Table 2. Surface Receiving Water Quality Monitoring Parameters

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Photo Monitoring		
Upstream and downstream photographs at monitoring location		With every monitoring event
WATER COLUMN SAMPLING		
Physical Parameters and General Chemistry		
Flow (field measure) (CFS) following SWAMP field SOP[9]	.25	Monthly, including 2 stormwater events
pH (field measure)	0.1	”
Electrical Conductivity (field measure) (µS/cm)	2.5	”
Dissolved Oxygen (field measure) (mg/L)	0.1	”
Temperature (field measure) (^{o}C)	0.1	”
Turbidity (NTU)	0.5	”
Total Dissolved Solids (mg/L)	10	”
Total Suspended Solids (mg/L)	0.5	”
Nutrients		
Total Nitrogen (mg/L)	0.5	Monthly, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	0.1	”
Total Ammonia (mg/L)	0.1	”
Unionized Ammonia (calculated value, mg/L))		”
Total Phosphorus (as P) (mg/L)	0.02	
Soluble Orthophosphate (mg/L)	0.01	”
Water column chlorophyll a (µg/L)	1.0	“
Algae cover, Floating Mats, % coverage	-	“
Algae cover, Attached, % coverage	-	“
Water Column Toxicity Test		
Algae - *Selenastrum capricornutum (*96-hour chronic; Method1003.0 in EPA/821/R-02/013)	-	4 times each year, twice in dry season, twice in wet season
Water Flea – *Ceriodaphnia dubia* (7-day chronic; Method 1002.0 in EPA/821/R-02/013)	-	”
Midge - *Chironomus spp.* (96-hour acute; Alternate test species in EPA 821-R-02-012)	-	“

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Toxicity Identification Evaluation (TIE)	-	As directed by Executive Officer
Pesticides[2] /Herbicides (µg/L)		
Organophosphate Pesticides		
Azinphos-methyl	0.02	2 times in both 2017 and 2018, once in dry season and once in wet season of each year, concurrent with water toxicity monitoring
Chlorpyrifos	0.005	"
Diazinon	0.005	"
Dichlorvos	0.01	"
Dimethoate	0.01	"
Dimeton-s	0.005	"
Disulfoton (Disyton)	0.005	"
Malathion	0.005	"
Methamidophos	0.02	"
Methidathion	0.02	"
Parathion-methyl	0.02	"
Phorate	0.01	"
Phosmet	0.02	"
Neonicotinoids		
Thiamethoxam	.002	"
Imidacloprid	.002	"
Thiacloprid	.002	"
Dinotefuran	.006	"
Acetamiprid	.01	"
Clothianidin	.02	
Herbicides		
Atrazine	0.05	"
Cyanazine	0.20	"
Diuron	0.05	"
Glyphosate	2.0	"
Linuron	0.1	"
Paraquat	0.20	"
Simazine	0.05	"
Trifluralin	0.05	"
Metals (µg/L)		
Arsenic (total) [5,7]	0.3	2 times in both 2017 and 2018, once in dry season and once in wet season of each year, concurrent with water toxicity monitoring
Boron (total) [6,7]	10	"

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Cadmium (total & dissolved) [4.5,7]	0.01	"
Copper (total and dissolved) [4,7]	0.01	"
Lead (total and dissolved) [4,7]	0.01	"
Nickel (total and dissolved) [4,7]	0.02	"
Molybdenum (total) [7]	1	"
Selenium (total)[7]	0.30	"
Zinc (total and dissolved) [4.5,7]	0.10	"
Other (µg/L)		
Total Phenolic Compounds[8]	5	2 times in 2017, once in spring (April-May) and once in fall (August-September)
Hardness (mg/L as CaCO3)	1	"
Total Organic Carbon (ug/L)	0.6	"
SEDIMENT SAMPLING		
Sediment Toxicity - *Hyalella azteca* 10-day static renewal (EPA, 2000)		2 times each year, once in spring (April-May) and once in fall (August-September)
Pyrethroid Pesticides in Sediment (µg/kg)		
Gamma-cyhalothrin	2	2 times in both 2017 and 2018, once in spring (April-May) and once in fall (August-September) of each year, concurrent with sediment toxicity sampling
Lambda-cyhalothrin	2	"
Bifenthrin	2	"
Beta-cyfluthrin	2	"
Cyfluthrin	2	"
Esfenvalerate	2	"
Permethrin	2	"
Cypermethrin	2	"
Danitol	2	"
Fenvalerate	2	"
Fluvalinate	2	"
Other Monitoring in Sediment		
Chlorpyrifos (µg/kg)	2	"
Total Organic Carbon	0.01%	"
		"
Sediment Grain Size Analysis	1%	"

[1]Monitoring is ongoing through all five years of the Order, unless otherwise specified. Monitoring frequency may be used as a guide for developing alternative Sampling and Analysis Plan.
[2]Pesticide list may be modified based on specific pesticide use in Central Coast Region. Analytes on this list must be reported, at a minimum.

[3] Reporting Limit, taken from SWAMP where applicable.
[4] Holmgren, Meyer, Cheney and Daniels. 1993. Cadmium, Lead, Zinc, Copper and Nickel in Agricultural Soils of the United States. J. of Environ. Quality 22:335-348.
[5] Sax and Lewis, ed. 1987. Hawley's Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co., 1987. Zinc arsenate is an insecticide.
[6] Http://www.coastalagro.com/products/labels/9%25BORON.pdf; Boron is applied directly or as a component of fertilizers as a plant nutrient.
[7] Madramootoo, Johnston, Willardson, eds. 1997. Management of Agricultural Drainage Water Quality. International Commission on Irrigation and Drainage. U.N. FAO. SBN 92-6-104058.3.
[8] http://cat.inist.fr/?aModele=afficheN&cpsidt=14074525; Phenols are breakdown products of herbicides and pesticides. Phenols can be directly toxic and cause endocrine disruption.
[9] See SWAMP field measures SOP, p. 17
mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram;
NTU – Nephelometric Turbidity Units; CFS – cubic feet per second;

Table 3. Groundwater Monitoring Parameters

Parameter	RL	Analytical Method[3]	Units
pH	0.1	Field or Laboratory Measurement EPA General Methods	pH Units
Specific Conductance	2.5		µS/cm
Total Dissolved Solids	10		mg/L
Total Alkalinity as CaCO3	1	EPA Method 310.1 or 310.2	
Calcium	0.05	General Cations[1] EPA 200.7, 200.8, 200.9	
Magnesium	0.02		
Sodium	0.1		
Potassium	0.1		
Sulfate (SO4)	1.0	General Anions EPA Method 300 or EPA Method 353.2	
Chloride	0.1		
Nitrate + Nitrite (as N)[2] or Nitrate as N	0.1		

[1] General chemistry parameters (major cations and anions) represent geochemistry of water bearing zone and assist in evaluating quality assurance/quality control of groundwater sampling and laboratory analysis.
[2] The MRP allows analysis of "nitrate plus nitrite" to represent nitrate concentrations (as N). The "nitrate plus nitrite" analysis allows for extended laboratory holding times and relieves the Discharger of meeting the short holding time required for nitrate.
[3] Dischargers may use alternative analytical methods approved by EPA.
RL – Reporting Limit; µS/cm – micro siemens per centimeter

Table4. Tier 2 - Time Schedule for Key Monitoring and Reporting Requirements (MRPs)

REQUIREMENT	TIME SCHEDULE[1]
Submit Sampling And Analysis Plan and Quality Assurance Project Plan (SAAP/QAPP) for Surface Receiving Water Quality Monitoring (*individually or through cooperative monitoring program*)	By March 1, 2018, or as directed by the Executive Officer; satisfied if an approved SAAP/QAPP has been submitted pursuant to Order No. R3-2012-0011 and associated MRPs
Initiate surface receiving water quality monitoring (*individually or through cooperative monitoring program*)	Per an approved SAAP and QAPP
Submit surface receiving water quality monitoring data (*individually or through cooperative monitoring program*)	Each January 1, April 1, July 1, and October 1
Submit surface receiving water quality Annual Monitoring Report *(individually or through cooperative monitoring program*)	By July 12017: annually thereafter by July 1
Initiate monitoring of groundwater wells	First sample from March-June 2017, second sample from September-December 2017
Submit electronic Annual Compliance Form	March 1, 2018 and every March 1 annually thereafter
Submit groundwater monitoring results	Within 60 days of the sample collection
Tier 2 Dischargers with farms/ranches growing high risk crops: Report total nitrogen applied on the Total Nitrogen Applied form	March 1, 2018 and every March 1annually thereafter

[1] Dates are relative to adoption of this Order or enrollment date for Dischargers enrolled after the adoption of this Order, unless otherwise specified.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM
ORDER NO. R3-2017-0002-03

TIER 3

DISCHARGERS ENROLLED UNDER
CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES FROM IRRIGATED LANDS

This Monitoring and Reporting Program Order No. R3-2017-0002-03 (MRP) is issued pursuant to California Water Code (Water Code) sections 13267 and 13269, which authorize the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) to require preparation and submittal of technical and monitoring reports. Water Code section 13269 requires a waiver of waste discharge requirements to include as a condition, the performance of monitoring and the public availability of monitoring results. *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands,* Order No. R3-2017-0002 (Order), includes criteria and requirements for three tiers. This MRP sets forth monitoring and reporting requirements for **Tier 3 Dischargers** enrolled under the Order. A summary of the requirements is shown below.

SUMMARY OF MONITORING AND REPORTING REQUIREMENTS FOR TIER 3:

Part 1: Surface Receiving Water Monitoring and Reporting *(cooperative or individual)*
Part 2: Groundwater Monitoring and Reporting *(cooperative or individual)*
Total Nitrogen Applied Reporting *(required for subset of Tier 3 Dischargers if farm/ranch growing any crop with high nitrate loading risk to groundwater);*
Part 3: Annual Compliance Form
Part 5: Individual Surface Water Discharge Monitoring and Reporting
Part 6: Irrigation and Nutrient Management Plan *(required for subset of Tier 3 Dischargers if farm/ranch has High Nitrate Loading Risk)*
Part 7: Water Quality Buffer Plan *(required for subset of Tier 3 Dischargers if farm/ranch contains or is adjacent to a waterbody impaired for temperature, turbidity or sediment)*

Pursuant to Water Code section 13269(a)(2), monitoring requirements must be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. The monitoring and reports required by this MRP are to evaluate effects of discharges of waste from irrigated agricultural operations and individual farms/ranches on waters of the state and to determine compliance with the Order.

MONITORING AND REPORTING BASED ON TIERS

The Order and MRP includes criteria and requirements for three tiers, based upon those characteristics of the individual farms/ranches at the operation that present the highest level of waste discharge or greatest risk to water quality. Dischargers must meet conditions of the Order and MRP for the appropriate tier that applies to their land and/or the individual farm/ranch. Within a tier, Dischargers comply with requirements based on the specific level of discharge and threat to water quality from individual farms/ranches. The lowest tier, Tier 1, applies to dischargers who discharge the lowest level of waste (amount or concentration) or pose the lowest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. The highest tier, Tier 3, applies to dischargers who discharge the highest level of waste or pose the greatest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. Tier 2 applies to dischargers whose discharge has a moderate threat to water quality. Water quality is defined in terms of regional, state, or federal numeric or narrative water quality standards. Per the Order, Dischargers may submit a request to the Executive Officer to approve transfer to a lower tier. If the Executive Officer approves a transfer to a lower tier, any interested person may request that the Central Coast Water Board conduct a review of the Executive Officer's determination.

PART 1. SURFACE RECEIVING WATER MONITORING AND REPORTING REQUIREMENTS

The surface receiving water monitoring and reporting requirements described herein are generally a continuation of the surface receiving water monitoring and reporting requirements of Monitoring and Reporting Program Order No. 2012-0011-03, as revised August 22, 2016, with the intent of uninterrupted regular monitoring and reporting during the transition from Order No. R3-2012-0011-03 to Order No. R3-2017-0002-03.

Monitoring and reporting requirements for surface receiving water identified in Part 1.A. and Part 1.B. apply to Tier 3 Dischargers. Surface receiving water refers to water flowing in creeks and other surface waters of the State. Surface receiving water monitoring may be conducted through a cooperative monitoring program on behalf of Dischargers, or Dischargers may choose to conduct surface receiving water monitoring and reporting individually. Key monitoring and reporting requirements for surface receiving water are shown in Tables 1 and 2. Time schedules are shown in Table 5.

A. Surface Receiving Water Quality Monitoring

1. Dischargers must elect a surface receiving water monitoring option (cooperative monitoring program or individual receiving water monitoring) to comply with surface receiving water quality monitoring requirements, and identify the option selected on the Notice of Intent (NOI).

2. Dischargers are encouraged to choose participation in a cooperative monitoring program (e.g., the existing Cooperative Monitoring Program or a similar program) to comply with receiving water quality monitoring requirements. Dischargers not participating in a cooperative monitoring program must conduct surface receiving water quality monitoring individually that achieves the same purpose.

3. Dischargers (individually or as part of a cooperative monitoring program) must conduct surface receiving water quality monitoring to a) assess the impacts of their waste discharges from irrigated lands to receiving water, b) assess the status of receiving water quality and beneficial use protection in impaired waterbodies dominated by irrigated agricultural activity, c) evaluate status, short term patterns and long term trends (five to ten years or more) in receiving water quality, d) evaluate water quality impacts resulting from agricultural discharges (including but not limited to tile drain discharges), e) evaluate stormwater quality, f) evaluate condition of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat, including degradation resulting from erosion or agricultural discharges of waste, and g) assist in the identification of specific sources of water quality problems.

Surface Receiving Water Quality Sampling and Analysis Plan

4. **By March 1, 2018, or as directed by the Executive Officer**, Dischargers (individually or as part of a cooperative monitoring program) must submit a surface receiving water quality Sampling and Analysis Plan (SAAP) and Quality Assurance Project Plan (QAPP); this requirement is satisfied if an approved SAAP and QAPP addressing all surface receiving water quality monitoring requirements described in this Order has been submitted pursuant to Order No.R3-2012-0011 and associated Monitoring and Reporting Programs. Dischargers (or a third party cooperative monitoring program) must develop the Sampling and Analysis Plan to describe how the proposed monitoring will achieve the objectives of the MRP and evaluate compliance with the Order. The Sampling and Analysis Plan may propose alternative monitoring site locations, adjusted monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water. The Executive Officer must approve the Sampling and Analysis Plan and QAPP.

5. The Sampling and Analysis Plan must include the following minimum required components:
    a. Monitoring strategy to achieve objectives of the Order and MRP;
    b. Map of monitoring sites with GIS coordinates;

c. Identification of known water quality impairments and impaired waterbodies per the 2010 Clean Water Act 303(d) List of Impaired Waterbodies (List of Impaired Waterbodies);
d. Identification of beneficial uses and applicable water quality standards;
e. Identification of applicable Total Maximum Daily Loads;
f. Monitoring parameters;
g. Monitoring schedule, including description and frequencies of monitoring events;
h. Description of data analysis methods;

6. The QAPP must include receiving water and site-specific information, project organization and responsibilities, and quality assurance components of the MRP. The QAPP must also include the laboratory and field requirements to be used for analyses and data evaluation. The QAPP must contain adequate detail for project and Water Board staff to identify and assess the technical and quality objectives, measurement and data acquisition methods, and limitations of the data generated under the surface receiving water quality monitoring. All sampling and laboratory methodologies and QAPP content must be consistent with U.S. EPA methods, State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocols and the Central Coast Water Board's Central Coast Ambient Monitoring Program (CCAMP). Following U.S. EPA guidelines[1] and SWAMP templates[2], the receiving water quality monitoring QAPP must include the following minimum required components:
    a. Project Management. This component addresses basic project management, including the project history and objectives, roles and responsibilities of the participants, and other aspects.
    b. Data Generation and Acquisition. This component addresses all aspects of project design and implementation. Implementation of these elements ensures that appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, and quality control activities are employed and are properly documented. Quality control requirements are applicable to all the constituents sampled as part of the MRP, as described in the appropriate method.
    c. Assessment and Oversight. This component addresses the activities for assessing the effectiveness of the implementation of the project and associated QA and QC activities. The purpose of the assessment is to provide project oversight that

[1] USEPA. 2001 (2006) USEPA Requirements for Quality Assurance Project Plans (QA/R-5) Office of Environmental Information, Washington, D.C. USEPA QA/R-5
[2] http://waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa

will ensure that the QA Project Plan is implemented as prescribed.

d. Data Validation and Usability. This component addresses the quality assurance activities that occur after the data collection, laboratory analysis and data generation phase of the project is completed. Implementation of these elements ensures that the data conform to the specified criteria, thus achieving the MRP objectives.

7. The Central Coast Water Board may conduct an audit of contracted laboratories at any time in order to evaluate compliance with the QAPP.

8. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may also revise the Sampling and Analysis Plan, including adding, removing, or changing monitoring site locations, changing monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water.

Surface Receiving Water Quality Monitoring Sites

9. The Sampling and Analysis Plan must, at a minimum, include monitoring sites to evaluate waterbodies identified in Table 1, unless otherwise approved by the Executive Officer. The Sampling and Analysis Plan must include sites to evaluate receiving water quality impacts most directly resulting from areas of agricultural discharge (including areas receiving tile drain discharges). Site selection must take into consideration the existence of any long term monitoring sites included in related monitoring programs (e.g. CCAMP and the existing CMP). Sites may be added or modified, subject to prior approval by the Executive Officer, to better assess the pollutant loading from individual sources or the impacts to receiving waters caused by individual discharges. Any modifications must consider sampling consistency for purposes of trend evaluation.

Surface Receiving Water Quality Monitoring Parameters

10. The Sampling and Analysis Plan must, at a minimum, include the following types of monitoring and evaluation parameters listed below and identified in Table 2:

    a. Flow Monitoring;
    b. Water Quality (physical parameters, metals, nutrients, pesticides);
    c. Toxicity (water and sediment);
    d. Assessment of Benthic Invertebrates.

11. All analyses must be conducted at a laboratory certified for such analyses by the State Department of Public Health (CDPH) or at laboratories approved by the Executive Officer. Unless otherwise noted, all sampling, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, U.S. EPA, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link: http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls

12. Water quality and flow monitoring is used to assess the sources, concentrations, and loads of waste discharges from individual farms/ranches and groups of Dischargers to surface waters, to evaluate impacts to water quality and beneficial uses, and to evaluate the short term patterns and long term trends in receiving water quality. Monitoring data must be compared to existing numeric and narrative water quality objectives.

13. Toxicity testing is to evaluate water quality relative to the narrative toxicity objective. Water column toxicity analyses must be conducted on 100% (undiluted) sample. At sites where persistent unresolved toxicity is found, the Executive Officer may require concurrent toxicity and chemical analyses and a Toxicity Identification Evaluation (TIE) to identify the individual discharges causing the toxicity.

Surface Receiving Water Quality Monitoring Frequency and Schedule

14. The Sampling and Analysis Plan must include a schedule for sampling. Timing, duration, and frequency of monitoring must be based on the land use, complexity, hydrology, and size of the waterbody. Table 2 includes minimum monitoring frequency and parameter lists. Agricultural parameters that are less common may be monitored less frequently. Modifications to the receiving water quality monitoring parameters, frequency, and schedule may be submitted for Executive Officer consideration and approval. At a minimum, the Sampling and Analysis Plan schedule must consist of monthly monitoring of common agricultural parameters in major agricultural areas, including two major storm events during the wet season (October 1 – April 30).

15. Storm event monitoring must be conducted within 18 hours of storm events, preferably including the first flush run-off event that results in significant increase in stream flow. For purposes of this MRP, a storm event is defined as precipitation producing onsite runoff (surface water flow) capable of creating significant ponding, erosion or other water quality problem. A

significant storm event will generally result in greater than 1-inch of rain within a 24-hour period.

16. Dischargers (individually or as part of a cooperative monitoring program) must perform receiving water quality monitoring per the Sampling and Analysis Plan and QAPP approved by the Executive Officer.

B. Surface Receiving Water Quality Reporting

Surface Receiving Water Quality Data Submittal

1. Dischargers (individually or as part of a cooperative monitoring program) must submit water quality monitoring data to the Central Coast Water Board electronically, in a format specified by the Executive Officer and compatible with SWAMP/CCAMP electronic submittal guidelines, each January 1, April 1, July 1, and October 1.

Surface Receiving Water Quality Monitoring Annual Report

2. By July 1, 2017, and every July 1 annually thereafter, Dischargers (individually or as part of a cooperative monitoring program) must submit an Annual Report, electronically, in a format specified by the Executive Officer including the following minimum elements:

a. Signed Transmittal Letter;
b. Title Page;
c. Table of Contents;
d. Executive Summary;
e. Summary of Exceedance Reports submitted during the reporting period;
f. Monitoring objectives and design;
g. Monitoring site descriptions and rainfall records for the time period covered;
h. Location of monitoring sites and map(s);
i. Tabulated results of all analyses arranged in tabular form so that the required information is readily discernible;
j. Summary of water quality data for any sites monitored as part of related monitoring programs, and used to evaluate receiving water as described in the Sampling and Analysis Plan.
k. Discussion of data to clearly illustrate compliance with the Order and water quality standards;
l. Discussion of short term patterns and long term trends in receiving water quality and beneficial use protection;

m. Evaluation of pesticide and toxicity analyses results, and recommendation of candidate sites for Toxicity Identification Evaluations (TIEs);
n. Identification of the location of any agricultural discharges observed discharging directly to surface receiving water;
o. Laboratory data submitted electronically in a SWAMP/CCAMP comparable format;
p. Sampling and analytical methods used;
q. Copy of chain-of-custody forms;
r. Field data sheets, signed laboratory reports, laboratory raw data;
s. Associated laboratory and field quality control samples results;
t. Summary of Quality Assurance Evaluation results;
u. Specify the method used to obtain flow at each monitoring site during each monitoring event;
v. Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date;
w. Conclusions.

PART 2. GROUNDWATER MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring may be conducted through a cooperative monitoring and reporting program on behalf of growers, or Dischargers may choose to conduct groundwater monitoring and reporting individually. Qualifying cooperative groundwater monitoring and reporting programs must implement the groundwater monitoring and reporting requirements described in this Order, unless otherwise approved by the Executive Officer. An interested person may seek review by the Central Coast Water Board of the Executive Officer's approval or denial of a cooperative groundwater monitoring and reporting program.

Key monitoring and reporting requirements for groundwater are shown in Table 3.

A. Groundwater Monitoring

1. Dischargers must sample private domestic wells and the primary irrigation well on their farm/ranch to evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for nitrogen loading and exceedance of drinking water standards, and identify priority areas for follow up actions.

2. Dischargers must sample at least one groundwater well for each farm/ranch on their operation, including groundwater wells that are located within the property boundary of the enrolled county assessor parcel numbers (APNs). For farms/ranches with multiple groundwater wells, Dischargers must sample all domestic wells and the primary irrigation well. For the purposes of this MRP, a "domestic well" is any well that is used or may be used for domestic

use purposes, including any groundwater well that is connected to a residence, workshop, or place of business that may be used for human consumption, cooking, or sanitary purposes. Groundwater monitoring parameters must include well screen interval depths (if available), general chemical parameters, and general cations and anions listed in Table 3.

3. Dischargers must conduct two rounds of monitoring of required groundwater wells during calendar year 2017; one sample collected during spring (**March - June)** and one sample collected during fall **(September - December)**.

4. Groundwater samples must be collected by a qualified third party (e.g., consultant, technician, person conducting cooperative monitoring) using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols. Groundwater samples must be collected at or near the well head before the pressure tank and prior to any well head treatment. In cases where this is not possible, the water sample must be collected from a sampling point as close to the pressure tank as possible, or from a cold-water spigot located before any filters or water treatment systems.

5. Laboratory analyses for groundwater samples must be conducted by a State certified laboratory according to U.S. EPA approved methods; unless otherwise noted, all monitoring, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, United States Environmental Protection Agency, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link below: http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/resources4growers/2016_04_11_labs.pdf

6. If a discharger determines that water in any domestic well exceeds 10 mg/L of nitrate as N, the discharger or third party must provide notice to the Central Coast Water Board within 24 hours of learning of the exceedance. For domestic wells on a Discharger's farm/ranch that exceed 10 mg/L nitrate as N, the Discharger must provide written notification to the users within 10 days of learning of the exceedance and provide written confirmation of the notification to the Central Coast Water Board.

   The drinking water notification must include the statement that the water poses a human health risk due to elevated nitrate concentration, and include a warning against the use of the water for drinking or cooking. In addition, Dischargers must also provide prompt written notification to any new well users (e.g. tenants and employees with access to the affected well), whenever there is a change in occupancy.

For all other domestic wells not on a Discharger's property, the Central Coast Water Board will notify the users promptly.

The drinking water notification and confirmation letters required by this Order are available to the public.

B. Groundwater Reporting

1. **Within 60 days of sample collection,** Dischargers must coordinate with the laboratory to submit the following groundwater monitoring results and information, electronically, using the Water Board's GeoTracker electronic deliverable format (EDF):
    a. GeoTracker Ranch Global Identification Number
    b. Field point name (Well Name)
    c. Field Point Class (Well Type)
    d. Latitude
    e. Longitude
    f. Sample collection date
    g. Analytical results
    h. Well construction information (e.g., total depth, screened intervals, depth to water), as available

2. Dischargers must submit groundwater well information required in the electronic Notice of Intent (eNOI) for each farm/ranch and update the eNOI to reflect changes in the farm/ranch information within 30 days of the change. Groundwater well information reported on the eNOI includes, but is not limited to:
    a. Number of groundwater wells present at each farm/ranch
    b. Identification of any groundwater wells abandoned or destroyed (including method destroyed) in compliance with the Order
    c. Use for fertigation or chemigation
    d. Presence of back flow prevention devices
    e. Number of groundwater wells used for agricultural purposes
    f. Number of groundwater wells used for or may be used for domestic use purposes (domestic wells)

C. Total Nitrogen Applied Reporting

1. By March 1, 2018, and by March 1 annually thereafter, Tier 3 Dischargers growing any crop with a high potential to discharge nitrogen to groundwater must record and report total nitrogen applied for each specific crop that was irrigated and grown for commercial purposes on that farm/ranch during the preceding calendar year (January through December).

    Crops with a high potential to discharge nitrogen to groundwater are: beet,

broccoli, cabbage, cauliflower, celery, Chinese cabbage (napa), collard, endive, kale, leek, lettuce (leaf and head), mustard, onion (dry and green), spinach, strawberry, pepper (fruiting), and parsley.

Total nitrogen applied must be reported on the Total Nitrogen Applied Report form as described in the Total Nitrogen Applied Report form instructions.

Total nitrogen applied includes any product containing any form or concentration of nitrogen including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, and extracts.

2. The Total Nitrogen Applied Report form includes the following information:
    a. General ranch information such as GeoTracker file numbers, name, location, acres.
    b. Nitrogen concentration of irrigation water
    c. Nitrogen applied in pounds per acre with irrigation water
    d. Nitrogen present in the soil
    e. Nitrogen applied with compost and amendments
    f. Specific crops grown
    g. Nitrogen applied in pounds per acre with fertilizers and other materials to each specific crop grown
    h. Crop acres of each specific crop grown
    i. Whether each specific crop was grown organically or conventionally
    j. Basis for the nitrogen applied
    k. Explanation and comments section
    l. Certification statement with penalty of perjury declaration
    m. Additional information regarding whether each specific crop was grown in a nursery, greenhouse, hydroponically, in containers, and similar variables.

PART 3. ANNUAL COMPLIANCE FORM

Tier 3 Dischargers must submit annual compliance information, electronically, on the Annual Compliance Form. The purpose of the electronic Annual Compliance Form is to provide information to the Central Coast Water Board to assist in the evaluation of threat to water quality from individual agricultural discharges of waste and measure progress towards water quality improvement and verify compliance with the Order and MRP. Time schedules are shown in Table 5.

A. Annual Compliance Form

1. **By March 1, 2018, and updated annually thereafter by March 1**, Tier 3 Dischargers must submit an Annual Compliance Form electronically, in a format specified by the Executive Officer. The electronic Annual Compliance Form includes, but is not limited to the following minimum requirements[1]:
    a. Question regarding consistency between the Annual Compliance Form and the electronic Notice of Intent (eNOI);
    b. Information regarding type and characteristics of discharge (e.g., number of discharge points, estimated flow/volume, number of tailwater days);
    c. Identification of any direct agricultural discharges to a stream, lake, estuary, bay, or ocean;
    d. Identification of specific farm water quality management practices completed, in progress, and planned to address water quality impacts caused by discharges of waste including irrigation management, pesticide management, nutrient management, salinity management, stormwater management, and sediment and erosion control to achieve compliance with this Order; and identification of specific methods used, and described in the Farm Plan consistent with Order Provision 44.g., for the purposes of assessing the effectiveness of management practices implemented and the outcomes of such assessments:
    e. Proprietary information question and justification;
    f. Authorization and certification statement and declaration of penalty of perjury.

PART 5. INDIVIDUAL SURFACE WATER DISCHARGE MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for individual surface water discharge identified in Part 5.A. and Part 5.B. apply to Tier 3 Dischargers with irrigation water or stormwater discharges to surface water from an outfall. Outfalls are locations where irrigation water and stormwater exit a farm/ranch, or otherwise leave the control of the discharger, after being conveyed by pipes, ditches, constructed swales, tile drains, containment structures, or other discrete structures or features that transport the water. Discharges that have commingled with discharges from another farm/ranch are considered to have left the control of the discharger. Key monitoring and reporting requirements for individual surface water discharge are shown in Tables 4A and 4B. Time schedules are shown in Table 5.

[1] Items reported in the Annual Compliance Form are due by March 1 2018, and annually thereafter, unless otherwise specified.

A. Individual Surface Water Discharge Monitoring

1. Tier 3 Dischargers must conduct individual surface water discharge monitoring to a) evaluate the quality of individual waste discharges, including concentration and load of waste (in kilograms per day) for appropriate parameters, b) evaluate effects of waste discharge on water quality and beneficial uses, and c) evaluate progress towards compliance with water quality improvement milestones in the Order.

Individual Sampling and Analysis Plan

2. **By March 1, 2018, or as directed by the Executive Officer**, Tier 3 Dischargers must submit an individual surface water discharge Sampling and Analysis Plan (SAAP) and QAPP to monitor individual discharges of irrigation water and stormwater that leaves their farm/ranch from an outfall. The Sampling and Analysis Plan and QAPP must be submitted to the Executive Officer; this requirement is satisfied if an approved SAAP and QAPP addressing all individual surface water discharge monitoring requirements described in this Order has been submitted pursuant to Order No.R3-2012-0011 and associated Monitoring and Reporting Programs.

3. The Sampling and Analysis Plan must include the following minimum required components to monitor irrigation water and stormwater discharges:
    a. Number and location of outfalls (identified with latitude and longitude or on a scaled map);
    b. Number and location of monitoring points;
    c. Description of typical irrigation runoff patterns;
    d. Map of discharge and monitoring points;
    e. Sample collection methods;
    f. Monitoring parameters;
    g. Monitoring schedule and frequency of monitoring events;

4. The QAPP must include appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, quality control activities, and documentation.

5. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may require modifications to the Sampling and Analysis Plan or Tier 3 Dischargers may propose Sampling and Analysis Plan modifications for Executive Officer approval, when modifications are justified to accomplish the objectives of the MRP.

Individual Surface Water Discharge Monitoring Points

6. Tier 3 Dischargers must select monitoring points to characterize at least 80% of the estimated maximum irrigation run-off discharge volume from each farm/ranch based on that farm's/ranch's typical discharge patterns[1], including tailwater discharges and discharges from tile drains. Sample must be taken when irrigation activity is causing maximal run-off. Load estimates will be generated by multiplying flow volume of discharge by concentration of contaminants. Tier 3 Dischargers must include at least one monitoring point from each farm/ranch which drains areas where chlorpyrifos or diazinon are applied, and monitoring of runoff or tailwater must be conducted within one week of chemical application. If discharge is not routinely present, Discharger may characterize typical run-off patterns in the Annual Report. See Table 4A for additional details.

7. Tier 3 Dischargers must also monitor storage ponds and other terminal surface water containment structures that collect irrigation and stormwater runoff, unless the structure is (1) part of a tail-water return system where a major portion of the water in such structure is reapplied as irrigation water, or (2) the structure is primarily a sedimentation pond by design with a short hydraulic residence time (96 hours or less) and a discharge to surface water when functioning. If multiple ponds are present, sampling must cover at least those structures that would account for 80% of the maximum storage volume of the containment features. See Table 4B for additional details. Where water is reapplied as irrigation water. Dischargers shall document reuse in the Farm Plan.

Individual Surface Water Discharge Monitoring Parameters, Frequency, and Schedule

8. Tier 3 Dischargers must conduct monitoring for parameters, laboratory analytical methods, frequency and schedule described in Tables 4A and 4B. Dischargers may utilize in-field water testing instruments/equipment as a substitute for laboratory analytical methods if the method is approved by U.S. EPA, meets reporting limits (RL) and practical quantitation limits (PQL) specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.

[1] The requirement to select monitoring points to characterize at least 80% of the estimated maximum irrigation run-off based on typical discharge patterns is for the purposes of attempting to collect samples that represent a majority of the volume of irrigation run-off discharged; however the Board recognizes that predetermining these locations is not always possible and that sampling results may vary. The MRP does not specify the number or location of monitoring points to provide maximum flexibility for growers to determine how many sites necessary and exact locations are given the anticipated site-specific conditions.

9. Tier 3 Dischargers must initiate individual surface water discharge monitoring per an approved Sampling and Analysis Plan and QAPP, unless otherwise directed by the Executive Officer.

B. Individual Surface Water Discharge Reporting

Individual Surface Water Discharge Monitoring Data Submittal

By March 1, 2018, and annually thereafter by March 1, Tier 3 Dischargers must submit individual surface water discharge monitoring data and information to the Central Coast Water Board electronically, in a pdf format, containing at least the following items, or as otherwise approved by the Executive Officer:

a. Electronic laboratory data
- All reports of results must contain Ranch name and Global ID, site name(s), project contact, and date.
- Electronic laboratory data reports of chemical results shall include analytical results, as well as associated quality assurance data including method detection limits, reporting limits, matrix spikes, matrix spike duplicates, laboratory blanks, and other quality assurance results required by the analysis method.
- Electronic laboratory data reports of toxicity results shall include summary results comparable to those required in a CEDEN file delivery, including test and control results. For each test result, the mean, associated control performance, calculated percent of control, statistical test results and determination of toxicity, must be included. Test results must specify the control ID used to calculate statistical outcomes.
- Field data results, including temperature, pH, conductivity, turbidity and flow measurements, any field duplicates or blanks, and field observations.
- Calculations of un-ionized ammonia concentrations
- Calculations of total flow and pollutant loading (for nitrate, pesticides if sampled, total ammonia, and turbidity) (include formulas);

b. Narrative description of typical irrigation runoff patterns;
c. Location of sampling sites and map(s);
d. Sampling and analytical methods used;
e. Specify the method used to obtain flow at each monitoring site during each monitoring event;
f. Photos obtained from all monitoring sites, clearly labeled with location and date;
g. Sample chain-of-custody forms do not need to be submitted but must be made available to Central Coast Water Board staff, upon request.

PART 6. IRRIGATION AND NUTRIENT MANAGEMENT PLAN

Monitoring and reporting requirements related to the Irrigation and Nutrient Management Plan (INMP) identified in Part 6.A., and 6.B, apply to Tier 3 Dischargers identified by the Executive Officer that are newly enrolled in Order No. R3-2017-0002, and Tier 3 Dischargers that were subject to Irrigation and Nutrient Management Plan Requirements in Order R3-2012-0011 per MRP Order No. R3-2012-0011-03 Time schedules are shown in Table 5.

A. Irrigation and Nutrient Management Plan Monitoring

1. Tier 3 Dischargers required in Order No. R3-2012-0011 to develop and initiate implementation of an Irrigation and Nutrient Management Plan (INMP) certified by a Professional Soil Scientist, Professional Agronomist, or Crop Advisor certified by the American Society of Agronomy, or similarly qualified professional, are required to update (as necessary) and implement their INMP throughout the term of this Order.

2. The Executive Officer will assess whether an INMP is required for new Tier 3 Dischargers that enroll in Order No. R3-2017-0002 during the term of the Order. The Executive Officer will use the criteria established in Order No. R3-2012-0011 to make this assessment. If a Tier 3 Discharger is required to develop an INMP, the Tier 3 discharger must develop and initiate implementation of an Irrigation and Nutrient Management Plan (INMP) certified by a Professional Soil Scientist, Professional Agronomist, or Crop Advisor certified by the American Society of Agronomy, or similarly qualified professional, **within 18 months** of the Executive Officer's assessment of the INMP requirement.
3. The purpose of the INMP is to budget and manage the nutrients applied to each farm/ranch considering all sources of nutrients, crop requirements, soil types, climate, and local conditions in order to minimize nitrate loading to surface water and groundwater in compliance with this Order. The professional certification of the INMP must indicate that the relevant expert has reviewed all necessary documentation and testing results, evaluated total nitrogen applied relative to typical crop nitrogen uptake and nitrogen removed at harvest, with consideration to potential nitrate loading to groundwater, and conducted field verification to ensure accuracy of reporting.
4. Tier 3 Dischargers required to develop and initiate implementation an (INMP) must include the following elements in the INMP. The INMP is not submitted to the Central Coast Water Board, with the exception of the INMP Effectiveness Report:
    a. Proof of INMP certification;
    b. Map locating each farm/ranch;
    c. Identification of crop nitrogen uptake values for use in nutrient balance calculations;

d. Record keeping annually by either Method 1 or Method 2:

e. To meet the requirement to record total nitrogen in the soil,dischargers may take a nitrogen soil sample (e.g. laboratory analysis or nitrate quick test) or use an alternative method to evaluate nitrogen content in soil, prior to planting or seeding the field or prior to the time of pre-sidedressing, or at an alternative time when it is most effective to determine nitrogen present in the soil that is available for the next crop and to minimize nitrate leaching to groundwater. The amount of nitrogen remaining in the soil must be accounted for as a source of nitrogen when budgeting, and the soil sample or alternative method results must be maintained in the INMP.
f. Identification of irrigation and nutrient management practices in progress (identify start date), completed (identify completion date), and planned (identify anticipated start date) to reduce nitrate loading to groundwater to achieve compliance with this Order.
g. Description of methods Discharger will use to verify overall effectiveness of the INMP.

5. Tier 3 Dischargers must evaluate the effectiveness of the INMP. Irrigation and Nutrient Management Plan effectiveness monitoring must evaluate reduction in new nitrogen[1] loading potential based on minimized fertilizer use and improved irrigation and nutrient management practices in order to minimize new nitrogen loading to surface water and groundwater. Evaluation methods used may include, but are not limited to analysis of groundwater well monitoring data or soil sample data, or analysis of trends in new nitrogen application data.

B. Irrigation and Nutrient Management Plan Reporting

1. **By March 1, 2019**, Tier 3 Dischargers required to develop and initiate implementation of an INMP must submit an INMP Effectiveness Report to evaluate reductions in nitrate loading to surface water and groundwater based on the implementation of irrigation and nutrient management practices in a format specified by the Executive Officer. Dischargers in the same groundwater basin or subbasin may choose to comply with this requirement as a group by submitting a single report that evaluates the overall effectiveness of the broad scale implementation of irrigation and nutrient management practices identified in individual INMPs to protect groundwater. Group efforts must use data from each farm/ranch (e.g., data from individual groundwater wells, soil samples, or nitrogen application). The INMP

[1] New nitrogen is nitrogen from fertilizers, amendments, and other nitrogen sources applied other than nitrogen present in groundwater.

Effectiveness Report must include a description of the methodology used to evaluate and verify effectiveness of the INMP.

PART 7. WATER QUALITY BUFFER PLAN

Monitoring and reporting requirements related to the Water Quality Buffer Plan identified in Part 7.A. and Part 7.B. apply to Tier 3 Dischargers that have farms/ranches *that contain or are adjacent to waterbody identified on the List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment).* Time schedules are shown in Table 5.

A. Water Quality Buffer Plan

1. **By 18 months following enrollment in Order No. R3-2017-0002 of a Tier 3 farm/ranch**, Tier 3 Dischargers adjacent to or containing a waterbody identified on the List of Impaired Waterbodies as impaired for temperature, turbidity or sediment must submit a Water Quality Buffer Plan (WQBP) to the Executive Officer that protects the listed waterbody and its associated perennial and intermittent tributaries. The purpose of the Water Quality Buffer Plan is to prevent waste discharge, comply with water quality standards (e.g., temperature, turbidity, sediment), and protect beneficial uses in compliance with this Order and the following Basin Plan requirement:

   Basin Plan (Chapter 5, p. V-13, Section V.G.4 – Erosion and Sedimentation, *"A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, must be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. For construction activities, minimum width of the filter strip must be thirty feet, wherever possible…."*

2. The Water Quality Buffer Plan must include the following or the functional equivalent, to address discharges of waste and associated water quality impairments:

   a. A minimum 30 foot buffer (as measured horizontally from the top of bank on either side of the waterway, or from the high water mark of a lake and mean high tide of an estuary);
   b. Any necessary increases in buffer width to adequately prevent the discharge of waste that may cause or contribute to any excursion above or outside the acceptable range for any Regional, State, or Federal numeric or narrative water quality standard (e.g., temperature, turbidity);

c. Any buffer less than 30 feet must provide equivalent water quality protection and be justified based on an analysis of site-specific conditions and be approved by the Executive Officer;
d. Identification of any alternatives implemented to comply with this requirement, that are functionally equivalent to described buffer;
e. Schedule for implementation;
f. Maintenance provisions to ensure water quality protection;
g. Annual photo monitoring;

2. The WQPB must be submitted using the Water Quality Buffer Plan form, or, if an alternative to the WQBP is submitted, in a format approved by the Executive Officer.

3. **By March 1, 2019**, Tier 3 Dischargers that submitted a WQBP pursuant to Order No. R3-2012-0011 or Order No. R3-2017-0002, are required to update (as necessary) and implement their WQBP, and annually submit a WQBP Status Report of their WQBP implementation using the Water Quality Buffer Plan form, or, if an alternative to the WQBP was submitted, an Alternative to WQBP Status Report, electronically, in a format approved by the Executive Officer.

PART 8. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. Submittal of Technical Reports

1. Dischargers must submit reports in a format specified by the Executive Officer (reports will be submitted electronically, unless otherwise specified by the Executive Officer). A transmittal letter must accompany each report, containing the following penalty of perjury statement signed by the Discharger or the Discharger's authorized agent:

   "In compliance with Water Code §13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment".

2. If the Discharger asserts that all or a portion of a report submitted pursuant to this Order is subject to an exemption from public disclosure (e.g. trade secrets or secret processes), the Discharger must provide an explanation of how those portions of the reports are exempt from public disclosure. The

Discharger must clearly indicate on the cover of the report (typically an electronic submittal) that the Discharger asserts that all or a portion of the report is exempt from public disclosure, submit a complete report with those portions that are asserted to be exempt in redacted form, submit separately (in a separate electronic file) unredacted pages (to be maintained separately by staff). The Central Coast Water Board staff will determine whether any such report or portion of a report qualifies for an exemption from public disclosure. If the Central Coast Water Board staff disagrees with the asserted exemption from public disclosure, the Central Coast Water Board staff will notify the Discharger prior to making such report or portions of such report available for public inspection.

B. Central Coast Water Board Authority

1. Monitoring reports are required pursuant to section 13267 of the California Water Code. Pursuant to section 13268 of the Water Code, a violation of a request made pursuant to section 13267 may subject you to civil liability of up to $1000 per day.

2. The Water Board needs the required information to determine compliance with Order No.R3-2017-0002. The evidence supporting these requirements is included in the findings of Order No.R3-2017-0002.

_____

John M. Robertson
Executive Officer

_____

Date

Table 1. Major Waterbodies in Agricultural Areas[1]

Hydrologic SubArea	Waterbody Name	Hydrologic SubArea	Waterbody Name
30510	Pajaro River	30920	Quail Creek
30510	Salsipuedes Creek	30920	Salinas Reclamation Canal
30510	Watsonville Slough	31022	Chorro Creek
30510	Watsonville Creek[2]	31023	Los Osos Creek
30510	Beach Road Ditch[2]	31023	Warden Creek
30530	Carnadero Creek	31024	San Luis Obispo Creek
30530	Furlong Creek[2]	31024	Prefumo Creek
30530	Llagas Creek	31031	Arroyo Grande Creek
30530	Miller's Canal	31031	Los Berros Creek
30530	San Juan Creek	31210	Bradley Canyon Creek
30530	Tesquisquita Slough	31210	Bradley Channel
30600	Moro Cojo Slough	31210	Green Valley Creek
30910	Alisal Slough	31210	Main Street Canal
30910	Blanco Drain	31210	Orcutt Solomon Creek
30910	Old Salinas River	31210	Oso Flaco Creek
30910	Salinas River (below Gonzales Rd.)	31210	Little Oso Flaco Creek
30920	Salinas River (above Gonzales Rd. and below Nacimiento R.)	31210	Santa Maria River
30910	Santa Rita Creek[2]	31310	San Antonio Creek[2]
30910	Tembladero Slough	31410	Santa Ynez River
30920	Alisal Creek	31531	Bell Creek
30920	Chualar Creek	31531	Glenn Annie Creek
30920	Espinosa Slough	31531	Los Carneros Creek[2]
30920	Gabilan Creek	31534	Arroyo Paredon Creek
30920	Natividad Creek	31534	Franklin Creek

[1] At a minimum, monitoring sites must be included for these waterbodies in agricultural areas, unless otherwise approved by the Executive Officer. Monitoring sites may be proposed for addition or modification to better assess the impacts of waste discharges from irrigated lands to surface water. Dischargers choosing to comply with surface receiving water quality monitoring, individually (not part of a cooperative monitoring program) must only monitor sites for waterbodies receiving the discharge.

[2] These creeks are included because they are newly listed waterbodies on the 2010 303(d) list of Impaired Waters that are associated with areas of agricultural discharge.

Table 2. Surface Receiving Water Quality Monitoring Parameters

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Photo Monitoring		
Upstream and downstream photographs at monitoring location		With every monitoring event
WATER COLUMN SAMPLING		
Physical Parameters and General Chemistry		
Flow (field measure) (CFS) following SWAMP field SOP[9]	.25	Monthly, including 2 stormwater events
pH (field measure)	0.1	”
Electrical Conductivity (field measure) (µS/cm)	2.5	”
Dissolved Oxygen (field measure) (mg/L)	0.1	”
Temperature (field measure) (^{o}C)	0.1	”
Turbidity (NTU)	0.5	”
Total Dissolved Solids (mg/L)	10	”
Total Suspended Solids (mg/L)	0.5	”
Nutrients		
Total Nitrogen (mg/L)	0.5	Monthly, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	0.1	”
Total Ammonia (mg/L)	0.1	”
Unionized Ammonia (calculated value, mg/L))		”
Total Phosphorus (as P) (mg/L)	0.02	
Soluble Orthophosphate (mg/L)	0.01	”
Water column chlorophyll a (µg/L)	1.0	“
Algae cover, Floating Mats, % coverage	-	“
Algae cover, Attached, % coverage	-	“
Water Column Toxicity Test		
Algae - *Selenastrum capricornutum (*96-hour chronic; Method1003.0 in EPA/821/R-02/013)	-	4 times each year, twice in dry season, twice in wet season
Water Flea – *Ceriodaphnia dubia* (7-day chronic; Method 1002.0 in EPA/821/R-02/013)	-	”
Midge - *Chironomus spp.* (96-hour acute; Alternate test species in EPA 821-R-02-012)	-	“

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Toxicity Identification Evaluation (TIE)	-	As directed by Executive Officer
Pesticides[2] /Herbicides (µg/L)		
Organophosphate Pesticides		
Azinphos-methyl	0.02	2 times in both 2017 and 2018, once in dry season and once in wet season of each year, concurrent with water toxicity monitoring
Chlorpyrifos	0.005	"
Diazinon	0.005	"
Dichlorvos	0.01	"
Dimethoate	0.01	"
Dimeton-s	0.005	"
Disulfoton (Disyton)	0.005	"
Malathion	0.005	"
Methamidophos	0.02	"
Methidathion	0.02	"
Parathion-methyl	0.02	"
Phorate	0.01	"
Phosmet	0.02	"
Neonicotinoids		
Thiamethoxam	.002	"
Imidacloprid	.002	"
Thiacloprid	.002	"
Dinotefuran	.006	"
Acetamiprid	.01	"
Clothianidin	.02	
Herbicides		
Atrazine	0.05	"
Cyanazine	0.20	"
Diuron	0.05	"
Glyphosate	2.0	"
Linuron	0.1	"
Paraquat	0.20	"
Simazine	0.05	"
Trifluralin	0.05	"
Metals (µg/L)		
Arsenic (total) [5,7]	0.3	2 times in both 2017 and 2018, once in dry season and once in wet season of each year, concurrent with water toxicity monitoring
Boron (total) [6,7]	10	"
Cadmium (total & dissolved) [4.5,7]	0.01	"

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Copper (total and dissolved) [4,7]	0.01	"
Lead (total and dissolved) [4,7]	0.01	"
Nickel (total and dissolved) [4,7]	0.02	"
Molybdenum (total) [7]	1	"
Selenium (total)[7]	0.30	"
Zinc (total and dissolved) [4.5,7]	0.10	"
Other (µg/L)		
Total Phenolic Compounds[8]	5	2 times in 2017, once in spring (April-May) and once in fall (August-September)
Hardness (mg/L as CaCO3)	1	"
Total Organic Carbon (ug/L)	0.6	"
SEDIMENT SAMPLING		
Sediment Toxicity - *Hyalella azteca* 10-day static renewal (EPA, 2000)		2 times each year, once in spring (April-May) and once in fall (August-September)
Pyrethroid Pesticides in Sediment (µg/kg)		
Gamma-cyhalothrin	2	2 times in both 2017 and 2018, once in spring (April-May) and once in fall (August-September) of each year, concurrent with sediment toxicity sampling
Lambda-cyhalothrin	2	"
Bifenthrin	2	"
Beta-cyfluthrin	2	"
Cyfluthrin	2	"
Esfenvalerate	2	"
Permethrin	2	"
Cypermethrin	2	"
Danitol	2	"
Fenvalerate	2	"
Fluvalinate	2	"
Other Monitoring in Sediment		
Chlorpyrifos (µg/kg)	2	"
Total Organic Carbon	0.01%	"
		"
Sediment Grain Size Analysis	1%	"

[1]Monitoring is ongoing through all five years of the Order, unless otherwise specified. Monitoring frequency may be used as a guide for developing alternative Sampling and Analysis Plan.
[2]Pesticide list may be modified based on specific pesticide use in Central Coast Region. Analytes on this list must be reported, at a minimum.
[3] Reporting Limit, taken from SWAMP where applicable.

[4] Holmgren, Meyer, Cheney and Daniels. 1993. Cadmium, Lead, Zinc, Copper and Nickel in Agricultural Soils of the United States. J. of Environ. Quality 22:335-348.
[5]Sax and Lewis, ed. 1987. Hawley's Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co., 1987. Zinc arsenate is an insecticide.
[6]Http://www.coastalagro.com/products/labels/9%25BORON.pdf; Boron is applied directly or as a component of fertilizers as a plant nutrient.
[7]Madramootoo, Johnston, Willardson, eds. 1997. Management of Agricultural Drainage Water Quality. International Commission on Irrigation and Drainage. U.N. FAO. SBN 92-6-104058.3.
[8]http://cat.inist.fr/?aModele=afficheN&cpsidt=14074525; Phenols are breakdown products of herbicides and pesticides. Phenols can be directly toxic and cause endocrine disruption.
[9]See SWAMP field measures SOP, p. 17
mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram;
NTU – Nephelometric Turbidity Units; CFS – cubic feet per second;

Table 3. Groundwater Monitoring Parameters

Parameter	RL	Analytical Method[3]	Units
pH	0.1	Field or Laboratory Measurement EPA General Methods	pH Units
Specific Conductance	2.5		µS/cm
Total Dissolved Solids	10		mg/L
Total Alkalinity as $CaCO_3$	1	EPA Method 310.1 or 310.2	
Calcium	0.05	General Cations[1] EPA 200.7, 200.8, 200.9	
Magnesium	0.02		
Sodium	0.1		
Potassium	0.1		
Sulfate (SO_4)	1.0	General Anions EPA Method 300 or EPA Method 353.2	
Chloride	0.1		
Nitrate + Nitrite (as N)[2] *or* Nitrate as N	0.1		

[1]General chemistry parameters (major cations and anions) represent geochemistry of water bearing zone and assist in evaluating quality assurance/quality control of groundwater monitoring and laboratory analysis.
[2]The MRP allows analysis of "nitrate plus nitrite" to represent nitrate concentrations (as N). The "nitrate plus nitrite" analysis allows for extended laboratory holding times and relieves the Discharger of meeting the short holding time required for nitrate.
[3]Dischargers may use alternative analytical methods approved by EPA.
RL – Reporting Limit; µS/cm – micro siemens per centimeter

Table 4A. Individual Discharge Monitoring for Tailwater, Tile drain, and Stormwater Discharges

Parameter	Analytical Method[1]	Maximum PQL	Units	Min Monitoring Frequency
Discharge Flow or Volume	Field Measure	---	CFS	(a) (d)
Approximate Duration of Flow	Calculation	---	hours/month	
Temperature (water)	Field Measure	0.1	^{o}Celsius	
pH	Field Measure	0.1	pH units	

Electrical Conductivity	Field Measure	100	µS/cm	
Turbidity	SM 2130B, EPA 180.1	1	NTUs	
Nitrate + Nitrite (as N)	EPA 300.1, EPA 353.2	0.1	mg/L	
Ammonia	SM 4500 NH3, EPA 350.3	0.1	mg/L	
Chlorpyrifos[2]	EPA 8141A, EPA 614	0.02	ug/L	(b) (c) (d)
Diazinon[2]				
Ceriodaphnia Toxicity (96-hr acute)	EPA-821-R-02-012	NA	% Survival	
Hyalella Toxicity in Water (96-hr acute)	EPA-821-R-02-012	NA	% Survival	

[1] In-field water testing instruments/equipment as a substitute for laboratory analysis if the method is approved by EPA, meets RL/PQL specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.
[2]If chlorpyrifos or diazinon is used at the farm/ranch, otherwise does not apply. The Executive Officer may require monitoring of other pesticides based on results of downstream receiving water monitoring.
(a) Two times per year during primary irrigation season for farms/ranches less than or equal to 500 acres, and four times per year during primary irrigation season for farms/ranches greater than 500 acres. Executive Officer may reduce sampling frequency based on water quality improvements.
(b) Once per year during primary irrigation season for farms/ranches less than or equal to 500 acres, and two times per year during primary irrigation season for farms/ranches greater than 500 acres.
(c) Sample must be collected within one week of chemical application, if chemical is applied on farm/ranch;
(d) Once per year during wet season (October – March) for farms/ranches less than or equal to 500 acres, and two times per year during wet season for farms/ranches greater than 500 acres, within 18 hours of major storm events;
CFS – Cubic feet per second; NTU – Nephelometric turbidity unit; PQL – Practical Quantitation Limit;
NA – Not applicable

Table 4B. Individual Discharge Monitoring for Tailwater Ponds and other Surface Containment Features

Parameter	Analytical Method[1]	Maximum PQL	Units	Minimum Monitoring Frequency
Volume of Pond	Field Measure	1	Gallons	(a) (d)
Nitrate + Nitrite (as N)	EPA 300.1, EPA 353.2	50	mg/L	

[1] In-field water testing instruments/equipment as a substitute for laboratory analysis if the method is approved by EPA, meets RL/PQL specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.
(a) Four times per year during primary irrigation season; Executive Officer may reduce monitoring frequency based on water quality improvements.
(d) Two times per year during wet season (October – March, within 18 hours of major storm events)

Table 5. Tier 3 - Time Schedule for Key Monitoring and Reporting Requirements (MRPs)

REQUIREMENT	TIME SCHEDULE[1]
Submit Sampling And Analysis Plan and Quality Assurance Project Plan (SAAP/QAPP) for Surface Receiving Water Quality Monitoring (*individually or*	By March 1, 2018, or as directed by the Executive Officer; satisfied if an approved SAAP/QAPP has been submitted pursuant

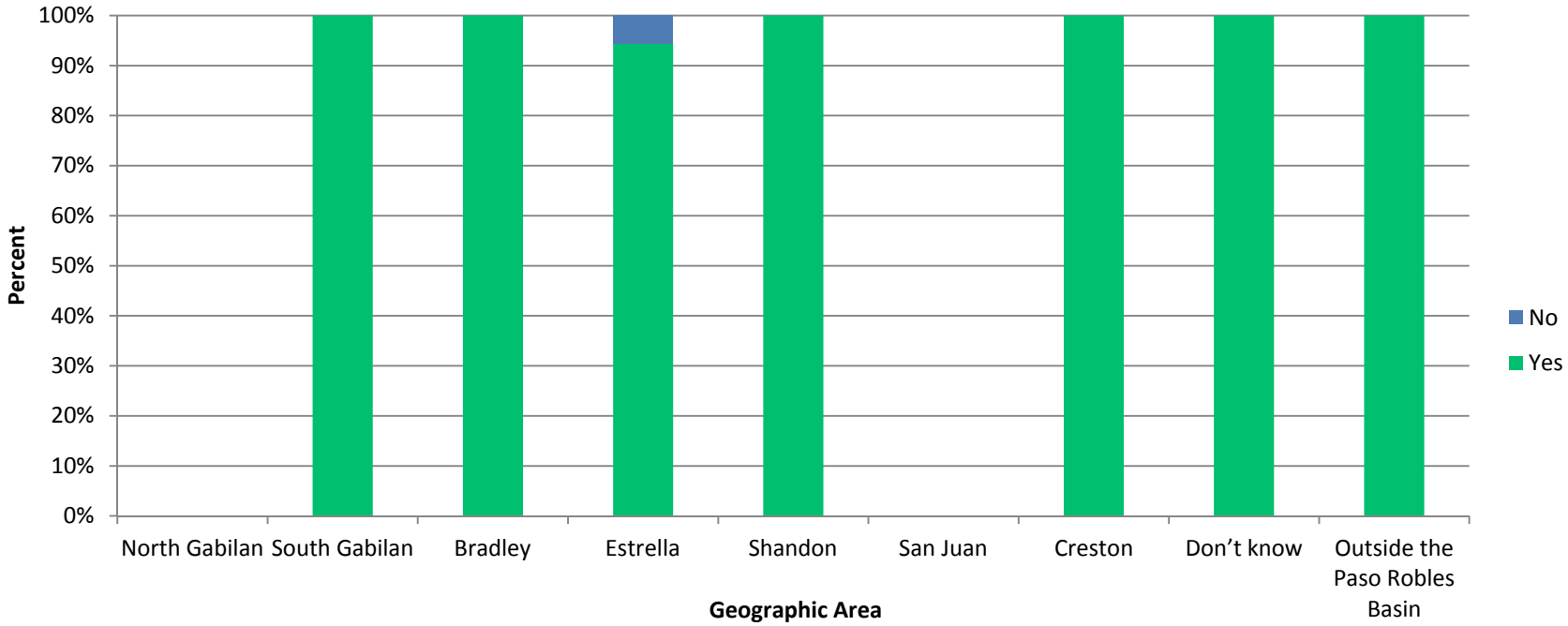
through cooperative monitoring program)	to Order No. R3-2012-0011 and associated MRPs
Initiate surface receiving water quality monitoring (*individually or through cooperative monitoring program*)	Per an approved SAAP and QAPP
Submit surface receiving water quality monitoring data (*individually or through cooperative monitoring program*)	Each January 1, April 1, July 1, and October 1
Submit surface receiving water quality Annual Monitoring Report (*individually or through cooperative monitoring program*)	By July 1 2017; annually thereafter by July 1
Initiate monitoring of groundwater wells	First sample from March-June 2017, second sample from September-December 2017
Submit individual surface water discharge SAAP and QAPP	By March 1, 2018 or as directed by the Executive Officer; waived if an approved SAAP and QAPP has been submitted and being implemented pursuant to Order No. R3-2012-0011.
Initiate individual surface water discharge monitoring	As described in an approved SAAP and QAPP
Submit individual surface water discharge monitoring data	March 1, 2018, and every March 1 annually thereafter
Submit electronic Annual Compliance Form	March 1, 2018 and every March 1 annually thereafter
Submit groundwater monitoring results	Within 60 days of the sample collection
Submit Water Quality Buffer Plan or alternative	Within 18 months of enrolling new Tier 3 farm/ranch in Order
Submit Status Report on Water Quality Buffer Plan or alternative	March 1, 2019
Tier 3 Dischargers with farms/ranches growing high risk crops:	
Report total nitrogen applied on the Total Nitrogen Applied form	March 1, 2018 and every March 1 annually thereafter
Submit INMP Effectiveness Report	March 1, 2019

[1] Dates are relative to adoption of this Order, unless otherwise specified.

Appendix G

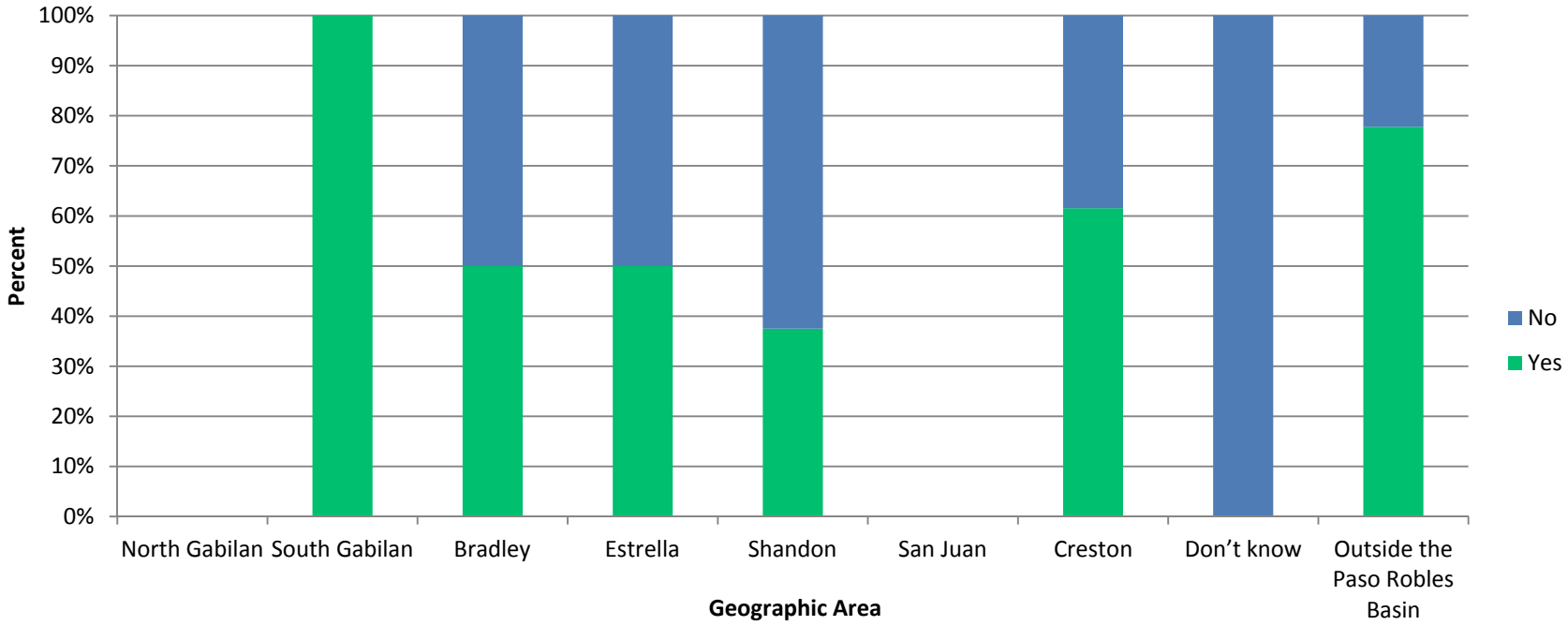
Sustainable Management Criteria Survey Results

Have you heard about the Sustainable Groundwater Management Act (SGMA) Groundwater Sustainability Plan (GSP) process?



