



CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY STANDING ADVISORY COMMITTEE

Committee Members

Roberta Jaffe (Chair)
Brenton Kelly (Vice Chair)

Brad DeBranch
Louise Draucker
Jake Furstenfeld

Joe Haslett
Mike Post
Hilda Leticia Valenzuela

AGENDA

March 28, 2019

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee to be held on Thursday, March 28, 2019 at 4:00 PM, at the Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254. To hear the session live, call (888) 222-0475, code: 6375195#.

Teleconference Locations:

Cuyama Valley Family Resource Center 4689 CA-166 New Cuyama, CA 93254	7870 Fairchild Ave Winnetka, CA 91306
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The order in which agenda items are discussed may be changed to accommodate scheduling or other needs of the Committee, the public or meeting participants. Members of the public are encouraged to arrive at the commencement of the meeting to ensure that they are present for Committee discussion of all items in which they are interested.

In compliance with the Americans with Disabilities Act, if you need disability-related modifications or accommodations, including auxiliary aids or services, to participate in this meeting, please contact Taylor Blakslee at (661) 477-3385 by 4:00 p.m. on the Friday prior to this meeting. Agenda backup information and any public records provided to the Committee after the posting of the agenda for this meeting will be available for public review at 4689 CA-166, New Cuyama, CA 93254. The Cuyama Basin Groundwater Sustainability Agency reserves the right to limit each speaker to three (3) minutes per subject or topic.

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Approval of Minutes
5. Groundwater Sustainability Plan
 - a. Groundwater Sustainability Plan Update
 - i. Direction on Eastern Region Sustainability Thresholds
 - ii. Discussion on Placeholder Section
 - iii. Review of Options for Management Area Governance
 - iv. Update on Sustainability and Climate Change Modeling

- v. Direction on Implementation Plan Interim Milestones (i.e. Glide Path)
 - b. Technical Forum Update
 - c. Stakeholder Engagement Update
 - i. Review of Public Draft Comment Period
- 6. Groundwater Sustainability Agency
 - a. Notice of Standing Advisory Committee Resignation
 - b. Report of the Executive Director
 - c. Board of Directors Agenda Review
 - d. Report of the General Counsel
- 7. Items for Upcoming Sessions
- 8. Committee Forum
- 9. Public comment for items not on the Agenda

At this time, the public may address the Committee on any item not appearing on the agenda that is within the subject matter jurisdiction of the Committee. Persons wishing to address the Committee should fill out a comment card and submit it to the Executive Director prior to the meeting.

- 10. Adjourn

Cuyama Basin Groundwater Sustainability Agency Special Standing Advisory Committee Meeting

February 28, 2019

Draft Meetings Minutes

Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254

PRESENT:

Jaffe, Roberta – Chair
Kelly, Brenton – Vice Chair
DeBranch, Brad
Draucker, Louise
Furstenfeld, Jake
Haslett, Joe
Post, Mike (*telephonic*)
Valenzuela, Hilda Leticia
Beck, Jim – Executive Director
Hughes, Joe – Legal Counsel (*telephonic*)

ABSENT:

Alvarado, Claudia

1. Call to Order

Chair Roberta Jaffe called the Standing Advisory Committee (SAC) to order at 2:00 p.m.

2. Roll Call

Hallmark Group Project Coordinator Taylor Blakslee called roll of the Committee (shown above).

Woodard & Curran (W&C) Senior Water Resources Engineer Lyndel Melton, Catalyst Group Principal Strategist Charles Gardiner, Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board Director Derek Yurosek, and legal counsel Joe Hughes participated telephonically and CBGSA Board Director Jane Wooster was in the room.

3. Pledge of Allegiance

The pledge of allegiance was led by Chair Jaffe.

4. Approval of Minutes

Chair Jaffe presented the January 31, 2019 SAC minutes.

MOTION

Committee Member Mike Post made a motion to adopt the January 31, 2019 CBGSA SAC meeting minutes. The motion was seconded by Vice Chair Brenton Kelly, a roll call vote was made, and the motion passed.

AYES: Committee Members Draucker, Jaffe, Kelly, Post and Valenzuela
 NOES: None
 ABSTAIN: Committee Member DeBranch and Furstenfeld
 ABSENT: Committee Members Alvarado and Haslett

Chair Jaffe commented that during item No. 4 the Committee had discussed the need for Santa Barbara County's input on the Groundwater Conditions chapter and asked that be reflected in the minutes.

Chair Jaffe also commented that on page 8 of the minutes there is a minor editorial change regarding the California Department of Water Resources (DWR) Natural Communities title. Hallmark Group Project Coordinator Taylor Blakslee said he would make the correction.

5. Groundwater Sustainability Plan

a. Groundwater Sustainability Plan Update

W&C's Senior Water Resource Engineer Brian Van Lienden provided an update on Groundwater Sustainability Plan (GSP) activities, which is included in the SAC packet. He commented that the chapter placeholder document will become available on March 22, 2019, and comments on that document will be due a week later on March 29, 2019.

Chair Jaffe asked for clarification regarding the 2040 sustainability requirement. Mr. Van Lienden said, per SGMA, the only requirement is that the CBGSA is at or above set thresholds, however the CBGSA can adjust threshold levels as appropriate. Vice Chair Kelly asked how DWR will perceive those potential changes. CBGSA Executive Director Jim Beck said DWR will look at the rationale for any potential changes and these changes must not cause undesirable results.

Chair Jaffe suggested adding a note that climate change would be modeled on the GSP approach and terminology slide. Mr. Van Lienden said he will include this.

b. Technical Forum Update

Mr. Van Lienden provided an overview of the February 22, 2019 technical forum call. A summary of the issues discussed is provided in the SAC packet, which include an update on the numerical model and sustainability thresholds.

Committee Member Haslett arrived at 2:15 pm

Cuyama Valley Family Resource Center's Executive Director Lynn Carlisle commented that she had read DWR's climate change guidance document and wanted to know how we can look at the water budget without climate change incorporated. Mr. Van Lienden said W&C will be doing a 50-year scenario for a water budget with and without climate change, which will be included in the GSP draft.

c. Discussion on Water Budgets

Mr. Van Lienden provided an overview of the Water Budget chapter. Mr. Van Lienden said W&C plans on estimating the sustainable yield with just pumping reductions, then with pumping reductions and projects, and then with a separate climate change analysis.

Committee Member Haslett asked if the oil industries have been taken into account from a land use standpoint and water consumption that they may have in Cuyama. Mr. Van Lienden said his understanding is they do not have a net consumption of water.

Chair Jaffe commented that there is not enough data to make accurate projections on the model for the Western Region.

University of California, Santa Barbara Professor Casey Walsh asked why the average annual groundwater level change does not show a significant drawdown in the North Western Region. Mr. Van Lienden said that there is some drawdown, but it is not very steep.

Committee Member Haslett asked what the irrigated acres are in the south portion of the western region. Mr. Van Lienden said he will look into the land use for this area and report back. Committee Member Haslett recommended looking into this.

Ms. Wooster said there is not a well in the area north of the vineyard and does not see how there can be drawdown there.

Mr. Van Lienden discussed the pumping reductions only scenario assumptions and Mr. Beck pointed out that these are just for the model run and should not be confused with glide path discussions that we will have later.

Vice Chair Kelly said his understanding is that idle lands will likely be kept free and not converted to native vegetation.

Mr. Beck commented that the model is a good model, but it is based on the data we have. He said model outputs must be taken with a grain of salt.

Vice Chair Kelly asked why the water budget chapter text mentions "overdraft" only twice on page 5 and not throughout the rest of the chapter and asked if there is a semantics issue with the term. Mr. Van Lienden said he is using "change in storage" to mean the same thing as "overdraft".

d. Discussion on Sustainability Thresholds

Mr. Van Lienden provided an overview of the Sustainability Thresholds chapter.

Ms. Carlisle asked when the interim milestones will be included. Mr. Van Lienden said they need to determine what project and actions to implement because these will drive the interim milestone schedule. Ms. Carlisle said she would make a recommendation to discuss interim milestones when discussions are held on the glide path.

Mr. Van Lienden said on the first things to do in the implementation phase is to set up the monitoring network.

Mr. Van Lienden discussed the threshold rationale for the Eastern Region. He reminded the SAC that when W&C applied the Board-approved threshold rationales in the Eastern Region they did not work since 20% below 2015 levels, or ten feet above of the nearest shallow well, whichever is more restrictive, resulted in minimum thresholds significantly above current levels. Mr. Van Lienden presented W&C's recommendation to reset minimum thresholds to 2017 levels minus 20% and install additional representative well(s) going forward.

Committee Member Haslett said Mr. Van Lienden's approach made sense. Chair Jaffe asked why these are the only wells being used/monitored. Mr. Van Lienden said they only used the data that was provided to them.

Mr. Van Lienden said W&C will double check landowner Jim Wegis' data since he said the data he provided Mr. Van Lienden was tested as recently as 2017.

Vice Chair Kelly asked Mr. Wegis if he feels the four current representative wells represent the Ventucopa area. Mr. Wegis said the representative wells are fairly shallow and there has not been water at 830 feet. Mr. Wegis said that if you set levels at 130 feet you would likely impact a number of production wells.

Chair Jaffe asked what "install" a well in Ventucopa means. Mr. Van Lienden said it does not necessarily mean installing a new well; but could mean facilitating or assisting in adding additional monitoring wells in the Eastern Region.

MOTION

Committee Member Haslett made a motion to adopt W&C's recommendation to reset minimum thresholds in the Eastern Region to 20% below 2017 levels and consider adding additional representative wells and review minimum thresholds and measurable objectives as part of the 2025 GSP update. The motion was seconded by Committee Member DeBranch, a roll call vote was made, and the motion passed.

AYES: Committee Members Post, Haslett, Debranch, Draucker, Kelly, Furstenfeld, Valenzuela, and Jaffe
 NOES: None
 ABSTAIN: None
 ABSENT: Committee Member Alvarado

e. Direction on Management Areas

Mr. Van Lienden reported they are looking for feedback from the Board regarding the need for Management Areas in the Cuyama Basin.

Legal Counsel Joe Hughes said when you have a management area one important issue to consider is how it is managed. He said management areas in the Kern County basin were designed in a bottom-up structure where the individual water districts develop their chapters and would implement those chapters in a form of local control. If you have management areas in Cuyama, you may want to delegate authority to the Cuyama Basin Water District (CBWD), the Counties, or some other group to manage within a particular management area.

Mr. Beck said these discussions get more into the policy side of discussions. He said staff's recommendation is to use management areas and thinks they are a helpful tool that DWR created but wanted feedback from the SAC.

Chair Jaffe asked for clarification if the CBWD would be the manager of the overdraft areas, but the CBGSA would still set minimum thresholds and measurable objectives. Mr. Hughes commented that local control means that the GSA monitors the guidelines of the GSP that is agreed upon.

Chair Jaffe asked what would be the effect of not having management areas. Mr. Beck said it could make things more complex, for example, with project funding where you do not have a good mechanism for allocating costs below a basin level. Also, if you are going to manage pumping reduction, how do you delineate reductions without management areas.

Ms. Carlisle asked if you can have management areas managed by the CBGSA. Mr. Hughes said you could. He said when setting this up, it is a good idea to make the draft as flexible as possible.

Vice Chair Kelly said he can see a big problem with determining the boundary for the management areas defined by overdraft conditions.

Committee Member DeBranch asked if the Joint Exercise of Powers Agreement would need to be amended to delegate authority for another entity to manage management areas. Mr. Hughes said yes, either that, or a side agreement may be the way to go.

Mr. Beck said management areas allow the stakeholders impacted to have more input and the stakeholders not involved are protected from assessments or reductions that may not be appropriate for their areas.

Vice Chair Kelly asked the financial impact of managements areas. Mr. Beck said there will likely be an incremental cost depending on how managements areas are administered.

Ms. Wooster asked if the future conditions average annual groundwater level change will be modified as the model is refined. Mr. Beck said yes, but at some point, he expects the boundaries of the management areas to be solidified.

Committee Member DeBranch asked how often the model will be run and the potential boundary shift causing landowners to be in or out. Mr. Beck said it is really a budget call and you might want to do an update every two or three years, but this is something you would want to address in the implementation plan. Triangle E Farm's Owner Jim Wegis said there is an incentive for landowners to not cause an overdraft situation and have to pay for projects.

MOTION

Committee Member Post made a motion to accept the staff recommendation to set two preliminary management areas in the Central Basin and Ventucopa area where modeled overdraft conditions are greater than two feet per year and subject for future review no later than five years. The motion was seconded by Committee Member Draucker, a roll call vote was made, and the motion passed.

AYES:	Committee Members Post, Haslett, DeBranch, Draucker, Kelly, Furstenfeld, Valenzuela, Jaffe
NOES:	None
ABSTAIN:	None
ABSENT:	Committee Member Alvarado

f. Projects and Management Actions

Mr. Van Lienden provided an update on the status of projects and management actions and reported that they will be presenting an analysis for each project.

i. Direction on Projects

Precipitation Enhancement Modeling Analysis

Cost: \$20-30 per acre foot (based on total potential benefit of 4,200 acre-feet)

Change in storage: 1,500 acre-feet per year

Grapevine Capital's Ray Shady noted that it appears to him that the greatest beneficiaries of the cloud seeding would be in the Southeastern and Eastern Regions. Mr. Van Lienden said that is correct and the benefit is diffused across the basin and some cost sharing agreement would need to be decided on among beneficiaries if this project is implemented.

Stormwater Capture Modeling Analysis

Cost: \$600-800 per acre foot

Average Volume Captured: 2,500 acre-feet per year

Change in storage: 1,900 acre-feet per year

Mr. Van Lienden reported you would need to consider the effects on downstream users.

Forest/Rangeland Management Modeling Analysis

Cost: \$500-600 per acre foot

Assumption: 4% decrease in native vegetation evapotranspiration

Boundary flow: 2,300 acre-feet

Change in storage: 1,500 acre-feet per year

Mr. Wegis commented that the Santa Barbara Canyon drainage would flow into the Central Basin, but it is not included. Mr. Van Lienden said this may be looked at in future model studies.

Committee Member Post said he cannot think of a faster way to litigation.

Mr. Gliessman commented that in the Sierra Nevada's they usually perform controlled burns, and this is an effective way to decrease evapotranspiration and increase the outflow of water. With a burn in the Cuyama area rangeland, it is an all or nothing event and can potentially create devastating conditions.

Committee Member Draucker asked what the financial benefit would be of doing these programs. Mr. Van Lienden said it would be fleshed out in an economic analysis.

Mr. Beck said you could also do an analysis to determine the benefits.

Chair Jaffe said it would be helpful to have a summary chart of the three projects.

Committee Member Draucker said there is a concern that the small farmers are going to be driven out of the Basin.

Committee Member DeBranch asked if there is a value in including the projects in the GSP to demonstrate to DWR that the CBGSA is evaluating all project options. Mr. Beck said that is a good point and it would be helpful to show DWR our process for exploring implementation plan projects. Committee member Furstenfeld said he does not think they should take any of the project and management actions off because even if it is a small

benefit it is better than nothing.

CBGSA Board Alternate John Coates said the concept of having two wells in the Cuyama Community Services District (CCSD) is that there is a backup well if the main well fails for any reason, and if one well starts underperforming, an additional well would augment supplies.

MOTION

Vice Chair Kelly made a motion to accept the staff recommendation to include the following project(s) in the GSP Water Budget chapter and use for additional analysis in the GSP implementation plan:

Flood/stormwater capture, forest/rangelands management, and precipitation enhancement, and support for development of well infrastructure in the Cuyama, New Cuyama and Ventucopa areas.

The motion was seconded by Committee Member Furstenfeld, a roll call vote was made, and the motion passed.

AYES:	Committee Members Post, Haslett, DeBranch, Draucker, Kelly, Furstenfeld, Valenzuela, Jaffe
NOES:	None
ABSTAIN:	None
ABSENT:	Committee Member Alvarado

ii. Direction on Pumping Allocation Approach

Mr. Beck described the example glide path as a representation of a basin-wide groundwater use decline.

Chair Jaffe expressed concern that a glide path could be adopted that is very lax and then threshold levels are readjusted near 2040. Committee Member DeBranch said he does not see this option occurring since you have to demonstrate you are making progress to DWR in the interim updates.

Mr. Beck said there will be administrative fees to keep the GSA going, which will deal with the administration of monitoring programs, and project and management action implementation.

Mr. Wegis asked what about the funding for non-district areas. Mr. Beck said the Counties have indicated that they are not contributing funds post-2020, but they will allow their jurisdiction to be used by the GSA to implement funding activities.

Committee Member DeBranch asked if the GSA can assess individual landowners or just members. Mr. Beck said this would be a question for legal counsel.

Mr. Van Lienden provided an overview of allocation methods that was discussed at last month's meeting.

Mr. Wegis asked Mr. Beck in regard to water marketing, could a landowner sell their groundwater or pump their groundwater and sell that. Mr. Beck said under the

recommended allocation strategy sale of groundwater would not be allowed, but the CBGSA could allow sale of groundwater that has pumped. He commented that staff has not recommended that. Mr. Beck said the Board will need to formulate a policy on water transfers in the near future.

MOTION

Vice Chair Kelly made a motion that the allocation approach should be decided by the entity managing the management area. The motion was seconded by Committee Member Draucker, a roll call vote was made, and the motion passed.

AYES:	Committee Members Post, Haslett, DeBranch, Draucker, Kelly, Furstenfeld, Valenzuela, Jaffe
NOES:	None
ABSTAIN:	None
ABSENT:	Alvarado

g. Direction on Implementation Plan

Mr. Van Lienden provided an overview of the components in the implementation plan.

Vice Chair Kelly mentioned that the allocation program does not start until 2030 on the implementation timeline and Mr. Van Lienden said it should be implemented sooner than that and will revise the schedule to reflect that.

Chair Jaffe asked if we can have an allocation plan developed in 2020. Mr. Beck suggested moving the "Allocation program begins and phase-in" to the 2020-2025 section on slide 118 and reword to "Allocation program development and phase-in."

Mr. Van Lienden discussed the funding areas and mechanisms.

Committee Member Haslett suggested adding an asterisk to the items in the implementation timeline that are specific to management areas.

There was consensus from the SAC to accept the implementation timeline pending the changes discussed above.

h. Stakeholder Engagement Update

GSP Outreach the Catalyst Group's Mary Currie provided an update on stakeholder engagement activity.

6. Groundwater Sustainability Agency

a. Report of the Executive Director

Nothing to report.

b. Board of Directors Agenda Review

Mr. Beck provided an overview of the March 6, 2019 Joint Meeting of CBGSA Special Board of Directors and SAC agenda.

c. Report of the General Counsel

This was covered under Item No. 5e.

Mr. Blakslee provided an update on the Grant Admin Agreement. He reported that the agreement has been signed and approved, and W&C and Hallmark Group are currently pulling together documents for the first invoice. He reported that they have had the kick-off meeting with DWR and we can expect payment from DWR in 3-4 months due to their internal review process.

7. Items for Upcoming Sessions

Vice Chair Kelly asked where the place will be to discuss groundwater dependent ecosystem questions. Mr. Van Lienden said it will be covered in the placeholder section, which will be on the March 28, 2019 SAC agenda and April 3, 2019 Board agenda.

8. Committee Forum

Nothing to report.

9. Public comment for items not on the Agenda

Nothing to report.

10. Adjourn

Chair Jaffe adjourned the meeting at 5:49 p.m.

Minutes approved by the Standing Advisory Committee of the Cuyama Basin Groundwater Sustainability Agency the 28th day of March 2019.

STANDING ADVISORY COMMITTEE OF THE
CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Chair: _____

ATTEST:

Vice Chair: _____



TO: Standing Advisory Committee
Agenda Item No. 5a

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Groundwater Sustainability Plan Update

Issue

Update on the Cuyama Basin Groundwater Sustainability Agency Groundwater Sustainability Plan.

Recommended Motion

None – information only.

Discussion

Cuyama Basin Groundwater Sustainability Agency Groundwater Sustainability Plan (GSP) consultant Woodard & Curran's GSP update is provided as Attachment 1.

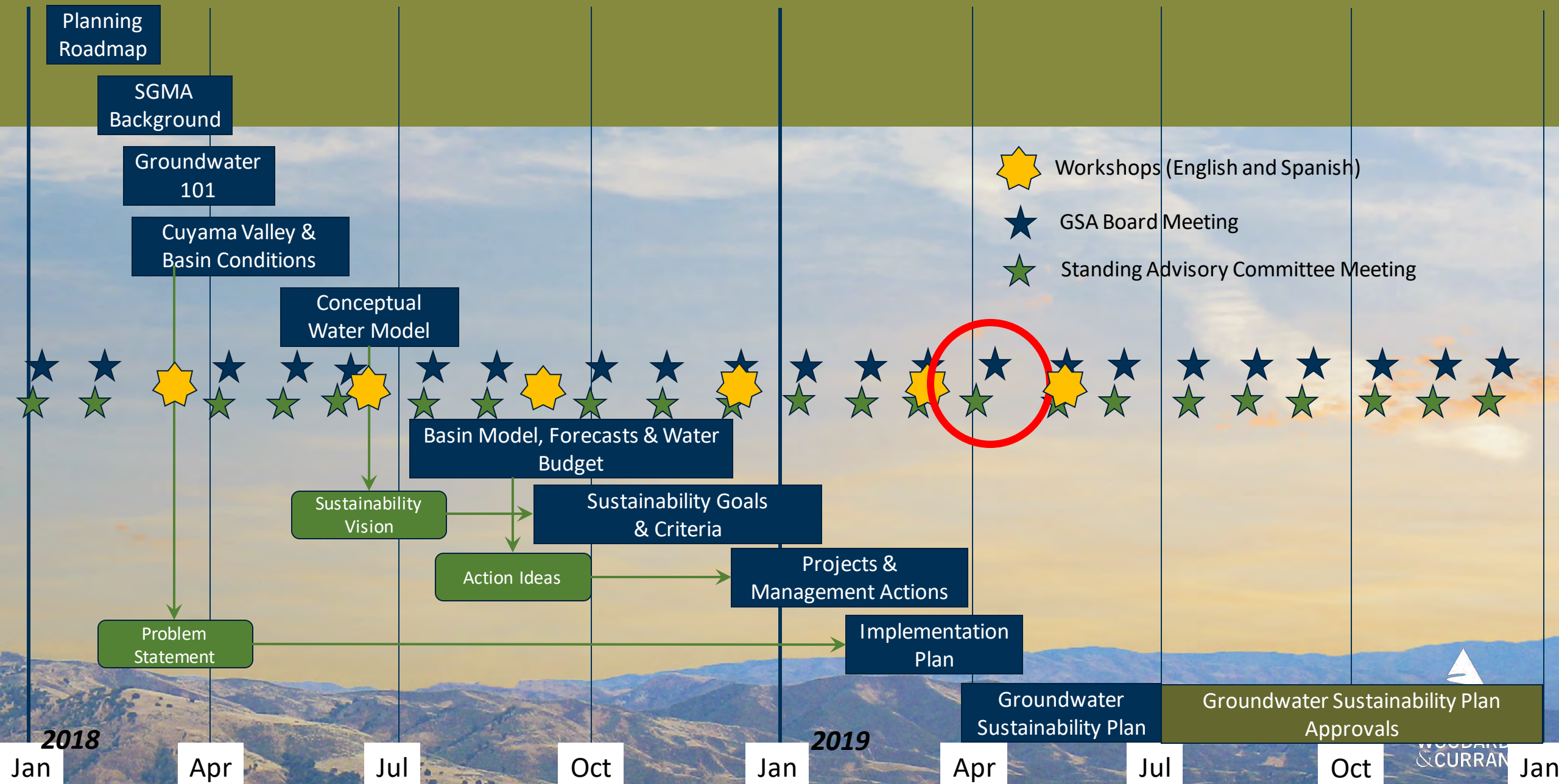
Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Update

March 28, 2019



Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap ¹⁴



March GSP Accomplishments

- ✓ Conducted Cuyama Basin GSP Workshops
- ✓ Submitted draft Placeholder GSP sections for review
- ✓ Developed draft future climate change scenarios using the Cuyama Basin numerical model
- ✓ Developed draft future sustainability scenarios using the Cuyama Basin numerical model
- ✓ Submitted initial invoice to DWR for payment on SGMA grant

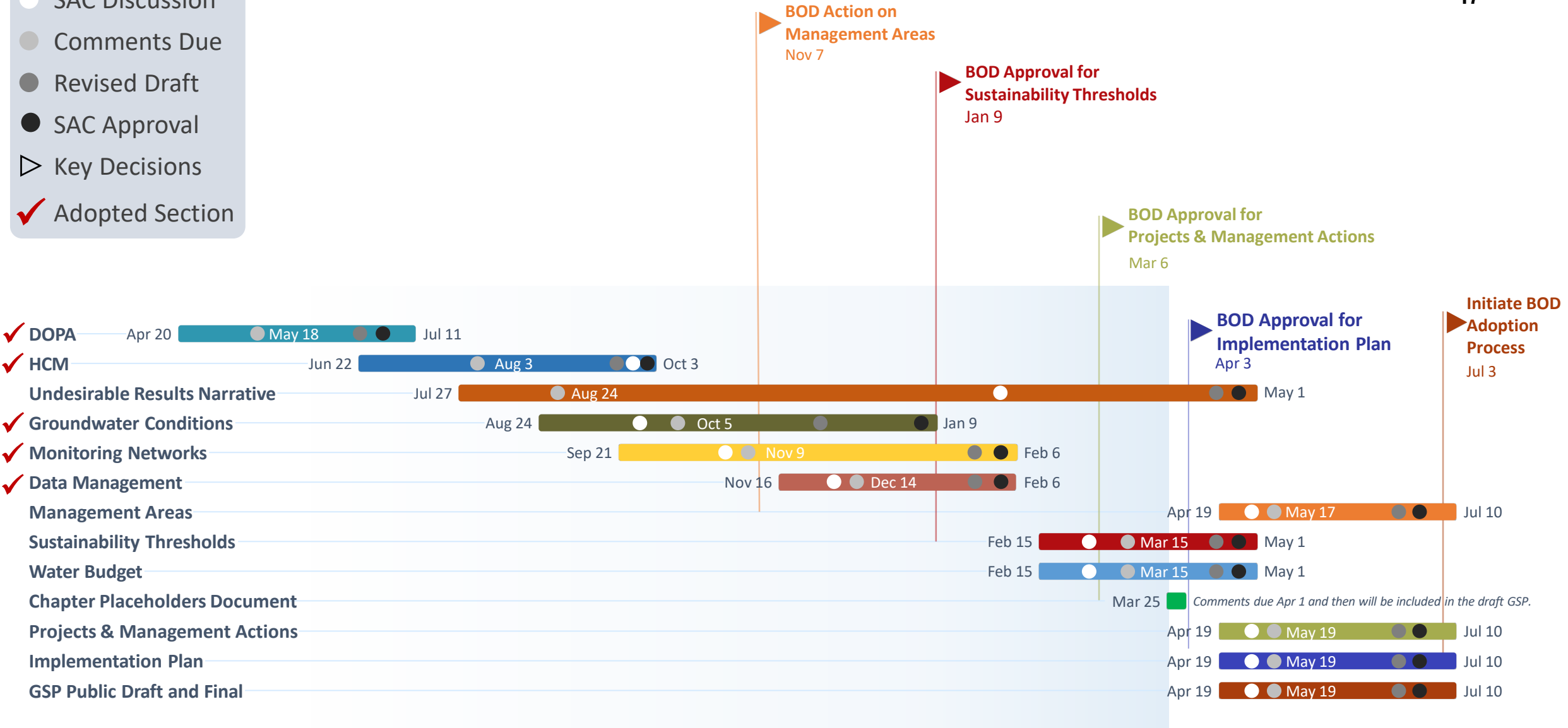
GSP Sections

1. Introduction
 - 1.1 GSA Authority & Structure
 - 1.2 Plan Area
 - 1.3 Outreach Documentation
2. Basin Settings
 - 2.1. HCM
 - 2.2 GW Conditions
 - 2.3 Water Budget

Appendix: Numerical GW Model Documentation
3. Undesirable Results
 - 3.1 Sustainability Goal
 - 3.2 Narrative/Effects
 - 3.2 ID Current Occurrence
4. Monitoring Networks
 - 4.1 Data Collection/Processing
 - 4.2 GSP Monitoring Networks
5. Sustainability Thresholds
 - 5.1 Threshold Regions
 - 5.2 Minimum Thresholds, Measurable Objectives, Margin of Operational Flexibility, Interim Milestones
6. Data Management System

