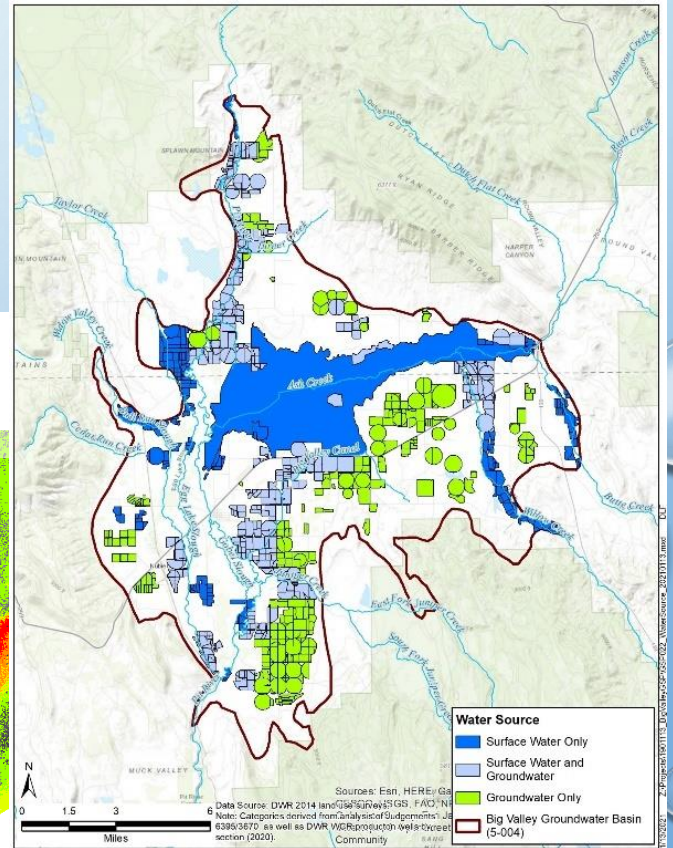
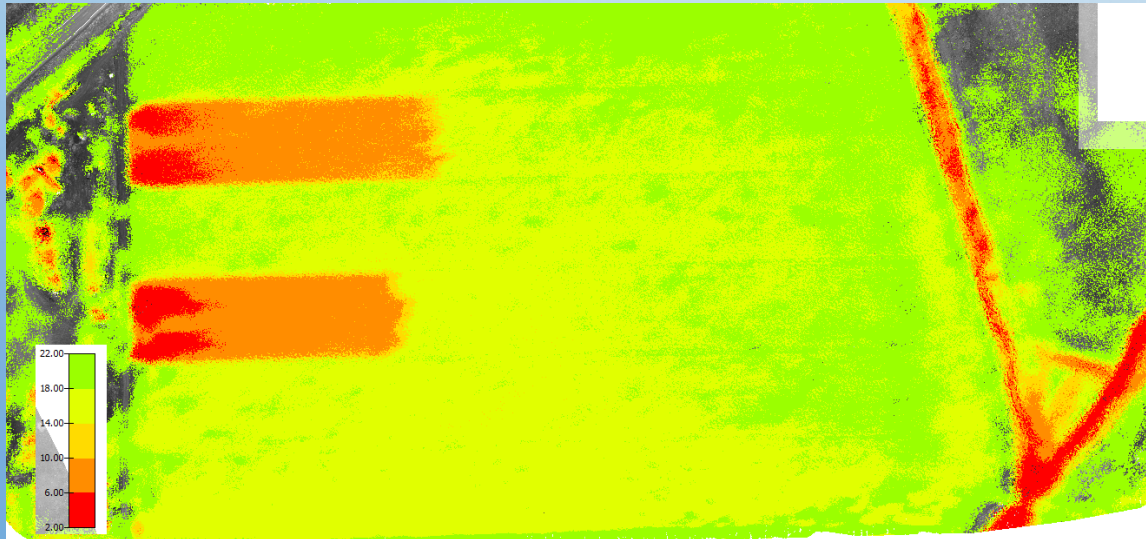


The background is a light blue gradient. It is decorated with numerous water droplets of various sizes. Some droplets are large and prominent, while others are small and subtle. They are scattered across the slide, with a higher concentration in the top-left and bottom-right corners.