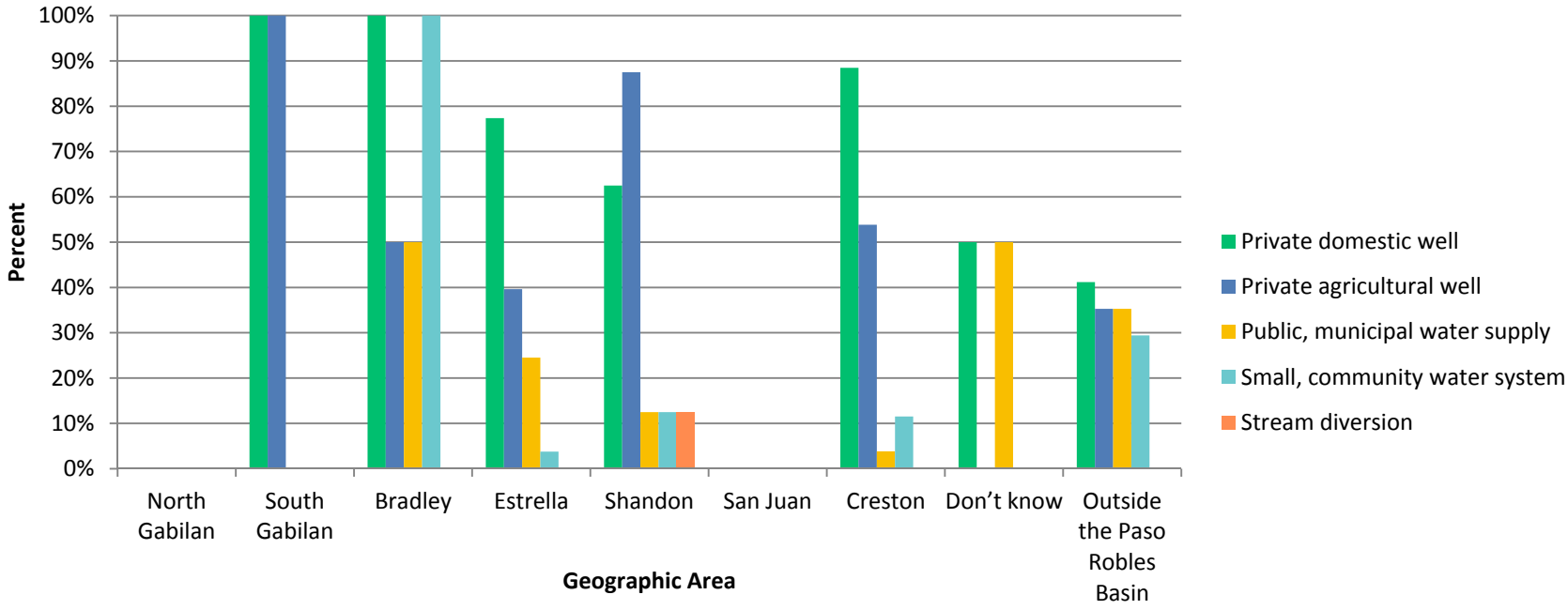
Geographic Area	Yes		No		Total	
	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0
South Gabilan	100%	1	0%	0	1%	1
Bradley	100%	2	0%	0	2%	2
Estrella	94%	50	6%	3	48%	53
Shandon	100%	8	0%	0	7%	8
San Juan	0%	0	0%	0	0%	0
Creston	100%	26	0%	0	23%	26
Don't know	100%	2	0%	0	2%	2
Outside the Paso Robles Basin	100%	19	0%	0	17%	19
Total	97%	108	3%	3	100%	111
					Answered	111
					Skipped	0

Have you been involved in other water supply public processes in the past?



Geographic Area	Yes		No		Total	
	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0
South Gabilan	100%	1	0%	0	1%	1
Bradley	50%	1	50%	1	2%	2
Estrella	50%	26	50%	26	48%	52
Shandon	38%	3	63%	5	7%	8
San Juan	0%	0	0%	0	0%	0
Creston	62%	16	38%	10	24%	26
Don't know	0%	0	100%	2	2%	2
Outside the Paso Robles Basin	78%	14	22%	4	17%	18
Total	56%	61	44%	48	100%	109
					Answered	109
					Skipped	2

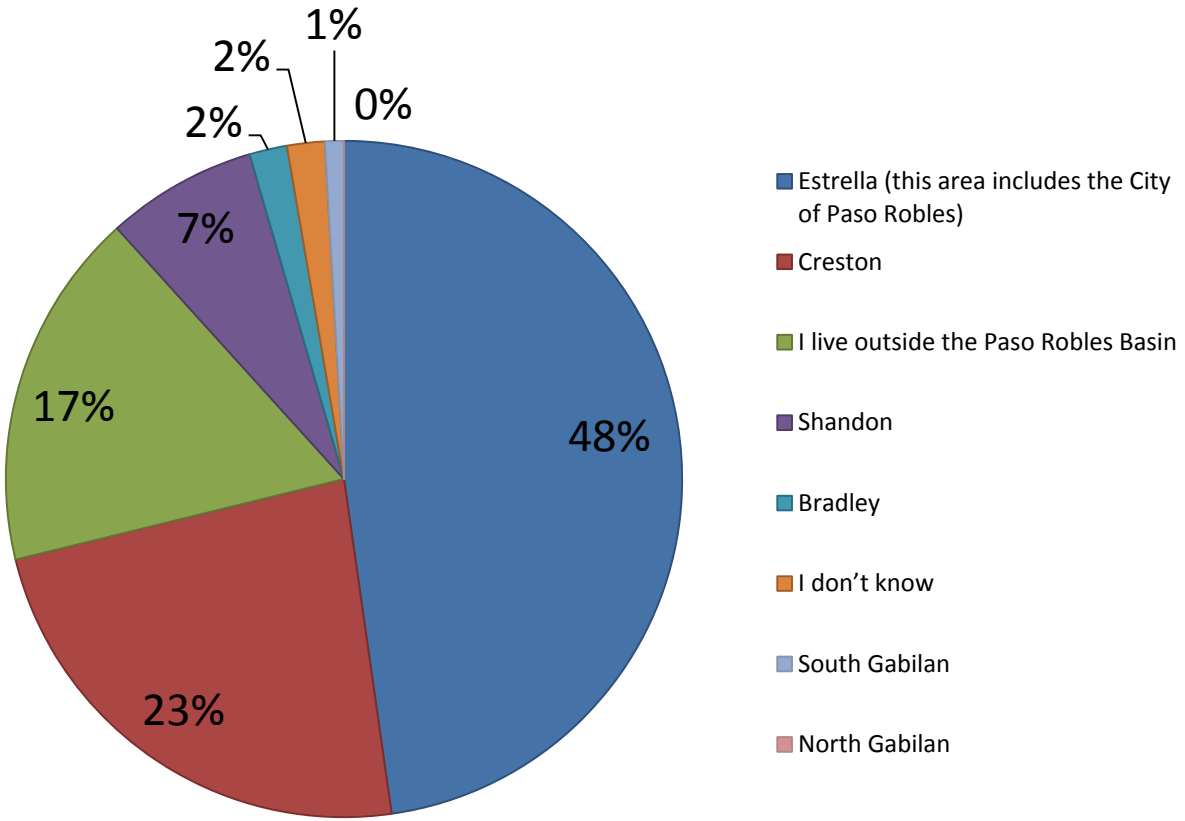
Which water sources do you use? (select all that apply)



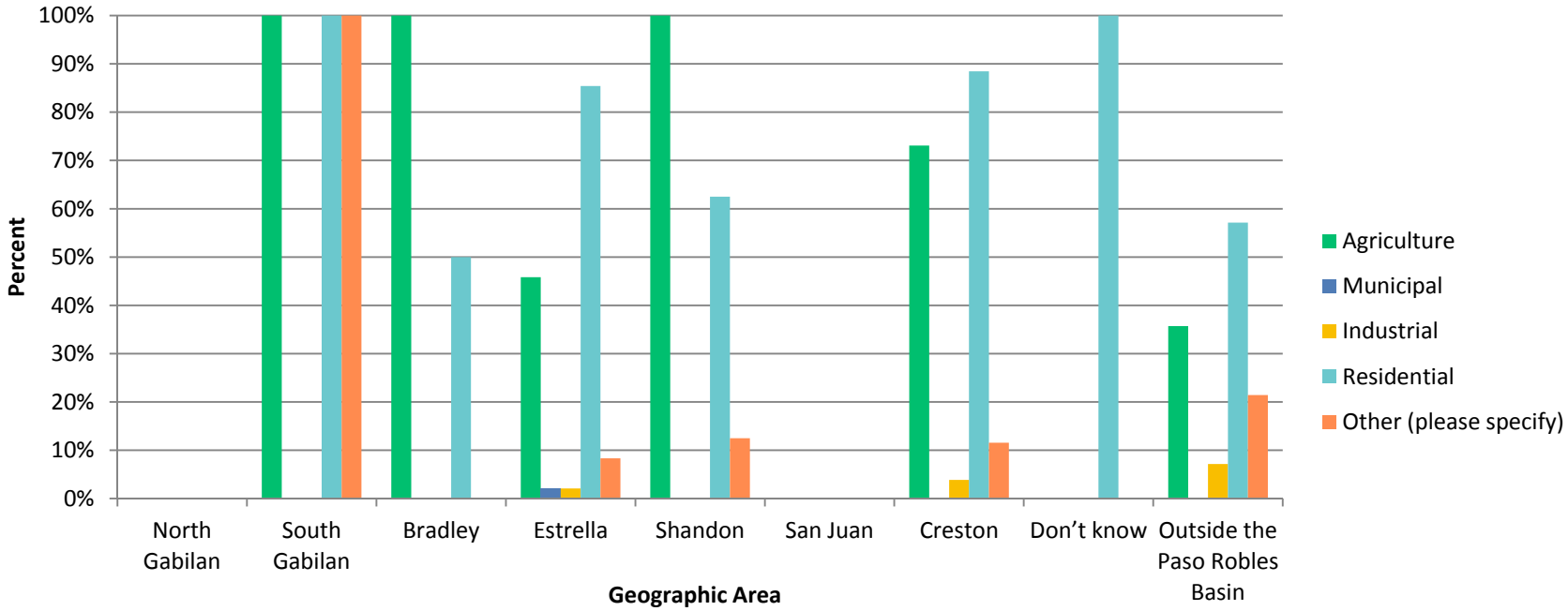
Geographic Area	Private domestic well		Private agricultural well		Public, municipal water supply		Small, community water system		Stream diversion		Total	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	100%	1	100%	1	0%	0	0%	0	0%	0	1%	1
Bradley	100%	2	50%	1	50%	1	100%	2	0%	0	2%	2
Estrella	77%	41	40%	21	25%	13	4%	2	0%	0	49%	53
Shandon	63%	5	88%	7	13%	1	13%	1	13%	1	7%	8
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Creston	88%	23	54%	14	4%	1	12%	3	0%	0	24%	26
Don't know	50%	1	0%	0	50%	1	0%	0	0%	0	2%	2
Outside the Paso Robles Basin	41%	7	35%	6	35%	6	29%	5	0%	0	16%	17
Total	73%	80	46%	50	21%	23	12%	13	1%	1	100%	109
											Answered	109
											Skipped	2

Which geographic area do you live in?

Geographic Area	Percent	Count
North Gabilan	0%	0
South Gabilan	1%	1
Bradley	2%	2
Estrella (this area includes the City of Paso Robles)	48%	53
Shandon	7%	8
San Juan	0%	0
Creston	23%	26
I don't know	2%	2
I live outside the Paso Robles Basin	17%	19
Total	100%	111



If you pump groundwater, what do you use it for? (check all that apply)



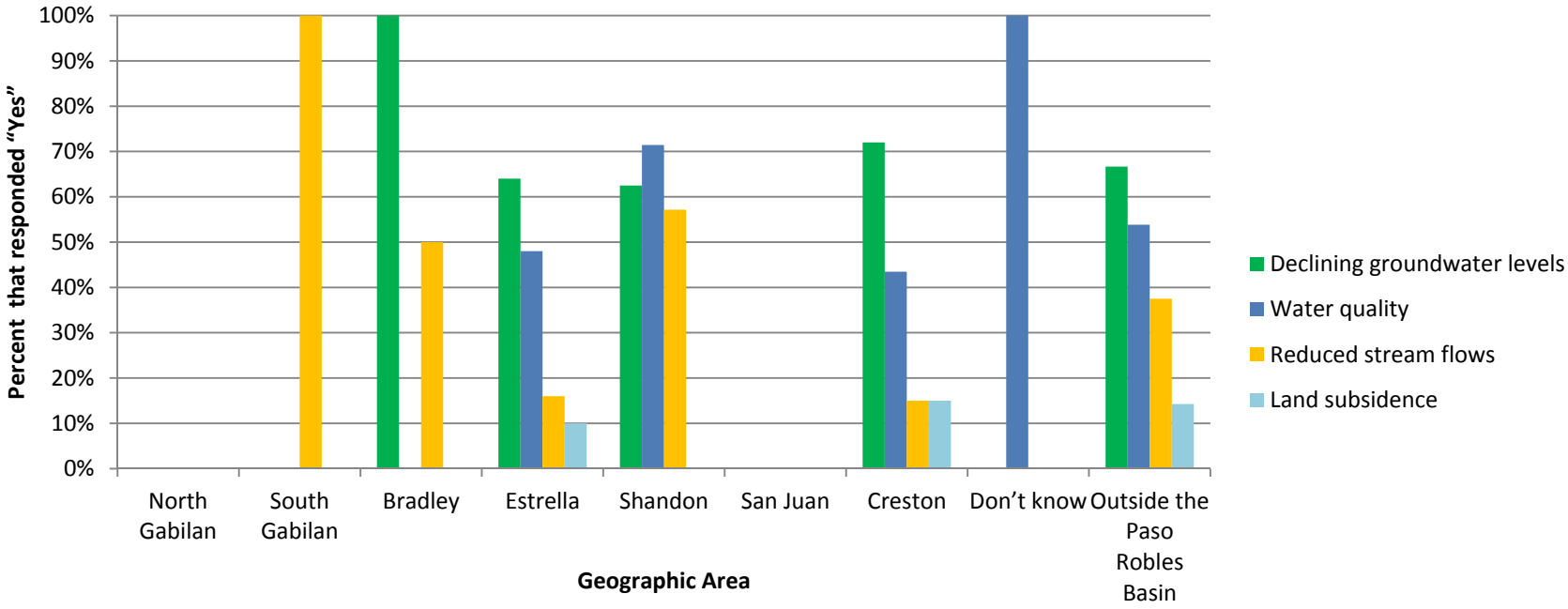
Geographic Area	Agriculture		Municipal		Industrial		Residential		Other (please specify)		Total	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	100%	1	0%	0	0%	0	100%	1	100%	1	1%	1
Bradley	100%	2	0%	0	0%	0	50%	1	0%	0	2%	2
Estrella	46%	22	2%	1	2%	1	85%	41	8%	4	48%	48
Shandon	100%	8	0%	0	0%	0	63%	5	13%	1	8%	8
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Creston	73%	19	0%	0	4%	1	88%	23	12%	3	26%	26
Don't know	0%	0	0%	0	0%	0	100%	1	0%	0	1%	1
Outside the Paso Robles Basin	36%	5	0%	0	7%	1	57%	8	21%	3	14%	14
Total	57%	57	1%	1	3%	3	80%	80	12%	12	100%	100
											Answered	100
											Skipped	11

Please rank the following potential negative impacts to groundwater based on your level of concern, with 1 representing the impact of greatest concern.

Impact	Rank:	1		2		3		4		Total		Weighted Score
Declining groundwater levels	North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	South Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	Bradley	0%	0	100%	1	0%	0	0%	0	1%	1	2.0
	Estrella	76%	35	17%	8	7%	3	0%	0	42%	46	1.3
	Shandon	83%	5	0%	0	17%	1	0%	0	5%	6	1.3
	San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	Creston	83%	20	8%	2	4%	1	4%	1	22%	24	1.3
	Don’t know	100%	2	0%	0	0%	0	0%	0	2%	2	1.0
	Outside the Paso Robles Basin	79%	15	16%	3	5%	1	0%	0	17%	19	1.3
	Total	70%	77	13%	14	5%	6	1%	1	100%	110	1.2
Water Quality	North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	South Gabilan	0%	0	100%	1	0%	0	0%	0	1%	1	2.0
	Bradley	100%	1	0%	0	0%	0	0%	0	1%	1	1.0
	Estrella	17%	8	55%	26	26%	12	2%	1	43%	47	2.1
	Shandon	33%	2	50%	3	17%	1	0%	0	5%	6	1.8
	San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	Creston	9%	2	74%	17	17%	4	0%	0	21%	23	2.1
	Don’t know	0%	0	100%	1	0%	0	0%	0	1%	1	2.0
	Outside the Paso Robles Basin	6%	1	72%	13	22%	4	0%	0	16%	18	2.2
	Total	13%	14	55%	61	19%	21	1%	1	100%	110	1.8
Reduced stream flows	North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	South Gabilan	100%	1	0%	0	0%	0	0%	0	1%	1	1.0
	Bradley	50%	1	0%	0	50%	1	0%	0	2%	2	2.0
	Estrella	2%	1	11%	5	52%	24	35%	16	42%	46	3.2
	Shandon	20%	1	60%	3	0%	0	20%	1	5%	5	2.2
	San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	Creston	5%	1	0%	0	75%	15	20%	4	18%	20	3.1
	Don’t know	0%	0	50%	1	50%	1	0%	0	2%	2	2.5
	Outside the Paso Robles Basin	6%	1	6%	1	61%	11	28%	5	16%	18	3.1
	Total	5%	6	9%	10	47%	52	24%	26	100%	110	2.6
Land subsidence	North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	South Gabilan	0%	0	0%	0	0%	0	100%	1	1%	1	4.0
	Bradley	0%	0	0%	0	50%	1	50%	1	2%	2	3.5
	Estrella	15%	7	13%	6	19%	9	54%	26	44%	48	3.1
	Shandon	0%	0	0%	0	40%	2	60%	3	5%	5	3.6
	San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0.0
	Creston	0%	0	14%	3	10%	2	76%	16	19%	21	3.6
	Don’t know	0%	0	0%	0	0%	0	100%	1	1%	1	4.0
	Outside the Paso Robles Basin	11%	2	6%	1	11%	2	72%	13	16%	18	3.4
	Total	8%	9	9%	10	15%	16	55%	61	100%	110	2.9

Have you been negatively impacted by the following?

Figure and table below show results for those who responded "Yes"



	Declining groundwater levels		Water quality		Reduced stream flows		Land subsidence	
Geographic Area	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	0%	0	100%	1	0%	0
Bradley	100%	2	0%	0	50%	1	0%	0
Estrella	64%	32	48%	24	16%	8	10%	5
Shandon	63%	5	71%	5	57%	4	0%	0
San Juan	0%	0	0%	0	0%	0	0%	0
Creston	72%	18	43%	10	15%	3	15%	3
Don't know	0%	0	100%	1	0%	0	0%	0
Outside the Paso Robles Basin	67%	10	54%	7	38%	6	14%	2
Total	62%	67	44%	47	21%	23	9%	10

Have you been negatively impacted by the following?

Responses from Creston				
Declining groundwater levels	Water quality	Reduced stream flows	Land subsidence-	Negative impacts:
No	No	No	No	
No	No	No		
Yes	Yes	No	No	
No	Yes	No	Yes	WATER LINES BREAKING
Yes	Yes	No	No	
Yes	No	No	No	
No	No	No	No	
No	No			
Yes	No			
Yes				Well ran dry.
Yes	No	No	Yes	
Yes				Had to stop watering my garden and. Lost apple and apricot trees. Could no longer have a food garden.
Yes	Yes	No	No	
Yes	Yes	Yes	No	
No	No	No	No	Not sure... How are individuals supposed to know the water quality characteristics?
Yes	No	No	No	Drill new deeper wells
Yes	Yes		No	We have given up our lawns and our vegetable garden and limited our baths/showers and wear clothes longer before washing.
No	No	No	No	
Yes	No	No	No	
Yes	No	No	No	Moderate decline in static water level. In close proximity to Windfall Farms who pumps constantly. Also in proximity to a newly planted very large vineyard with new pumping. The risk of adverse impact on our groundwater is very high.
				No ,none of the above
Yes	Yes	No	No	
Yes	Yes	No	No	Greatly reduced groundwater level and poor water quality in new well.
Yes	No	No	No	Dramatic decrease in aquifer level and need to drop pump in 2015
Yes	Yes	Yes	No	obvious increase in hardness of water; trees in creek dying; well levels not returning during average rain year.
Yes	Yes	Yes	Yes	

Have you been negatively impacted by the following?

Responses from Estrella				
Declining groundwater levels	Water quality	Reduced stream flows	Land subsidence-	Negative impacts:
Yes	Yes	Yes	No	
Yes	Yes	Yes	No	
Yes	Yes	No	No	2 dry wells
No	Yes	No	No	
No	No	No	No	
Yes	No	No	No	
No	Yes	No	No	Salt build-up in soil
Yes	Yes	No	No	
No	No	No	No	
Yes	Yes	Yes	Yes	well water level is very close to pump, have to have a new well drilled
Yes	Yes	No	No	
Yes	Yes	No	Yes	
No	No	No	No	
Yes	Yes	Yes	No	Each citizen within the basin is impacted by these whether aware or not. As these impacts increase the economic burden will increase, the communal burden will increase i.e. loss of natural beauty and shared public spaces, decisions of who gets water who does not. Increased public strife and division.
No	No	No	No	
Yes	No	No	No	
Yes	Yes	No	No	Had to lower the pumps Have to treat our water to combat water quality
Yes	Yes	No	Yes	Water quality has decreased with the concentration of salts in our wells.
No	No	No	No	
No	No	No	No	
No	No	No	No	
Yes	Yes	No	No	
No	Yes	No	No	Increased salinity
Yes	Yes	No	No	
No	Yes	No	No	
Yes	No	No	No	No measurements on water quality, but water table has dropped significantly since late 1990's

Have you been negatively impacted by the following?

Responses from Estrella Continued				
Declining groundwater levels	Water quality	Reduced stream flows	Land subsidence-	Negative impacts:
	No	No	No	Well static level has dropped 50’
No	Yes	No	No	increased salts, boron, etc.
No	Yes	No	No	
No	No	No	No	The city's attempt to take over right to my well water
Yes	Yes	No	No	Forced to install a second, larger holding tank and drop our well pump. When we purchased the home, the water tasted great and we had no problem with excess calcium build-up. Now it does not taste the same and we have excessive mineral build-up.
Yes	No	No	No	Cost per ac-ft increased due to declining levels.
Yes	No	No	No	
No	No	No	No	
Yes	No	No	Yes	
Yes	No	No	No	
No	No	No	No	
Yes	No	Yes	No	Quickly declining static water level in our well. Recharge rate reduced. Pumping volume reduced.
Yes	No	Yes	No	the water level in our well has dropped 50+ feet in the last four years
No	No	No	No	
Yes	Yes	Yes	No	The level of arsenic in our groundwater caused us to have to obtain a grant to correct the problem.
Yes	Yes		No	Higher energy costs, lowering in water quality and quantity
Yes	No	No	No	
Yes	Yes	No	No	My job and livelihood depends upon wine grape production and having a balanced and sustainable management of the groundwater basin for ALL should be achievable.
				Need more info.
Yes	Yes	No	No	
Yes	No	No	No	
Yes	No	No	Yes	Paid $35,000 for a new well 2 months ago!!!
Yes	No	Yes	No	I had to drill a much deeper well.
Yes	No	No	No	Static water level of our well has dropped 35' since 2011
No	No	No	No	
Yes	Yes			My 350 foot well went dry. Had to drill a new one

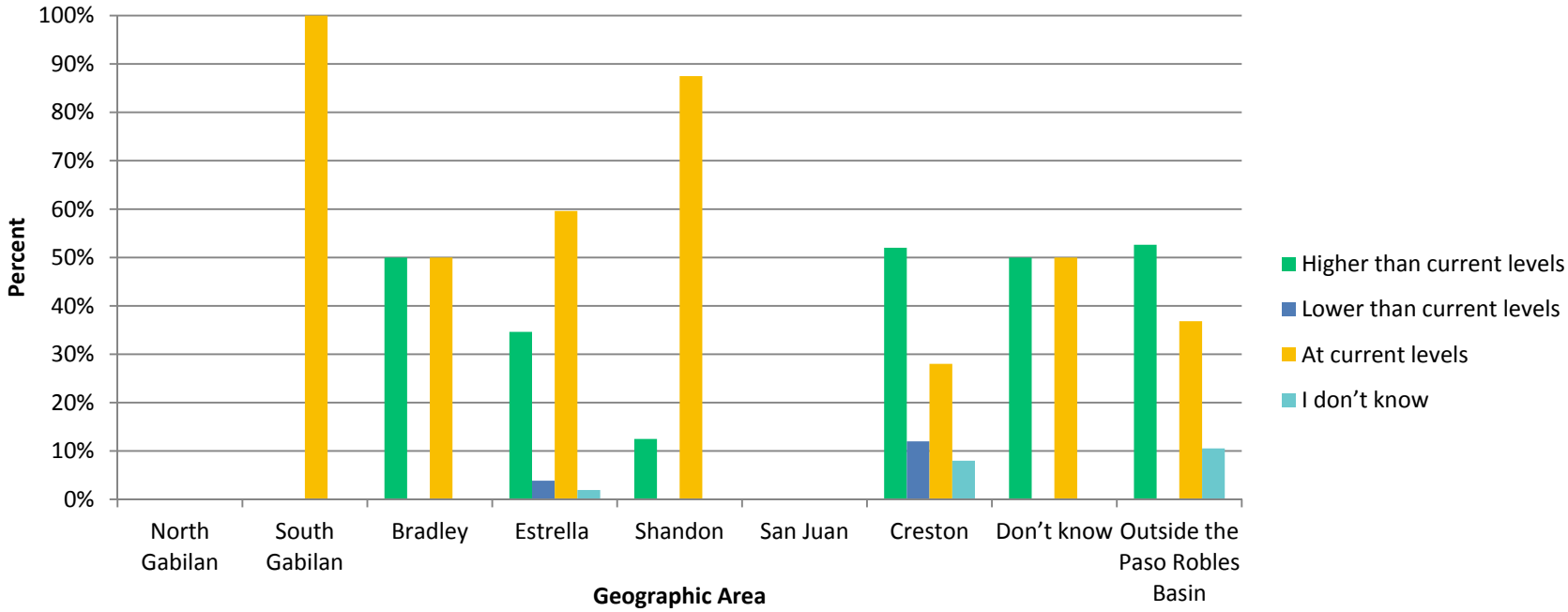
Have you been negatively impacted by the following?

Responses from Outside the Paso Robles Basin				
Declining groundwater levels	Water quality	Reduced stream flows	Land subsidence-	Negative impacts:
Yes		Yes	Yes	Fisheries, aquatic life,quality of life
Yes	Yes	Yes	No	Irrigation limitations.
Yes	No	Yes	No	
Yes	Yes	No	No	
No	No	No	No	
No	No	No	No	
Yes	No	No	No	
No	Yes	No	No	blowing dust in the wind
No	Yes	No	No	
		Yes		
		Yes		Reduced Steelhead spawning and rearing habitat. Riparian vegetation decline.
Yes				Wellntel's clients in the Paso basin are negatively impacted by declining groundwater levels.
Yes	No	No	No	
No	No	No	No	
Yes	Yes	Yes	Yes	
Yes	Yes	No	No	In Shandon over the last 90 years GW levels have declined and water quality has been reduced to a degree in some wells.
Yes	Yes	No	No	
Yes		Yes	Yes	Fisheries, aquatic life,quality of life
Yes	Yes	Yes	No	Irrigation limitations.
Yes	No	Yes	No	
Yes	Yes	No	No	
No	No	No	No	
No	No	No	No	
Yes	No	No	No	

Have you been negatively impacted by the following?

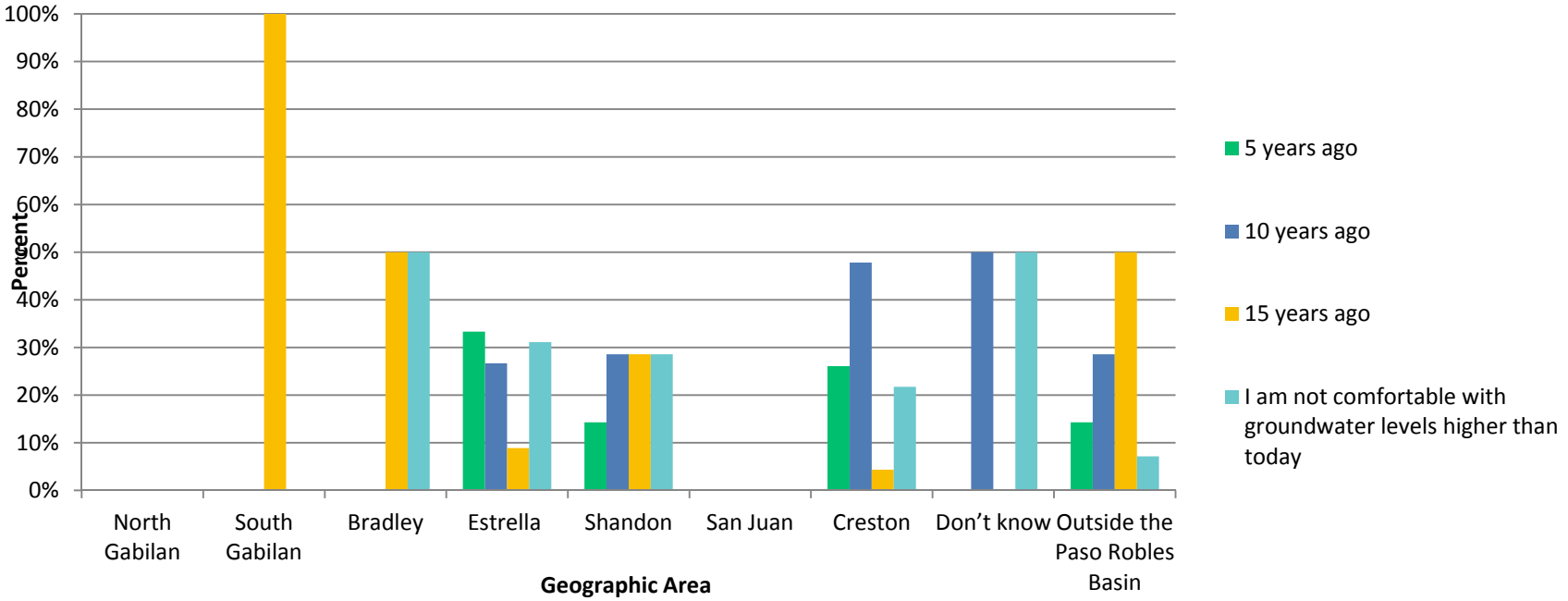
Declining groundwater levels	Water quality	Reduced stream flows	Land subsidence-	Negative impacts:
Responses from Bradley				
Yes	No	No	No	
Yes	No	Yes	No	Nacimiento recreation uses impaired by Monterey County dam releases. Limited water availability overall increases water usage in some agri-businesses. State water law creates contentiousness in water access.
Responses from Don't Know				
No	Yes	No	No	
				Not yet, many friends have lost their wells
Responses from South Gabilan				
No	No	Yes	No	Due to lack of rainfall, stream reduction results in less water penetrating the upper hardpan and replenishing the substrata and ground water.
Responses from Shandon				
No	Yes	No	No	
Yes	No	No	No	
Yes	Yes	No	No	Cost of water and lack of quality
Yes				Lost a well adjacent to vineyard property
Yes	Yes	Yes	No	Cost of pumping from groundwater levels and brackish water quality
No	Yes	Yes	No	
Yes	No	Yes	No	loss of grazing forage, loss of wildlife habitat, increased business expense/cost
No	Yes	Yes	No	

Raising groundwater levels requires developing new water supplies or reducing pumping; both of which have a financial cost. Lowering groundwater levels will allow increased pumping, but may dry out shallower (domestic) wells or streams. 20 years from now, would you be most satisfied with groundwater levels in your part of the basin that are stable at:



Geographic Area	Higher than current levels		Lower than current levels		At current levels		I don't know		Total	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	0%	0	100%	1	0%	0	1%	1
Bradley	50%	1	0%	0	50%	1	0%	0	2%	2
Estrella	35%	18	4%	2	60%	31	2%	1	48%	52
Shandon	13%	1	0%	0	88%	7	0%	0	7%	8
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0
Creston	52%	13	12%	3	28%	7	8%	2	23%	25
Don't know	50%	1	0%	0	50%	1	0%	0	2%	2
Outside the Paso Robles Basin	53%	10	0%	0	37%	7	11%	2	17%	19
Total	40%	44	5%	5	50%	55	5%	5	100%	109
									Answered	109
									Skipped	2

If the basin is maintained higher than current levels, additional water must be imported or pumping must be reduced. Knowing that higher groundwater levels will result in higher costs, please complete the following statement. I am comfortable with groundwater levels that would stabilize at levels seen: (select one)

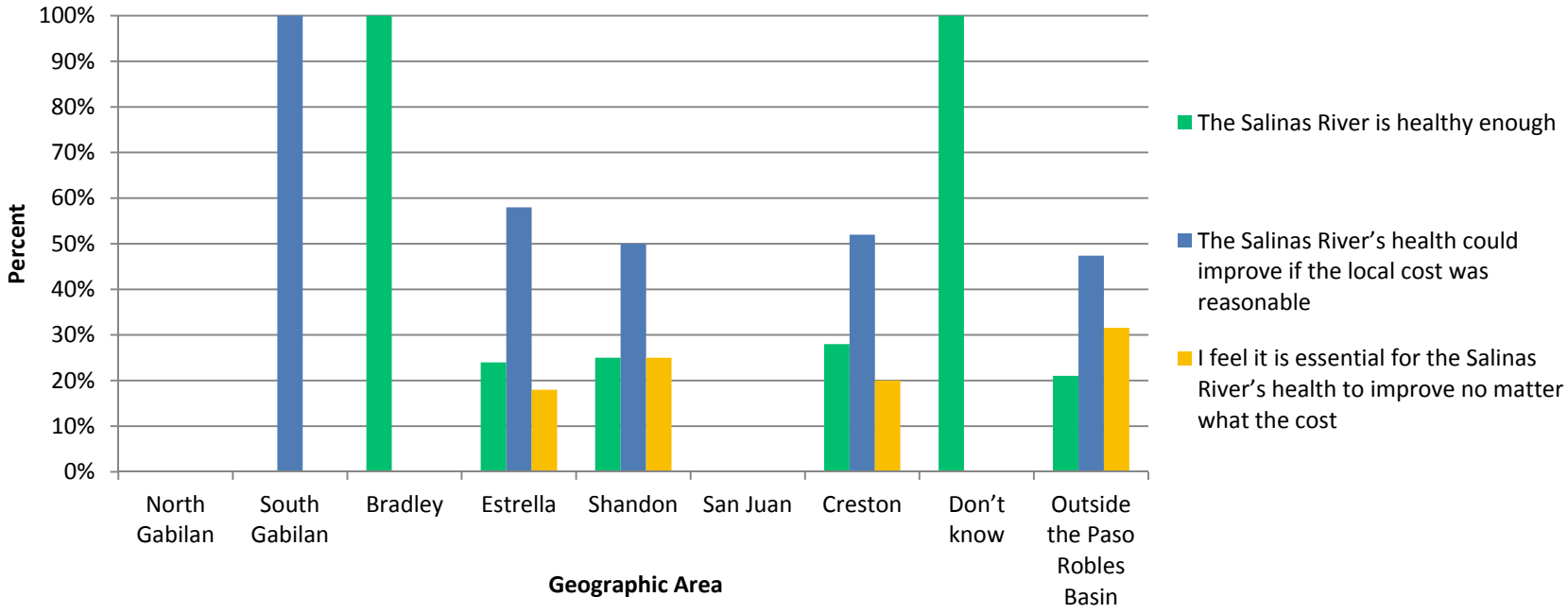


Geographic Area	5 years ago		10 years ago		15 years ago		I am not comfortable with groundwater levels higher than today		Total	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	0%	0	100%	1	0%	0	1%	1
Bradley	0%	0	0%	0	50%	1	50%	1	2%	2
Estrella	33%	15	27%	12	9%	4	31%	14	48%	45
Shandon	14%	1	29%	2	29%	2	29%	2	7%	7
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0
Creston	26%	6	48%	11	4%	1	22%	5	24%	23
Don't know	0%	0	50%	1	0%	0	50%	1	2%	2
Outside the Paso Robles Basin	14%	2	29%	4	50%	7	7%	1	15%	14
Total	26%	24	32%	30	17%	16	26%	24	100%	94
Other (please specify)									20%	19
									Answered	94
									Skipped	17

If the basin is maintained at lower than current levels, domestic wells or local streams may dry out. How much lower, approximately, could groundwater levels drop before they are too low? If you do not believe levels should drop, leave the slider at zero.

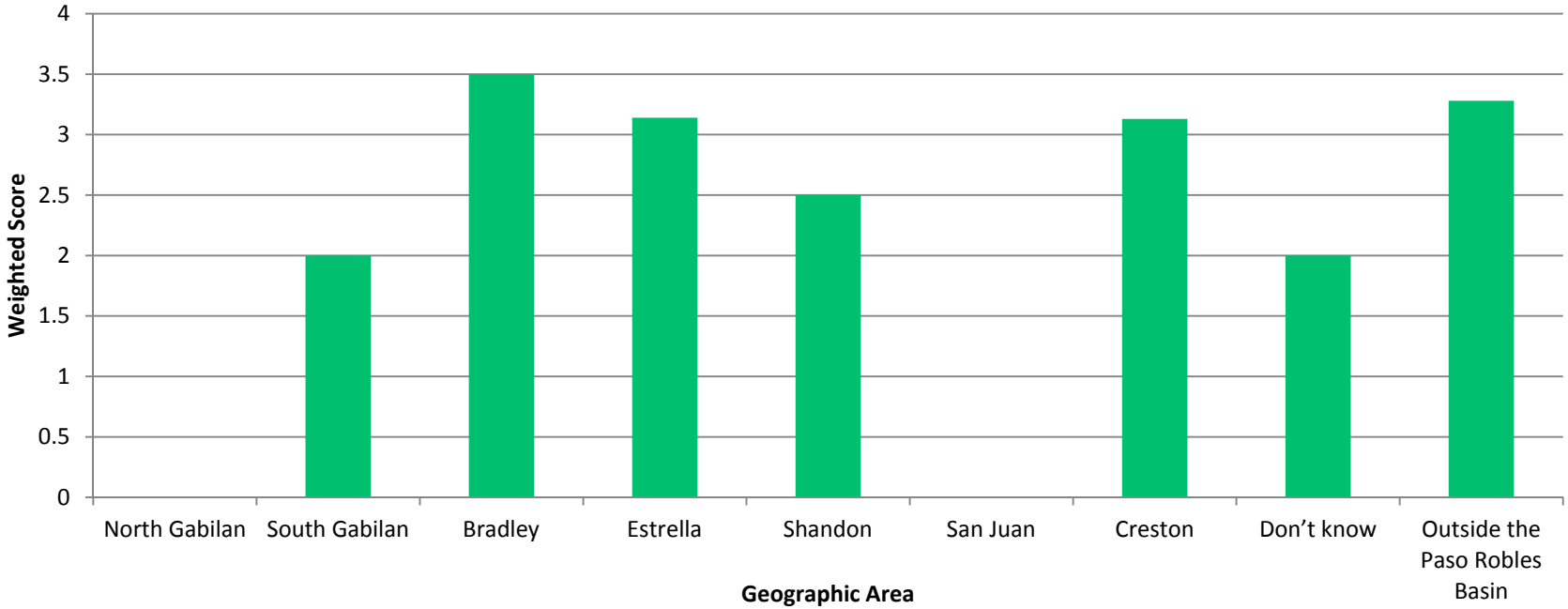
Responses from Creston	Responses from Estrella	Responses from Don't know	Responses from Outside the Paso Robles Basin	Responses from Shandon	Responses from South Gabilan
102	100	13	1	3	0
0	0		100	0	
200	100		150	0	
0	15		50	0	
75	0		0	110	
0	100		0		
45	0		0		
0	401		0		
114	50		0		
0	251		0		
0	0		2		
0	1		49		
0	0				
	0				
	1				
	250				
	208				
	0				
	301				
	0				
	0				
	400				
	40				
	500				
	23				
	275				
	0				
	0				
	0				
	0				
	34				
	201				

Which statement best describes your opinion of the health (in terms of stream flow and water quality) of the Salinas River in the Paso Robles Basin?



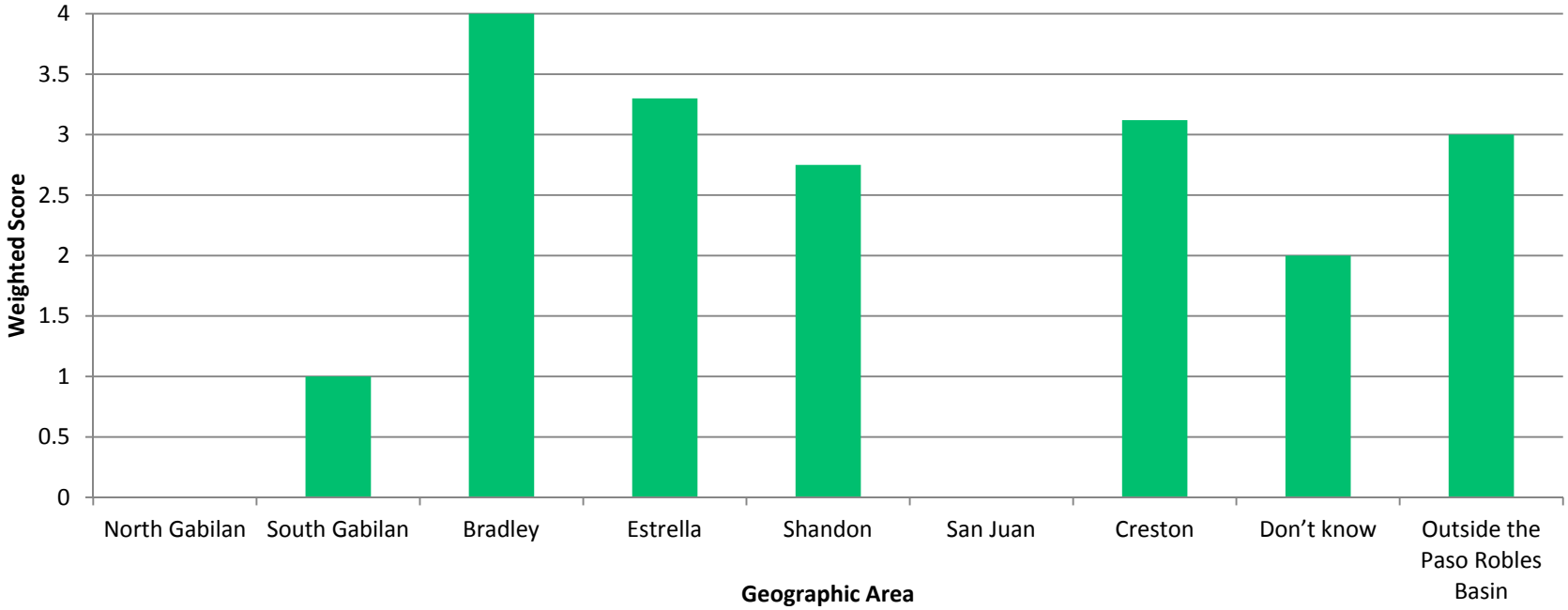
Geographic Area	The Salinas River is healthy enough		The Salinas River's health could improve if the local cost was reasonable		I feel it is essential for the Salinas River's health to improve no matter what the cost		Total	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	100%	1	0%	0	1%	1
Bradley	100%	2	0%	0	0%	0	2%	2
Estrella	24%	12	58%	29	18%	9	47%	50
Shandon	25%	2	50%	4	25%	2	8%	8
San Juan	0%	0	0%	0	0%	0	0%	0
Creston	28%	7	52%	13	20%	5	24%	25
Don't know	100%	1	0%	0	0%	0	1%	1
Outside the Paso Robles Basin	21%	4	47%	9	32%	6	18%	19
Total	26%	28	53%	56	21%	22	100%	106
							Answered	106

Do you feel that the health of Salinas River in the Paso Robles Basin is negatively impacted by the following? Please indicate on a scale of 1 (least impact) to 5 (most impact): Limited releases from Santa Margarita Lake (Salinas Reservoir)



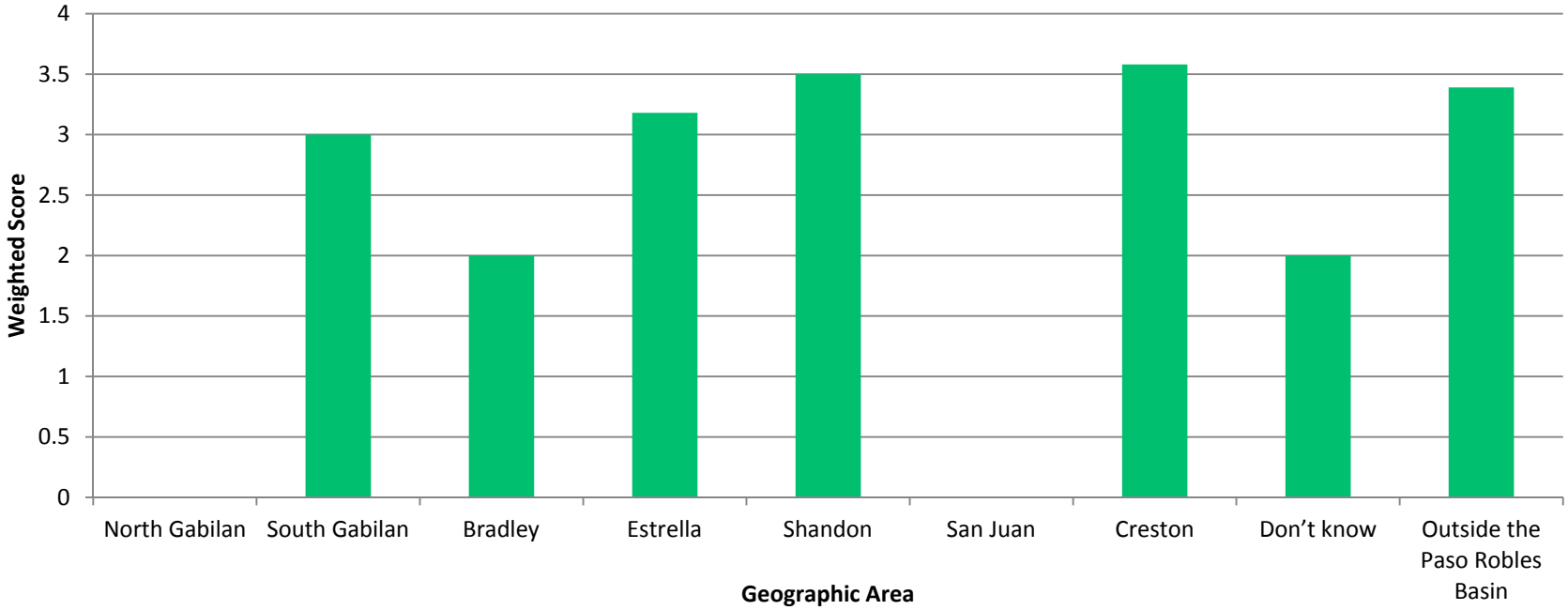
Geographic Area	Least impact 1		2		Moderate impact 3		4		Most impact 5		Total		Weighted Average
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
South Gabilan	0%	0	100%	1	0%	0	0%	0	0%	0	1%	1	2
Bradley	0%	0	0%	0	50%	1	50%	1	0%	0	2%	2	3.5
Estrella	14%	7	20%	10	22%	11	22%	11	20%	10	46%	49	3.14
Shandon	38%	3	13%	1	25%	2	13%	1	13%	1	8%	8	2.5
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	13%	3	17%	4	38%	9	13%	3	21%	5	23%	24	3.13
Don't know	0%	0	100%	1	0%	0	0%	0	0%	0	1%	1	2
Outside the Paso Robles Basin	22%	4	11%	2	11%	2	28%	5	28%	5	17%	18	3.28
Total	16%	17	18%	19	24%	25	20%	21	20%	21	100%	106	3.01
												Answered	106
												Skipped	5

Do you feel that the health of Salinas River in the Paso Robles Basin is negatively impacted by the following? Please indicate on a scale of 1 (least impact) to 5 (most impact):
People directly diverting water from the Salinas River in and upstream of the Paso Robles Basin



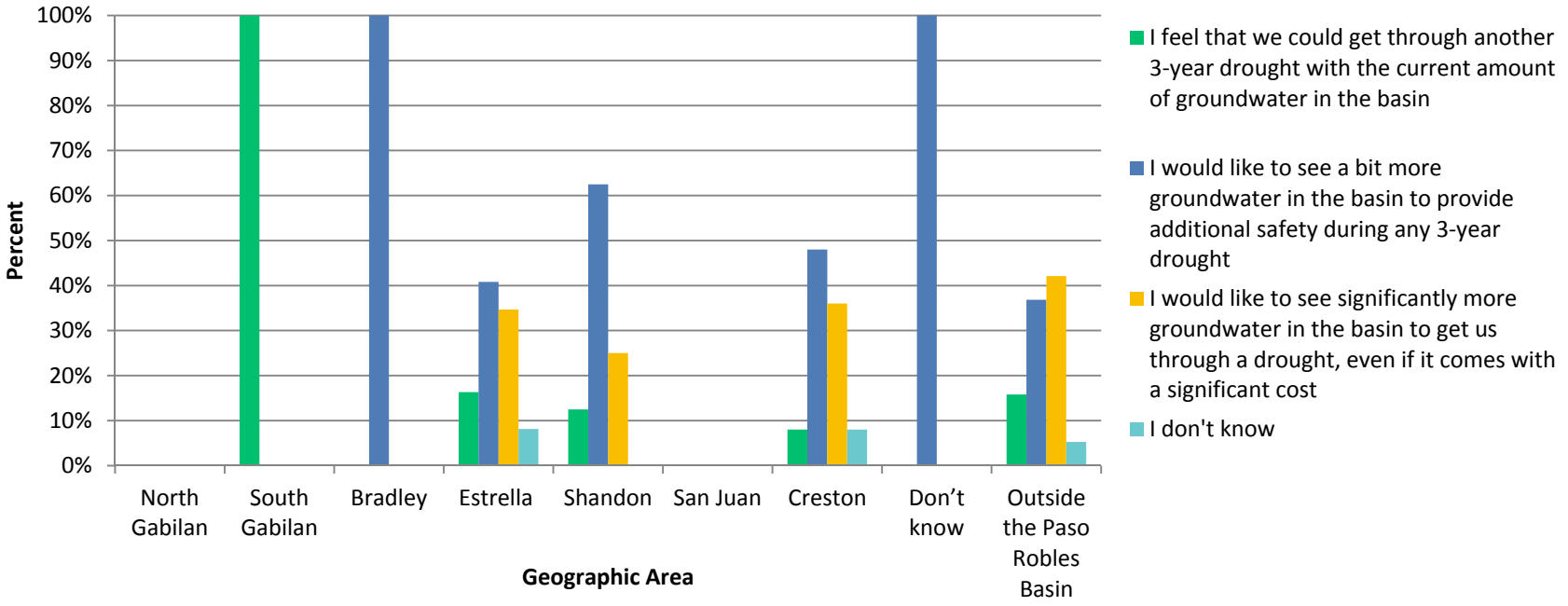
Geographic Area	Least impact 1		2		Moderate impact 3		4		Most impact 5		Total		Weighted Average
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
South Gabilan	100%	1	0%	0	0%	0	0%	0	0%	0	1%	1	1
Bradley	0%	0	0%	0	50%	1	0%	0	50%	1	2%	2	4
Estrella	10%	5	12%	6	34%	17	26%	13	18%	9	47%	50	3.3
Shandon	13%	1	38%	3	25%	2	13%	1	13%	1	8%	8	2.75
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	20%	5	12%	3	28%	7	16%	4	24%	6	24%	25	3.12
Don't know	0%	0	100%	1	0%	0	0%	0	0%	0	1%	1	2
Outside the Paso Robles Basin	28%	5	0%	0	33%	6	22%	4	17%	3	17%	18	3
Total	16%	17	12%	13	31%	33	21%	22	19%	20	100%	106	3.11
												Answered	106
												Skipped	5

Do you feel that the health of Salinas River in the Paso Robles Basin is negatively impacted by the following? Please indicate on a scale of 1 (least impact) to 5 (most impact):
Groundwater wells pulling water from, or preventing water from getting to, the Salinas River



Geographic Area	Least impact 1		2		Moderate impact 3		4		Most impact 5		Total		Weighted Average
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
South Gabilan	0%	0	0%	0	100%	1	0%	0	0%	0	1%	1	3
Bradley	50%	1	0%	0	50%	1	0%	0	0%	0	2%	2	2
Estrella	18%	9	10%	5	30%	15	20%	10	22%	11	47%	50	3.18
Shandon	13%	1	13%	1	25%	2	13%	1	38%	3	8%	8	3.5
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	12%	3	12%	3	27%	7	8%	2	42%	11	25%	26	3.58
Don't know	0%	0	100%	1	0%	0	0%	0	0%	0	1%	1	2
Outside the Paso Robles Basin	17%	3	6%	1	28%	5	22%	4	28%	5	17%	18	3.39
Total	16%	17	10%	11	29%	31	16%	17	28%	30	100%	106	3.30
												Answered	106
												Skipped	5

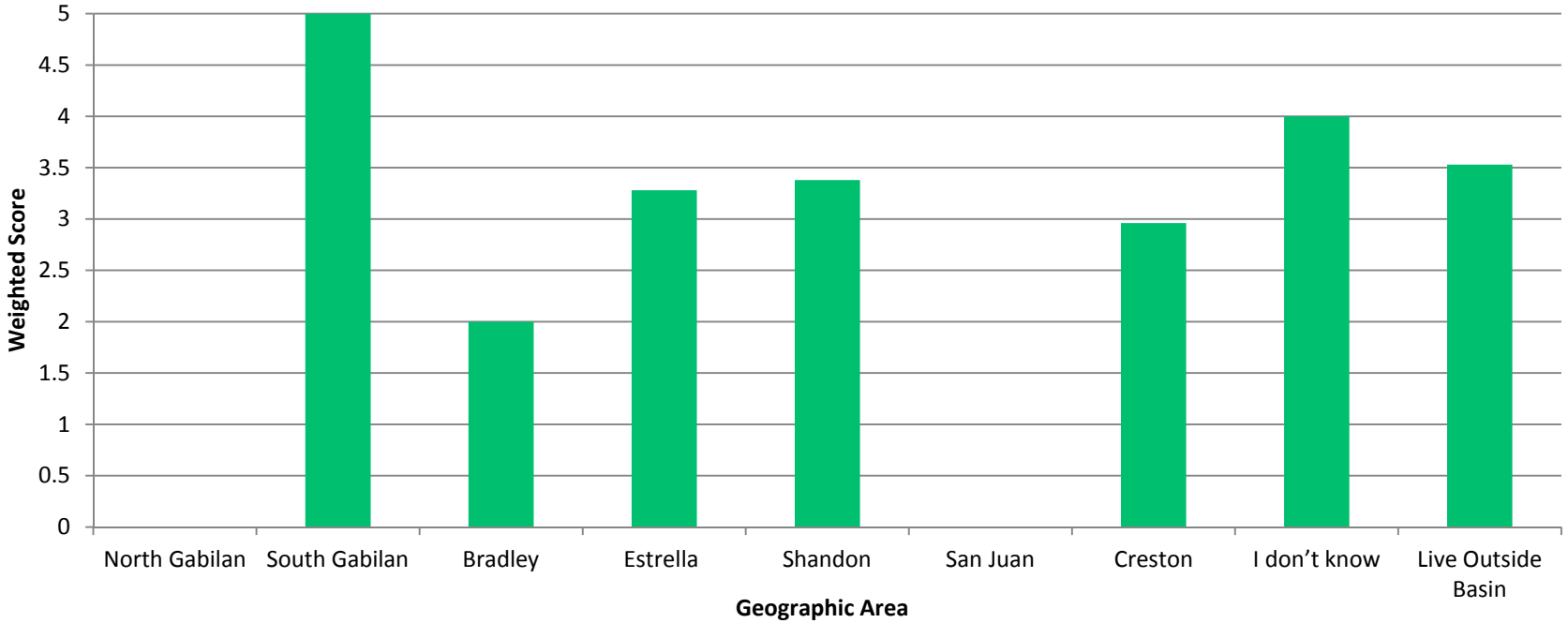
Which statement best describes your opinion about the amount of groundwater stored in the Paso Robles Basin?



Geographic Area	I feel that we could get through another 3-year drought with the current amount of groundwater in the basin		I would like to see a bit more groundwater in the basin to provide additional safety during any 3-year drought		I would like to see significantly more groundwater in the basin to get us through a drought, even if it comes with a significant cost		I don't know		Total	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	100%	1	0%	0	0%	0	0%	0	1%	1
Bradley	0%	0	100%	2	0%	0	0%	0	2%	2
Estrella	16%	8	41%	20	35%	17	8%	4	47%	49
Shandon	13%	1	63%	5	25%	2	0%	0	8%	8
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0
Creston	8%	2	48%	12	36%	9	8%	2	24%	25
Don't know	0%	0	100%	1	0%	0	0%	0	1%	1
Outside the Paso Robles Basin	16%	3	37%	7	42%	8	5%	1	18%	19
Total	14%	15	45%	47	34%	36	7%	7	100%	105
									Answered	105
									Skipped	6

Reaching sustainability will likely require some concessions. On a scale of 1 (most acceptable concession) to 5 (least acceptable concession), how would you rate the following concessions that may be necessary to reach sustainability?

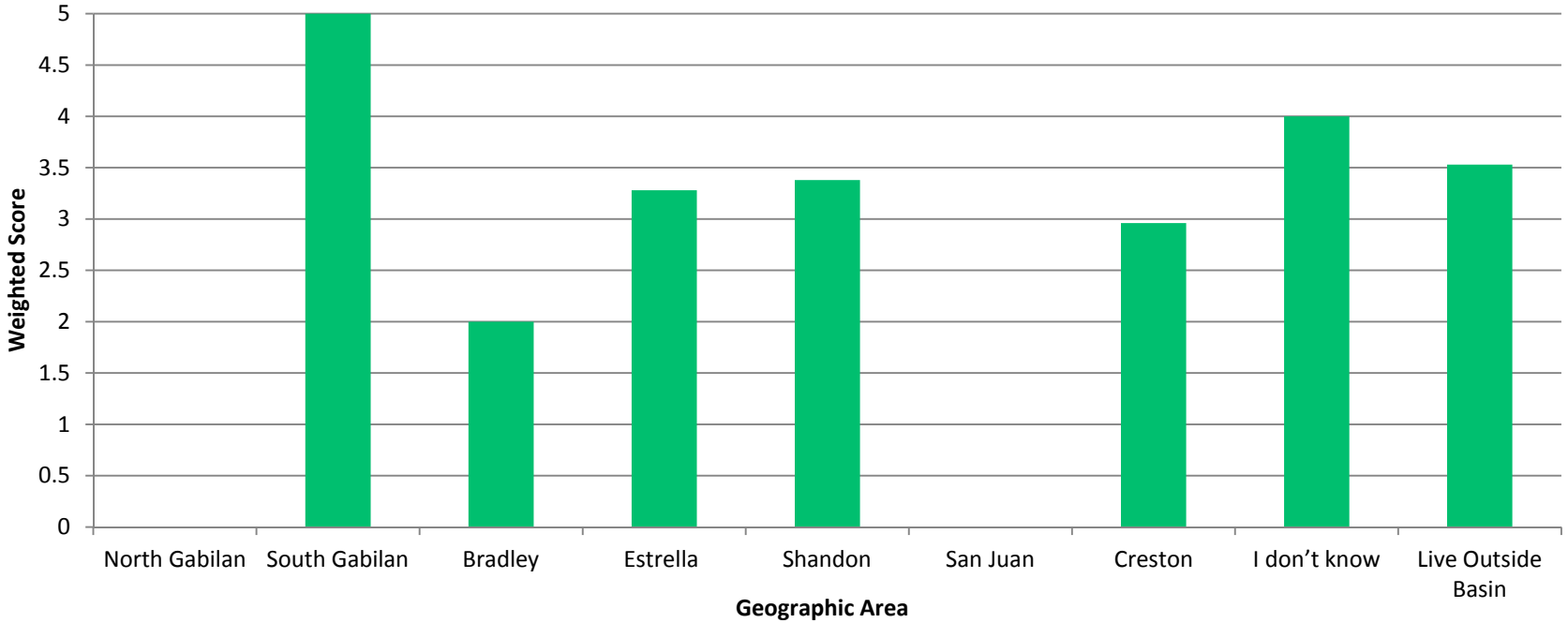
Lower groundwater levels in the future, even if they are stable



Geographic Area	most acceptable			moderately acceptable			least acceptable				
	1		2		3		4		5	Total		Weighted Score
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
South Gabilan	0%	0	0%	0	0%	0	0%	0	100%	1	1%	1	5
Bradley	50%	1	0%	0	50%	1	0%	0	0%	0	2%	2	2
Estrella	19%	9	11%	5	23%	11	17%	8	30%	14	47%	47	3.28
Shandon	0%	0	0%	0	75%	6	13%	1	13%	1	8%	8	3.38
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	17%	4	26%	6	22%	5	13%	3	22%	5	23%	23	2.96
I don't know	0%	0	0%	0	0%	0	100%	1	0%	0	1%	1	4
Live Outside Basin	11%	2	11%	2	37%	7	0%	0	42%	8	19%	19	3.53
Total	16%	16	13%	13	30%	30	13%	13	29%	29	100%	101	
											Answered	101
											Skipped	10

Reaching sustainability will likely require some concessions. On a scale of 1 (most acceptable concession) to 5 (least acceptable concession), how would you rate the following concessions that may be necessary to reach sustainability?

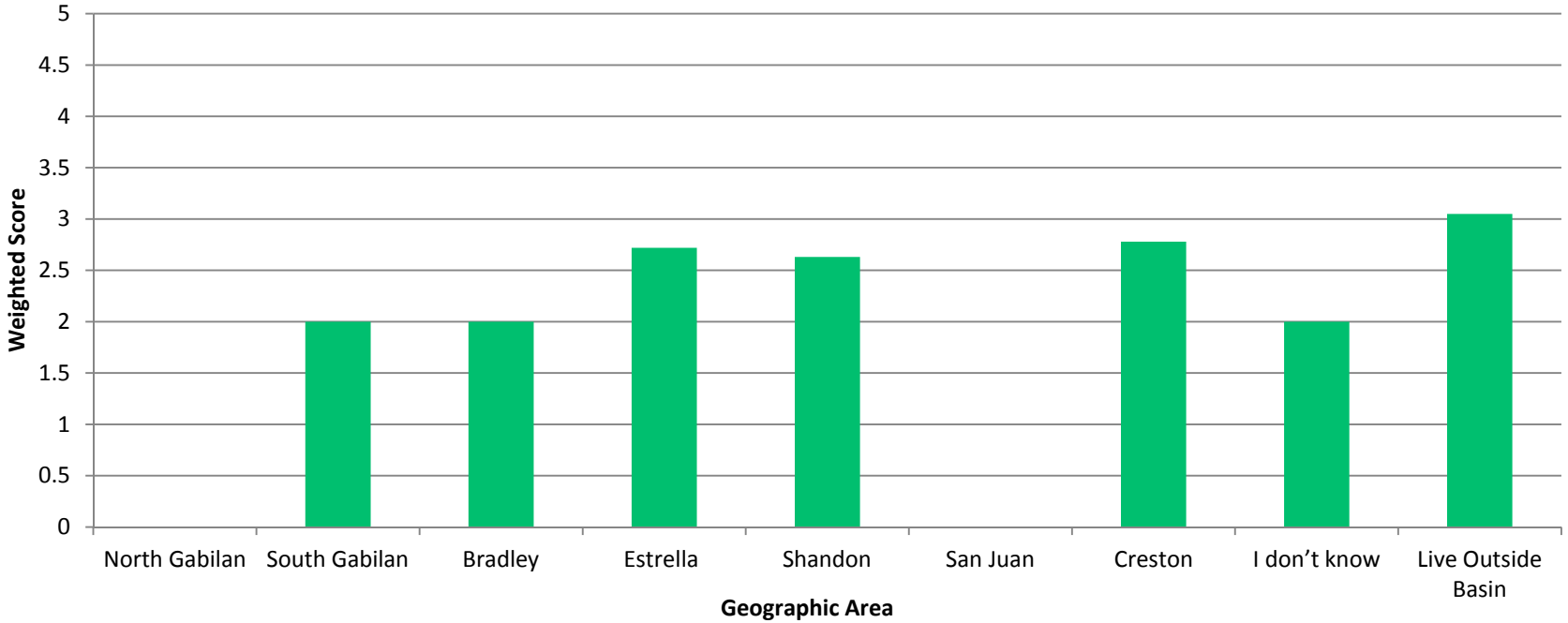
Restrictions on pumping in dry years when groundwater levels might be low



Geographic Area	most acceptable			moderately acceptable			least acceptable				
	1		2		3		4		5	Total		Weighted Score
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	0%	0	0%	0	0%	0	100%	1	1%	1	5
Bradley	50%	1	0%	0	50%	1	0%	0	0%	0	2%	2	2
Estrella	19%	9	11%	5	23%	11	17%	8	30%	14	47%	47	3.28
Shandon	0%	0	0%	0	75%	6	13%	1	13%	1	8%	8	3.38
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	17%	4	26%	6	22%	5	13%	3	22%	5	23%	23	2.96
I don't know	0%	0	0%	0	0%	0	100%	1	0%	0	1%	1	4
Live Outside Basin	11%	2	11%	2	37%	7	0%	0	42%	8	19%	19	3.53
Total	16%	16	13%	13	30%	30	13%	13	29%	29	100%	101	
											Answered	101
											Skipped	10

Reaching sustainability will likely require some concessions. On a scale of 1 (most acceptable concession) to 5 (least acceptable concession), how would you rate the following concessions that may be necessary to reach sustainability?