Appendix: DMS User Guide
7. Projects & Management Actions
8. GSP Implementation

- SAC Discussion
- Comments Due
- Revised Draft
- SAC Approval
- ▷ Key Decisions
- ✓ Adopted Section



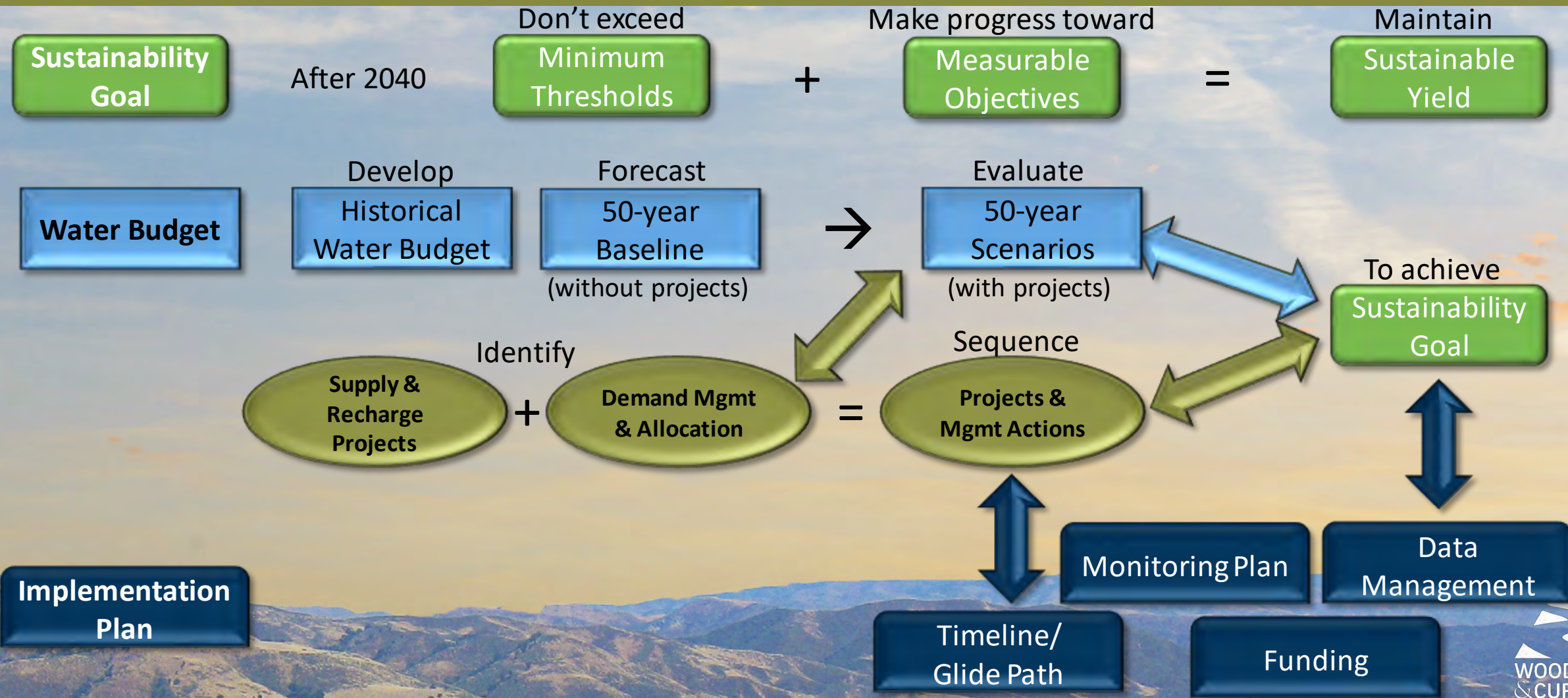
2018

2019

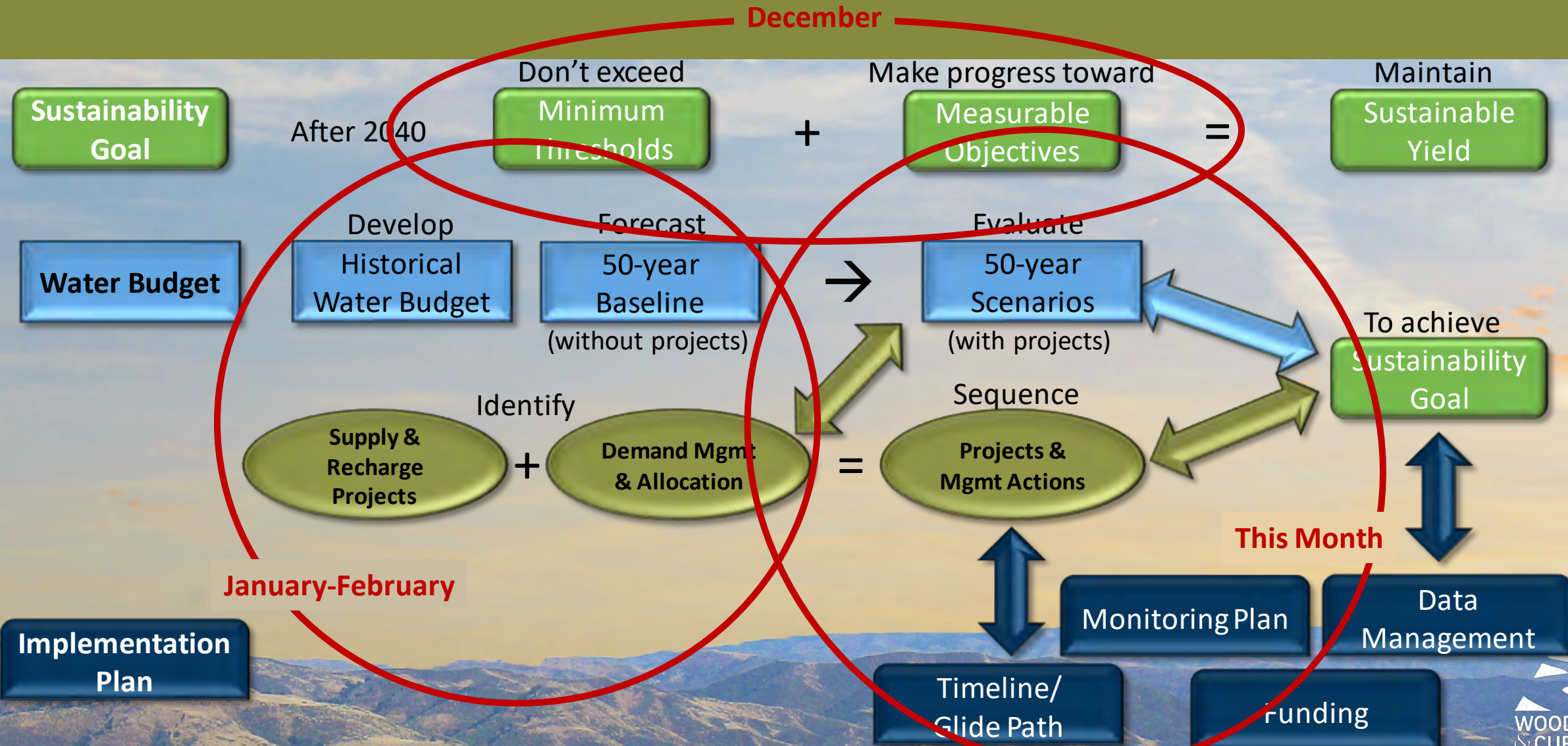
Apr Jun Aug Oct Dec Feb Apr Jun

Today

GSP Discussion Approach & Terminology



GSP Discussion Approach & Terminology





TO: Standing Advisory Committee
Agenda Item No. 5ai

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Direction on Eastern Region Sustainability Thresholds

Issue

Direction on Eastern Region sustainability thresholds.

Recommended Motion

None – information only.

Discussion

An update on the Eastern Region sustainability thresholds is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

Direction on Eastern Region Sustainability Thresholds

March 28, 2019



Board Direction on Threshold Rationales

- Threshold rationales approved by Board at Dec 18 Board Meeting:

Threshold Region	Board-Approved Threshold Rationale
SOUTHEASTERN	MO = 2015 levels.
EASTERN	MT = 20% below 2015 levels, or 10' above the shallowest nearby well, whichever is more restrictive.
CENTRAL	MT = 20% below 2015 levels.
WESTERN	MT = 15% of saturated portion of each representative well.
NORTHWESTERN	MT = 15% of saturated aquifer thickness.

MO = Measurable Objective

MT = Minimum Threshold

**A supermajority vote of 75% is needed for each rationale to be passed by the Board.*

Revised Staff Recommendation

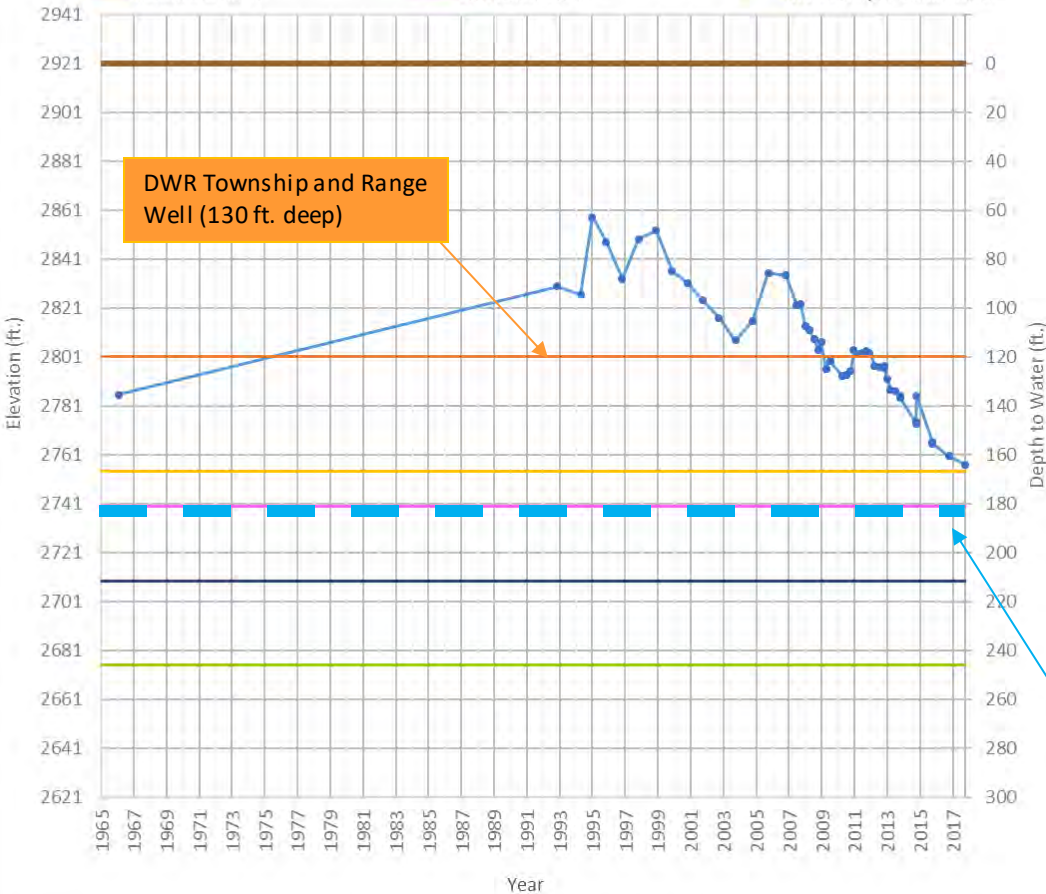
- Revised recommendation following direction at March 6 Board meeting:
 - Reset Eastern Region Minimum Thresholds to year 35% below 2015 levels, with shallowest nearby well criteria removed
 - Install additional representative well(s) going forward
 - Review MTs and MOs as part of 2025 GSP Update

Proposed Eastern Region Thresholds

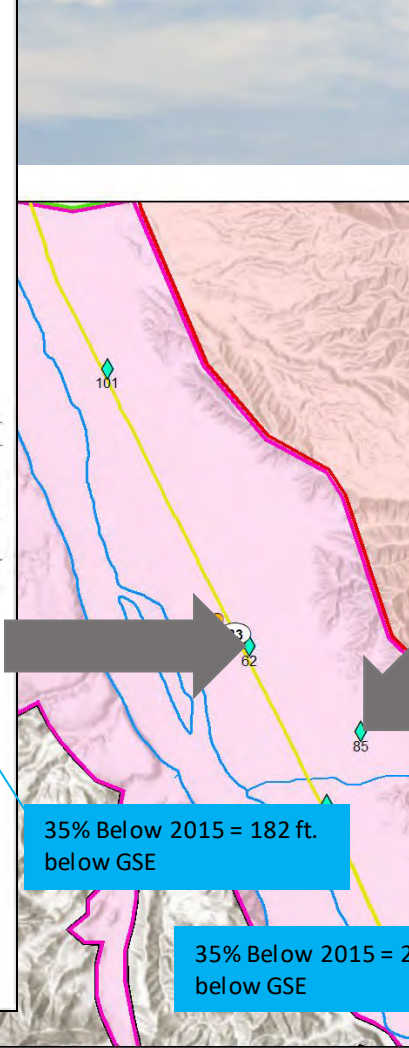
OPTI Well 62 Hydrograph

Well Depth = 212 ft. 10 ft. Above Nearest Well = 120 ft. 20% Below 2015 = 167 ft.
20% Below 2017 = 181 ft. Model Output Stabilization = 246 ft. 5-Years of Storage = 25 ft.

- WSE & Depth-to-Water
- Screen Top
- 20% Below 2015
- GSE
- Screen Bottom
- 20% Below 2017
- Well Depth
- 10 ft. Above Nearest Well
- Model Output Stabilization



DWR Township and Range Well (130 ft. deep)



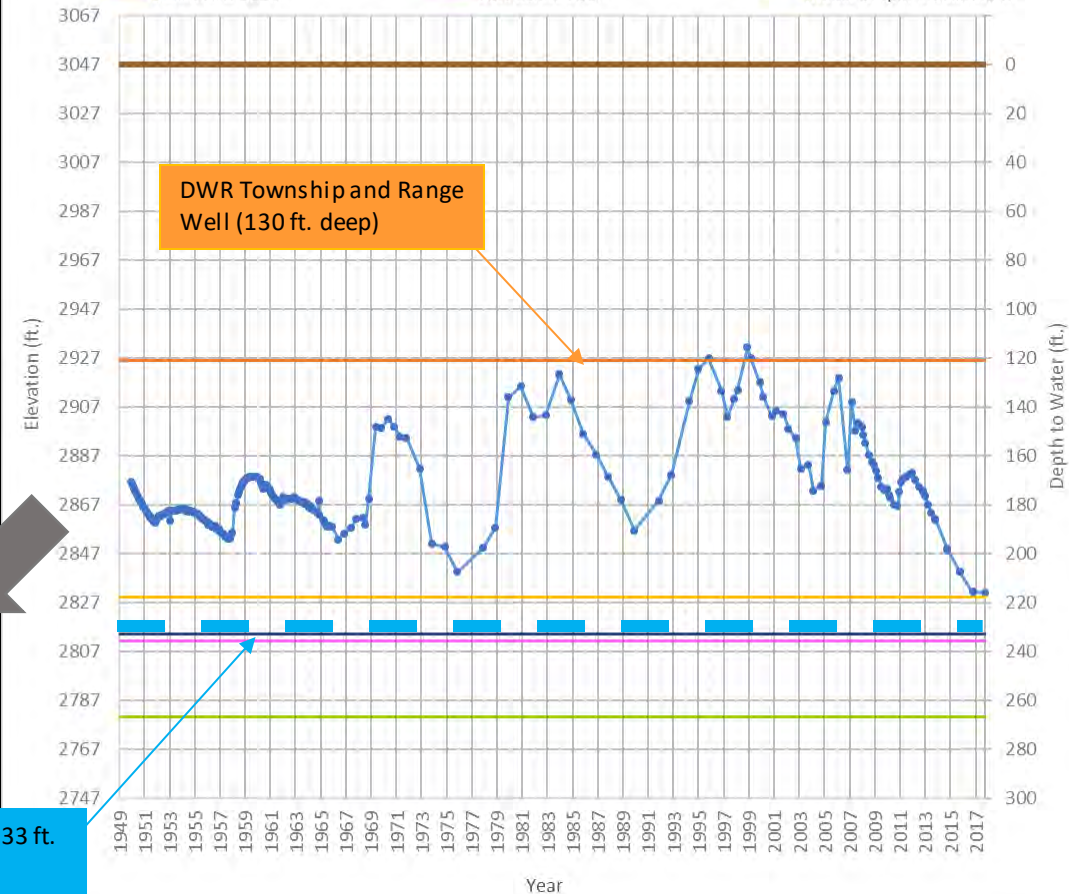
35% Below 2015 = 182 ft. below GSE

35% Below 2015 = 233 ft. below GSE

OPTI Well 85 Hydrograph

Well Depth = 233 ft. 10 ft. Above Nearest Well = 121 ft. 20% Below 2015 = 218 ft.
20% Below 2017 = 236 ft. Model Output Stabilization = 267 ft. 5-Years of Storage = 24 ft.

- WSE & Depth-to-Water
- Screen Top
- 20% Below 2015
- GSE
- Screen Bottom
- 20% Below 2017
- Well Depth
- 10 ft. Above Nearest Well
- Model Output Stabilization



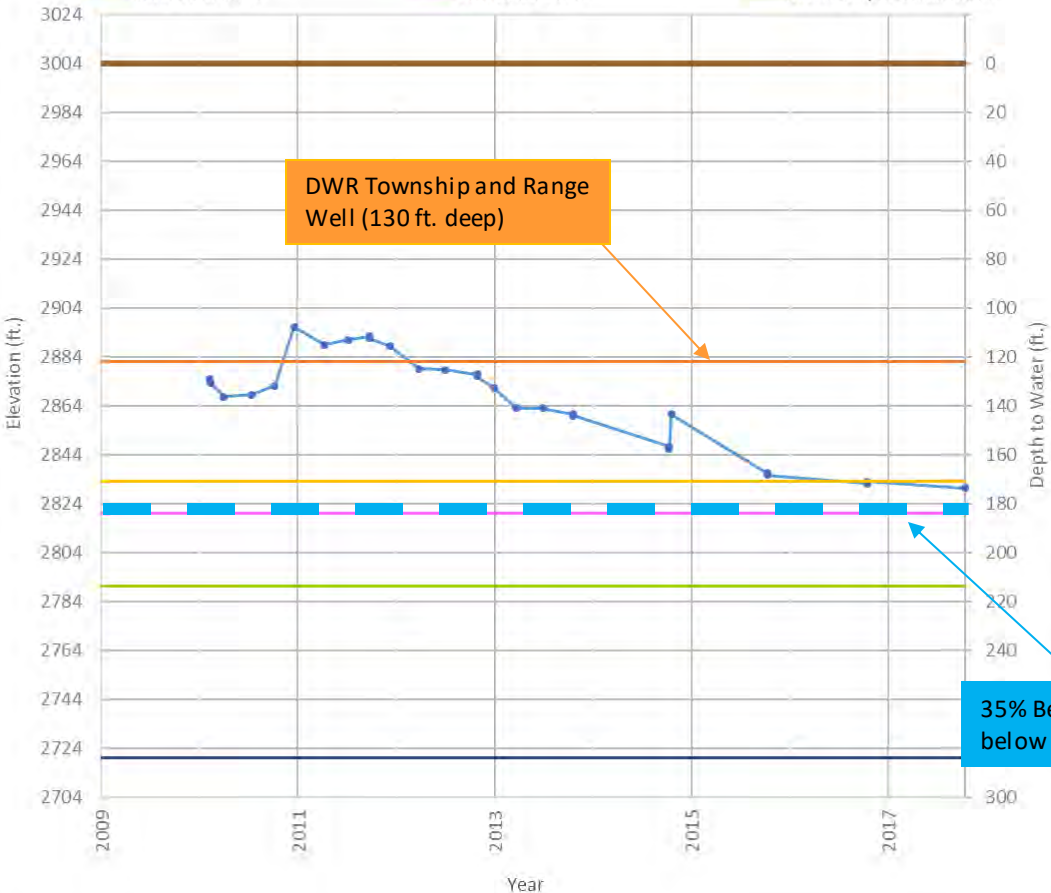
DWR Township and Range Well (130 ft. deep)

Proposed Eastern Region Thresholds

OPTI Well 100 Hydrograph

Well Depth = 284 ft. 10 ft. Above Nearest Well = 122 ft. 20% Below 2015 = 171 ft.
20% Below 2017 = 184 ft. Model Output Stabilization = 214 ft. 5-Years of Storage = 29 ft.

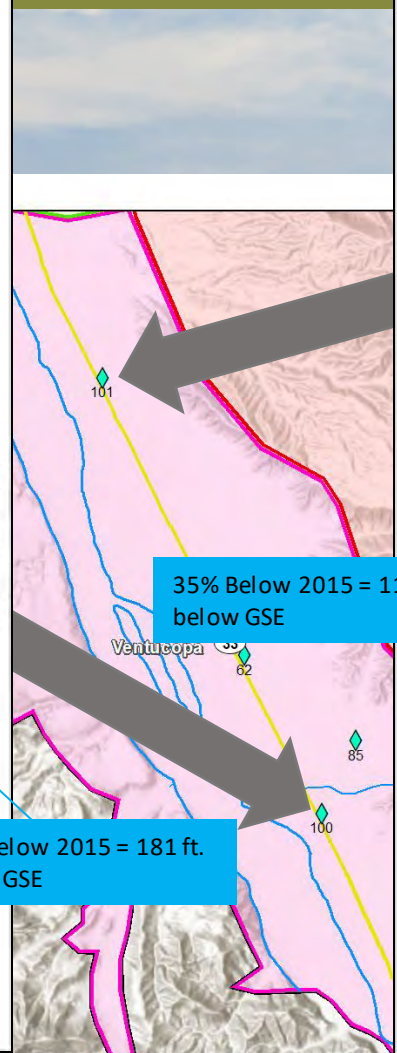
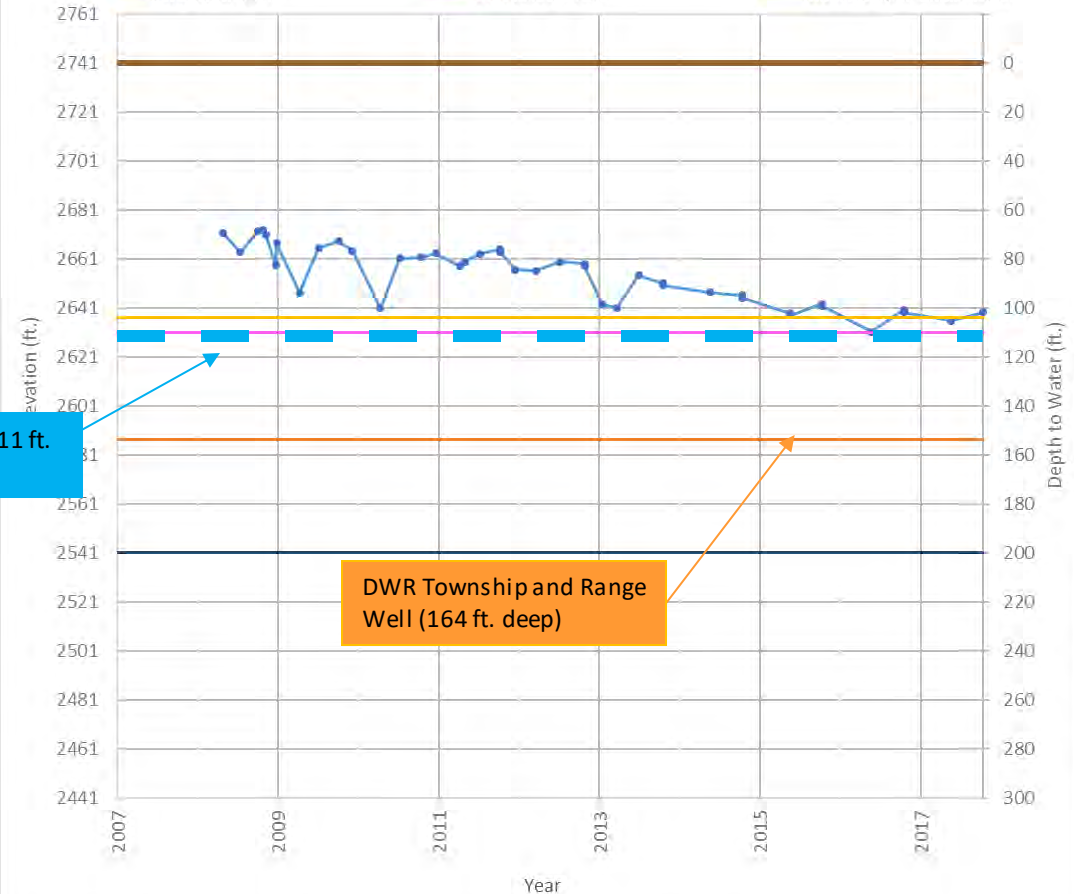
- WSE & Depth-to-Water
- Screen Top
- 20% Below 2015
- GSE
- Screen Bottom
- 20% Below 2017
- Well Depth
- 10 ft. Above Nearest Well
- Model Output Stabilization



OPTI Well 101 Hydrograph

Well Depth = 200 ft. 10 ft. Above Nearest Well = 154 ft. 20% Below 2015 = 104 ft.
20% Below 2017 = 110 ft. Model Output Stabilization = Not Applicable ft. 5-Years of Storage = 23 ft.

- WSE & Depth-to-Water
- Screen Top
- 20% Below 2015
- GSE
- Screen Bottom
- 20% Below 2017
- Well Depth
- 10 ft. Above Nearest Well
- Model Output Stabilization





TO: Standing Advisory Committee
Agenda Item No. 5aii

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Discussion on Placeholder Sections

Issue

Discussion on the Placeholder Sections.

Recommended Motion

None – information only.

Discussion

An overview on the Placeholder Sections is provided as Attachment 1 and the Placeholder Sections draft is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

Discussion on GSP Placeholder Sections

March 28, 2019



GSP Placeholder Sections

- Draft GSP Sections provided to SAC and Board for on March 22nd
- GSP sections included:
 - Plan Area
 - Plan Elements from CWC Section 10727.4
 - Hydrogeological Conceptual Model
 - HCM data gaps
 - Groundwater Conditions
 - Change in groundwater storage
 - Interconnected surface water systems
 - Groundwater dependent ecosystems
 - Data gaps
 - Monitoring Networks
 - Depletions of interconnected surface water systems monitoring network
- Comments are due on March 29th

Cuyama Valley Groundwater Basin Groundwater Sustainability Plan Placeholder Sections Draft

Prepared by:



March 2019

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Chapter 1 Introduction

1.2 Description of Plan Area

1.2.8 Plan Elements from CWC Section 10727.4

The plan elements from CWC Section 10727.4 require GSPs to address or coordinate the addressing of the components listed in Table 1-1. Several components of CWC Section 10727.4 address issues that are not within the CBGSA's authority, and are coordinated with local agencies

Table 1-1. Plan Elements from CWC Section 10727.4	
Element	Location
(a) Control of saline water intrusion	Not Applicable
(b) Wellhead protection areas and recharge areas.	To be coordinated with Counties
(c) Migration of contaminated groundwater.	Coordinated with Regional Water Quality Control Board (RWQCB)
(d) A well abandonment and well destruction program.	To be coordinated with Counties
(e) Replenishment of groundwater extractions.	Section X – Projects and Management Actions
(f) Activities implementing, opportunities for, and removing impediments to, conjunctive use or underground storage.	Section X – Projects and Management Actions
(g) Well construction policies.	To be coordinated with Counties
(h) Measures addressing groundwater contamination cleanup, groundwater recharge, in-lieu use, diversions to storage, conservation, water recycling, conveyance, and extraction projects.	Section X – Projects and Management Actions, and coordinated with RWQCB
(i) Efficient water management practices, as defined in Section 10902, for the delivery of water and water conservation methods to improve the efficiency of water use.	Coordinated with Cuyama Basin Irrigation District
(j) Efforts to develop relationships with state and federal regulatory agencies.	Section X – Plan Implementation
(k) Processes to review land use plans and efforts to coordinate with land use planning agencies to assess activities that potentially create risks to groundwater quality or quantity.	To be coordinated with Counties
(l) Impacts on groundwater dependent ecosystems.	Section X – Monitoring Networks, and Section X – Sustainability Criteria

Chapter 2 Basin Settings

2.1 Hydrogeologic Conceptual Model

2.1.10 Hydrogeologic Conceptual Model Data Gaps

A number of HCM data gaps were identified during the development of this GSP, and additional questions were asked by stakeholders during development:

- There is no consensus about whether faults are barriers to flow in the basin, and if so, at what depth are they a barrier to flow.
- Confusion exists about whether smaller faults and fault splays are barriers to flow as well.
- Aquifer properties in areas where aquifer testing has not been conducted are not well defined and are estimated.
- The shallowness of the alluvium in the canyon to the southeast of Ventucopa is not well understood.
- Connectivity between the alluvium west of the Russel Fault and areas in upland areas is not agreed upon by stakeholders and are not described in existing references.

