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
2. Roll Call
3. Pledge of Allegiance
4. Approval of Minutes
    a. March 6, 2019
5. Report of the Standing Advisory Committee
6. Technical Forum Update
7. Groundwater Sustainability Plan
    a. Groundwater Sustainability Plan Update
    b. Discussion on Placeholder Section
    c. Direction on Eastern Region Sustainability Thresholds
    d. Review of Options for Management Area Governance
    e. Update on Sustainability and Climate Change Modeling

f. Direction on Implementation Plan Interim Milestones (i.e. Glide Path)
    i. Direction on Implementation Financing Plan
g. Stakeholder Engagement Update
    i. Review of Public Draft Comment Period

8. Groundwater Sustainability Agency
    a. Notice of Standing Advisory Committee Resignation
    b. Report of the Executive Director
    c. Progress & Next Steps
    d. Report of the General Counsel
9. Financial Report
    a. Financial Management Overview
    b. Financial Report
    c. Direction on Annual Audit
    d. Payment of Bills
10. Reports of the Ad Hoc Committees
11. Directors' Forum
12. Public comment for items not on the Agenda

    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

Cuyama Basin Groundwater Sustainability Agency

Acronyms List

ARMA	Autoregression Moving Average
BOD	Board of Directors
CA	California
CASGEM	California Sustainable Groundwater Elevation Monitoring
CB	Cuyama Basin
CBGSA	Cuyama Basin Groundwater Sustainability Agency
CBWD	Cuyama Basin Water District
CCSD	Cuyama Community Services District
CDEC	California Data Exchange Center
CVCA	Cuyama Valley Community Association
CVRD	Cuyama Valley Recreation District
DMS	Data Management System
DWR	California Department of Water Resources
EKI	EKI Environment & Water, Inc.
ET	Evapotranspiration
FRC	Cuyama Valley Family Resource Center
FY	Fiscal Year
GAMA	Groundwater Ambient Monitoring and Assessment Program
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HG	Hallmark Group (Executive Director)
ITRC	Irrigation Training & Research Center
IWFM	Integrated Water Flow Model
JPA	Joint Exercise Powers Agreement
Kern	County of Kern
NOAA	National Oceanic and Atmospheric Administration
NWIS	National Water Information System
PRISM	Parameter-elevation Regressions on Independent Slopes Model
SAC	Standing Advisory Committee
Santa Barbara	County of Santa Barbara
SBCWA	Santa Barbara County Water Agency
SGMA	Sustainable Groundwater Management Act
SLO	San Luis Obispo County
SWCRB	State Water Resources Control Board
TAF	Thousand Acre Feet
TO	Task Order
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
Ventura	County of Ventura
W&C	Woodard & Curran (GSP Development Consultant)
WMA	Water Management Area
WY	Water Year

Joint Meeting of Cuyama Basin Groundwater Sustainability Agency Special Board of Directors and Standing Advisory Committee

March 6, 2019

Draft Meeting Minutes

Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254
New Cuyama High School Cafeteria, 4500 CA-166, New Cuyama, CA 93254

PRESENT:

Board of Directors:
Yurosek, Derek – Chair
Albano, Byron
Bantilan, Cory
Bracken, Tom
Cappello, George
Chounet, Paul
Scrivner, Zack
Shephard, Glenn
Williams, Das
Wooster, Jane
Beck, Jim – Executive Director
Hughes, Joe – Legal Counsel

Standing Advisory Committee:
Jaffe, Roberta – Chair
Kelly, Brenton – Vice Chair
DeBranch, Brad
Draucker, Louise
Post, Mike

ABSENT:

Board of Directors:
Compton, Lynn – Vice Chair

Standing Advisory Committee:
Alvarado, Claudia
Furstenfeld, Jake
Haslett, Joe
Valenzuela, Leticia

1. **Call to order**
   Chair Derek Yurosek called the meeting to order at 2:01 p.m.

2. **Roll call**
   Hallmark Group Project Coordinator Taylor Blakslee called roll (shown above) and informed Chair Yurosek that there was a quorum of the Board and SAC.

3. **Pledge of Allegiance**
   The pledge of allegiance was led by Chair Yurosek.

4. **Approval of Minutes**
   Chair Yurosek opened the floor for comments on the February 6, 2019 Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board meeting minutes.

MOTION
Director Glenn Shephard made a motion to adopt the February 6, 2019 CBGSA Board meeting minutes. The motion was seconded by Director Cory Bantilan and passed.

AYES:	Directors Albano, Bantilan, Bracken, Cappello, Chounet, Shephard, Williams, Wooster and Yurosek
NOES:	None
ABSTAIN:	None
ABSENT:	Directors Compton and Scrivner

5. Report of the Standing Advisory Committee
CBGSA SAC Chair Roberta Jaffe provided a report on the February 28, 2019 SAC meeting, which is provided in the Board packet.

6. Technical Forum Update
GSP consultant Woodard & Curran's (W&C) Senior Water Resources Engineer Lyndel Melton provided an overview of the February 22, 2019 technical forum call, and a summary of the issues discussed is provided in the Board packet.

7. Groundwater Sustainability Plan

a. Groundwater Sustainability Plan Update
Mr. Melton provided an update on the Groundwater Sustainability Plan (GSP) development, which is included in the Board packet.

Mr. Melton 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.

b. Discussion on Water Budgets
Mr. Melton provided an overview of the Water Budgets Chapter.

Director Cappello asked how climate change variables are determined. Mr. Melton and W&C Senior Water Resource Engineer Brian Van Lienden reported that the California Department of Water Resources will provide a standard set of conditions to choose from.

Director Albano asked if W&C is anticipating less or more precipitation. Mr. Van Lienden said they anticipate precipitation to be similar to what occurs now, but with higher temperatures affecting evapotranspiration rates.

Director Williams said the climate projections throughout the State, that he is aware of, project the same amount of water per year but delivery in smaller time periods. SAC Committee Member Mike Post added that this occurs with greater volatility.

Director Wooster asked if W&C can incorporate how many acres are in the basin and the watershed in the Water Budget Chapter. Mr. Van Lienden confirmed that they will add this information.

Director Cappello asked if the future conditions groundwater level map is a projection and not what is currently occurring. Mr. Melton confirmed this.

Director Albano asked for clarification on the data period assumptions. Mr. Melton said the future conditions groundwater level change map is based on 50 years of hydrologic information, 2017 land use, and available population data.

CBGSA Executive Director Jim Beck mentioned that reducing crop acreage by a set percentage is not a recommendation but was used as a tool to understand the magnitude of reductions.

Director Wooster asked if this was analyzed for reasonableness. Mr. Melton said yes, by W&C staff and during the technical forum.