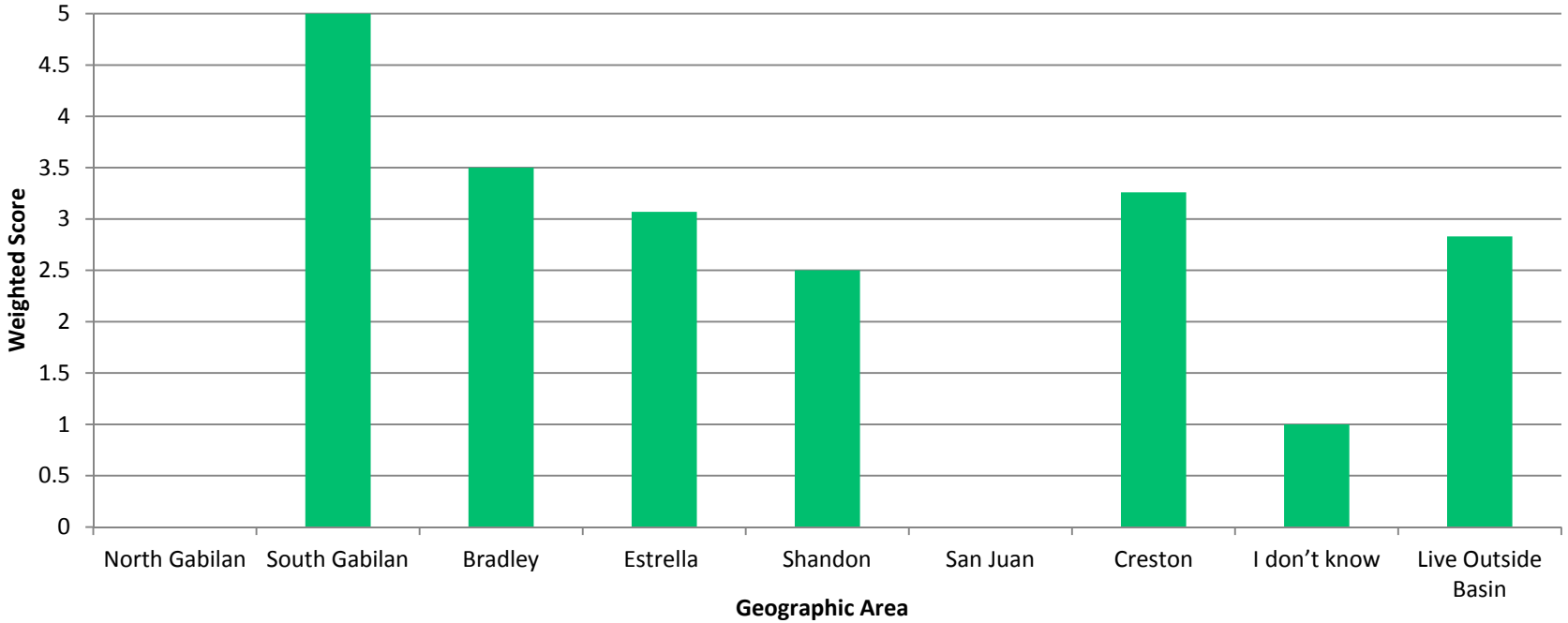
Less flow in the Salinas River



Geographic Area	most acceptable			moderately acceptable			least acceptable				
	1		2		3	4		5		Total		Weighted Score
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
South Gabilan	0%	0	100%	1	0%	0	0%	0	0%	0	1%	1	2
Bradley	50%	1	0%	0	50%	1	0%	0	0%	0	2%	2	2
Estrella	20%	9	22%	10	41%	19	2%	1	15%	7	46%	46	2.72
Shandon	25%	2	25%	2	25%	2	13%	1	13%	1	8%	8	2.63
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	22%	5	17%	4	35%	8	13%	3	13%	3	23%	23	2.78
I don't know	0%	0	100%	1	0%	0	0%	0	0%	0	1%	1	2
Live Outside Basin	21%	4	11%	2	26%	5	26%	5	16%	3	19%	19	3.05
Total	21%	21	20%	20	35%	35	10%	10	14%	14	100%	101	
											Answered		101
											Skipped		10

Reaching sustainability will likely require some concessions. On a scale of 1 (most acceptable concession) to 5 (least acceptable concession), how would you rate the following concessions that may be necessary to reach sustainability?

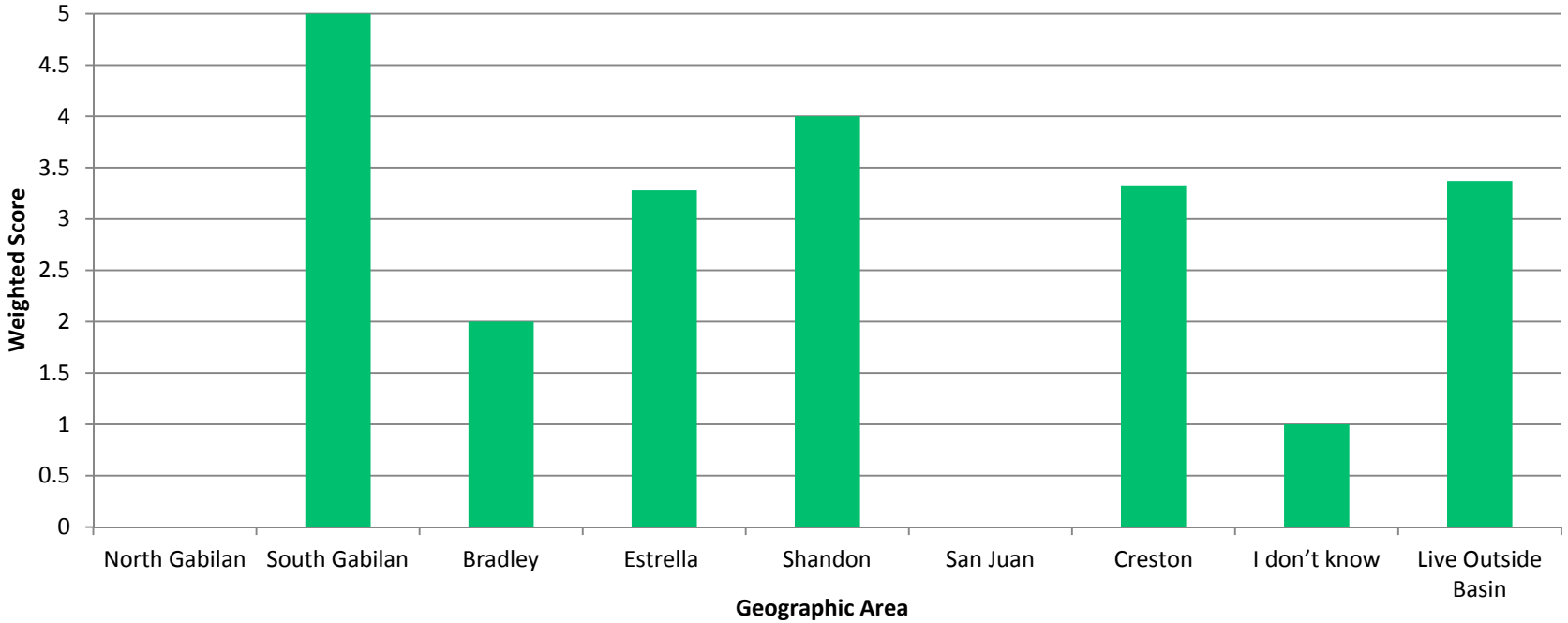
A requirement to reduce pumping to maintain creek flows



Geographic Area	most acceptable			moderately acceptable			least acceptable				Weighted Score
	1		2		3		4		5		Total		
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
South Gabilan	0%	0	0%	0	0%	0	0%	0	100%	1	1%	1	5
Bradley	0%	0	0%	0	50%	1	50%	1	0%	0	2%	2	3.5
Estrella	11%	5	22%	10	31%	14	20%	9	16%	7	45%	45	3.07
Shandon	38%	3	13%	1	25%	2	13%	1	13%	1	8%	8	2.5
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	17%	4	13%	3	26%	6	13%	3	30%	7	23%	23	3.26
I don't know	100%	1	0%	0	0%	0	0%	0	0%	0	1%	1	1
Live Outside Basin	28%	5	6%	1	28%	5	33%	6	6%	1	18%	18	2.83
Total	18%	18	15%	15	28%	28	20%	20	17%	17	100%	101	
												Answered	101
												Skipped	10

Reaching sustainability will likely require some concessions. On a scale of 1 (most acceptable concession) to 5 (least acceptable concession), how would you rate the following concessions that may be necessary to reach sustainability?

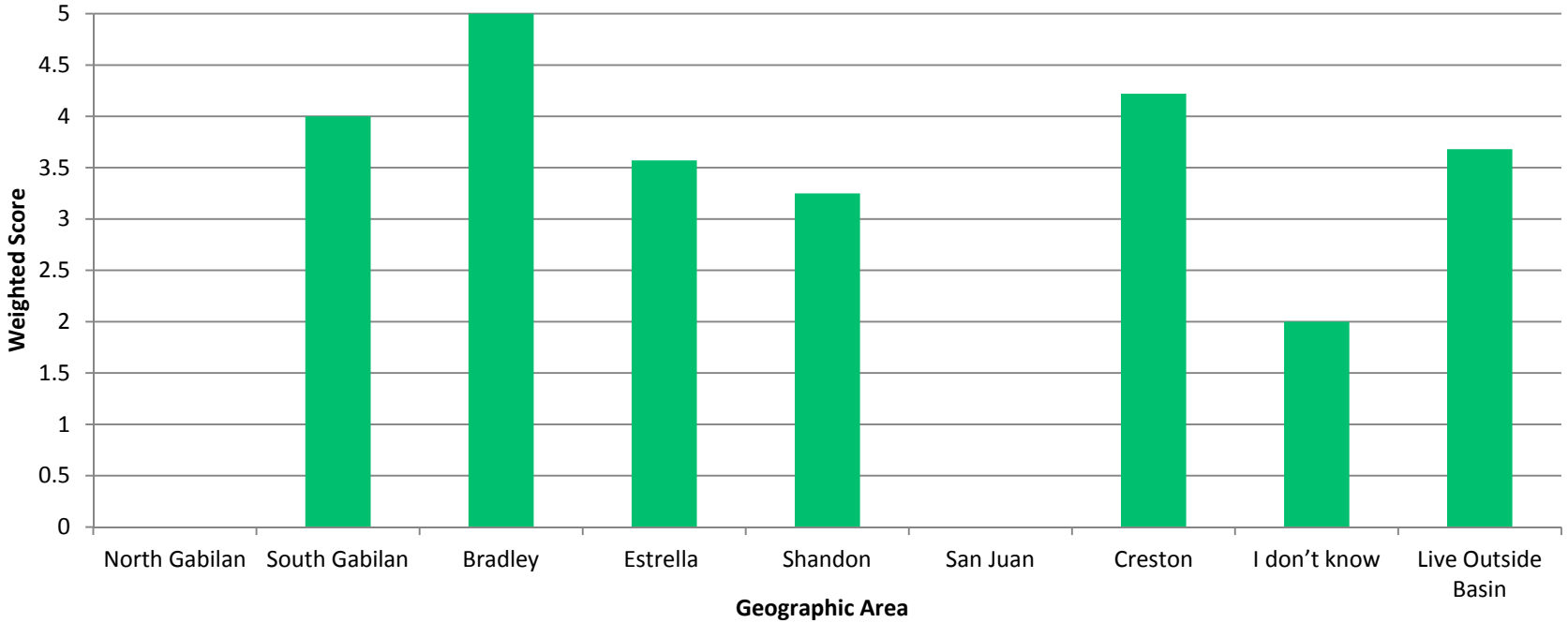
A requirement to reduce agricultural pumping in all years



Geographic Area	most acceptable			moderately acceptable			least acceptable			Total		Weighted Score
	1		2		3		4		5			
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	0%	0	0%	0	0%	0	100%	1	1%	1	5
Bradley	0%	0	100%	2	0%	0	0%	0	0%	0	2%	2	2
Estrella	19%	9	17%	8	17%	8	11%	5	36%	17	47%	47	3.28
Shandon	13%	1	0%	0	25%	2	0%	0	63%	5	8%	8	4
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	23%	5	14%	3	9%	2	18%	4	36%	8	22%	22	3.32
I don't know	100%	1	0%	0	0%	0	0%	0	0%	0	1%	1	1
Live Outside Basin	16%	3	11%	2	21%	4	26%	5	26%	5	19%	19	3.37
Total	19%	19	15%	15	16%	16	14%	14	36%	36	100%	101	
											Answered		101
											Skipped		10

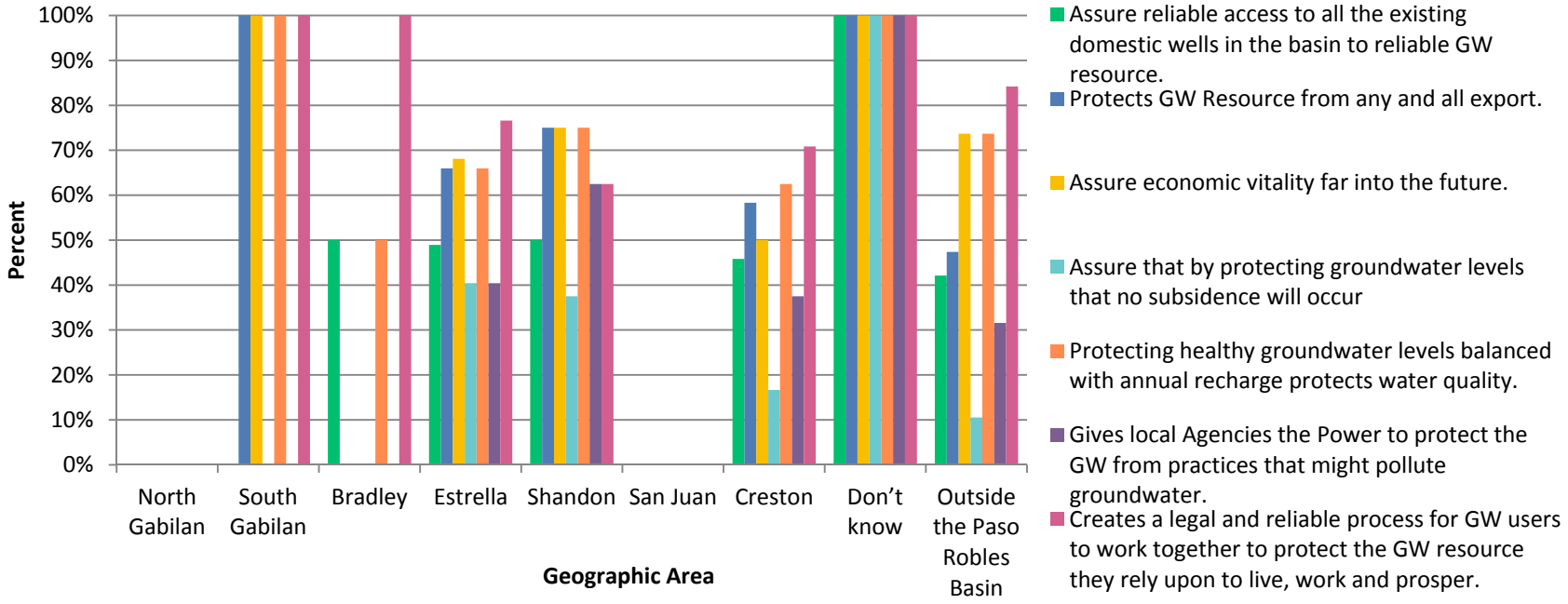
Reaching sustainability will likely require some concessions. On a scale of 1 (most acceptable concession) to 5 (least acceptable concession), how would you rate the following concessions that may be necessary to reach sustainability?

Shallow domestic wells going dry and needing to be deepened



Geographic Area	most acceptable			moderately acceptable			least acceptable			Total		Weighted Score
	1		2		3		4		5			
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	0%	0	0%	0	100%	1	0%	0	1%	1	4
Bradley	0%	0	0%	0	0%	0	0%	0	100%	2	2%	2	5
Estrella	15%	7	15%	7	13%	6	13%	6	45%	21	47%	47	3.57
Shandon	13%	1	0%	0	50%	4	25%	2	13%	1	8%	8	3.25
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0
Creston	0%	0	4%	1	17%	4	30%	7	48%	11	23%	23	4.22
I don't know	0%	0	100%	1	0%	0	0%	0	0%	0	1%	1	2
Live Outside Basin	5%	1	16%	3	21%	4	21%	4	37%	7	19%	19	3.68
Total	9%	9	12%	12	18%	18	20%	20	42%	42	100%	101	
											Answered		101
											Skipped		10

From your perspective, check the boxes that apply to the biggest opportunities as a result of the SGMA process



Geographic Area	Assure reliable access to all the existing domestic wells in the basin to reliable GW resource.		Protects GW Resource from any and all export.		Assure economic vitality far into the future.		Assure that by protecting groundwater levels that no subsidence will occur		Protecting healthy groundwater levels balanced with annual recharge protects water quality.		Gives local Agencies the Power to protect the GW from practices that might pollute groundwater.		Creates a legal and reliable process for GW users to work together to protect the GW resource they rely upon to live, work and prosper.		Total	
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
North Gabilan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
South Gabilan	0%	0	100%	1	100%	1	0%	0	100%	1	0%	0	100%	1	1%	1
Bradley	50%	1	0%	0	0%	0	0%	0	50%	1	0%	0	100%	2	2%	2
Estrella	49%	23	66%	31	68%	32	40%	19	66%	31	40%	19	77%	36	46%	47
Shandon	50%	4	75%	6	75%	6	38%	3	75%	6	63%	5	63%	5	8%	8
San Juan	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Creston	46%	11	58%	14	50%	12	17%	4	63%	15	38%	9	71%	17	24%	24
Don't know	100%	1	100%	1	100%	1	100%	1	100%	1	100%	1	100%	1	1%	1
Outside the Paso Robles Basin	42%	8	47%	9	74%	14	11%	2	74%	14	32%	6	84%	16	19%	19
Total	47%	48	61%	62	65%	66	28%	29	68%	69	39%	40	76%	78	100%	102
															Answered	102
															Skipped	9

What would be a successful outcome of the SGMA process from your perspective?

Responses from Estrella
Balancing the water usage in urban areas vs ag.
Sustainable groundwater levels
Protect groundwater supplies with an equitable approach for all users. Do not increase city use at the expense of agricultural use.
Maintain groundwater levels. Enforcement of over pumping. No selling groundwater.
Stability
Stable political situation which allows additional planting of irrigated crops
Maintain GW levels and quality at greater or at least current levels
Stop or reduce residential development including hotels which are major water users.
A successful outcome would be to further stabilize water levels and then come up with a plan to recharge the water basin.
We have too much government involved in our daily lives. Eliminate all of the SGMA governmental entities.
A better understanding of groundwater, its biggest users, biggest threats, and best practices that can help reduce use.
Respect for and preservation of private landowner water rights.
Raise current groundwater elevations
Completely measure the basin in all areas and develop accurate sustainable yields that are measurable
Creates a plan for stabilizing and perhaps improving future water availability and quality. Controls over pumping by some parties that are abusing groundwater pumping.
Slow growth in Paso Robles city limits.
All vested parties unite in reaching viable solutions for the betterment of all. Local control.
Develop and implement a plan that is acceptable to stakeholders while fulfilling the requirements of the SGMA process.
An allocation per acre, equal for all land owners that in total brings the usage down to a sustainable level. Owners that didn't plan to use their could lease, sell or contribute to raising the water table and help mitigate low rainfall
Land use regulations to monitor / regulate future growth of AG. Also need to monitor all development to ensure there is sufficient water resources. Water resources must be managed. Growth must be planned. Wells will need monitoring along with a reliable means of determining the water level of the basin.
Increased scientific research on the basin and the development of an integrated plan to reach sustainability using that research as a foundation.
The wake up call to City Council that we cannot keep adding 1000s of homes.

What would be a successful outcome of the SGMA process from your perspective?

Responses from Estrella Continued
Stabilize basin from decline without destroying agriculture.
The end of waiting for my well to run dry
A plan that stabilizes ground water sources which assures property values
Not to have to listen to that Graywall guy any more.
Stable well water levels
Collect data that clearly defines the status of the parts of the basin and then work to create a fair distribution of pumping capability so that NO WELL goes dry.
maintain ground water levels at current state in non impacted areas and increase the levels in severely impacted areas
Reaching SGMA's defined purpose: achieve sustained water supplies
enough groundwater to sustain growth in the area
{Better} educating our community so there is a clear, uniform understanding and coalition effort moving forward.
less residential & commercial development, mainly less residential density of development. The quality of life offered here is being squandered I feel by a hurry up attitude toward development. Paso Robles will only become more attractive in the future with a slower approach to development of high density projects. The land is the finite resource, once it's developed, nothing else can be done with it for long periods of time. Don't be in such a rush to sell the golden goose. Thank you for this survey opportunity.
A stable and reliable GW.
maintaining ground water levels about 100 feet higher than they are today.
One where limitations are placed on the amount of water that can be drawn from the aquifer and more specifically the larger agricultural operations. Also to implement practices of water consumption by the general public and practice water conservation at all times.
That those who have superior rights to groundwater maintain that entitlement, and the appropriators be the first to be required to conserve or find alternate sources of water, especially the city of Paso
No export and metered wells with allocations. Bring the basin back to health and sustainable levels for 100 years to come.

What would be a successful outcome of the SGMA process from your perspective?

Responses from Creston
Through additional data, prove that there is not a justification for rationing water.
Pumping reductions which are applied fairly (based on crop water duty factors vs. historic pumping) to ensure that groundwater levels return to and stay at January 1, 2015 levels on average (allowing for lower levels in dry years only if groundwater levels on average stay at Jan. 1, 2015 levels).
to keep large investors from selling our water.
Win Win deal for everyone. Increase storage supplies and keep the basin in balance.
We already conserve and use as little as we can get by with. Getting everyone to do the same would be most helpfuk
A fair, science based plan, with exponentially more monitoring, and rewards for the most efficient water management practices.
- addressing the elephant in the room of disproportionate water usage by grape growers - recognition of residential water users as de minimis users
Stabilize water level at or near present level without major heartache to residents.
One with facts to back up the actions and one that accounts for future growth.
-To most heavily scrutinize new development, whether housing or agriculture, rather than limit the current community. -To offer quality monitoring on a county-wide level to ensure the safety of private domestic well users. -
Stable water levels and plan for the future which could include more irrigated land if owners willing to pay imported water cost
Pumping limits on heavy ag users, and a means of monitoring their usage. Significant fines for violations - high enough to make it economically unfeasible to exceed the limits set.
Maintaining levels and quality of this precious resource for the years to come.
A county wide "slow growth" ordinance
For decades our area was dry farmed and the population was modest. We now have major irrigated farming and excessive development, residential, commercial, wineries, and breweries - all major uses of groundwater. We need to get realistic on how our groundwater is used.
Follow the law ,overlyers first all others get in line use their other water sources end of story
Restoration of the Basin to its condition before the recent (last 10 years) explosion of development and pumping.
Groundwater levels returned to January 2015 levels and maintained at those levels into the future. Each sub-area meets the levels for their area.
A stable, healthy aquifer, able to withstand drought years, all parties sharing in the burden.
maintaining water levels at the BMP levels set around the basin.
Balance and sensible approach

What would be a successful outcome of the SGMA process from your perspective?

Responses from Outside the Paso Robles Basin
Stop subdividing ag land by abolishing certificates of compliance. No more production of grapes. Encourage dry-land farming. Raise ground water levers to historic averages.
Maintain or improve existing pumping levels with no pumping restrictions.
It's very important that we have a reasoned and scientific assessment of the health of the Basin so that we can consider projects to will enhance the Basin's yield. Very little will be achieved if we try to fix the Basin by how people feel. Good science will have to drive this process. Opinions matter little. Only good science and data will allow for just and equitable solutions.
sustainability no adjudication
sustainability at current levels
SLO County (Paso Basin area especially) becomes a more resilient economy (more sustainable and profitable agriculture) and health of the Salinas is increased as much as possible in conjunction with the US-LTRCD and other stakeholders. To collaborate to make difficult decisions, but ensure that agricultural users are not harmed economically or can benefit in some way if these difficult decisions do affect them (e.g. investigate how agriculture can be a force of long-term ecological good through innovative conservation tools or incentives and skillful communication thereof).
Stabilize groundwater levels and create a workable plan for agriculture and domestic use
Protect ground water by limiting new growth in the Paso Robles area.
Restoration and protection of the irreplaceable natural resources of the Salinas River for present and future generations.
Ample monitoring programs(using Wellntel) that engage groundwater users in a shared understanding of groundwater dynamics - ensuring adequate water for everyone.
Sustainable yields to support agriculture at it's current level and with room to grow.
Appropriate and legally-defensible flows for fish.
A practical GSP that all the parties can successfully implement to protect the GW resource sustainably into the future.
Local management of the resource. Improved local understanding and collaboration of people to understand how this GW source we have CAN be shared and used without harm to one another.
No domestic wells be effected. stop the wine industry growth no marijuana growers

What would be a successful outcome of the SGMA process from your perspective?

Responses from Bradley
GW resource is not overdeveloped. GW policies recognize the standing of individuals, and does not cater
Responses from Don't Know
lower ag use of water (wine grapes) alfalfa
Responses from South Gabilan
Stay out of the separate water supply in the Ranchita Canyon area and to the North, which is Northerly
Responses from Shandon
Shandon becoming its own basin
Publicly monitor ground water levels. Publicly monitor all agricultural wells. Maintain or improve groundwater levels.
reliable water
Meeting the requirements of the law with least amount of capital spending
Sustainable water volume and quality.
Users paying a fair price for water and an end to the disharmony in the community
recognition of dry land farming and ranching groundwater needs, ability to receive credit for groundwater recharge practices
Groundwater levels that are stable within a few years at a level that allows continued domestic and agricultural uses. Levels may differ by location within the basin.

Please provide any other information, comments, or questions that you have regarding the SGMA process and development of Minimum Thresholds for the Paso Robles Basin.

Responses from Estrella
Their must be rules about a corp drilling a signifiant well right on your fence line and destroying your ag well.
Developers and others continue to blame vineyards for water use . Actually vineyards with effective drip irrigation use little water compared to hotels and residential expansion.
Get out of our lives!!!!!
I have been in the profession of civil engineering and water sustainability for over 25 years. I am currently a sustainable wine auditor in SLO County for CSWA. There are ways to reduce water consumption that actually saves money that should be mandated.
Need to agricultural pumpers providing technical details about current irrigation practices including scheduling, water saving technologies, cultural practices, etc.
Your all dancing around the issue, there is 2 to 3 times the sustainable usage, it has to come down! Farming techniques have to reduce evaporation or reduce acreage.
We need to be careful in examining the estimated water use as submitted by some engineering companies. One example was the engineer report for the EPC Water District. Way over estimated water use, methodology flawed. They simply averaged all AG uses at 3.5 AF for all planted acres. Since most irrigated acreage in the EPC District was vines, this over estimated. For vines they used 1.8 AF based on a 30 year irrigation use average. With the advances in irrigation, this number should be 1to 1.25AF.
My fear is that the Council will approve lowering the threshold just to make it easier to maintain while adding 1000s of new homes to the area.
I think serious thought needs to be given to some vehicle to discourage new major large vineyards from contributing to the decline of the ground water in the basin
Keep the process objective, based on good science with the least government control.
unsure

Please provide any other information, comments, or questions that you have regarding the SGMA process and development of Minimum Thresholds for the Paso Robles Basin.

Responses from Creston
How can the county be sure of water quality, and well productivity throughout the basin(s) and are there currently sufficiently trained individuals to carry out the potential increase of data gathering, sampling and related activities to serve the public?
Pumping data and groundwater levels for 2015 - not 2011 - must be used. Key wells must be chosen and used for verification. Pumping reductions must be calculated based on 2015 data. Any groundwater reductions in the short term must be addressed, instead of waiting until 5 year reviews.
Get the supervisors on board
again increase storage and balance the basin. Allow Huer Huero River to run and bring the basin back into balance.
With the city of Paso planning major housing developments and hotels. The cities usage is going up exponentially
More information on the great many variations of the PR Basin.
This there even a chance to hold the water level near current with recent spurt of ag growth and continued residential growth--without draconian measures? Is this whole process just an exercise?
Is the county currently staffed with the workforce of individuals with experience in well sampling, depth sounding, field assessment of wellhead sanitation, environmental/watershed and related activities that will be of increased importance to serve the local community? -If the county will not be measuring or monitoring these criteria, who will?
Acceptable drops likely will vary in the Basin, a single figure in feet is likely too simplistic
I appreciate the opportunity to participate in a survey like this. Thank you
Where are the results of the last survey from about a month ago?
The overdraft is a lie , the casgem # a lie tell the truth State provide the water you sold, build the dams we voted on
The first step is to require meters and reporting on all wells. The Basin will never be managed until we know accurately how much water is being extracted.
The El Pomar area should be addressed separately from the Creston sub-area. Data on key wells must be maintained to determine status of groundwater levels in relation to established minimum thresholds.
I am very disappointed by the lack of community spirit to solve this problem.
I have concerns that the GSPs will require too little, too late and the basin will be irreparably damaged. Plans will look good on paper but won't be effective. The larger ag interests will have taken maximum profit and move an.

Please provide any other information, comments, or questions that you have regarding the SGMA process and development of Minimum Thresholds for the Paso Robles Basin.

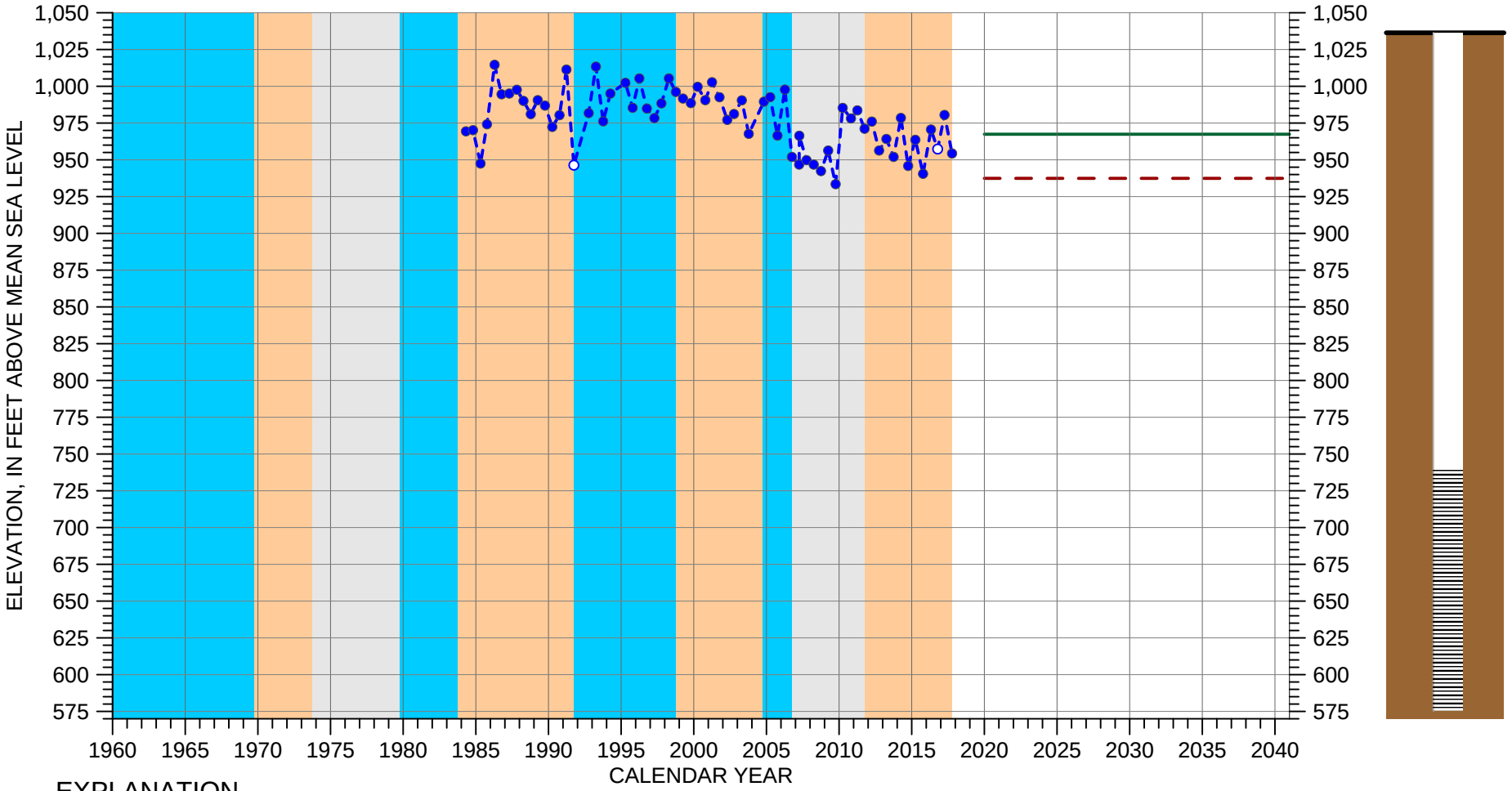
Responses from Outside the Paso Robles Basin
Minimum thresholds are the center piece of the GSP. This will require qualified hydrologists and hydrogeologists working together to analyze our basin and come up with alternatives and choices. Once the scientific data is analyzed and accepted by Basin users, then careful consideration must be made taking into account the social and economic impact of proposed changes to water usage in the Basin.
We are not sffected by basin levels so my answers may not be applicable.
Thank YOU! Appreciate the hard work you all are doing, and would love to see survey results or be informed about the tangible and intangible outcomes of it.
Minimum groudwater levels must be correlated with appropriate stream flow levels to protect all the Groundwater Dependent Ecosystems associated with the Salinas River, including the estuary.
The Paso GSA would benifit from using Wellntel based community groundwater monitoring networks. The network would fill data gaps, and engage stakeholders by providing them sustainability indicators for their own wells.
Nothing at this time and thank you for this survey!
Minimum thresholds in the Paso Basin need to be based on accurate rich publicly accessible GW data. Combining historical and new ongoing standing water level data sets with periodic quality testing.
I'm sure you are aware of this, but the Blue Ribbon Committee's work back in 2012 is a good source of information.
please do not bend to big money

Please provide any other information, comments, or questions that you have regarding the SGMA process and development of Minimum Thresholds for the Paso Robles Basin.

Responses from South Gabilan
For ranchers, farmers and others who wish to plant an irrigable agricultural product, give consideration towards them, even though they had not planted their lands before the explosive growth and heavy use of water for vineyards.
Responses from Don't Know
the County needs to have more regs re usage. How many acres of grapes have been planted since theCounty's last "regulation"
Responses from Shandon
Make everything easy for the public to know.
N/A
Please address the ability to deepen or drill new wells for domestic use in the Shandon area.
a successful outcome should include a market based system whereby credits/debits can be traded (monetized) for appropriate recharge/use of groundwater in the basin

Appendix H

Paso Robles Formation Aquifer RMS Hydrographs and Well Data

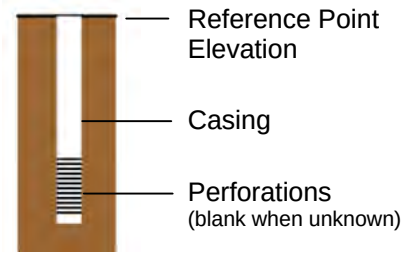


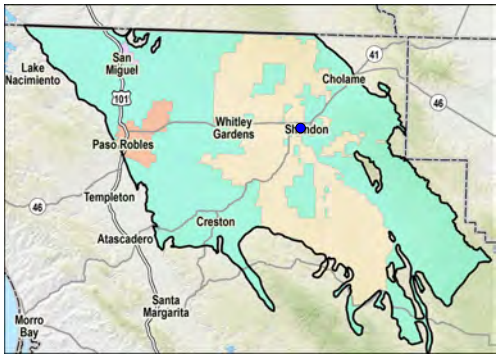
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



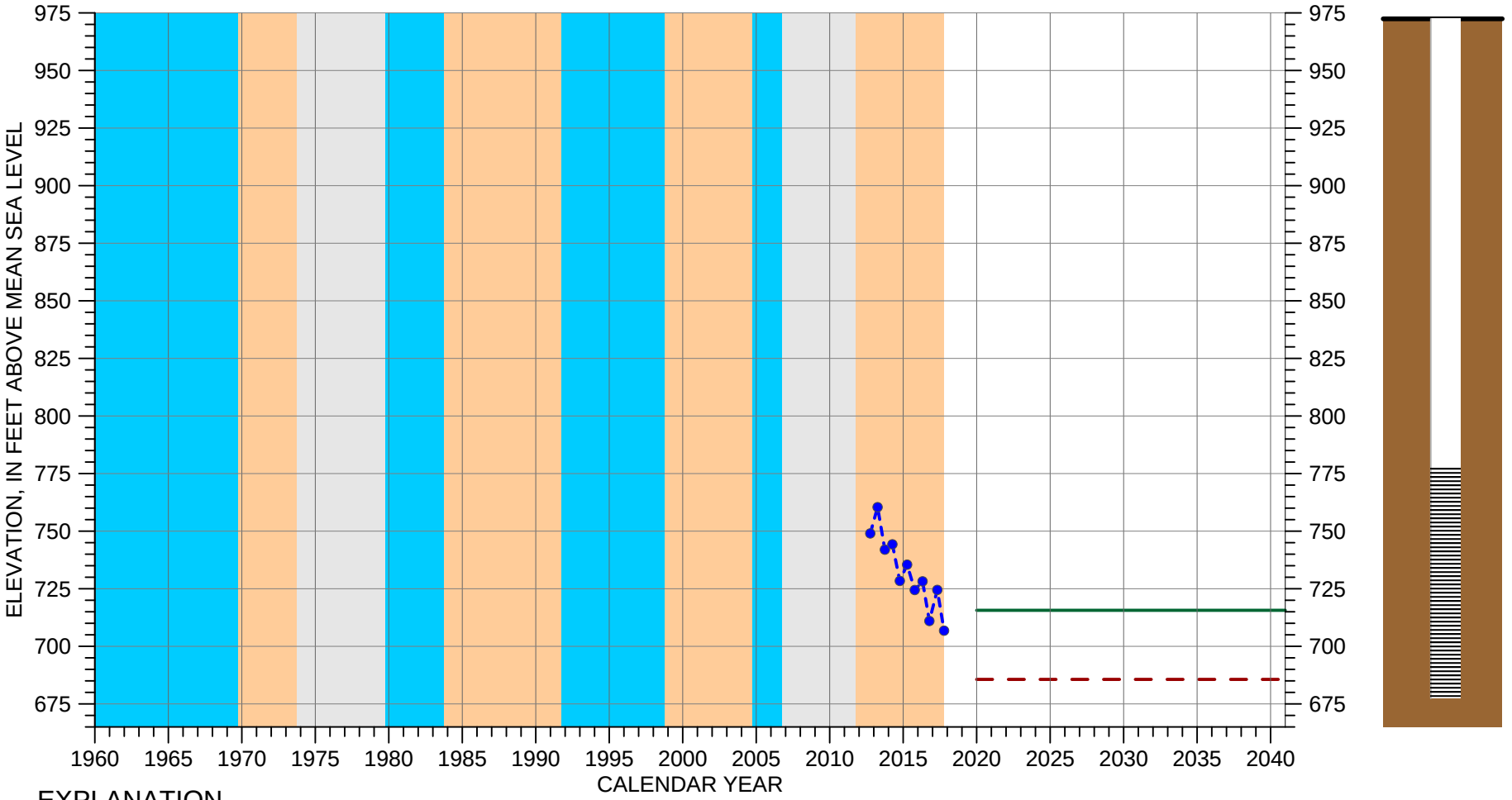


Well Depth: 461 feet
Screened Interval: 297-461 feet below ground surface
Reference Point Elevation: 1036.36 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/15E-20B04

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig07_26S_15E-20B04.grf

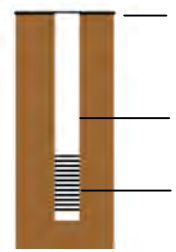


EXPLANATION

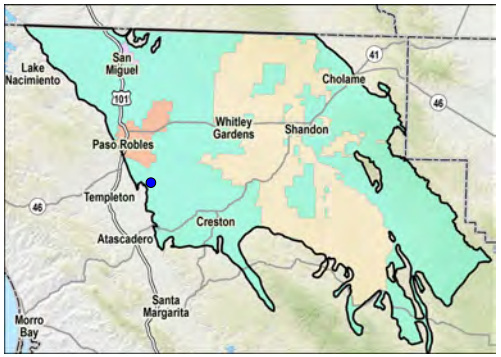
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



- Reference Point Elevation
- Casing
- Perforations (blank when unknown)

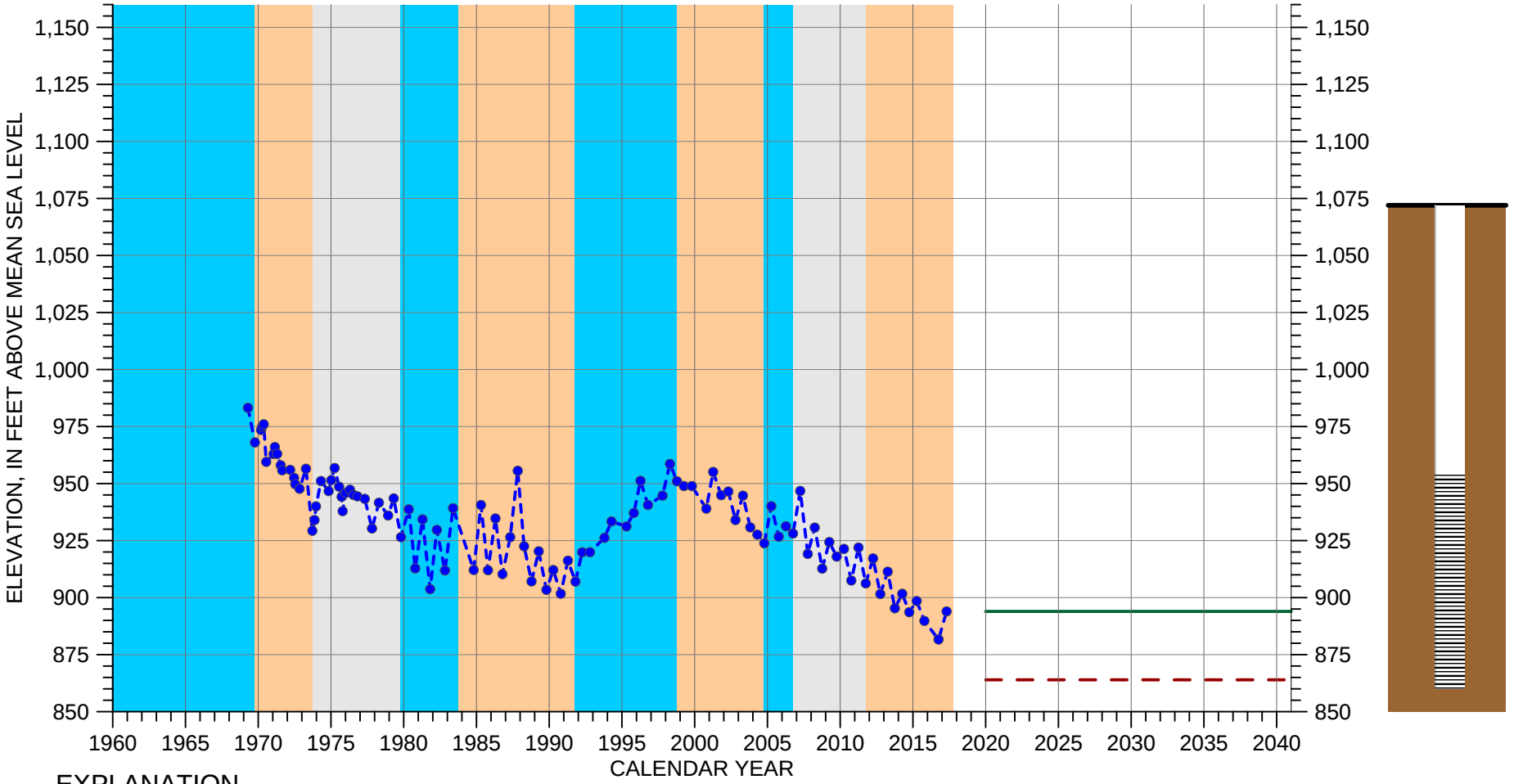


Well Depth: 295 feet
Screened Interval: 195-295 feet below ground surface
Reference Point Elevation: 972.4 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 27S/12E-13N01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig08_27S_12E-13N01.grf

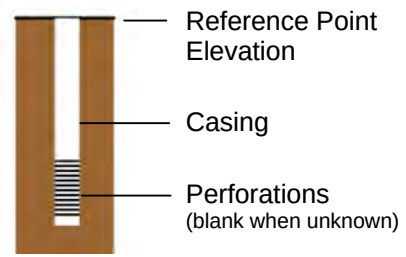


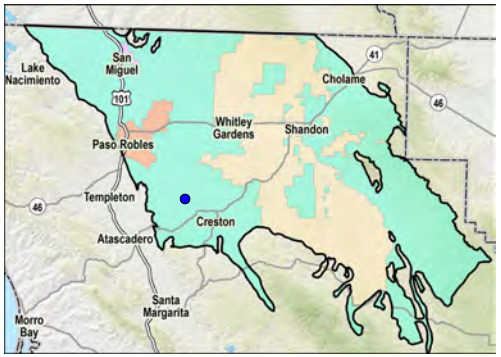
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



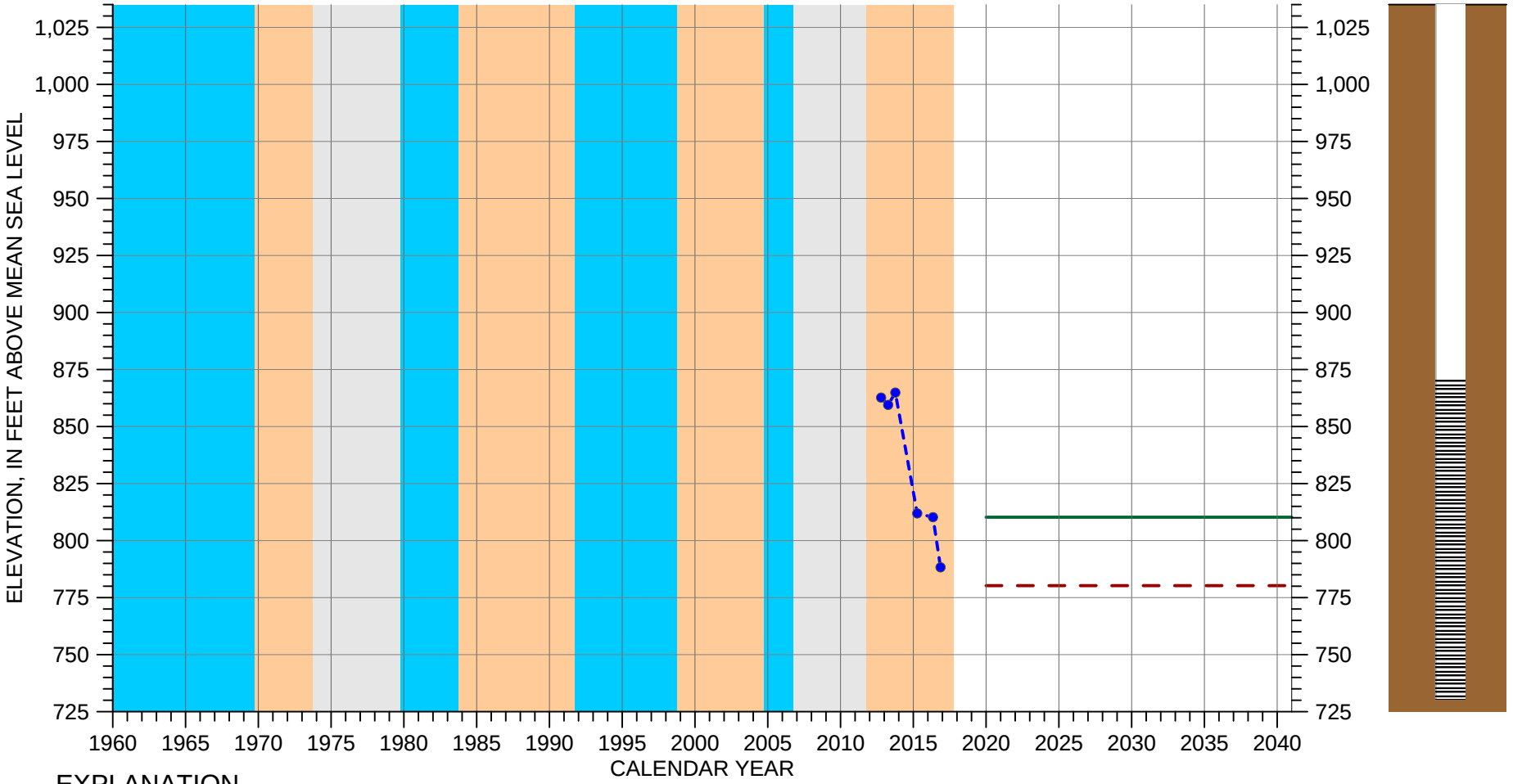


Well Depth: 212 feet
Screened Interval: 118-212 feet below ground surface
Reference Point Elevation: 1072 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 27S/13E-28F01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig09_27S_13E-28F01.grf



EXPLANATION

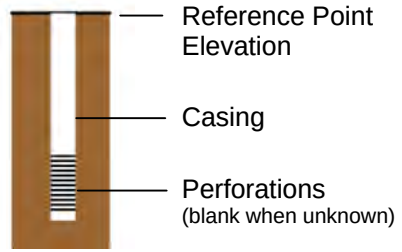
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

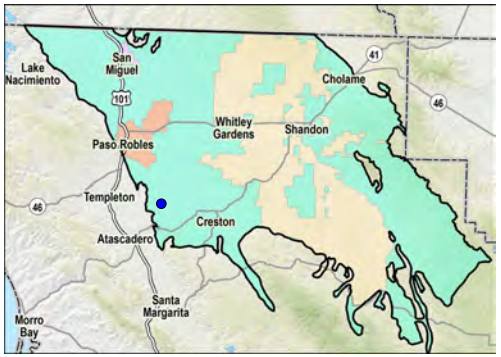
CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET

Well Depth: 355 feet
Screened Interval: 215-235, 275-355 feet below ground surface
Reference Point Elevation: 1086.7 feet above mean sea level

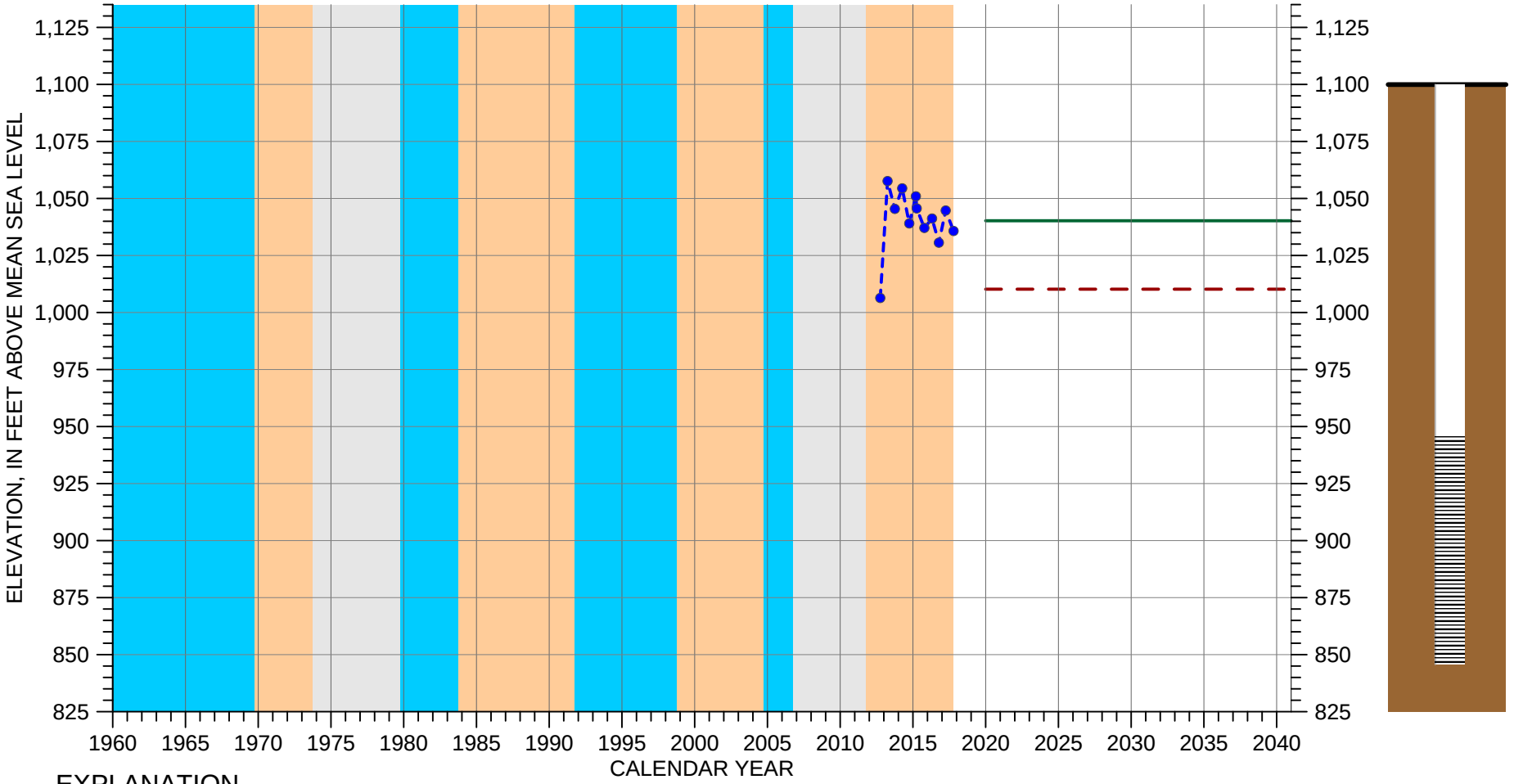
* Measurement reported as not static





MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 27S/13E-30N01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig10_27S_13E-30N01.grf

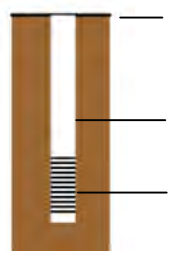


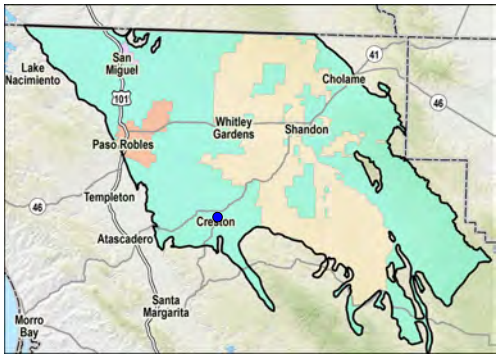
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



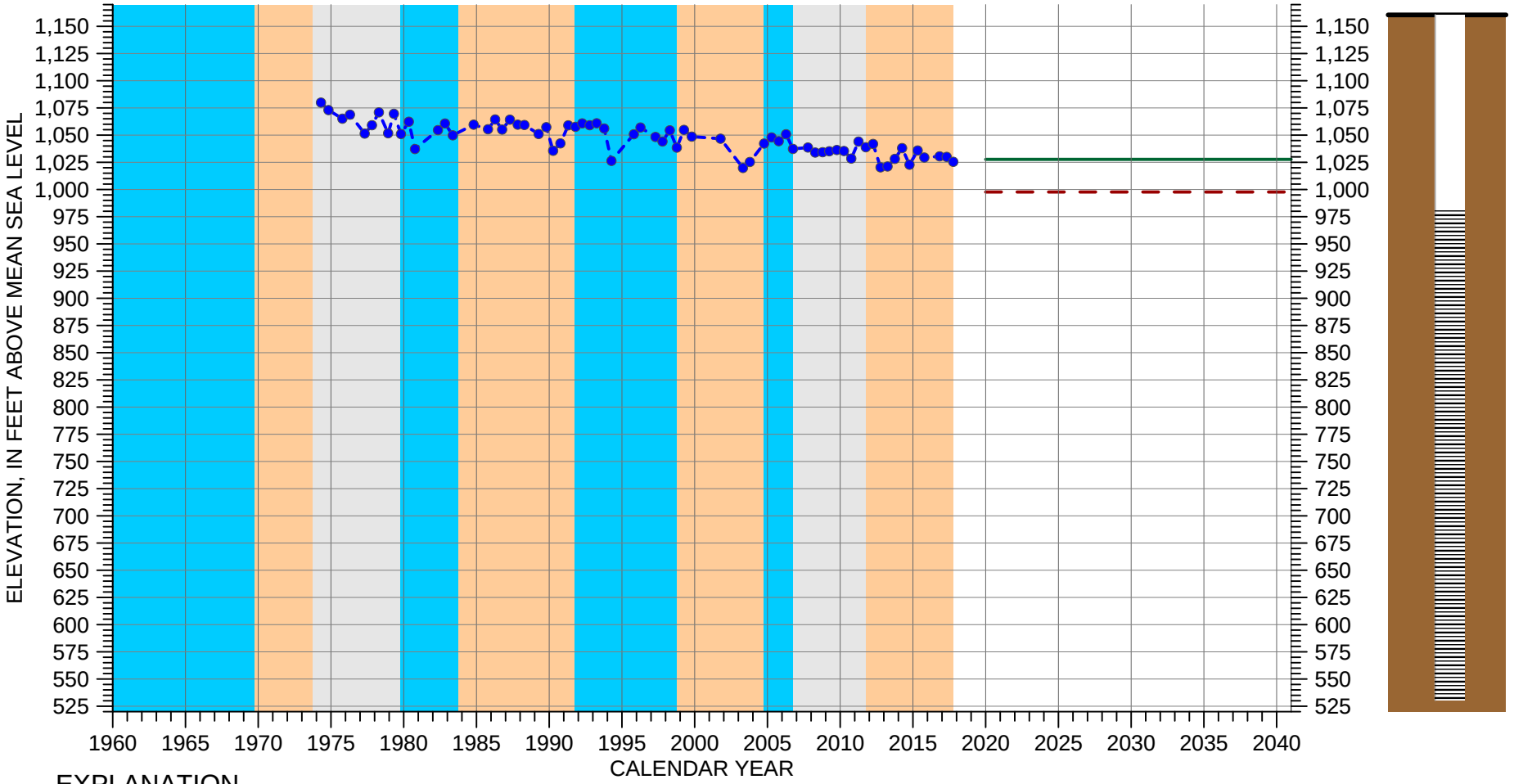


Well Depth: 254 feet
Screened Interval: 154-254 feet below ground surface
Reference Point Elevation: 1099.9 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 28S/13E-01B01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig11_28S_13E-01B01.grf

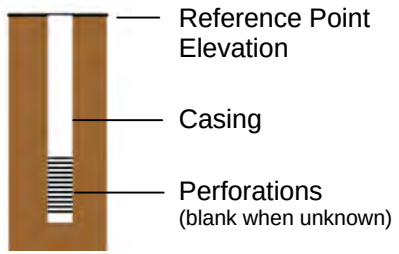


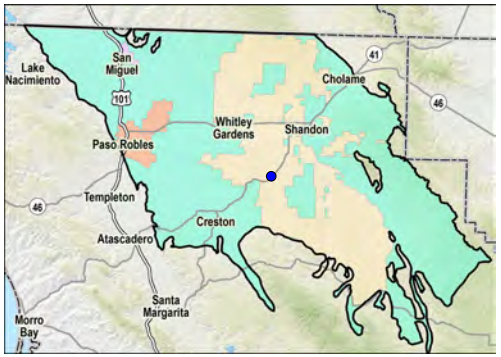
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



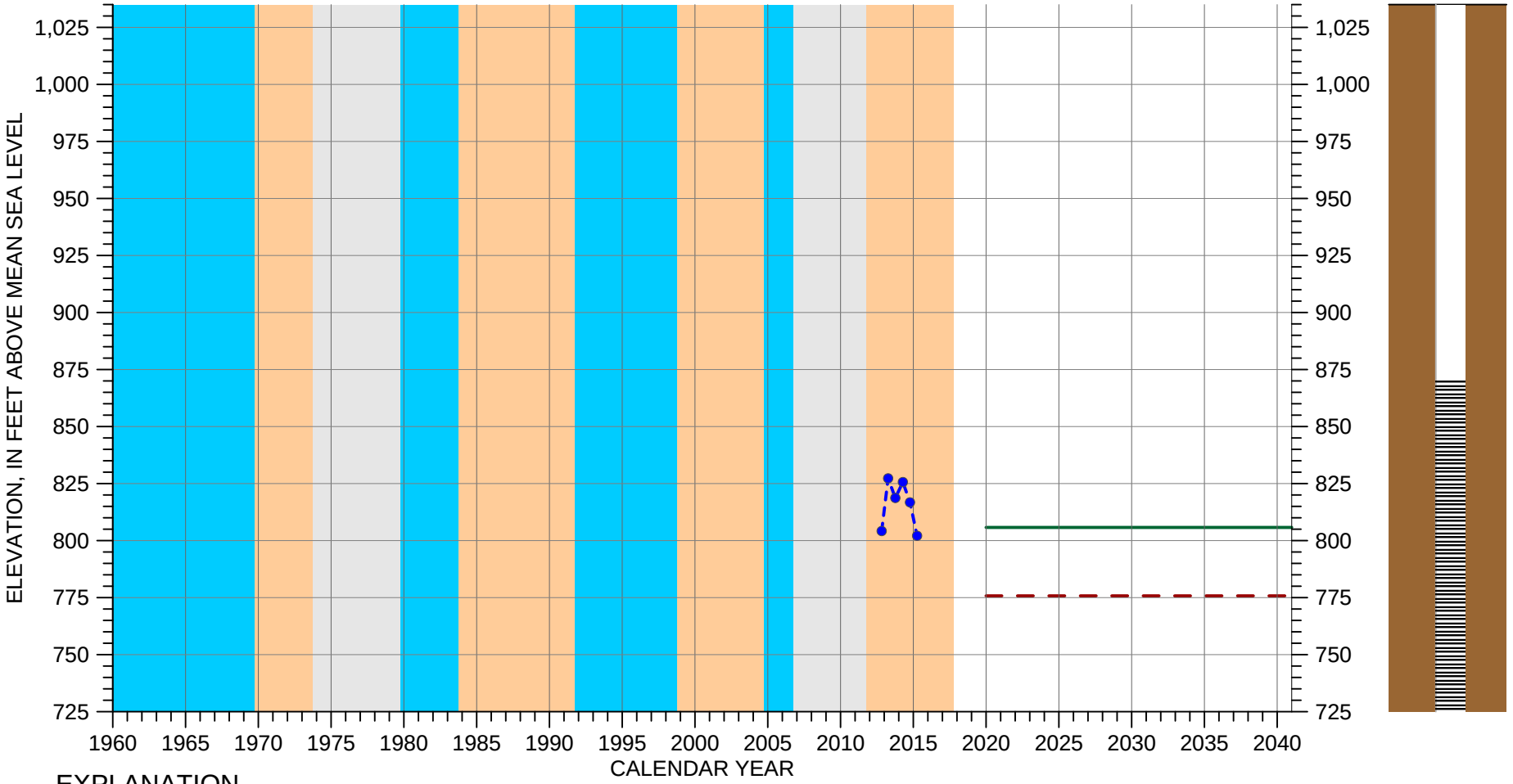


Well Depth: 630
Screened Interval: 180-630 feet below ground surface
Reference Point Elevation: 1160.5 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 27S/14E-11R01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig12_27S_14E-11R01.grf

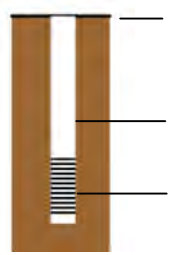


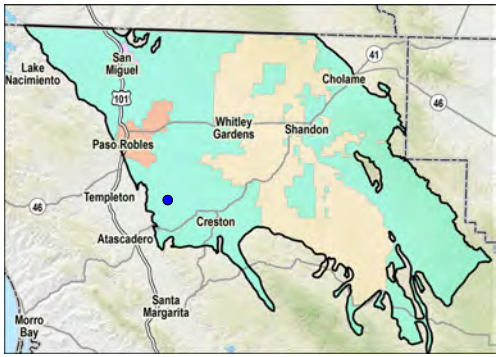
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



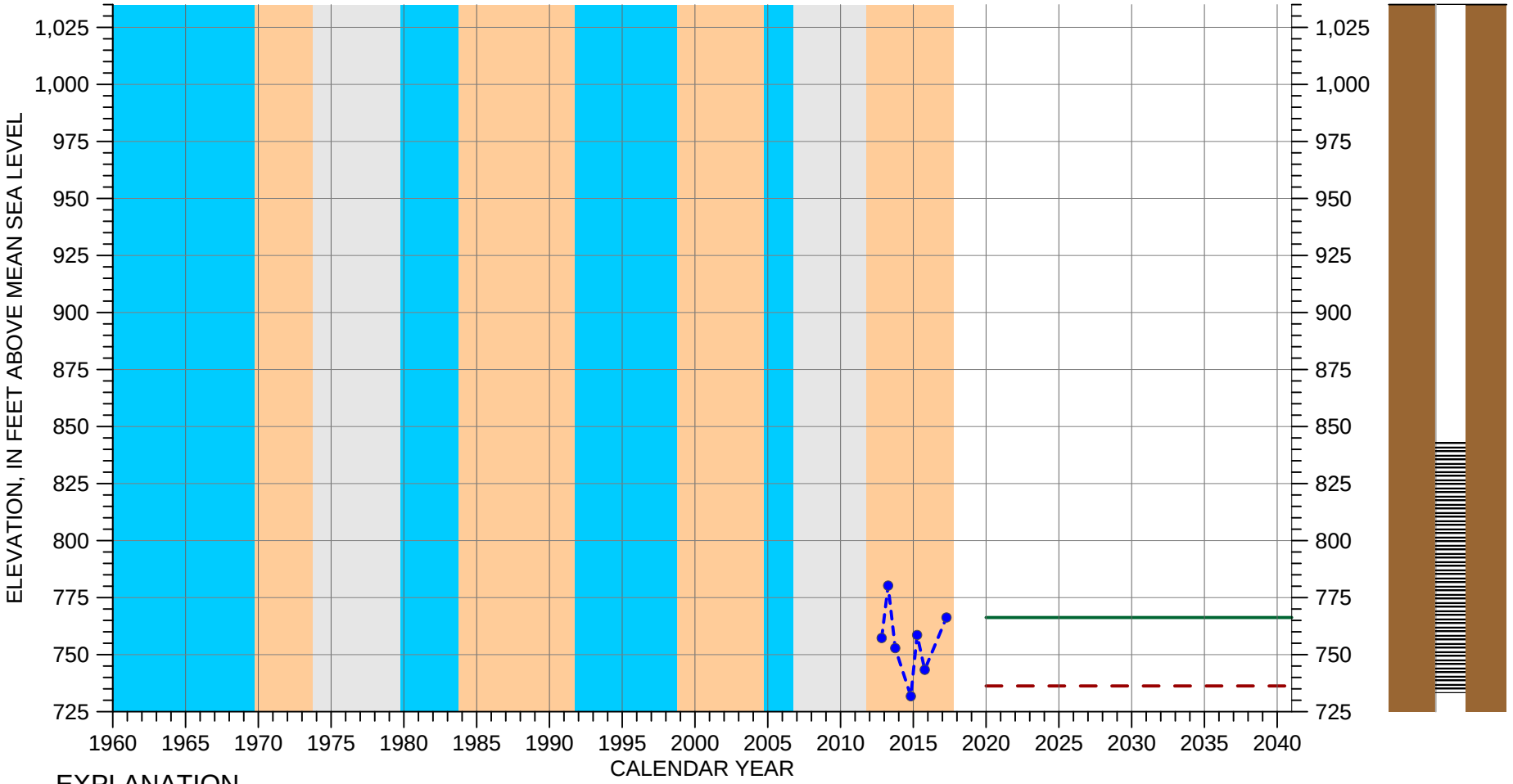


Well Depth: 685
Screened Interval: 225-685 feet below ground surface
Reference Point Elevation: 1095 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 27S/13E-30J01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig13_27S_13E-30J01.grf