As the CBGSA develops its monitoring networks and implements the GSP, these data gaps will be revisited and re-evaluated for importance during the five year update of the GSP

2.2 Groundwater Conditions

2.2.4 Change in Groundwater Storage

Historical change in storage in the Cuyama Basin has shown a consistent decline in groundwater in storage. Figure 2-1 shows the change in storage by year, water year type, and cumulative water volume for the last 20 years. Change in storage was calculated by the Cuyama Basin IWFMM Model. Average annual use over the twenty-year period was -23,076 Acre-feet. The color of bar for each year of change in storage correlates to the San Joaquin River water year type. Change in storage is negative in 18 of the 20 years, and was negative during three “Wet” years, as designated by the water year type.

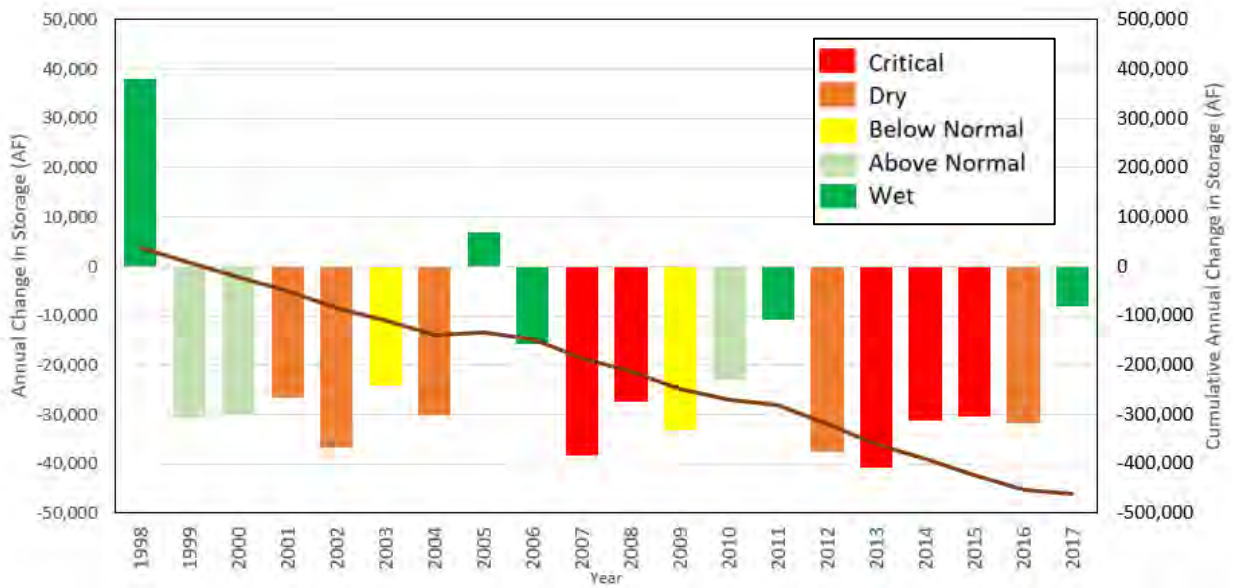


Figure 2-1 Cuyama Groundwater Storage by Year, Water Year Type, and Cumulative Water Volume

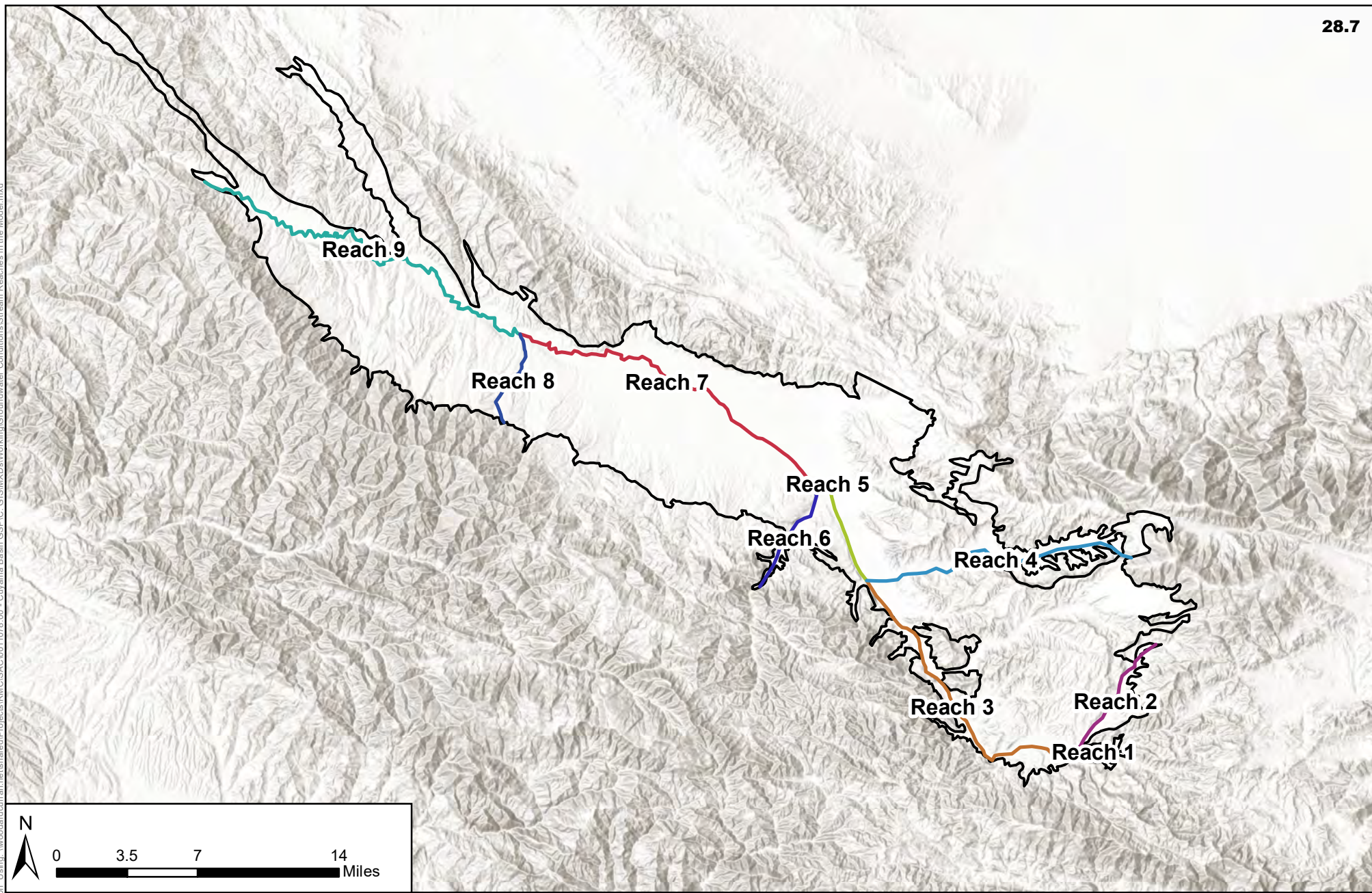
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2.2.8 Interconnected Surface Water Systems

The Cuyama Basin IWFM Model, described in Appendix X, was used to analyze interactions between surface water flows in the Basin. Surface water flows were assigned reaches, five on the Cuyama River, and four for creeks. Reaches are shown in Figure 2-2, and were assigned by number. Results of the analysis are shown in Table 2-1 in Acre-Feet (AF) for each reach. Seven years had higher total depletions than 2017, which had a depletion estimate of 5016 AF

- **Reach 1 – Alamo Creek:** This reach was gaining in each year analyzed, with an average gain of 380 AF/year. The highest gain of 692 AF was in 1998, and the lowest gain was 192 AF in 2016.
- **Reach 2 – Cuyama River, from edge of basin to Alamo Creek:** This reach was losing in each year analyzed, with an average loss of 26 AF. The smallest loss was 1 AF in 2007, and the largest loss was -109 AF in 2005
- **Reach 3 – Cuyama River from Alamo Creek, to Quatal Canyon Creek:** This reach mostly was gaining in each year, and lost in one year. The average of gains and losses was a gain of 931 AF. The highest gain of 2,781 was in 1998, and the loss of 300 AF occurred in 2017.
- **Reach 4 – Quatal Canyon Creek:** This reach was losing in each year analyzed, with an average loss of 83 AF. The smallest loss was 1 AF in 2007, and the largest loss was -347 AF in 1998
- **Reach 5 – Cuyama River from Quatal Canyon Creek to Santa Barbara Canyon Creek:** This reach was losing in each year analyzed, with an average loss of 926 AF. The smallest loss was 180 AF in 2013, and the largest loss was 2,394 AF in 2005
- **Reach 6 – Santa Barbara Canyon Creek:** This reach was gaining in each year analyzed, with an average gain of 95 AF/year. The highest gain of 222 AF was in 1999, and the lowest gain was 222 AF in 2016.
- **Reach 7 – Cuyama River from Santa Barbara Canyon Creek to Schoolhouse Canyon Creek:** This reach was losing in each year analyzed, with an average loss of 5,218 AF. The smallest loss was 797 AF in 2013, and the largest loss was 16,472 AF in 1998
- **Reach 8 – Schoolhouse Canyon Creek:** This reach was gaining in each year analyzed, with an average gain of 175 AF/year. The highest gain of 249 AF was in 1998, and the lowest gain was 134 AF in 2017.
- **Reach 9 – Cuyama River west of Schoolhouse Canyon Creek:** This reach was gaining in each year analyzed, with an average gain of 1,333 AF/year. The highest gain of 2,743 AF was in 1998, and the lowest gain was 750 AF in 2015.

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Stream Reaches Used in Cuyama Groundwater Model

Cuyama Basin Groundwater Sustainability Agency

Cuyama Valley Groundwater Basin Groundwater Sustainability Plan

March 2019



Legend

Cuyama Basin	Stream Reach	5
	1	6
	2	7
	3	8
	4	9

Year	Reach 1 (AF)	Reach 2 (AF)	Reach 3 (AF)	Reach 4 (AF)	Reach 5 (AF)	Reach 6 (AF)	Reach 7 (AF)	Reach 8 (AF)	Reach 9 (AF)	Total (AF)
1998	692.9	-100.7	2780.8	-346.8	-2182.5	164	-16471.5	249.3	2742.9	-12471.6
1999	547.1	-4.3	2636.1	-15.1	-561.3	222.1	-3060.8	234.1	2383.5	2381.4
2000	492.6	-19.3	1915.6	-60.8	-973.6	150	-4602.7	218.3	2152.4	-727.5
2001	460.6	-55.1	1300.5	-194.6	-1369.1	134	-7776	197.8	1906.3	-5395.6
2002	376.6	-1.2	1519.8	-2	-268.8	99.3	-1215.9	198.7	1783.1	2489.6
2003	340	-25.8	463.2	-78	-1247.9	75.8	-6156.6	189.6	1320.9	-5118.8
2004	293	-13.5	706.4	-37.2	-711.3	61.6	-3370.3	183.1	1447.5	-1440.7
2005	525.5	-109	668.7	-254.7	-2394	152.8	-14950.5	178	1115.9	-15067.3
2006	583.8	-23	1112.7	-106.3	-1302.3	155.6	-7026.4	172.2	1089.5	-5344.2
2007	455.6	-0.7	1542.1	-0.8	-269.9	114.1	-1327.9	172.3	1328.8	2013.6
2008	426.3	-26.6	797.8	-92.4	-1204.7	103.2	-5902.4	160.6	1105.7	-4632.5
2009	361.8	-8.3	956.6	-33.7	-540.2	77.5	-3191.7	164.2	997.3	-1216.5
2010	347.2	-29.4	294.2	-74.9	-1091.6	72.6	-5843.1	158.2	836	-5330.8
2011	332.3	-48.6	397.4	-191.5	-1518.5	79.5	-7937.3	143.2	899.7	-7843.8
2012	274.1	-7.7	650.6	-28.2	-457.8	60.6	-2720.4	153.9	1091.8	-983.1
2013	244.9	-0.9	768.7	-4.7	-180.2	46.9	-797.2	150.9	1169	1397.4
2014	226.4	-11	183.1	-31.2	-548	37	-2429.6	147.9	971.8	-1453.6
2015	211.9	-7.7	211.7	-16.5	-350.6	30.2	-1968.7	143.9	749.5	-996.3
2016	191.5	-8.6	16.8	-23	-447.1	27.1	-2713	141.1	766.7	-2048.5
2017	208.2	-19.9	-300.4	-67.8	-906	34.5	-4900.3	133.7	801.8	-5016.2

Table 2-1 Stream Depletion by Reach

2.2.9 Groundwater Dependent Ecosystems

A Groundwater Dependent Ecosystem (GDE) is defined by the emergency regulations, Section 351 (m) as referring “to ecological communities or species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface”. Section 354.16 (g) requires identification of GDEs within the basin, utilizing data available from DWR, or the best available information. GDEs are not mentioned elsewhere in the emergency regulations. Because the NCCAG dataset includes a number of estimates, the Nature Conservancy recommends verifying the NCCAG identified locations by a licensed biologist.

DWR has provided the Natural Communities Commonly Associated with Groundwater (NCCAG) dataset through the SGMA data portal at <https://gis.water.ca.gov/app/NCDataSetViewer/>. The NCCAG dataset was compiled by the Nature Conservancy using a set of six pre-existing dataset sources, and is explained in detail at: <https://gis.water.ca.gov/app/NCDataSetViewer/sitedocs/#>. Figure 2-3 shows the locations of areas identified as NCCAG from the Nature Conservancy’s dataset.

A Woodard and Curran licensed wetlands biologist performed verification of the NCCAG dataset using remote sensing techniques, supported by a small amount of in person field verification. This work was documented in a Technical Memorandum included in [Appendix X](#). The analysis was performed by groupings, and the results of analysis at the groupings level is shown in Figure 2-4. The analysis concluded that there were 123 “probable GDEs” and 275 “probable non-GDEs” in the Cuyama Basin, as shown in Figure 2-5.

2.2.10 Data Gaps

A number of Groundwater Conditions data gaps were identified during the development of this GSP, and additional questions were asked by stakeholders during development:

- Due to sporadic monitoring by a variety of monitoring entities, a long period of record of monitoring for groundwater levels does not exist in many areas in the basin.
- The depths where arsenic occurs are not known, making setting sustainability thresholds for arsenic not feasible
- The Cuyama river is not gaged inside the Cuyama Basin, so flows of the river in the basin have been estimated based on measurements at downstream gages.
- Subsidence in the central portion of the basin where groundwater levels are lowest is not monitored nor understood
- Vertical gradients in the majority of the basin are not understood due to the lack of wells with completions of different depths near located near each other
- The salinity in groundwater in the Basin has a number of natural sources, but are not discretely identified.
- GDEs could be evaluated in greater detail.

As the CBGSA develops its monitoring networks and implements the GSP, these data gaps will be revisited and re-evaluated for importance during the five year update of the GSP

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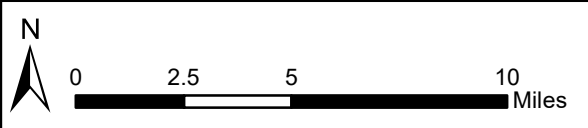
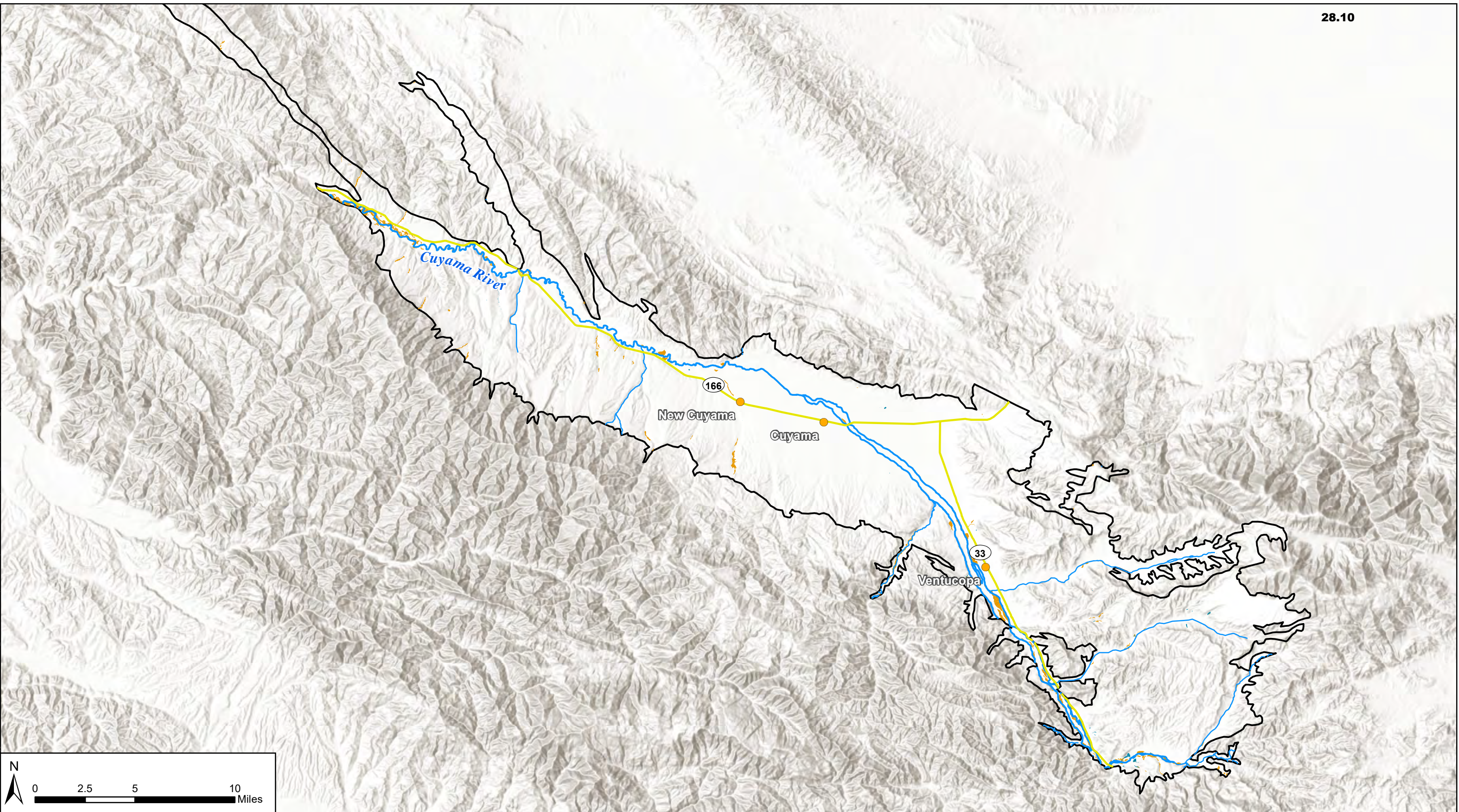








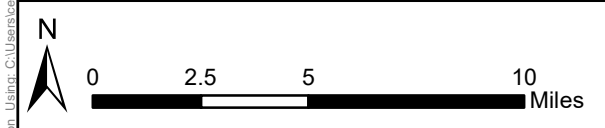
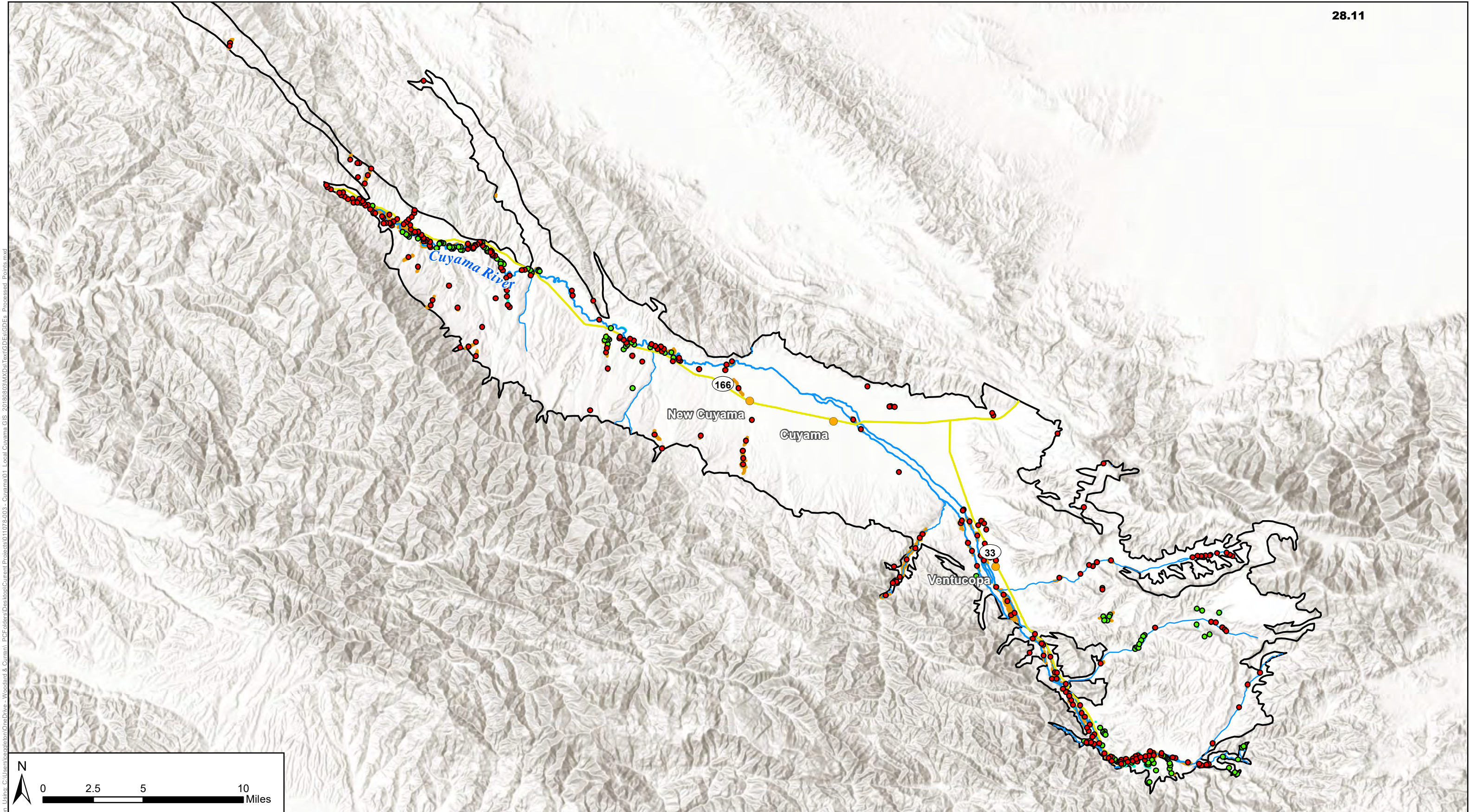


Figure 2-3- Cuyama Basin TNC Identified NCCAG Dataset

Cuyama Basin Groundwater Sustainability Agency
 Cuyama Valley Groundwater Basin Groundwater Sustainability Plan
 March 2019

 WOODARD & CURRAN	Legend	 Cuyama Basin	 Cuyama River
		 TNC Identified Potential GDE Wetland	 Streams
		 TNC Identified Potential GDE Vegetation	 Highways
		 Towns	

Draft



**Figure 2-4 - Cuyama Basin
NCAG GDE Point Analysis**

Cuyama Basin Groundwater Sustainability Agency

Cuyama Valley Groundwater Basin Groundwater
Sustainability Plan

March 2019



Legend

- Cuyama Basin
- TNC Identified Potential GDE Wetland
- TNC Identified Potential GDE Vegetation
- Cuyama NCAG Probable Non-GDEs
- Cuyama NCAG Probable GDEs
- Towns
- Cuyama River
- Streams
- Highways

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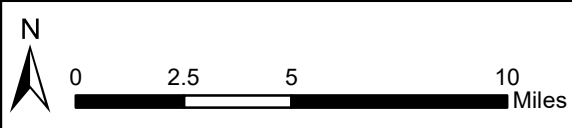
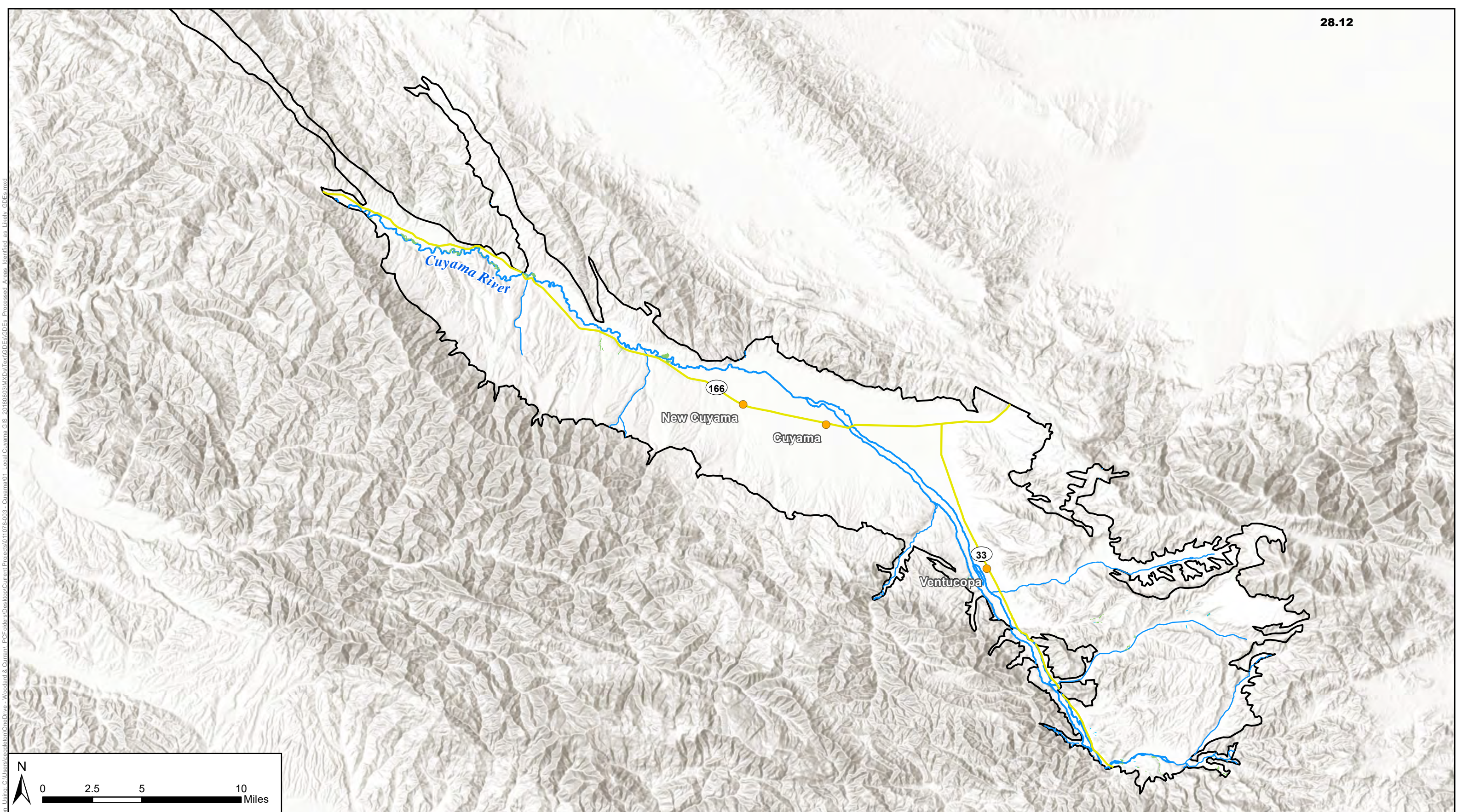


Figure 2-5 - Cuyama Basin Probable GDEs Based on Analysis

Cuyama Basin Groundwater Sustainability Agency

Cuyama Valley Groundwater Basin Groundwater Sustainability Plan

March 2019



Legend

- Cuyama Basin
- Likely GDE Vegetation
- Towns
- Liley GDE Wetlands
- Cuyama River
- Streams
- Highways

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Chapter 4 Monitoring Networks

4.10 Depletions of Interconnected Surface Water Monitoring Network

DWR's emergency regulations Section 354.28 (c) (6) state that "The minimum threshold for depletions of interconnected surface water shall be the rate or volume of surface water depletions caused by groundwater use that has adverse impacts on beneficial uses of the surface water and may lead to undesirable results. The minimum threshold established for depletions of interconnected surface water shall be supported by the following: (A) The location, quantity, and timing of depletions of interconnected surface water, and (B) A description of the groundwater and surface water model used to quantify surface water depletion. "

Since the emergency regulations require a numerical model to estimate the depletions of interconnected surface water, there is no functional monitoring network that can be used to measure depletions of interconnected surface water.