# LASSEN-MODOC FLOOD CONTROL AND WATER CONSERVATION DISTRICT

OCTOBER 4, 2021

# BIG VALLEY GROUNDWATER SUSTAINABILITY PLAN



# SGMA DEVELOPMENT TIMELINE (SUSTAINABLE GROUNDWATER MANAGEMENT ACT)

- 2014 SGMA BECOMES A LAW
- 2018 BIG VALLEY DECLARED A MEDIUM PRIORITY BASIN
- 2019 DEVELOPMENT OF TWO GROUNDWATER SUSTAINABILITY AGENCIES (GSA) - MODOC AND LASSEN COUNTIES
- 2020 DEVELOPMENT OF THE BIG VALLEY ADVISORY COMMITTEE (BVAC)
- SINCE 2020 MEETING ALMOST EVERY MONTH
  - FIRST WEDNESDAY OF THE MONTH AT 4:00PM ROTATING ADIN AND BIEBER



# The Road to Sustainability

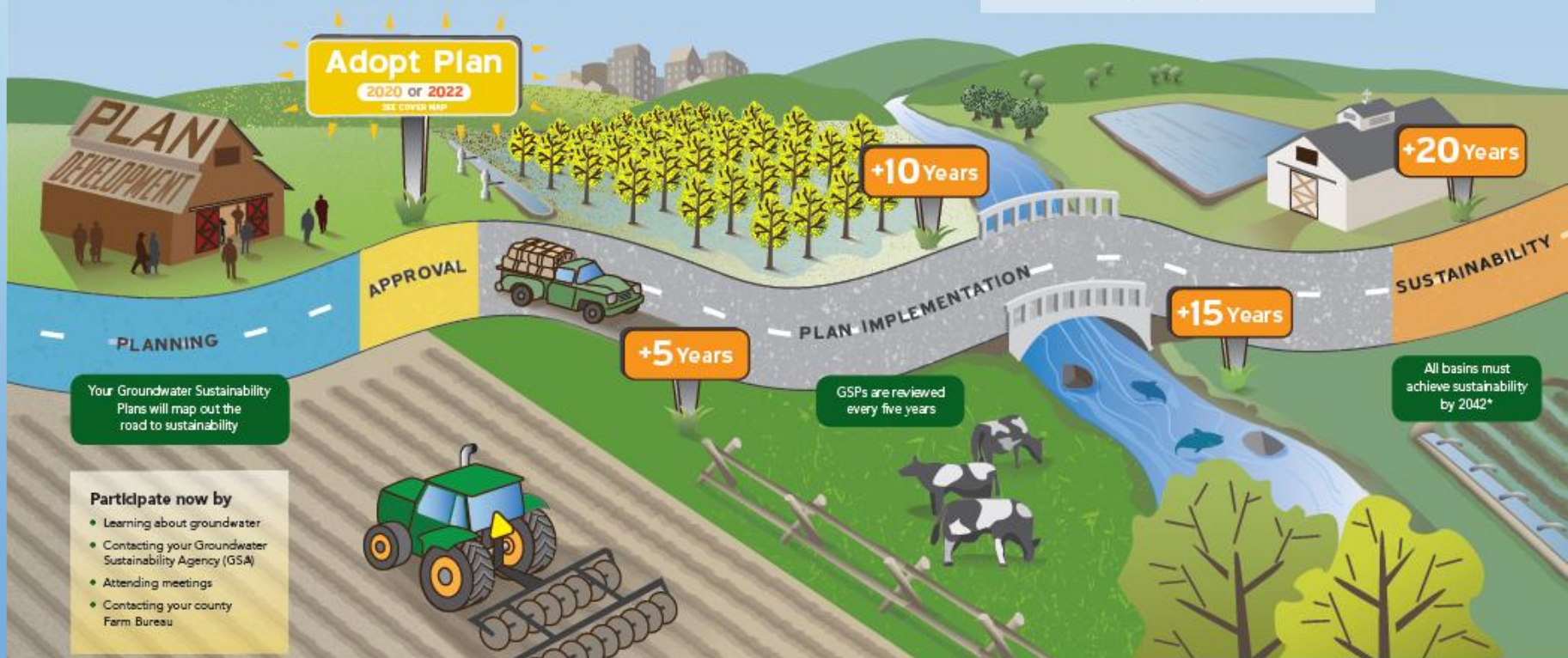
## Learn and Engage!