Director Cappello said he understands the 38,000 acre-feet per year reduction the model projects to get in balance is a very rough estimate and reductions could be closer to a 40% decrease in pumping in the Central Region if more monitoring is performed and data gaps are filled.

Mr. Beck clarified the results being presented are based on the model and you need to consider that the model is imperfect and there are data gaps that remain that will help refine the model.

c. Discussion on Sustainability Thresholds

Mr. Melton and Mr. Van Lienden provided an overview of the Sustainability Thresholds Chapter.

Mr. Van Lienden provided an update on the Eastern Region thresholds and recommended resetting the minimum thresholds to 2017 levels minus 20%.

Director Williams commented that the point of setting thresholds was to be above the well depths, which is not in the examples of the Opti wells shown in the Board packet.

Director Wooster said it was pointed out at the SAC meeting that these wells are very shallow in the Eastern Region and they may not be appropriate representative wells.

SAC Chair Jaffe asked if we can add a comment in the GSP that states that these wells are not good representative wells and will be updated as we receive more data.

Director Albano asked if it will be problematic to manage to 2017 levels and not 2015. Mr. Van Lienden said Sustainable Groundwater Management Act (SGMA) does not require to preserve 2015 levels, it states that we need to prevent undesirable results.

Director Albano said there are undesirable results in Ventucopa area due to the small amount of data that we have, however this should not dissolve us from the issues in that area. He said we should stop trying to plan the future for that area because of the data gap.

MOTION

Director Williams made a motion to amend the threshold in the Eastern Region to 20% below 2015 levels. The motion was seconded by Director Bantilan.

Director Cappello said this threshold would violate well levels and you do not want to start your plan at a violation of threshold levels. Director Williams commented that the Board will decide what percentage of wells can fall below the threshold before triggering undesirable results.

Mr. Beck said the basin does have data gaps and it is appropriate to have representative wells for this area. He commented that when you set a threshold that triggers failure to comply and your levels are below that threshold, that is the agency saying that they are already experiencing undesirable results. Mr. Beck agreed with Director Williams that one well below its threshold does not necessarily trigger undesirable results for the basin.

Mr. Melton agreed that a single well will not trigger action, but we are already down a well in the calculation which you need to consider.

Director Wooster said she thought W&C's recommendation was really good and minimum thresholds need to be reset to 20%, but without going below the well depth. She said new representative wells are needed and need to be evaluated as part of the 2025 update.

SAC Chair Jaffe said she agreed with Director Wooster. She said it does not make sense to go lower with groundwater levels in a critical overdraft basin. Mr. Beck said the minimum thresholds could be above a well as we develop better data. Mr. Beck said he thinks the key will be to get more data during the implementation phase.

Director Albano said he said he believes its ok to start with two wells in the Ventucopa area that are more stable, however these wells may not be the best to start with. Committee Member Post said water is being trucked into the Ventucopa area by a residential water company and that is a bad thing no matter how they got there and that the Ventucopa domestic wells are going dry.

Director Cappello said the plan is to make things better, and you do not want to be in violation of SGMA at the start of your plan. He said you will not fix things in the first 5 years.

Director Albano asked if it would be more sensible to start with wells that are at or below the minimum thresholds, but we end the plan with knowing how many wells can be below the minimum threshold in that area for a problem to arise. He asked if that is problematic in Director Cappello's opinion. Director Cappello replied that once an undesirable result is triggered, DWR will begin monitoring.

Director Williams said he is not suggesting pairing this with a low percentage of wells in the Eastern Region and these wells may not be the best, but they do represent conditions residents in the Ventucopa area are experiencing.

Director Wooster said we do not have a lot of information in this area, and a number of Ventucopa residents have said there are deeper wells in the area. Director Albano commented that his feeling is that well levels have been going down in that region for some time.

Director Albano said we need to move on from this item and he is ok with staff's recommendation, leaving the threshold as is, or making a motion for a revised threshold.

Director Bantilan asked if W&C knows what 20% of 2017 would be based on 2015. Mr. Van Lienden said the graphs represent both 20% of 2015 and 2017, but he is unsure of what that is off the top of his head.

Director Shephard asked why W&C moved from 2015 to 2017 for the baseline. He said he believes there is value in maintaining consistency with the baseline. Mr. Melton and Mr. Van Lienden said W&C reviewed a series of alternatives and based on those alternatives, they made a recommendation. Mr. Melton said W&C had an extensive dialogue regarding these recommendations with Mr. Beck because of his technical experience with the Kern Groundwater Basin

Director Bantilan asked Mr. Beck why 2017 was chosen and Mr. Beck said there was not a scientific reason other than 2017 was the most recent data, but this could be expressed from a 2015 baseline condition. Director Chounet said he liked using percentage based on the 2015 level.

Cuyama Valley Family Resource Center's Executive Director Lynn Carlisle asked Director Cappello and Mr. Beck in regard to triggering violations, would you have a number of years before a violation is triggered. Chair Yurosek said it is somewhat of a J-curve and you have to allow time for the actions to take place. Mr. Beck said if we have a well that is violating its minimum threshold or measurable objective then we will include what we are doing to address the issues in that area using management actions.

MOTION
Director Williams amended his motion to convert the staff recommendation for the Eastern Region to a 2015 baseline. The motion was seconded by Director Bantilan and the motion passed by a supermajority vote of 88.89% (a 75% approval is need for a supermajority vote).

AYES:	Directors Albano, Bantilan, Bracken, Cappello, Chounet, Scrivner, Shephard, Williams, Wooster and Yurosek
NOES:	None
ABSTAIN:	None
ABSENT:	Director Compton

d. Direction on Management Areas
Mr. Melton provided an overview of Management Areas.

Mr. Beck said legal counsel Joe Hughes would provide an overview of what type of authority management areas can take. Mr. Hughes said management areas are permissive under SGMA, but not mandatory. He said the Joint Exercise of Powers Agreement is set up as a top down structure where the CBGSA is the driving force in implementing SGMA. As a comparison, he said the Kern Groundwater Authority (KGA) in Kern County is set up as a bottom up structure where various water districts and member agencies maintain local control and prepare their individual chapters and are responsible for implementation and enforcement of the GSP.

Director Chounet said if Cuyama Community Services District (CCSD) or New Cuyama are in the Management Area, he would not agree with another agency managing his district. Mr. Hughes said the management areas within the Cuyama basin may be a mixed combination of the GSA,

County, CCSD, and Water District.

Director Williams asked if W&C's recommendation is more from a technical standpoint and not about who will be governing them. Mr. Melton confirmed that and Director Williams said he likes W&C's recommendation because it shows where we need to concentrate the work, and it targets and focuses on just the problem areas.