Therefore, the monitoring networks for depletions of interconnected surface water will include two components:

- Groundwater level monitoring to serve as monitoring by proxy of depletions of interconnected surface water (discussed in the monitoring networks section), and
- Pursuit of additional surface water gage stations to improve numerical model accuracy.

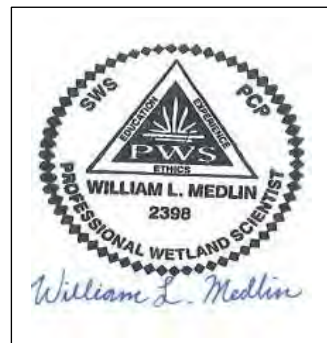
Because there are currently no operating stream gage stations on the Cuyama River in the Cuyama Basin, the CBGSA is pursuing installation of three stream gages to assist in filling the data gap. This activity is further described in the plan implementation section

Appendix X – Groundwater Dependent Ecosystem Technical Memorandum

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TECHNICAL MEMORANDUM

TO: Cuyama Groundwater Sustainability Agency
 CC: Brian Van Lienden, Woodard & Curran PM
 PREPARED BY: William L. Medlin, PWS, ENV SP
 REVIEWED BY: John Ayres and Micah Eggleton
 DATE: November 15, 2018
 RE: Cuyama GSP Groundwater Dependent Ecosystems Study



As part of the California Sustainable Groundwater Management Act (SGMA), Groundwater Sustainability Agencies (GSAs) are required to develop a Groundwater Sustainability Plan (GSP) to help ensure that groundwater is available for long-term, reliable water supply uses. SGMA was put into place and is enforced by the California Department of Water Resources (DWR). Once implemented, each GSP must address certain key elements such as baseline groundwater assessment, monitoring, establishing best management practices (BMPs), and setting new regulations with the goal of defining a pathway to achieve sustainable groundwater management within 20 years.

Within the GSP, a baseline assessment of groundwater conditions must be completed, and part of that assessment **includes identification of groundwater dependent ecosystems (GDEs)**. SGMA defines GDEs as “ecological communities or species that depend of groundwater emerging from aquifers or on groundwater occurring near the **ground surface.**” **The identification and determination of GDEs within a groundwater basin is the responsibility of the GSA** that governs the basin. This study specifically focuses on GDEs identified within the Cuyama Valley Groundwater Basin.

1. CUYAMA GROUNDWATER BASIN ECOLOGICAL SETTING

The Cuyama groundwater basin encompasses multiple California ecoregions (Griffith et al. 2016). In terms of land area, the dominant ecoregion is the Central California Foothills and Coastal Mountains (6), sub-ecoregion Cuyama Valley (6am). This ecoregion is characterized by its Mediterranean climate with hot, dry summers and cool, moist winters. Typical vegetative communities consist of chaparral and oak woodlands; grasslands are present at some lower elevations and pine forests are observed at high elevations. Most of the region is comprised of open, low mountains and foothills with some irregular plains and narrow valleys in certain locations. More specifically, the Cuyama Valley is a narrow valley with significant agricultural production. The mainstem Cuyama River flows through the center of the valley from southeast to northwest.

A minor part of the Cuyama ground water basin is in the Southern California Mountains (8) ecoregion, in the Northern Transverse Range (8g) sub-ecoregion. This ecoregion, like other California ecoregions, is characterized by a Mediterranean climate of hot, dry summers and cool, moist winters. Chaparral and oak woodland vegetative communities are still ever-present, however the elevations in this ecoregion are higher generally leading to cooler summers and greater rainfall which result in denser vegetation and large areas of coniferous forests. There is a slope effect that causes some significant ecological differences in the Transverse Range. South-facing slopes receive more precipitation (30-40 inches) than the northern slopes (15-20 inches), yet evaporation rates contribute to the development of chaparral communities. While on the northern side of parts of the ecoregion, lower temperatures and evaporation coupled with slow snow melt allow for a coniferous forest that transitions to desert montane habitat. Some areas of severe erosion are common where vegetation has been removed via fire, overgrazing, or other land clearing

practices. Many areas in this ecoregion are National Forest public land (Griffith et al. 2016). The Cuyama River headwaters (Quatal Canyon Creek, Apache Canyon Creek, and Cuyama Creek) flow through this ecoregion.

2. GDE ASSESSMENT AND FIELD VALIDATION

Using Geographic Information Systems (GIS), Woodard & Curran completed a preliminary desktop analysis of the California DWR *Natural Communities Commonly Associated with Groundwater* (NCAG) geospatial data set. Woodard & Curran attempted to identify NCAG polygons that appeared to be “probable GDEs” based on the following observations:

- Presence of a mapped USGS spring or seep
- Inundation visible on aerial imagery
- Saturation visible on aerial imagery
- Dense riparian and/or wetland vegetation visible on aerial imagery

Areas that did not exhibit the above characteristics (or similar) were considered “probable non-GDEs” for purposes of this study.

In addition to the preliminary desktop analysis of the NCAG data set, Woodard & Curran also completed a preliminary GDE field validation study throughout portions of the Cuyama groundwater basin. The field study was conducted only on publicly accessible lands (including the Los Padres National Forest) where the NCAG data set indicated potential presence of GDEs. Field observations were made at NCAG-mapped seeps, springs, and at other riparian habitats to document plant communities, aquatic or semi-aquatic wildlife, indicators of surface and subsurface hydrology, presence of hydric soils, and other relevant ecological and hydrological data. Photographs were taken in the four cardinal directions (north, east, south, west) at each field validation assessment location, and additional photographs were taken of plant species and other relevant ecological data. GPS points were also collected at the field validation assessment locations. Preliminary determinations were made at these field assessment locations as to whether an area would be classified as a GDE.

3. RESULTS

Out of 486 NCAG-mapped polygons (128 GDE_wetland and 358 GDE_vegetation), the preliminary desktop analysis yielded **123 “probable GDEs” and 275 “probable non-GDEs” based on the above**-described methodology. Individual polygons were not assessed due to time and budget constraints, but rather groupings of similarly-situated riparian areas or clusters of polygons were assessed via GIS for probability of GDE classification.

The preliminary GDE field validation study assessed six (6) locations in the field on publicly accessible lands. All field assessment sites were in the Los Padres National Forest public lands. One (1) location was along the upper mainstem of the Cuyama River, and the other five (5) locations were in the Apache Canyon Creek watershed. Table 1 below describes each of the field assessment sites in more detail.

Table 1: GDE Field Validation Data Collection Sites

Data Point Name	Latitude / Longitude	NCAG-Mapped Polygon?	NCAG Vegetation / Wetland Type	Dominant Plant Species Observed	Other Notes
probable Non-GDE 1	34.760116 N, 119.419661 W	Yes	Riversidean Alluvial Scrub	<i>Hesperoyucca whipplei</i> , <i>Arctostaphylos glauca</i> , <i>Lepidospartum squamatum</i> , <i>Ericameria nauseosa</i> , <i>Eriogonum fasciculatum</i> , <i>Bromus carinatus</i>	Soils at data point are sandy, dry and friable; would not stay in soil auger. This location does not appear to be a GDE.
probable Non-GDE 2	34.761994 N 119.375711 W	Yes	Scalebroom	<i>Lepidospartum squamatum</i> , <i>Ericameria nauseosa</i> , <i>Eriogonum fasciculatum</i>	Soils at data point are dry and friable: Some pines and junipers are growing in the riparian zone adjacent to river bed; no evidence of hydrology that persists beyond flashy storm events. This location does not appear to be a GDE.
GDE 1	34.778902 N 119.341961 W	No	N/A	<i>Juncus xiphioides</i> , <i>Juncus patens</i> , <i>Typha domingensis</i> , <i>Scirpus microcarpus</i> , <i>Salix exigua</i> , <i>Salix laevigata</i> , <i>Castilleja sp.</i>	A small stream is flowing at this location and hydrophytic vegetation is present throughout the channel; brown algae observed in flowing stream; crystallized salt or other calcic material observed on stream channel sediments; soils are saturated to the surface in this area.
GDE 2	34.801748 N 119.293979 W	Yes	Palustrine, Scrub-Shrub, Seasonally Saturated	<i>Clematis ligusticifolia</i> , <i>Juncus effusus</i> , <i>Salix laevigata</i> , <i>Urtica dioica</i>	Data point is located at US Forest Service Nettle Springs Campground; USGS mapped spring indicated at data point; groundwater is seeping out of the hillside at this data point; soils sampled on hillslope are hydric and saturated at the surface; water flows in a small channel for approximately 300-500 feet downstream of the spring before drying up.



TO: Standing Advisory Committee
Agenda Item No. 5aiii

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Review of Options for Management Area Governance

Issue

Review options for Management Area governance.

Recommended Motion

None – information only.

Discussion

An overview of options for Management Area governance is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

Review of Options for Management Area Governance

March 28, 2019



DWR Definition of a “Management Area”

- *“... may be defined by natural or jurisdictional boundaries, and may be based on differences in water use sector, water source type, geology, or aquifer characteristics.”*
- *“Management Areas may have different minimum thresholds and measurable objectives than the basin at large and may be monitored to a different level.”*
- *“Other portions of the GSP (e.g., hydrogeologic conceptual model, water budget, notice and communication) must be consistent of the entire GSP area.”*

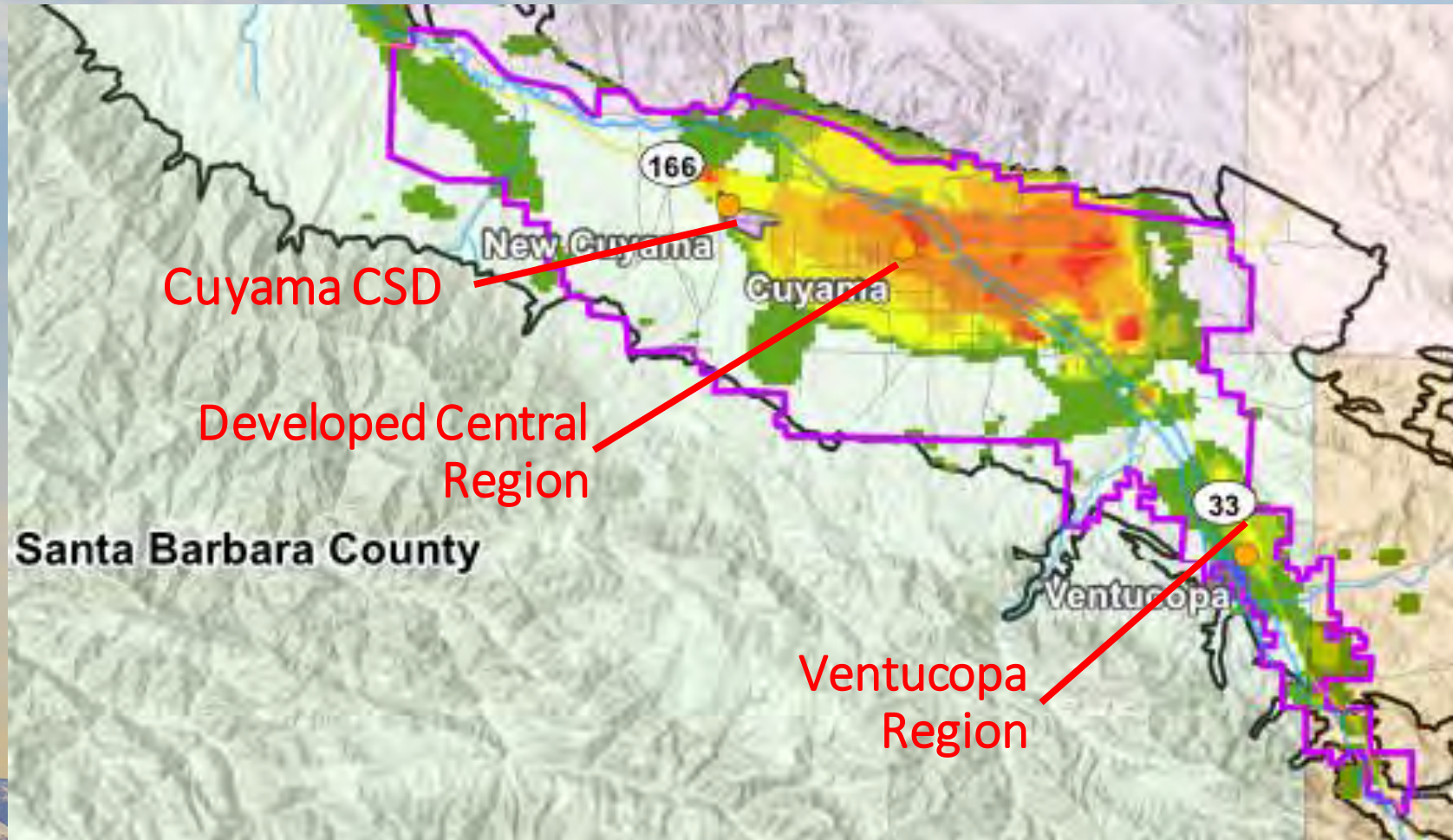
Board Direction on Management Areas

- **Two management areas will be included in the current GSP:**
 - **Central Basin area with modeled overdraft conditions (>2 ft/yr)**
 - **Ventucopa area with modeled overdraft conditions (>2 ft/yr)**
- Information will be developed over the next five years to refine proposed management areas

Board Direction on Management Areas

- All management areas will include the following:
 - (1) Allocation per irrigated acre within the area influencing overdraft in the Central Region
 - (2) Historical use allocation for the CCSD
 - (3) Include a mechanism for adding in un-irrigated acres within the area influencing Central Region overdraft that may want to use their groundwater rights, and
 - (4) No restrictions for users outside the management areas.

Two (or Three) Potential Management Areas



Options for Management Area Governance

1. GSA Responsible for Management Area(s)
2. GSA Delegates Responsibility for Management Area(s)
 - Cuyama Basin Water District
 - Cuyama Community Services District

Direction on Cuyama Community Services District

- Board Direction: historical use allocation for the CCSD
 - Recent historical pumping level: ~100 AF/year
- How should potential future growth be handled?
 - Capped at recent historical levels?
 - Capped at something else?
- Should the CCSD be included in a management area?
- Staff Recommendation:
 - Limit CCSD to recent historical pumping level plus de minimis growth
 - Don't include the CCSD in a management area

Areas of Potential Delegation

Things to Delegate

- Management Actions
- Pumping Reductions
- Project Evaluation and Implementation
- Well-Head Metering (if deemed appropriate)

Things to Not Delegate

- GSA Oversight
- GSP Updates
- Monitoring and Reporting
- Satellite Imagery to Monitor Water Use

Advantages and Disadvantages – Non-Delegation

Advantages

- No additional agreements required
- Centralized control and reporting

Disadvantages

- Time and effort spent by “non-affected” parties
- Non-affected parties engaged in decision making

Advantages and Disadvantages – Delegation

Advantages

- Only affected parties engaged in decision making
- Less time and effort spent by “non-affected” parties
- Non-affected parties receive regular updates
- More efficient project implementation

Disadvantages

- Additional agreements required
- Additional oversight by GSA on delegated responsibilities



TO: Standing Advisory Committee
Agenda Item No. 5aiv

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Update on Sustainability and Climate Change Modeling

Issue

Update on sustainability and climate change modeling.

Recommended Motion

None – information only.

Discussion

An update on sustainability and climate change modeling is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

Update on Sustainability and Climate Change Modeling

March 28, 2019



Water Budgets - Time Frames

Historical Conditions

Historical hydrology, land use and population (1995-2017)

Current Conditions

2017 land use and population
1967 - 2017 historical hydrology

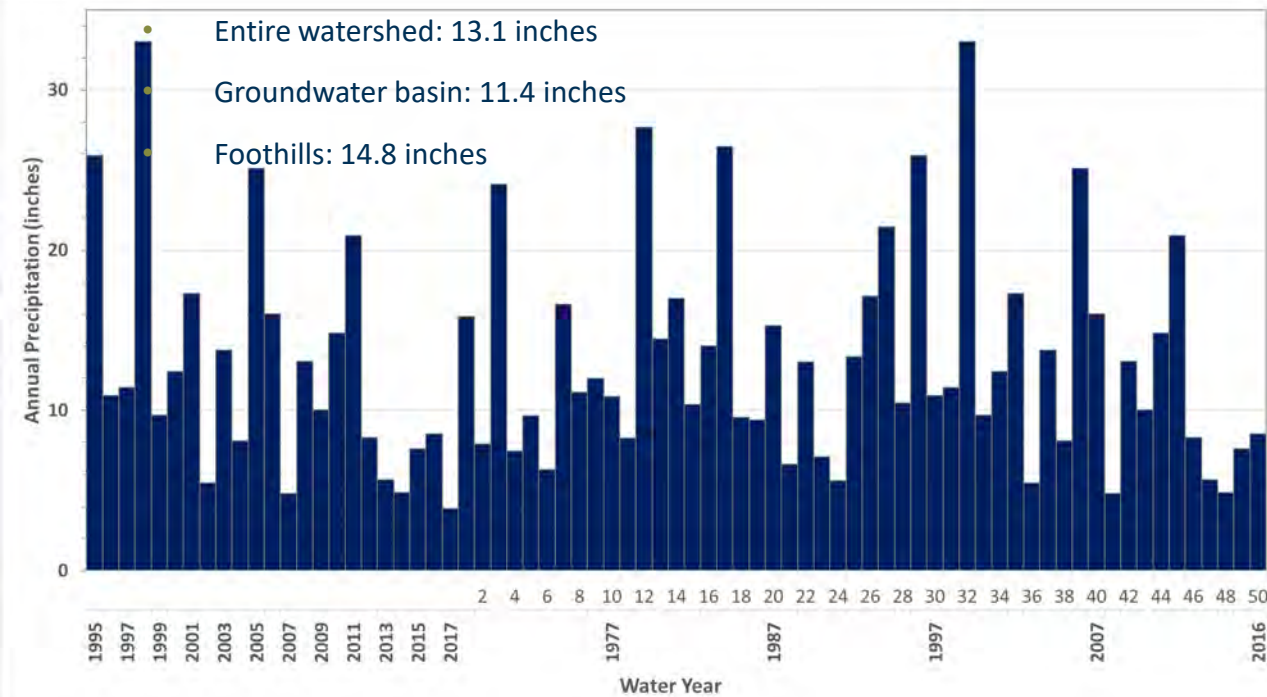
Future Conditions

Year 2040 land use and population
- Assumed to be the same as
Current Conditions
1967- 2017 historical hydrology
With and without climate change

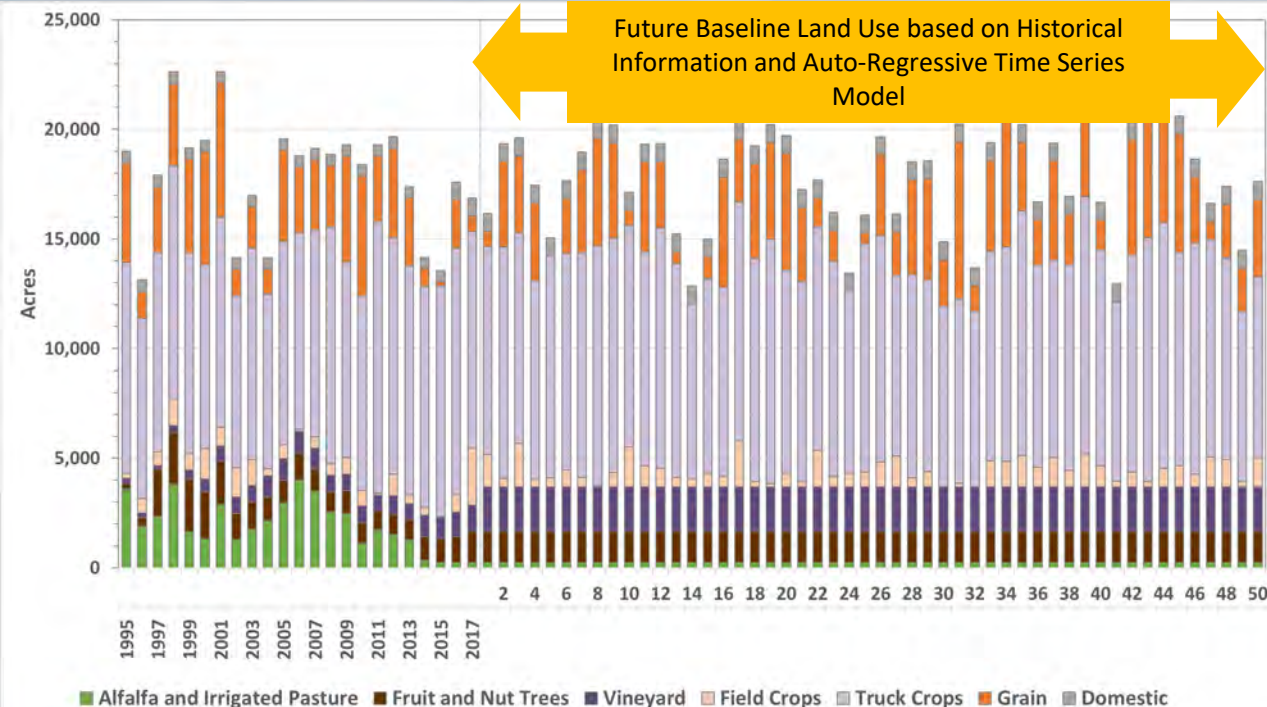
Future Conditions

Annual Precipitation (based on adjusted PRISM dataset)

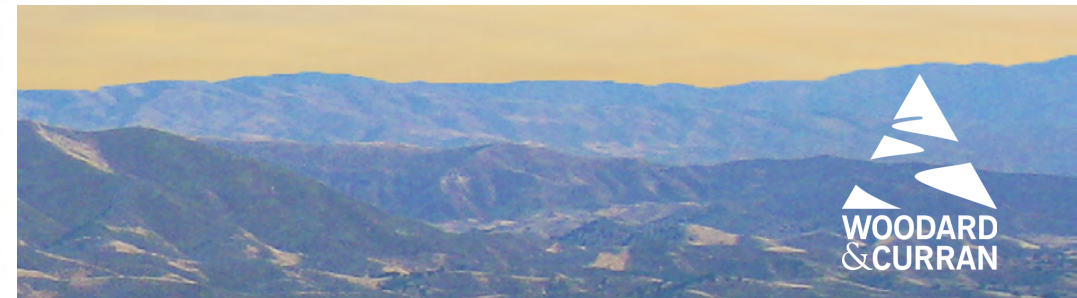
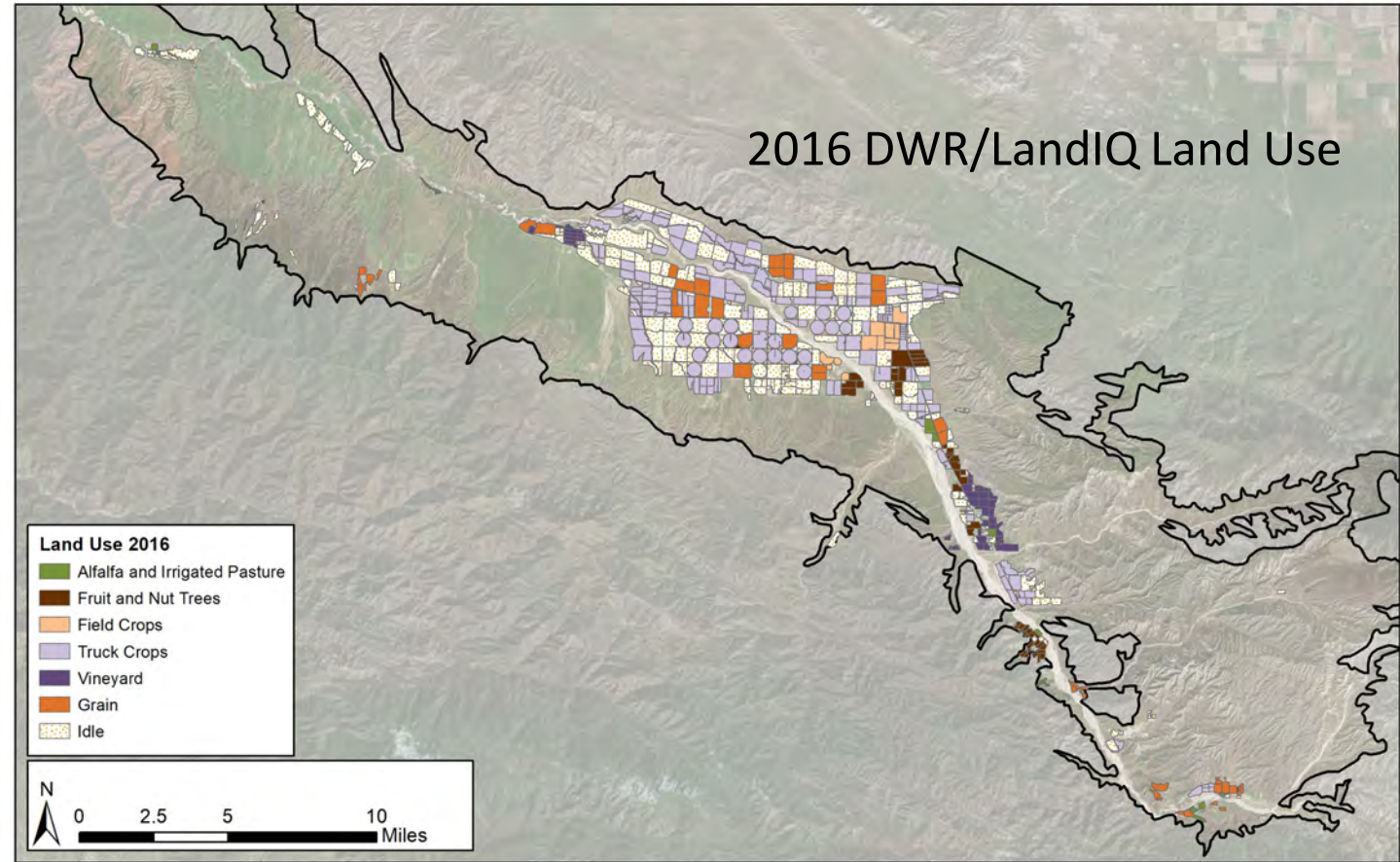
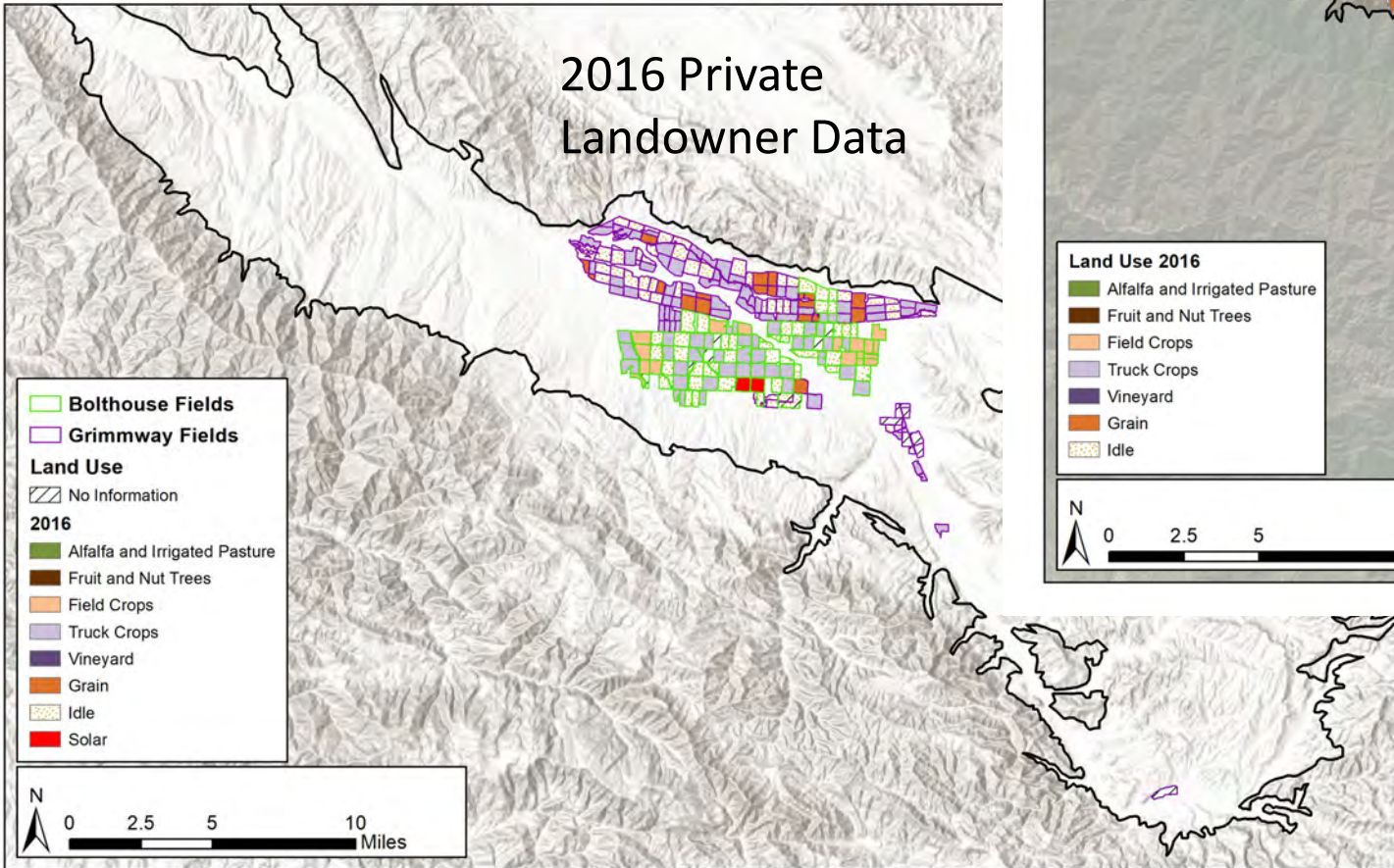
Average Annual Precipitation (50 years)