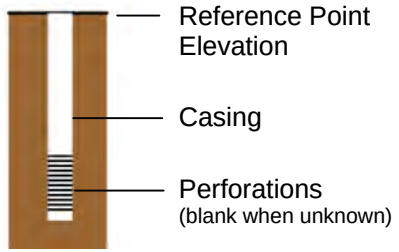


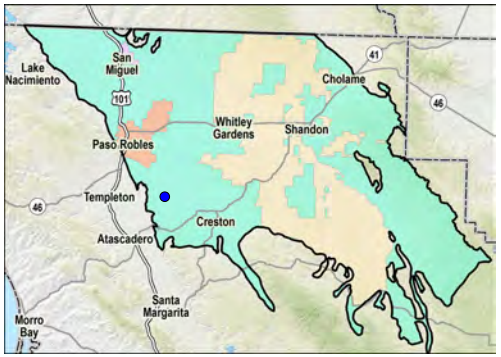
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



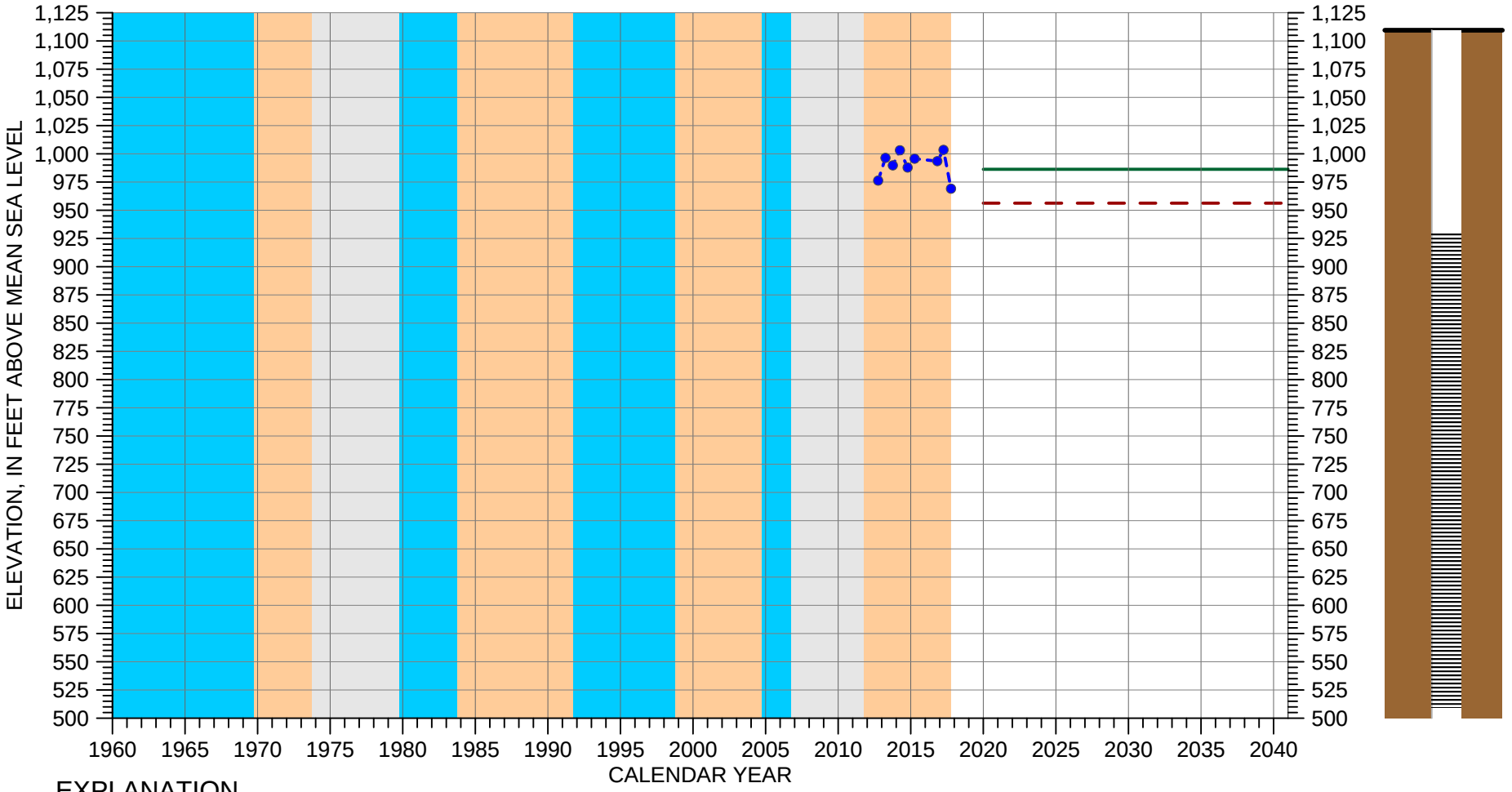


Well Depth: 310
Screened Interval: 200-310 feet below ground surface
Reference Point Elevation: 1043.2 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 27S/13E-30F01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig14_27S_13E-30F01.grf

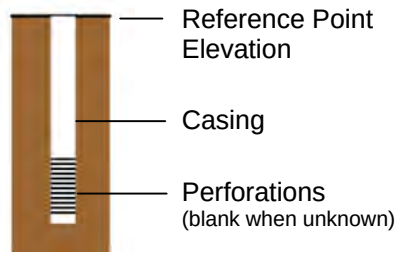


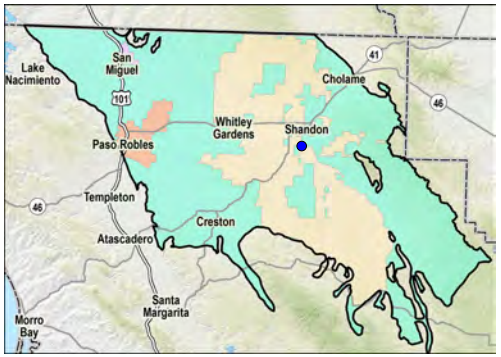
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



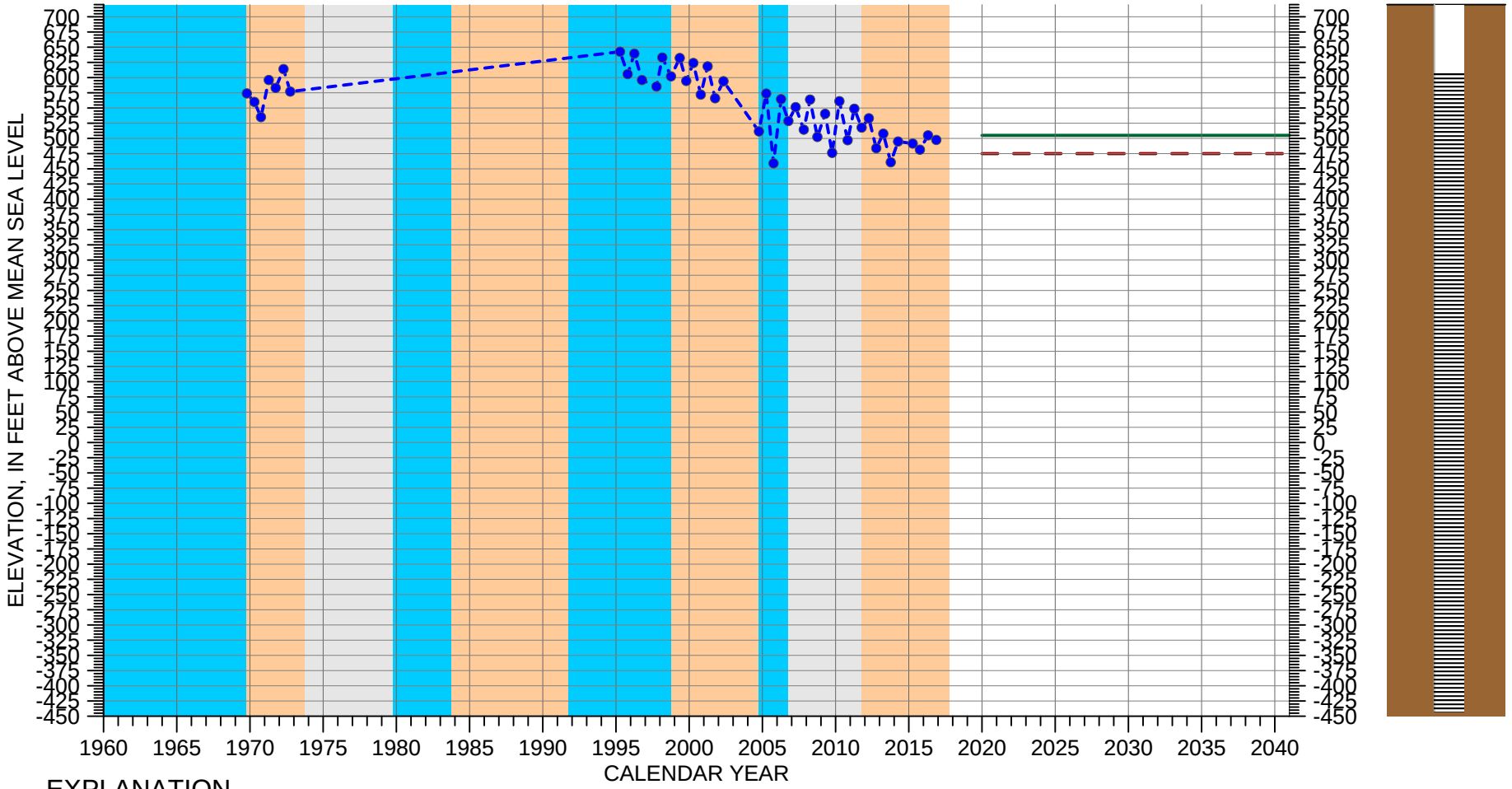


Well Depth: 600
Screened Interval: 180-600 feet below ground surface
Reference Point Elevation: 1109.5 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/15E-29R01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig15_26S_15E-29R01.grf

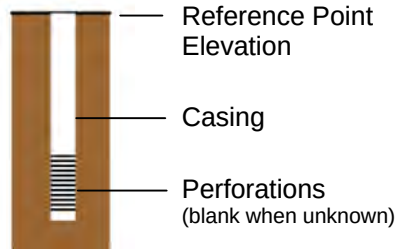


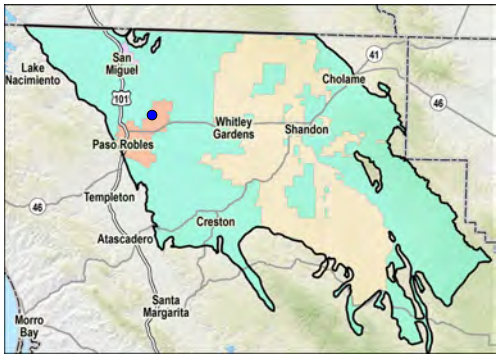
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



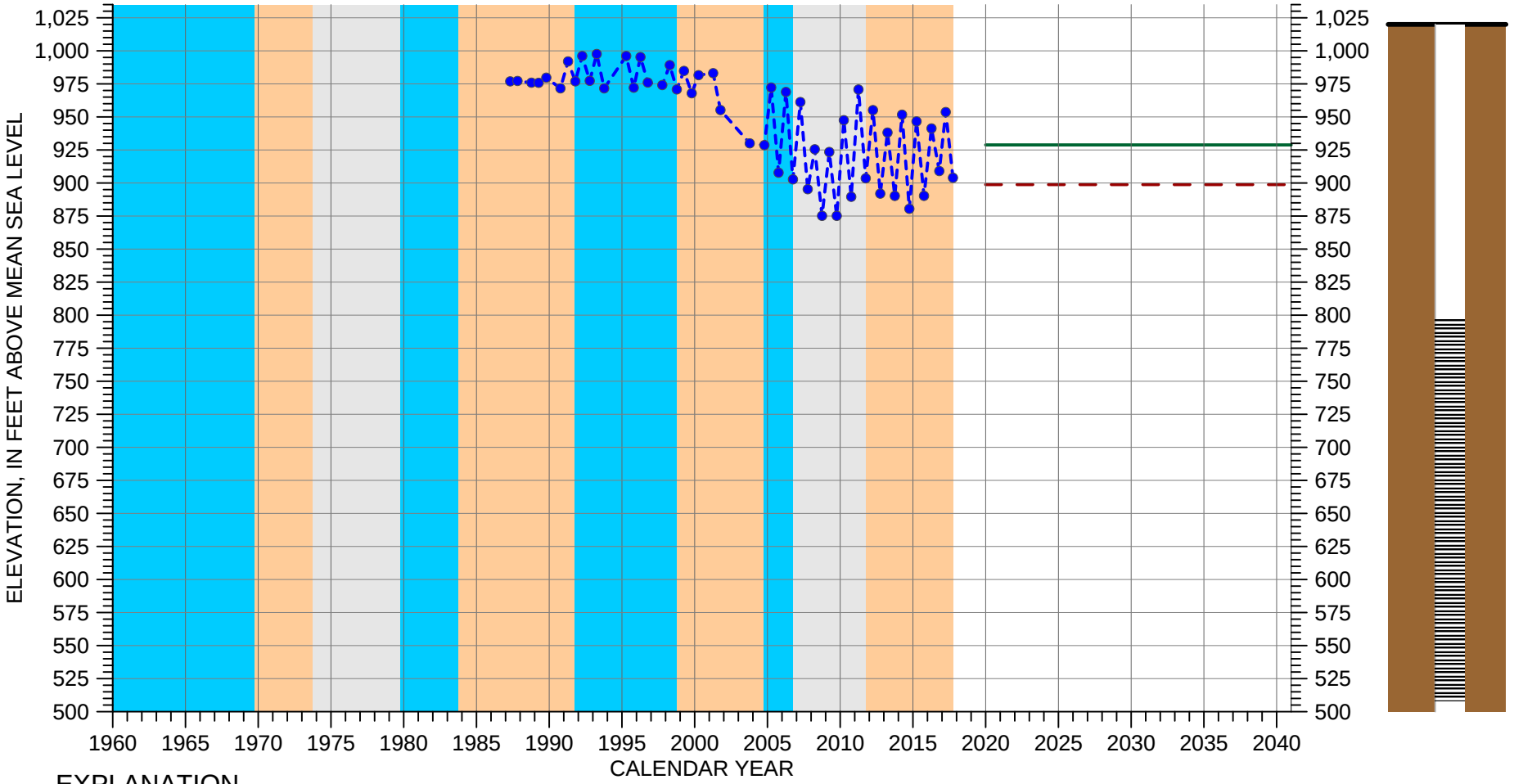


Well Depth: 1230
Screened Interval: 180-~1230 feet below ground surface
Reference Point Elevation: 790 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/12E-14H01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig16_26S_12E-14H01.grf

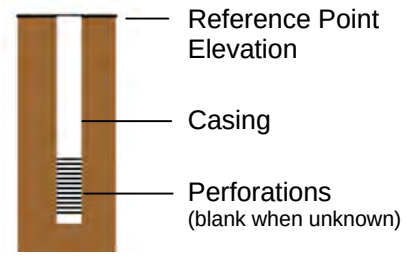


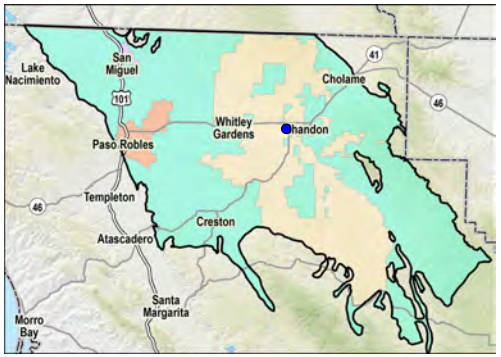
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



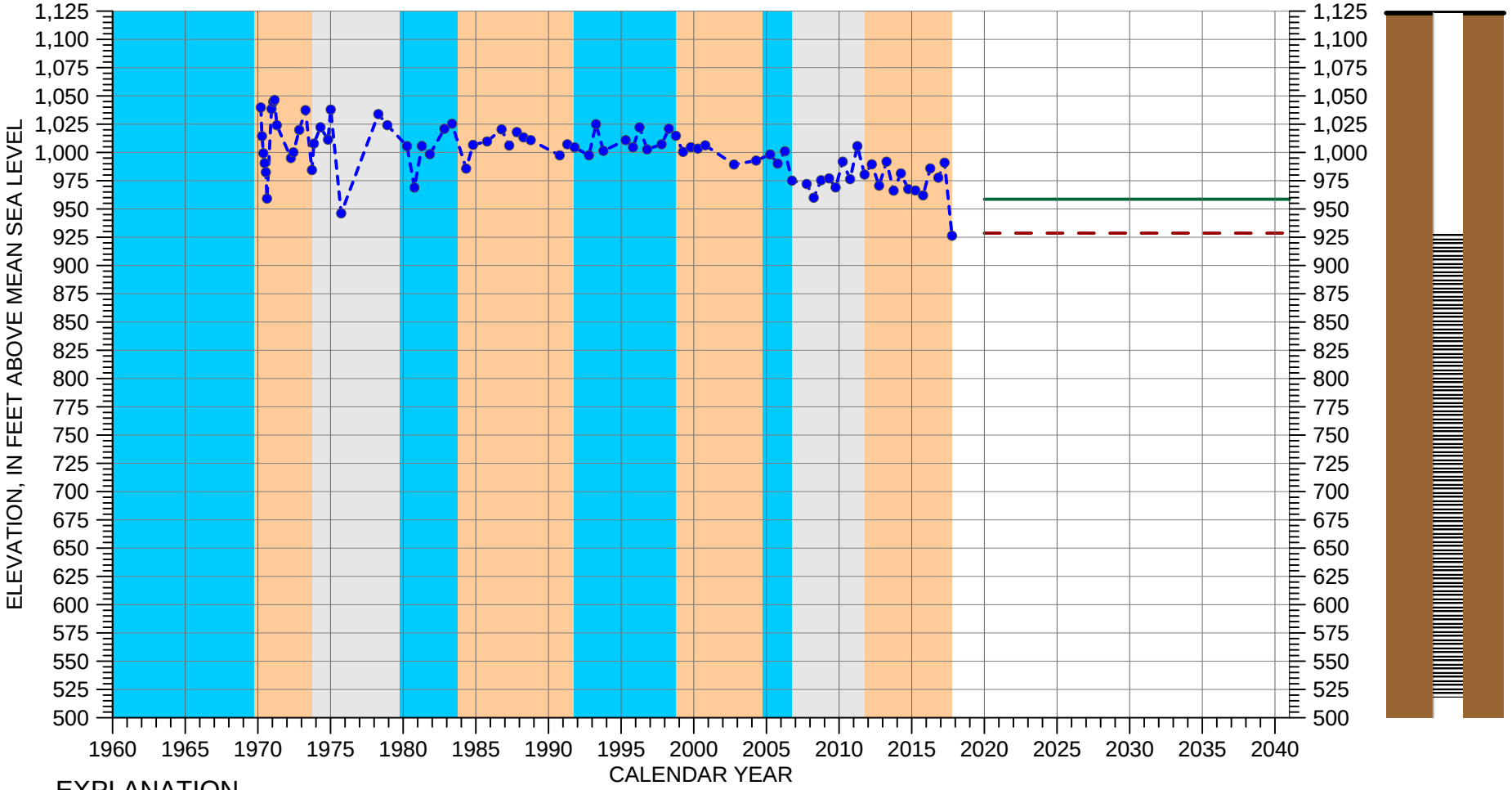


Well Depth: 512
Screened Interval: 223-512 feet below ground surface
Reference Point Elevation: 1020 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/15E-19E01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig17_26S_15E-19E01.grf



EXPLANATION

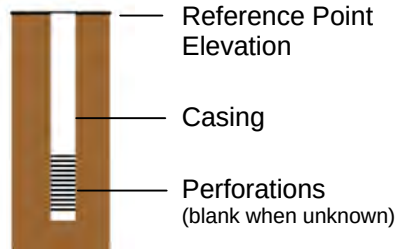
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

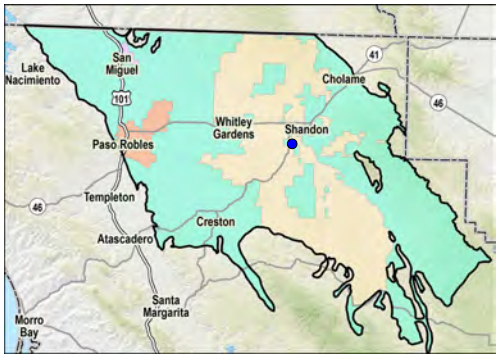
CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET

Well Depth: 605
Screened Interval: 195-605 feet below ground surface
Reference Point Elevation: 1123.3 feet above mean sea level

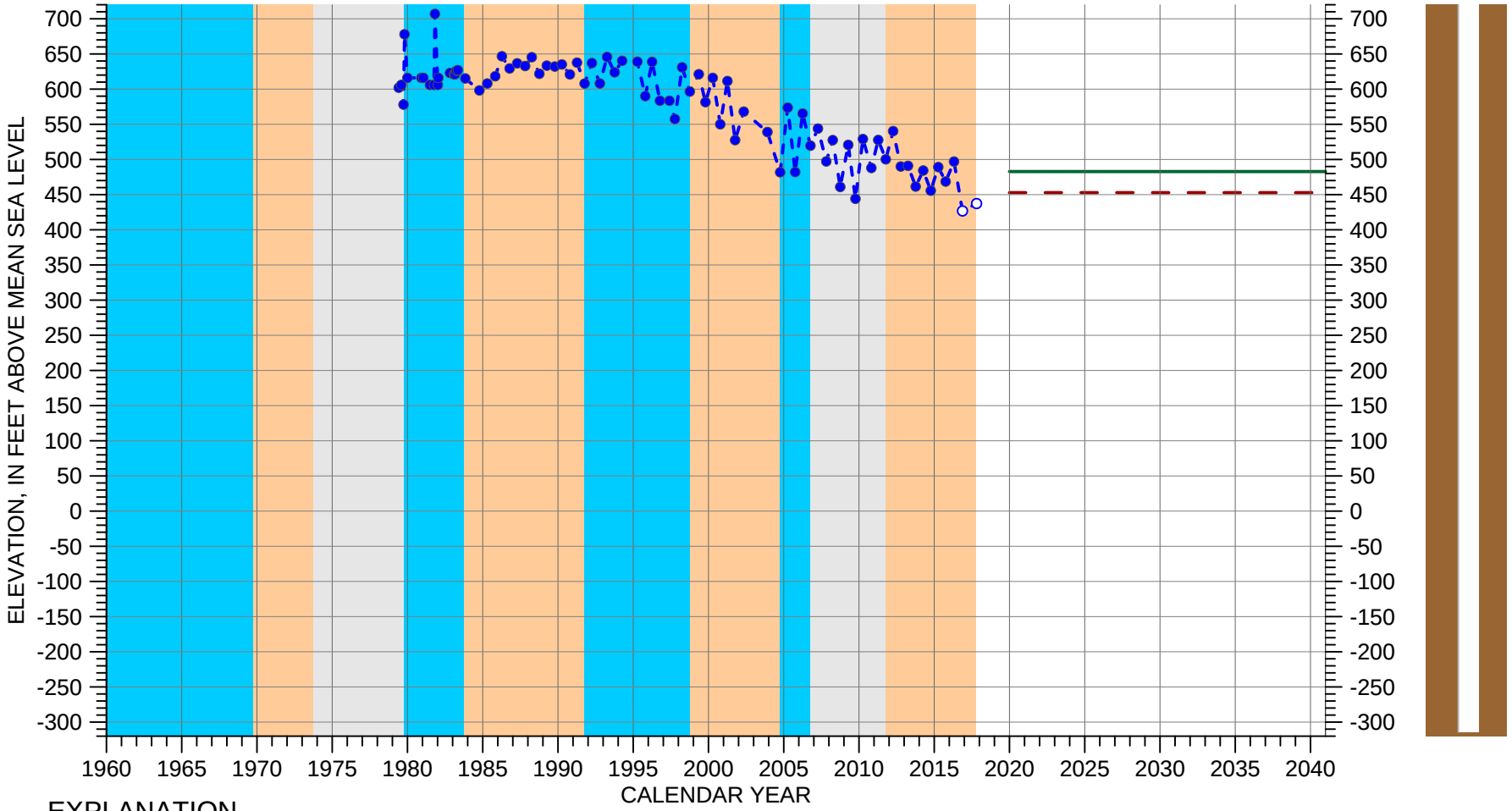
* Measurement reported as not static





MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/15E-30J01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig18_26S_15E-30J01.grf



EXPLANATION

MEASURABLE OBJECTIVE

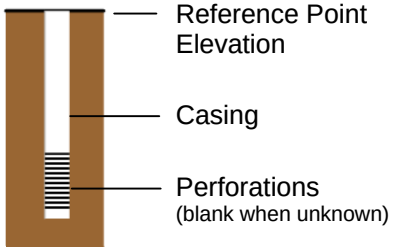
GROUNDWATER ELEVATION

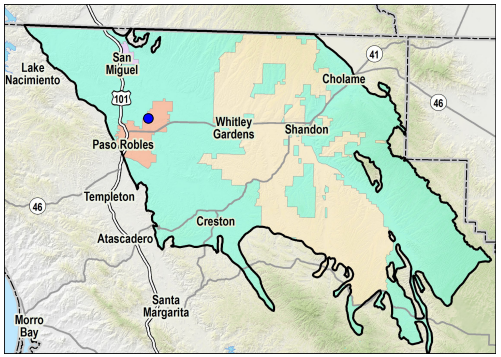
MEASUREMENT NOT VERIFIED*

MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY AVERAGE/ALTERNATING WET



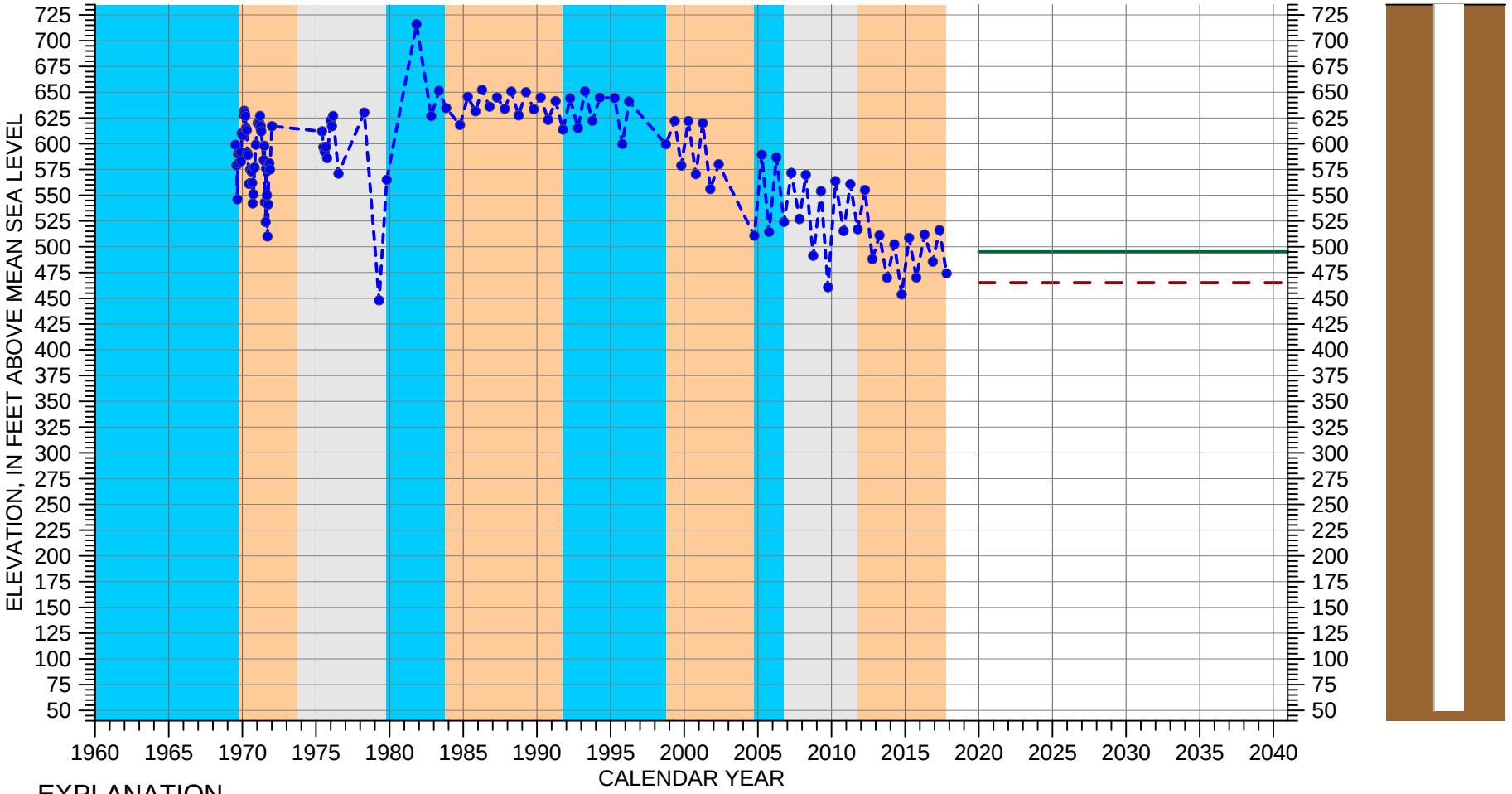


Well Depth: 1100
Screened Interval: unknown
Reference Point Elevation: 786 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/12E-14K01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig19_26S_12E-14K01.grf



EXPLANATION

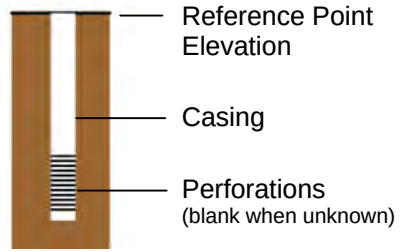
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

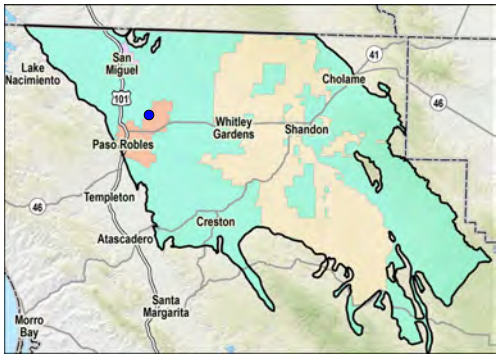
CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET

Well Depth: 740
Screened Interval: unknown
Reference Point Elevation: 789.3 feet above mean sea level

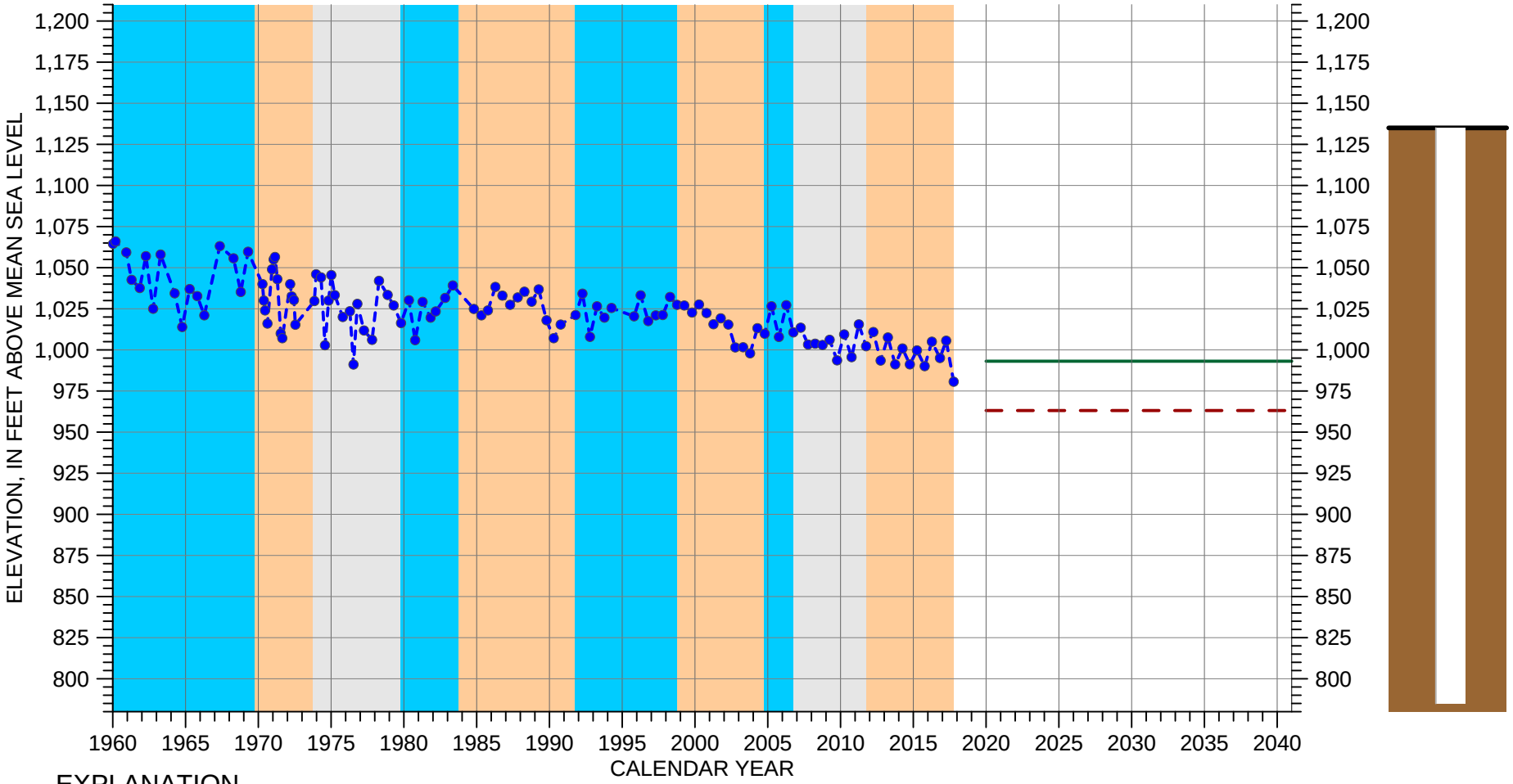
* Measurement reported as not static





MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/12E-14G01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig20_26S_12E-14G01.grf

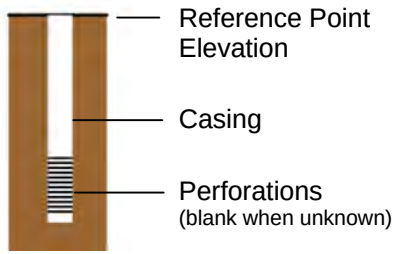


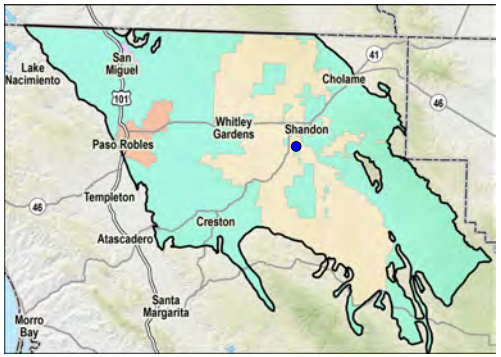
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



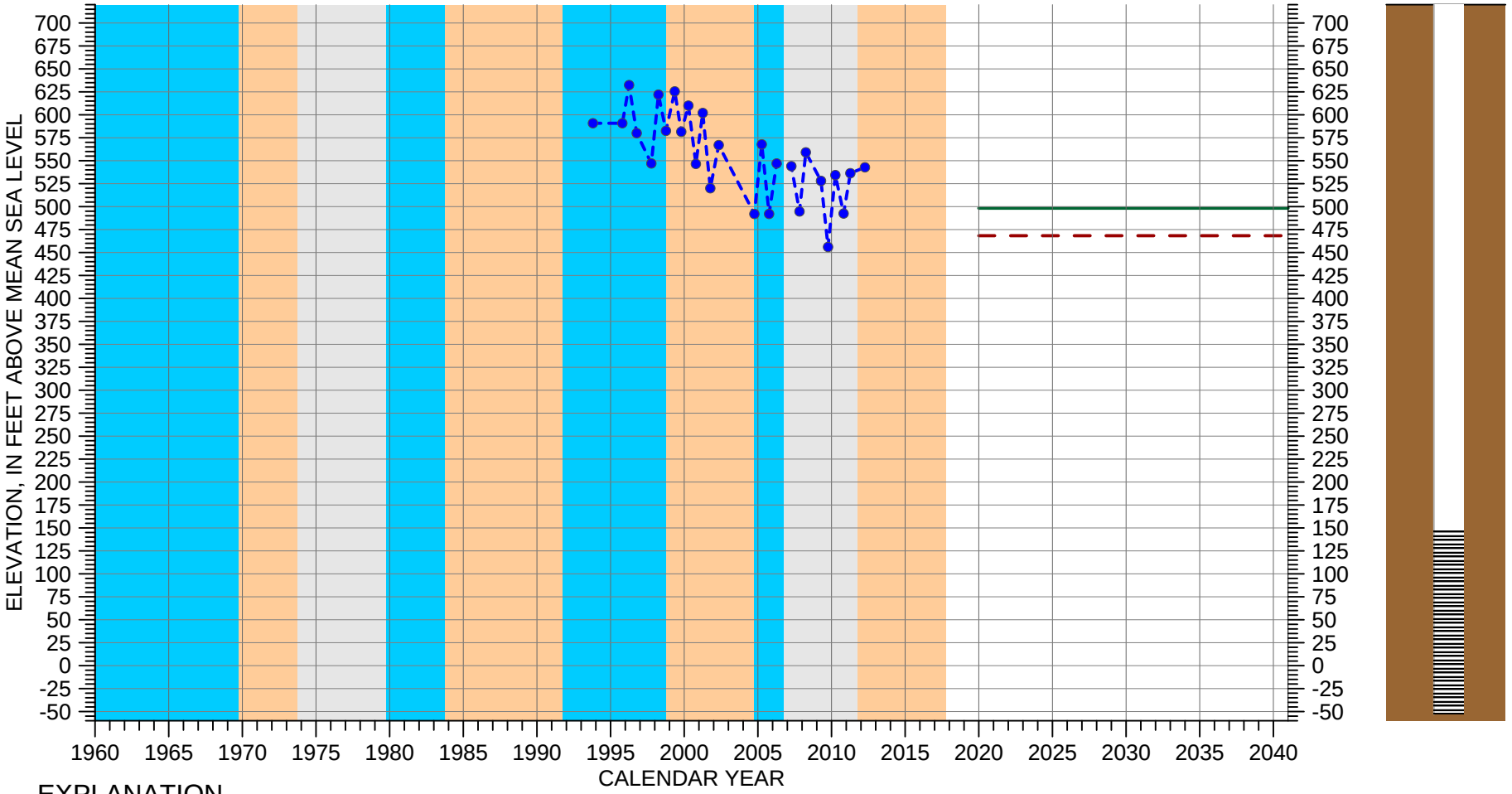


Well Depth: 350
Screened Interval: unknown
Reference Point Elevation: 1135 feet above mean sea level

* Measurement reported as not static

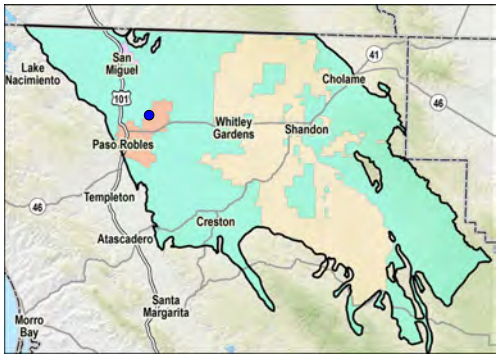
MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/15E-29N01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig21_26S_15E-29N01.grf



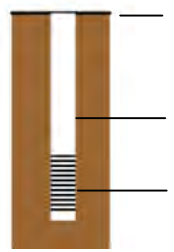
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*



CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET

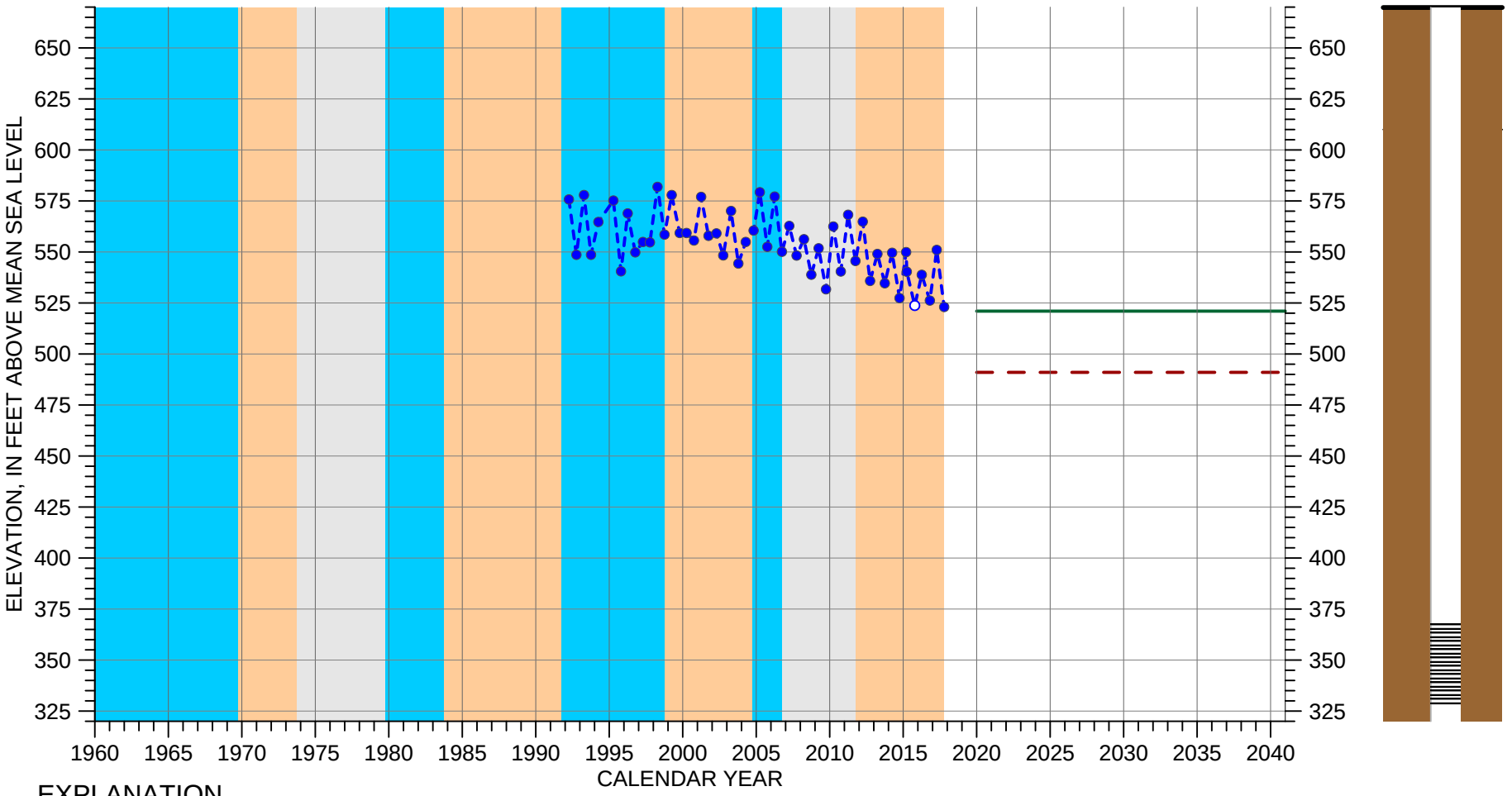


Well Depth: 840
Screened Interval: 640- ~840 feet below ground surface
Reference Point Elevation: 787 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/12E-14G02

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig22_26S_12E-14G02.grf

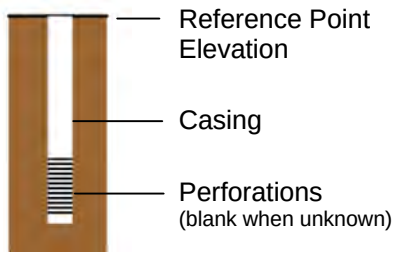


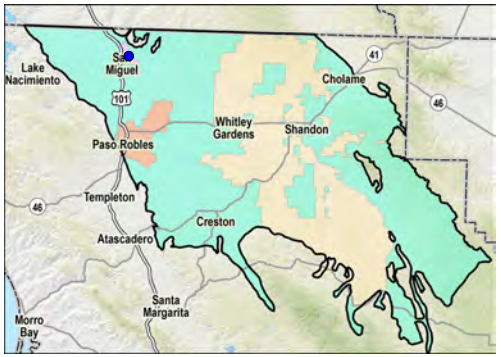
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



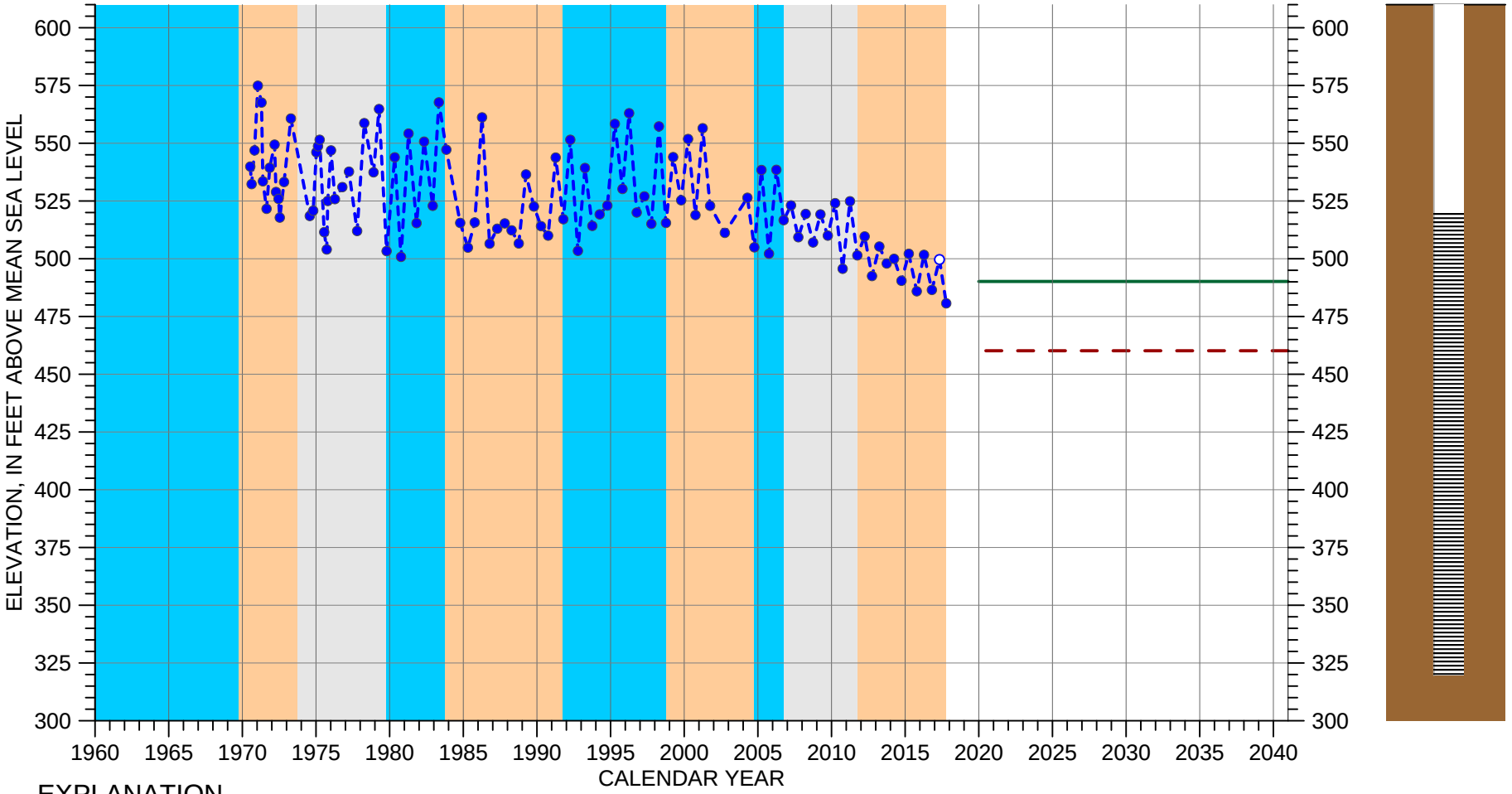


Well Depth: 350 feet
Screened Interval: 300-310, 330-340 feet below ground surface
Reference Point Elevation: 669.8 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 25S/12E-16K05

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig01_25S_12E-16K05.grf

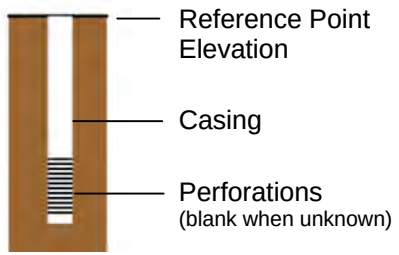


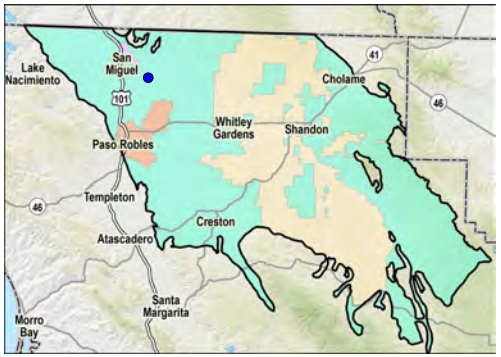
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



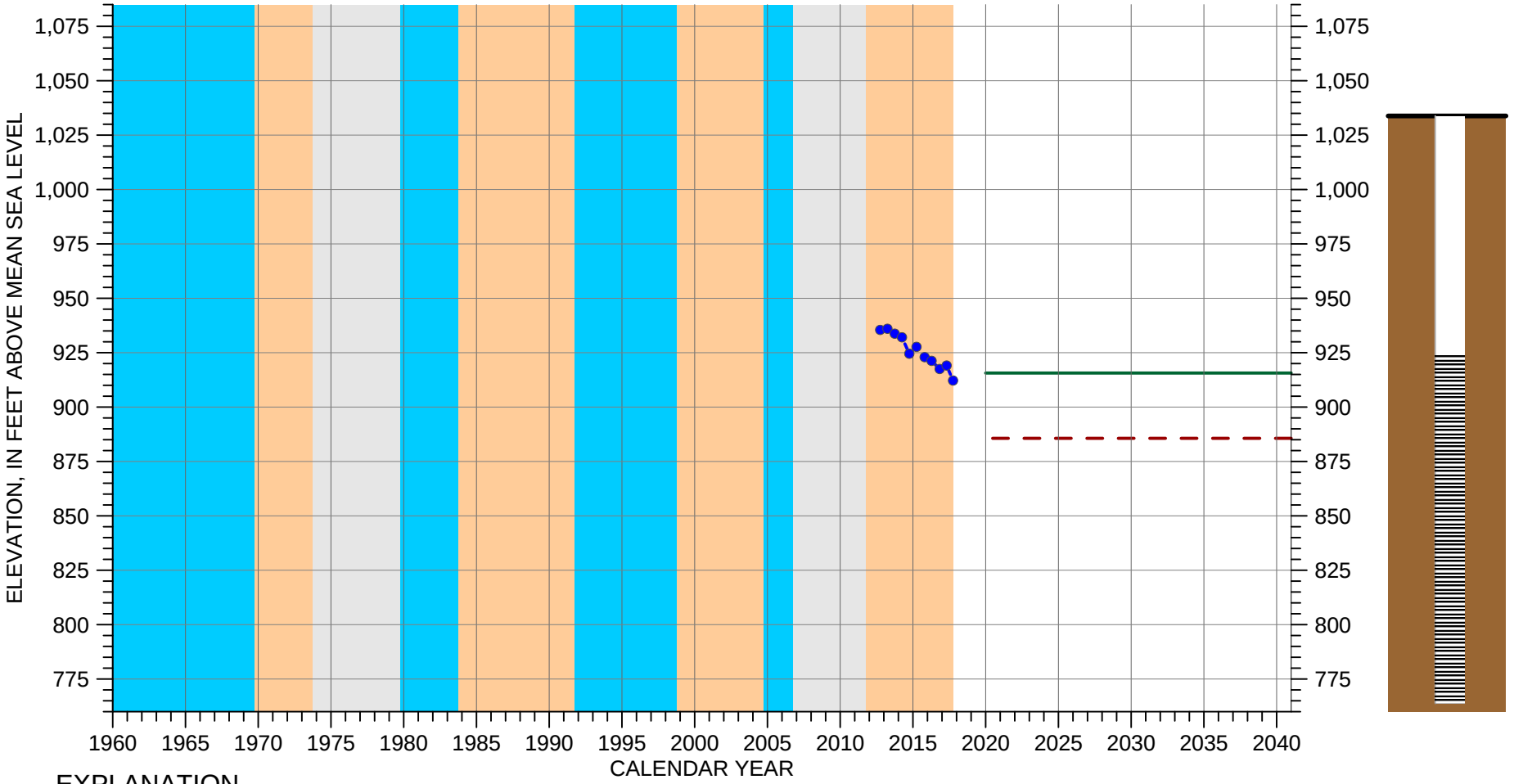


Well Depth: 400 feet
Screened Interval: 200-400 feet below ground surface
Reference Point Elevation: 719.7 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 25S/12E-26L01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig02_25S_12E-26L01.grf

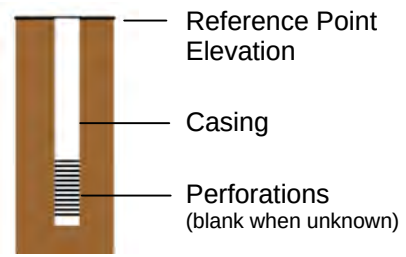


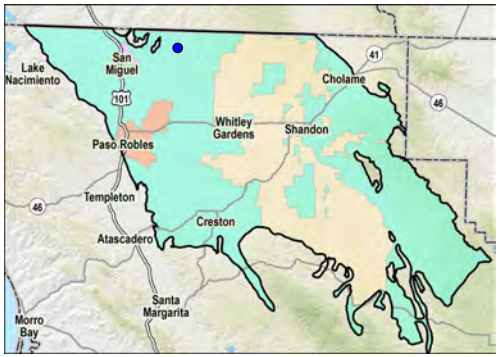
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



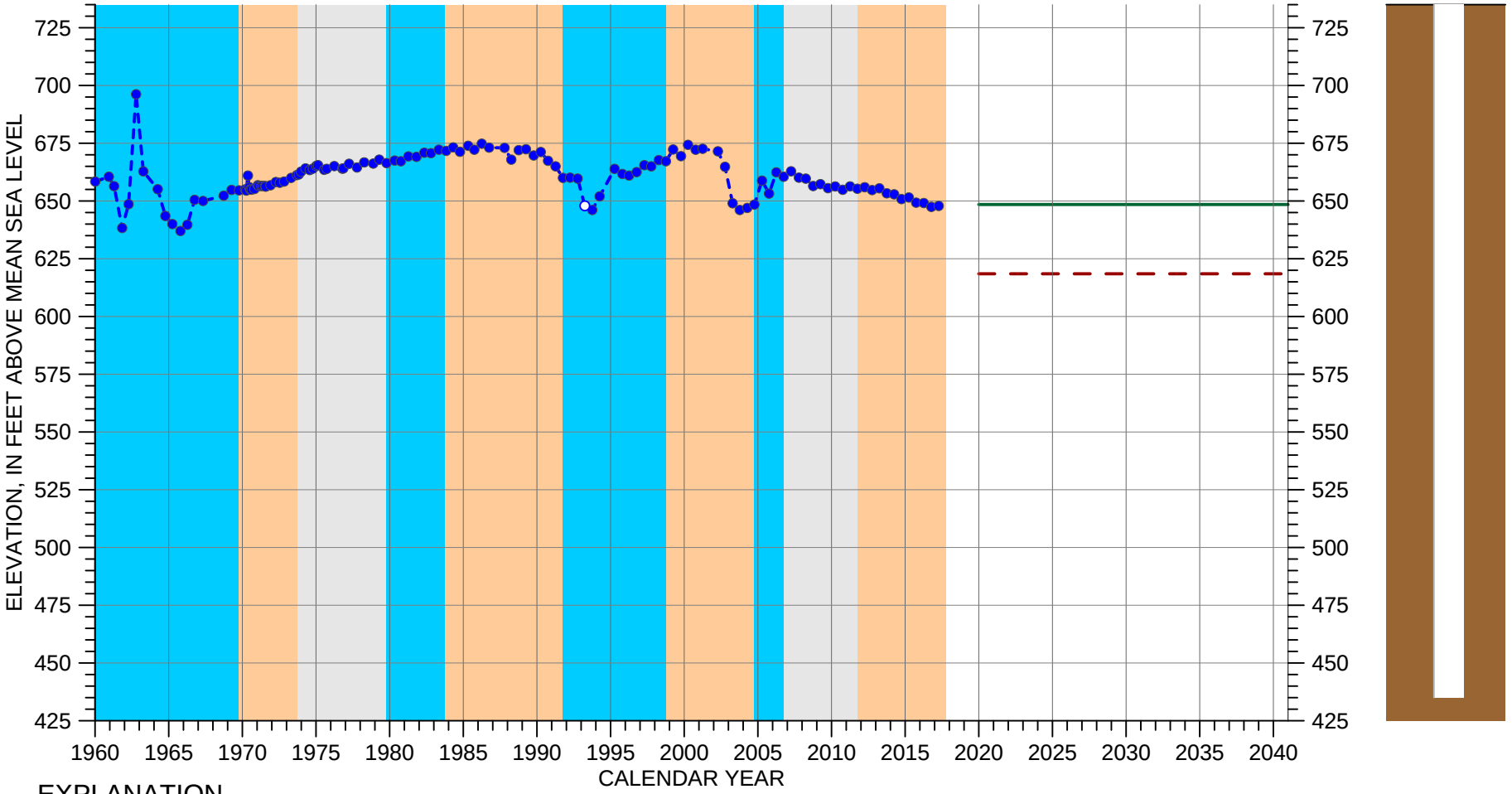


Well Depth: 270 feet
Screened Interval: 110-270 feet below ground surface
Reference Point Elevation: 1033.8 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 25S/13E-08L02

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig03_25S_13E-08L02.grf



EXPLANATION

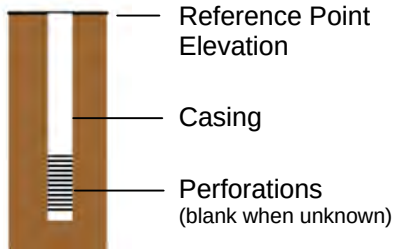
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

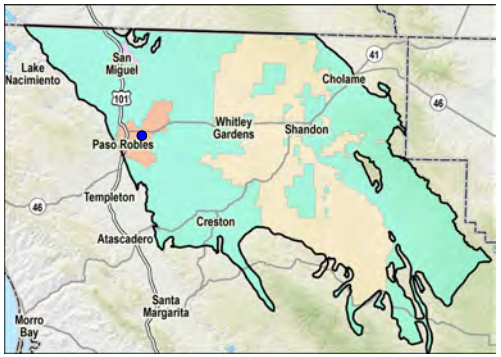
CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET

Well Depth: 400 feet
Screened Interval: unknown
Reference Point Elevation: 835 feet above mean sea level

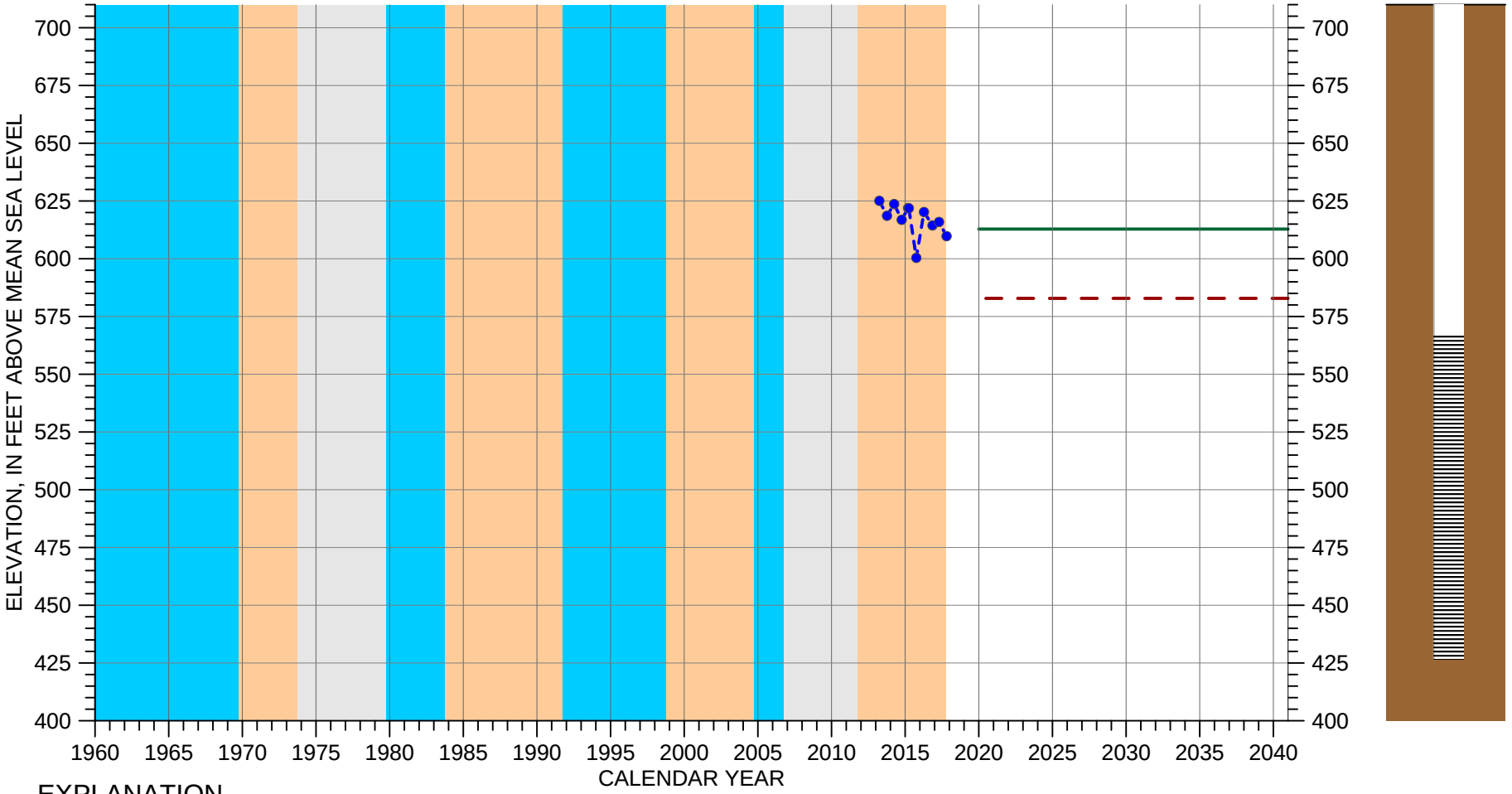
* Measurement reported as not static





MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/12E-26E07

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig04_26S_12E-26E07.grf

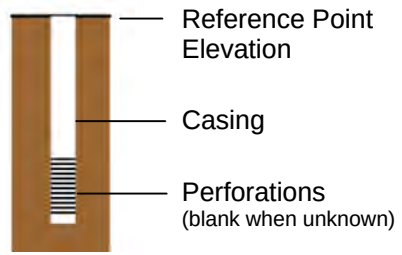


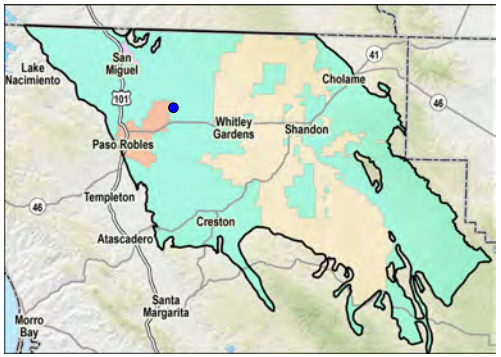
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



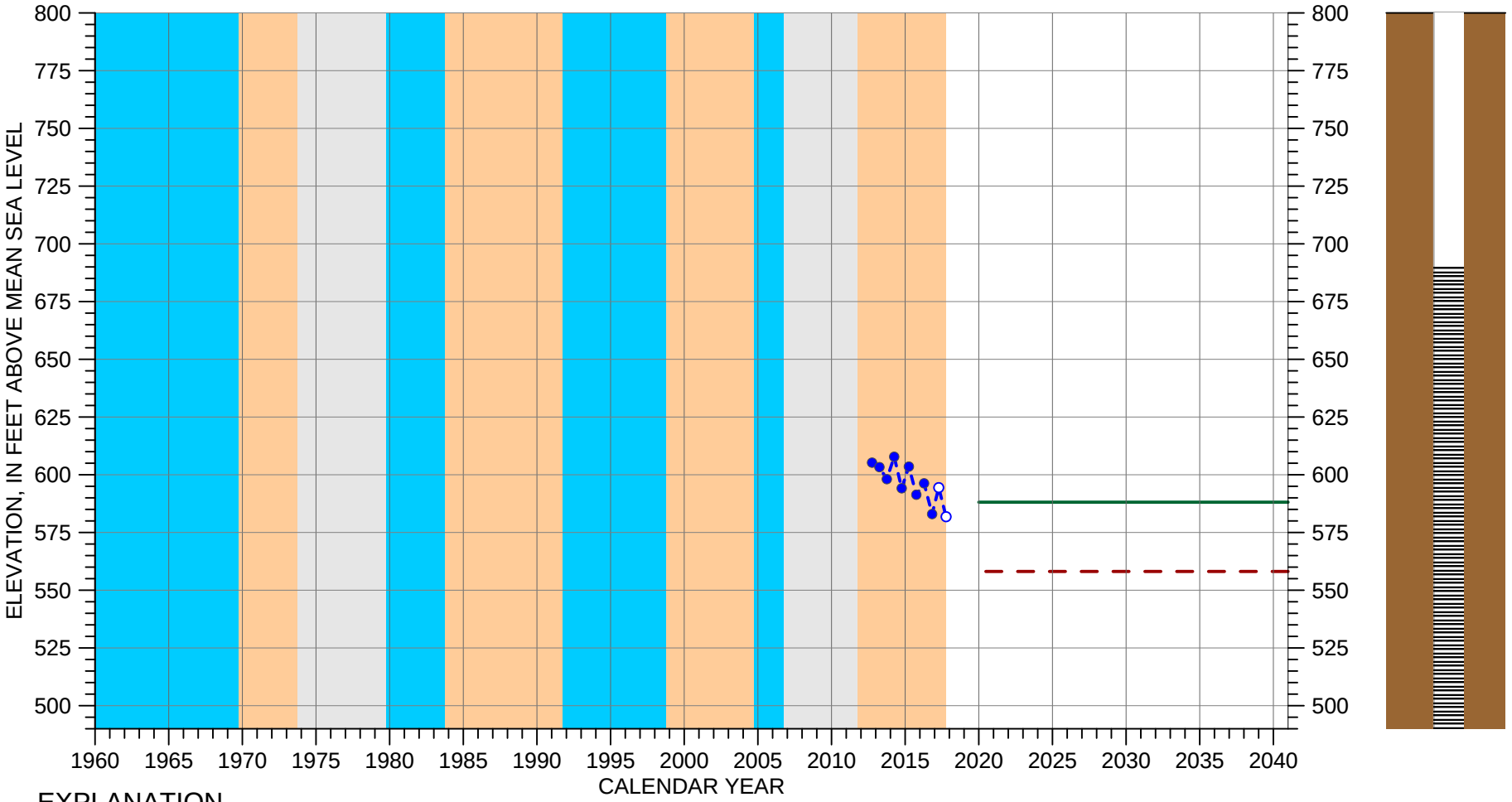


Well Depth: 400 feet
Screened Interval: 260-400 feet below ground surface
Reference Point Elevation: 827.9 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/13E-08M01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig05_26S_13E-08M01.grf

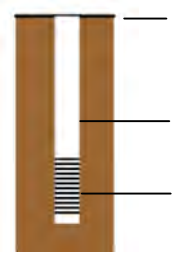


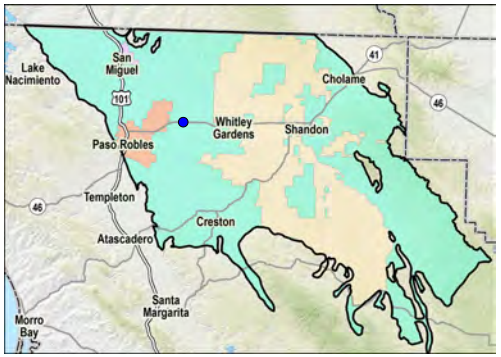
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 400 feet
Screened Interval: 200-400 feet below ground surface
Reference Point Elevation: 890.2 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES AND MINIMUM THRESHOLDS FOR 26S/13E-16N01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\Observed_only\Fig06_26S_13E-16N01.grf

Appendix I

Water Supplies

APPENDIX I – WATER SUPPLIES

1.1 Overview and Acquisition of Available Water Supplies

There are four types of surface waters available for use in the Paso Robles Subbasin for groundwater recharge or in-lieu use – State Water Project (SWP) water, Nacimiento Water Project (NWP) water, local recycled water, and flood flows from local rivers and streams. Below is a description of each supply, including a discussion of reliability and contracting issues.