Participate now to represent your interest. SGMA stresses local group formation, local plans and local management.

SGMA plans will reflect local conditions and can include local solutions. Once approved by the state, your local plan represents a commitment to future actions.

### Let's be clear:

- SGMA will affect your groundwater pumping
- SGMA establishes new responsibilities to share groundwater
- SGMA will change how we use land and water
- SGMA does not change water rights



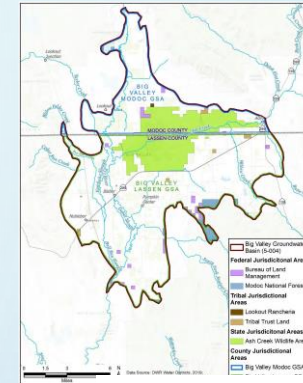
# CHAPTER PROCESS

## 1 INTRODUCTION

## 2 AGENCY INFORMATION

## 3 DESCRIPTION OF PLAN AREA

### Background

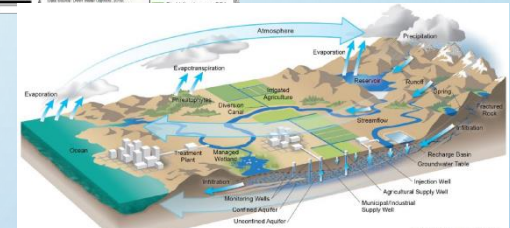


## 4 HYDROGEOLOGIC CONCEPTUAL MODEL

## 5 GROUNDWATER CONDITIONS

## 6 WATER BUDGET

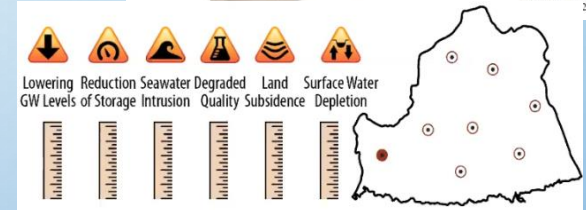
### Science



## 7 SUSTAINABLE MANAGEMENT CRITERIA

## 8 MONITORING NETWORKS

### Management Plan



## 9 PROJECTS AND MANAGEMENT ACTIONS

## 10 IMPLEMENTATION PLAN

## 11 NOTICE AND COMMUNICATIONS

## 12 INTERAGENCY AGREEMENTS

## REFERENCE LIST

### Implementation



Source: UCANR Andrew Brown