Director Albano asked how you address the problem zones and implement pumping allocation with no management areas. Mr. Melton said you could, but he would not recommend a basin-wide pumping allocation; however, management areas make it simpler because it targets specifically who pays for correcting the problem.

Mr. Beck said if you start with the philosophy that the folks causing the problem need to fix it, management areas are a convenient tool to address this. If you are in a management area and you are targeted for pumping reductions, then typically we believe these folks should bare the responsibility of what they want to fund and how they want to allocate costs, although they still have to report upwards to the GSA to demonstrate that they are complying with plan requirements. When it comes to determining pumping reductions, the folks that are actually going to bear them are going to be at the table discussing them, whereas the folks that are not going to bear them do not get a seat at the table, but they also do not get a bill.

Director Shephard said he concurs with staff's recommendation and Director William's comments.

Director Albano said he likes where staff is going with management areas but feels we need to look at what is going on in different parts of the valley, for example more monitoring in the Ventucopa area. He believes we need to start looking at these areas because they are geographically different, and the difference in the fault lines and aquifer depth are very important. He said similar hydrology and geology should dictate who is in the same bathtub, or sub basin. He said the solution is not in the little sliver in Ventucopa and we need to look at the entire area's hydrology. Also, he said we need to look at the beneficiaries of SGMA and it may not be just the people in the problem area, it may be a slightly larger area. He feels as though we need both approaches: a targeted focus on the areas for reductions and a larger area to considering impacts and causes. Director Williams said he believes management areas is a good tools for this.

Chair Yurosek asked the SAC for their feedback. SAC Vice Chair Kelly said the SAC had an issue with selecting the management area line and as conditions improve, or other groundwater level changes occur, how they would reconcile the boundary line. SAC Chair Jaffe commented that the SAC unanimously accepted staff's recommendation.

Committee Members Post and Valenzuela commented that we have to start somewhere and agreed with staff's recommendation.

Chair Yurosek said there are areas that have overlaps that are managed well including Arvin-Edison, which has Arvin Community Services District inside its boundary and Lamont, which sits in Kern Delta Water District. Chair Yurosek said he gets nervous with how management areas are executed and managed. He thinks staff's recommendation is a good start and supports the

direction we are moving in, but would likely support even subbasin, or smaller governance regions.

Director Chounet said he does not believe the CCSD is part of the problem and they have already reduced their pumping by 50% in the last 37 years.

Mr. Beck said we use the term preliminary with management areas regularly because these will be reshaped as we move forward. Also, the way these management areas are managed will be determined in the implementation phase. In order to move forward with plan development, W&C needs to know if they can proceed forward with management areas.

SAC Chair Jaffe asked if the management areas will start to be implemented and used with the management actions taken from the beginning and modified over the following years.

Mr. Beck said the boundaries will be clearly defined and at some point, the boundary will need to be locked in. He recommended that we implement management areas from the beginning of the implementation phase.

Director Albano said setting a management area based on the 50-year model projection in a small sliver in Ventucopa seems very premature and bound to change. He said if we were to set a management area there, it should manage the threshold region. He asked who would govern these threshold regions when they are split between districts.

Director Williams said he agrees with Director Cappello and having two management areas makes sense.

MOTION
Director Shephard made a motion to include management areas in the Groundwater Sustainability Plan. Director Bantilan seconded, but the motion failed with a 71.11% vote (75% vote needed for supermajority).

AYES:	Directors Bantilan, Bracken, Cappello, Scrivner, Shephard, Williams, Wooster and Yurosek
NOES:	Directors Albano and Chounet
ABSTAIN:	None
ABSENT:	Director Compton

Directors Albano and Chounet were asked what the didn't like with the motion and Director Albano said he felt a vote on management areas is premature. Director Chounet said he voted no because he did not believe the CCSD should be in a management area.

Committee Member Post said they are not voting on a boundary line for management areas, but on proceeding forward with the concept of management areas. With this additional clarification, the Board decided to vote again.

MOTION
Director Shephard made a motion to include management areas in the Groundwater Sustainability Plan. Director Bantilan seconded, and the motion passed with an 80.22% vote

(75% vote needed for supermajority).

AYES:	Directors Bantilan, Bracken, Cappello, Chounet, Scrivner, Shephard, Williams, Wooster and Yurosek
NOES:	Director Albano
ABSTAIN:	None
ABSENT:	Director Compton

e. Projects and Management Actions

i. **Direction on Projects**

Mr. Van Lienden provided an overview of projects being considered.

Mr. Van Lienden said he recommends these projects be considered in the model, but additional research be done.

Precipitation Enhancement

Director Williams commented that it is very challenging to verify the efficacy of cloud seeding and tentatively supports the option. Director Bantilan said it is by far the least expensive option.

Stormwater Capture

Director Williams asked if the estimate acre feet of capture was a legal description and Mr. Beck said this is purely a technical analysis. Director Williams asked how you would do this and Mr. Van Lienden said you would select sites with favorable recharge soils allowing the most permeability off the river channel.

Director Cappello said the muddy water would be an issue. Mr. Melton said the sediment problem would be very problematic, but downstream water rights issues could potentially be offset by precipitation enhancement.

Director Wooster said it may be beneficial to look at sites near Rhodia to prevent future groundwater declines.

Forest/Rangeland Management

Director Bantilan asked why the recharge costs are so expensive and Mr. Van Lienden said it was a rough number he got from the Santa Barbara County report and it could be lower.

Director Shephard said on a project in Ventura they are charging about $65 per acre foot, but they have been established a long time.

Ms. Carlisle encouraged the Board to consider not including this project in the water budget since it is very unlikely to happen. Mr. Van Lienden said they were doing two water budgets, one with projects and one without.

Dan Wilkey said flood and storm water capture works in other areas, but we will have to deal with the Department of Fish & Wildlife. He agrees with rangeland management,

but he said in the last 10-12 years most of the brush has been cleared by fires. Director Albano said there is still a lot of underbrush in the front country.

MOTION
Director Cappello made a motion to include all projects in the Groundwater Sustainability Plan. Director Shephard seconded, and the motion failed with a 66.67% vote (75% vote needed for supermajority).

AYES: Directors Albano, Bracken, Cappello, Chounet, Scrivner, Shephard, Wooster and Yurosek
NOES: Directors Bantilan and Williams
ABSTAIN: None
ABSENT: Director Compton

The Board proceeded to take action on each individual project.

MOTION
Director Williams made a motion to accept the staff recommendation to include Precipitation Enhancement and new wells in the CCSD, Ventucopa and New Cuyama areas for additional analysis in the GSP implementation plan. The motion was seconded by Director Bantilan and passed unanimously with an 88.89% vote. (75% vote needed for supermajority).