1.1.1 State Water Project

The SWP is a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants that extend from Northern to Southern California for over 600 miles. Its main purpose is to divert and store surplus water during wet periods and distribute it to 29 contractors in Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California. The SWP is operated by the California Department of Water Resources (DWR).

The SWP's Coastal Branch passes through the southern portion of the Subbasin, through the Shandon and Creston regions. The Coastal Branch of this system extends from the California Aqueduct for 160 miles through the southern portion of Subbasin. Figure 1 shows the Coastal Branch and Polonio Pass Treatment Plant (PPWTP). Prior to treatment at PPWTP, water in the Coastal Branch is untreated. Water is treated at the PPWTP, and southeast of the PPWTP the water in the Coastal Branch pipeline is of potable water standards.

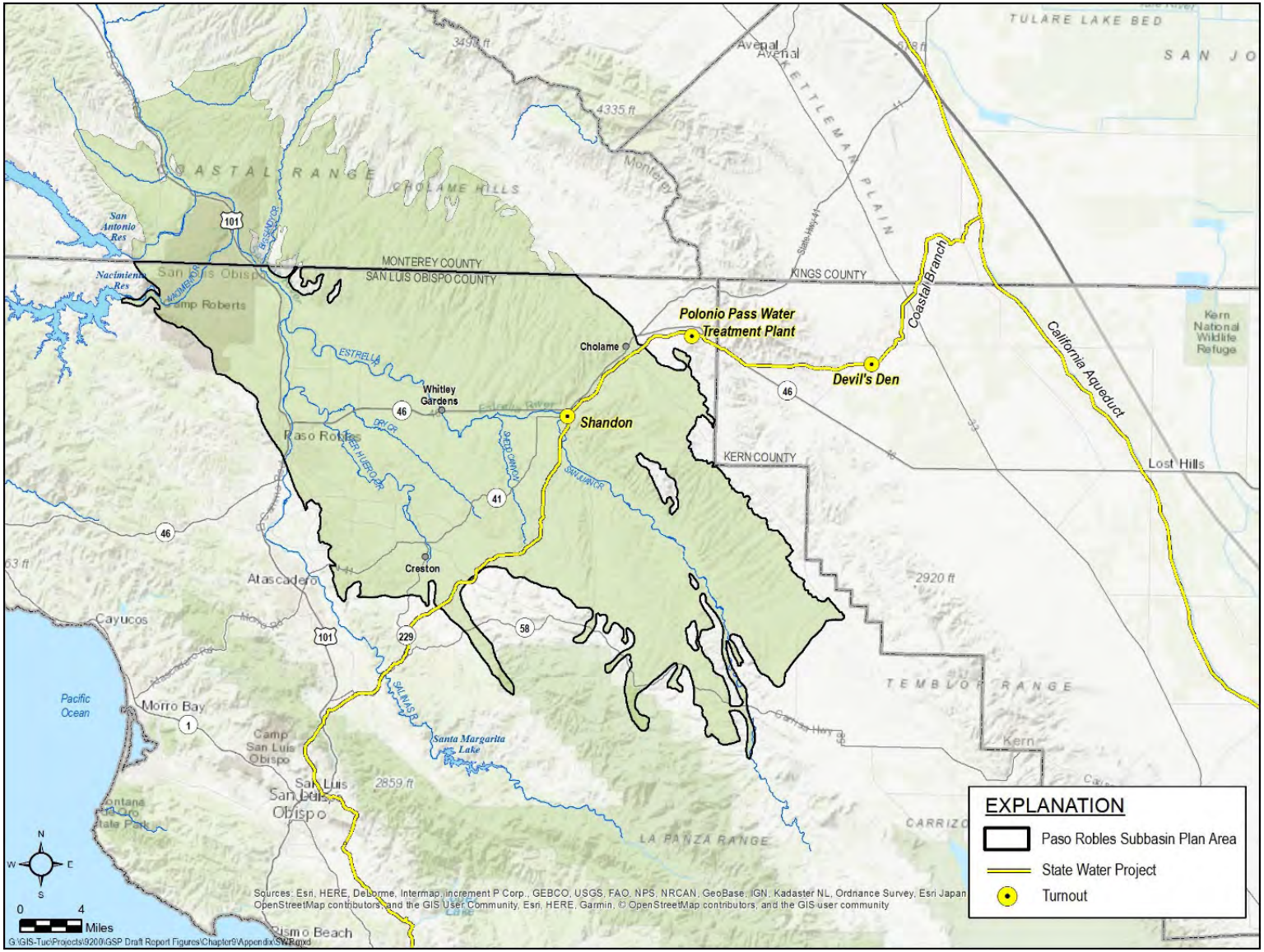


Figure 1: SWP Coastal Branch Infrastructure

The San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWD) is one of DWR's 29 SWP contractors. DWR has contracts with both Santa Barbara County Flood Control and Water Conservation District (SBCFCWCD) and SLOCFCWD to deliver SWP water through the Coastal Branch. The Central Coast Water Authority (CCWA) owns, operates, and maintains the PPWTP and operates the portion of the Coastal Branch that is downstream of Polonio Pass.

SLOCFCWD currently has 25,000 AFY of Table A allocation contracted with DWR. Of this amount, 10,477 AFY is allocated to subcontractors through Water Supply Agreements. SLOCFCWD retains an excess allocation of 14,523 AFY; however, DWR estimates availability of SWP water to average around 58-62% of total allocations (DWR 2014, SWR 2015, DWR 2018). For SLOCFCWD's excess allocation of 14,523, 58-62% corresponds to between 8,400 and 9,000 AFY. For the purpose of the GSP, a value of 8,800 AFY has been assumed as the long-term average annual availability for SLOCFCWD's excess Table A allocation. The actual amount available for delivery by DWR would vary from year to year between zero and 14,523 AF.

1.1.1.1 Physical and Contractual Constraints

According to a study on the Coastal Branch (WSC 2011), enough hydraulic capacity exists to deliver water that exceeds SLOCFCWD's contracted capacity within the Coastal Branch pipeline; however, contractual capacity limits currently constrain the amount of excess allocation available to SLOCFCWD and would need to be renegotiated if SLOCFCWD were to take water at any location downstream of the PPWTP. In particular the Master Water Supply Agreement with DWR dictates:

- District's contractual capacity for Reach 1 is 7.17 cfs (5,191 AFY).
- District's contractual capacity for Reaches 2 through 4 is 7.17 cfs (5,191 AFY).

And the Master Water Treatment Agreement with CCWA dictates:

- District's contractual capacity in the PPWTP is 4,830 AFY

Additionally, existing District subcontractors can increase their SWP allocations. For example, the Oceano Community Services District recently contracted with SLOCFCWD for 750 AFY of additional drought buffer. These increases could limit the amount of excess allocation water available to the Subbasin.

Historical and anticipated future costs for existing subcontractors were analyzed in a supply options study by SLOCFCWD (Carollo, 2017). The analysis determined the range of costs for raw and treated water, shown in Table 1.

Table 1: SWP Estimated Costs Paid by Existing Subcontractors Based on Point of Delivery

Turnout Location	Water Quality	Estimated Unit Cost ($/AF)
SWP & Coastal Branch Intersection	Raw	$467
Devil's Den Pumping Station	Raw	$1,793
PPWTP	Treated	$2,292
Shandon Turnout	Treated	$2,503

The unit costs shown in 1 were estimated average values that were developed to account for a capacity buy-in that includes back payment of capacity allocation and anticipated payment for 20 years. The back payments and future payments were summed and divided over a 20-year payback period. These costs also factor in the SWP system's anticipated future reliability of an average annual delivery of 59% of the total allocation, meaning they are intended to represent costs for actual delivered water.

Raw water is available only east of the PPWTP. To secure the lower raw water cost, new infrastructure would need to be constructed to bring water from upstream of PPWTP to the Subbasin. A previous analysis showed that the annualized cost of the new infrastructure plus the cost of the raw water equated to a similar unit cost as that of treated water. The new infrastructure would also greatly increase the total capital cost of a project. The SWP projects analyzed for the purposes of the GSP assumed the use of treated water; however, the planning and predesign stages of a future SWP project could include an analysis of using treated vs. raw water.

SWP water can be procured by GSAs in two ways: negotiating with a current District or CCWA subcontractor, or negotiating with SLOCFCWD to receive an annual allocation as a new subcontractor.

Under the first method, the purchaser would hold a sub-agreement with an existing subcontractor (that has excess allocation) and not have a direct relationship with SLOCFCWD. The second method would come with an annual buy-in cost and a unit cost of water. It would also, however, increase the potential volume and certainty of supply. Given the amount of water being considered for projects in this GSP, it is likely that being a new subcontractor would be the only feasible route.

Contractual and legal information as it applies to the SWP is described in further detail in Attachment 1 to this appendix.

1.1.1.2 Nacimiento Water Project

The Nacimiento Water Project (NWP) consists of 45 miles of pipeline that conveys raw water from Lake Nacimiento in the northern portion of San Luis Obispo County to communities within San Luis Obispo County. Figure 2 shows an overview of the NWP.

Monterey County Water Resource Agency (MCWRA) manages and operates Lake Nacimiento. SLOCFCWD has an entitlement of 17,500 AFY through a Master Water Agreement with MCWRA negotiated in 1959. Of this amount, 1,750 AFY is permanently allocated to lakeside customers, and the rest is allocated to seven participants. Any surplus NWP water must be obtained through the existing participants. Table 2 shows the allocations of each of the seven participants. These allocations established in 2016 and fully allocated SLOVCWD's entitlement.

Table 2: Nacimiento Water Project Participants and Allocations

Agency	New Allocation
City of Paso Robles	6,488
Templeton Community Services District (CSD)	406
Atascadero Mutual Water Company (MWC)	3,244
City of San Luis Obispo	5,482
County Service Area 10A (CSA 10A)	40
Bella Vista Mobile Home Park	10
Santa Margarita Ranch Mutual Water Company	80
Total	15,750

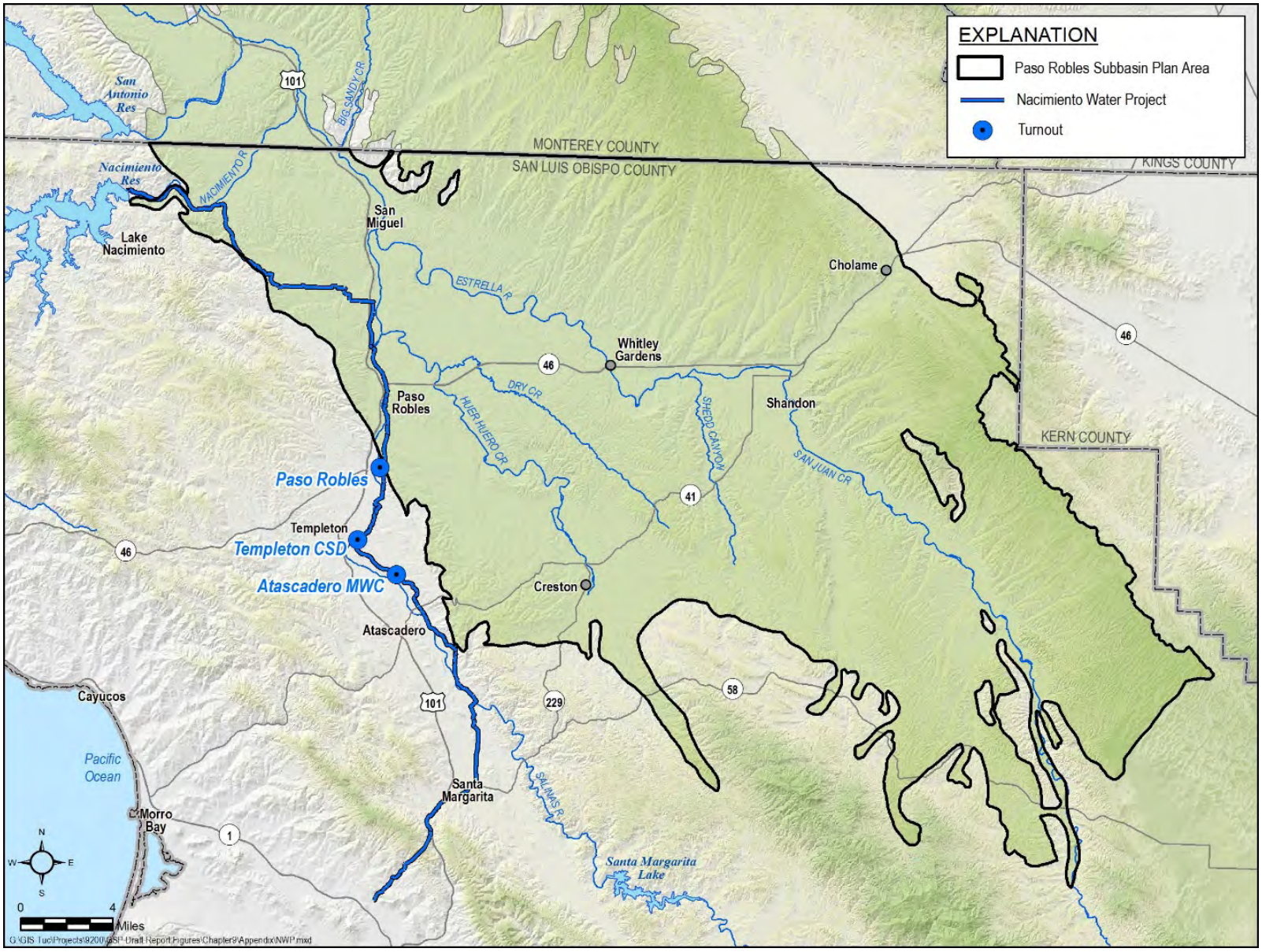


Figure 2: NWP Infrastructure

A previous study projected surplus NWP water based on participant's projected use (Carollo, 2017). The projected surplus is shown in Table 3. NWP is a very reliable supply, since SLOCFCWD's entitlement is for the lowest pool in the reservoir, and therefore is largely immune to level fluctuations. However, as seen in Table 3, NWP participants tend to use more during drought conditions, leaving less surplus water.

To determine how much NWP water might be available for purchase by the GSAs, the 2040 projected annual average surplus supply amounts were used. Dry years were assumed to occur one year out of every three years. A weighted average of the 2040 dry and wet year supplies was calculated as 5,800 AFY. While 5,800 AFY was assumed to be available to the Paso Robles GSAs, the actual amount would need to be negotiated with existing NWP project participants as there may be other entities interested in acquiring surplus NWP water.

Table 3: Nacimiento Water Project Projected Annual Surplus Supply

	Normal Year (AFY)	Dry Year (AFY)
2020	10,135	5,577
2030	8,473	4,045
2040	7,269	2,852

The NWP contract established the process for determining the cost per acre-foot of surplus water, which was applicable prior to full allocation of NWP water among the existing participants. According to the contract, the cost of surplus water to each NWP participant had two components:

1. Operations and maintenance costs per AF of surplus water for the prior year
2. Variable energy costs associated with delivering the surplus water.

For non-participants, a third component is added consisting of debt service costs for surplus water delivered for the current year. Table 4 shows the estimated costs for FY 2015/16, which was the last year when there was non-allocated NWP water available.

Table 4: Nacimiento Water Project Estimated Costs

Location	For Participants	For Non-Participants[2]
City of Paso Robles	$216/AF	$1,299/AF
Templeton CSD	$234/AF	$1,967/AF
Atascadero MWC	$235/AF	$1,554/AF

Under full allocation, the NWP contract requires selling surplus water at a cost the market can bear but not less than costs participants pay for the delivery of the same unit or units of water. At

the time of this report, no surplus water sales have occurred after full allocation approval in April 2016. Thus, a range of purchase costs is possible.

The minimum cost of $250/AF is based on FY 2015/16 costs for participants, representing the cost to convey the water to a turnout. The maximum cost of $2,000/AF is assumed based on FY 2015/16 costs for non-participants, including the debt service cost. However, the actual cost must be negotiated between the purchaser and the NWP participants.

A non-participant may purchase NWP water from an NWP participant every year. However, the non-participant will not have permanent rights to the water unless a participant is willing to sell a portion of its NWP allotment. Thus, a multi-year purchase agreement from a non-participant is likely required to support capital investment in conveyance facilities.

1.1.1.3 Recycled Water

The Paso Subbasin contains two wastewater treatment plants (WWTPs): Paso Robles WWTP and San Miguel WWTP. Recycled water meeting high quality standards established by the State of California is available from these plants year-round. Most demand or recycled water is non-potable demand, such as irrigation. This demand is seasonal, with much greater demand in the summer.

Water quality is a potential issue for irrigation projects using recycled water. Because the water is high in salinity, only a portion of the total amount of water used for irrigation can be recycled water without damaging the crops. To mitigate this issue, recycled water projects in the Subbasin would either be blended with groundwater supplies or occasional flushing would be performed to prevent buildup of salts in the root zone.

The City of Paso Robles is in the process of planning and constructing a recycled water project which could provide up to 2,900-5,000 AFY of in-lieu and direct recharge by providing recycled water for use on golf courses, City parks, nearby vineyards, and recharge through discharge into Huer Huero Creek.

According to the Recycled Water Distribution System Final Design (Carollo, 2018), 1,320 AFY of recycled water will be available during Phase 1 of the project. Some of this water will be used for park irrigation and industrial use, offsetting the City of Paso Robles' potable water demand. Some of this water will be used to offset agricultural pumping. Excess water supply will be discharged to Huer Huero Creek as a recharge project. Phase 1 of the project is modeled in the modified baseline simulation of this GSP, beginning in 2025.

Phase 2 of the project is less well defined. Phase 2 is based on the assumption that as the City grows, the available wastewater for recycled water use will increase. In Phase 2, an assumed additional 902 AFY of recycled water will be available for use for both in-City and out of city

demands. Excess tertiary treated water will be discharged to Huer Huero creek. Phase 2 of the project is modeled in the modified baseline simulation of this GSP beginning in 2040.

Phase 1 of the recycled water project planned by the City of Paso Robles is shown in Figure 3. Private pipelines that will use recycled water for agricultural purposes are not shown in Figure 3; however, the in-lieu recharge has been modeled as part of the modified baseline simulation.

The City of San Miguel is also planning to reuse some or all of its centrally-treated wastewater which could amount to up to 200+ AFY. This additional recycled water is also available for irrigation or other non-potable projects that could offset groundwater pumping.

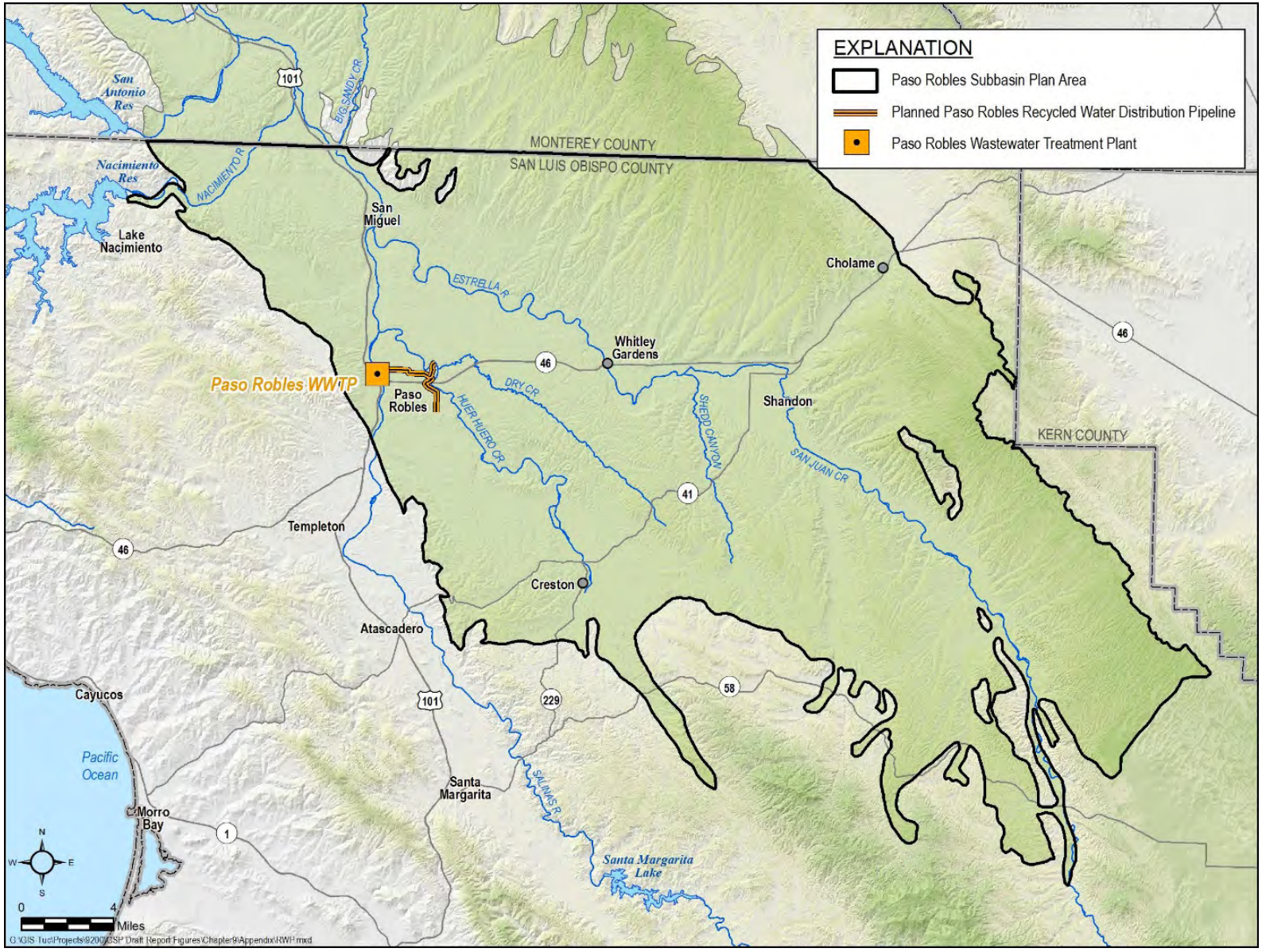


Figure 3: City of Paso Robles Planned Recycled Water Project

1.1.1.4 Surface Water

Three large perennial streams flow through the Paso Robles Basin – the Salinas River, the Estrella River, and Huer Huero Creek, as shown in Figure 4. There are two ways to acquire rights to use surface water from these streams – a standard surface water diversion permit or a temporary flood flow permit, both discussed below.

Acquiring a standard diversion permit is a lengthy and complicated process. A standard permit is likely to be very difficult to acquire, since any downstream user can protest a permit application. Furthermore, the Salinas River between Salinas Dam and the inlet of the Nacimiento is fully allocated throughout the year, except between January and May 1. The acquisition of a standard water diversion permit was not explored further.

DWR has circulated a proposed approach to streamline applicants that seek to divert water only during high flow events (SWRCB 2018). Under the proposed administrative approach, applicants could apply for a temporary permit to divert flows that exceed the 90th percentile daily flow up to 10 or 20% of the total flow between December 1 and March 31.

For example, the 90th percentile flood flow of the Salinas River for January 26th is 1,250 cfs; however, the 90th percentile flood flow for January 27th is 876 cfs. If the river were to flow at 1,000 cfs for both days, water could only be captured during January 27th but not during January 26th. What this means is that flood flows could only be captured infrequently and the large scale infrastucture required to capture these flows could sit idle many years at a time.

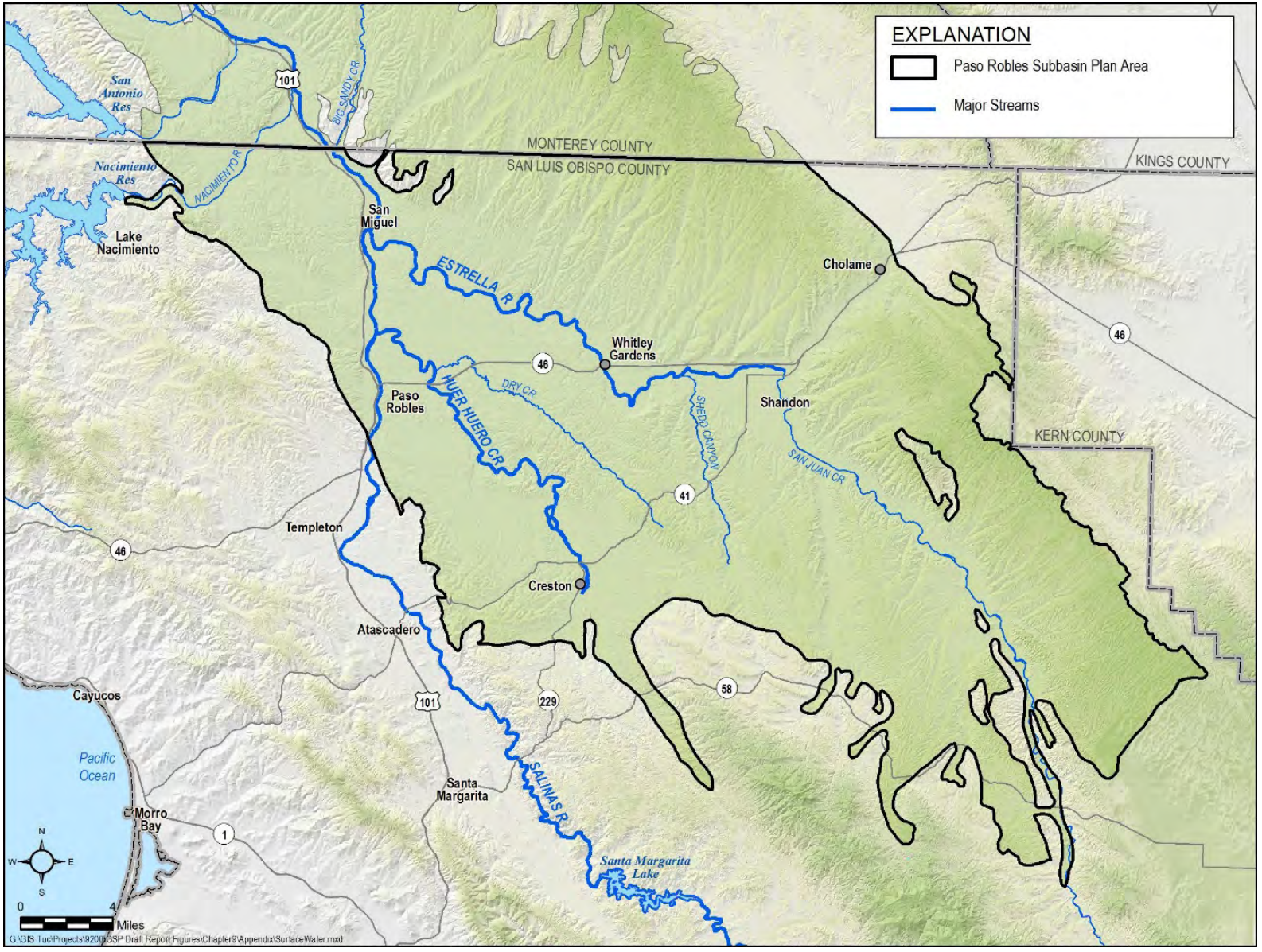


Figure 4: Major Streams in the Paso Robles Subbasin

REFERENCES

DWR 2014. The State Water Project Final Delivery Reliability Report 2013. December 2014.

DWR 2015. The State Water Project Final Delivery Capability Report 2015. July 2015.

DWR 2018. The State Water Project Capability Report and Studies 2017. March 30, 2018.

Carollo 2018. Recycled Water Distribution System Final Design. Technical Memorandum. Project confirmation. Final. December, 2018.

Carollo 2017. Paso Robles Groundwater Basin Supplemental Supply Options Feasibility Study. San Luis Obispo County Flood Control and Water Conservation District. January 2017.

SWRCB 2018. Streamlined Permitting Process for Diversions of High Flows to Underground Storage: Discussion Draft July 20, 2018. SWRCB Division of Water Rights. July 20, 2018.

WSC 2011. Capacity Assessment of the Coastal Branch, Chorro Valley & Lopez Pipelines. 2011.

WSC 2016. Paso Robles Groundwater Basin Supplemental Supply Options Study: Technical Memorandum No. 3. Potential Supply Options and Points of Delivery for State Water. San Luis Obispo County Flood Control and Water Conservation District. December 2016.

ATTACHMENT 1: MEMORANDUM REGARDING STATE WATER PROJECT EXCESS ALLOCATION

MEMORANDUM

To:	HydroMetrics – Paso Robles GSP
From:	OLP
Issue:	San Luis Obispo County Flood Control and Water Conservation District's State Water Project "Excess Allocation"
Date:	June 6, 2018
Client No.:	1902

San Luis Obispo County's State Water Project ("SWP") contract is between the San Luis Obispo Flood Control and Water Conservation District ("District") and the Department of Water Resources ("DWR"). (District SWP Water Supply Contract, at 1.) This Water Supply Contract gives the District the right to 25,000 acre-feet of SWP water each year. (District SWP Water Supply Contract, at 78.) The District then subcontracts its SWP allocation to ten subcontractors.

The SWP water is delivered to the District via the Coastal Branch of the California Aqueduct. Although the District is entitled to 25,000 acre-feet of SWP water each year, contractual provisions from agreements entered during the Coastal Branch's construction substantially limit the District's Coastal Branch conveyance capacity. Consequently, the District possesses an "Excess Allocation," which represents the difference between the District's annual allocation and the water reserved and delivered to its subcontractors. The following discussion begins with a primer on the District's involvement with the SWP. It then addresses the District's Excess Allocation and concludes by discussing factors influencing how much Excess Allocation water is currently available.

I. State Water Project: Coastal Branch – Background.

The SWP is a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants extending for more than 600 miles from northern to southern California. ((SLO Technical Memorandum #3, at 3-6) ("Tech. Memo 3").) The California Aqueduct ("Aqueduct") is one of the key features of the SWP by conveying water from the Delta to central and southern California. (*Id*.) Of relevance here, the Coastal Branch of the SWP connects to the Aqueduct approximately 11 miles south of Kettleman City. (*Id*.) The Coastal Branch extends for approximately 160 miles through Kings, Kern, San Luis Obispo, and Santa Barbara Counties and terminates in Northern Santa Barbara County. (*Id*.)

DWR delivers SWP water through the Coastal Branch to two SWP contractors: (1) the District; and (2) the Santa Barbara County Flood Control and Water Conservation District ("SBCFCWCD"), via the Central Coast Water Authority ("CCWA"), a joint powers authority. Both the District and CCWA then subcontract out their SWP entitlements via "Water Supply Agreements" with individual subcontractors. (*Id*.)

The Coastal Branch was constructed in two phases – "Phase I" and "Phase II." (*Id*.) Phase I was completed in 1968 and includes 15 miles of aqueduct and two pumping stations (Las Perillas and Badger Hill). Although Phase I was completed in 1968, SWP water was not

delivered to SBFCWCD or the District until Phase II was completed, because the facilities did not reach the District or SBFCWCD end users. (Department of Water Resources Bulletin 132-98, at xxviii.)

Phase II consists of 101 miles of pipeline and extends from the terminus of Phase I to Tank 5, located in Northern Santa Barbara County. (Tech. Memo 3, at 3-9.) Included within Phase II are three pumping stations (Devils Den, Bluestone, and Polonio Pass) as well as the Polonio Pass Water Treatment Plant ("PPWTP"). (*Id*.) After Phase II was completed in August 1997, SWP water was finally delivered to the District and SBCFCWCD. (*Id*.)

The ownership and operation of the Phase II facilities is divided amongst/between DWR, CCWA, and the District. DWR was responsible for the design and construction of all Phase II facilities. (CCWA Urban Water Management Plan 2010, at 3.) Following construction, DWR has retained ownership of Phase II facilities. (*Id*.) In addition, DWR maintains and operates the "raw water portion" of Phase II, which is located "upstream" of the PPWTP. (San Luis Obispo Regional Integrated Water Management Proposal, Attachment 13, at 1-2.)

However, CCWA and the District financed the costs for Phase II's design and construction and continue to finance the operation of Phase II. (*Id*.) CCWA operates the "treated portion" of Phase II, which runs from the PPWTP and encompasses all conveyance facilities from the PPWTP to the end of Phase II in Santa Barbara. (Central Coast Water Authority, 2017-18 Fiscal Budget, at 298.)

The District's delivery of water through Phase II facilities is controlled by the Master Water Treatment Agreement between the District and CCWA. This Agreement provides that CCWA is responsible for treating the District's SWP water at the PPWTP and conveying the treated water through Phase II facilities to District subcontractors. (Tech. Memo 3, at 3-11.) The District only funded its portion of Phase II, which would support the delivery of 4,830 acre-feet per year. Because of the District's decision to fund the Phase II only up to its existing demand, the Water Treatment Agreement limits the delivery of District water to 4,830 acre feet of PPWTP treated water through the Phase II conveyance facilities per year. (*Id*.; Master Water Treatment Agreement 1992 and 1995.)

II. **Quantifying the District's Excess Allocation**

The District's Excess Allocation represents the difference between its SWP entitlement of 25,000 acre-feet per year and the amount of water reserved by its subcontractors. (Tech Memo 3, at 3-10.) As noted above, subcontractor demand is 4,830 acre-feet per year. (*Id*., at 3-10 to 3-11.) This leaves 20,170 acre feet of excess allocation.

However, the SWP often is not able to deliver 100 percent of contract water to the SWP contractors. Because the SWP allocations are often reduced to below 100 percent delivery, the District also provides its subcontractors the opportunity acquire "drought buffer" deliveries. The purpose of the drought buffer is to maintain full water deliveries to District subcontractors even when SWP allocations are reduced.

The District provides up to 5,747 acre feet of drought buffer allocation per year, as shown in the chart below. The drought buffer works as follows: Envision a subcontractor with a contract for 100 acre-feet of water per year (Water Service Amount) and 100 acre-feet "drought buffer." In a year where SWP allocation are reduced to 50 percent of the contract amount, this subcontractor would still get 100 acre-feet of water because they would get 50 percent of their water service amount (50 acre-feet) and 50 percent of their drought buffer (50 acre-feet).

Subcontractor	Water Service Amount	Drought Buffer	Total Reserved
Chorro Valley Turnout		*~$1,100 per AF*	
City of Morro Bay	1,313	2,290	3,603
CA Men's Colony	400	400	800
County OP Center	425	425	850
Cuesta College	200	200	400
Lopez Turnout		*~$1,000 per AF*	
City of Pismo Beach	1,240	1,240	2,480
Oceano CSD	750	750	1500
San Miguelito MWC	275	275	550
Avila Beach CSD	100	100	200
Avila Valley MWC	20	60	80
San Luis Coastal USD	7	7	14
Shandon	100	0	100
TOTAL	**4,830**	**5,747**	**10,577**

As displayed above, the District's current subcontractors have purchased various quantities of drought buffer rights. In years where SWP allocations are reduced to greater than 50 percent, the District will need to demand almost the entire 10,577 acre feet to serve its subcontractors. This reduces the excess allocation of the District to 14,423 acre-feet per year. ((San Luis Obispo County Water Resources, Division of Public Works: State Water Project, available at: https://www.slocountywater.org/site/Major%20Projects/State%20Water%20Project/) (Accessed May 14, 2018).)

III. How Much of The District's Excess Allocation is Actually Available?

On paper, the District has 14,423 acre-feet in Excess Allocation. However, there are several factors that may make it difficult to access and put the Excess Allocation to beneficial use. Those factors are summarized below.

1. SWP Rarely Delivers 100 Percent of Contractor Allocation

Although the District is entitled to 25,000 acre-feet per year, the actual amount of water delivered to SWP contractors can vary substantially each year. For example, in 2006, the District received 100 percent of its annual allocation. (Tech. Memo 3, at 3-17.) Conversely, in 2014, the District received only 5 percent of its annual allocation. (*Id*.) Carollo Engineers developed a Technical Memorandum on behalf of the District addressing supplemental supply options in the Paso Robles basin.

The Technical Memorandum estimated that future long-term average annual allocation would likely be around 58 percent. (Tech. Memo 3, at 3-30.) In other words, for planning purposes, future SWP deliveries to the District will likely average around 58 percent of the District's 25,000 SWP contract entitlement. (*Id*.) Applying this figure to the District's current Excess Allocation, this means (all other constraints aside) the District could expect to have access to approximately 8,365 acre-feet of excess allocation per year in an average year – rather than 14,432 acre-feet. (14,432 acre-feet x .58 = 8,365.34).

2. Capacity Constraints

As discussed above, the District's Master Water Treatment Agreement limits the District's Phase II capacity to 4,830 acre-feet per year. Thus, even if the District could obtain excess allocation from the SWP, the current Agreement with CCWA limits capacity to 4,830 acre feet per year.

The Technical Memorandum concluded that there is "significant unused capacity" within the SWP Coastal Branch facilities that could be used to deliver additional District SWP water. (Tech. Memo 3, at 3-3.) If there is physical capacity available, it is possible the District and CCWA could negotiate an amendment to the Master Water Treatment Agreement to allow the District to access additional capacity in Phase II facilities. The Master Water Treatment agreement has been amended before (in 1995 to reflect the District's current 4,830 acre-feet limitation). However, that amendment occurred before Phase II was completed in 1997. While the Master Water Treatment has an amendment provision, it does not appear that the agreement has been amended since Phase II came online in August of 1997.

Other than amendment of the Master Water Treatment Agreement between the District and CCWA, there are capacity limitations for the Coastal Branch facilities reaches 1-6 included in the DWR contract for SWP water with SBCFCWCD. (Table B of the SWP/SBCFCWCD Contract.) To the extent these limitations control CCWA, they may restrict CCWA from allocating the District additional capacity in Phase II facilities.

The Master Water Treatment Agreement between CCWA and the District limits the District's capacity on the "treated" portion of Phase II. However, the Master Water Treatment Agreement does not limit the District's capacity to convey water through the "untreated portion" of Phase II (Reach 1) which consists of approximately 16.2 miles of pipeline and three pumping plants (Devils Den, Bluestone, and Polonio Pass). (Tech. Memo 3, at A-3 (Need to review Exhibit E of the Master Water Treatment Agreement to confirm this finding.).) Similarly, the Master Water Service Agreement does not limit District delivery of water through Phase I

(completed in 1968). Therefore, if the conveyance capacity challenges above cannot be overcome, there may be an option to access the excess SWP allocation by building a new pipeline or other delivery conveyance structure that separately conveys the excess allocation prior to the "treated" portion of Phase II facilities.

3. Potential Rights of Existing Subcontractors

The District currently has 10 subcontractors. The subcontractors may have certain rights of first refusal on the District's Excess Allocation. Specifically, this right derives from the District's "Excess Entitlement Policy" and may be further included in each subcontractor's Local Water Supply Contract with the District.

In 2003, the District developed a series of Excess Entitlement policies. (Tech. Memo 3, at 3-10 to 3-11 (San Luis Obispo Board of Supervisors, *Policy on Excess State Water Supply*, January 2003).) In relevant part, these policies provide that prior to transferring the District's Excess Allocation for "any other use," subcontractors of the District's SWP water with capacity in Phase II must have the "first right" to utilize the Excess Allocation for "drought buffer" purposes. (San Luis Obispo Board of Supervisors, *Policy on Excess Water State Water Supply*, at 1.) The process by which subcontractors acquire excess allocation is unclear as are any potential limitations on acquisition of future drought buffer quantities from the District.

5. The District's Current Excess Allocation Activities

In recent years, the District has leveraged its Excess Allocation via DWR sanctioned water sales, stored the water for future use, and (potentially) engaged in an exchange program with CCWA. For example, in 2013 the District participated in a DWR sanctioned "Multiyear Water Pool" program whereby it sold 19,404 acre-feet of water to other SWP contractors. (DWR Bulletin 132-14, at 169.)

Additionally, the District has also stored portions of its Excess Allocation for use in the following year. An example of this is the SWP's "carryover water" program. This program permits SWP contractors to carryover a portion of its allocated water approved for delivery in the current year for delivery during the following year. (Tech. Memo 3, at 3-14.) In 2014, when the SWP delivered only 5 percent of contractors' entitlements, the District delivered 2,693 acre-feet of carryover water. (DWR Bulletin 132-15, at Table 9-8.)

In addition to water sales and carryover storage, in 2016, the District attempted to implement an "exchange program" with CCWA. In this program, the District proposed to exchange some of its "wet water" in storage for pipeline and treatment capacity above its current 4,830 acre-feet limitation. (SLO Department of Public Works, Report of J. Ogren, at 3 (December 13, 2016).) The proposed exchange was structured as a 2 for 1 program whereby for every two acre-feet of water the District provided to CCWA in excess of the District's annual 4,830 acre-feet limitation, CCWA would get to keep one acre-foot and CCWA would treat and then convey the other acre-foot to the District's subcontractors. (*Id*. (emphasis added).) It is

unclear if this proposed program was implemented. However, the fact that the District proposed this program suggests the District is making efforts to utilize its Excess Allocation.

4. Acquisition of the District's Excess Allocation.

All other limitations aside, the GSA should consider if there were Excess Allocation available, how it would acquire this water from the District. This consideration should include (1) the relationship between the District and the County and whether the District would allow the County to use the Excess Allocation; (2) whether the GSA could become a District subcontractor; (3) whether any other entity could become a District subcontractor; (4) negotiations of which entities would pay for the Excess Allocation and/or increased capacity

IV. **Outstanding Questions**.

The following are outstanding questions at this time:

1. What is the extent of the the subcontractor right of first refusal to Excess Allocation? Is it limited to drought buffer rights? Or do subcontractors have right to refuse all excess allocation?

2. Is it possible to negotiate increased capacity in Phase II facilities with CCWA?

3. What are the estimated costs for conveyance facilities to divert water above the PPWTP and deliver to the GSA service area?

V. **Conclusion and Next Steps**.

The major limiting factors in accessing Excess Allocation include: (1) SWP delivery shortages; (2) limited capacity in Phase II facilities; and (3) the (potentially) superior rights of existing subcontractors.

***

Appendix J

Project Assumptions

APPENDIX J – PROJECT ASSUMPTIONS

This document provides an overview of the assumptions used to develop projects and costs in Chapter 9 of the Paso Robles GSP. Assumptions need to be checked and tested during the pre-design phase of each project. Project designs, and therefore costs, could change considerably as more information is gathered.

1.1 Year-to-Year Variability in Water Supply Amount

All water supplies being considered to supplement the Paso Subbasin are rainfall dependent and therefore vary year to year in the amount available for supply. To make use of the available long-term average annual average water supply, projects and infrastructure such as pipes and pump stations must be sized for the highest flows that could occur. The highest available flows, as well as the long-term expected averages for SWP and NWP are presented in Table 1.

Table 1: Long-term Average and High Flow Available

Supply	Long-term Average (AFY)	Highest Flow (AFY)
SWP	8,860	14,770
NWP	5,800	7,270

1.2 Seasonal Variability in Demand

Injection and recharge basin projects were sized to deliver flow steadily throughout the year with no seasonal variation. Direct delivery projects were sized to deliver water according to seasonal fluctuations in demand.

1.3 Daily Variability in Demand

No daily variation in demand was assumed for any projects. For irrigation projects, water for each day would be delivered over a 24-hour period, even though irrigation might typically occur over a 12-hour or less window. This would require farmers to have onsite storage and pumps. All onsite improvements for direct users are assumed to be developed by individual land owners.

1.3.1 Recycled Water Projects

The two recycled water Projects described in the GSP are planned projects being implemented by the City of Paso Robles and San Miguel CSD. The Paso Robles project is currently underway, with design expected to be complete by 2019 and construction to be complete by 2021. Pipeline

alignments, costs, and delivery amounts were obtained from the project design 60% design information.

The San Miguel project is not as far along as that of Paso Robles. Some conceptual information is known; however, exact pipelines, customers, flows, and costs have not been determined yet. To obtain a cost for the purposes of the GSP, the project team came up with a potential design for a San Miguel RW project – one that sends half the flow to the eastern customers, and another half of the flow to western customers. The actual design is to be determined.

1.3.2 Recharge Basin Projects

All recharge basin projects were sized assuming an infiltration rate of 0.5' per day. Recharge basins were assumed to receive water consistently throughout the year, with no seasonal variation in water delivery.

The locations of all three recharge basin projects were selected to be close enough to the supply pipelines such that a pump station would not be required to deliver water to the recharge site. If land close to supply lines cannot be procured, these projects might require a pump station, which would increase project cost.

1.3.3 Direct Delivery Projects

The three NWP direct delivery projects were selected and sized to offset pumping throughout the eastern central region of the Subbasin and even out projected water levels.

Seasonal variation of demand (by month) was assumed in each region to follow patterns based on 2015 agricultural pumping demand curves modeled in the GSP model. Assumed peaking factors by month are shown in Table 2.

Table 2: Agricultural Demand Peaking Factors, by Month

Month	Peaking Factor
January	0.00
February	0.00
March	0.7
April	2
May	1.6
June	2.5
July	2
August	1.1
September	1.2
October	0.7

Pipelines were sized to deliver supply commensurate with the amount of NWP water that would be available during a wet year (Table 1). Table 3 shows the amount of peak and average demand met by each project in the project region.

Table 3: Peak and Average Demand and Deliveries for Direct Delivery Projects

	North	Central[1]	Eastern
Peak Monthly Demand (gpm)	15,920	2,640	5,500
Max Pipeline Delivery (gpm)	2,960	1,260	2,480
Average annual demand (AFY)	10,415	1,725	3,600
Annual water delivered, wet year (AFY)	3,510	1,250	2,510

Notes:
1. Demands for this area are those remaining demand after accounting for recycled water deliveries (from the modified baseline model run).

Pipelines were sized to deliver demand at all hours of the day regardless of the time period required for irrigation. This assumption was made to reduce the pipeline diameter and pump station requirements; however, this assumption requires that farmers have daily on-site storage to collect water from the pipeline during times when they're not irrigating. The cost of on-site storage and other on-site improvements was not included in the cost estimates.

Water from the NWP might have water quality that is problematic for irrigation systems; the NWP pipeline carries untreated reservoir water that can be high in metals and contain algae that that could clog or foul drip irrigation or sprinkler heads. No treatment was assumed in the project costs; however, water quality would need to be analyzed and a small pilot study conducted to determine if any water quality adjustment would be required. Alternatively, different irrigation techniques or operational changes may need to be utilized with NWP water deliveries. This could be determined in a pilot study.

1.3.4 Local Recharge Projects

The perennial rivers that flow through the Paso Robles Basin can be engorged with flood water for several weeks at a time while remaining dry for most of the year. Historical water levels on the Estrella River, Huer Huero Creek, and the Salinas River were analyzed to determine the frequency, length, and volume of flow imparted by these flood events.

Legal issues were also considered to determine how much water could feasibly be extracted for a local recharge project. A standard surface water diversion permit would theoretically allow for more water to be extracted from a river; however, the process for obtaining a standard surface water permit is extremely lengthy and complicated. The Salinas River between Salinas Dam and the Nacimiento confluence is fully allocated except between Jan 1 – May 15; and, permit

applications would be subject to protest from all existing upstream and downstream permit-holders.

DWR may introduce a streamlined surface water permit for GSAs to extract water during flood flows. The draft concept of the temporary permit is to allow the diversion of flood flows between December 1 and March 31. The diversions can only legally occur on days when the volume of flow in the river is greater than the 90th percentile flow for that particular day of the year. This concept is described in detail in Appendix I.

Though the volume of water available during floods is considerable, the infrastructure required to divert a large volume would also need to be sizeable. The volume of stormwater that could be captured from the Salinas River under the draft streamlined permit was computed for three different sized systems. Flood flows for the last 30 years (1989-2018) were used to simulate the diversions, which were set to occur only on days between January 1 and March 31 with flood flows higher than the 90th percentile flood flow. The results are shown in Table 4.

Table 4: Simulated Volume Diverted from the Salinas River under the Draft Streamlined Permit over a 30-Year Period for Different System Sizes

System Size (cfs)	Recharge basin size (acres)	Volume captured over the 30 year period (AF)	Average annual captured (AFY)
10	40	4,900	165
40	160	20,400	645
80	315	38,000	1,260

It is worth noting that, over the 30-year simulated period, the stormwater diversion infrastructure would have been activated for a total of 250 days (an average of 8 days per year). Costs are provided for the 10 cfs system. Water would be extracted via radial Ranney wells, which are built to draw water from the alluvium and do not require in-river infrastructure.

1.3.5 Salinas Dam Expansion

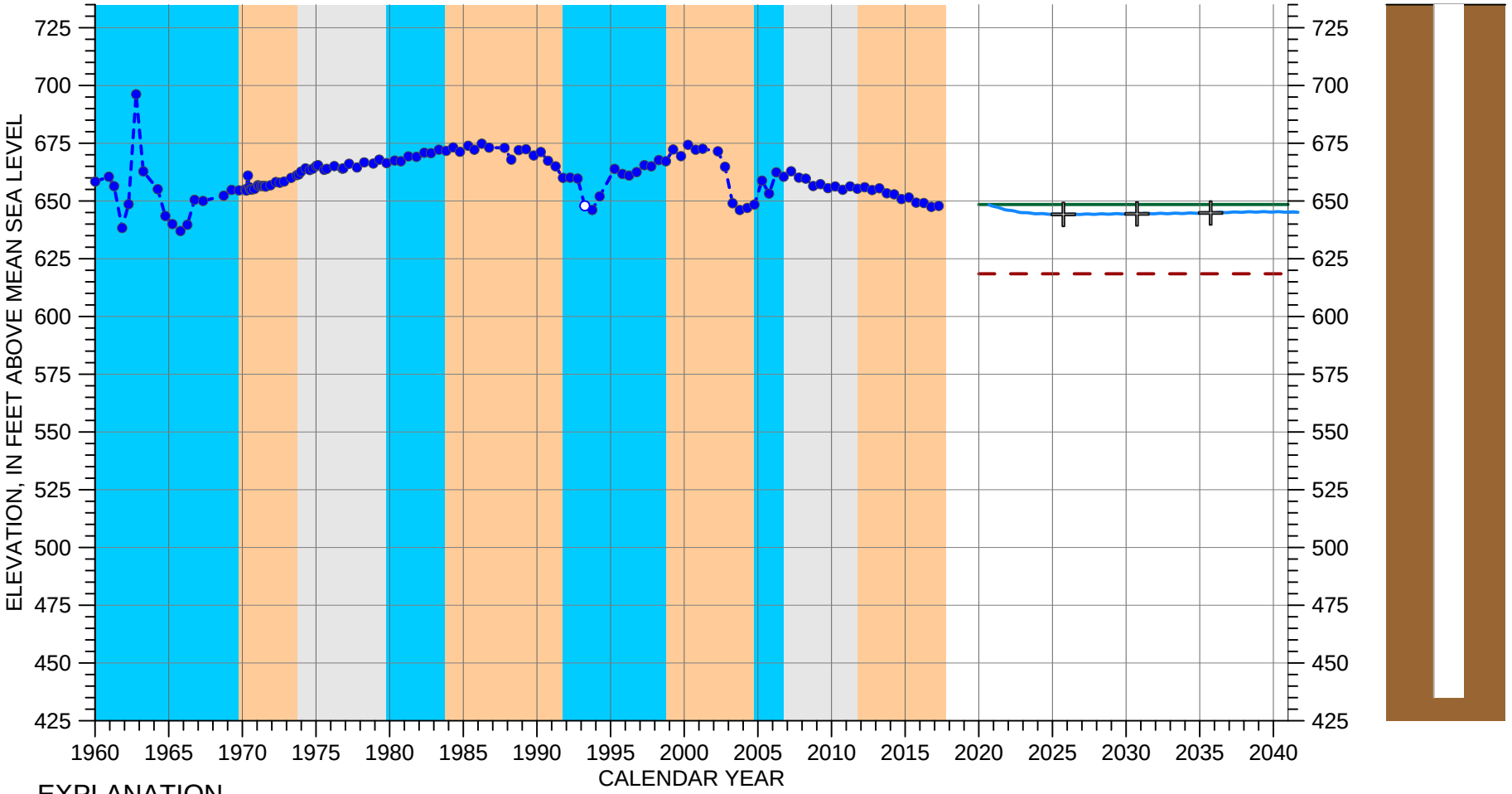
Information regarding the Salinas Dam expansion was obtained from SLOCFCWCD.

REFERENCES

SLOCFCWCD 2008. Paso Robles Groundwater Subbasin Water Banking Feasibility Study. Final Report. San Luis Obispo County Flood Control and Water Conservation District. April 2008.