Land Use (based on historical information and ARMA Model)



2016/17 Land Use Data

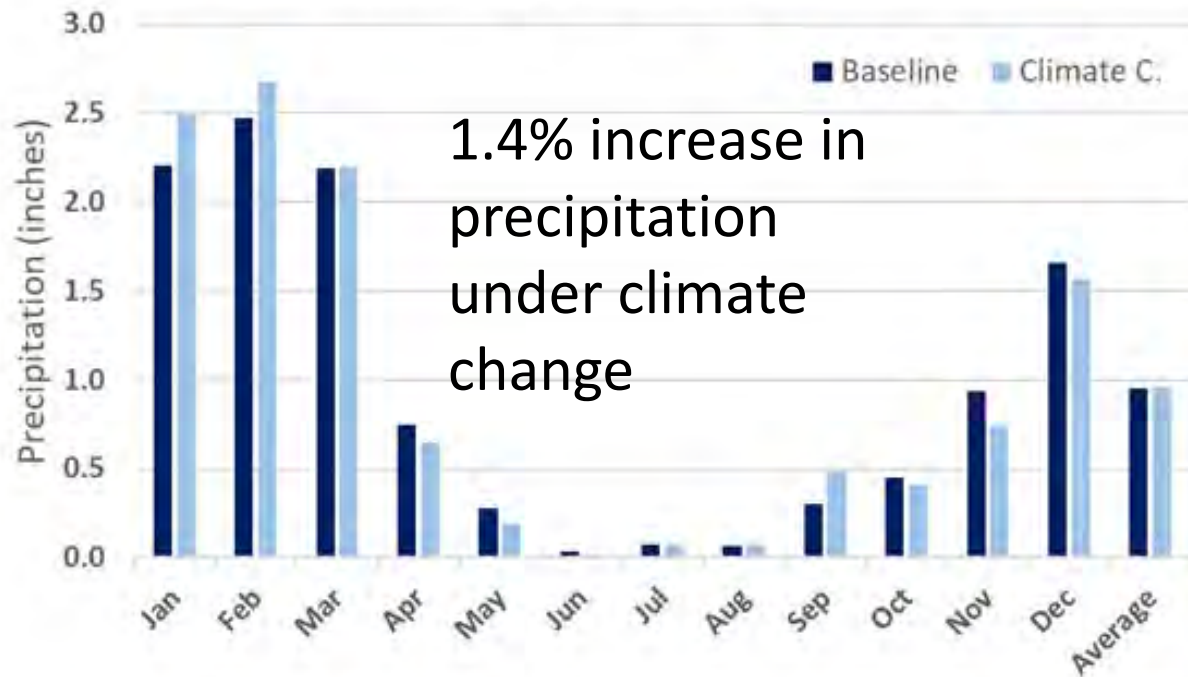


Future Baseline Conditions Under Climate Change

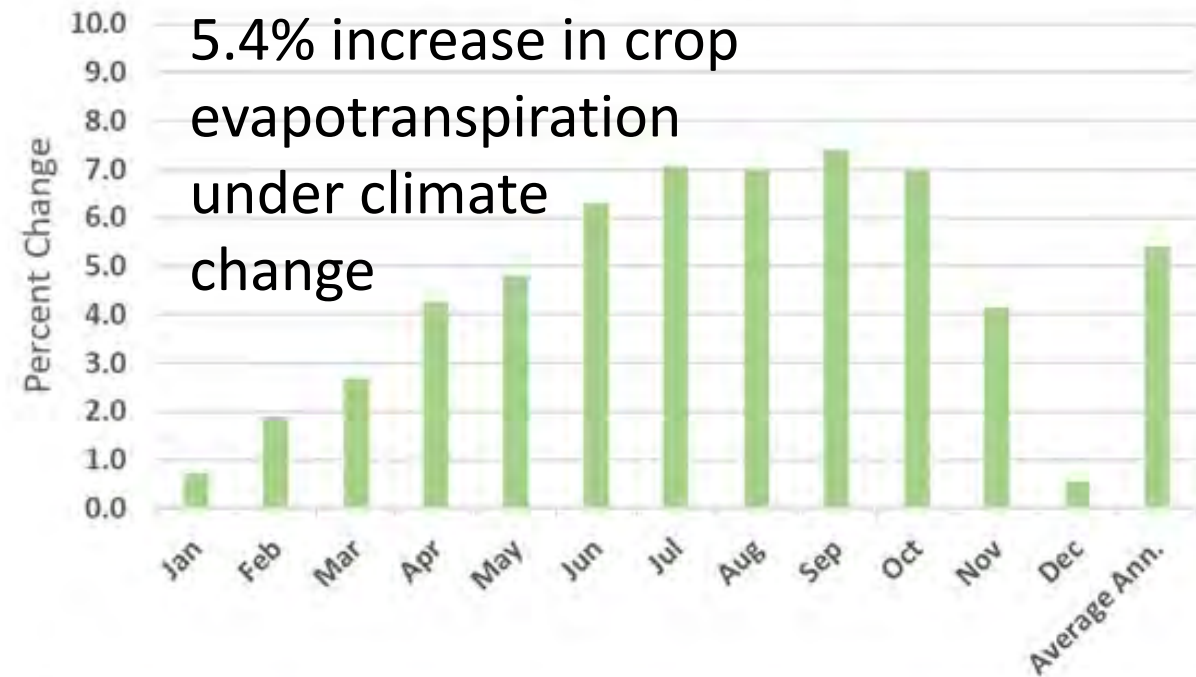
- Year 2040 land use and population
 - Assumed to be the same as Current Conditions
- Uses 1967- 2017 historical hydrology
- Datasets modified to reflect climate change:
 - Precipitation
 - Crop evapotranpiration
 - Modifications made using factors provided by CA DWR

Future Baseline Conditions Under Climate Change

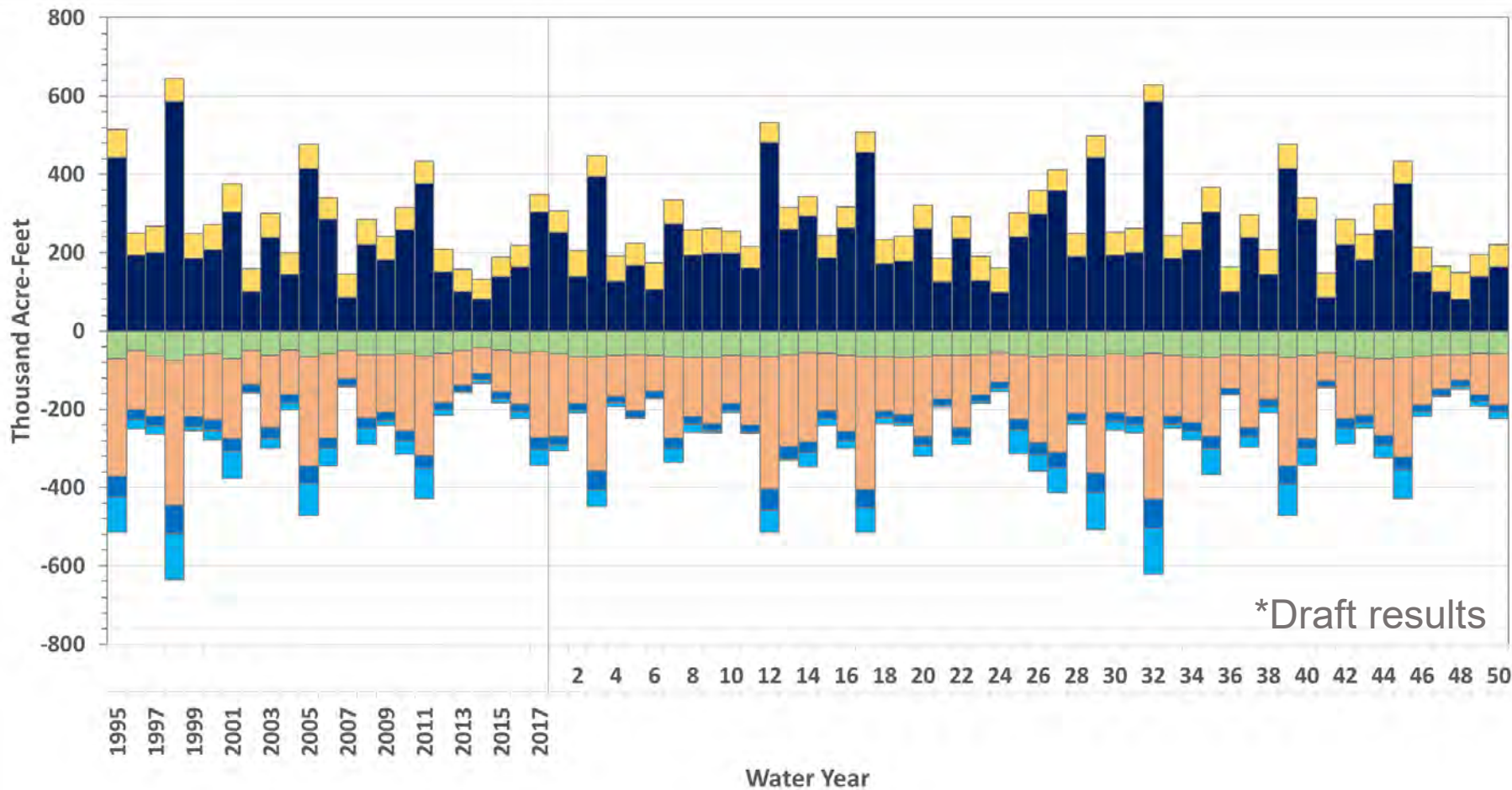
Average Precipitation
(Baseline vs. Climate Change)



Average Ag. Actual ET Change
(Climate Change minus Baseline)



Future Conditions without Climate Change: Basin-Wide Land Surface Water Budget



Average Annual (50 years)

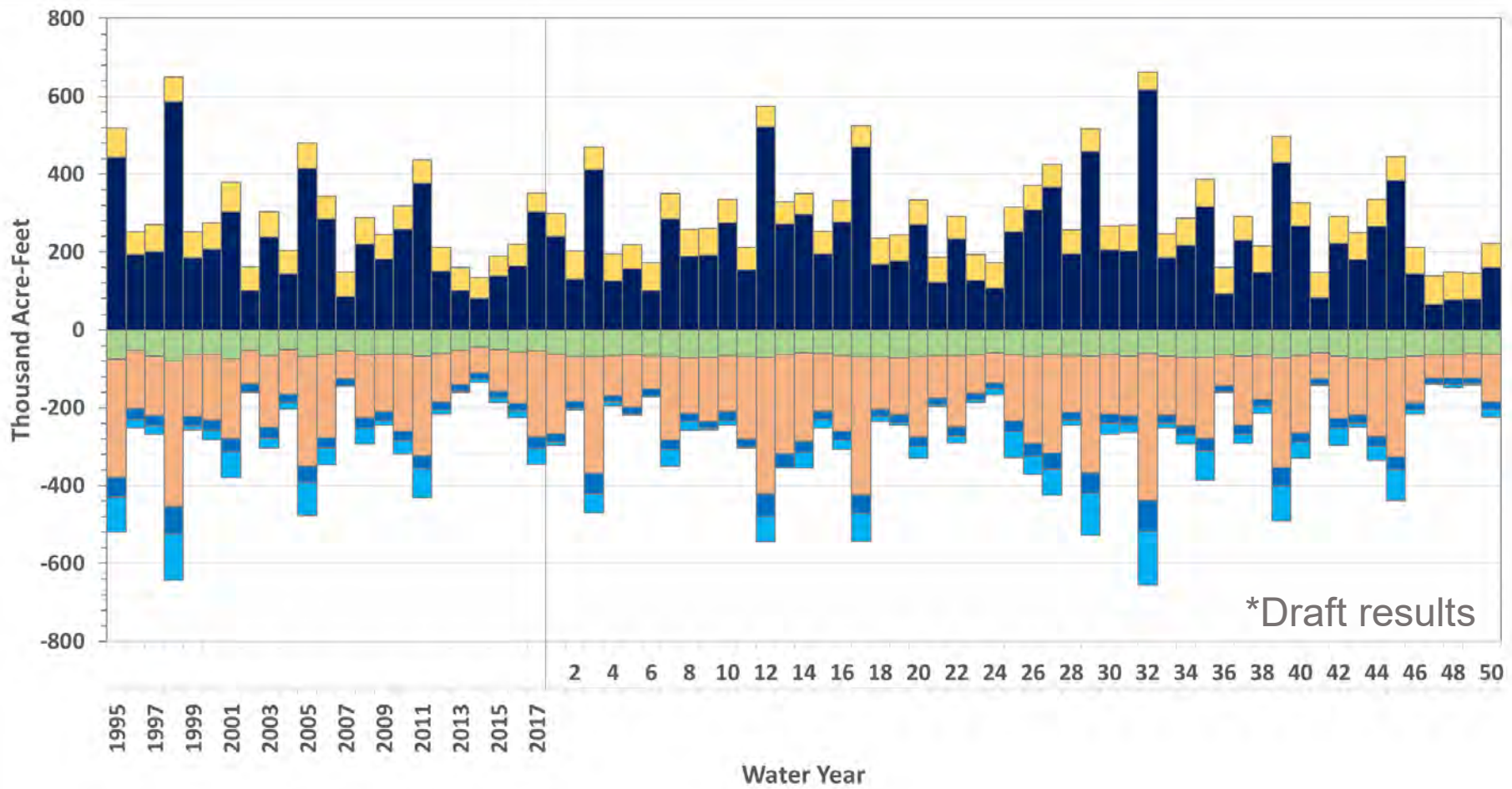
Inflows

- Precipitation (~11.4") 230 TAF
- Applied Water 60 TAF

Outflows

- Agriculture Evapotranspiration 57 TAF
- Native Vegetation Evapotranspiration 182 TAF
- Domestic Evapotranspiration <0.1 TAF
- Deep Percolation 24 TAF
- Runoff 27 TAF

Future Conditions with Climate Change: Basin-Wide Land Surface Water Budget



Average Annual (50 years)

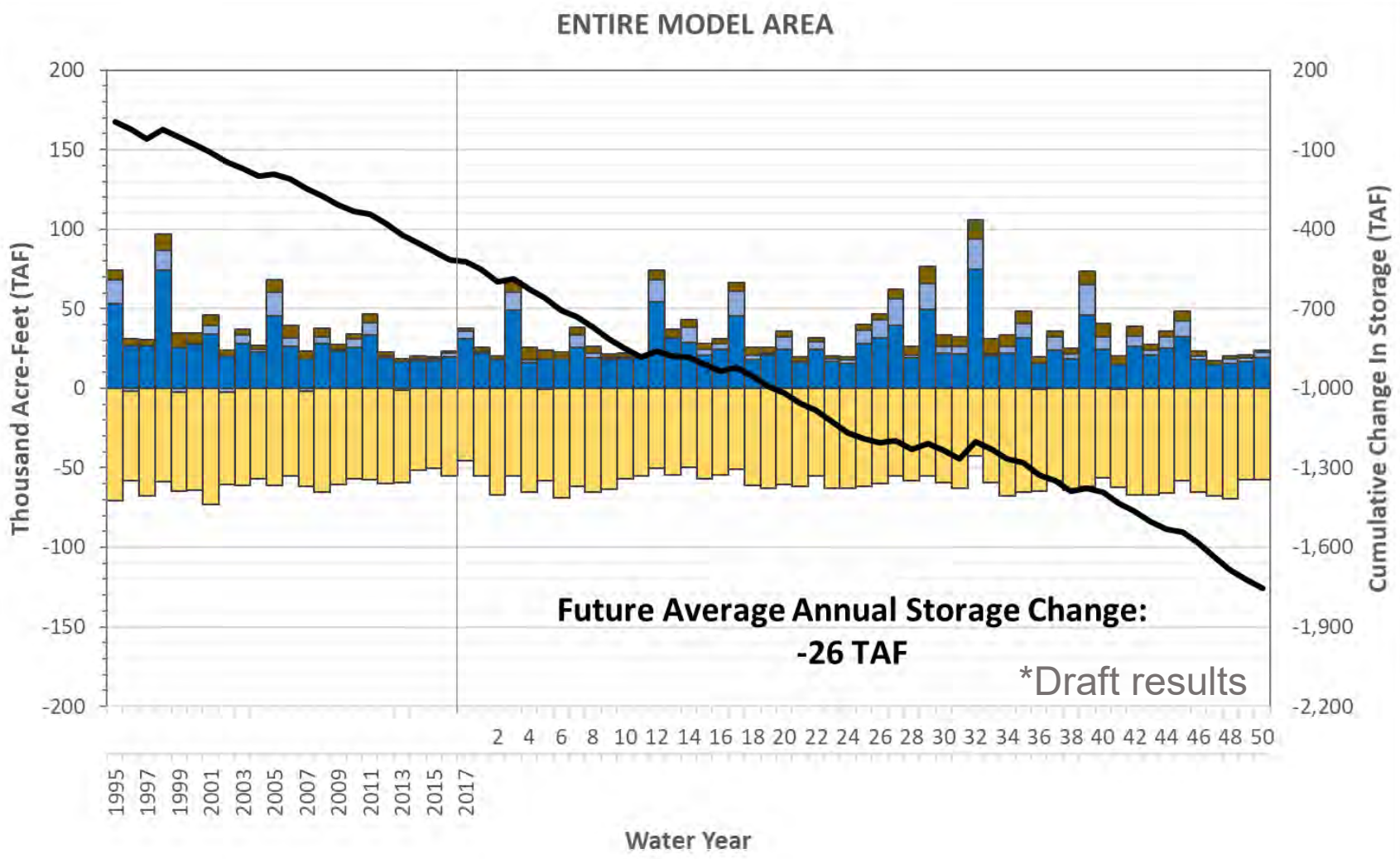
Inflows

- Precipitation (~11.6") 233 TAF
- Applied Water 63 TAF

Outflows

- Agriculture Evapotranspiration 66 TAF
- Native Vegetation Evapotranspiration 174 TAF
- Domestic Evapotranspiration <0.5 TAF
- Deep Percolation 26 TAF
- Runoff 30 TAF

Future Conditions without Climate Change: Basin-Wide Groundwater Budget



Average Annual (50 years)

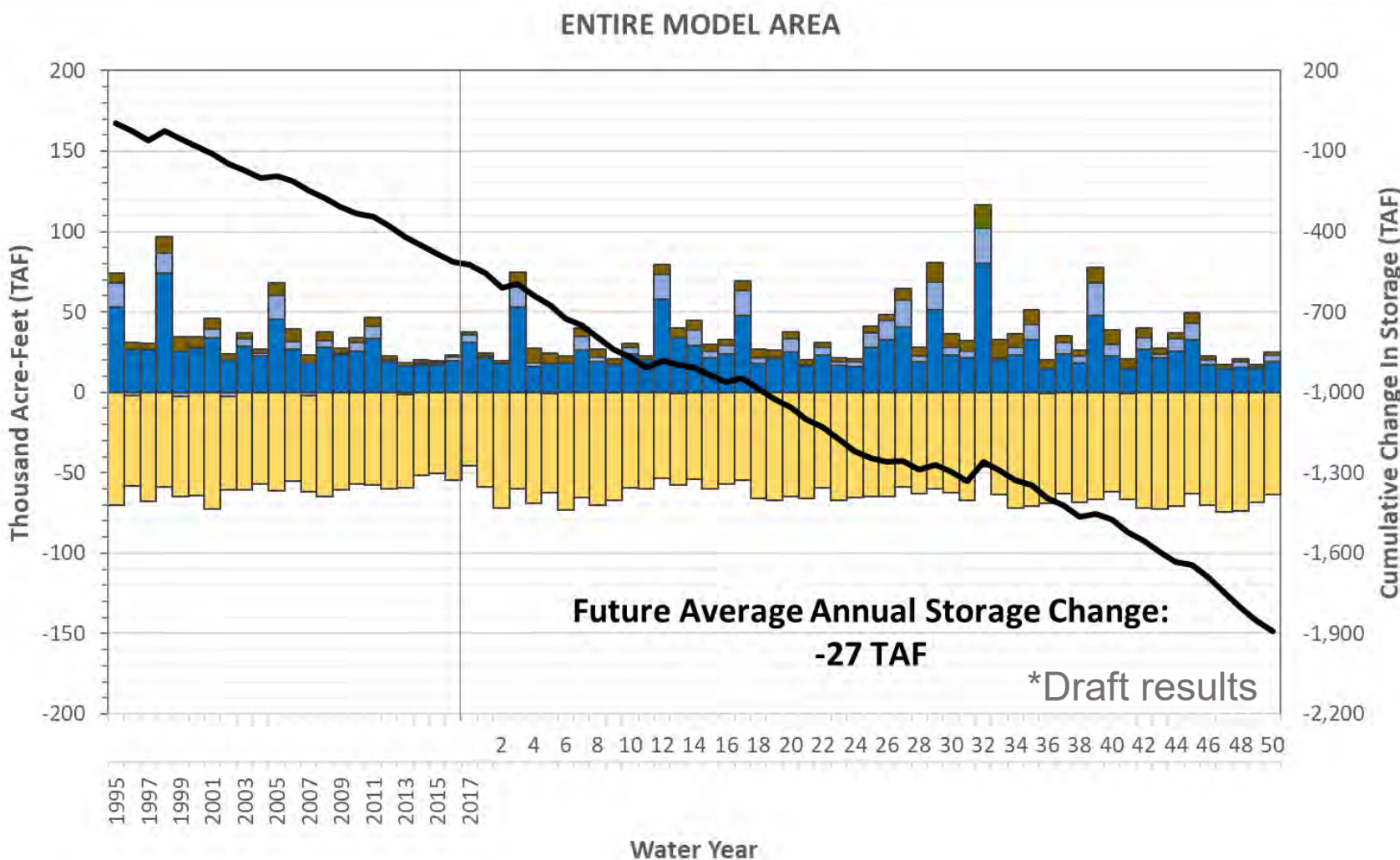
Inflows:

- Deep Percolation 26 TAF
- Stream Seepage 4 TAF
- Boundary Flow 4 TAF

Outflows:

- GW Pumping 60 TAF

Future Conditions with Climate Change: Basin-Wide Groundwater Budget



Average Annual (50 years)