AYES: Directors Albano, Bantilan, Bracken, Cappello, Chounet, Scrivner, Shephard, Williams, Wooster and Yurosek
NOES: None
ABSTAIN: None
ABSENT: Director Compton

MOTION
Director Albano made a motion to accept the staff recommendation to include Flood/Stormwater Capture for additional analysis in the GSP implementation plan. The motion was seconded by Director Bantilan and passed unanimously with an 88.89% vote. (75% vote needed for supermajority).

AYES: Directors Albano, Bantilan, Bracken, Cappello, Chounet, Scrivner, Shephard, Williams, Wooster and Yurosek
NOES: None
ABSTAIN: None
ABSENT: Director Compton

MOTION
Director Cappello made a motion to accept the staff recommendation to include Forest/Rangeland Management for additional analysis in the GSP implementation plan. The motion was seconded by Director Bracken and failed with a 66.67% vote. (75% vote needed for supermajority).

AYES: Directors Albano, Bracken, Cappello, Chounet, Scrivner, Shephard, Wooster

and Yurosek
NOES: Directors Bantilan and Williams
ABSTAIN: None
ABSENT: Director Compton

ii. **Direction on Pumping Allocation Approach**
Mr. Van Lienden provided an overview of several pumping allocation approaches.

Director Williams said the plan is almost meaningless if we don't implement actions before 2030. Director Shephard said agricultural stakeholders in other GSA's he has been involved with are opposed to any cliffs in the glide path.

SAC Vice Chair Kelly said his question is that once we reach sustainability, will there be any water left in the system. Chair Yurosek said he agrees that it is important to look at the total basin storage when implementing a glide path.

Director Albano said he does not think the CBGSA will be able to implement pumping reductions in the first few years since this is all new for the basin and they don't have the system in place to manage this.

Mr. Beck said the SAC supported staff's recommendation that the allocation approach should be decided by the entity managing the management area.

Director Chounet asked how far back they would consider historic usage for the CCSD. Mr. Beck said his assumption is that pumping negotiations would be based on historic pumping, meaning pumping that is occurring now.

Director Shephard said the recommendation does not specify the Ventucopa area and recommended removing "Central Basin" form the bullet point to make it applicable to management areas in general.

Director Albano said he would like to discuss management area governance at next month's Board meeting.

Director Bantilan discussed eliminating the bullet point that read "No restrictions for users outside the management areas," and Committee member Post said this only applies to an allocation approach and Director Bantilan said it will be very important to get the management area boundaries right in that case.

Committee member Valenzuela suggested adding "allocation" to the last line in the "No restrictions for users outside the management areas."

MOTION
Director Bantilan made a motion that the allocation approach for all management areas include the following provisions: (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. The motion was seconded by Director Chounet and the motion passed with a 75.56% vote.

AYES:	Directors Bantilan, Bracken, Cappello, Chounet, Shephard, Williams, and Yurosek
NOES:	Directors Albano and Wooster
ABSTAIN:	None
ABSENT:	Director Compton

f. Direction on Implementation Plan

Mr. Van Lienden provided an overview of the implementation plan components and preliminary timeline.

Director Williams suggested changing the timeline headings to reflect the categories more accurately. Mr. Melton suggested changing the 2035-2040 heading from "Implement Sustainable Operations" to "Achieve Groundwater Basin Sustainability."

Ms. Carlisle asked regarding the implementation timeline, if the threshold rationale and minimum thresholds could be monitored and adjusted in the coming years and does not see that in the graph and believes it should be codified in the graphic. Mr. Van Lienden and Mr. Beck said we should have included that in the 2020 box.

g. Stakeholder Engagement Update

GSP outreach consultant the Catalyst Group's Charles Gardiner provided an update on stakeholder engagement which is provided in the Board packet.

8. Groundwater Sustainability Agency

a. Report of the Executive Director

Nothing to report.

b. Progress & Next Steps

Mr. Beck provided an update on the near-term GSP schedule and accomplishments and next steps, which are summarized in the Board packet.

c. Report of the General Counsel

Nothing to report.

9. Financial Report

a. Financial Management Overview

Mr. Blakslee provided an overview of the CBGSA's financial activities.

b. Direction on Annual Audit

Mr. Blakslee reported that he heard from 3 of the 4 counites on the ability to perform a two-year audit to save some money, but this item was tabled until next month.

c. Financial Report

Mr. Blakslee provided an overview of the January 2019 financial report and is included in the Board packet.

d. Payment of Bills

Mr. Blakslee reported on the payment of bills for the month of January 2019.

MOTION

A motion was made to approve payment of the bills through the month of January 2019 in the amount of $124,542.96, pending receipt of funds. The motion was seconded by Director Bracken and passed unanimously.

AYES:	Directors Albano, Bantilan, Bracken, Cappello, Chounet, Shephard, Williams, Wooster and Yurosek
NOES:	None
ABSTAIN:	None
ABSENT:	Director Compton

10. Reports of the Ad Hoc Committees

Nothing to report.

11. Directors' Forum

Nothing to report.

12. Public comment for items not on the Agenda

Nothing to report.

13. Adjourn

Adjourned to New Cuyama High School Cafeteria at 5:50 p.m.
At the public workshop, a quorum was lost and the CBGSA Board adjourned at 7:14 pm.
The SAC lost a quorum and adjourned at 7:40 pm.

Minutes approved by the Board of Directors of the Cuyama Basin Groundwater Sustainability Agency the 3rd day of April 2019.

BOARD OF DIRECTORS OF THE
CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Chair: _____

ATTEST:

Secretary: _____

TO: Board of Directors
Agenda Item No. 5

FROM: Roberta Jaffe, Standing Advisory Committee Chair

DATE: April 3, 2019

SUBJECT: Report of the Standing Advisory Committee

Issue
Report on the Standing Advisory Committee meeting.

Recommended Motion
None – information only.

Discussion
Provided as Attachment 1 is a report on the March 28, 2019 Standing Advisory Committee (SAC) from SAC Chair Roberta Jaffe and Vice Chair Brenton Kelly.

The purpose of this report is to provide the Cuyama Basin Groundwater Sustainability Agency Board of Directors with SAC input on the various Groundwater Sustainability Plan (GSP) components and issues that will better equip the Board when making decisions on GSP-related issues.