Appendix K

Model Results that Demonstrate Sustainability

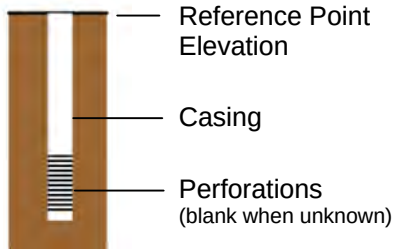


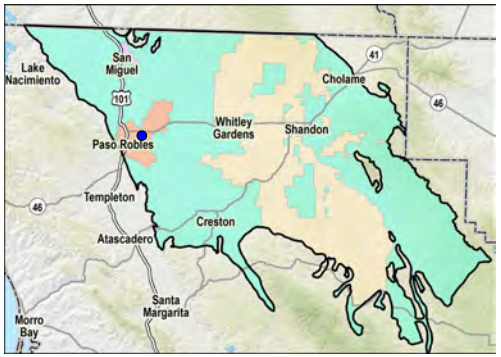
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



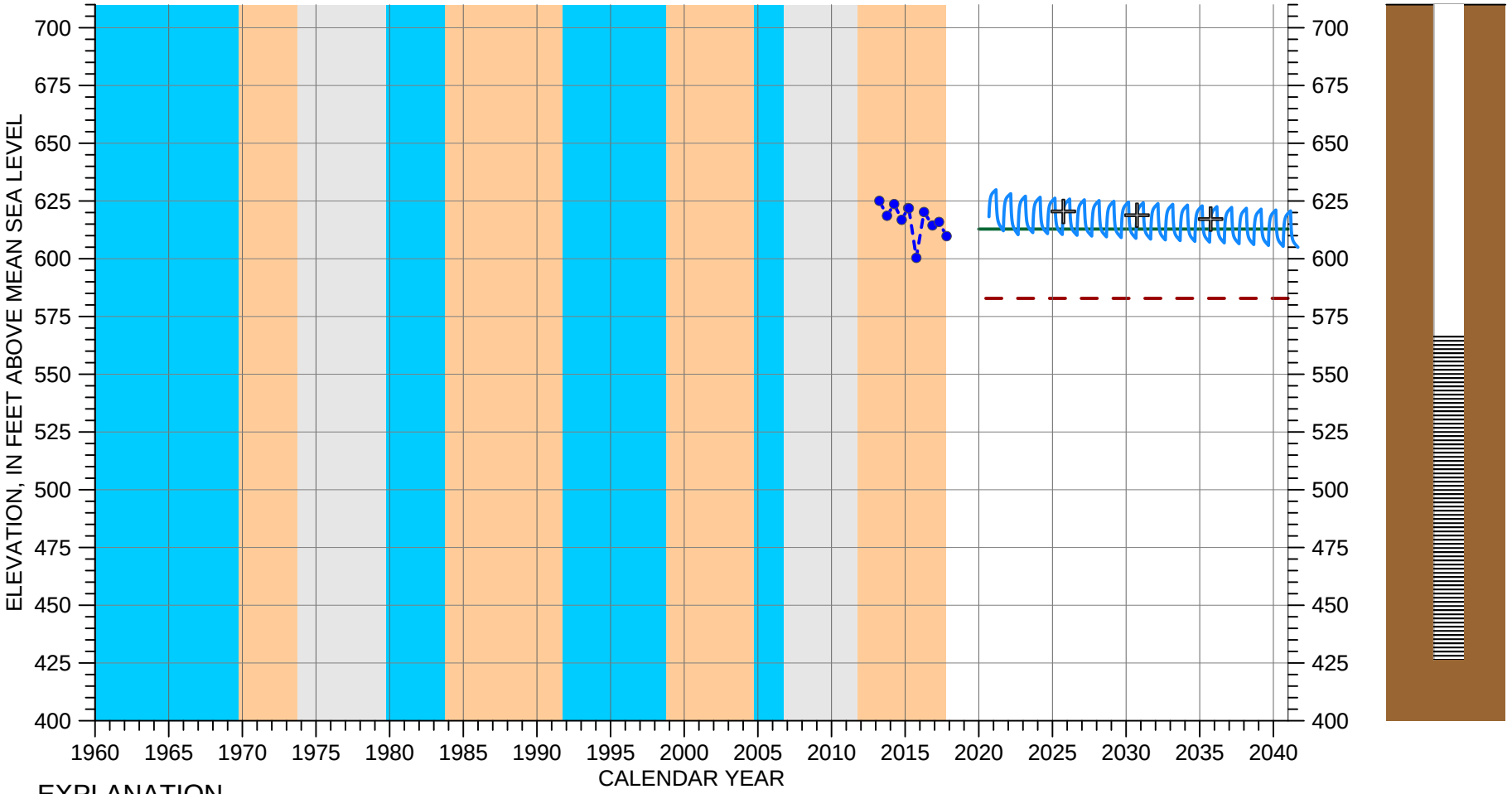


Well Depth: 400 feet
Screened Interval: unknown
Reference Point Elevation: 835 feet above mean sea level

* Measurement reported as not static

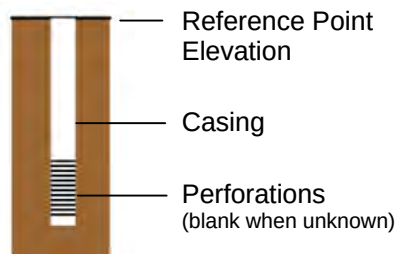
MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/12E-26E07

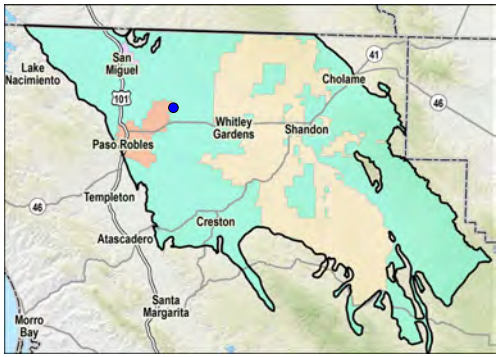
S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig04_26S_12E-26E07.grf



EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE





CLIMATE PERIOD CLASSIFICATION

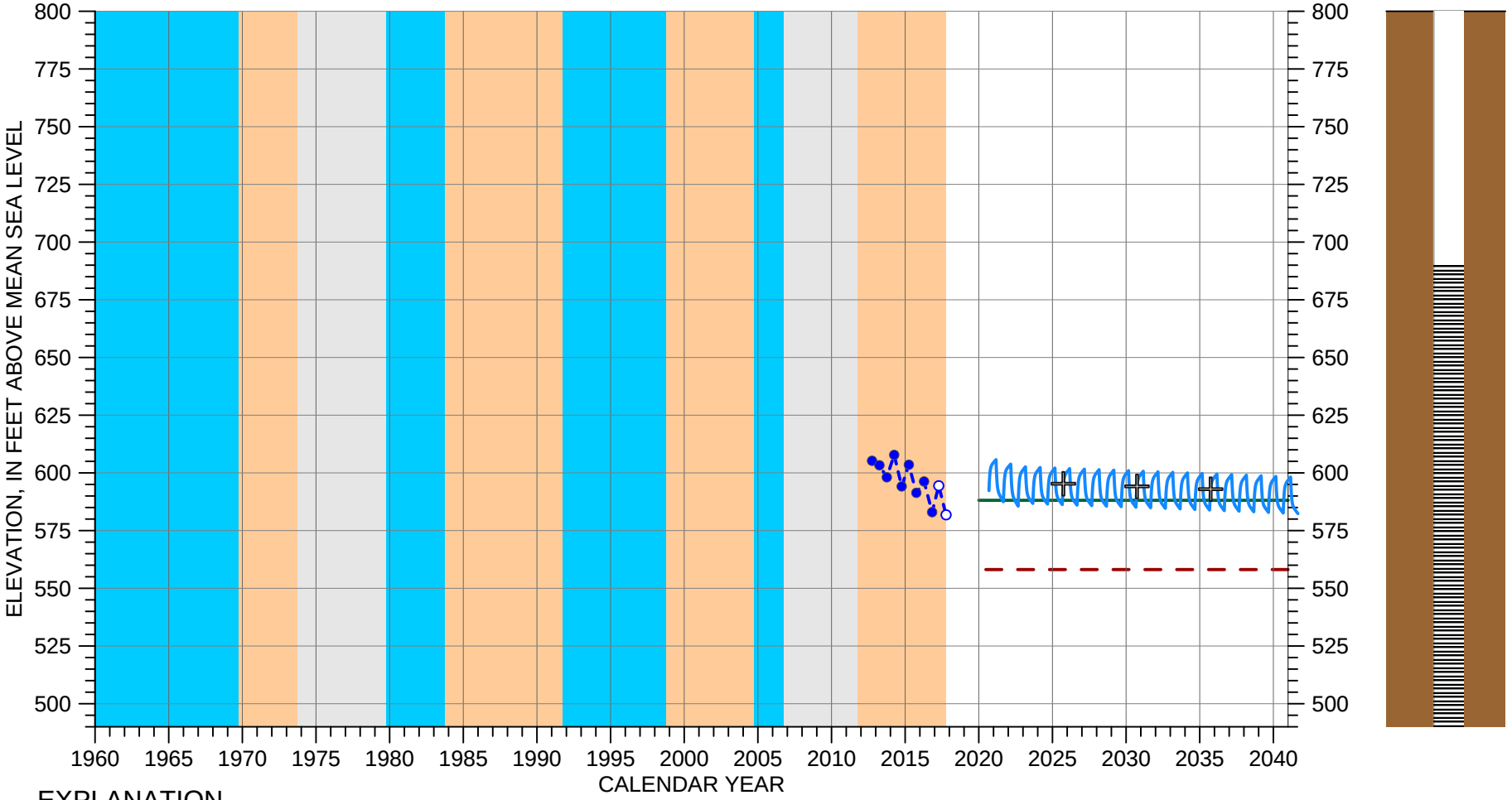
DRY | AVERAGE/ALTERNATING | WET

Well Depth: 400 feet
Screened Interval: 260-400 feet below ground surface
Reference Point Elevation: 827.9 feet above mean sea level

* Measurement reported as not static

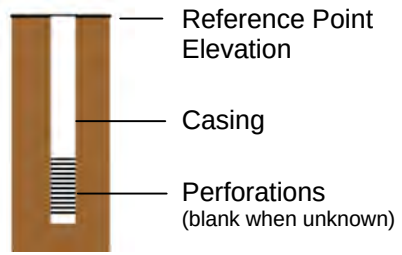
MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/13E-08M01

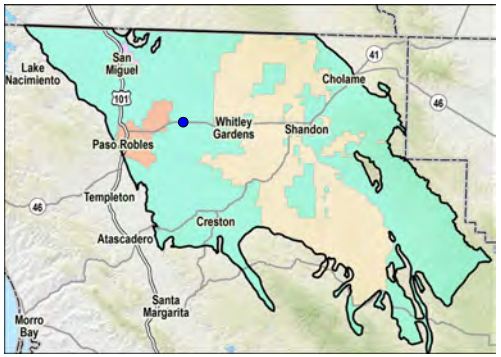
S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig05_26S_13E-08M01.grf



EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE





CLIMATE PERIOD CLASSIFICATION

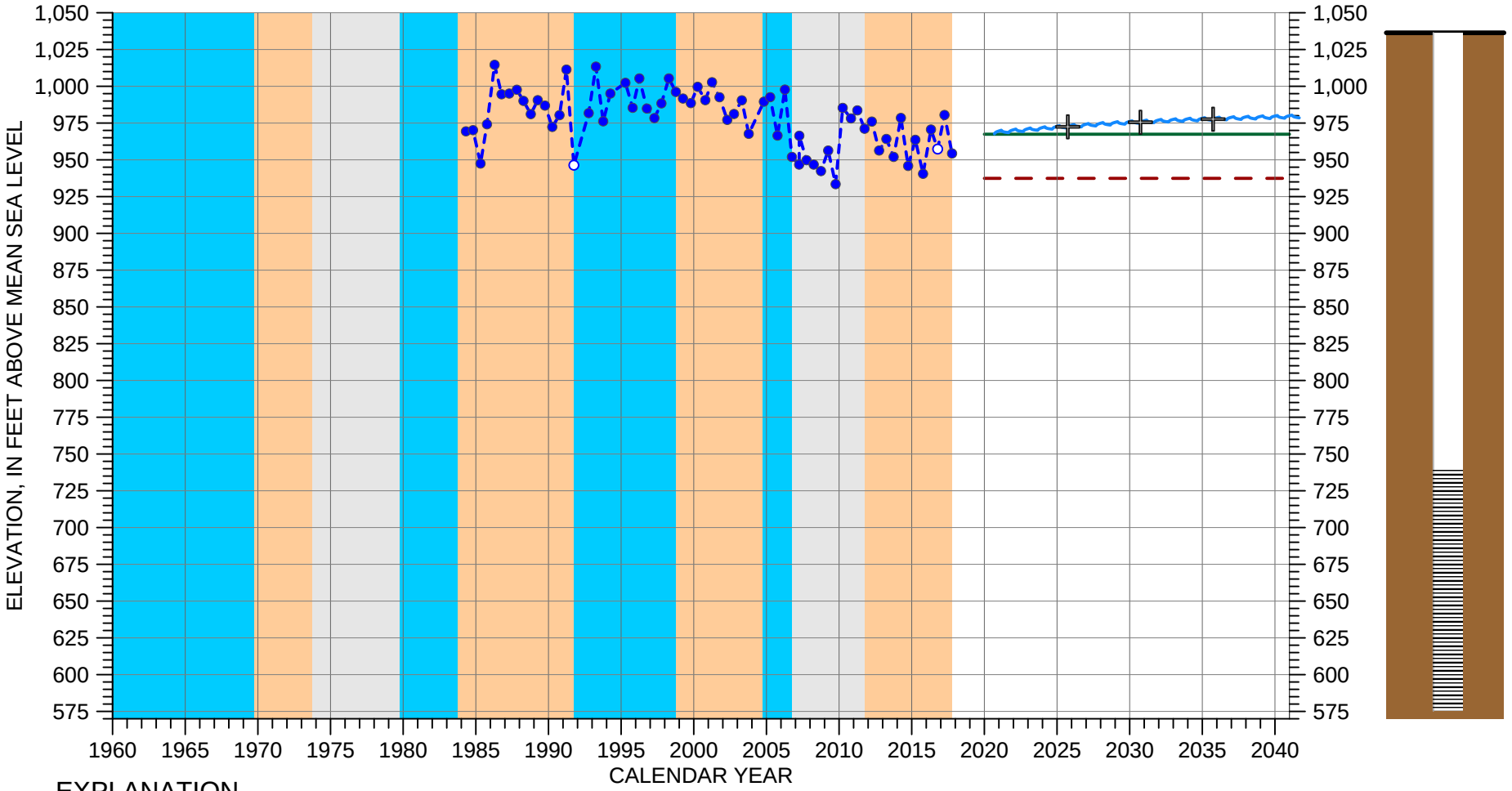
DRY | AVERAGE/ALTERNATING | WET

Well Depth: 400 feet
Screened Interval: 200-400 feet below ground surface
Reference Point Elevation: 890.2 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/13E-16N01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig06_26S_13E-16N01.grf

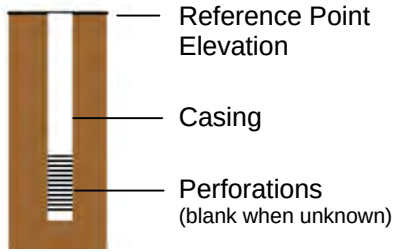


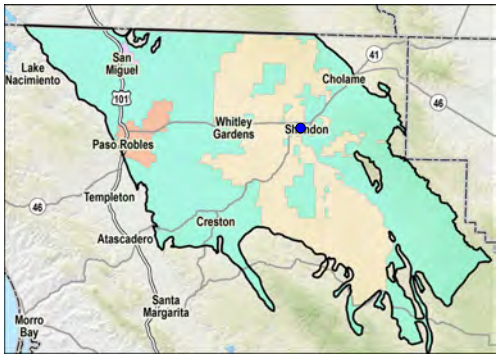
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



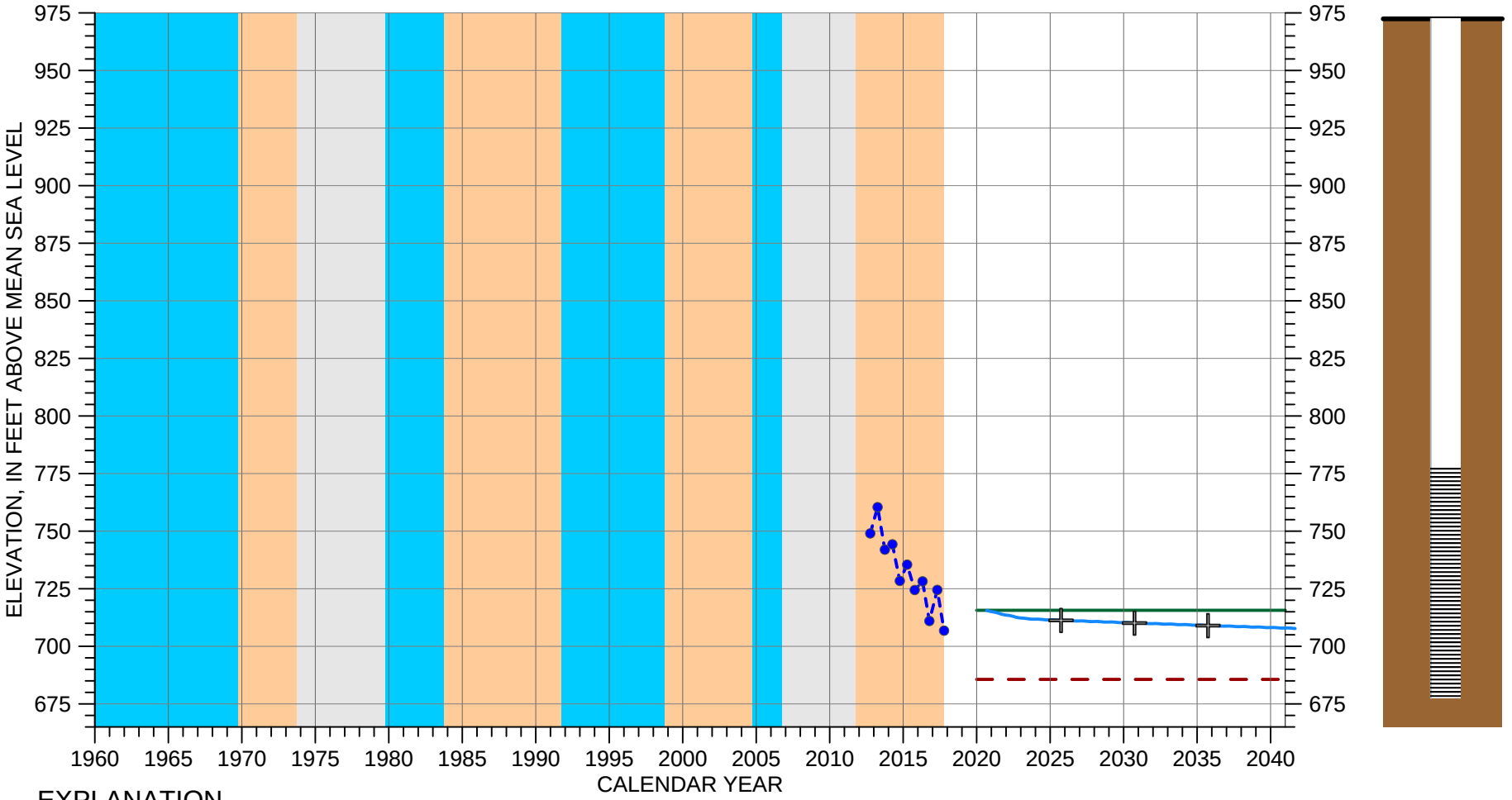


Well Depth: 461 feet
Screened Interval: 297-461 feet below ground surface
Reference Point Elevation: 1036.36 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/15E-20B04

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig07_26S_15E-20B04.grf

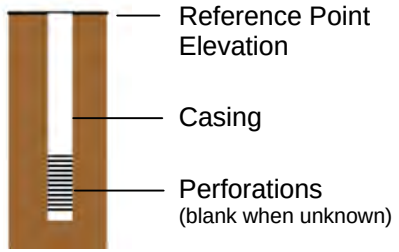


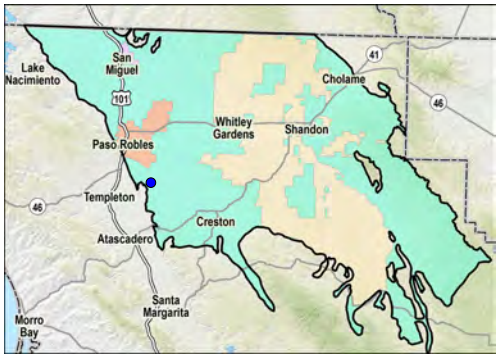
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



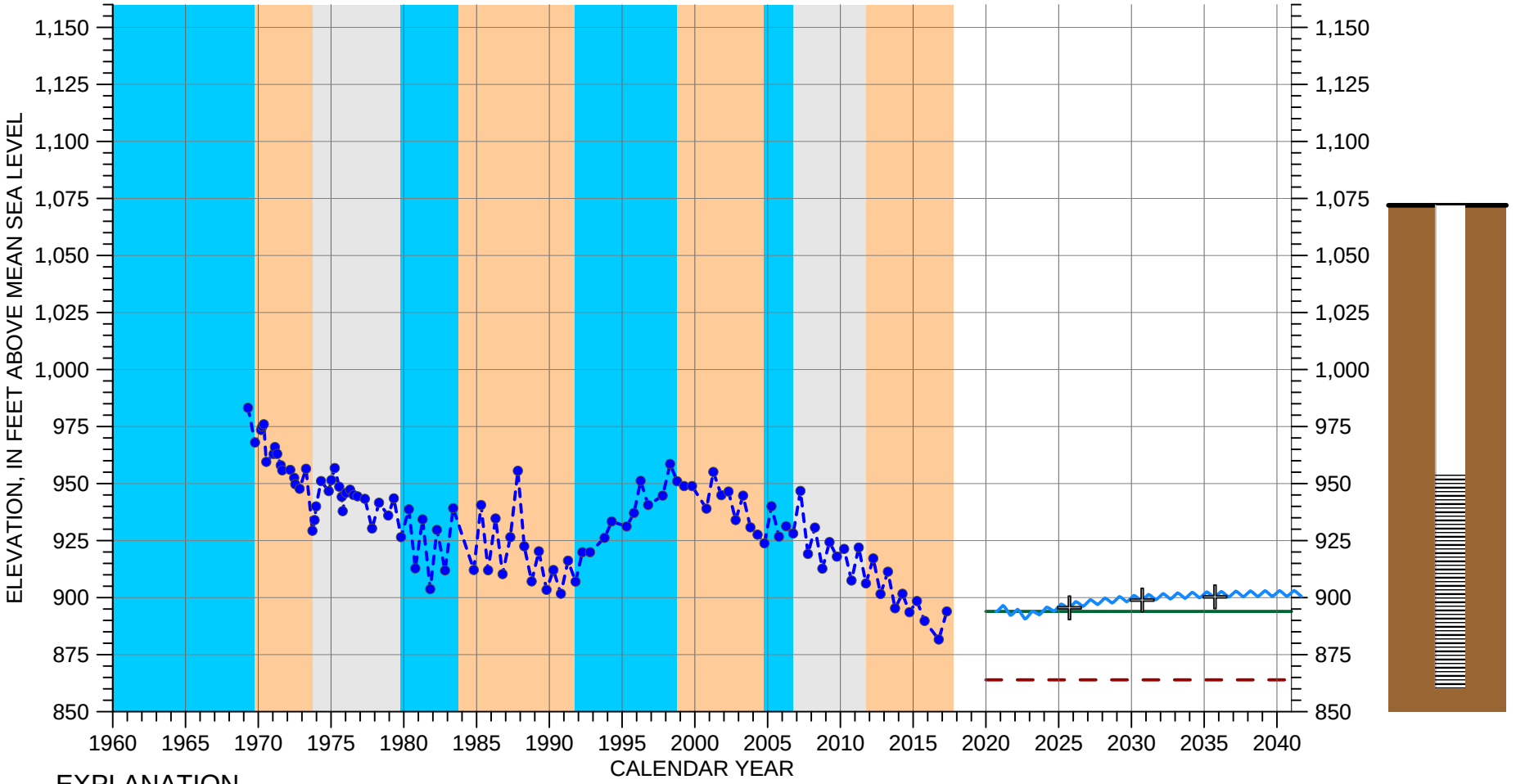


Well Depth: 295 feet
Screened Interval: 195-295 feet below ground surface
Reference Point Elevation: 972.4 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 27S/12E-13N01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig08_27S_12E-13N01.grf

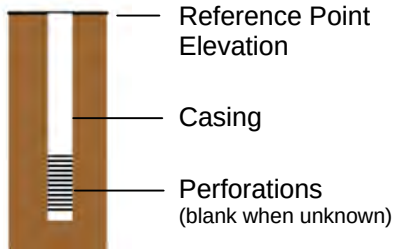


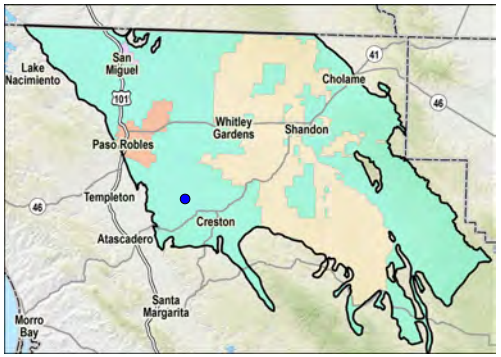
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



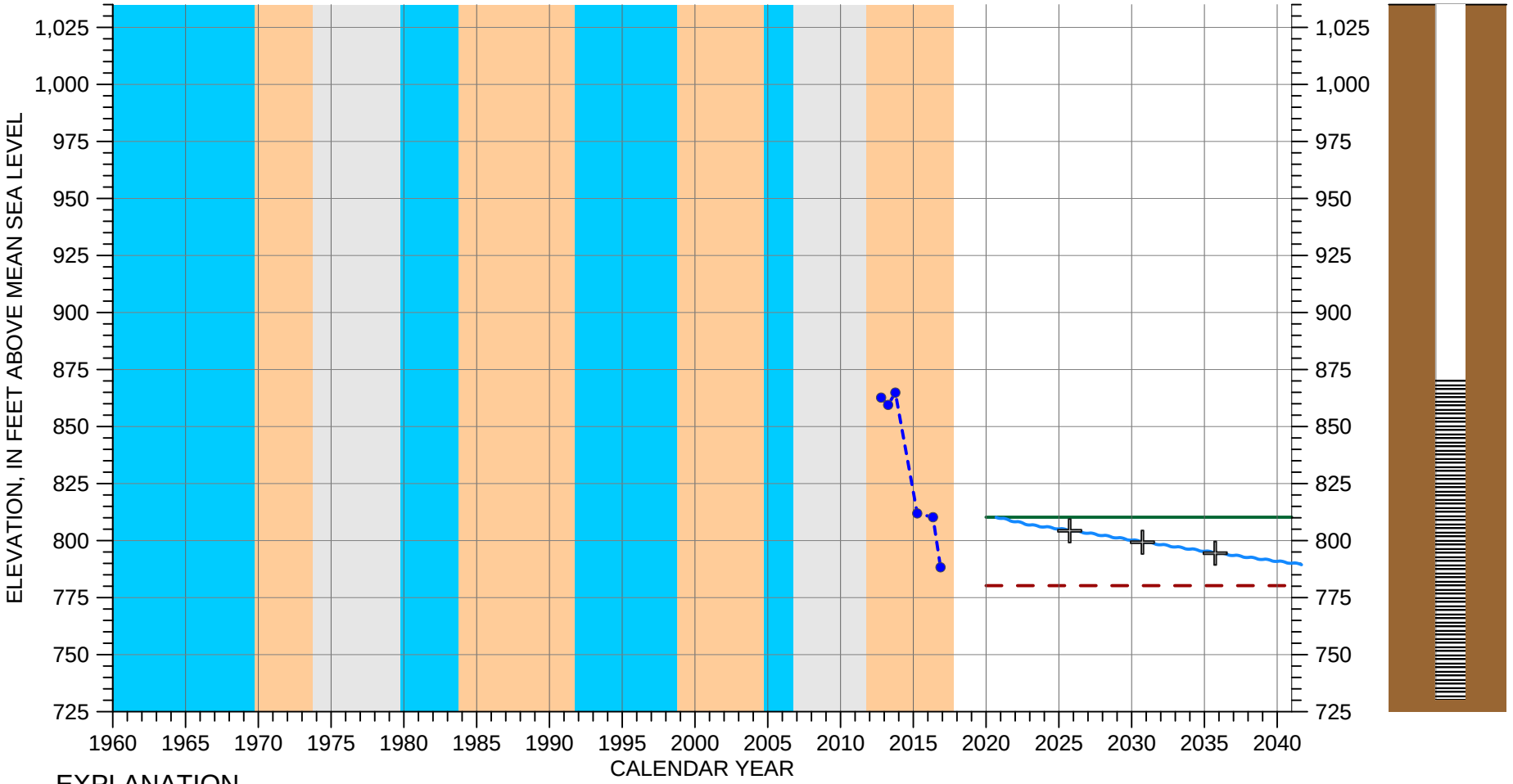


Well Depth: 212 feet
Screened Interval: 118-212 feet below ground surface
Reference Point Elevation: 1072 feet above mean sea level

* Measurement reported as not static

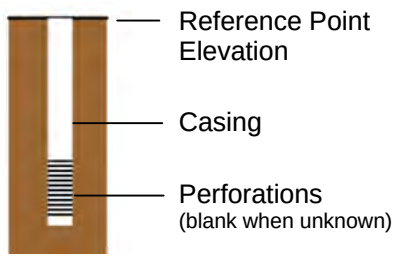
MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 27S/13E-28F01

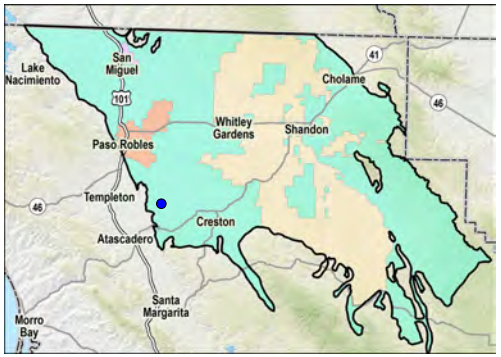
S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig09_27S_13E-28F01.grf



EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE





CLIMATE PERIOD CLASSIFICATION

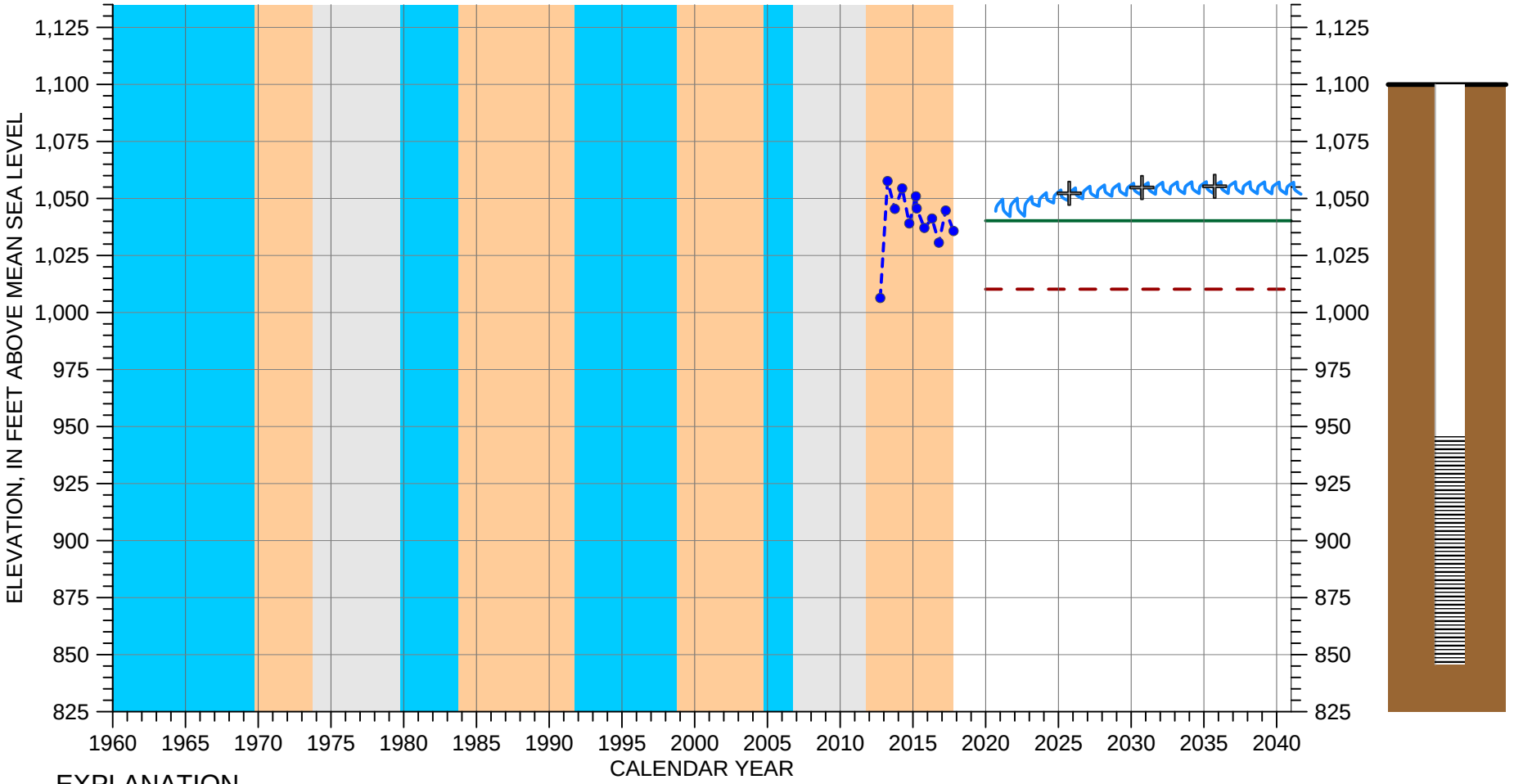
DRY | AVERAGE/ALTERNATING | WET

Well Depth: 355 feet
Screened Interval: 215-235, 275-355 feet below ground surface
Reference Point Elevation: 1086.7 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 27S/13E-30N01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig10_27S_13E-30N01.grf

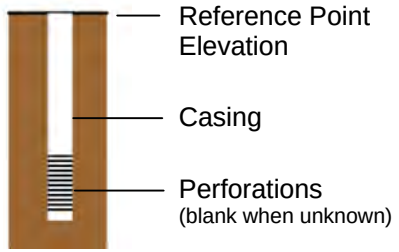


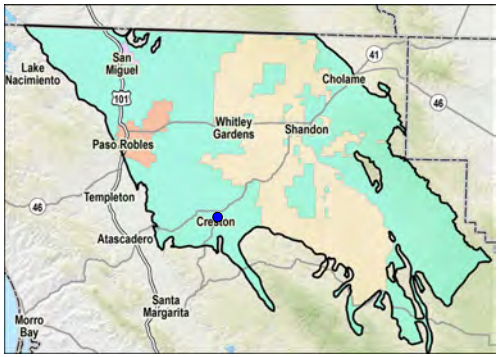
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



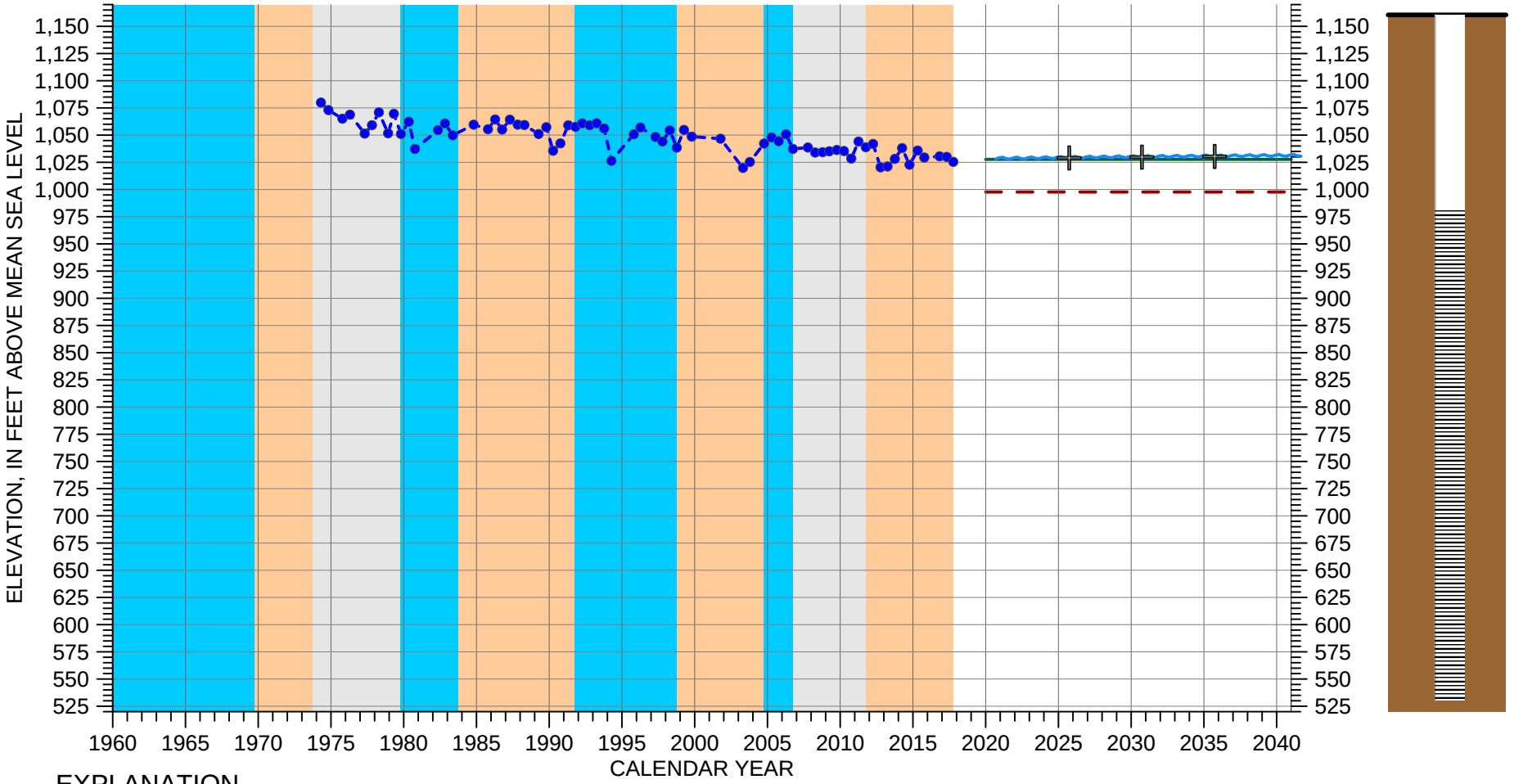


Well Depth: 254 feet
Screened Interval: 154-254 feet below ground surface
Reference Point Elevation: 1099.9 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 28S/13E-01B01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig11_28S_13E-01B01.grf

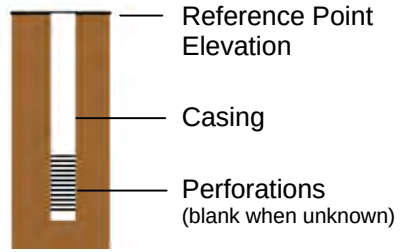


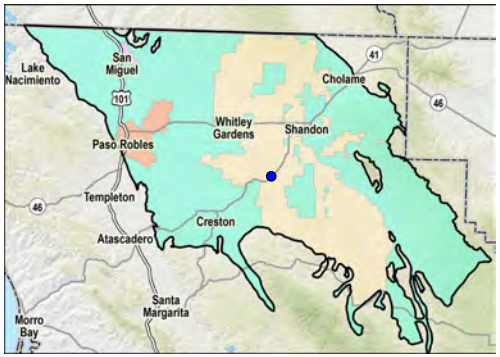
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



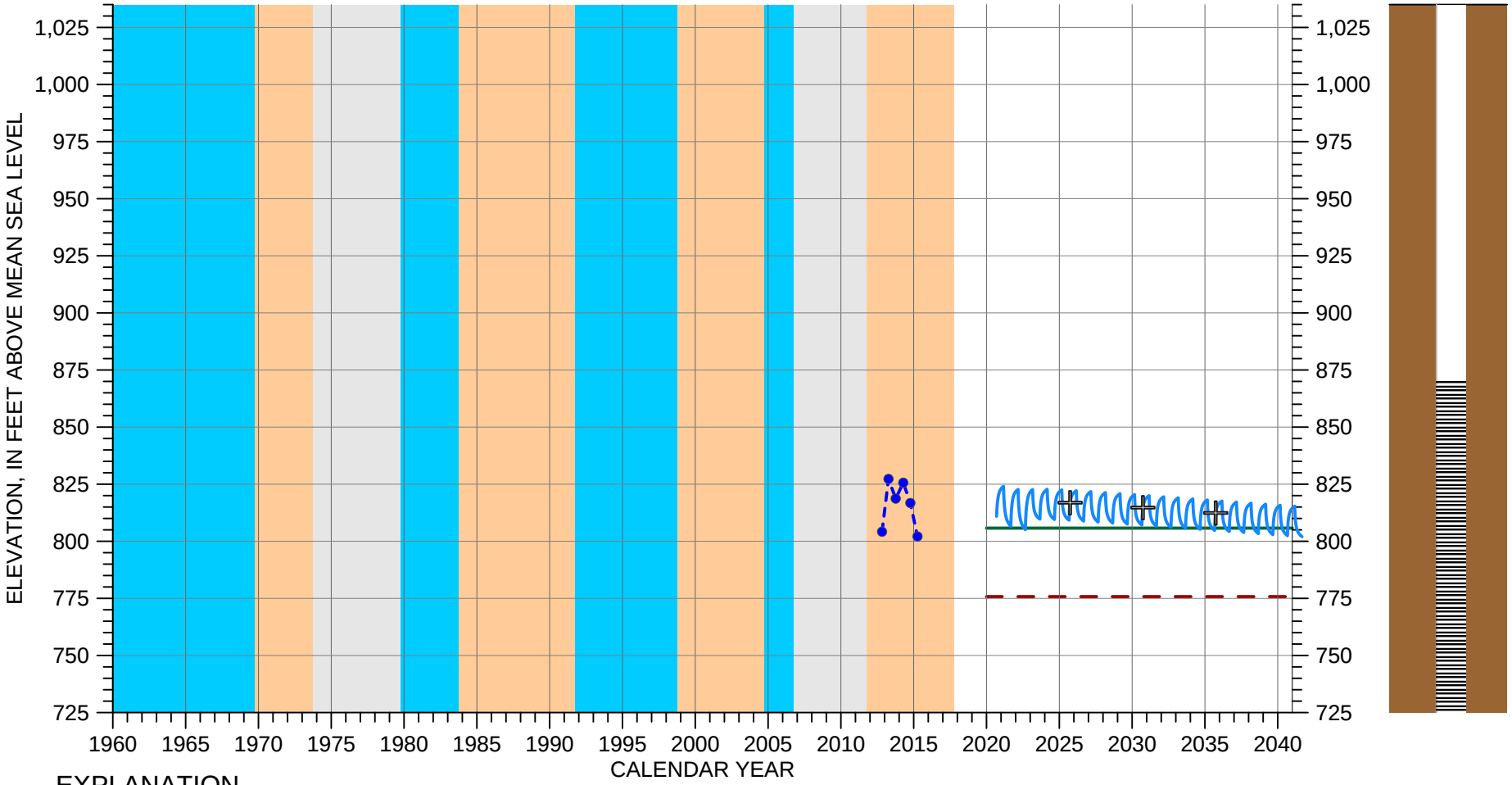


Well Depth: 630
Screened Interval: 180-630 feet below ground surface
Reference Point Elevation: 1160.5 feet above mean sea level

* Measurement reported as not static

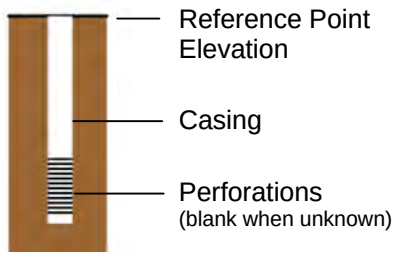
MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 27S/14E-11R01

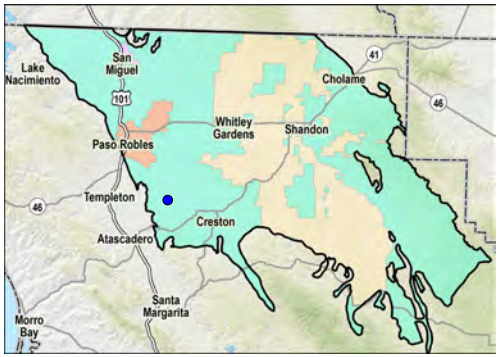
S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig12_27S_14E-11R01.grf



EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE





CLIMATE PERIOD CLASSIFICATION

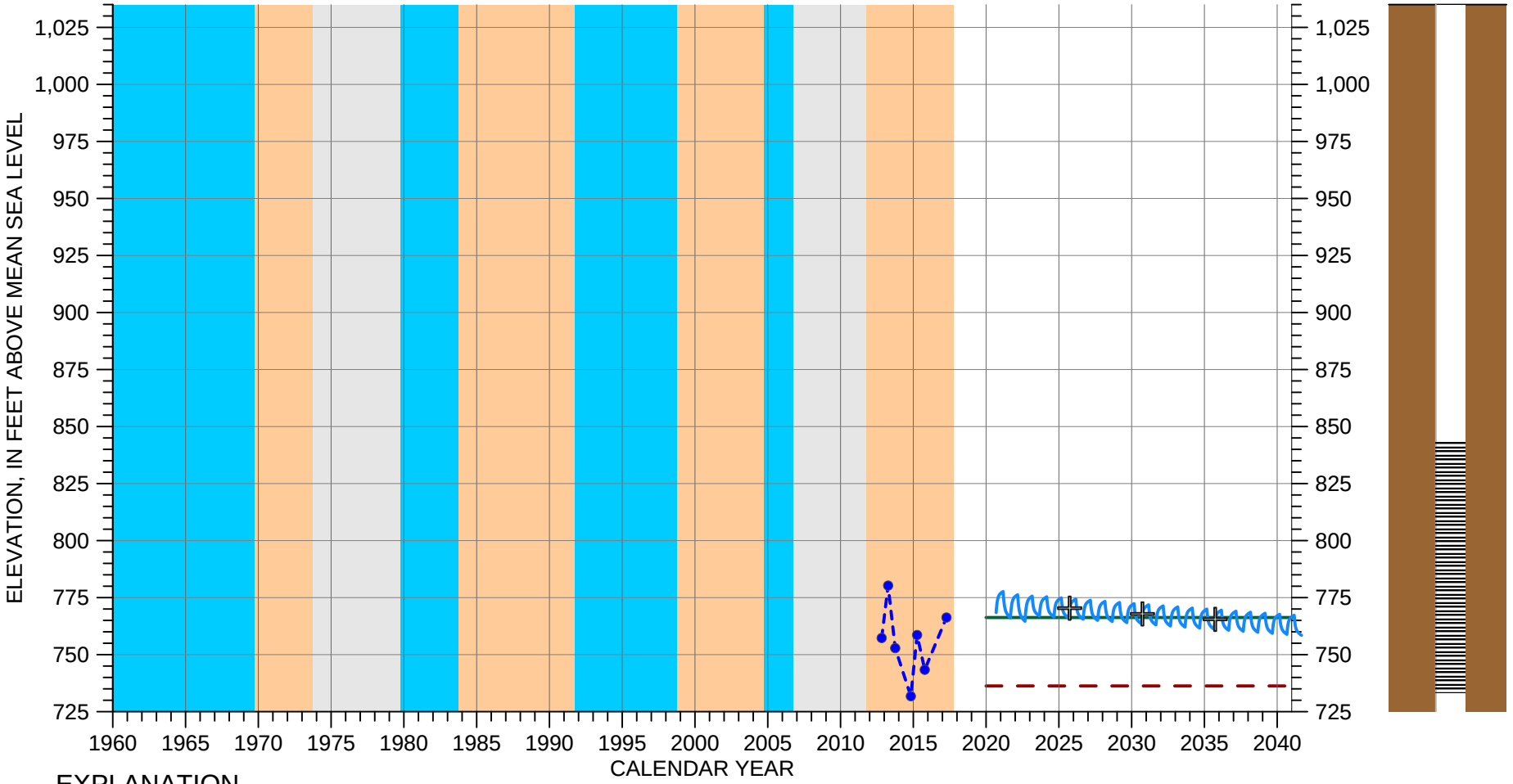
DRY | AVERAGE/ALTERNATING | WET

Well Depth: 685
Screened Interval: 225-685 feet below ground surface
Reference Point Elevation: 1095 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 27S/13E-30J01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig13_27S_13E-30J01.grf

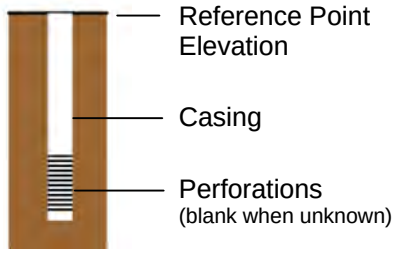


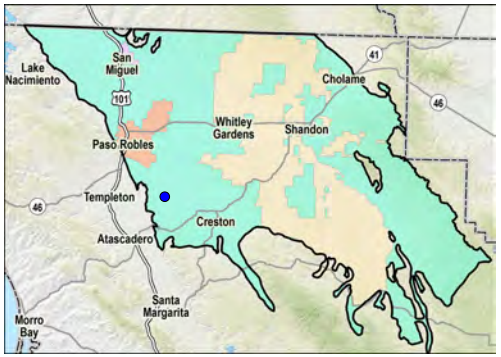
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



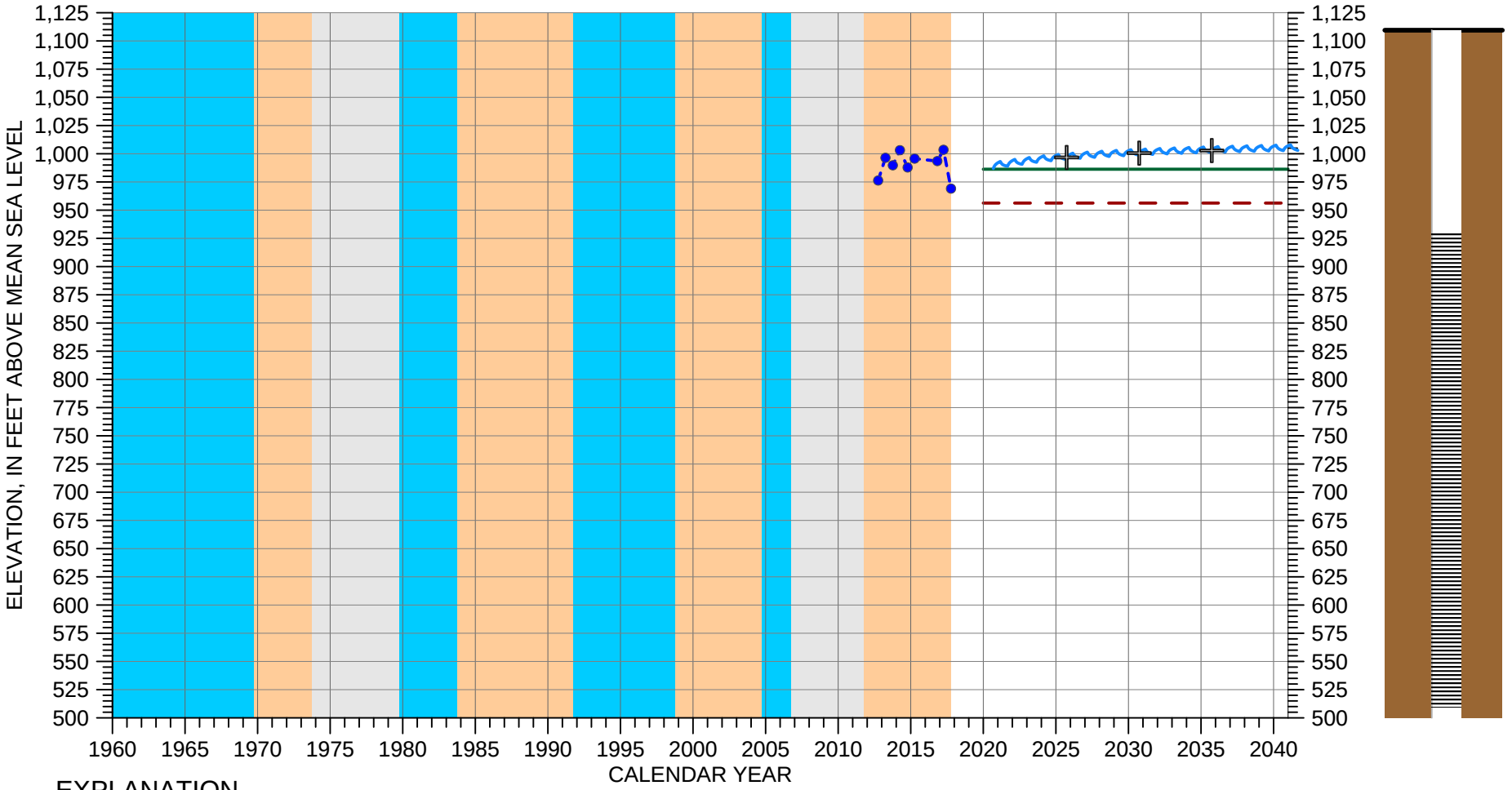


Well Depth: 310
Screened Interval: 200-310 feet below ground surface
Reference Point Elevation: 1043.2 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 27S/13E-30F01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig14_27S_13E-30F01.grf



EXPLANATION

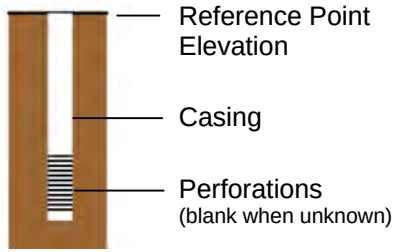
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

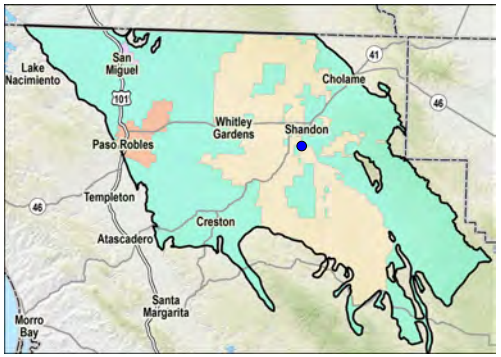
CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET

Well Depth: 600
Screened Interval: 180-600 feet below ground surface
Reference Point Elevation: 1109.5 feet above mean sea level

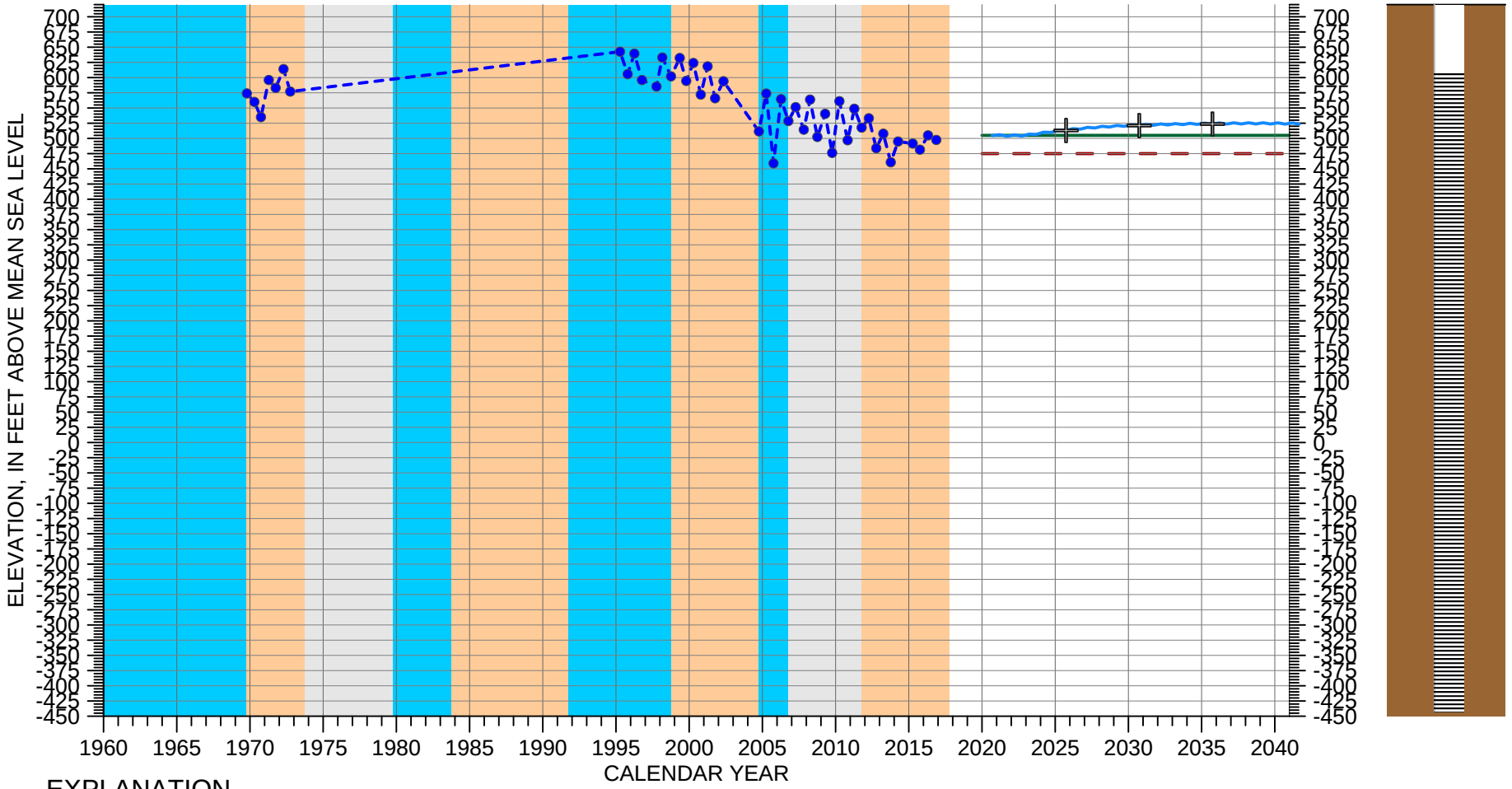
* Measurement reported as not static





MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/15E-29R01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig15_26S_15E-29R01.grf

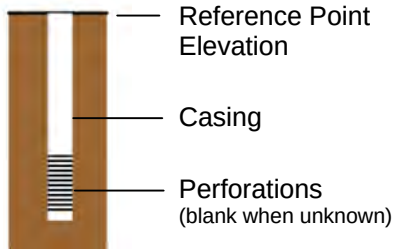


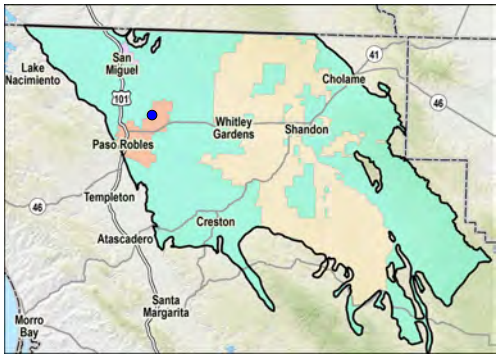
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



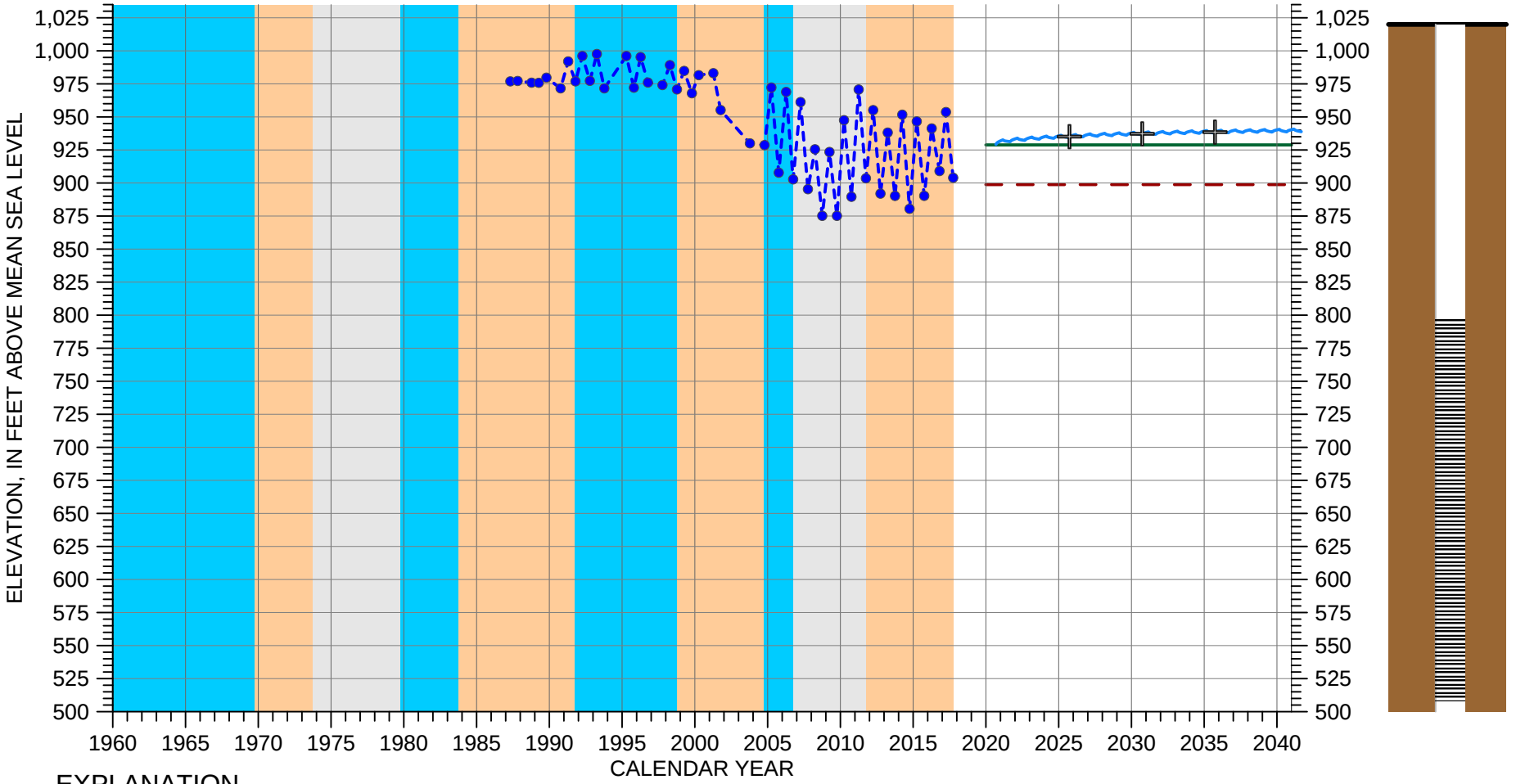


Well Depth: 1230
Screened Interval: 180-~1230 feet below ground surface
Reference Point Elevation: 790 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/12E-14H01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig16_26S_12E-14H01.grf

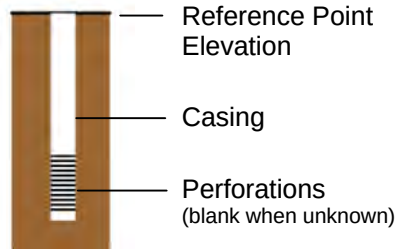


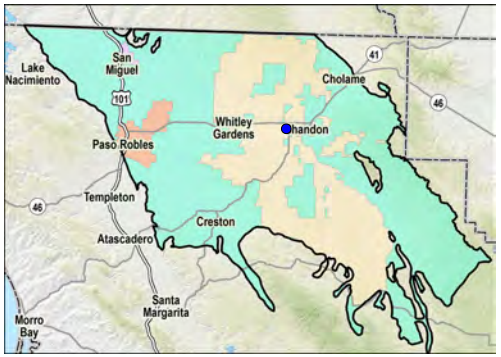
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



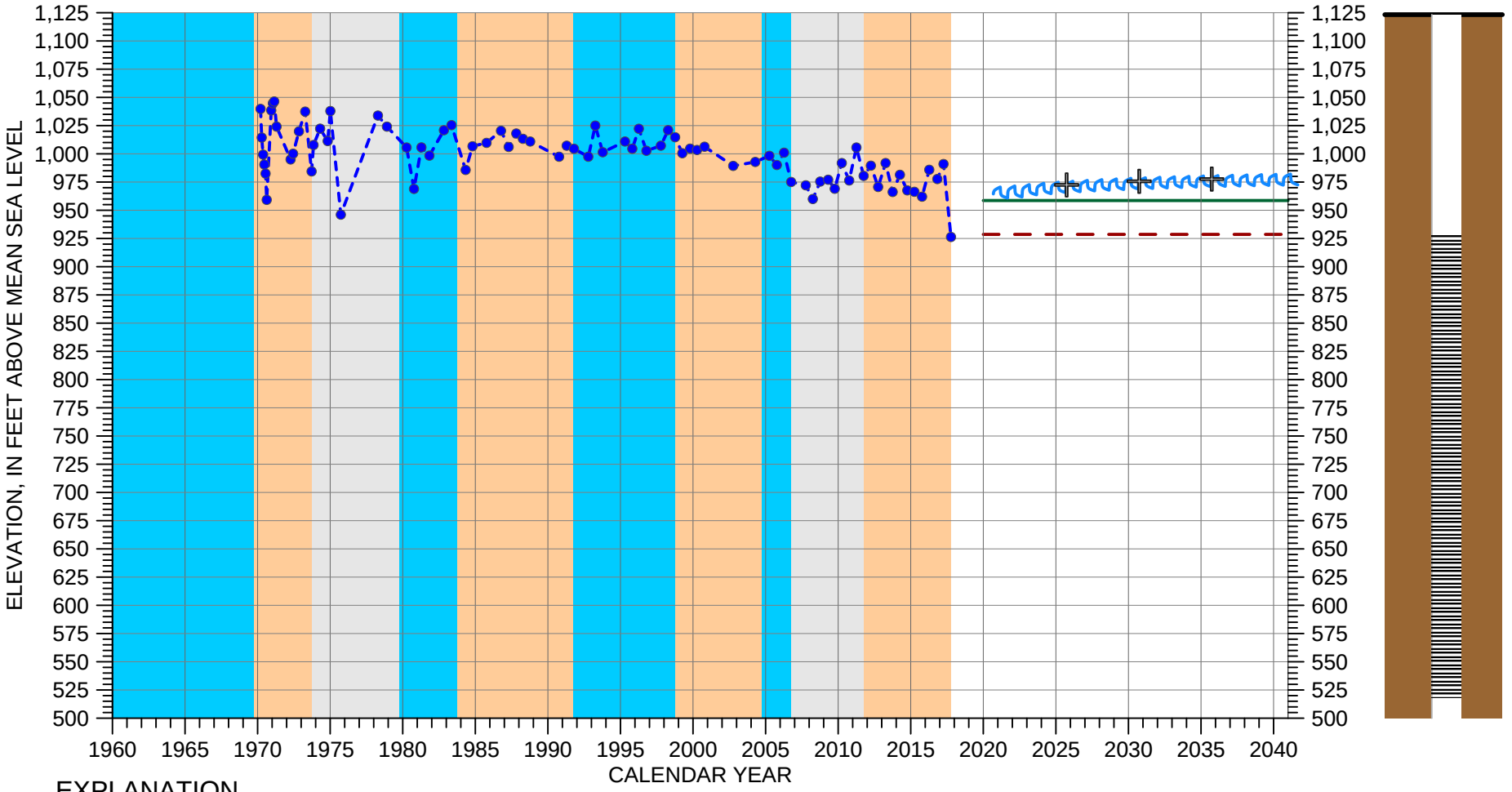


Well Depth: 512
Screened Interval: 223-512 feet below ground surface
Reference Point Elevation: 1020 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/15E-19E01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig17_26S_15E-19E01.grf

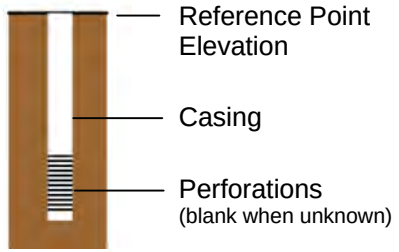


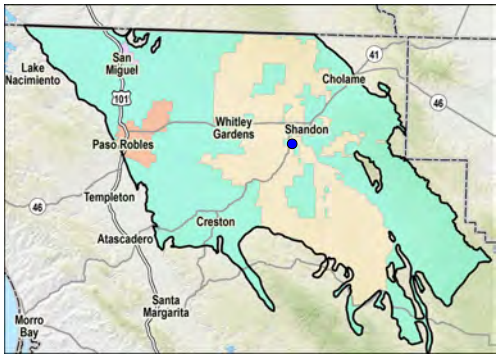
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



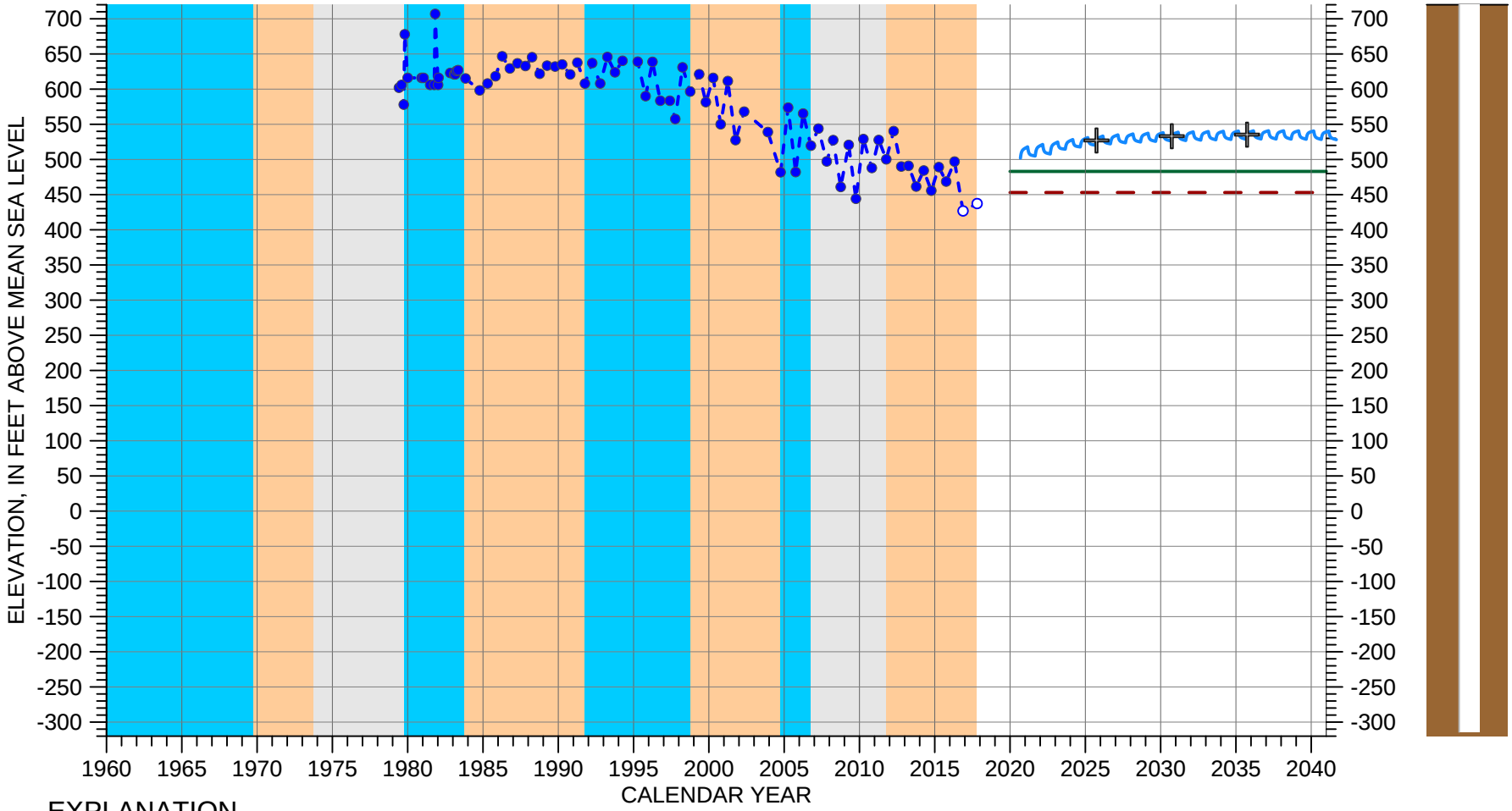


Well Depth: 605
Screened Interval: 195-605 feet below ground surface
Reference Point Elevation: 1123.3 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/15E-30J01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig18_26S_15E-30J01.grf

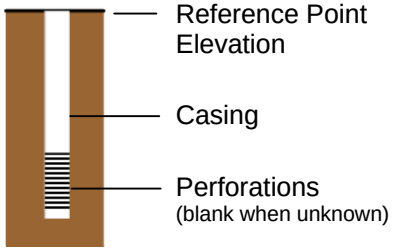


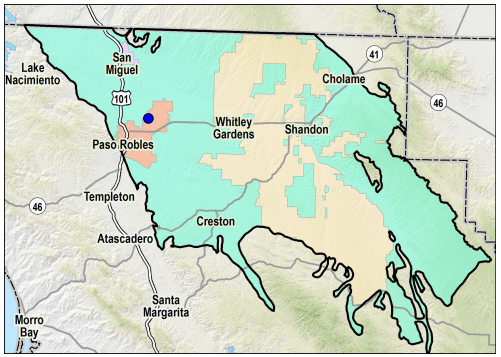
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