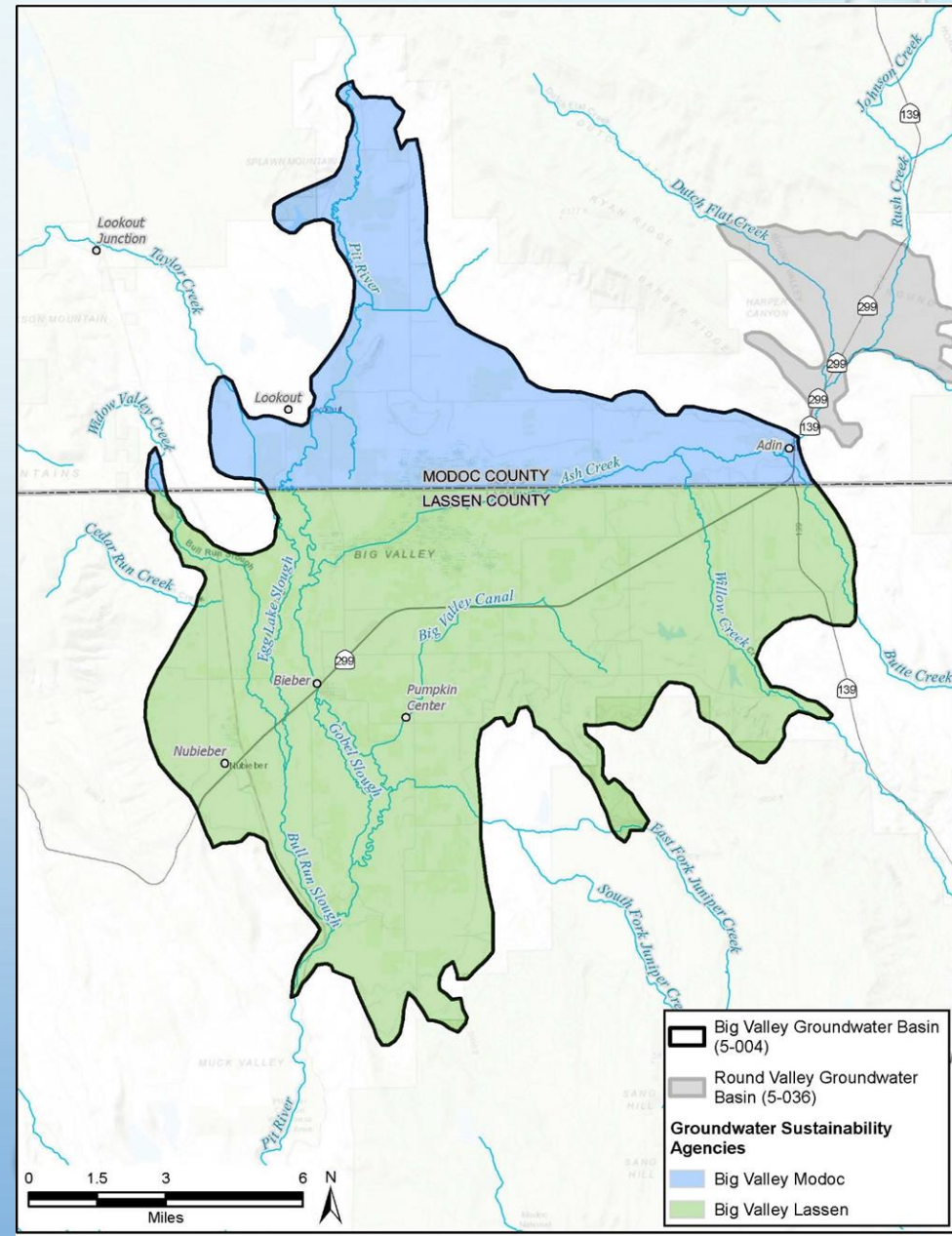
Source: Westlands Water District



# CHAPTER 1-3

## INTRODUCTION AND PLAN AREA

- UNIQUE CHARACTERISTICS OF BIG VALLEY BASIN
- ESTABLISH MODOC AND LASSEN COUNTY GROUNDWATER SUSTAINABILITY AGENCIES (GSA)







# SUSTAINABILITY GOAL

TEXT FOR SUSTAINABILITY GOAL FROM CHAPTER 1

***THE SUSTAINABILITY GOAL FOR THE BIG VALLEY GROUNDWATER BASIN IS TO MAINTAIN A LOCALLY GOVERNED, ECONOMICALLY FEASIBLE, SUSTAINABLE GROUNDWATER BASIN AND SURROUNDING WATERSHED FOR EXISTING AND FUTURE LEGAL BENEFICIAL USES WITH A CONCENTRATION ON AGRICULTURE. SUSTAINABLE MANAGEMENT WILL BE CONDUCTED IN CONTEXT WITH THE UNIQUE CULTURE OF THE BASIN, CHARACTER OF THE COMMUNITY, QUALITY OF LIFE OF THE BIG VALLEY RESIDENTS, AND THE VESTED RIGHT OF AGRICULTURAL PURSUITS THROUGH THE CONTINUED USE OF GROUNDWATER AND SURFACE WATER.***