Standing Advisory Committee Report
Meeting: March, 28, 2019

Submitted to the GSA Board April 1, 2019

From:

Roberta Jaffe, SAC Chair
Brenton Kelly SAC Vice-Chair

The SAC maintained a quorum for all 3.5 hours of the meeting with 2 members absent and one vacancy. The SAC made two recommendations to the Board and had lengthy discussions on several important items without reaching any discreet recommendation to the GSA. An ad hoc committee was formed to support of the Catalyst Group on the outreach for the Public Draft Comment Period. There were approximately 15 people in the audience, and Anita Regmi, the DWR point-of-contact representative for the Cuyama Basin was on the phone.

There were 5 main areas of discussion:

1. Review of Options for Management Area Governance
2. Update on Sustainability and Climate Change Modeling
3. Direction on Implementation Plan Interim Milestones
4. Review of Public Draft Comment Period
5. Notice of Standing Advisory Committee Resignation

1. Review of Options for Management Area Governance, Item 7d

It was agreed that the CCSD should not be included in the central developed area due to their small historical pumpage. There was recognition that de minimus domestic growth could be expected to be less than 20% over the implementation horizon. The following recommendation was made:

Exclude the CCSD from a MA, limit pumping levels at recent historic levels of 100 AF/Year with a 20% growth factor for 20 years.

Louise made the motion, Jake seconded, Passed Unanimously.

Brad, Louise, Brenton, Jake, Letty, Robbie.

Due to the extent of the Cuyama Basin that is outside of the CBWD and the potential for management areas to arise in these White areas in the future it was asked if the Counties were additionally being considered as potential management entity if Delegation were to be considered. This would present additional delegation agreements and duplication of efforts if the GSA chooses to Delegate management actions.

It was recognized that the CBWD had the funding mechanism to implement management actions and that those stakeholders responsible for having created the problem in the central developed area would/should be the ones to bear the responsibility of corrective actions, it was also noted however that the very difficult decisions on when and where to make these substantial cutbacks in the interests of all the beneficial users in the valley may be too great a responsibility to give to the pumpers alone. Staff was assured that GSA "oversight" was sufficiently required, however those details are vague and no incentive or enforcement exists to ensure effective oversight.

The discussion closed without a recommendation on the delegation of Management Area but the SAC was polled: Brad said he doesn't share the same concerns, Louise, Jake and Letty thought that we don't have enough detail to evaluate the possible concerns and Brenton and Robbie said they have real concerns with the oversight mechanism if MA authority were to be delegated.

2. Update on Sustainability and Climate Change Modeling, Item 7e.

Although the impact of climate change is seen as slight in the big picture, the model shows an increase in the overdraft from 26 to 27 TAF per year. It was noted that for simplicity, the presentation shows the central tendency within a range of uncertainty. This range will be able to be presented in the future. Brian said the sustainable yield for the basin as a whole is 20 TAF per year without climate change and 21 TAF per year with climate change.

3. Direction on Implementation Plan Interim Milestones. Item 7f.

Jim presented an overview of the glide path discussion. We are now looking at a ramp up path towards the total required reduction that are needed to reach the Sustainable Yield. How soon to start, how steep to cut, at what date will we achieve Sustainability? These issues all directly impact the continuing declines of groundwater storage. The SAC requested that the glide path options incorporate the impact on Groundwater storage so the impact on groundwater levels can be seen. Staff will attempt to present this overdraft context for the GSA.

With regards to how soon to start: Jim said it may take a year to do the necessary analysis, also we may want to do a more robust economic analysis which hasn't been done yet. It is budgeted for next year, but that tool would be helpful in the decision making. One to two years at the most.

With regards to how steep: Jim said many options could work to balance the needs of all the beneficial users. Brian said he hopes to model the glide path live, including overdraft numbers with the GSA Board and hopes they can agree on a path to be included in the GSP.

With regards to when to achieve Sustainability: It was recognized that (with climate change) every year drains 27 TAF from a Basin that has been recognized by CDWR to be in chronic overdraft since 1980. The urgency of action was expressed by several stakeholders, as was the difficulty involved in reducing the demand by as much as will be required to reach Sustainability.

Jim gave an update on the financing plan and reported that the Budget Ad Hoc recently completed the draft FY 19-20 budget and it is estimated at roughly $1.19 million for basin-wide activities. Jim estimated that Management Area costs would be in the $500,000-800,000 plus the cost of the projects.

A hybrid approach that balances the costs between Irrigated and Non Irrigated acres, with a way to address new development, and an acreage threshold high enough to exclude domestic users, seems the friendliest way to fund the basin wide administration.

4. Review of Public Draft Comment Period, Item 7gi.

The final draft of the GSP will be available electronically on April 19 and the plan is to have the printed document available at the FRC and Library soon thereafter. Robbie recommended appointing an ad hoc to work with Catalyst on the outreach for the Final Public Draft Review Period. Jake & Letty volunteered with Robbie, and will meet with Mary.

5. Notice of Standing Advisory Committee Resignation, Item 8a

Jim reported that Claudia Alvarado let the SAC know she will no longer be able to participate in the SAC and has resigned. It was asked how long the SAC is anticipated to exist. Jim said the JPA instructs that the SAC will provide input to the Board for GSP development and implementation. Lynn Carlisle, Executive Director of the Family Resource Center, read and submitted a written statement recognizing the need to maintain Hispanic engagement in the SAC and that the community has been actively involved and informed as demonstrated by the attendance at the last public workshop.

The following motion was made by Brenton and seconded by Louise and passed unanimously:

The SAC recommends that the GSA open the position and receive applications from the Hispanic community for appointment to the vacancy on the SAC.

Summary:

Progress is being made in adjustments to the Sustainability Threshold Rationales for the Eastern Region, But SAC continues to recommend better representation in the Monitoring wells in this region.

The CCSD is not responsible for the overdraft in the central developed area and should not be affected by any cutbacks to its historic use or by the financial burden of managing the overdraft.

Although climate change may bring more precipitation to the region, its benefits are countered by increases in temperature and evapotranspiration. The range of uncertainty of the whole picture just got a little more uncertain.

The SAC recognizes the delicacy of the Management Area delegation debate. Management Areas are a tool without an operator's manual and not enough of the details are understood at this point to comfortably delegate full responsibility for the cutbacks to those entities understandably least inclined and literally operating with conflicted interests

The SAC expressed strong concern for the impact on Groundwater storage within the Basin when considering glide path options and the implementation timeline.

The SAC unanimously voted to recommend action to appoint a replacement to the recent vacancy on the Standing Advisory Committee.

TO: Board of Directors
Agenda Item No. 6

FROM: Lyndel Melton, Woodard & Curran

DATE: April 3, 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.