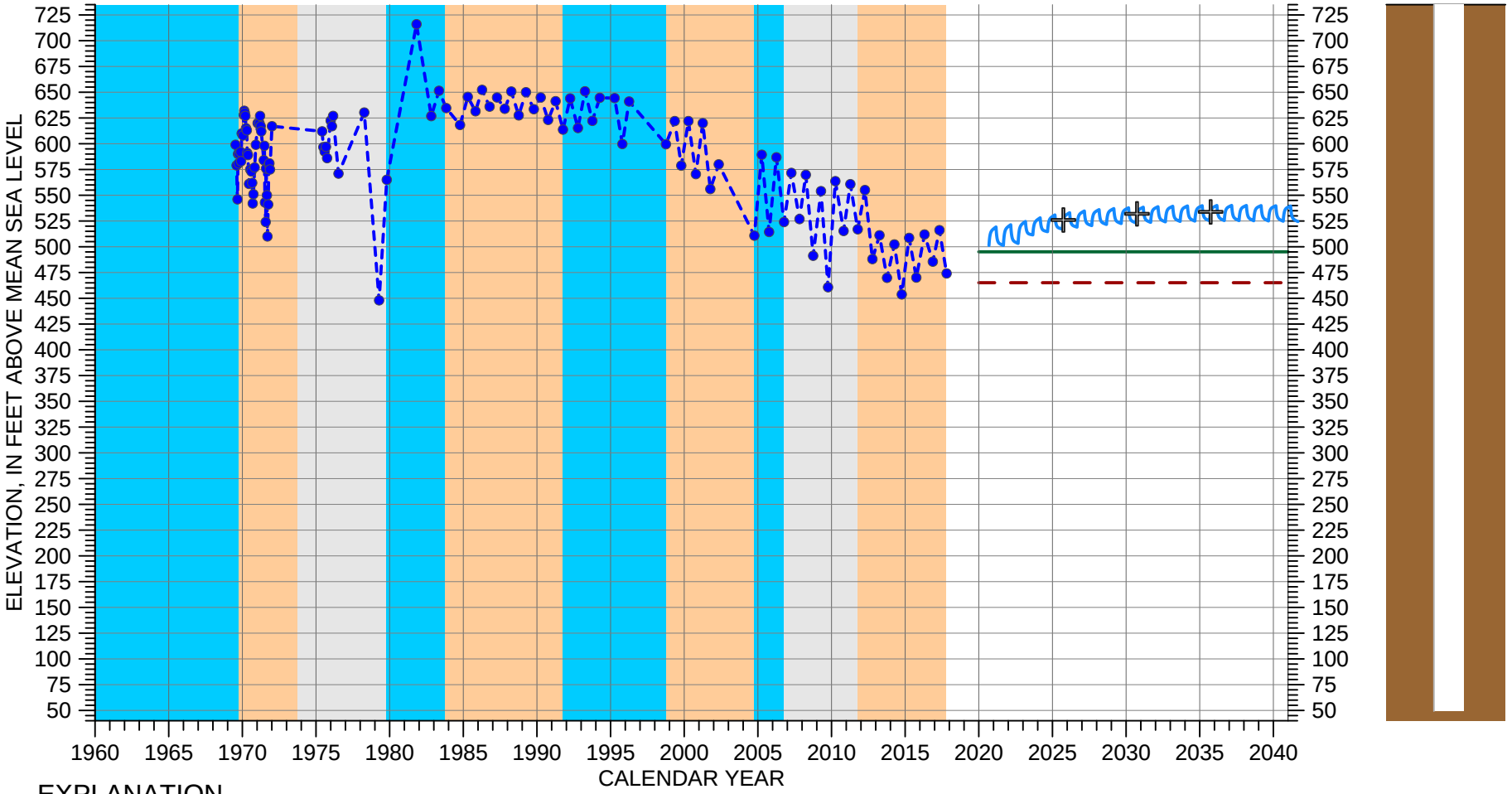


Well Depth: 1100
Screened Interval: unknown
Reference Point Elevation: 786 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/12E-14K01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig19_26S_12E-14K01.grf

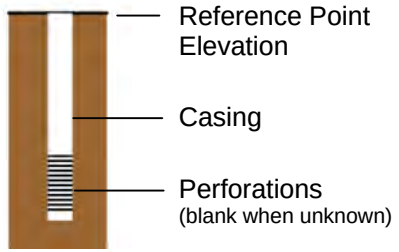


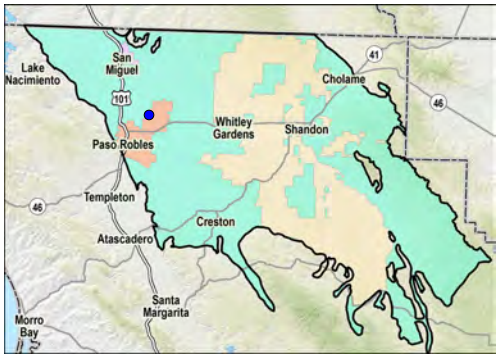
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



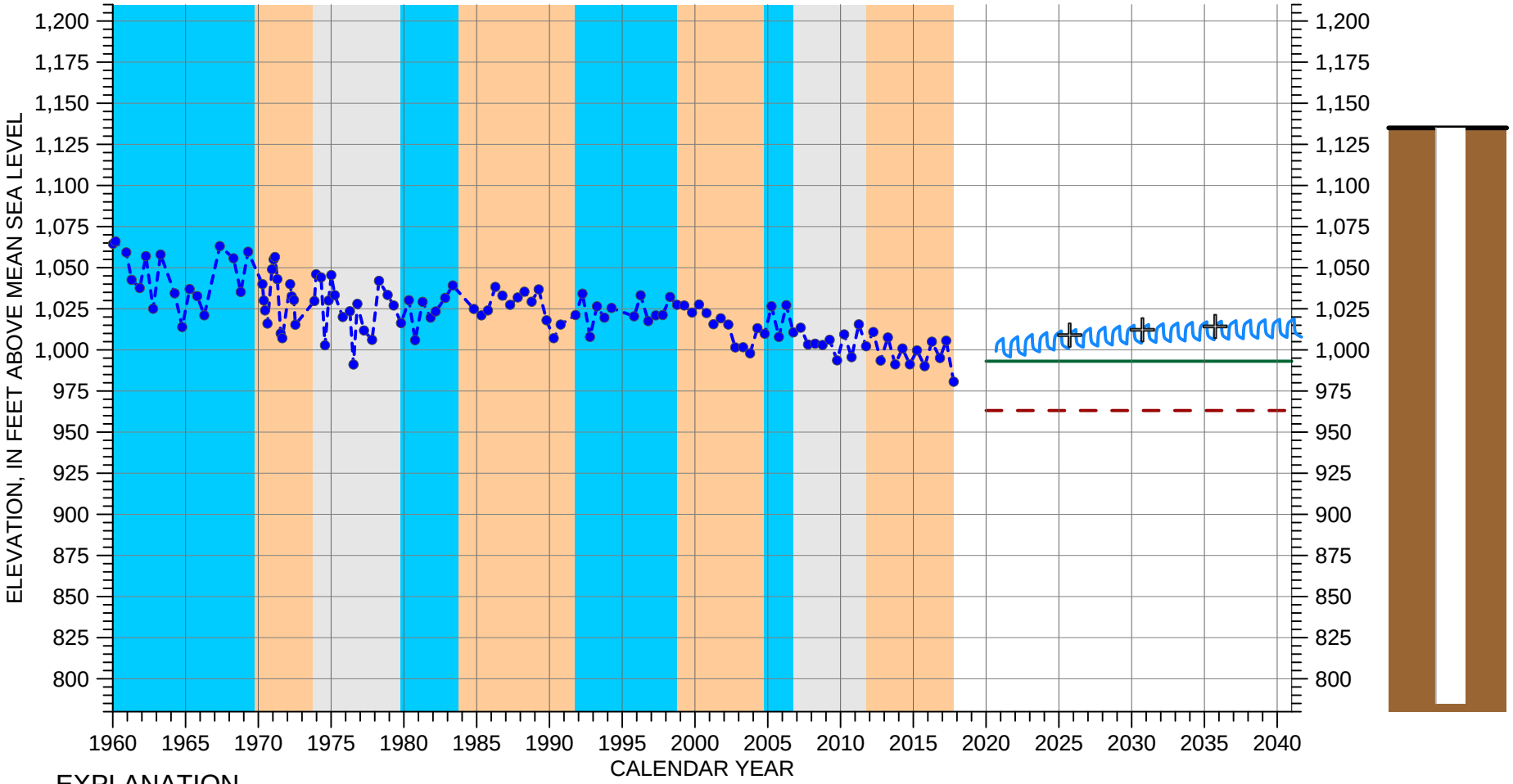


Well Depth: 740
Screened Interval: unknown
Reference Point Elevation: 789.3 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/12E-14G01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig20_26S_12E-14G01.grf

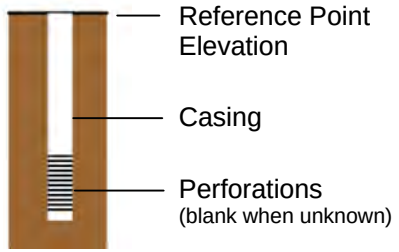


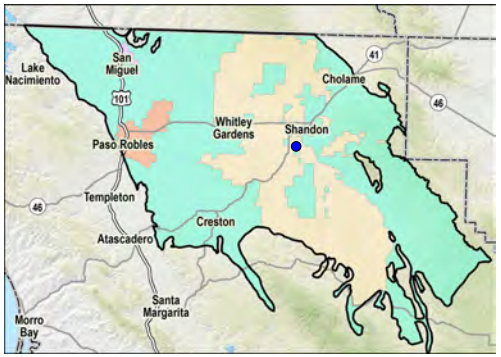
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



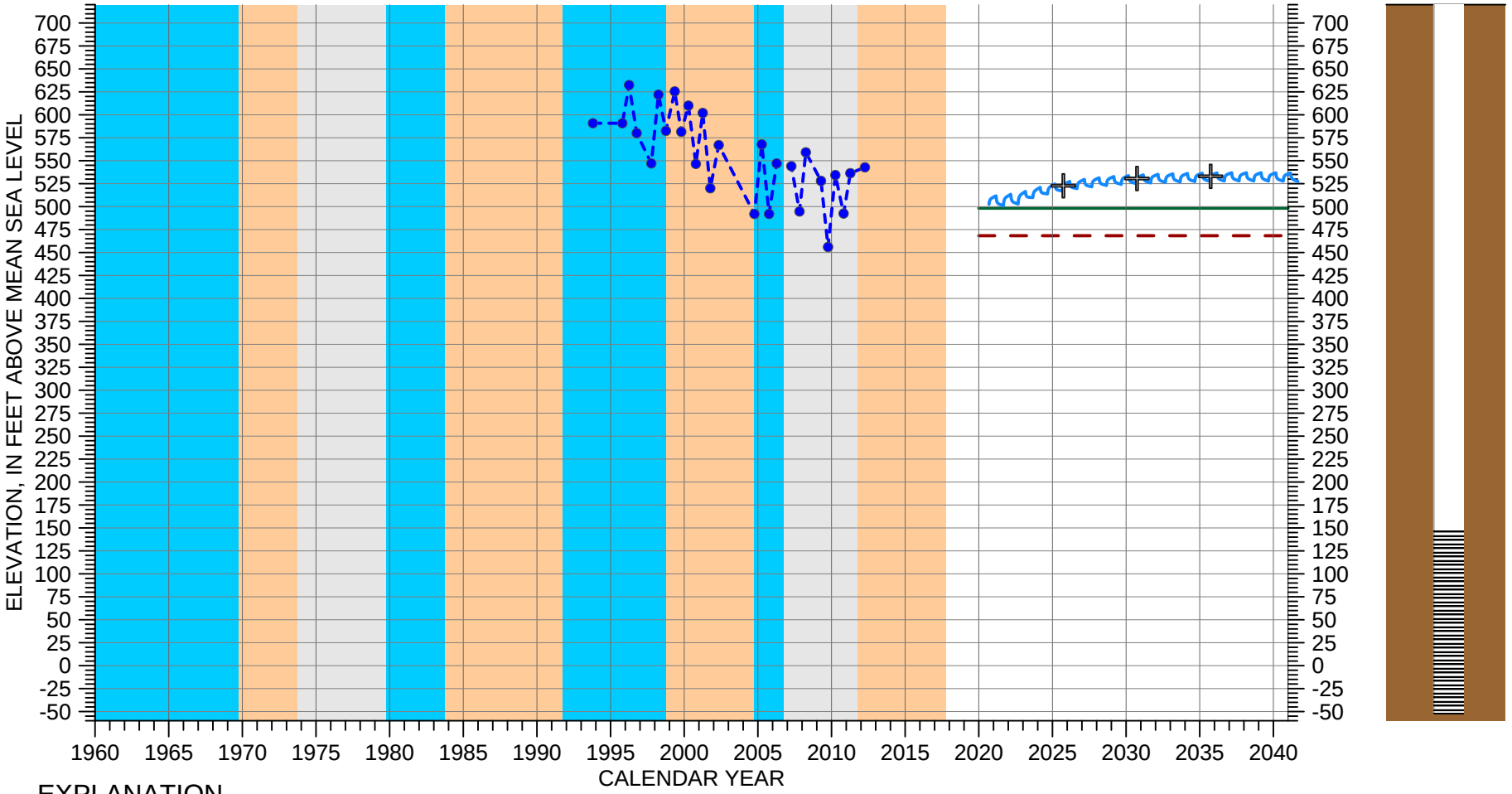


Well Depth: 350
Screened Interval: unknown
Reference Point Elevation: 1135 feet above mean sea level

* Measurement reported as not static

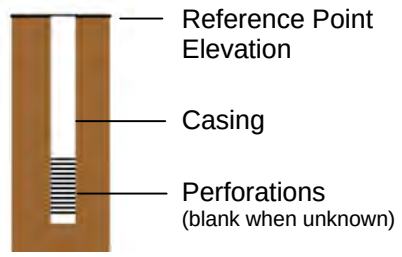
MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/15E-29N01

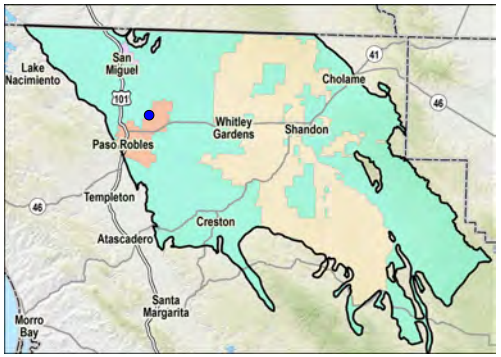
S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig21_26S_15E-29N01.grf



EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE





CLIMATE PERIOD CLASSIFICATION

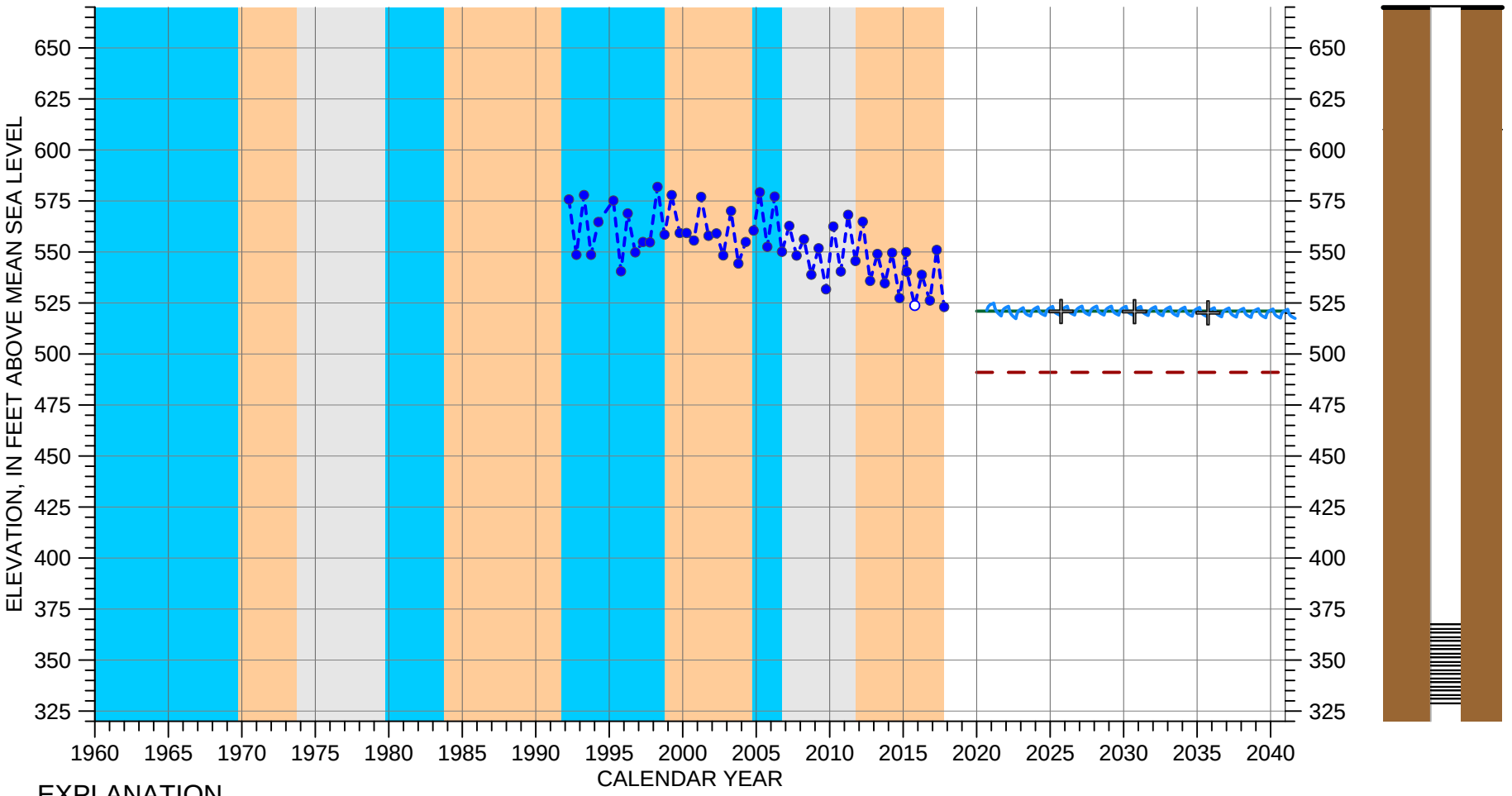
DRY | AVERAGE/ALTERNATING | WET

Well Depth: 840
Screened Interval: 640- ~840 feet below ground surface
Reference Point Elevation: 787 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 26S/12E-14G02

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig22_26S_12E-14G02.grf

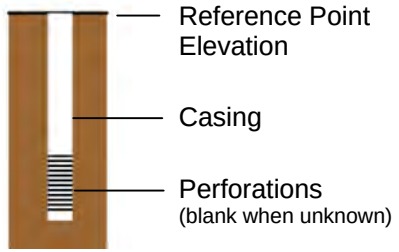


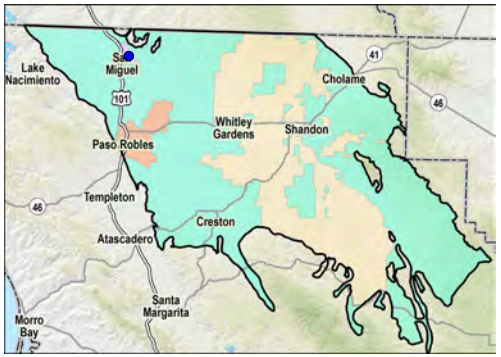
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



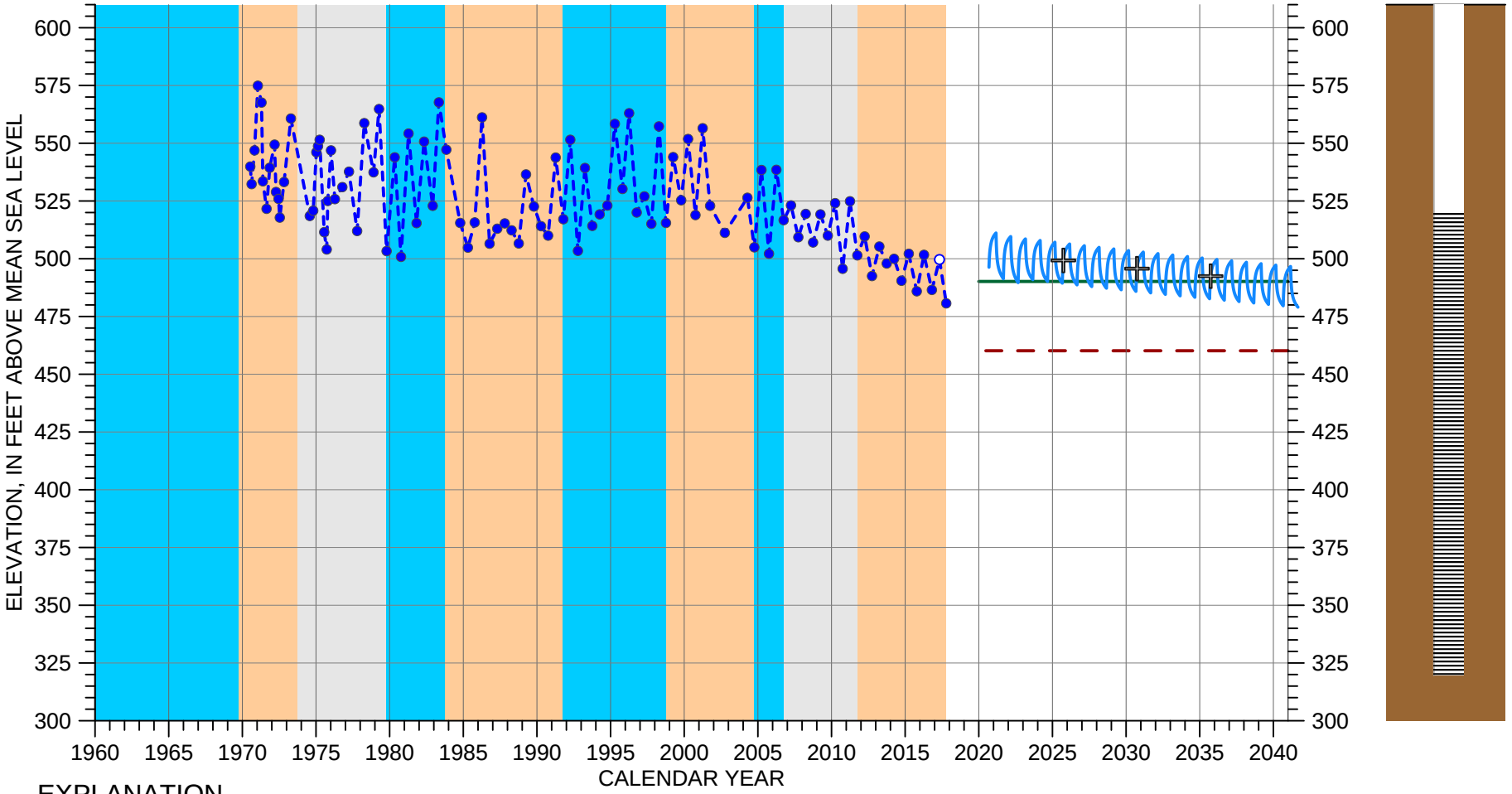


Well Depth: 350 feet
Screened Interval: 300-310, 330-340 feet below ground surface
Reference Point Elevation: 669.8 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 25S/12E-16K05

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig01_25S_12E-16K05.grf

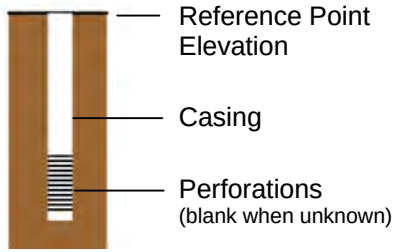


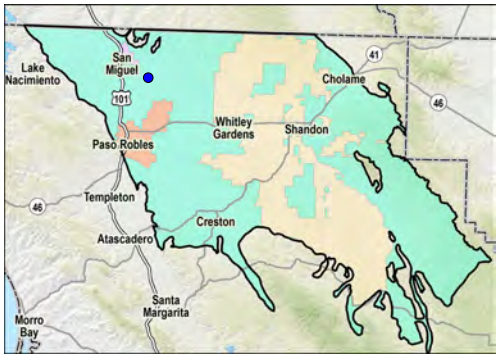
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



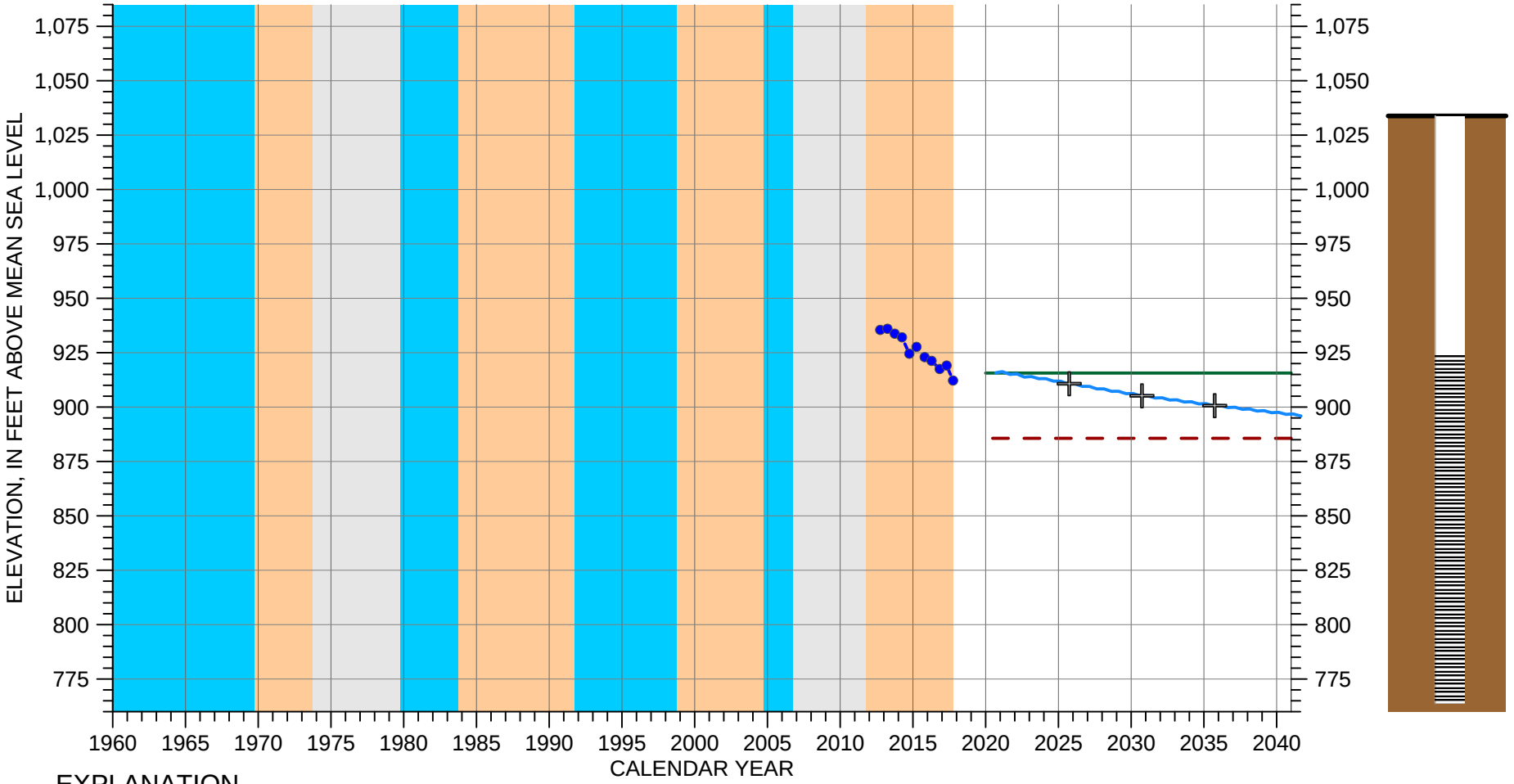


Well Depth: 400 feet
Screened Interval: 200-400 feet below ground surface
Reference Point Elevation: 719.7 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 25S/12E-26L01

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig02_25S_12E-26L01.grf

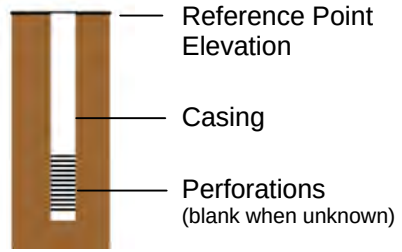


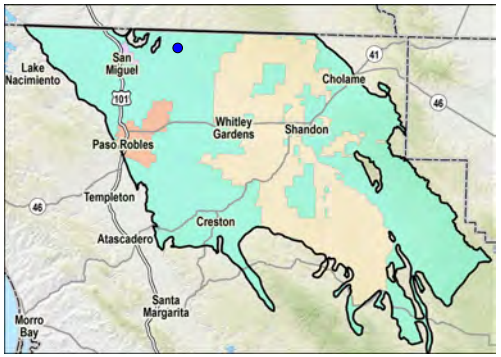
EXPLANATION

- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- PROJECTED WATER LEVEL
- INTERIM MILESTONE

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 270 feet
Screened Interval: 110-270 feet below ground surface
Reference Point Elevation: 1033.8 feet above mean sea level

* Measurement reported as not static

MEASUREABLE OBJECTIVES, MINIMUM THRESHOLDS, AND INTERIM MILESTONES FOR 25S/13E-08L02

S:\projects\9200_Paso Robles GSP\GSP\Ch 9-10 Coordination Effort\Ch 9\Appendices\AppendixJ_SimulatedHydrographs\grf\ProjectedWL_2017MO_withIM\Fig03_25S_13E-08L02.grf

APPENDIX L. OTHER MANAGEMENT ACTION PROGRAM CONCEPTS, DATA GAP PLAN, AND OTHER PROJECT CONCEPTS

Programs that affected pumpers could fund to achieve necessary reductions and/or avoid undesirable results are described below.

L1.1 Well Interference Mitigation Program

GSAs have explicit authority to impose spacing requirements on new groundwater well construction to minimize well interference and impose reasonable operating regulations on existing groundwater wells to minimize well interference, including requiring extractors to operate on a rotation basis (Water Code 10726.4).

The net effect of implementing a program to mitigate well interference could be a reduction in groundwater pumping.

L1.1.1 Relevant Measurable Objectives

An interference mitigation program would benefit the groundwater elevation, groundwater storage, and land subsidence measurable objectives.

L1.1.2 Expected Benefits and Evaluation of Benefits

The primary benefit from the well interference program could be less pumping in the Subbasin. A connected secondary benefit will be mitigating the decline, or raising, groundwater elevations from reduced pumping. An ancillary benefit from stable or rising groundwater elevations may include avoiding pumping induced subsidence. Because the amount of pumping reduction from an interference mitigation program is unknown at this time, it is difficult to quantify the expected benefits.

Reductions in groundwater pumping would be measured directly through the metering and reporting program and recorded in the DMS. Changes in groundwater elevation would be measured with the groundwater level monitoring program. Subsidence would be measured with the CGPS station network. Changes in groundwater storage would be estimated using the groundwater level proxy. Information about the monitoring programs is provided in Chapter 7. Isolating the effect of the interference mitigation program on groundwater levels will be challenging because it will be only one of several management actions that may be implemented concurrently in the Subbasin.

L1.1.3 Circumstances for Implementation

The interference mitigation program would be initiated only after a GSA decides whether it will be implemented.

L1.1.4 Public Noticing

Public meetings would be held to inform the public that interference mitigation program is being considered and/or developed. The interference mitigation program would be developed in an open and transparent process. The public and interested stakeholders would have the opportunity at these meetings to provide input and comments on the process and the program elements.

L1.1.5 Permitting and Regulatory Process

The interference mitigation program may be subject to CEQA. Pumping rotation schedules and well spacing requirements may need to be implemented by establishing new ordinances.

L1.1.6 Implementation Schedule

The interference mitigation program would be developed and implemented when a GSA decides to initiate the process.

L1.1.7 Legal Authority

California Water Code §10726.4 provides GSAs the authorities to establish well spacing requirements and establish pumping rotation schedules.

L1.1.8 Estimated Cost

The cost to develop and implement the interference mitigation program is estimated to be up to $750,000 depending on the final components included. The estimated cost of the CEQA permitting process and the annual cost of data collection, data management, and program compliance are unknown at this time.

L1.2 Groundwater Conservation Program

A groundwater conservation program could be implemented to achieve the necessary limitations in groundwater pumping. This program could include elements that would facilitate compensating landowners for fallowing or retiring agricultural land, incentivize water use efficiency through a tiered pumping fee structure, and/or facilitate the development of projects. The program would need adequate monitoring and oversight to ensure there are no unintended consequences from implementing the program elements and projects. The GSA would likely conduct substantial public outreach and hold meetings to educate and solicit input on the groundwater conservation program and any proposed elements. This outreach program would be designed to ensure that the conservation program is equitable to all beneficial groundwater users and uses, and that it is consistent with groundwater laws and water rights.

Substantial negotiation among Subbasin groundwater users and public input would be needed to develop an equitable fee structure and the details of a groundwater conservation program. The groundwater conservation program would be developed with the intent of providing groundwater pumpers flexibility in how they manage water. Some groundwater pumpers may choose to reduce pumping, others may choose

to coordinate through the groundwater conservation program with neighbors retiring land or paying for projects.

L1.2.1 Relevant Measurable Objectives

The groundwater management program would benefit the groundwater elevation, groundwater storage, and land subsidence measurable objectives.

L1.2.2 Expected Benefits and Evaluation of Benefits

The primary benefit from implementing a groundwater conservation program is reduced Subbasin pumping. A connected benefit of reduced pumping is mitigating the decline, or raising, groundwater elevations. An ancillary benefit from stable or increasing groundwater elevations may include avoiding pumping induced subsidence. The program is designed to ramp down pumping to the sustainable yield; therefore, the quantifiable benefit is to maintain pumping within the sustainable yield.

Reductions in groundwater pumping would be measured directly through the metering and reporting program and recorded in the DMS. Changes in groundwater elevation are an important metric for the groundwater conservation program and would be measured with the groundwater level monitoring program. Subsidence would be measured with the CGPS station network. Changes in groundwater storage would be estimated using the groundwater level proxy. Information about the monitoring programs is provided in Chapter 7. Isolating the effect of the groundwater conservation program on sustainability metrics will be challenging because it would be only one of several management actions that may be implemented concurrently in the Subbasin. However, as the program is initiated, the correlation between reduced pumping and higher groundwater levels may become more apparent.

L1.2.3 Circumstances for Implementation

The groundwater conservation program would be developed and implemented when a GSA decides to initiate the process.

L1.2.4 Public Noticing

Public meetings will be held to inform groundwater pumpers and other stakeholders that the groundwater conservation program is being developed. The groundwater conservation program would be developed in an open and transparent process. Groundwater pumpers and other stakeholders would have the opportunity at these meetings to provide input and comments on the process and the program elements.

L1.2.5 Permitting and Regulatory Process

A groundwater conservation program is subject to CEQA. A groundwater conservation program would be developed in accordance with all applicable groundwater laws and respect all groundwater rights. Depending on the funding approach agreed to for developing this management action, the fee structure and its justification developed as part of the groundwater conservation program would need to meet all California Constitutional requirements related to government funding mechanisms.

L1.2.6 Implementation Schedule

Developing and implementing a groundwater conservation program would likely take approximately two years, which includes time for conducting the required funding procedures.

L1.2.7 Legal Authority

California Water Code §10730 and §10730.2 provide GSAs the authorities to impose fees, including fees on groundwater pumping.

L1.2.8 Estimated Cost

The cost to develop and implement a groundwater conservation program is estimated to be $750,000. This does not include the cost of the CEQA permitting or any ongoing program oversight.

L2 DATA GAP PLAN

L2.1 Groundwater Level Monitoring Network and Supplemental Hydrogeologic Investigation

Monitoring groundwater levels in the Subbasin will be the most important monitoring activity during GSP implementation. Changes in groundwater levels will be the primary metric to document progress toward measurable objectives or avoiding undesirable results. Additional monitoring wells and more groundwater level data are needed to adequately characterize groundwater levels throughout the Subbasin for GSP implementation and meet State standards. Additionally, a better understanding of geologic conditions, and the impact of these conditions on groundwater flow in the Subbasin, is needed. These are key data gaps that will be addressed early during implementation. To address these data gaps, supplemental hydrogeologic investigations will be conducted by the GSAs during the first years of implementation after funding is available.

The overarching goal of the supplemental hydrogeologic investigations will be to sufficiently improve understanding of the hydrogeologic conceptual model of the Subbasin to support an equitable decision making process and adaptive management of the programs designed to achieve sustainability. The supplemental hydrogeologic investigations will be conducted in tandem with improving the groundwater level monitoring network. The investigation will rely on existing information first and conduct additional investigation to address targeted data gaps. To achieve the broad investigation goal, the following activities may be conducted as part of the supplemental hydrogeologic investigation.

- Compilation and evaluation of a broader dataset of existing groundwater levels
- Deployment of automated groundwater level monitoring devices in some monitoring wells
- Video logging of existing wells
- Initiation of monitoring in additional existing wells
- Drilling new dedicated monitoring wells
- Geophysical surveys to improve understanding of geologic conditions and structures
- Characterizing groundwater movement between Subbasin watersheds
- Pumping tests to estimate aquifer properties and characterize groundwater flow conditions in specific areas of the Subbasin

- Refinement and recalibration of the existing groundwater model or use of a new model when sufficient data become available
- Targeted groundwater quality sampling and incorporating groundwater data already collected under other regulatory programs

An additional data gap related to surface water and groundwater interconnectivity was also identified. A specific study to address this data gap is proposed in Section 9.3.1.5.6.

Results of the supplemental hydrogeologic investigation will be summarized in a report. Investigation results will support many important decisions made collectively by the GSAs or individually during implementation, including for example

- Developing a framework to evaluate and project groundwater level trends relative to minimum thresholds and undesirable results, and to establish triggers for initiation of public outreach and hearings on the need for and equitable implementation of sustainability programs and/or projects
- Adjusting sustainable yield
- Defining areas of the Subbasin in need of specific action and where management actions and or projects would be appropriate and beneficial.

New data gaps may be identified during the supplemental hydrogeologic study that would be addressed, if needed, in future investigations.

L2.2 Improve Monitoring Network

Specific data gaps were identified in Chapter 7, Monitoring Networks, related to the groundwater level monitoring network, including insufficient coverage of wells in the Paso Robles Formation Aquifer, and a lack of wells in the Alluvial Aquifer. The general plan for adding monitoring wells and Representative Monitoring Sites (RMSs) to the monitoring network will be to first incorporate existing wells. If an existing well cannot be identified or permission to use data from an existing well cannot be secured to fill a data gap, then a new monitoring well will be drilled. A system for registering monitoring wells for the GSP monitoring network will be developed. Additional information on the process for addressing data gaps and implementing groundwater level monitoring is provided below.

L2.2.1 Verify Current Network

The proposed RMS sites will be verified for inclusion in the monitoring network and data gaps will be confirmed. Before monitoring starts under the GSP, the GSAs will contact owners of all

wells identified as RMS in the current network to negotiate a new access agreement that will allow routine monitoring and reporting of data from the well, and possibly provisions for compensating well owners for use of their well. RMS wells will be inspected to verify total depth and screened interval (video logging may be required) and ensure the static groundwater level can be measured in accordance with monitoring protocols. The aquifer designation will be verified or designated.

L2.2.2 Expand Network

Additional monitoring wells and RMSs are needed for the groundwater level monitoring network in order to meet State standards. Existing wells not currently in the network may be added or new wells may be drilled.

Existing Wells. Existing wells in data gap areas will be identified for possible incorporation into the monitoring network. There are approximately 90 confidential wells in the Subbasin that have been monitored by the SLOFCWCD since 2012 that could be used to fill data gaps if a new access agreement can be secured with the well owners to allow use of groundwater level data from the well. Additionally, the County of SLO is developing a database of wells that will be used for identifying additional monitoring wells. During GSP development, some well owners offered access to their wells for monitoring purposes; these wells will also be considered. All of these potential sources for adding existing wells to the network will be used. In addition, the GSAs will conduct routine public outreach to identify other willing well owners to participate in the monitoring network. All candidate existing wells for incorporation into the monitoring network will be inspected to ensure they are adequate for monitoring and to determine depth, perforated intervals, and aquifer designation. Access agreements will be secured with well owners to ensure that data can be reported from the wells.

New Wells. New wells will be drilled in data gap areas where existing wells do not exist or areas where access to existing wells could not be secured. The GSAs will obtain required permits and access agreements before drilling new wells. The GSAs will retain the services of licensed geologists or engineers and qualified drilling companies for drilling new wells. The GSAs will evaluate the availability of grant funds through DWR for new wells. Once drilled, the new wells will be tested as necessary and equipped for monitoring. All well construction information, including the aquifer that is being monitored, will be registered with the well.

L2.2.3 Begin Monitoring Program

Groundwater level monitoring under the GSP will begin in 2020. Monitoring will adhere to protocols outlined in Chapter 7, Monitoring Networks, or new protocols developed under the GSP. Annually, monitoring data will be analyzed and presented in the following ways:

- Check and verify data then upload data to the Data Management System

- Prepare seasonal water level contour maps of both aquifers and evaluate changes
- Compare data to sustainable management criteria at RMS
- Analyze impacts of projects and actions.

Data will be included in the annual report to DWR.

L2.2.4 Evaluate Monitoring Network

As part of annual reporting, the monitoring network and current RMSs will be evaluated to ensure that they are sufficient to meet monitoring objectives and track Subbasin groundwater levels relative to Sustainable Management Criteria. Results of this evaluation could lead to further expansion of the monitoring network or omission of monitoring wells deemed unnecessary for monitoring objectives.

Groundwater Storage Monitoring Network

The GSAs will monitor groundwater levels as a proxy for assessing change in groundwater storage. Therefore, the groundwater level monitoring network will also be used for monitoring the reduction in groundwater storage sustainability indicator. Data gaps in the groundwater storage monitoring network are similar to the data gaps identified for the groundwater level monitoring network. However, most of the change in groundwater storage occurs near the water table, so sufficient water table monitoring wells are needed, including in the Paso Robles Formation Aquifer where most of the groundwater pumping occurs.

The need for additional water table wells will assessed by evaluating existing wells that are screened at or near the existing water table in the Paso Robles Formation Aquifer. If additional wells are needed, the steps described in Section 10.3.1 for expanding the current network will be followed.

Water Quality Monitoring Network

Under the GSP, water quality monitoring will be conducted in existing public water supply wells and agricultural supply wells. Initially, the current RMSs identified in Chapter 7 will be verified for inclusion in the monitoring network. The current network of RMSs for water quality has adequate spatial coverage to assess impacts to beneficial uses and users from actions taken in response to implementing the GSP. The primary data gap for water quality monitoring is the lack of well construction information for many of the supply wells in the monitoring network. Additional wells may be necessary to monitor impacts of projects and actions on water quality.

2.2.4.1 Verify Current Network

Before monitoring begins, the owner, operational status, construction details, and aquifer designation of all supply wells incorporated into the current network will be verified or determined. New information on supply wells will be added to the Data Management System. Supply wells used for water quality monitoring will be registered under the GSP well registration program. During the verification process, if other public or agricultural supply wells are identified that are deemed to improve the network, they may be added to the network.

2.2.4.2 Begin Monitoring Program

Water quality monitoring under the GSP will begin in 2020. Monitoring will adhere to protocols outlined in Chapter 7, Monitoring Networks, or new protocols developed under the GSP. For the most part, water quality monitoring and data reporting are already conducted by individual well owners as part of other regulatory programs for both public water supply wells and agricultural irrigation wells, as described in Chapter 7. These reported monitoring data will be used for the GSP.

Annually, monitoring data will be compiled, analyzed, managed, and presented in the following ways:

- Downloaded from public databases
- Check and verify data then upload data to the Data Management System
- Prepare data summary tables and figures
- Compare data to Sustainable Management Criteria at RMS
- Analyze impacts of projects and actions

Monitoring results will be included in the annual report to DWR.

2.2.4.3 Evaluate Monitoring Network

As part of annual reporting, the monitoring network and current RMSs will be evaluated to ensure that they are sufficient to meet monitoring objectives and track Subbasin groundwater quality relative to Sustainable Management Criteria. Results of this evaluation could lead to further expansion of the monitoring network or omission of monitoring wells deemed unnecessary for monitoring objectives.

Land Subsidence Monitoring Network

Land subsidence monitoring will be conducted using existing CGPS sites as described in Chapter 7, Monitoring Networks. Data from the CGPS are managed by UNAVCO. Data obtained from

UNAVCO will be evaluated to verify they are adequate for determining whether subsidence is occurring and for inclusion in the monitoring network. Data gaps related to the land subsidence monitoring network were not identified in Chapter 7. If the existing CGPS sites are determined to be inadequate for use under the GSP, then new land surface elevation monitoring devices will be deployed and/or alternate monitoring methods will be considered.

2.2.4.4 Conduct Monitoring

Land subsidence monitoring under the GSP will begin in 2020. As a first step, protocols for obtaining, evaluating, and using land surface elevation data from the CGPS sites will be developed. Annually, land surface elevation data will be analyzed and presented in the following ways:

- Download data from public database(s), including the USGS California Water Science Center and DWR
- Check and verify data then upload data to the Data Management System.
- Prepare summary tables and figures
- Compare data to sustainable management criteria at RMS

Results will be included in the annual report to DWR.

2.2.4.5 Evaluate Monitoring Network

As part of annual reporting, the monitoring network and current RMSs will be evaluated to ensure that they are sufficient to meet monitoring objectives and track Subbasin land surface elevations relative to Sustainable Management Criteria. Results of this evaluation could lead to further expansion of the monitoring network or omission of monitoring sites deemed unnecessary or inadequate for monitoring objectives. For land subsidence, an effort to identify other relevant subsidence data or studies will be conducted biannually.

Evaluating Interconnected Surface Water

As discussed in Chapter 5, the consensus among local groundwater experts is that there is no interconnection between surface water and groundwater in the Subbasin. Therefore, sustainable management criteria and an associated monitoring network for interconnected surface water and groundwater were not developed for the GSP. However, the GSAs value riparian and all native vegetation and communities and recognize that if new data from streamflow, stream geometry and groundwater level data near streams show a surface water and groundwater interconnection that the GSP will be updated to include them. To that end, the GSAs will conduct periodic investigation of areas of potential interconnected surface water and groundwater in the Subbasin.

The GSAs will develop and conduct a hydrogeologic investigation to establish whether or not interconnected surface waters exist in the Subbasin. The overall goal of this investigation is to obtain sufficient stream flow, stream geometry and groundwater level data in areas of potential interconnection to quantitatively determine if and when surface and groundwater water are interconnected. More specifically, the investigation could include gathering the following data as resources allow.

Shallow Groundwater Levels. The first step will be to identify existing wells that monitor shallow groundwater levels adjacent to streams. These wells will most likely be screened in the Alluvial Aquifer. If existing wells are identified and deemed adequate based on an inspection, an agreement will be secured with the well owner to incorporate the well into the investigation and report data from the well. If existing wells cannot be identified or accessed, then GSA(s) may consider drilling new monitoring wells.

Streamflow Monitoring. Streamflow conditions will also be evaluated. Data gathering may include walking or drone surveys, historical photos, local observations, and automated camera and stream gages in key reaches. USGS stream gaging data will also be evaluated. It may be necessary to verify the accuracy of existing stream gages and install new or additional stream gaging equipment.

It is expected that streamflow and shallow groundwater monitoring will continue until sufficient data are obtained to improve understanding of the relationship between surface water and shallow groundwater. If stream flow surveys or data suggests interconnected surface water and groundwater exists in the Subbasin, the GSP will be updated include this information, including related Sustainable Management Criteria and an appropriate monitoring program.

Groundwater Model Updates

After sufficient new data from monitoring programs, the supplemental hydrogeologic investigation, and other sources have been evaluated, the GSAs will consider the value of refining, updating, and recalibrating the GSP model or replacing it with a new open source model. New data and refinements to the hydrogeologic conceptual model, and possibly the updated numerical model, would be used for the following analyses:

- Refining the aquifer parameters and model input values
- Updating the estimated sustainable yield of the Subbasin
- Evaluating benefits of alternative sustainability programs or projects

The USGS is developing a regional groundwater model for the entire Salinas Valley, including the Paso Robles Subbasin. The GSAs will work with the USGS to coordinate modeling efforts and leverage modeling efficiencies where available.

L3 OTHER PROJECT CONCEPTS

Four other conceptual projects are summarized in the table below for future consideration to help stabilize groundwater levels and avoid undesirable results.

Other Project Concept

Project Name	Water Supply	Amount (AFY)
Delivery to Southwestern Subbasin Area	SWP	2,200
Delivery to Eastern Subbasin Area	SWP	930
Delivery to North of City of Paso Robles	NWP	1,500
Flood Flow Capture and Delivery North of City of Paso Robles	Salinas River	164

Appendix M

Communication and Engagement Plan

COMMUNICATION & ENGAGEMENT PLAN

FOR THE PASO ROBLES SUBBASIN GROUNDWATER SUSTAINABILITY PLAN

JULY 2018

Paso Robles Subbasin Groundwater Sustainability Agencies

- *County of San Luis Obispo*
- *City of Paso Robles*
- *San Miguel Community Services District*
- *Heritage Ranch Community Services District*
- *Shandon San Juan Water District*




Page Left Blank Intentionally

TABLE OF CONTENTS

1.0 INTRODUCTION

In 2015, the California state legislature approved a new groundwater management law known as the Sustainable Groundwater Management Act (SGMA). SGMA requires local agencies in medium- and high-priority groundwater basins, as designated by the California Department of Water Resources (DWR), to form Groundwater Sustainability Agencies (GSAs) and prepare Groundwater Sustainability Plans (GSPs). Because the Paso Robles Subbasin[1] (DWR Bulletin 118 Basin No. 3-4.06) has been designated as a high-priority basin subject to critical conditions of overdraft, the Paso Robles Subbasin GSP is due by January 31, 2020. Whereas, other medium- and high- priority basins not subject to critical conditions of overdraft are due January 31, 2022. During the GSP preparation process, GSP Regulations require public outreach and engagement with basin users, the public, and other stakeholders (collectively referred to in this document as Interested Parties).

The purpose of this Communication and Engagement Plan (C&E Plan) is to outline the process for Interested Parties' involvement in the development of a GSP for the Paso Robles Subbasin.

About Paso Robles Subbasin

The Paso Robles Subbasin lies in northern San Luis Obispo County and extends into southern Monterey County. The Subbasin is bounded by the Santa Lucia Range on the west, the La Panza Range on the south, and the Temblor and Diablo Ranges on the east. The **Figure 1** shows the Paso Robles Subbasin and the GSAs formed therein.

Basin Boundary Modifications

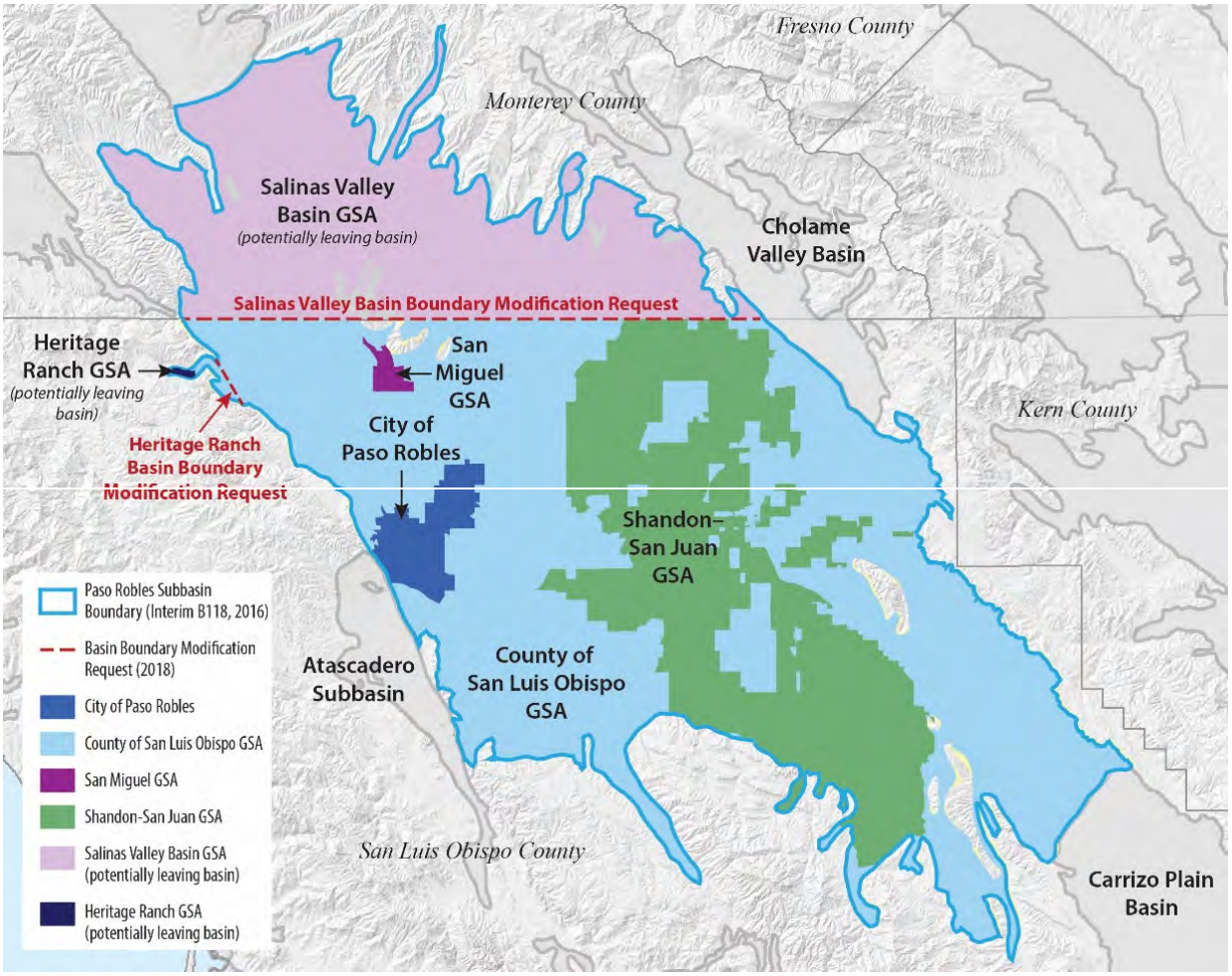
Two GSAs currently included in the Paso Robles Subbasin have filed initial notifications to DWR for a basin boundary modification which would cause them to leave the Paso Robles Subbasin.

- **Salinas Valley Basin GSA** (SVBGSA) submitted an initial notification on May 1, 2018 and a basin boundary modification request on July 5, 2018 to DWR regarding a jurisdictional internal boundary modification at the County line. If SVBGSA is granted the basin boundary modification, they will modify the border between the Upper Valley Aquifer and Paso Robles Subbasin to coincide with the Monterey/San Luis Obispo County line resulting in the Paso Subbasin lying wholly in San Luis Obispo County. The Paso Robles Subbasin GSAs support this request.
- **Heritage Ranch CSD GSA** submitted an initial notification on April 23, 2018 and a basin boundary modification request on June 27, 2018 to DWR regarding a scientific external boundary modification. If the request is granted, the Heritage Ranch CSD GSA area will be excluded from the Paso Robles Subbasin.

If either of these GSAs are granted a basin boundary modification, the Paso Robles Subbasin GSAs will continue to engage and coordinate with them as needed to achieve sustainable groundwater management.

[1] Formally, the Paso Robles Area Subbasin of the Salinas Valley Groundwater Subbasin

Figure 1. ***Paso Robles Subbasin and GSA Boundaries***



Formation of a Single GSP Memorandum of Agreement

In September 2017, through a Memorandum of Agreement (MOA), five GSAs that were formed under the DWR GSA process collectively agreed to develop one GSP for the portion of the Paso Robles Subbasin in San Luis Obispo County. As part of the MOA (Section 4.4(D)) they also decided to collectively develop a stakeholder participation plan that includes public outreach and involves Interested Parties in developing the GSP. These GSAs include:

- Paso Basin – County of San Luis Obispo GSA
- City of Paso Robles GSA
- San Miguel Community Services District GSA
- Shandon–San Juan GSA
- Heritage Ranch Community Services District GSA *(currently seeking basin boundary modification)*

The GSAs above will work together to develop the Paso Subbasin GSP. To streamline GSP development, each GSA provides a representative to serve on the Paso Subbasin Cooperative Committee ("Cooperative Committee"). Details about the Cooperative Committee are discussed in Section 4.0 GSAs' DECISION-MAKING PROCESS.

Our Promise

The Cooperative Committee, comprised of representatives of the five GSAs, *commit to developing a recommended GSP that will safeguard our local groundwater resources through sustainable management and to preserve this invaluable water supply source for future generations. We commit to work with Interested Parties to ensure that their concerns and inputs are considered in GSP development.*

C&E Plan as a Roadmap

This C&E Plan serves as a roadmap to meet the statutory requirements of SGMA and the GSP Regulations as outlined in **Appendix A** and, more importantly, serves to create common understanding and transparency among GSAs and Interested Parties throughout the GSP development process. The GSAs will follow this C&E Plan to engage with and gather input from various Interested Parties to support GSP development. GSP information, meeting schedules, and useful links can be found at the Paso Robles Groundwater Communication Portal (Paso GCP) at: www.pasogcp.com. Anyone may register as an Interested Party to be notified of upcoming events and activities regarding GSP development. For more information on the Paso GCP, refer to **Appendix B**.

2.0 GOALS AND OBJECTIVES

The goal of Paso Robles Subbasin communication and engagement efforts is to involve broad and diverse Interested Parties, including stakeholders, the public, and beneficial users, throughout the GSP development process to ensure Interested Parties' concerns, issues, and aspirations are consistently understood and considered in the GSAs' decision-making process.

Under the umbrella of meeting the statutory requirements of SGMA and the GSP Regulations, the objectives of the GSAs' engagement efforts are as follows:

- Educate Interested Parties about the importance of a GSP, what is and is not feasible, what must be accomplished, and how success will be measured
- Ensure Interested Parties and beneficial users of groundwater are given the opportunity to contribute meaningful input, which is then considered in the decision-making process
- Involve a diverse group of Interested Parties in the GSP process
- Make public participation easy and accessible

Interested Parties discuss potential options for groundwater management in the Paso Robles Subbasin at a public workshop held on May 14, 2018.

3.0 BENEFICIAL USES AND STAKEHOLDER GROUPS

Among the beneficial groundwater uses supported by the Paso Robles Subbasin are various irrigated and non-irrigated agricultural activities (including but not limited to grazing, vineyards, and orchards); rural domestic/residential wells; municipal and industrial supply; and aquatic ecosystems associated with rivers and streams, some of which provide habitat for threatened or endangered species.

Given its location, the Paso Robles Subbasin has diverse land uses including the following:

- Urban (i.e. City of el Paso de Robles)
- Community Services Districts (2)
- Urban Reserve area (e.g. Shandon)
- Village Reserve area (e.g. Creston)
- Rural Residential areas
- Agriculture
- Industrial areas
- Commercial areas
- Natural landscape

The Paso Robles Subbasin also covers a wide range of Interested Parties, including, but not limited to, the following:

- Land use authorities
- Private well users
- Urban users
- Native American Tribal interests
- Business interests
- Agriculture interests
- Public agencies
- Public water systems/ community water systems
- Environmental interests
- Disadvantaged Communities (DACs) – as identified in **Appendix C**
- General public

California Water Code (CWC) §10723.4 requires GSAs to establish and maintain a list of persons interested in receiving notices regarding plan preparation, meeting announcements, and availability of draft plans, maps, and other relevant documents. Any person may request, in writing, to be placed on the list of interested persons. Additionally, the GSAs developed the Paso Robles Groundwater Communication Portal (Paso GCP) where any person may sign up to be added to the list of Interested Parties. The Paso GCP is available at www.pasogcp.com. **Appendix D** includes an initial list of Interested Parties identified at the time of GSA formation. The updated Interested Parties list, with individual registrants, is stored in the Paso GCP, and will be available to DWR at the time of GSP submittal.

Diverse Outreach Practices

The Paso Robles Subbasin GSAs are committed to encouraging the active involvement of diverse social, cultural, and economic interests of the population within the groundwater basin. As such, outreach practices will be diverse as well, as outlined in Section 7.0.

4.0 GSAs' DECISION-MAKING PROCESS

The MOA, as introduced in Section 1.0, lays the framework for governance and decision-making. The MOA established the Cooperative Committee made up of representatives of the five GSAs to develop a single GSP that will be considered for adoption by each individual GSA. It is important to note that the MOA automatically terminates upon the State's approval of the GSP.

To provide for consistent and effective communication among the GSAs, each GSA agreed to designate one Cooperative Committee Member to conduct activities related to GSP development and SGMA implementation. **Table 1** lists the Primary and Alternate Members of the Cooperative Committee, as well as a point of contact for each GSA's staff. Each Cooperative Committee Member represents their respective GSA in the development of a recommended GSP that will be considered for adoption by each individual GSA and subsequently submitted to DWR for approval. GSA Staff works with the GSA Consultant on administrative matters to move the GSP process forward. A copy of the MOA and detailed Cooperative Committee responsibilities in the development of the GSP is available at https://slocountywater.org/site/Water%20Resources/SGMA/paso/pdf/FinalMOA_FullyExecuted.pdf

Table 1. Cooperative Committee Members and Weighted Vote for Decision-Making

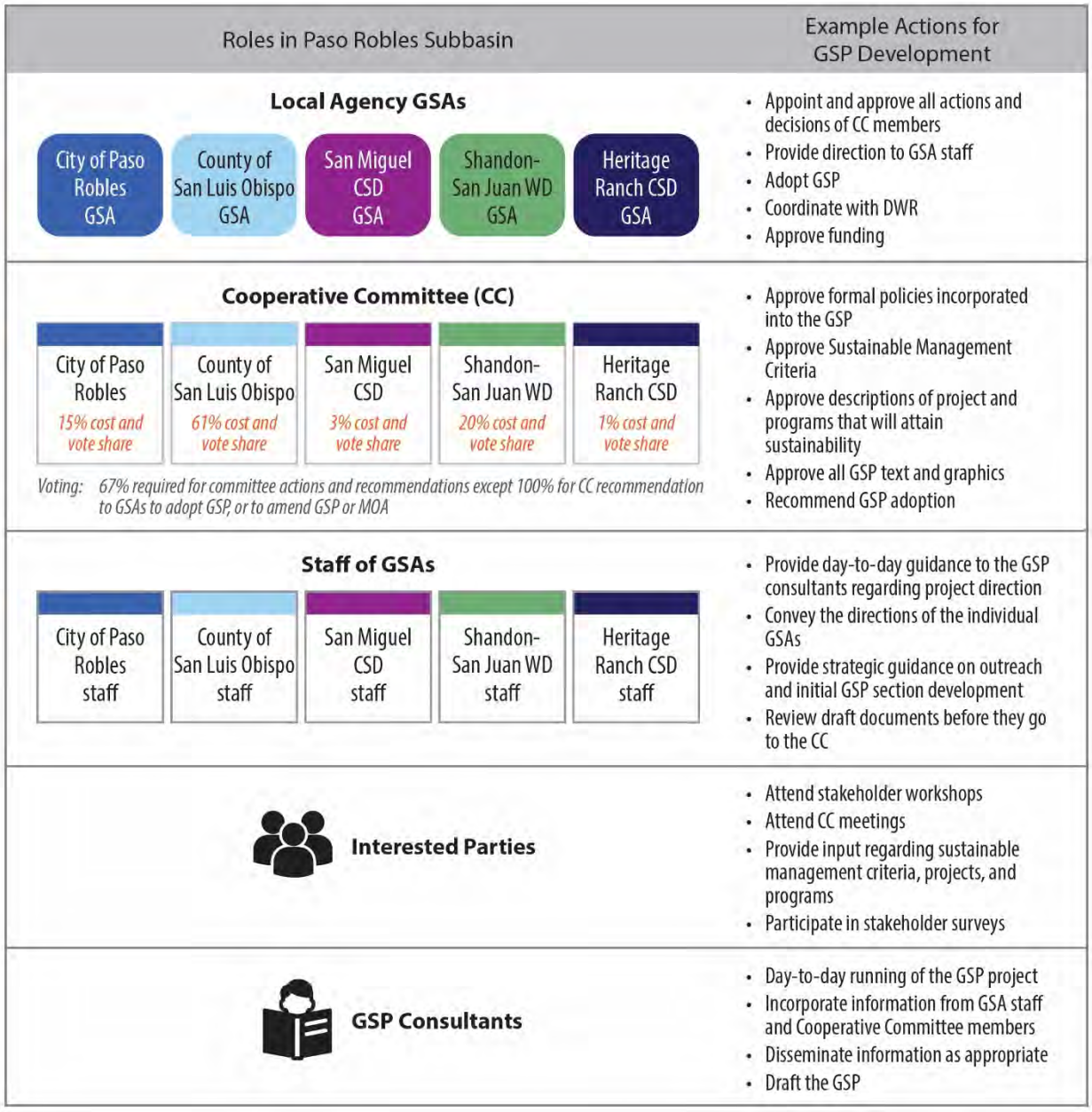
GSA (% Weighted Vote)	Cooperative Committee Member	Cooperative Committee Alternate	GSA's Staff Point of Contact
County of San Luis Obispo (61%)	John Peschong	Debbie Arnold	Angela Ruberto
City of Paso Robles (15%)	John Hamon	Steve Martin	Dick McKinley
Shandon-San Juan Water District (20%)	Willy Cunha	Matt Turrentine	Randy Diffenbaugh
San Miguel CSD (3%)	Joe Parent	Kelly Dodds	Blaine Reely
Heritage Ranch CSD (1%)	Reginald Coussineau	Scott Duffield	Scott Duffield

The Cooperative Committee will consider all beneficial uses and users of groundwater in the Subbasin as well as public input during the decision-making process. Each of the GSAs have weighted voting (see **Table 1**) on decision-making, with the exception of MOA amendments or termination and recommendation that the GSAs adopt the final GSP or any amendments thereto which require a unanimous vote. Portions of the MOA addressing voting are provided below.