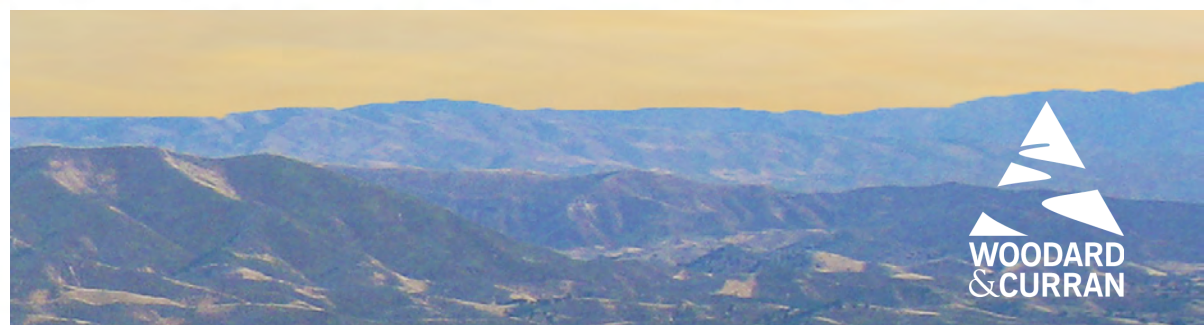
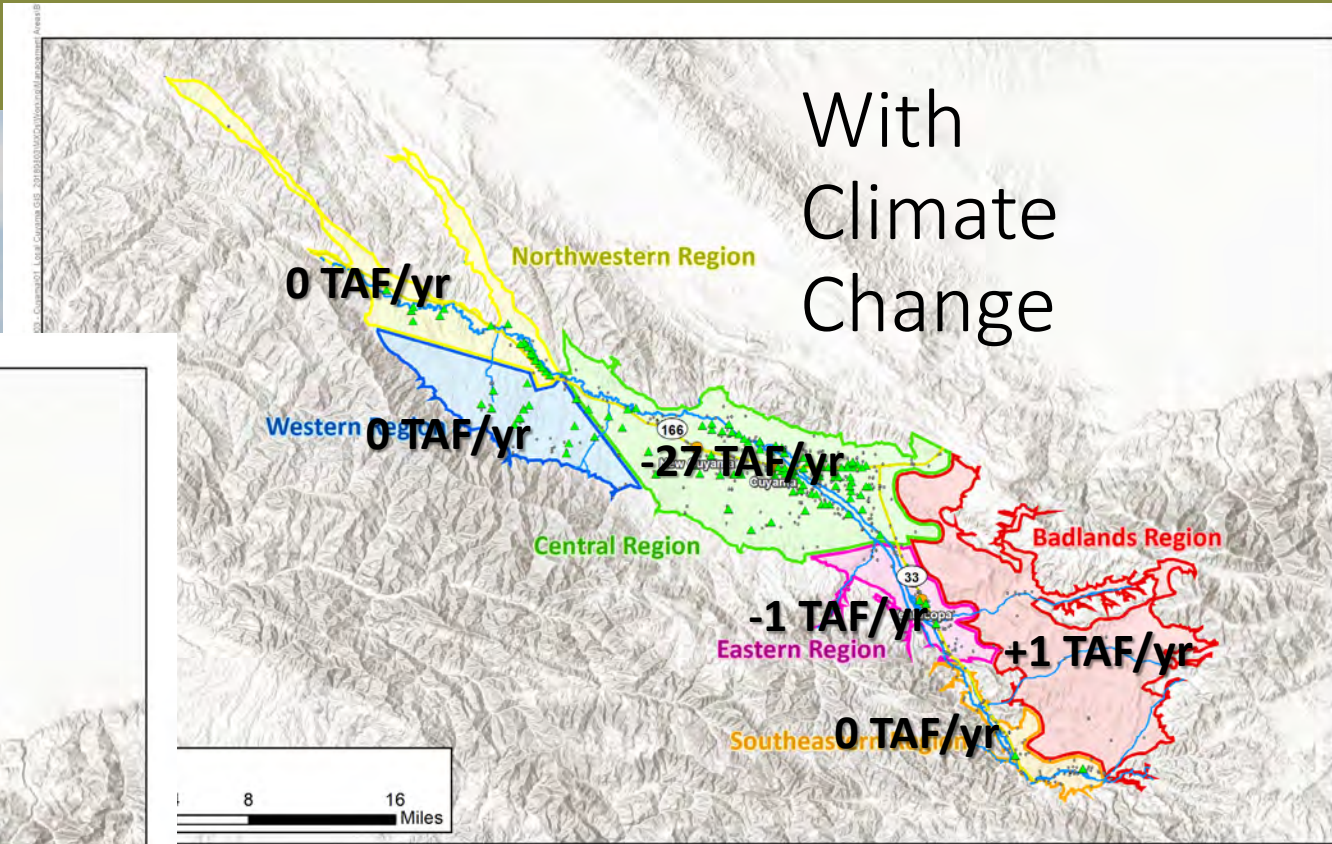
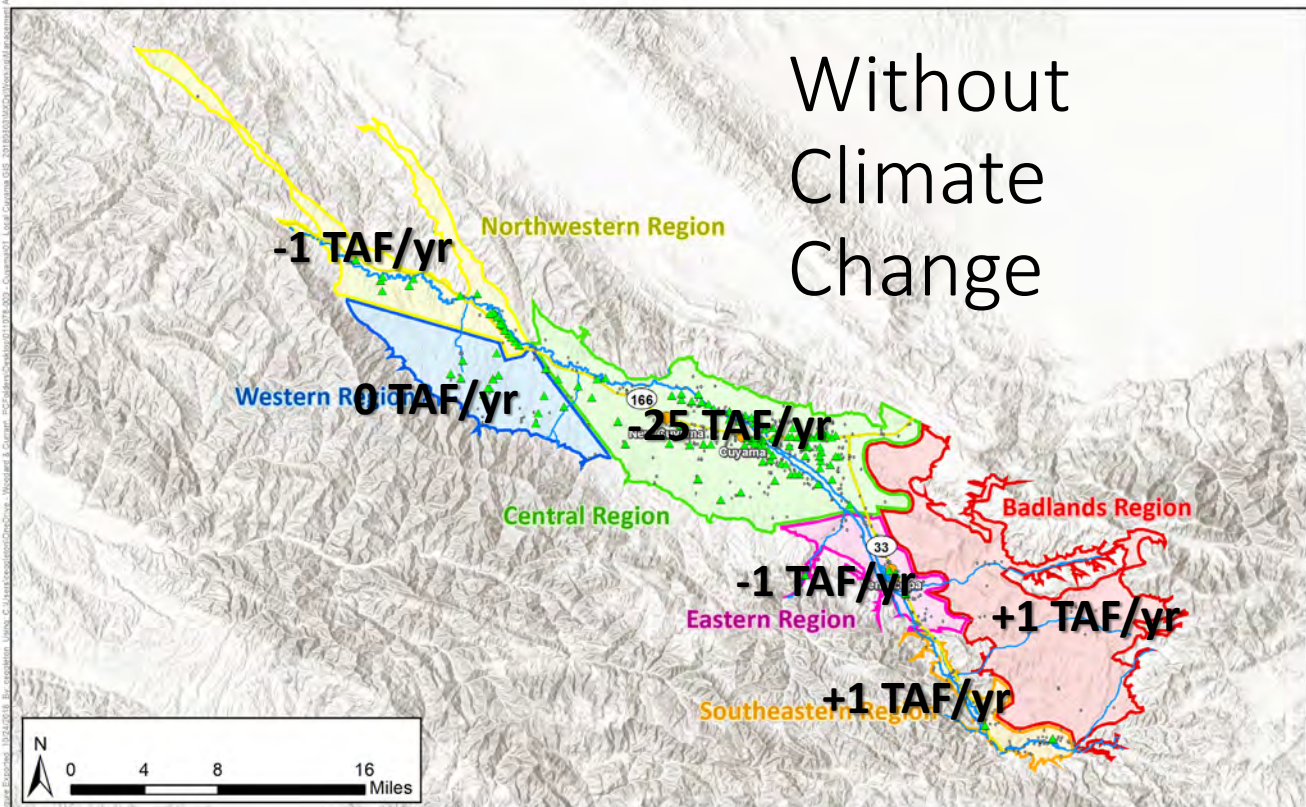
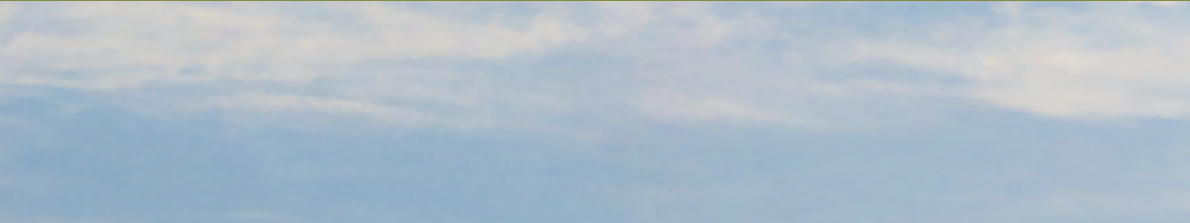
Inflows:

- Deep Percolation 26 TAF
- Stream Seepage 5 TAF
- Boundary Flow 5 TAF

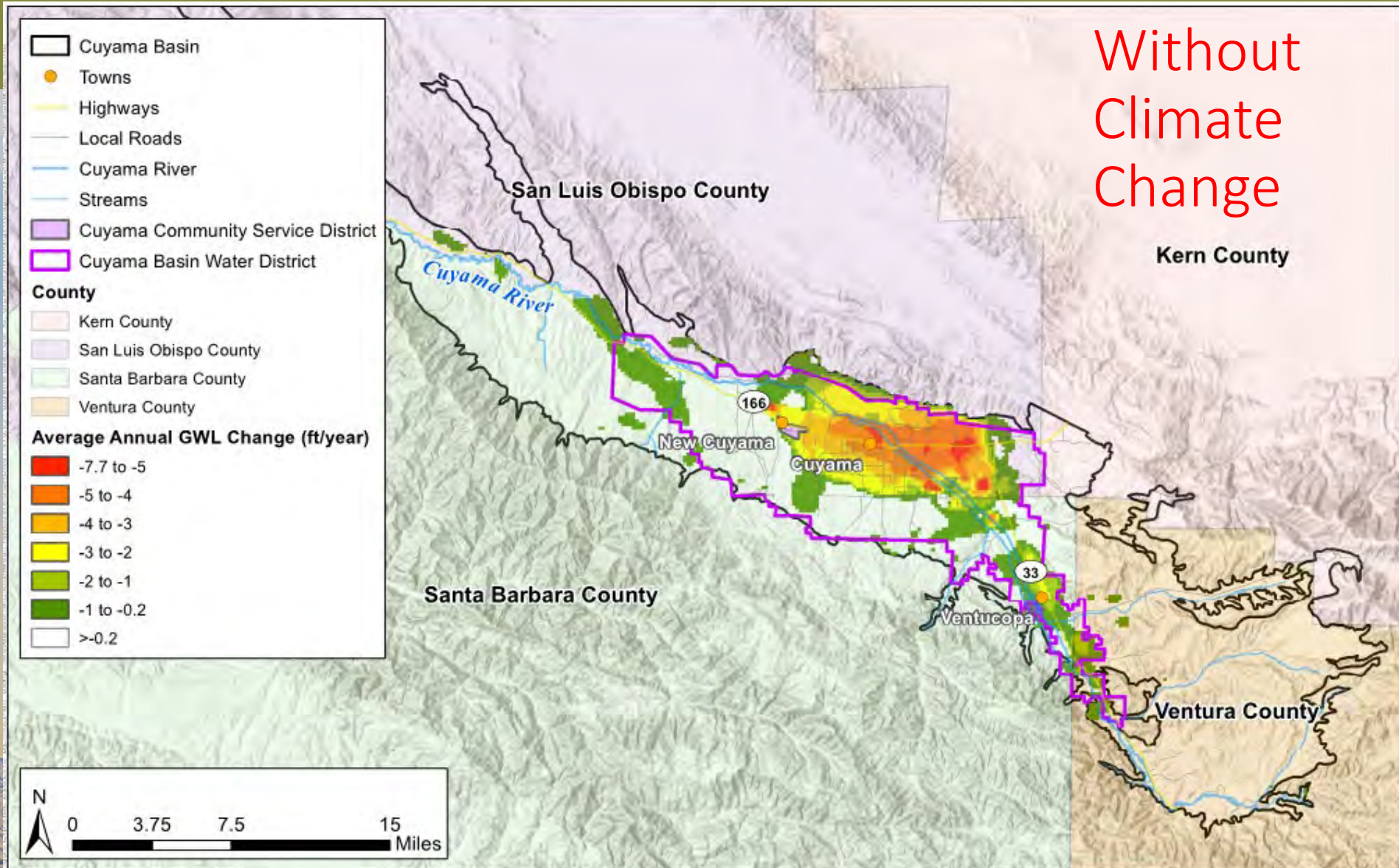
Outflows:

- GW Pumping 63 TAF

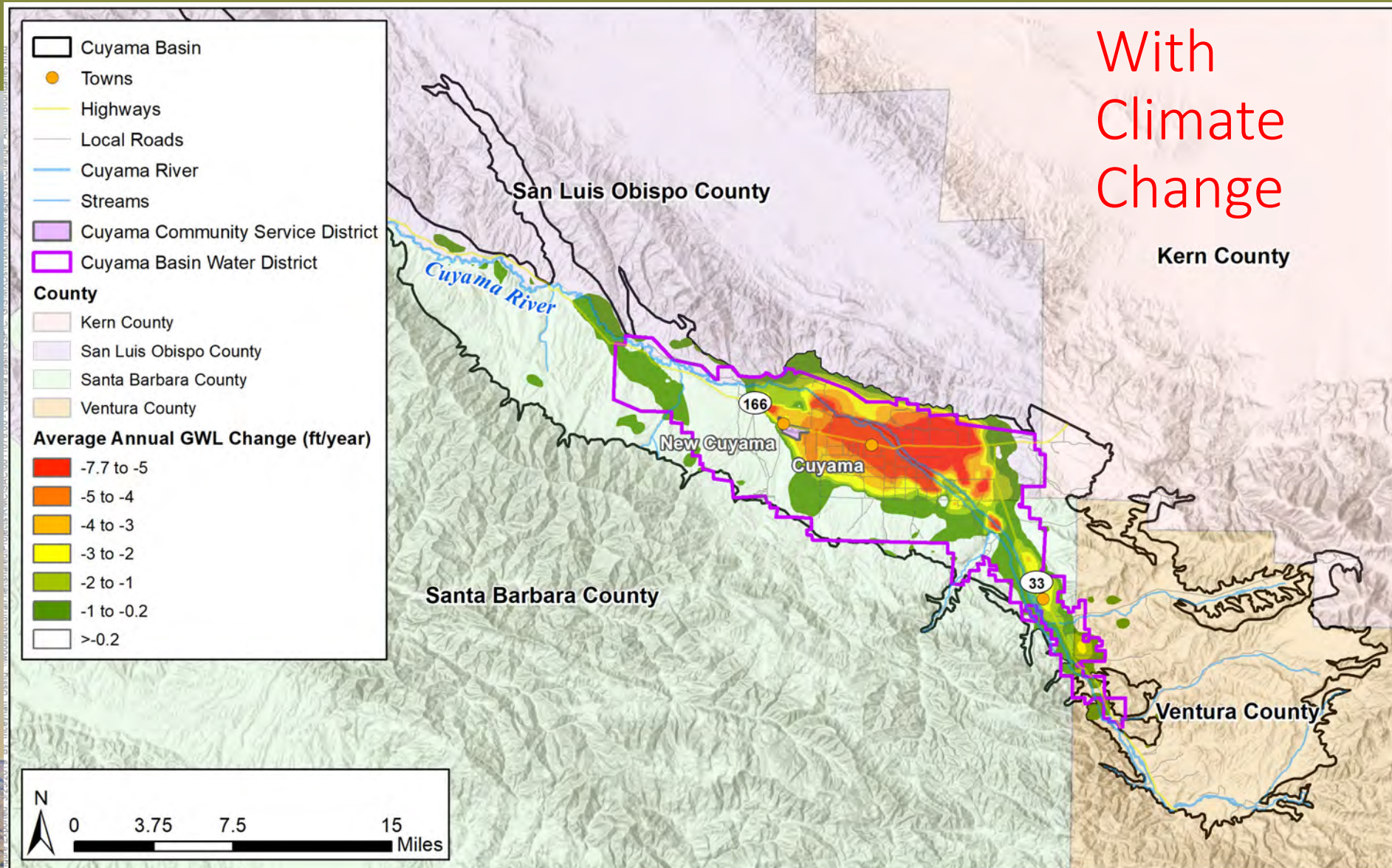
Average Annual Storage Change by Region



Average Annual Groundwater Level Change



Average Annual Groundwater Level Change

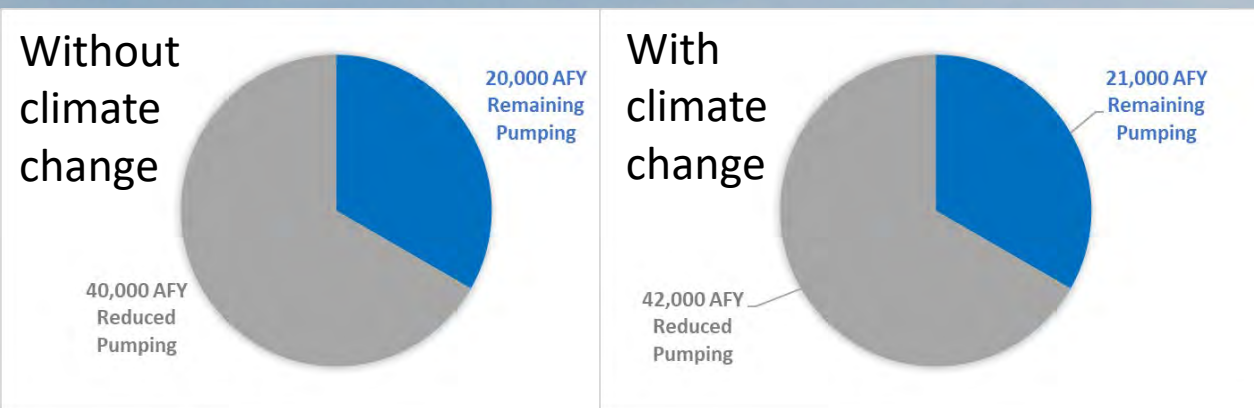


Future Basin Sustainability Simulations

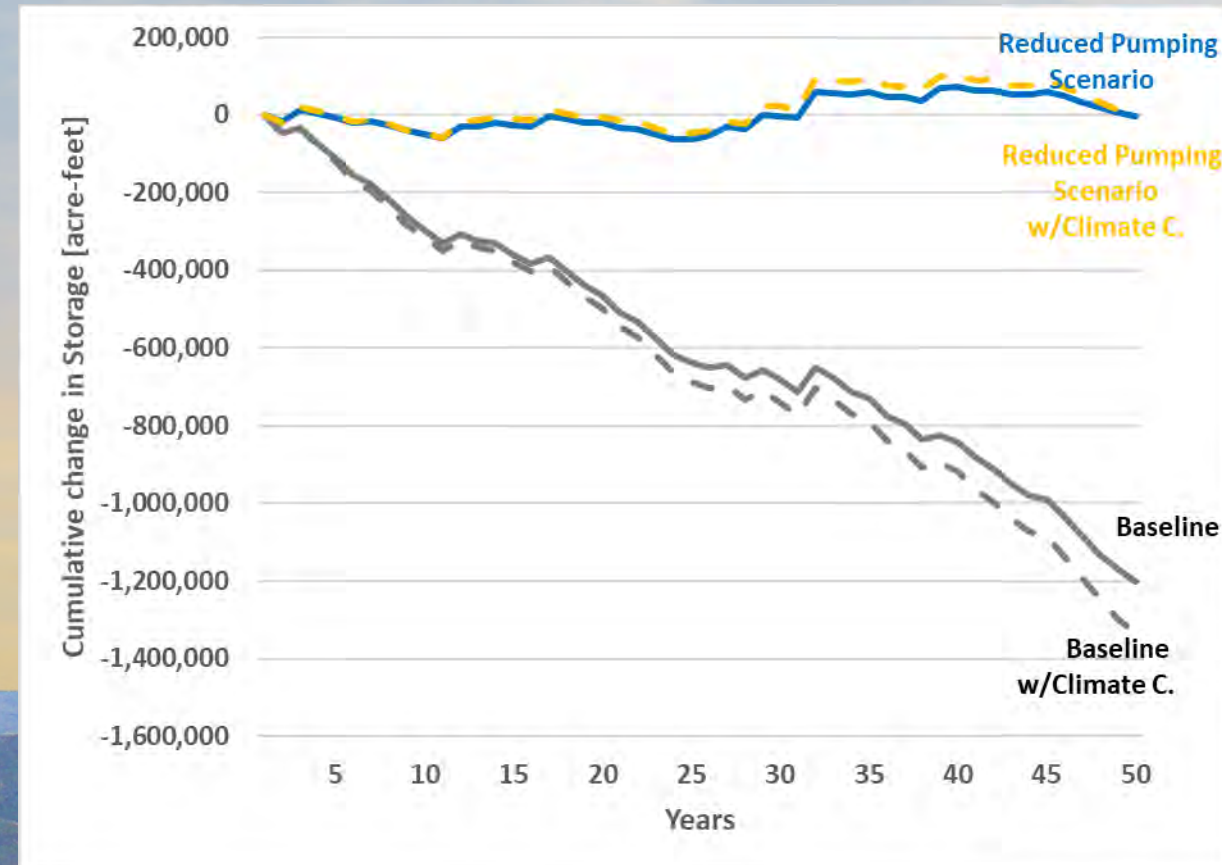
- Simulations Performed:
 - Pumping reductions only (without climate change)
 - Pumping reductions only (with climate change)
 - Pumping reductions with water supply projects (without climate change)
 - Pumping reductions with water supply projects (with climate change)
- Assumptions for reducing pumping volumes:
 - In each scenario run, total crop acreage was reduced by a constant percentage through the 50 year period.
 - Reduction applied independently for Central Developed Area and Ventucopa
- Water supply projects included:
 - Stormwater capture
 - Precipitation enhancement

Future Conditions – Pumping Reductions Only Scenarios – Basin-Wide

Pumping reductions required to eliminate cumulative decline in storage



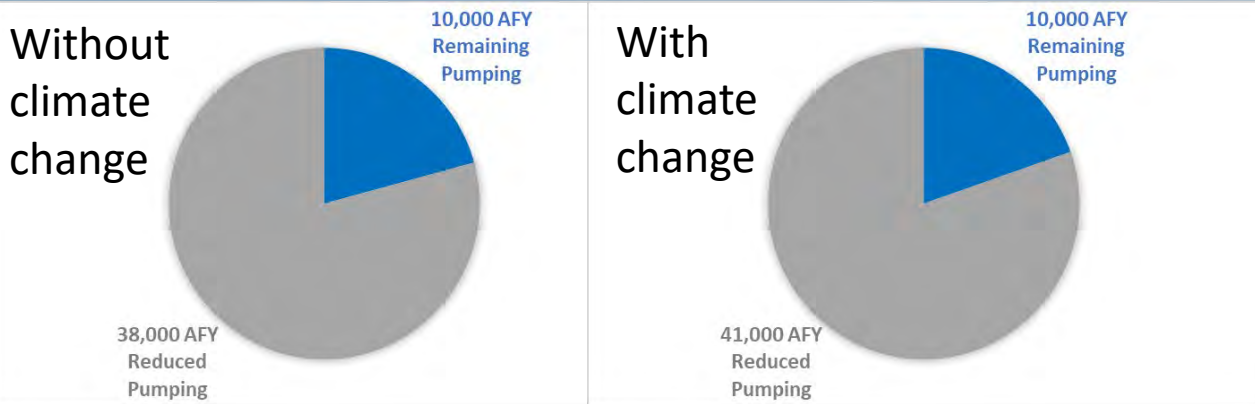
Projected change in storage under Baseline and reduced pumping conditions



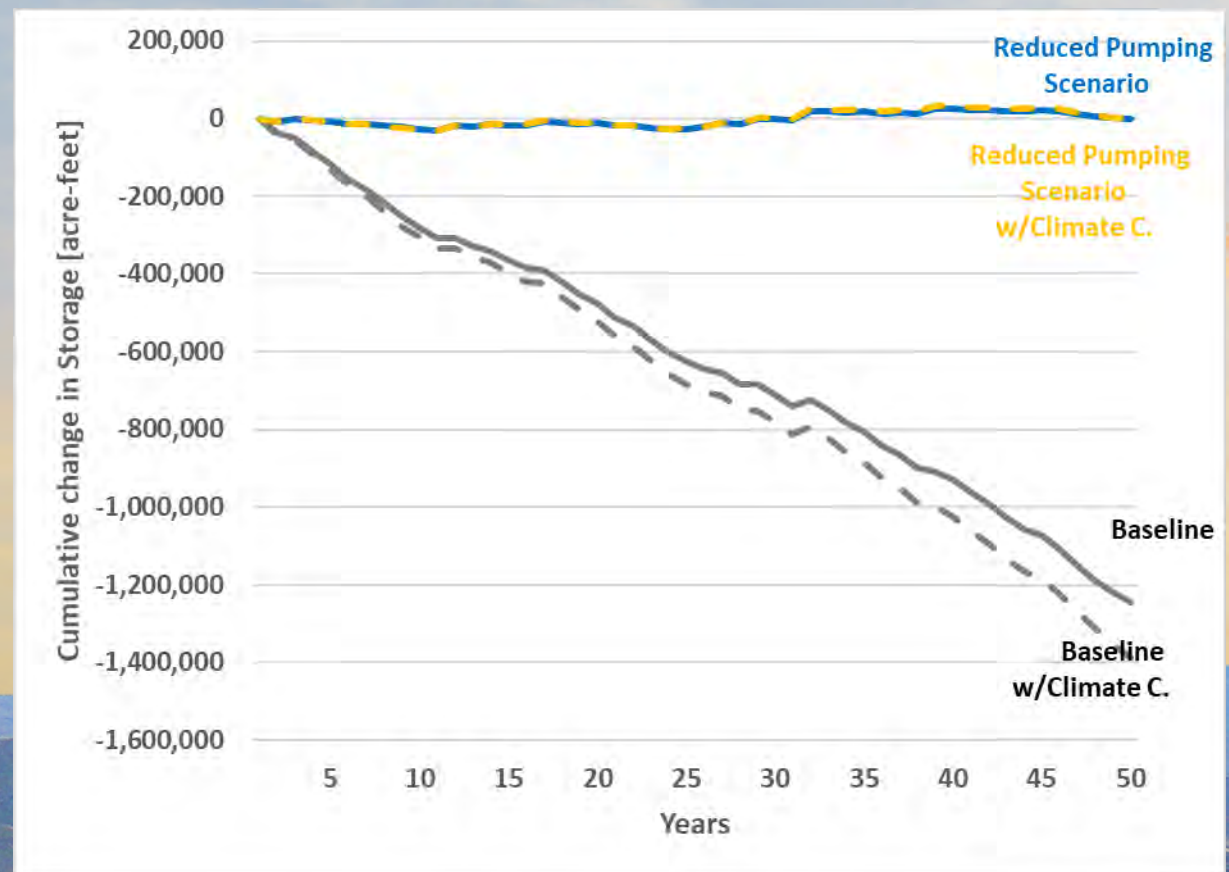
	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	26,000	12,000	26,000	11,000
Gain from Stream (+)	4,000	4,000	5,000	5,000
Subsurface Inflow(+)	4,000	4,000	5,000	5,000
OUTFLOWS				
Pumping (-)	60,000	20,000	63,000	21,000
STORAGE CHANGE	-26,000	0	-27,000	0

Future Conditions – Pumping Reductions Only Scenarios – Central Developed Region

Pumping reductions required to eliminate cumulative decline in storage



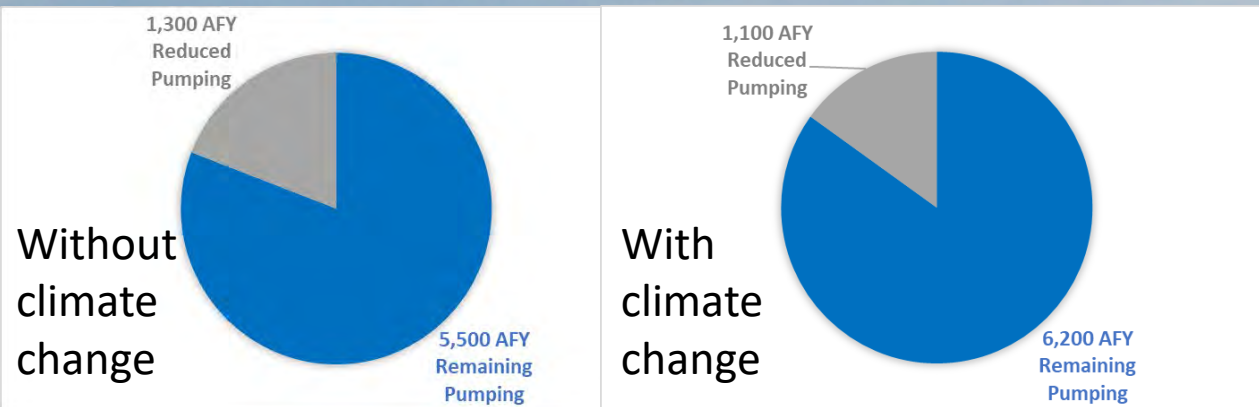
Projected change in storage under Baseline and reduced pumping conditions



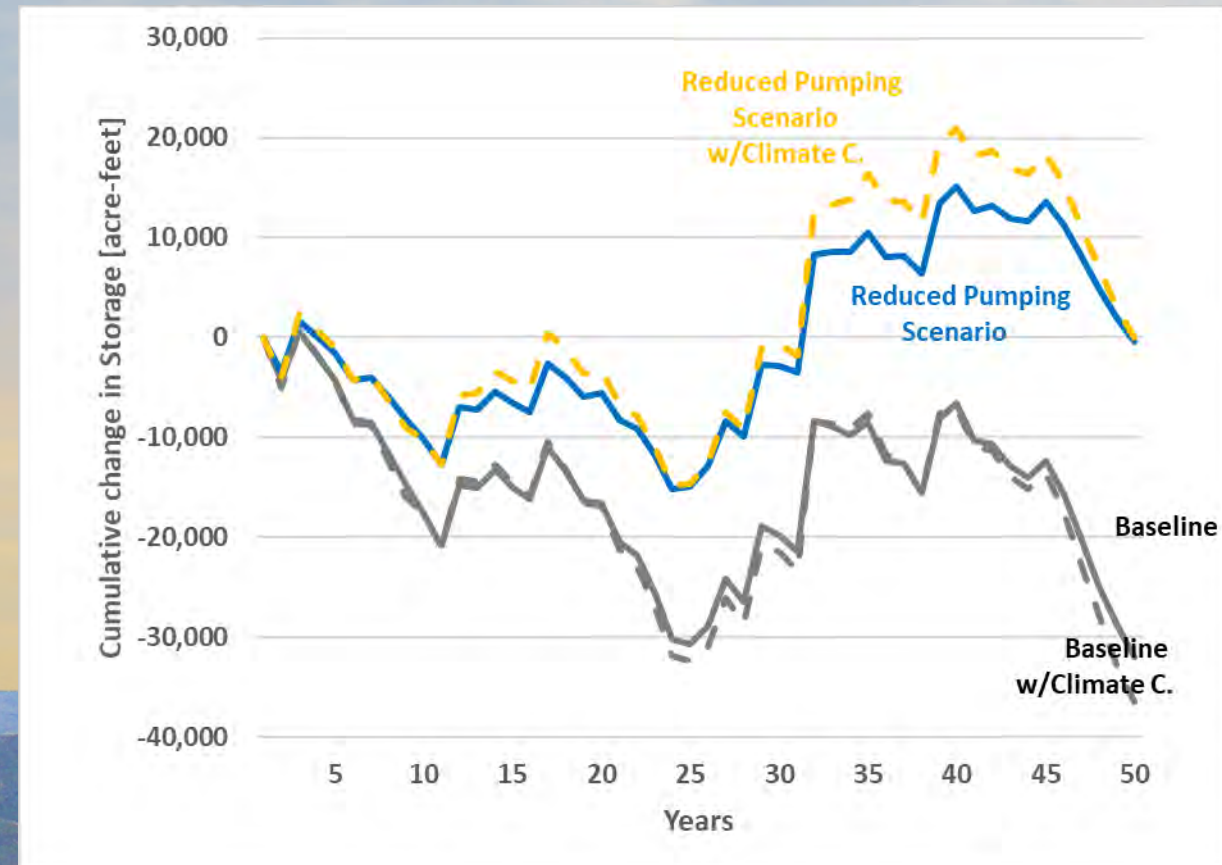
	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	17,000	4,000	17,000	4,000
Gain from Stream (+)	5,000	5,000	5,000	5,000
Subsurface Inflow(+)	1,000	1,000	2,000	1,000
OUTFLOWS				
Pumping (-)	48,000	10,000	51,000	10,000
STORAGE CHANGE	-25,000	0	-27,000	0