COMMITMENT & INTEGRITY
DRIVE RESULTS

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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)

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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

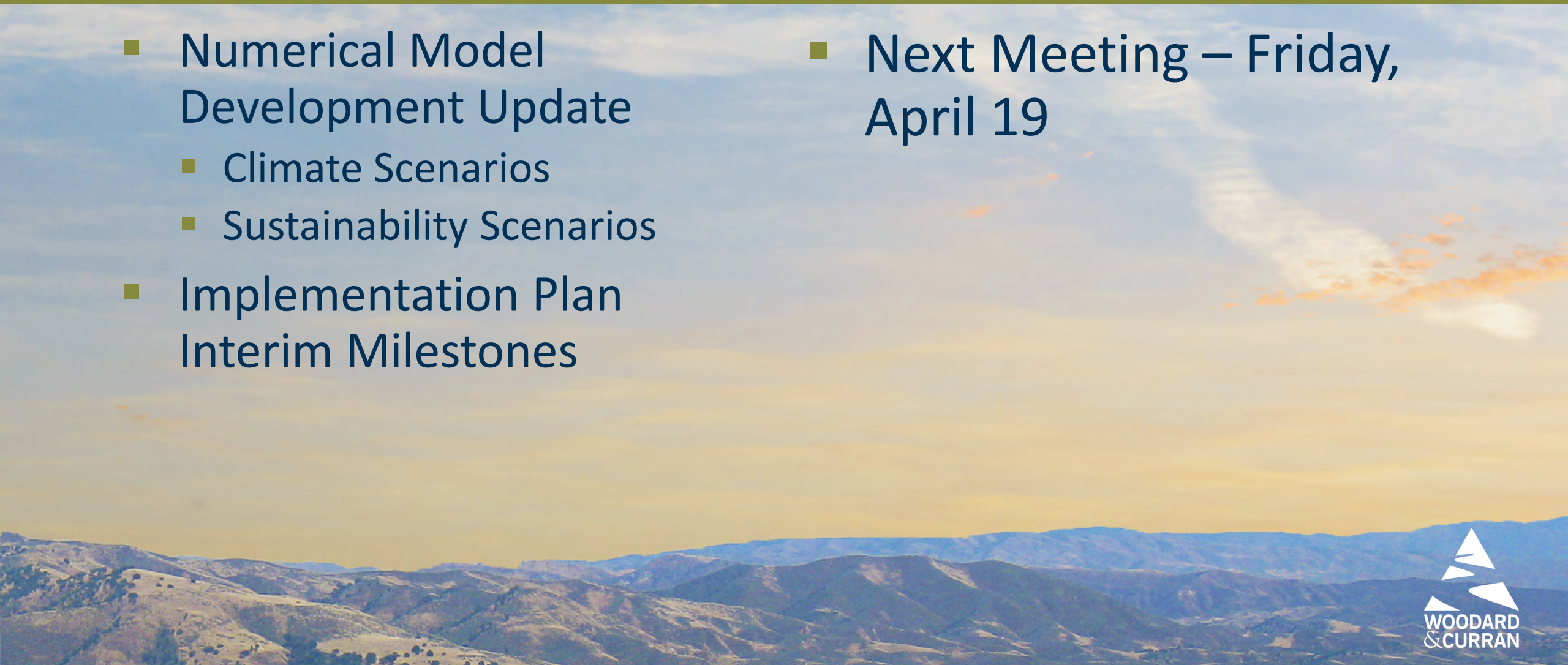
Technical Forum Update

April 3, 2019

WOODARD &CURRAN

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: Board of Directors
Agenda Item No. 7a

FROM: Lyndel Melton, Woodard & Curran (W&C)

DATE: April 3, 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.

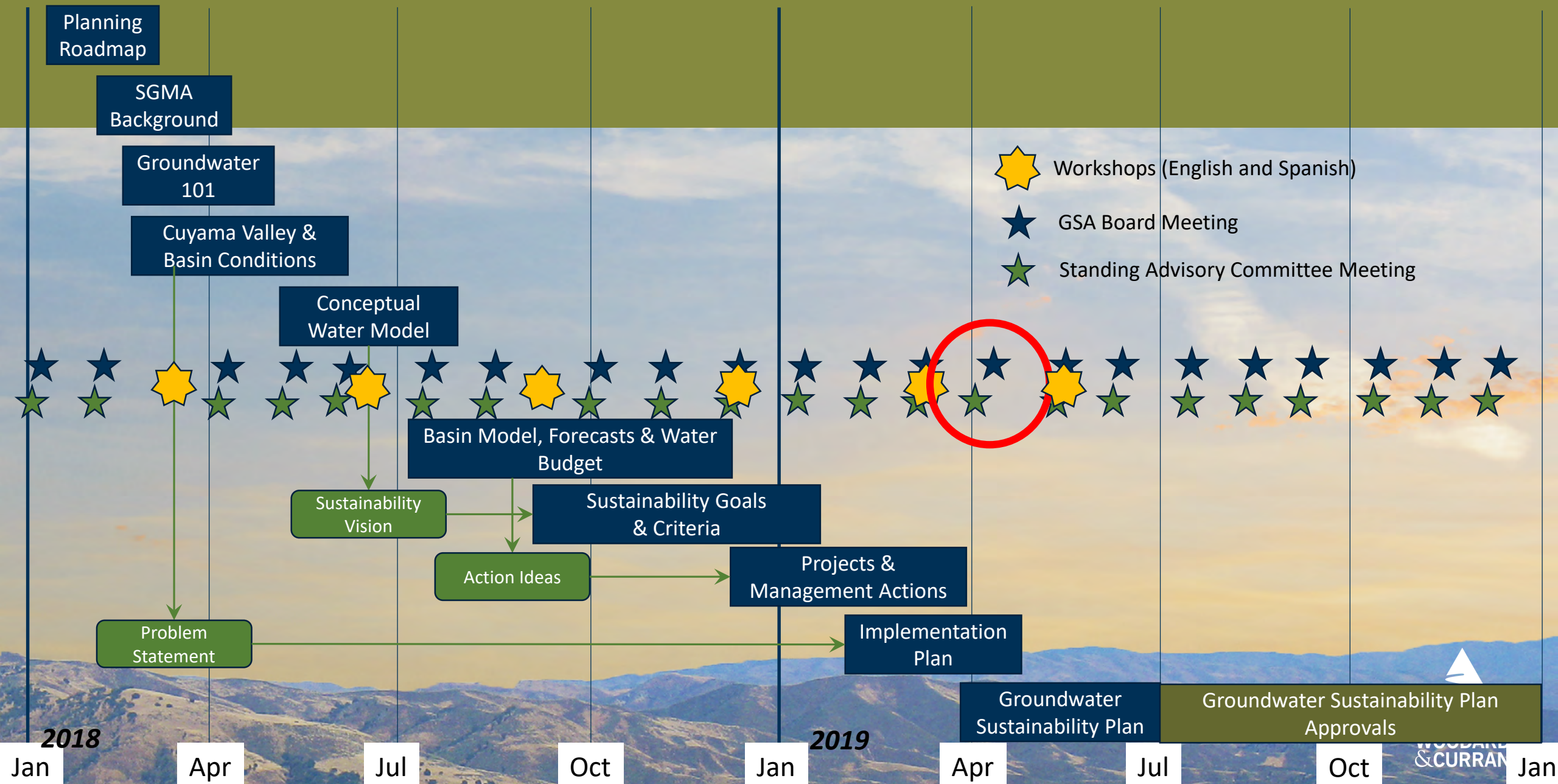
Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Update