- THE UNDERSTANDING THAT HAS BEEN GAINED BY THE GSAS IS THAT WITH PROPER MANAGEMENT AND COORDINATION WITH AND SUPPORT FROM FEDERAL LANDOWNER PARTNERS, THE BIG VALLEY BASIN WILL REMAIN SUSTAINABLE FOR THE BENEFIT OF ALL INTERESTED PARTIES.



# CHAPTER 4-5

## CURRENT GROUNDWATER CONDITIONS

- LAKE DEPOSIT AND VOLCANIC SOILS
- NATURAL WETLANDS
- GOOD-EXCELLENT WATER QUALITY
- CHANGE IN WATER LEVELS

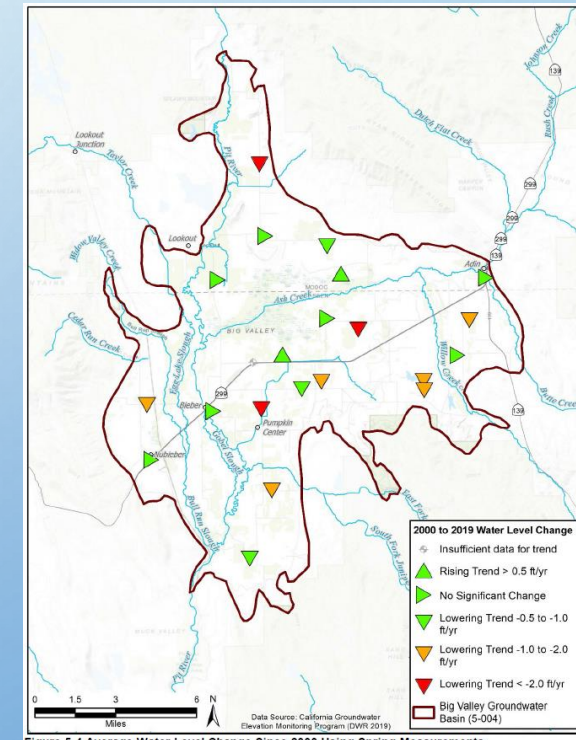
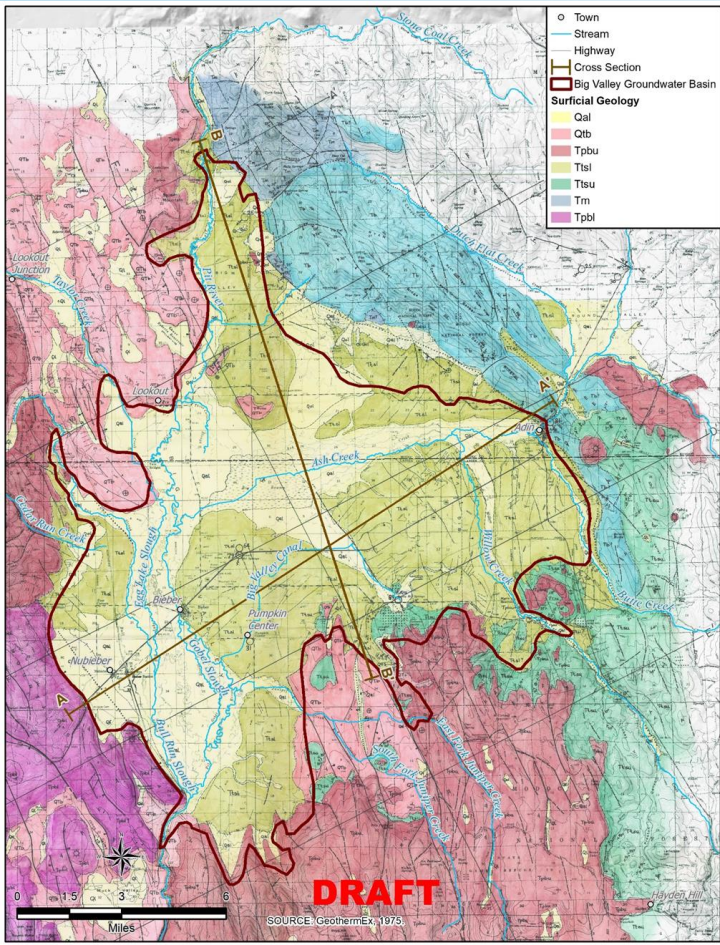
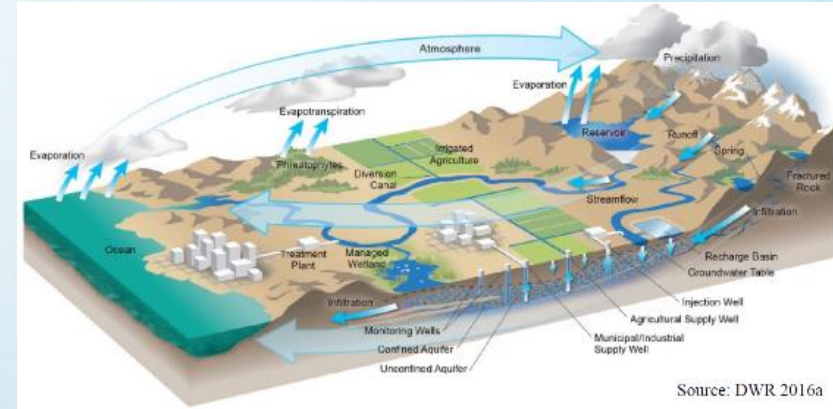