> *MOA Section 4.8: Any action or recommendation considered by the Cooperative Committee shall require the affirmative vote of 67 percent based on the percentages set forth in Section 4.6 or 4.7 above (of the MOA), as applicable. Notwithstanding the foregoing,* ***the following shall require the affirmative vote of 100 percent*** *based on the percentages set forth in Section 4.6 or 4.7 above (of the MOA), as applicable: (A) a recommendation that each of the Parties adopt the GSP or adopt any amendment thereto prepared in response to comments from DWR and (B) a recommendation that the Parties amend this MOA.*
>
> *MOA Section 9.2: This MOA may be terminated upon unanimous written consent of all current Parties.*

A summary of the Paso Robles Subbasin roles and actions for GSP development is depicted in **Figure 2**.

Figure 2. ***Paso Robles Subbasin Roles and Example Actions for GSP Development***



The following are descriptions of how each GSA makes their individual GSA decisions and which forums are used to devise their decision-making. Once their decisions are made they report to the Cooperative Committee for discussion.

County of San Luis Obispo GSA

Governing body	**County of San Luis Obispo Board of Supervisors**
Meeting information	**Bi-Monthly, on average; San Luis Obispo County Government Center.** See the complete schedule online. If matters relating to GSP development will be discussed during a Board meeting, the topic will be shown on the meeting's agenda.

The Paso Basin – County of San Luis Obispo GSA's governing body is the **County of San Luis Obispo Board of Supervisors**. The County's SGMA Strategy supports 1) fair and equitable representation in GSAs decision-making processes that include participation by the County and/or an alternative, stakeholder-driven eligible entity, and 2) adequate consultation between any GSA efforts and related County authorities and/or planning/management efforts. The County supports participating in a GSA in a basin to represent one or more of the following key roles and/or authorities:

- Interest 1: Representation of County Service Area(s)
- Interest 2: Representation of otherwise unrepresented beneficial uses/users of groundwater (e.g., rural domestic, agricultural, environmental, etc. as defined by SGMA)
- Interest 3: Land use authority
- Interest 4: Well construction permitting authority
- Interest 5: Integration and alignment of the County's discrete management actions (e.g., groundwater export ordinance) to the GSA's basin-wide, comprehensive management actions

City of Paso Robles GSA

Governing body	**Paso Robles City Council**
Meeting information	**First and third Tuesday of each month, Paso Robles City Hall.** If matters relating to GSP development will be discussed during a City Council meeting, the topic will be shown on the meeting's agenda.

The City of Paso Robles' GSA covers properties in the City limits except that portion of the City that is west of the Rinconada fault and thus in the Atascadero Basin. The GSA's governing body is the **Paso Robles City Council**, acting as the Board of the GSA. The City Council meets on the first and third Tuesday of each month in the Council Chamber in City Hall, but only meets as the GSA Board when there is a specific action item for the GSA.

Shandon-San Juan Water District GSA

Governing body	**Shandon-San Juan Water District Board of Directors**
Meeting information	**Third Tuesday of each month, Shandon High School Library.** If matters relating to GSP development will be discussed during a Board meeting, the topic will be shown on the meeting's agenda.

The Shandon San Juan GSA is formed and governed by an "opt-in" California Water District lying in the northeastern portion of San Luis Obispo County. The GSA's governing body is the **Board of Directors of the Shandon-San Juan Water District** (SSJWD), acting as the Board of the GSA. SSJWD meets on the third Tuesday of each month at the Shandon High School Library.

San Miguel CSD GSA

Governing body	**San Miguel Community Services District Board of Directors**
Meeting information	**Fourth Thursday of each month, San Miguel CSD District Office.** If matters relating to GSP development will be discussed during a Board meeting, the topic will be shown on the meeting's agenda.

The San Miguel Community Services District GSA covers the properties within its District boundaries. The GSA's governing body is the **San Miguel Community Services District Board of Directors**, acting as the Board of the GSA. The District Board of Directors meets on the fourth Thursday of each month at the District office which is located at 1150 Mission St. in San Miguel, CA 93451. The Board of Directors only meets as the GSA Board when there is a specific action item for the GSA on the agenda.

While an initial list of Interested parties was identified for the Paso Robles Subbasin at the time of GSA formation**,** additional Interested Parties specific to San Miguel CSD include the following:

- Disadvantaged communities, including but not limited to, those served by private domestic wells or small community water systems or ratepayers and domestic well owners – the Community of San Miguel, which lies within the District's GSA, is designated as a Disadvantaged Community (DAC)
- Entities listed in Section 10927 that are monitoring and reporting groundwater elevations in all or part of a groundwater basin managed by the GSA – the San Miguel Community Services District files, contributes, and/or maintain California Statewide Groundwater Elevation Monitoring (CASGEM) monitoring data with the DWR through San Luis Obispo County.

Heritage Ranch CSD GSA

Governing body	**Heritage Ranch Community Services District Board of Directors**
Meeting information	**Third Thursday of each month, Heritage Ranch CSD District Office.** If matters relating to GSP development will be discussed during a Board meeting, the topic will be shown on the meeting's agenda.

The Heritage Ranch Community Services District's governing body is a **Board of Directors** of five members. Director terms are four years, with staggered elections of three seats and two seats. They meet at 4:00 p.m. on the third Thursday of every month, in the Board Room located at 4870 Heritage Road, Paso Robles CA, 93446.

The Heritage Ranch Board also has five Committees. The Committees may include two Board members and members of the public. The manager is the staff person assigned to all Committees. The Board President appoints membership to committees at the first regular meeting in December in even number years. Heritage Ranch Committee membership is for two years. The Board President may also appoint ad-hoc committees. In response to SGMA, an ad-hoc SGMA Committee was appointed. The current SGMA Committee is Director Cousineau and Director Barker.

Heritage Ranch Committee motions and recommendations shall be advisory to the Board and shall not commit the District [HRCSD] to any policy, act, or expenditure unless expressly delegated by Board action. Nor may any committee direct staff to perform specific duties unless duly authorized by the Board. The committee chair is authorized to schedule committee meetings as deemed necessary and all such meetings shall be in compliance with Open Meeting Law of California (Brown Act).

Additional Contributors to GSP Development

Interested Parties

Interested Parties can participate in public meetings and hearings, which are posted on the Paso GCP, and communicate with Cooperative Committee members to provide input, obtain information, and review and comment on GSP documents. An initial list of Interested Parties identified for the Paso Robles Subbasin at the time of GSA formation is provided in **Appendix D**. Anyone may register as an Interested Party via the Paso GCP at www.pasogcp.com. Once registered, Interested Parties will receive invitations to meetings and workshops related Paso Robles Subbasin GSP development. The Interested Party list is stored and maintained in the Paso GCP database.

GSP Consultants

A team of consultants will conduct technical studies and investigations, including groundwater modeling, and draft the GSP documents.

Consultant work will be overseen by the GSA staff, who will provide guidance and oversight regarding GSP development, prior to reviewing draft documents with the Cooperative Committee. The consulting firms assisting with GSP development for the Paso Robles Subbasin are listed below.

- Hydrometrics Water Resources, Inc. (lead consultant)
- Montgomery and Associates
- Carollo Engineers
- GEI Consultants, Inc.
- O'Laughlin & Paris, LLP
- Strategy Driver, Inc.
- WestWater Research, LLC

Staff of the GSAs

Staff of the GSAs provide day-to-day guidance to the GSP consultant regarding project direction. Staff of the GSAs review GSP documents before they are passed to the Cooperative Committee. Staff members make interim decisions on the approach and messaging involved in GSP development. Fundamental to this decision-making approach is that staff of each GSA regularly communicate with GSA Boards or Councils and respective Cooperative Committee Members.

Decision-Making Steps

The Paso Robles Subbasin GSP must be developed under a compressed schedule, as the final adopted GSP is due to DWR by January 31, 2020. To ensure the GSP is delivered on time, decision-making during chapter development as well as for final approval must follow a streamlined process. These processes are outlined in **Figure 3** and **Figure 4**, respectively.

Figure 3. ***GSP Chapter Development Process***

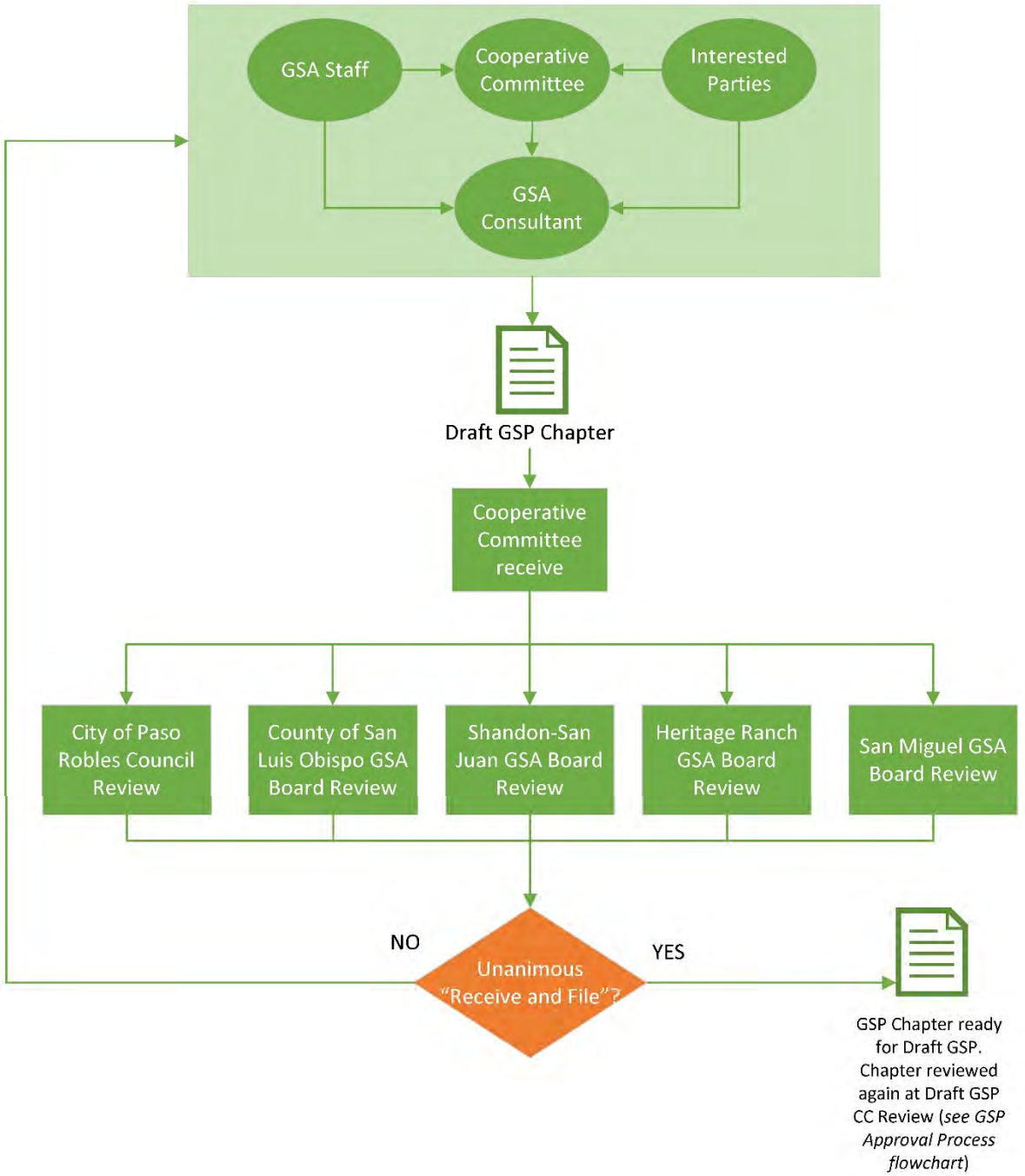
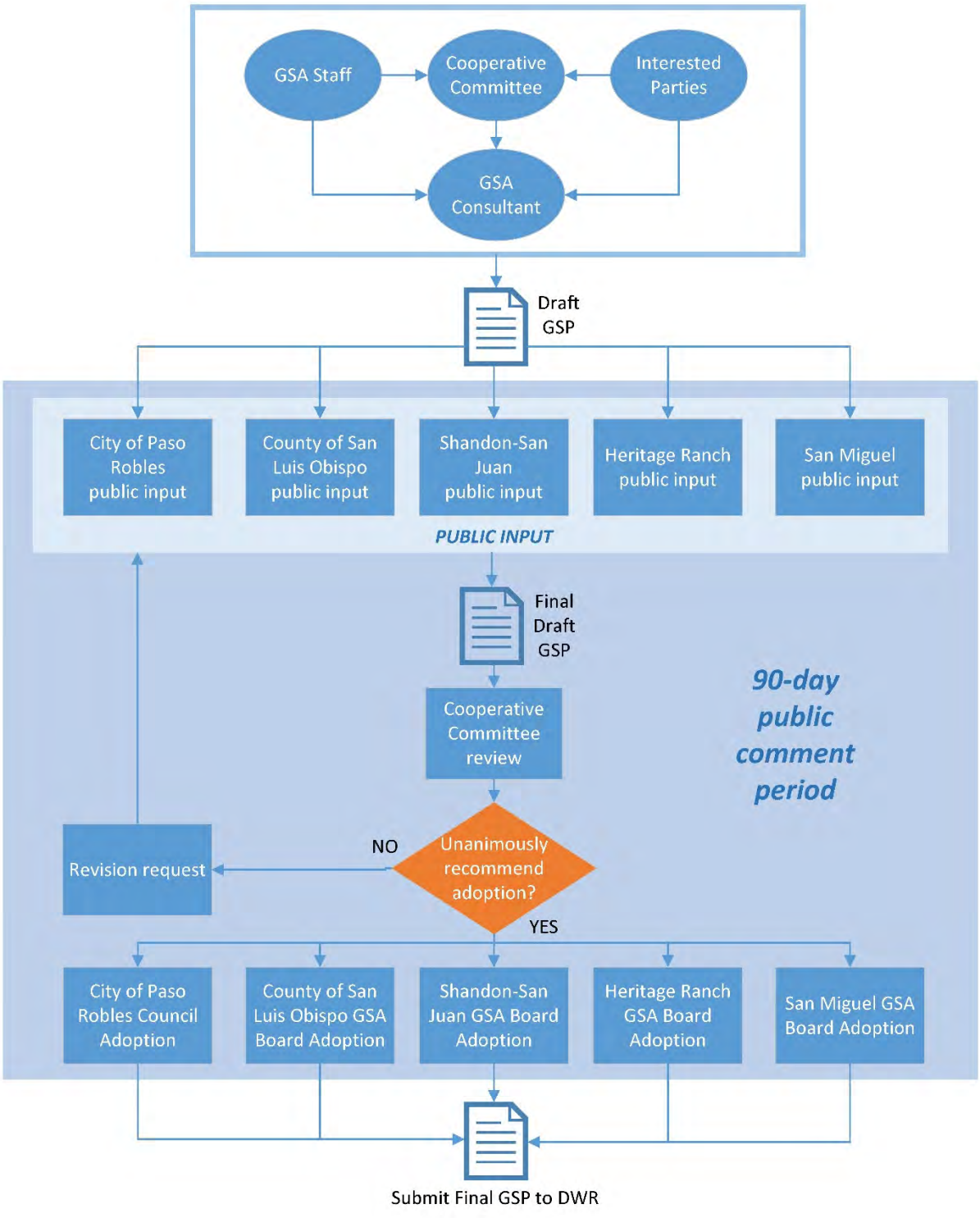


Figure 4. ***GSP Approval Process***



5.0 HOW CAN INTERESTED PARTIES AND PUBLIC GET INVOLVED?

The GSP process for the Paso Robles Subbasin includes both the development and implementation of a GSP. Interested Party participation is vital to the success of the GSP. A first step for Interested Parties to get involved is to sign up through the Paso GCP at www.pasogcp.com and review the content on the following websites:

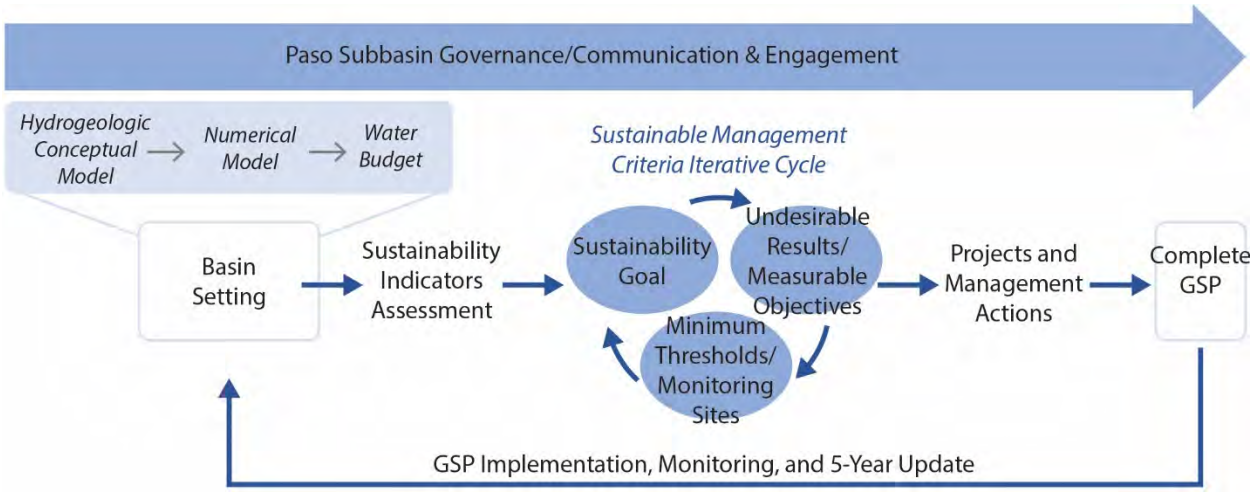
- Paso Robles Subbasin Groundwater Communication Portal (Paso GCP) – www.pasogcp.com
- GSA websites
    - County of San Luis Obispo – www.slocountywater.org
    - Shandon-San Juan Water District – www.ssjwd.org
    - Heritage Ranch CSD – www.heritageranchcsd.com
    - San Miguel CSD – www.sanmiguelcsd.org
    - City of Paso Robles – www.prcity.com
- DWR's SGMA Portal – https://sgma.water.ca.gov/portal/

Meetings of the Paso Subbasin Cooperative Committee are scheduled on a regular basis to provide information to the public and Interested Parties and provide opportunities to ask questions and make suggestions. These meetings are posted on the Paso GCP and announced via email. See **Section 7.0** to learn more ways the GSAs are engaging Interested Parties and inviting participation.

GSP Development Process

The GSP development process for the Paso Robles Subbasin shown in **Figure 5** outlines key tasks and their relationship to one another in developing the GSP. These main tasks roughly follow what will ultimately be the GSP's chapters. GSP development will also include: listing data gaps and how they will be filled during GSP implementation, conducting technical studies, defining the Subbasin's characteristics, accounting for current and planned groundwater uses, considering groundwater dependent ecosystems (GDEs), incorporating land use planning, and developing sustainable management criteria.

Figure 5. ***GSP Development Process***



Appendix E includes a preliminary schedule showing milestones and Interested Party engagement activities. As shown on the schedule, Cooperative Committee meetings will be held at regular intervals. Cooperative Committee meetings are open to the public. Focused workshops will be held as needed. In addition, technical staff will be available throughout the process to communicate and engage with Interested Parties. Interested Parties can be involved in GSP development by providing input throughout the process of completing these tasks. Periodic updates and materials will be posted on the Paso GCP and presented at Cooperative Committee meetings for Interested Parties review and comment.

Above, Interested Parties participate in an interactive workshop (May 14, 2018) about projects and actions.

6.0 DESIRED OUTCOMES

DWR's Stakeholder Communication and Engagement Guidance Document suggests answering a series of questions when setting desired outcomes for GSP Interested Party outreach. The questions and responses for the Paso Robles Subbasin are listed below.

What are we trying to accomplish?

We aim to make opportunities available for Interested Parties to provide input during development of the Paso Robles Subbasin GSP, and ensure the GSP considers input from Interested Parties.

How will we know if we are successful?

We will be successful when various Interested Parties have opportunities to provide their input, ask questions, receive up-to-date information, and comment on GSP development and draft documents.

What are the challenges or barriers?

One of the challenges is making a complete list of Interested Parties and being able to effectively communicate with them. We will make efforts to reach a broad set of Interested Parties and expand the list. We will use several forms of communication outreach such as: meetings, calendar updates with notification automatically sent to Interested Parties, radio and newspaper advertising, and email blasts. For a list of media contacted regarding Paso Subbasin GSP events, see **Appendix F**.

What are the opportunities for communication and engagement?

Available communication and engagement opportunities for Interested Parties include public workshops and hearings, communication through individual GSA webpages, registration as an Interested Party or contact through the Paso GCP, correspondence, phone calls, emails, and Cooperative Committee meetings.

What is the timeframe?

GSP development began in spring 2018 and will progress to adoption before January 31, 2020. During that period, Interested Party communication and engagement will be a continuous process, including the public review period for GSP approval. The Draft Paso Subbasin GSP will be available for 90 days of review during Fall 2019.

When will public input be relevant?

During GSP development, public input will be most relevant when the GSAs are framing the scope of studies, setting sustainable management criteria, developing management actions, identifying groundwater-dependent ecosystems (GDE), collecting existing and planned groundwater use information, and during public review of the draft GSP prior to DWR approval. Workshops and/or surveys will be held or conducted during GSP development for public input when it is most relevant.

How will public input be used?

GSP Regulations (Section 355.4) require that GSAs consider the interests of the beneficial uses and users of groundwater in the Subbasin. In addition, the GSAs as part of the GSP, will consider land use and property interests. Public input is essential in understanding and considering these interests and effects. During the GSP review and approval process, DWR will take public comments into account when determining whether interests within the Subbasin have been considered in the development and implementation of the GSP (Section 353.8).

7.0 COMMUNICATION + ENGAGEMENT TOOLS AND VENUES

Communication and engagement with Interested Parties may include Subbasin-wide outreach as well as engagement specifically within the individual GSA areas. Each GSA area may include a set of Interested Parties with specific interests. Each GSA will decide required levels of communication for its own GSA area and engage with Interested Parties in its GSA area as appropriate.

For Subbasin-wide interests and issues, the Cooperative Committee will communicate with Interested Parties. The Paso Robles Subbasin GSAs are committed to encouraging the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin. Therefore, outreach will be conducted through multiple and varied venues. Descriptions of these venues are presented below.

Paso GCP

Interested Parties are invited to register using the Paso GCP at www.pasogcp.com. Registrants will automatically be invited by email to activities regarding GSP development. Interested Parties may also view a calendar of events, register for upcoming events, and view materials from past events.

GSA Web Pages

Dedicated SGMA webpages for each GSA are listed below and also accessible at www.pasogcp.com. The webpages are designed to provide background information, maps, documents, status updates, useful links, contact information, and a means of communicating between the GSAs and the public.

- City of Paso Robles – www.prcity.com
- County of San Luis Obispo – www.slocountywater.org
- Heritage Ranch CSD – www.heritageranchcsd.com
- San Miguel CSD – www.sanmiguelcsd.org
- Shandon-San Juan Water District – www.ssjwd.org

Cooperative Committee Special Meetings

The Paso Robles Subbasin Cooperative Committee will host Special Meetings as-needed to cover time-sensitive GSP topics. For example, Special Meetings were hosted by the Cooperative Committee in Spring 2018 to launch the GSP process on the following topics:

- GSP Timeline, GSP requirements, and an introduction to Sustainable Management Criteria (April 23, 2018)
- Groundwater law and its connection to SGMA, State of the Subbasin (April 30, 2018)
- Projects and programs for groundwater management (May 14, 2018)
- Further information on the state of the Subbasin, and follow-up to the first three meetings (May 21, 2018)

Unless noticed as a Special Meeting, GSP-related discussions will take place during the regular meetings of the Cooperative Committee.

Cooperative Committee Regular Meetings

The Cooperative Committee meets regularly to carry out GSP activities. Regular Cooperative Committee meetings locations vary, but are typically held in the Paso Robles City Council Chambers. Meeting information, agendas, and other relevant documents are posted on the Paso GCP. The Cooperative Committee prepares and maintains minutes of its meetings, and all meetings of the Cooperative Committee are conducted in accordance with the Ralph M. Brown Act (Government Code §§ 54950 et seq.).

Public Surveys

Public surveys will be conducted when GSP development requires specific input from Interested Parties. Two public surveys were identified as of May 2018. The first was a C&E Survey, the results of which are discussed in **Appendix A** and many suggestions have been incorporated into this C&E Plan. The second survey centered around Sustainable Management Criteria/Minimum Thresholds and was conducted in Summer 2018.

Meeting feedback forms are available at public workshops to encourage Interested Party feedback on how the workshops are conducted. These feedback forms have been useful in helping the Cooperative Committee, GSA staff, and GSP consultants adapt to meet needs of Interested Parties along the way. For example, one meeting feedback form indicated that signage was needed at the meeting location to help find the correct building. Reusable directional signs were produced and displayed at the next meeting and will be available for future meetings. An example of the meeting feedback form is provided in **Appendix H**.

GSAs' Board of Directors/Supervisors/Council Meeting

Table 2 lists meetings of the governing bodies of the GSAs where interim updates regarding GSP development may be discussed as needed. See the linked websites below for the meeting agendas which may list SGMA as a topic. Stakeholders and members of the public may choose to comment at those meetings.

Table 2. GSA Regularly Scheduled Meetings

GSA / WEBSITE	DATE/TIME	LOCATION
County of San Luis Obispo www.slocounty.ca.gov/Departments/Board-of-Supervisors/Board-Meetings,-Agendas-and-Minutes.aspx	On average, twice per month	County Government Center Board of Supervisors Chambers 1055 Monterey Street San Luis Obispo, CA 93408
City of Paso Robles www.prcity.com	As-needed on the agenda of the City Council Meetings, held the first and third Tuesday of each month	Paso Robles City Hall Council Chambers 1000 Spring Street Paso Robles, CA 93446
Shandon-San Juan Water District www.ssjwd.org	As-needed on the agenda of the District Board Meetings, held on the third Tuesday of each month	Shandon High School 151 S. 1st Street Shandon, CA 93461

GSA / WEBSITE	DATE/TIME	LOCATION
Heritage Ranch CSD www.heritageranchcsd.com	As-needed on the agenda of the District Board Meetings, held on the third Thursday of each month	Heritage Ranch CSD District Office 4870 Heritage Road Paso Robles, CA 93446
San Miguel CSD www.sanmiguelcsd.org	As-needed on the agenda of the District Board Meetings, held on the fourth Thursday of each month	San Miguel CSD District Office 1150 Mission Street (Fire Station) San Miguel, CA 93451

eMail

Email blasts (emails to the entire list of Interested Parties) will be sent when there is significant information to communicate regarding GSP development. For example, email blasts are sent when Special Meetings of the Cooperative Committee are scheduled.

Individual emails will also be sent to invite known Interested Party groups to participate. For example, a letter was sent via email to local Native American Tribal governments inviting participation in the GSP process. A copy of the letter is included as **Appendix I**.

Postal Mail

Postal mail will be utilized to reach areas of the groundwater basin that may not otherwise be informed of GSP activities. For example, a postcard was mailed to Interested Parties in the San Miguel CSD GSA service area to announce the Special Meetings and launch of the Paso GCP, because the existing contact list for the San Miguel GSA included postal addresses, but not email addresses. The postcard invited these known Interested Parties in the San Miguel GSA to attend the Cooperative Committee Special Meetings and register their email address online with the Paso GCP. This postcard was also available at the Shandon-San Juan Water District Office for Interested Parties to pick up when they stopped by and was distributed to the rural communities of Jardine, Ground Squirrel Hollow, and Geneseo. The postcard is included with **Appendix J**.

Spanish Language Materials

The Cooperative Committee identified that there are potential Interested Parties who may be primarily Spanish-speaking. Because of this input, additional materials for communication about GSP development will be created in Spanish. Items identified initially for Spanish-language communications include the following:

- Postcard in Spanish to advertise Paso GCP (see **Appendix J**)
- Web page on Paso GCP written in Spanish
- Link on Paso GCP Spanish-language web page to request materials in Spanish

Adjacent Basin Meetings

Members of adjacent basins are welcome to participate in regularly scheduled Cooperative Committee meetings as well as special meetings. In addition, coordination between adjacent basins and individual GSAs will occur as needed. The names and GSP deadlines for basins adjacent are shown in **Table 3**.

Table 3. Basins Adjacent to the Paso Robles Subbasin

Basin	Basin Prioritization	GSP Due Date
Atascadero Subbasin	Draft 2018 DWR basin prioritization as Very Low (subject to change)	Pending final DWR basin prioritization
Lockwood Valley Basin	Very Low	N/A
Salinas Basin - Upper Valley Aquifer	Medium	January 31, 2022
Cholame Valley Basin	Very Low	N/A
Carrizo Plain Basin	Very Low	N/A

Public Hearings

Notices of public hearings are published in a variety of media, including radio and local newspapers, informing the public on meeting information, subject, and how to provide comments prior to decision making. Public hearings will also be noticed through the Paso GCP. At a minimum, a Public Hearing will be held when adopting or amending the GSP, or imposing or increasing a fee.

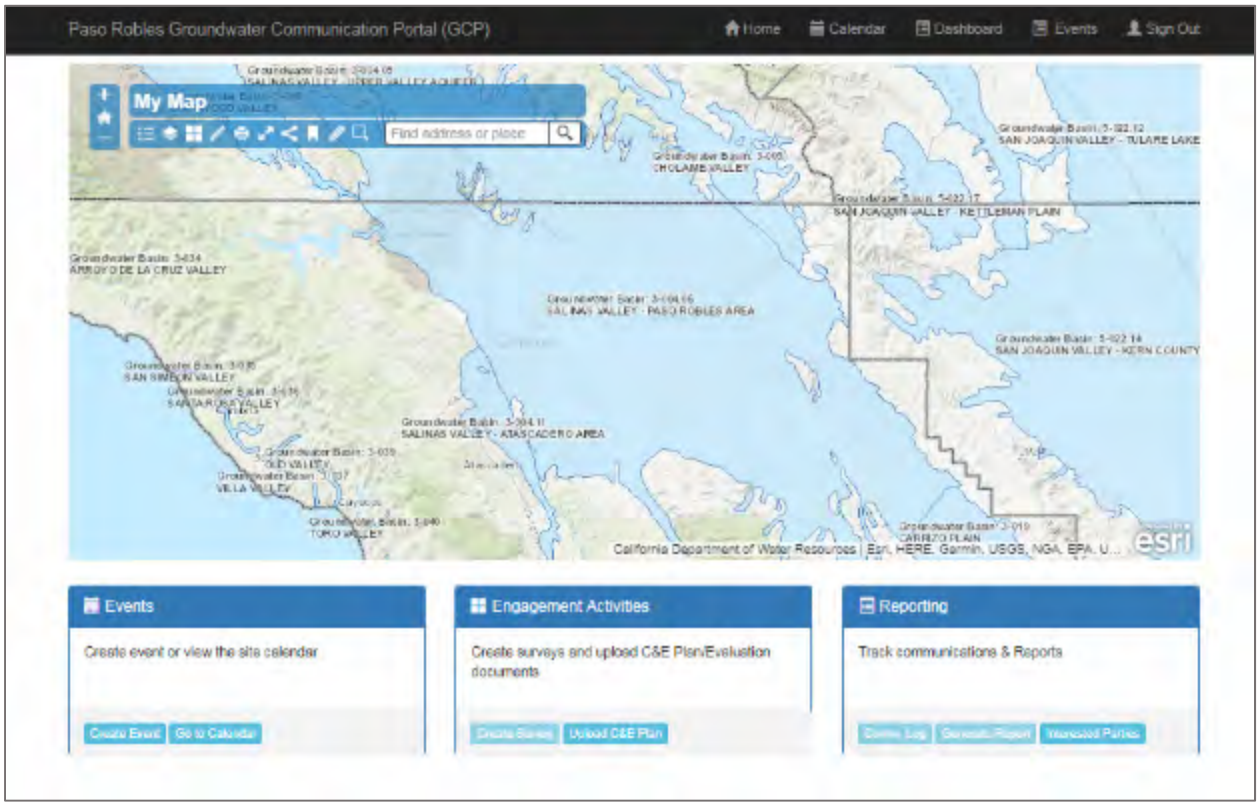
8.0 TRACK AND EVALUATE COMMUNICATIONS AND ENGAGEMENT

The Paso GCP (see **Appendix B**) tracks communications and engagement efforts for the Paso Robles Subbasin GSAs.

The Paso GCP serves as a repository for information about public meetings and interested parties. It tracks outreach efforts by the GSAs in its database; storing meeting attendance information, logging targeted outreach, and hosting the Interested Parties list.

Tool administrators can generate reports about meetings related to GSP planning. The reports include items such as attendance sheets, RSVPs, agendas, minutes, handouts, and presentations. Reports such as these will be included with the final Paso Robles Subbasin GSP as submitted to DWR.

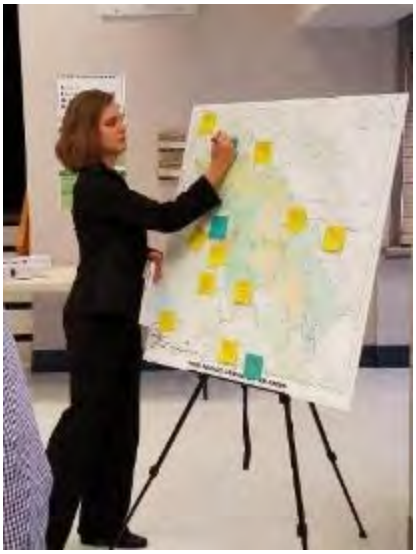
GSAs continually evaluate communications and engagement efforts as they are executed following this C&E Plan. This evaluation is conducted through the Cooperative Committee, GSA Staff, and GSP Consultant observations, as well as through feedback from Interested Parties via online surveys and meeting feedback forms. The Cooperative Committee, GSA Staff, and GSP Consultants will assess needs and update this C&E Plan as necessary.



The Paso GCP is the primary tool for tracking communication and engagement in the Paso Robles Subbasin. Above is a view of the Administrator's dashboard, where site administrators can post events, upload documents, and generate reports regarding communication and engagement.

9.0 SUMMARY

Interested Parties' communication and outreach activities are essential in GSP development. Only through effective communication and outreach can Interested Parties' concerns, issues, and aspirations be consistently understood and considered in the GSAs' decision-making process. Moreover, the C&E Plan process will be ongoing, starting with GSP development and continuing through implementation of the approved GSP for the Paso Robles Subbasin. As in GSP development, periodic reviews and adjustments of the C&E Plan process may be necessary. The goal is to develop and implement a robust Interested Parties C&E Plan process so we may achieve sustainability and manage our valuable shared groundwater resource for future generations.



Interested Parties, GSA Staff Member Dick McKinley of City of Paso Robles GSA, and consultants Matthew Payne and Lydia Holmes at a public workshop in May 2018.

APPENDICES

Appendix A. Statutory Table

Legislative/Regulatory Requirement	Legislative/Regulatory Section Reference	C&E Plan Section
Publish public notices and conduct public meetings when establishing a GSA, adopting or amending a GSP, or imposing or increasing a fee.	SGMA Sections 10723(b), 10728.4, and 10730(b)(1).	7.0
Maintain a list of, and communicate directly with, interested parties.	SGMA Sections 10723.4, 10730(b)(2), and 10723.8(a)	4.0
Consider the interests of all beneficial uses and users of groundwater.	SGMA Section 10723.2	4.0
Provide a written statement describing how interested parties may participate in plan [GSP] development and implementation, as well as a list of interested parties, at the time of GSA formation.	SGMA Sections 10723.8(a) and 10727.8(a)	4.0
Encourage active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin.	SGMA Section 10727.8(a)	7.0
Understand that any federally recognized Indian Tribe may voluntarily agree to participate in the planning, financing, and management of groundwater basins – refer to DWR's Engagement with Tribal Governments Guidance Document for Tribal recommended communication procedures.	SGMA 10720.3(c)	7.0
Description of beneficial uses and users of groundwater in the basin	GSP Regulations §354.10	3.0
List of public meetings at which the Plan [GSP] was discussed or considered	GSP Regulations §354.10	Appendix E
Comments regarding the Plan [GSP] received by the Agency and a summary of responses	GSP Regulations §354.10	N/A at time of publication
A communication section that includes the following (GSP Regulations §354.10):		
Explanation of the Agency's decision-making process	GSP Regulations §354.10	4.0
Identification of opportunities for public engagement and discussion of how public input and response will be used	GSP Regulations §354.10	7.0
Description of how the Agency encourages active involvement of diverse social, cultural, and economic elements of the population within the basin	GSP Regulations §354.10	7.0
The method the Agency will follow to inform the public about progress implementing the Plan [GSP], including the status of projects and actions	GSP Regulations §354.10	7.0

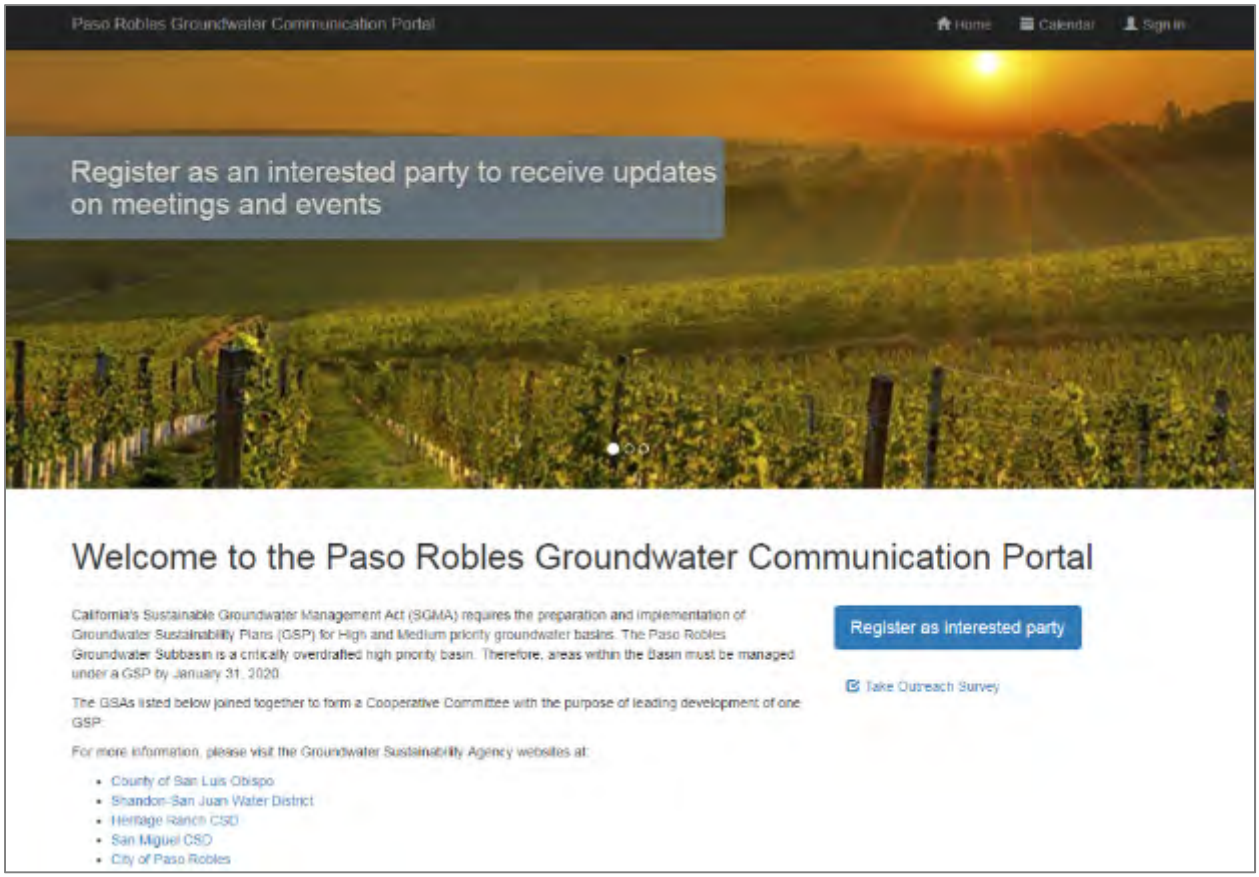
Appendix B. Paso Robles Subbasin Groundwater Communication Portal

The Paso Robles Subbasin Groundwater Communication Portal (Paso GCP) is a web-based outreach tool for Paso Subbasin GSAs to post events and automatically inform Interested Parties about GSP development. Interested Parties can visit the website and register their email address to stay informed about upcoming activities.

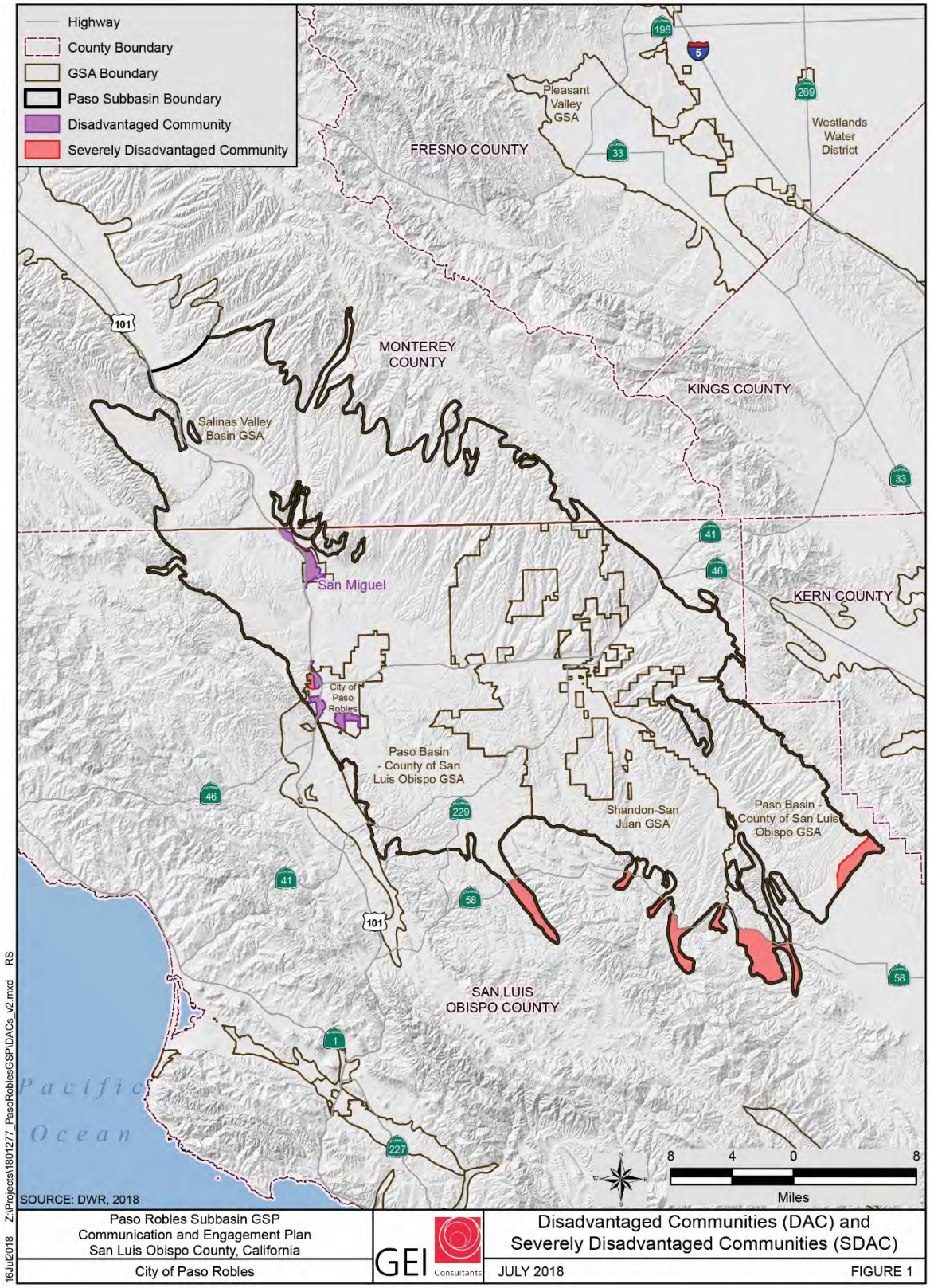
The Paso GCP serves as a repository for GSA information about Paso Robles Subbasin meetings, communications, and Interested Parties. It tracks outreach efforts by the GSAs; storing meeting attendance information, logging targeted outreach, and hosting the interested parties list.

Tool administrators can generate reports about GSP outreach activities. The reports include items such as attendance sheets, RSVPs, agendas, minutes, handouts, and presentations.

Paso GCP Home Page



Appendix C.Disadvantaged Communities in the Paso Robles Subbasin



Appendix D. Initial Interested Parties List

Pursuant to the California Water Code Section 10723.2, the Paso Robles Subbasin GSAs will consider the interest of all beneficial uses and users of groundwater when developing and implementing the Paso Robles Subbasin GSP.

The five Paso Robles Subbasin GSAs[2], party to the MOA, developed lists of Interested Parties and submitted those lists to DWR at the time of GSA formation. A compiled list of those submissions is provided below. This initial list, plus individuals who expressed interest in receiving updates about GSP development via the San Luis Obispo County website, were imported into the Paso GCP (presented in **Appendix B**) in May 2018. The Paso GCP automatically notifies the Interested Parties list via email when GSP-related events are scheduled in the Paso Robles Subbasin. The list continues to grow as additional Interested Parties self-register or are otherwise identified.

Agency

- Atascadero Basin GSA
- City of Paso Robles
- County of Monterey
- County of San Luis Obispo
- Creston School District
- Estrella-El Pomar-Creston Water District
- Heritage Ranch CSD
- Monterey County Parks Department
- Monterey County Water Resources Agency
- Paso Robles Unified School District
- Salinas Valley GSA
- San Luis Obispo County Flood Control & Water Conservation District
- San Miguel CSD
- San Miguel Joint Union School District
- Shandon San Juan Water District
- Shandon Unified School District
- Templeton CSD
- U.S. Department of Commerce – National Oceanic and Atmospheric Administration

Water Corporations Regulated by PUC or a Mutual Water Company

- Atascadero Mutual Water Company
- Green River Mutual Water Company
- Mustang Springs Mutual Water Company
- Rancho Salinas Mutual Benefit Water Company
- Santa Ysabel Ranch Mutual Water Company
- Spanish Lakes Mutual Water Company
- Walnut Hills Mutual Water Company

[2] City of Paso Robles GSA, County of San Luis Obispo GSA, Shandon-San Juan GSA, San Miguel GSA, and Heritage Ranch GSA

Agricultural users

- Agricultural landowners (individuals)_
- Agricultural Liaison Advisory Board (ALAB)
- Central Coast Vineyard Team
- Central Coast Wine Grape Growers Association
- Farm Bureau
- Grower-Shipper Association
- Independent Grape Growers of Paso Robles
- Local Chapter California Certified Organic Farms
- North County Farmers Market Association
- Paso Robles Vintners and Growers Association
- Paso Robles Wine Country Alliance
- SLO County Cattlemen
- SLO County Cattlewomen
- SLO County Farm Supply
- UC Cooperative Extension
- Upper Salinas-Las Tablas Resource Conservation District
- USDA Conservation Service
- USDA Farm Service Agency
- 4-H Clubs

Domestic well owners

- Individual rural residential/suburban landowners

Municipal well operators

- Covered in other categories

Public water systems (per EHS records)

- Almira Water Association
- Arciero Winery
- Cal Trans Shandon Rest Stop
- Camp Roberts
- Creston Country Store
- Creston Elementary School
- El Paso De Robles Youth Correction Facility
- Huerhuero Ranch
- Hunter Ranch Golf Course
- Jack Ranch Cafe
- Links at Lista Del Hombre
- Loading Chute
- Longbranch Saloon
- Los Robles Mobile Estates
- Meridian Vineyard
- North River Road
- Paso Robles RV Ranch
- Paso Robles Truck Plaza (San Paso)

- Pete Johnston GM
- Pleasant Valley Elementary
- SATCOM
- Shandon CSA

Local land use planning agencies

- City of Atascadero
- City of Paso Robles
- County of San Luis Obispo
- San Luis Obispo Council of Government (SLO COG)

Environmental users of groundwater

- Various agencies on this list address environmental concerns related to groundwater and the Paso Robles Subbasin GSAs will work with them to consider and protect such interests.

Surface water users (if hydrologic connection)

- Atascadero Community Services District (CSD)
- City of Paso Robles
- City of San Luis Obispo
- Heritage Ranch CSD
- Templeton CSD

Federal government

- Camp Roberts
- National Marine Fisheries Service
- U.S. Fish & Wildlife

California Native American tribes

- Chumash
- Salinan

Disadvantaged communities

- There are disadvantaged communities in the Paso Robles Subbasin, particularly in the southern portion of the Subbasin, where there are severely disadvantaged communities.

Entities monitoring and reporting groundwater in the Subbasin

- Various of the agencies and water companies listed above collect and report groundwater data including at the County and State level (CASGEM).

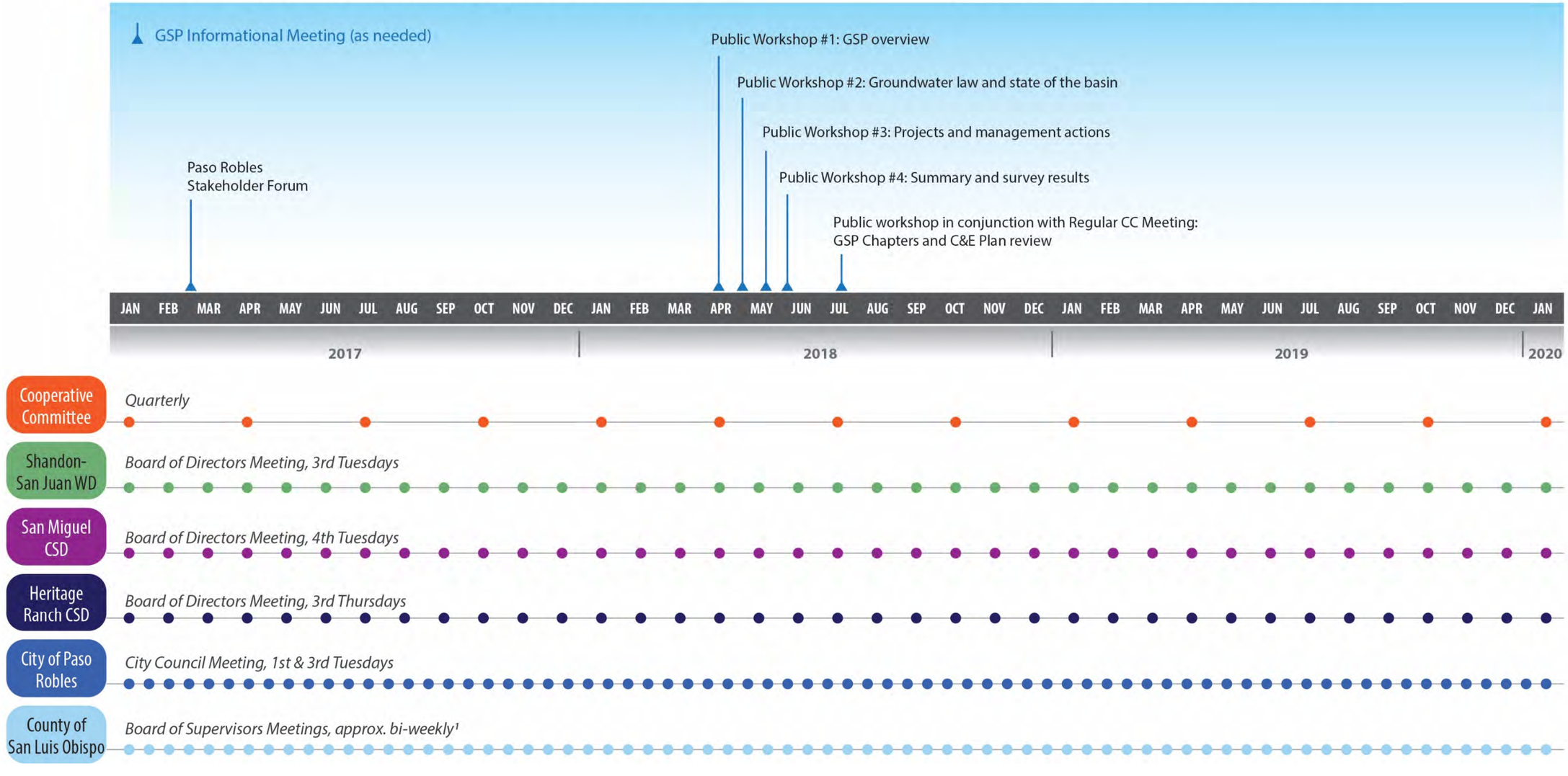
Appendix E. Preliminary Engagement Schedule

NOTES

1. See San Luis Obispo County Board of Supervisors meeting schedule online at http://www.slocounty.ca.gov/Departments/Administrative-Office/Board-of-Supervisors-Agenda.aspx
2. Schedule is representative. Dates subject to change.
3. Visit the Paso Robles Groundwater Communication Portal (Paso GCP) at www.pasogcp.com to see up-to-date information on Interested Party engagement opportunities.

Paso Robles Subbasin GSP Development

Preliminary Stakeholder Engagement Schedule



Appendix F. Media Contacts List

Press releases regarding GSP development public workshops are sent to the following contacts.

- Atascadero Mutual Water Company
- Atascadero News
- City of Atascadero
- City of Paso Robles
- County Administrator
- County Blade
- Cuestonian - Cuesta College
- KCBX
- KCOY-TV (NPG of California)
- KCPR
- KEYT KCOY KKFX
- KGUR
- KIDI FM/ KTAP
- KKJG/ KZOZ/ KKAL/KSTT/KVEC
- KPRL
- KPYG/ KWWV/ KXDZ/ KXTZ/ KYNS
- KSBW
- KSBY-TV
- KSMA/ KVEC/KJUG
- KTAS-TV, Telemundo
- KUHL-AM
- Los Osos Bay News; SLO City News; Coast News
- Monterey County Water Resources Agency
- Monterey Herald
- Mustang Daily
- New Times
- Paso Robles Chamber of Commerce
- Paso Robles Daily News
- Paso Robles Press
- Paso Robles Unified School District
- Pleasant Valley Joint Union School Dist.
- San Luis Obispo County Admin Analyst
- San Luis Obispo County Public Works
- San Miguel Community Services District
- San Miguel Joint School District
- SGMA/Calif Department of Water Resources & RWQCB
- Shandon Unified School District
- SLO County Board of Supervisors Secretary
- Soaring Eagle Press
- Templeton Chamber of Commerce
- Templeton Community Services District
- Templeton Unified School District
- The Tribune / County Digest

Appendix G. C&E Survey Results

From May 4 to May 18, 2018 a public survey was conducted to evaluate best methods for communication and engagement in the Paso Robles Subbasin. An invitation was sent to over 500 Interested Party contacts in the Paso GCP database. Over 100 Interested Parties responded and completed the survey. The results of the survey guided the formation of this C&E Plan and were presented at the May 21, 2018 Special Meeting of the Cooperative Committee. The presentation slides from that meeting are presented on the following pages.

How the Survey Results Were Used

The C&E Survey identified many methods in which the Interested Parties could receive information and provide input into the GSP process. As a result of the Survey, certain communication methods are emphasized in the C&E Plan, such as the development of the Paso Groundwater Communication Portal (Paso GCP) where Interested Parties can receive information in one consolidated location rather than seek information from all five individual GSA websites. Information posted to the Paso GCP includes meeting announcements, notes and materials provided at the meetings, FACT Sheets, frequently asked questions (FAQ), and important documents related to the SGMA GSP development process. In addition, the Paso GCP will provide input opportunities for Interested Parties to comment on the GSP process.

Many of the Interested Parties requests were accommodated through a meeting feedback form (see **Appendix H**) that was available at the four Informational Meetings held in Spring 2018. Subsequent actions as a result of the meeting feedback forms included:

- Providing clear signage to the meeting location
- Incorporating topics of interest expressed by Interested Parties to be discussed at the meetings
- Adding station-facilitated exercises where the Interested Parties could participate in smaller groups with the Cooperative Committee, GSA Staff, and Consultants on-hand for open dialog and interactive discussion for input.
- Developing specific outreach postcards for communities identified by Interested Parties, including both Disadvantaged Communities and Rural communities which may not have received electronic information.

We are appreciative of all those Interested Parties that participated in the online C&E Survey and the meeting feedback forms to improve the Paso GSP outreach process to be most effective.

COMMUNICATION AND ENGAGEMENT SURVEY RESULTS

Paso Robles Basin GSAs
City of Paso Robles
County of San Luis Obispo
Heritage Ranch CSD
San Miguel CSD
Shandon-San Juan Water District

May 21, 2018

Paso Robles Basin

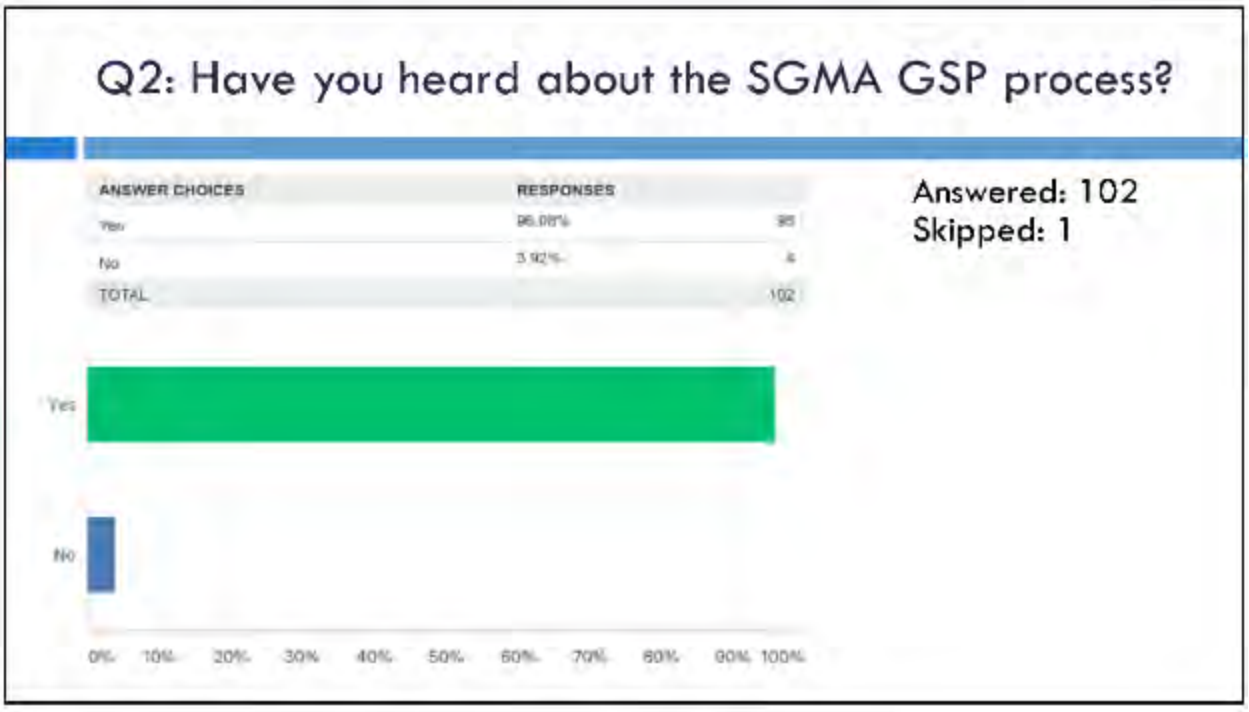
COMMUNICATION AND ENGAGEMENT SURVEY

103

Total Responses

- Date Opened: Friday, May 04, 2018
- Date Closed: Friday, May 18, 2018
- Complete Responses: 103

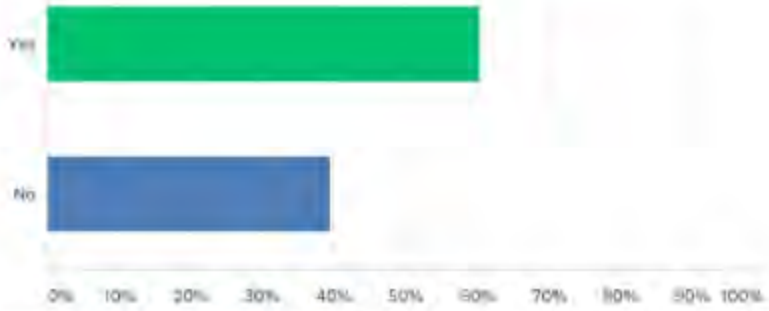

Q1: Have you participated in a public process before?
ANSWER CHOICES
RESPONSES
Yes
75.25%
76
No
24.75%
25
TOTAL
101
Answered: 101
Skipped: 2
Yes
No
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%


Q2: Have you heard about the SGMA GSP process?
ANSWER CHOICES
RESPONSES
Yes
96.08%
98
No
3.92%
4
TOTAL
102
Answered: 102
Skipped: 1
Yes
No
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Q3: Have you been involved in other water supply public processes in the past?

ANSWER CHOICES	RESPONSES	
Yes	60.40%	61
No	39.60%	40
TOTAL		101

Answered: 101
Skipped: 2



Q4: What is your level of interest in providing input on the planning and implementation of the SGMA GSP process?

	LEAST INTEREST ☆	☆☆	☆☆☆	☆☆☆☆	MOST INTEREST ☆☆☆☆☆	TOTAL	WEIGHTED AVERAGE
☆	1.96% 2	1.96% 2	13.73% 14	23.53% 24	58.82% 60	102	4.38

Answered: 102
Skipped: 1

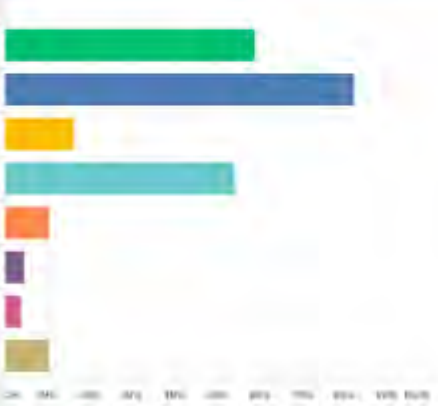
Q5: How would you like to provide input on the SGMA GSP process? Choose all that apply.

ANSWER CHOICES	RESPONSES	
Through a comment portal online	67.96%	70
Using social media	12.62%	13
During in-person meetings	55.34%	57
By reviewing draft project documents	70.87%	73
Other (please specify)	6.80%	7
Total Respondents: 103		

Answered: 103 Skipped: 0

Q6: How would you like to receive information about the GSP process? Choose all that apply.

ANSWER CHOICES	RESPONSES	
Website updates	59.22%	61
E-blasts/newsletters	82.52%	85
Flyers/community postings	16.50%	17
Meetings	54.37%	56
Social media: Facebook	10.68%	11
Social media: Nextdoor	4.85%	5
Social media: Twitter	3.88%	4
Other (please specify)	10.68%	11
Total Respondents: 103		

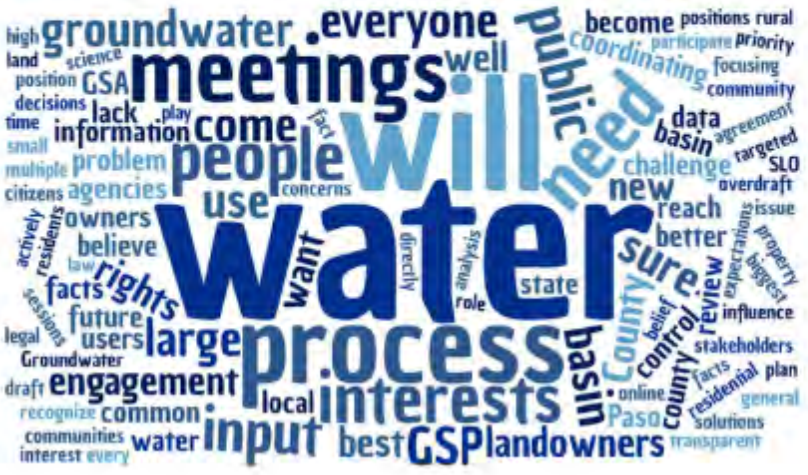


Answered: 103 Skipped: 0

Q7: What SGMA topics and information are of interest to you?

Answered: 96
Skipped: 7

Q8: What potential challenges do you anticipate regarding engagement? How can they be addressed?



Answered: 91
Skipped: 12

Q9: What would be a successful outcome for the GSP from your perspective?

Answered: 97
Skipped: 6

Q10. Who else do you think needs to be involved in the planning and implementation of the SGMA GSP?

Answered: 81
Skipped: 22