Future Conditions – Pumping Reductions Only Scenarios – Ventucopa Region

Pumping reductions required to eliminate cumulative decline in storage



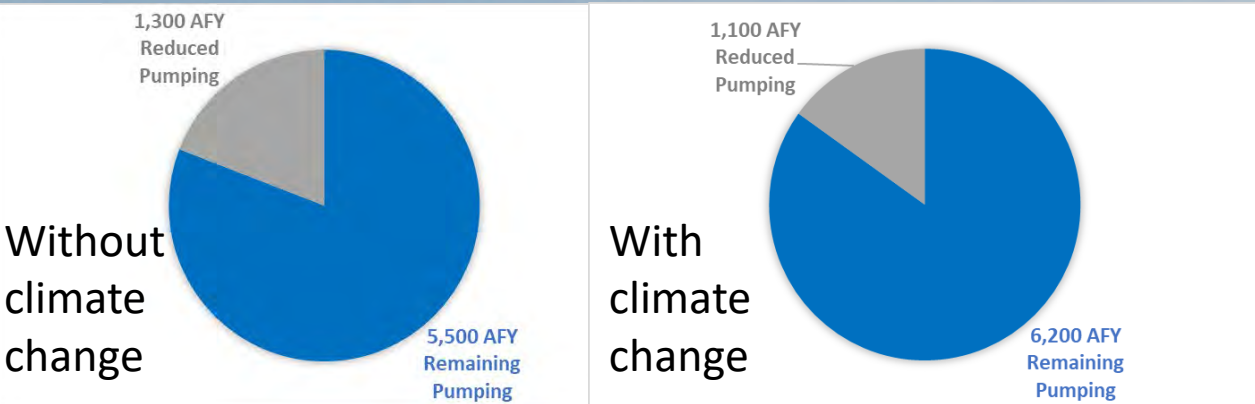
Projected change in storage under Baseline and reduced pumping conditions



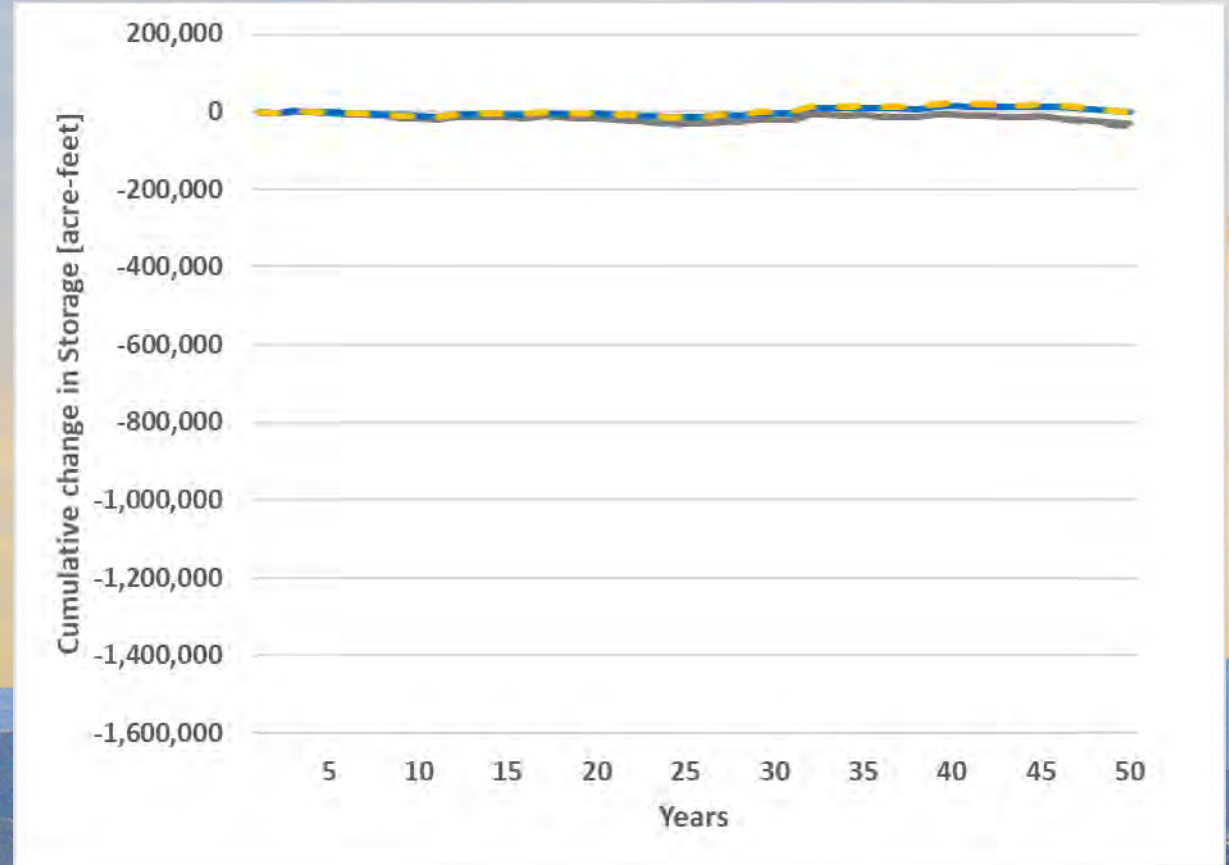
	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	4,200	3,500	4,300	3,900
Gain from Stream (+)	1,300	1,300	1,400	1,400
Subsurface Inflow(+)	700	700	900	900
OUTFLOWS				
Pumping (-)	6,800	5,500	7,300	6,200
STORAGE CHANGE	-600	0	-700	0

Future Conditions – Pumping Reductions Only Scenarios – Ventucopa Region

Pumping reductions required to eliminate cumulative decline in storage



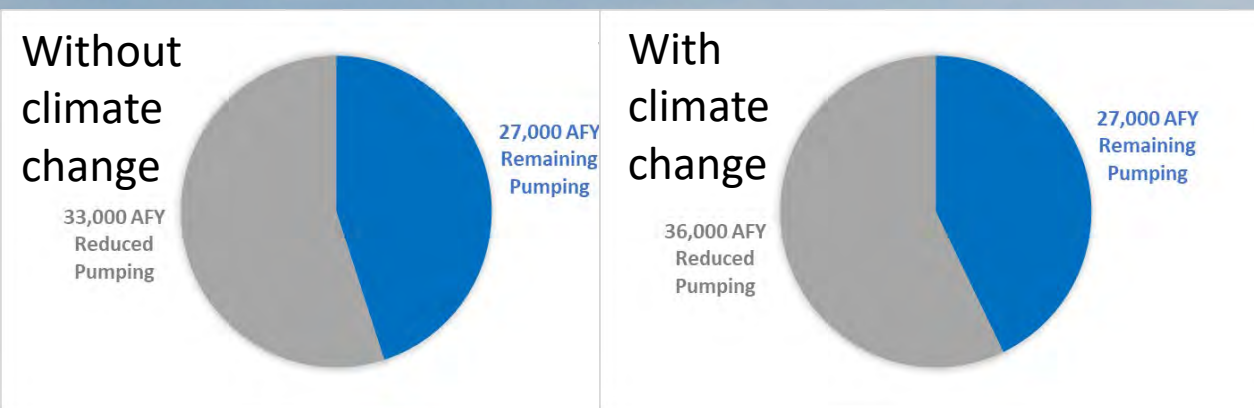
Projected change in storage under Baseline and reduced pumping conditions



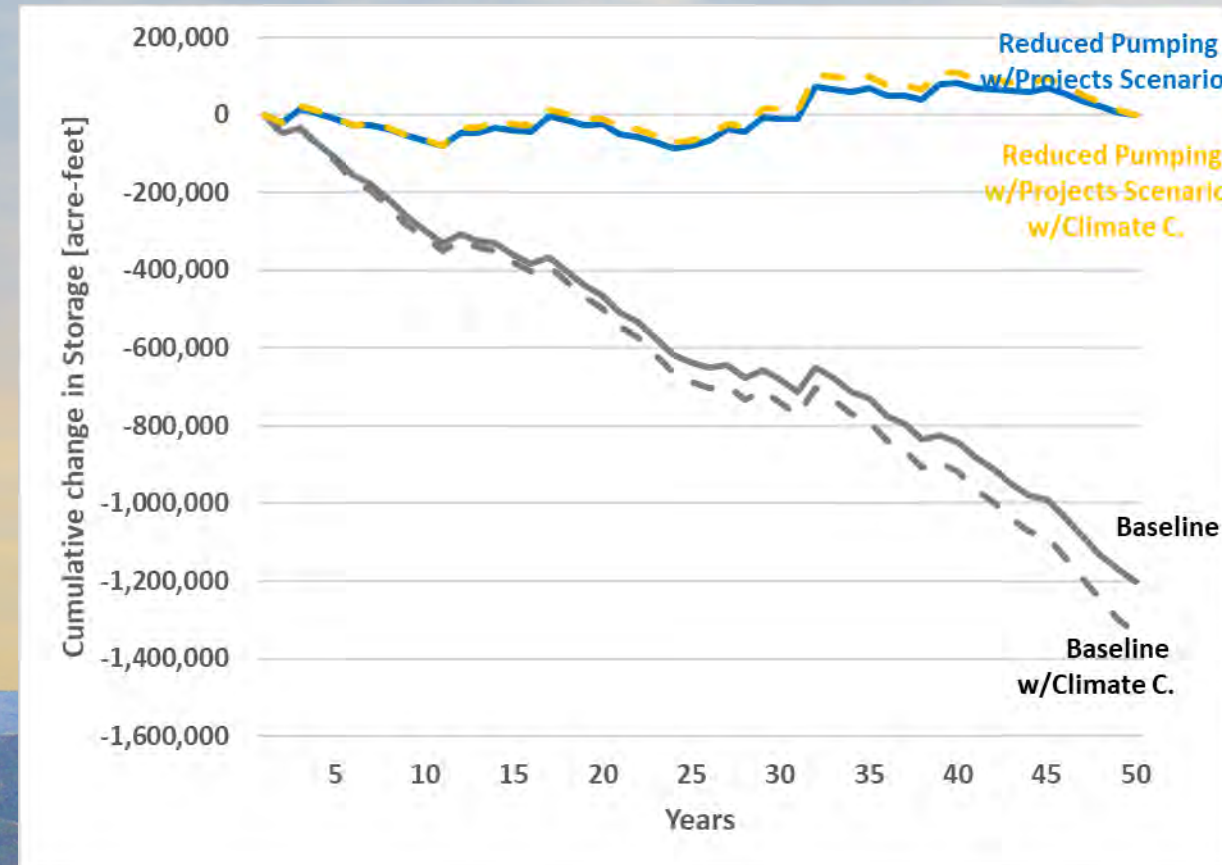
	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	4,200	3,500	4,300	3,900
Gain from Stream (+)	1,300	1,300	1,400	1,400
Subsurface Inflow(+)	700	700	900	900
OUTFLOWS				
Pumping (-)	6,800	5,500	7,300	6,200
STORAGE CHANGE	-600	0	-700	0

Future Conditions – Pumping Reductions with Water Supply Projects – Basin-Wide

Pumping reductions required to eliminate cumulative decline in storage



Projected change in storage under Baseline and reduced pumping conditions

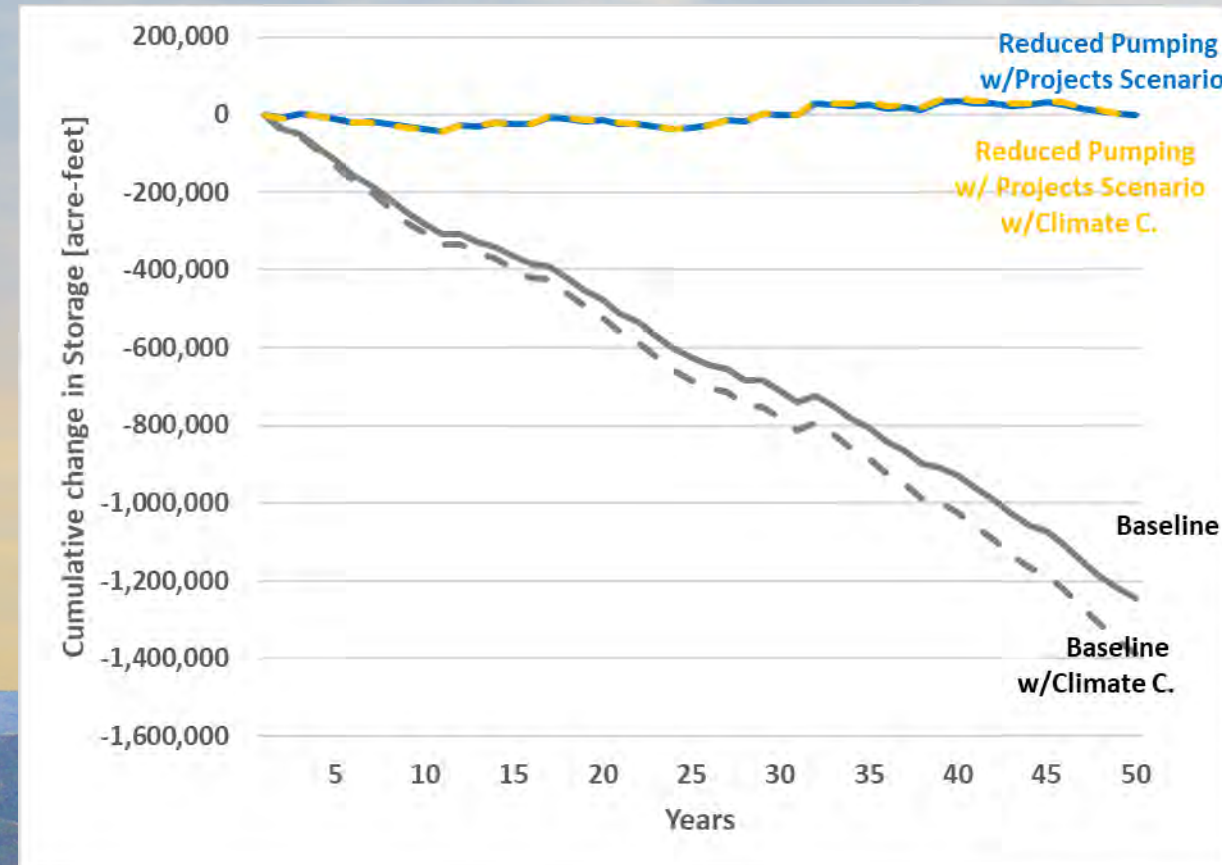
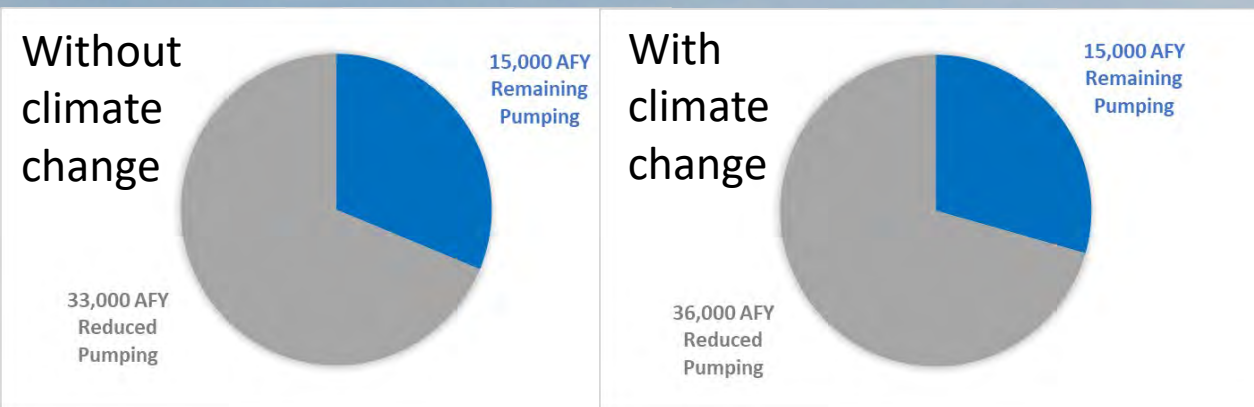


	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	26,000	18,000	26,000	18,000
Gain from Stream (+)	4,000	4,000	5,000	4,000
Subsurface Inflow(+)	4,000	5,000	5,000	5,000
OUTFLOWS				
Pumping (-)	60,000	27,000	63,000	27,000
STORAGE CHANGE	-26,000	0	-27,000	0

Future Conditions – Pumping Reductions with Water Supply Projects – Central Developed Region

Pumping reductions required to eliminate cumulative decline in storage

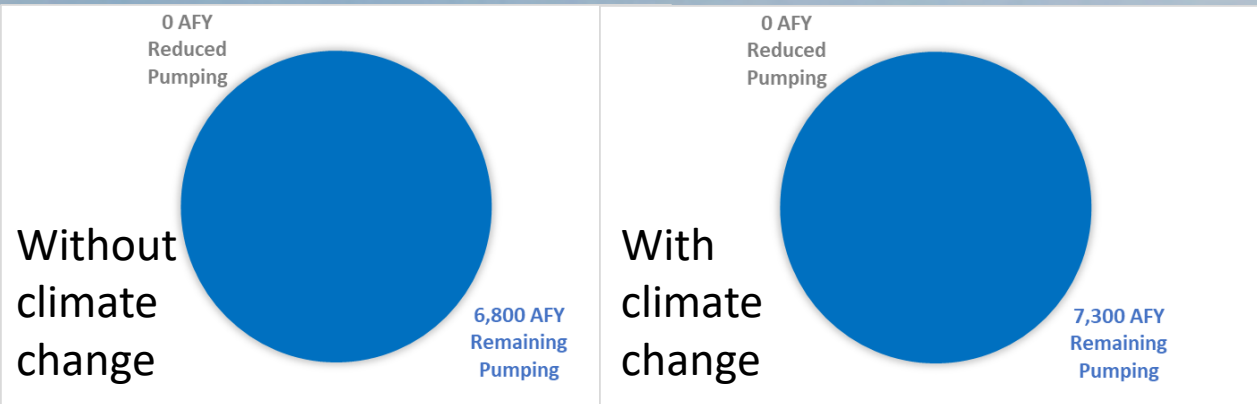
Projected change in storage under Baseline and reduced pumping conditions



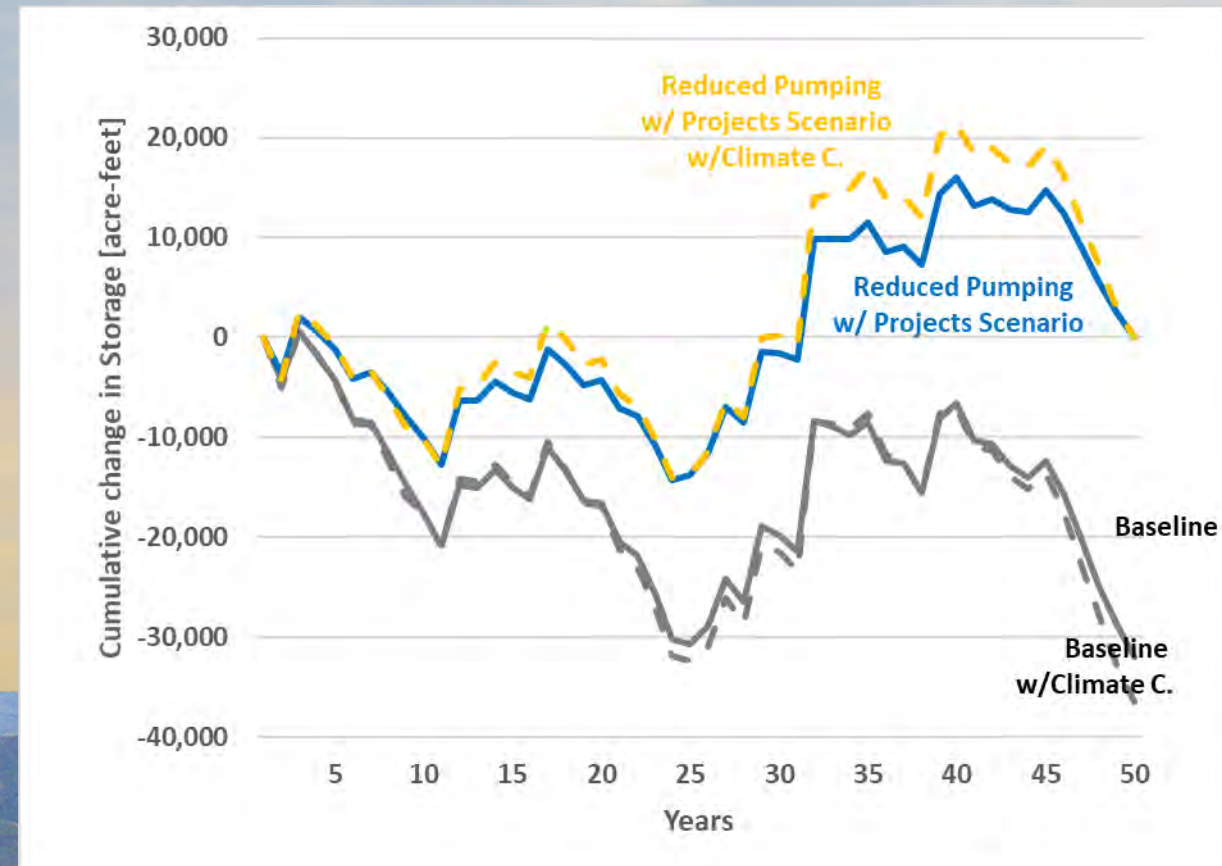
	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	17,000	9,000	17,000	9,000
Gain from Stream (+)	5,000	4,000	5,000	4,000
Subsurface Inflow(+)	1,000	2,000	2,000	2,000
OUTFLOWS				
Pumping (-)	48,000	15,000	51,000	15,000
STORAGE CHANGE	-25,000	0	-27,000	0

Future Conditions – Pumping Reductions with Water Supply Projects – Ventucopa Region

Pumping reductions required to eliminate cumulative decline in storage



Projected change in storage under Baseline and reduced pumping conditions

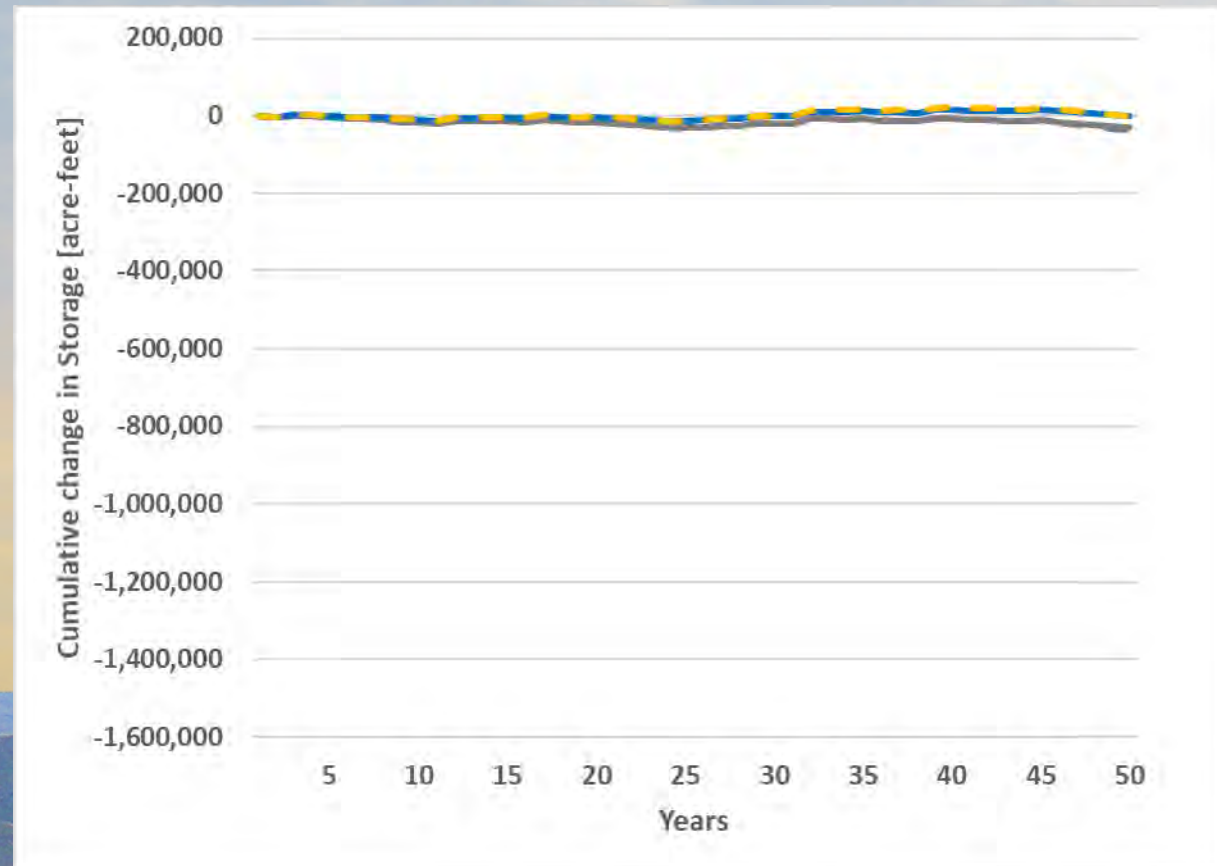
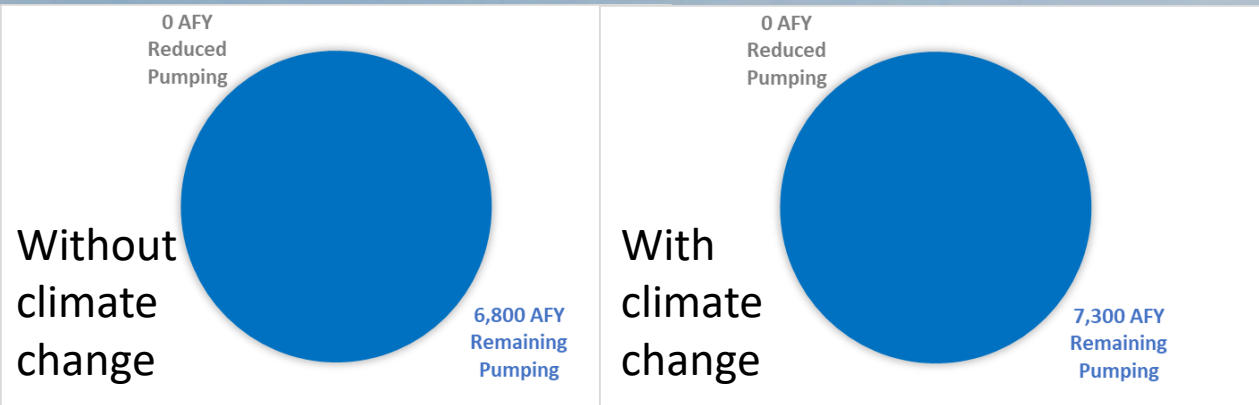


	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	4,200	4,600	4,300	4,700
Gain from Stream (+)	1,300	1,500	1,400	1,600
Subsurface Inflow(+)	700	700	900	1,000
OUTFLOWS				
Pumping (-)	6,800	6,800	7,300	7,300
STORAGE CHANGE	-600	0	-700	0

Future Conditions – Pumping Reductions with Water Supply Projects – Ventucopa Region

Pumping reductions required to eliminate cumulative decline in storage

Projected change in storage under Baseline and reduced pumping conditions



	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	4,200	4,600	4,300	4,700
Gain from Stream (+)	1,300	1,500	1,400	1,600
Subsurface Inflow(+)	700	700	900	1,000
OUTFLOWS				
Pumping (-)	6,800	6,800	7,300	7,300
STORAGE CHANGE	-600	0	-700	0

Future Basin Sustainability Simulations: Basin-Wide Summary of Results

■ Without Water Supply Projects

	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	26,000	12,000	26,000	11,000
Gain from Stream (+)	4,000	4,000	5,000	5,000
Subsurface Inflow(+)	4,000	4,000	5,000	5,000
OUTFLOWS				
Pumping (-)	60,000	20,000	63,000	21,000
STORAGE CHANGE	-26,000	0	-27,000	0

■ With Water Supply Projects

	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS				
Deep Percolation (+)	26,000	18,000	26,000	18,000
Gain from Stream (+)	4,000	4,000	5,000	4,000
Subsurface Inflow(+)	4,000	5,000	5,000	5,000
OUTFLOWS				
Pumping (-)	60,000	27,000	63,000	27,000
STORAGE CHANGE	-26,000	0	-27,000	0



TO: Standing Advisory Committee
Agenda Item No. 5av

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Direction on Implementation Plan Interim Milestones

Issue

Direction on implementation plan interim milestones.