Figure 5-4 Average Water Level Change Since 2000 Using Spring Measurements

# CHAPTER 6

- WATER BUDGET – BEST AVAILABLE SCIENCE
  - ANNUAL NEED OF ABOUT 44,500 ACRE-FEET WATER
  - ANNUAL RECHARGE 39,500 ACRE-FEET
  - = 5,000 ACRE-FEET NEEDED ANNUALLY FOR SUSTAINABILITY



Ground-  
water  
Recharge

Ground-  
water  
Use



# CHAPTER 7

## SUSTAINABLE GROUNDWATER MANAGEMENT CRITERIA



Lowering Groundwater Levels



Reduction of Storage



~~Seawater Intrusion~~



Degraded Quality



Land Subsidence



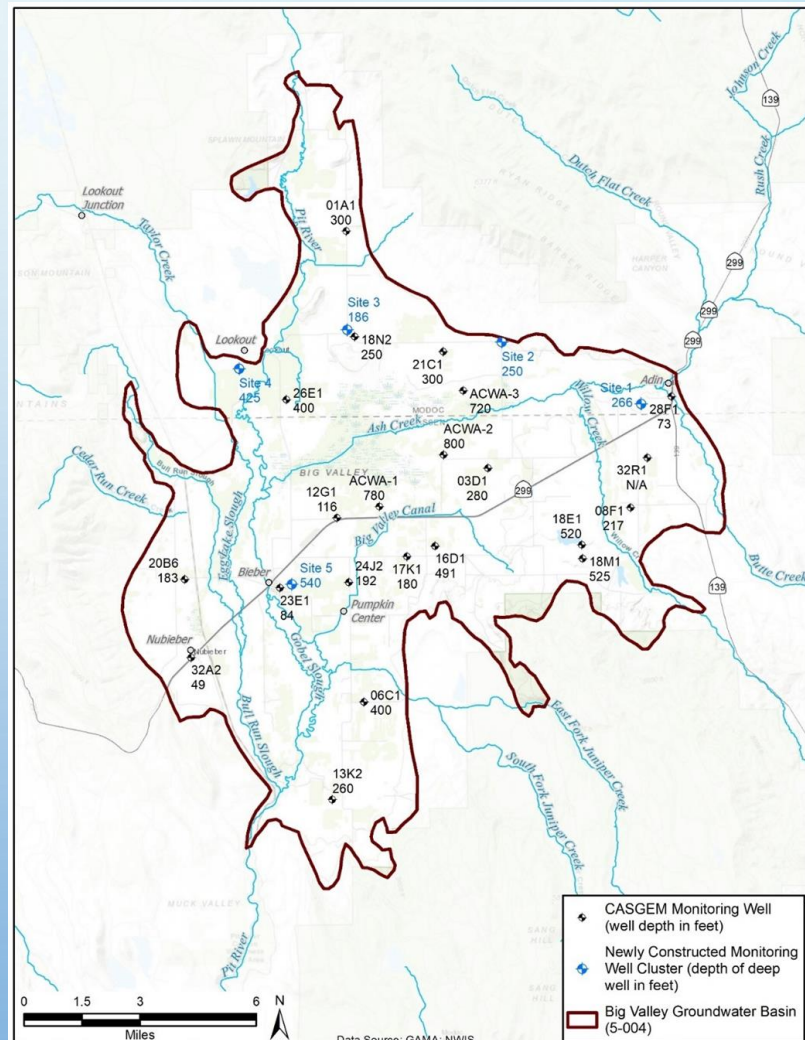
Surface Water Depletion

- SIGNIFICANT AND UNREASONABLE RESULTS
- BASELINE 2015
- SUSTAINABLE BY 2042

# CHAPTER 8

## MONITORING NETWORKS

- DEDICATED MONITORING WELLS
- ADDITIONAL CASGM MONITORING
- MONITORING ALL SUSTAINABILITY INDICATORS





# CHAPTER 9

## PROJECTS AND MANAGEMENT ACTIONS

No.	Category	Description	Estimated Time for Potential Implementation (years)		
			0-2	2-8	>8
1	9.1 Recharge Projects	AgMAR	X	X	X
2		Drainage and Basin Recharge	X	X	X
3		Ag Injection Wells			X
4	9.2 Research and Data Development	Stream Gauges	X		
5		Refined Water Budget	X	X	
6		Agro-Climate Station	X		
7		Voluntary Installation of Well Meters	X	X	