April 3, 2019

WOODARD &CURRAN

Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap



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
- ✓ Prepared initial invoice to DWR for payment on SGMA grant

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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

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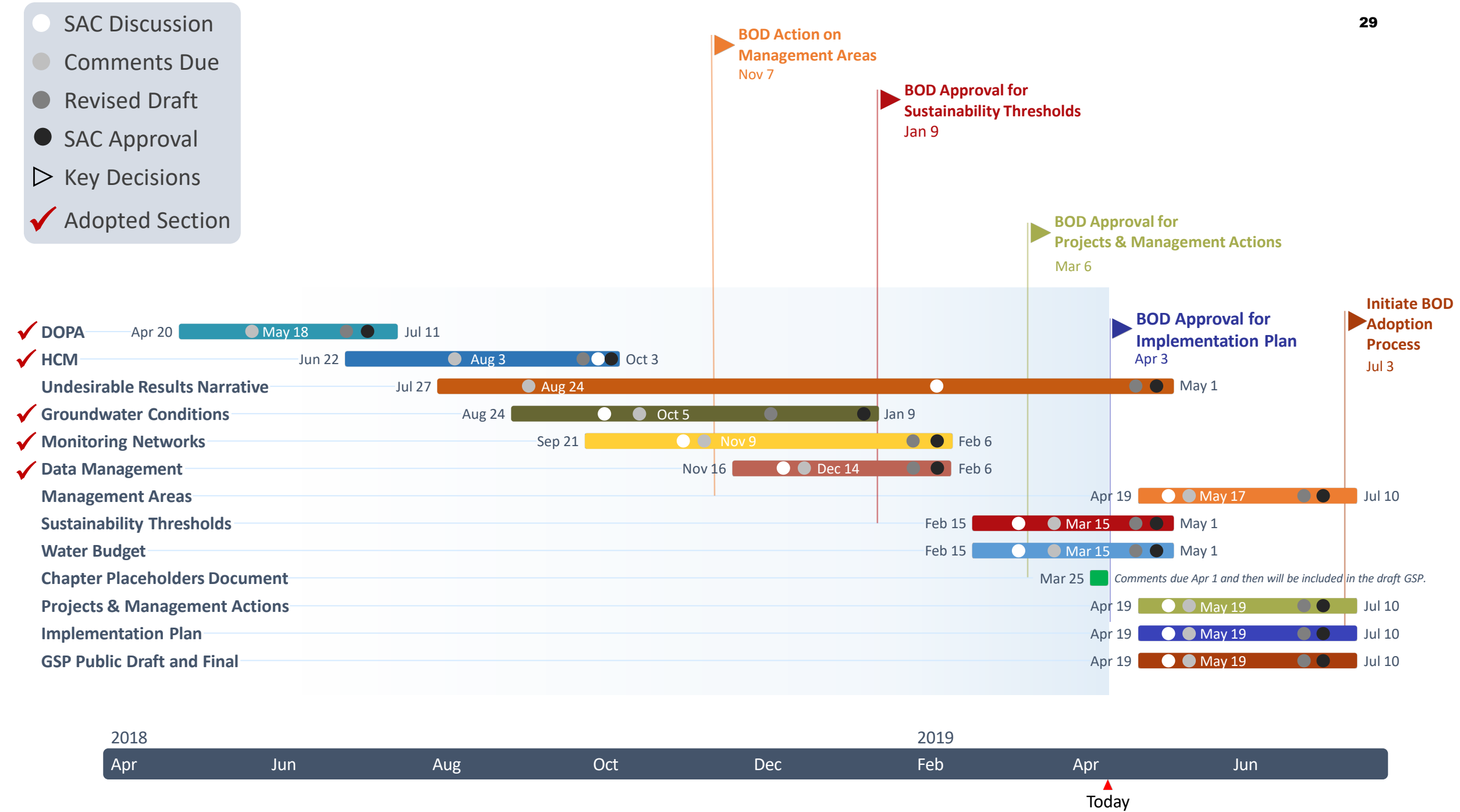
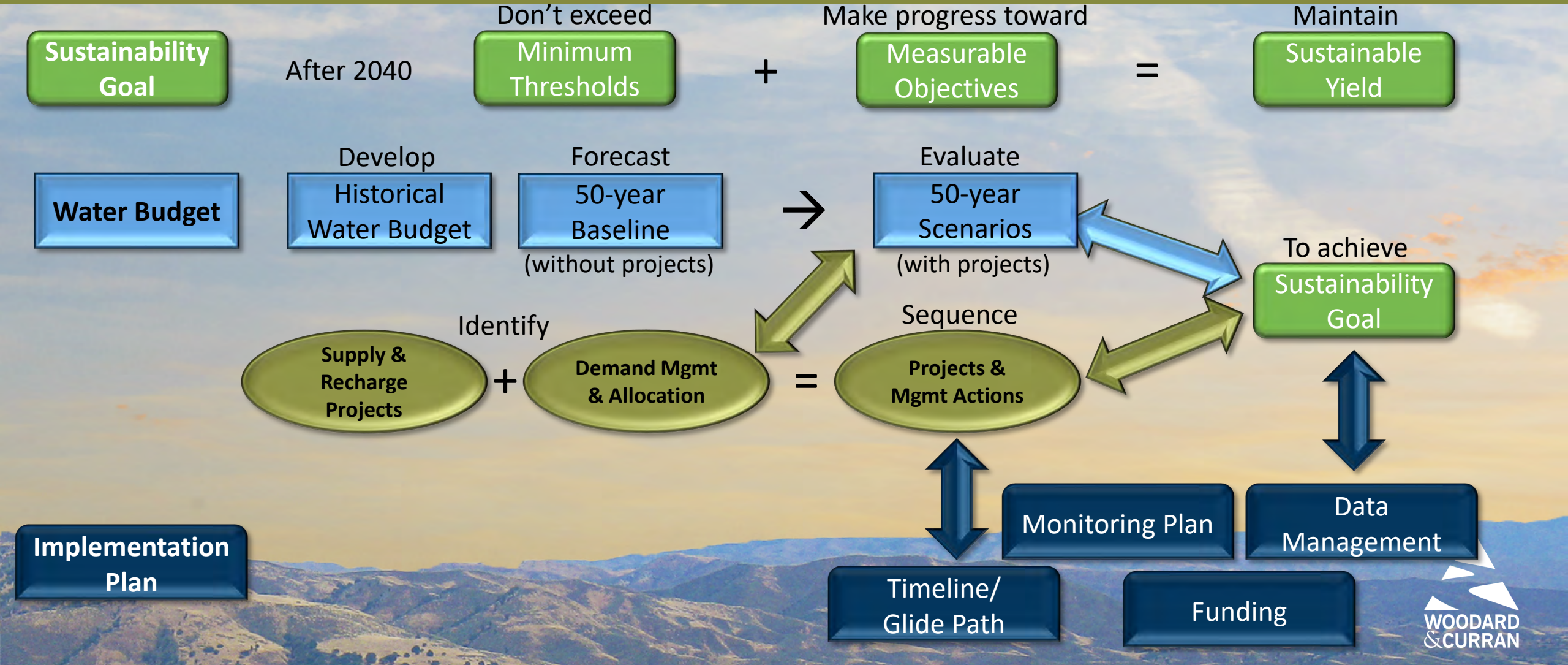
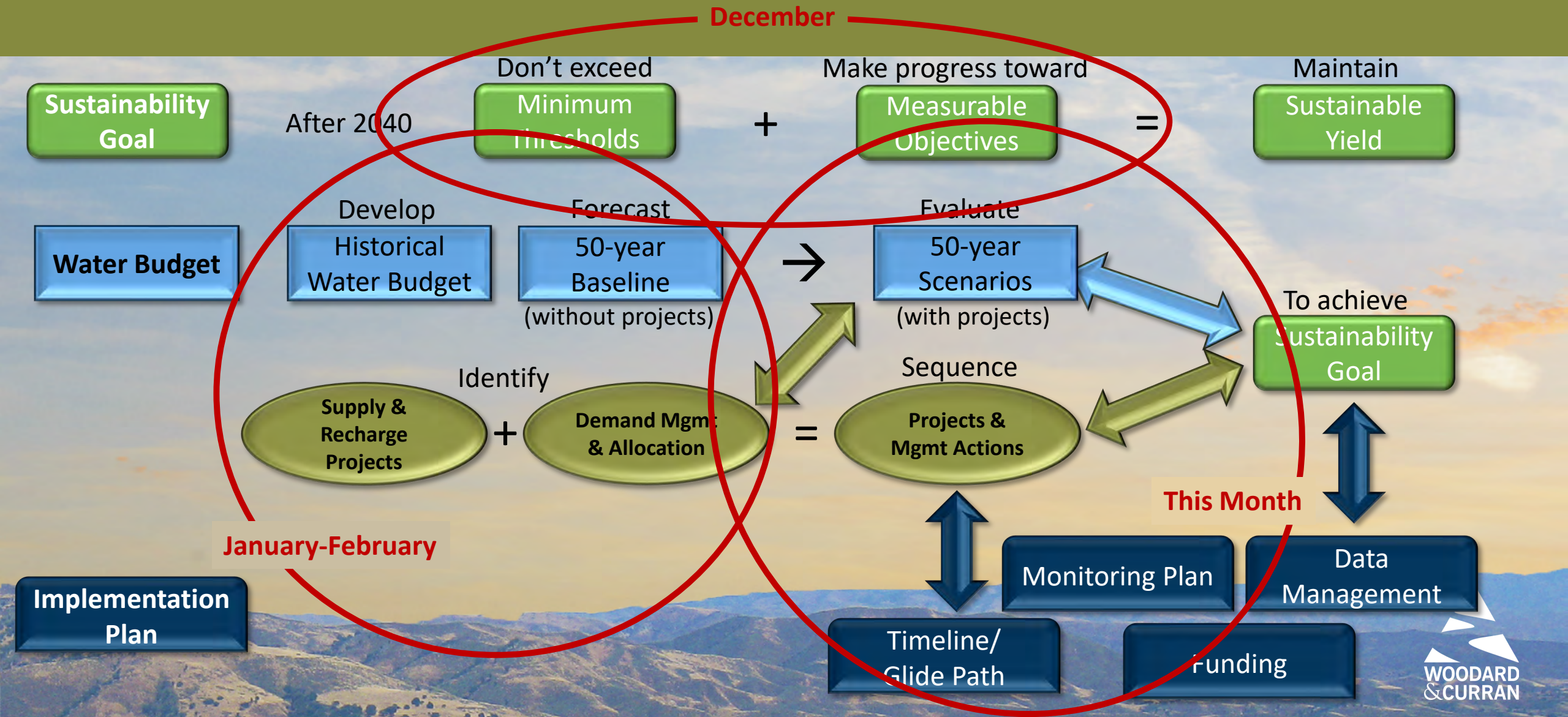