Recommended Motion

None – information only.

Discussion

An overview of the implementation plan interim milestones is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

Direction on Implementation Plan Interim Milestones

March 28, 2019



Conceptual GSP Implementation Timeline

Implementation will be phased over 20 years, with 5-year updates.

2020

2025

2030

2035

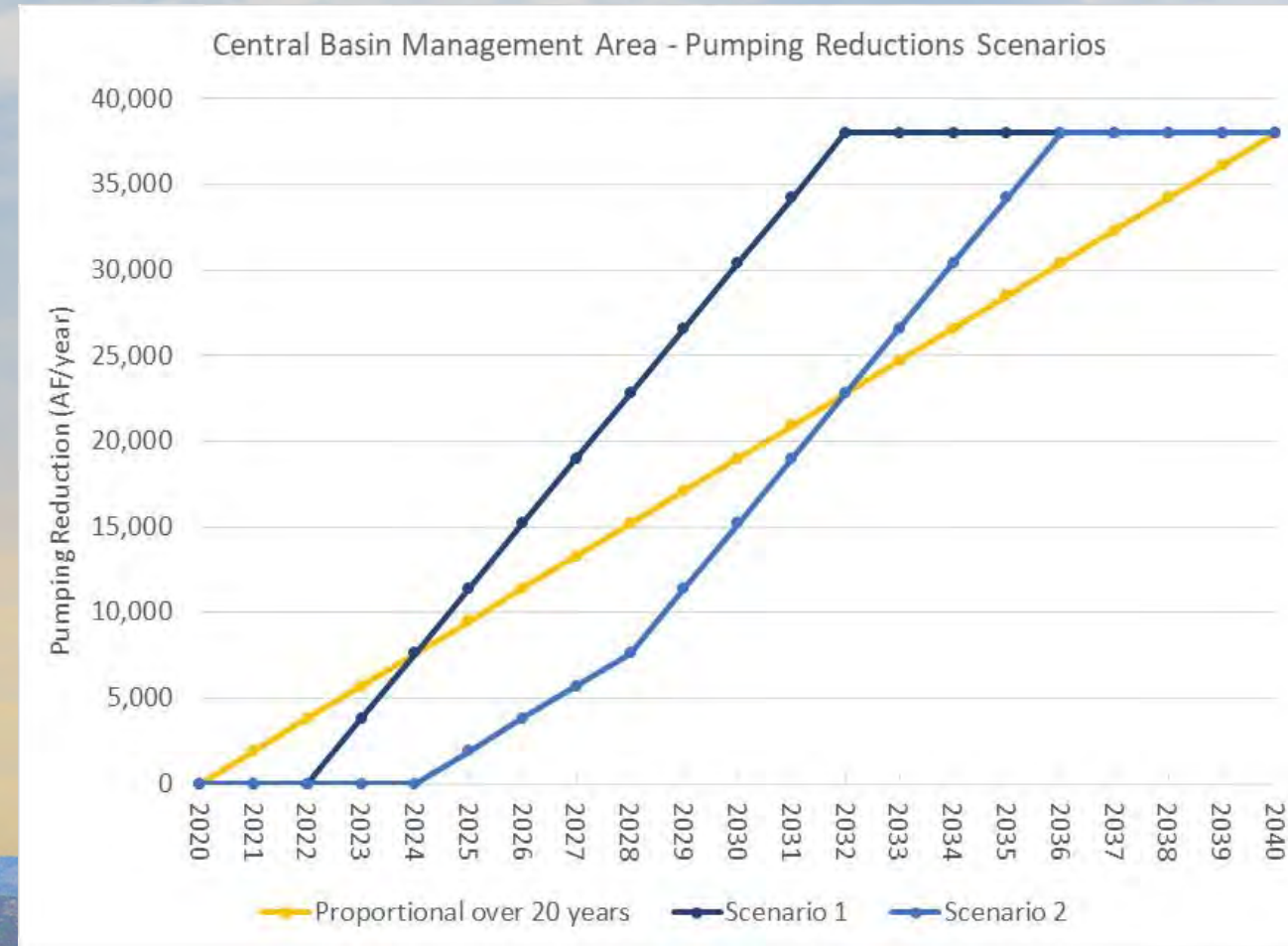
2040

Set up and Initiate Monitoring and Pumping Allocation Programs	Project Implementation and GSP Evaluation/Update	Project Implementation and GSP Evaluation/Update	Achieve Groundwater Basin Sustainability
<ul style="list-style-type: none"> Establish monitoring network and initiate monitoring and reporting Evaluate/refine thresholds and monitoring network Install new wells Develop pumping monitoring program* Set up and initiate pumping allocation program* Project analysis and feasibility Public outreach 	<ul style="list-style-type: none"> GSA conducts 5-year evaluation/update Monitoring and reporting continues Evaluate/refine thresholds and monitoring network Refine water budget Pumping monitoring program continues* Continue implementation of pumping allocation program* Plan/design/construct small to medium sized projects* Outreach continues 	<ul style="list-style-type: none"> GSA conducts 5-year evaluation/update Monitoring and reporting continues Evaluate/refine thresholds and monitoring network Refine water budget Pumping monitoring program continues* Continue implementation of pumping allocation program* Plan/design/construct larger projects* Outreach continues 	<ul style="list-style-type: none"> GSA conducts 5-year evaluation/update Monitoring and reporting continues Evaluate/refine thresholds and monitoring network Refine water budget Pumping monitoring program continues* Pumping allocation program fully implemented* Project implementation completed* Outreach continues

*Potential management area specific implementation

Board Direction on Pumping Allocation Implementation

- **Central Basin Region**
 - Example Glide Paths:
 - Start in 2023; full implementation in 2032
 - Start in 2025; full implementation in 2035
 - Others?
 - Pumping levels would be re-evaluated with new data collected before implementation begins
- **Ventucopa Region**
 - Recommend no planned pumping allocations until more data collection and analysis can be performed





TO: Standing Advisory Committee
Agenda Item No. 5avi

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Direction on Implementation Financing Plan

Issue

Direction on implementation financing plan.

Recommended Motion

None – information only.

Discussion

An overview of the implementation financing plan is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

Direction on Implementation Financing Plan

March 28, 2019



Board Direction on Financing Plan

Basin – Wide Activities

- GSA admin
- Monitoring & reporting
 - GW levels
 - GW quality
 - Water use estimation
- Data management
- Stakeholder engagement
- Annual reports
- 5-year GSP updates
- Estimated cost: ~\$800,000-\$1,200,000 per year

Management Area Activities

- Pumping Allocation Tracking and Management
- Project Implementation
 - Water supply projects
 - Wells for local communities
- Estimated cost to be determined by Management Area agencies

Board Direction on Financing Plan

Options for Financing of Basin-wide Activities

- Estimated Annual Cost: ~\$800,000-1,200,000 per year
- Options:
 - Fees paid by pumpers:
 - ~\$13-20/AF/year (at current pumping levels)
 - ~\$40-60/AF/year (at sustainable pumping levels)
 - Assessments by acre:
 - Entire Basin: ~\$5-8/acre/year
 - Current irrigated acreage only: ~\$20-35/acre/year
- Grants & loans can be pursued for some activities to offset some portion of above costs



TO: Standing Advisory Committee
Agenda Item No. 5b

FROM: Brian Van Lienden, Woodard & Curran (W&C)

DATE: March 28, 2019

SUBJECT: Technical Forum Update

Issue

Update on the Technical Forum.

Recommended Motion

None – information only.

Discussion

At the request of Cuyama Valley landowners, Cuyama Basin Groundwater Sustainability Agency Groundwater Sustainability Plan (GSP) consultant Woodard & Curran (W&C) has been meeting monthly with technical consultants representing landowners to discuss W&C's approach and to provide input where appropriate.

A summary of the topics discussed at the March 22, 2019 technical forum meeting is provided as Attachment 1, and the next forum date is April 19, 2019.



MEETING MEMORANDUM

PROJECT: Cuyama Basin Groundwater Sustainability Plan Development

MEETING DATE:
3/25/2019

MEETING: Technical Forum Conference Call

ATTENDEES: Matt Young (Santa Barbara County Water Agency)
Cathy Martin (San Luis Obispo County)
Neil Currie (Cleath-Harris Geologists)
John Fio (EKI)
Jeff Shaw (EKI)
Dave Leighton (EKI)
Matt Klinchuch (Provost & Pritchard)
Dennis Gibbs (Santa Barbara Pistachio Company)
Brian Van Lienden (Woodard & Curran)
Sercan Ceyhan (Woodard & Curran)

1. AGENDA

- Numerical Model and Water Budget Update
- Projects and Management Actions
- Groundwater Dependent Ecosystems

2. DISCUSSION ITEMS

The following table summarizes comments raised during the conference call and the response and plan for resolution (if appropriate) identified for each item.

Item No.	Comment	Commenter	Response/Plan for Resolution
1	There are ancillary issues that could affect the CCSD production area. If groundwater levels adjacent to the CCSD are drawn down, it would affect the CCSD.	Dennis Gibbs	The groundwater levels monitoring network will be used to measure if levels in the vicinity of the CCSD are being drawn down.
2	If the CCSD is not part of a management area, then how can it be limited to historical pumping levels?	Matt Young	This will be clarified during the SAC discussion.
3	The CCSD well is outside the CCSD service area.	Matt Klinchuch	This will need to be accounted for in designating management areas.
4	The pumping allocation approach could be the subject of potential litigation. The GSA should seek legal counsel in developing the approach.	Matt Young	CBGSA and/or CBWD legal counsel will be consulted in development of the policy.



5	What is the methodology for developing the climate change scenarios?	Dennis Gibbs	The climate change scenarios include modified precipitation and crop evapotranspiration (ET) that are adjusted using data and methods provided by the California Department of Water Resources.
6	You should consider presenting the more variability in modeling results, including looking at drier and wetter climate scenarios instead of just the central tendency projection.	Jeff Shaw	This will be considered for future analyses, most likely during the GSP implementation phase.
7	Looking at just the 1967-2016 hydrology does not capture the full climatic cycle.	Dennis Gibbs	A 50-year period was selected to comply with SGMA requirements.
8	Why does climate change result in higher crop ET but lower native vegetation ET?	Matt Klinchuch	Whereas the model will pump water to meet crop ET, the native vegetation ET is limited by the availability of precipitation. Therefore, actual native vegetation ET is less under climate change.
9	Can other pumping reduction schedules be considered outside of the ones shown?	Jeff Shaw	Yes – the Board can select an appropriate glide path for pumping reductions.
10	Will economics be considered prior to pumping reductions are implemented?	Multiple	Economic analysis can be performed in the GSP implementation phase prior to implementation of projects or pumping allocations.
11	Another approach for tracking pumping could be to use crop acreage with a factor for each crop.	Matt Young	Alternate methods can be considered for implementation by the Board.
12	A footnote should be added to note whether pumping fees would be applied to de minimis users	Cathy Martin	The presentation slides will be clarified prior to the GSA Board meeting
12	Another option to consider for GSA financing is to have a fee for each well with an additional charge for each unit of pumping	Matt Young	Alternate methods can be considered for implementation by the Board.
13	Fox Canyon in Ventura County could be reviewed for potential implementation approaches	Jeff Shaw	This can be considered during the GSP implementation phase.

Cuyama Basin Groundwater Sustainability Agency

Technical Forum Update

March 28, 2019



March 25th Technical Forum Discussion

- Numerical Model Development Update
 - Climate Scenarios
 - Sustainability Scenarios
- Implementation Plan Interim Milestones
- Next Meeting – Friday, April 19

Technical Forum Members

- Catherine Martin, San Luis Obispo County
- Matt Young, Santa Barbara County Water Agency
- Matt Scrudato, Santa Barbara County Water Agency
- Matt Klinchuch, Cuyama Basin Water District
- Jeff Shaw, EKI
- Anona Dutton, EKI
- John Fio, EKI
- Dennis Gibbs, Santa Barbara Pistachio Company
- Neil Currie, Cleath-Harris Geologists
- Matt Naftaly, Dudek



TO: Standing Advisory Committee
Agenda Item No. 5c

FROM: Mary Currie, Catalyst Group

DATE: March 28, 2019

SUBJECT: Stakeholder Engagement Update

Issue

Update on the Cuyama Basin Groundwater Sustainability Agency Groundwater Sustainability Plan stakeholder engagement.

Recommended Motion

None – information only.

Discussion

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Groundwater Sustainability Plan (GSP) outreach consultant the Catalyst Group's stakeholder engagement update is provided as Attachment 1.

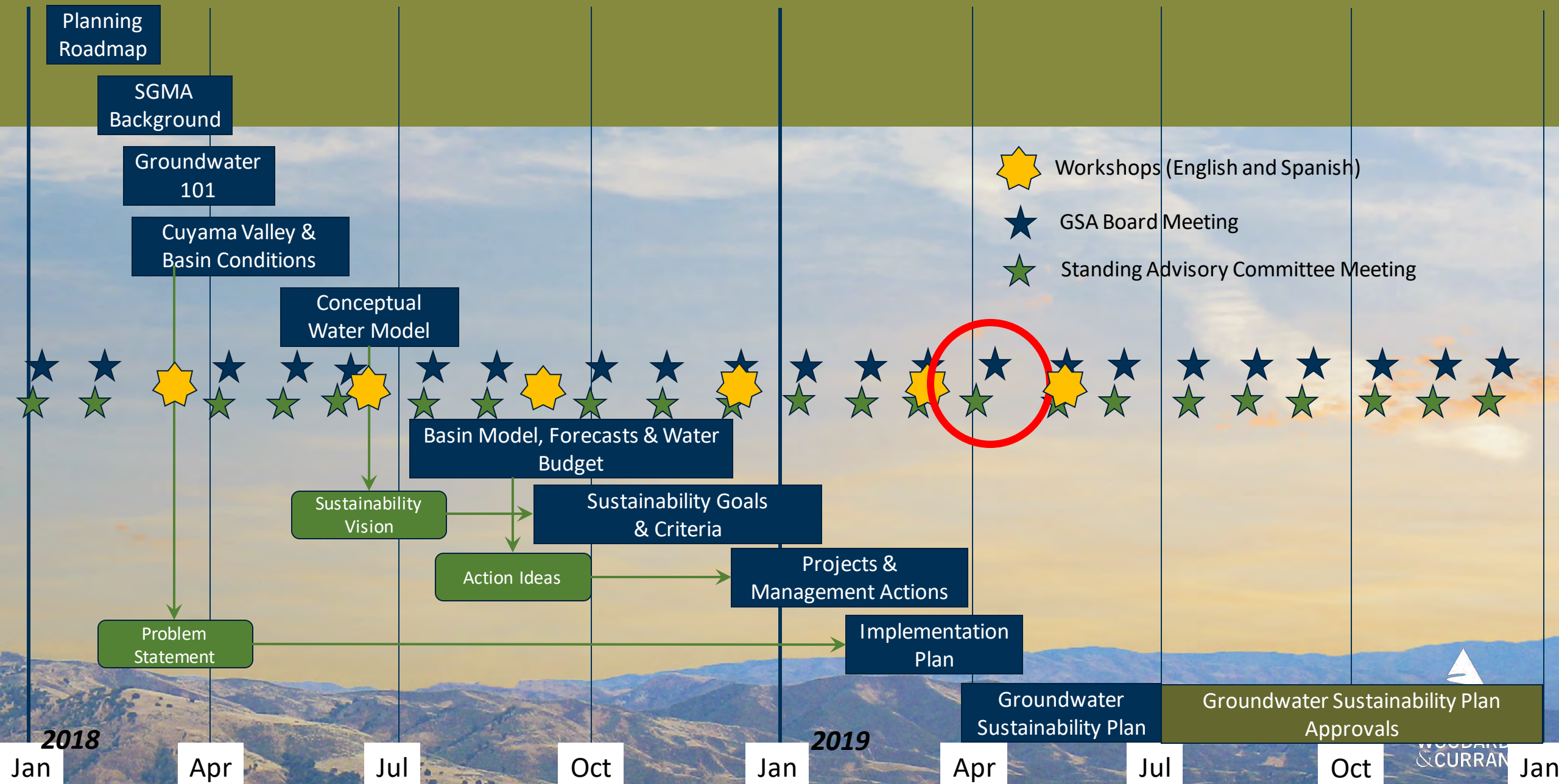
Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Stakeholder Engagement Update

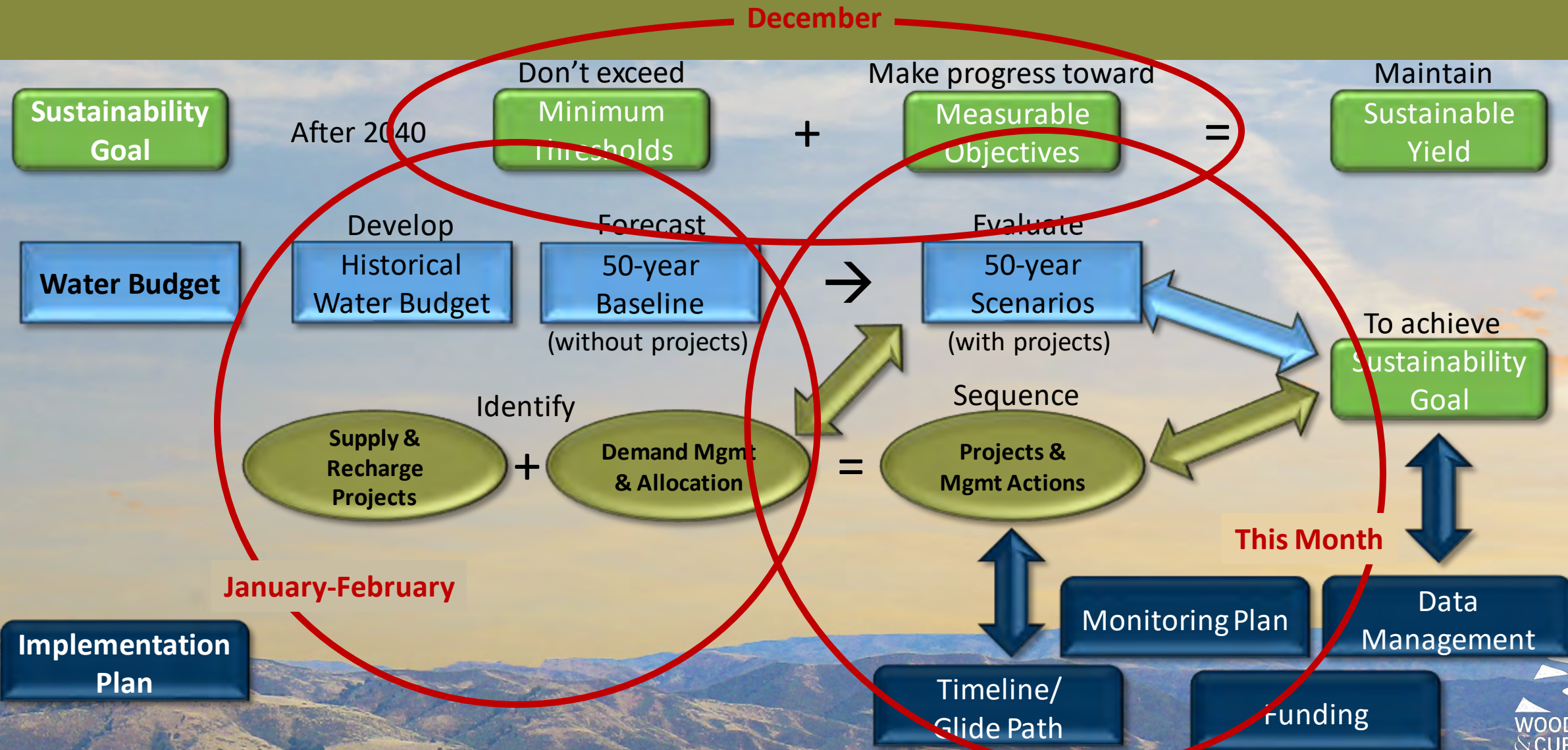
March 28, 2019



Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap ⁵⁸



GSP Discussion Approach & Terminology



Update on Outreach Activities

- March 6 Community Workshop Summary Available Soon
- Draft GSP - Announce Availability and Comment Period
 - Reference Hardcopies at FRC and Library
 - Spanish Translation of Executive Summary
 - May 1 Workshop to Receive Comments on Draft GSP
 - Notification of Availability and 30-Day Comment Period
 - CBGSA Newsletter to Cuyama Recreation by April 20
 - Email Notifications
 - Postcard mailing to parcel owners
 - Volunteer hand distribution



TO: Standing Advisory Committee
Agenda Item No. 5ci

FROM: Mary Currie, Catalyst Group

DATE: March 28, 2019

SUBJECT: Review of Public Draft Comment Period

Issue

Review public draft comment period.

Recommended Motion

None – information only.

Discussion

An update on the public draft comment period is provided as Attachment 1.

Proposed Public Engagement Strategy for April 2019 – May 2019

- Wednesday, April 3: CBGSA Regularly Scheduled Board Meeting**
- Monday, April 15: Initiate Public Notification Re: Release of Draft GSP, 30-day Public Comment Period, and Ways to Comment**
- Mail postcard to parcel owners
 - Email to stakeholder e-list
 - Coordinate with the Family Resource Center and Blue Sky Center for notice postings at businesses/residents in the basin
 - Inform key contacts in each county of the coming availability
 - Inform Technical Forum of the coming availability
- Friday, April 19: Draft GSP availability**
- Available online
 - One reference hardcopies available at the FRC
 - One reference hardcopies available at the New Cuyama Library
 - Executive Summary included
 - Executive Summary to be translated in Spanish and available online with two reference copies as each location noted above
- April 19 – May 20 30-Day Public Comment Period; Public Comments will be Accepted as Follows:**
- Written and Oral comments at May 1, Community Workshops
 - Written Comments via email to tblakslee@hgcpm.com
 - Written Comments to Cuyama Basin Groundwater Sustainability Agency, 4900 California Ave, Tower B, 2nd Floor, Bakersfield, CA 93309
- Wednesday, May 1 Joint Board and SAC Meeting Prior to Community Workshops**
- Present overview of key GSP findings
- Community Workshops to Receive Public Comments on Draft GSP**
- Present overview of key GSP findings
 - Received comments and questions
 - Oral and written comments accepted
- Approx. May 1 CBGSA Newsletter to be mailed as part of the Cuyama Recreation District Newsletter**
- The Cuyama Recreation District issues its newsletter on or about May 1. This will be too late to announce the workshops. The newsletter would focus on the contents of the Executive Summary and share the ways to review the Draft GSP and provide comments.
- Monday, May 20 Close of Public Comments**



TO: Standing Advisory Committee
Agenda Item No. 6c

FROM: Jim Beck, Executive Director

DATE: March 28, 2019

SUBJECT: Board of Directors Agenda Review

Issue

Review of the April 3, 2019 Cuyama Basin Groundwater Sustainability Agency Board of Directors meeting agenda.

Recommended Motion

None – information only.

Discussion

The April 3, 2019 Cuyama Basin Groundwater Sustainability Agency Board of Directors meeting agenda is provided as Attachment 1 for review.



CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD OF DIRECTORS

Board of Directors

Derek Yurosek Chairperson, Cuyama Basin Water District
Lynn Compton Vice Chairperson, County of San Luis Obispo
Das Williams Santa Barbara County Water Agency
Cory Bantilan Santa Barbara County Water Agency
Glenn Shephard County of Ventura
Zack Scrivner County of Kern

Paul Chounet Cuyama Community Services District
George Cappello Cuyama Basin Water District
Byron Albano Cuyama Basin Water District
Jane Wooster Cuyama Basin Water District
Tom Bracken Cuyama Basin Water District

AGENDA

April 3, 2019

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, April 3, 2019 at 4:00 PM, at the Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254. To hear the session live call (888) 222-0475, code: 6375195#.

The order in which agenda items are discussed may be changed to accommodate scheduling or other needs of the Board or Committee, the public, or meeting participants. Members of the public are encouraged to arrive at the commencement of the meeting to ensure that they are present for discussion of all items in which they are interested.

In compliance with the Americans with Disabilities Act, if you need disability-related modifications or accommodations, including auxiliary aids or services, to participate in this meeting, please contact Taylor Blakslee at (661) 477-3385 by 4:00 p.m. on the Friday prior to this meeting. Agenda backup information and any public records provided to the Board after the posting of the agenda for this meeting will be available for public review at 4689 CA-166, New Cuyama, CA 93254. The Cuyama Basin Groundwater Sustainability Agency reserves the right to limit each speaker to three (3) minutes per subject or topic.

1. Call to Order (Yurosek) (1 min)
2. Roll Call (Blakslee) (1 min)
3. Pledge of Allegiance (Yurosek) (1 min)
4. Approval of Minutes (Yurosek) (3 min)

Motion

- a. March 6, 2019

Memo

5. Report of the Standing Advisory Committee (Jaffe) (3 min)

Memo

6. Technical Forum Update (Melton) (3 min)

7. Groundwater Sustainability Plan

Memo

- a. Groundwater Sustainability Plan Update (Melton) (10 min)

Memo

- b. Discussion on Placeholder Section (Melton) (5 min)

Memo

- c. Direction on Eastern Region Sustainability Thresholds (Melton) (15 min)

Memo

- d. Review of Options for Management Area Governance (Beck) (45 min)

Memo

- e. Update on Sustainability and Climate Change Modeling (Melton) (10 min)

- Memo f. Direction on Implementation Plan Interim Milestones (i.e. Glide Path) (Melton) ⁶⁵ (45 min)
- Memo i. Direction on Implementation Financing Plan (Melton) (5 min)
- Memo g. Stakeholder Engagement Update (Gardiner) (5 min)
- Memo i. Review of Public Draft Comment Period (Gardiner) (10 min)
8. Groundwater Sustainability Agency
- Verbal a. Notice of Standing Advisory Committee Resignation (Beck) (5 min)
- Verbal b. Report of the Executive Director (Beck) (3 min)
- Memo c. Progress & Next Steps (Beck) (3 min)
- Verbal d. Report of the General Counsel (Hughes) (2 min)
9. Financial Report
- Memo a. Financial Management Overview (Blakslee/Beck) (3 min)
- Memo b. Financial Report (Blakslee) (3 min)
- Verbal c. Direction on Annual Audit (Blakslee) (3 min)
- M/M** d. Payment of Bills (Blakslee) (3 min)
10. Reports of the Ad Hoc Committees (3 min)
11. Directors' Forum (3 min)
12. Public comment for items not on the Agenda (5 min)
- At this time, the public may address the Board on any item not appearing on the agenda that is within the subject matter jurisdiction of the Board. Persons wishing to address the Board should fill out a comment card and submit it to the Board Chair prior to the meeting.*
13. Adjourn (7:13 pm)