8		Adaptive Management	X	X	X
9		Mapping and Land Use	X	X	
10	9.3 Increased Storage Capacity	Expanding Existing Reservoirs		X	
11		Allan Camp Dam			X
12	9.4 Improved Hydrologic Function	Forest Thinning and Management	X	X	X
13		Juniper Removal	X	X	X
14		Stream and Meadow Restoration	X	X	X
15	9.5 Water Conservation	Irrigation Efficiency	X	X	
16		Landscaping and Domestic Water Conservation	X	X	
17		Conservation Projects	X	X	
18	9.6 Education and Outreach	Public Communication	X		
19		Information and Data Sharing	X	X	
20		Fostering Relationships	X		
21		Compiling Efforts	X	X	
22		Educational Workshops	X		

# CHAPTER 10-12

## IMPLEMENTATION PLAN AND ADMINISTRATION

- MONITORING NETWORKS
- ANNUAL REPORTS, 5 YEAR PLAN UPDATES





# WHAT IS NEXT?

- THE BVAC (BIG VALLEY GROUNDWATER BASIN ADVISORY COMMITTEE) MEETS WEDNESDAY, OCTOBER 6, 2021, AND WILL CONSIDER REFERRING THE GSP TO THE TWO BOARDS (AS THE GSA FOR THEIR PORTION OF THE BASIN).
- A PUBLIC REVIEW PERIOD WILL BE CONDUCTED (LIKELY 30 TO 45 DAYS).
- AT LEAST ONE PUBLIC HEARING WILL BE CONDUCTED BY EACH GSA ON OR AFTER DECEMBER 14, 2021.
- THE GROUNDWATER SUSTAINABILITY PLAN MUST BE SUBMITTED TO DWR BY JANUARY 31, 2022.