SAC Discussion
Comments Due
Revised Draft
SAC Approval
Key Decisions
Adopted Section
BOD Action on Management Areas
Nov 7
BOD Approval for Sustainability Thresholds
Jan 9
BOD Approval for Projects & Management Actions
Mar 6
BOD Approval for Implementation Plan
Apr 3
Initiate BOD Adoption Process
Jul 3
DOPA Apr 20 May 18 Jul 11
HCM Jun 22 Aug 3 Oct 3
Undesirable Results Narrative Jul 27 Aug 24 May 1
Groundwater Conditions Aug 24 Oct 5 Jan 9
Monitoring Networks Sep 21 Nov 9 Feb 6
Data Management Nov 16 Dec 14 Feb 6
Management Areas Apr 19 May 17 Jul 10
Sustainability Thresholds Feb 15 Mar 15 May 1
Water Budget Feb 15 Mar 15 May 1
Chapter Placeholders Document Mar 25
Comments due Apr 1 and then will be included in the draft GSP.
Projects & Management Actions Apr 19 May 19 Jul 10
Implementation Plan Apr 19 May 19 Jul 10
GSP Public Draft and Final Apr 19 May 19 Jul 10
2018
2019
Apr
Jun
Aug
Oct
Dec
Feb
Apr
Jun
Today

GSP Discussion Approach & Terminology



GSP Discussion Approach & Terminology



TO: Board of Directors
Agenda Item No. 7b

FROM: Lyndel Melton, Woodard & Curran (W&C)

DATE: April 3, 2019

SUBJECT: Discussion on Placeholder Section

Issue
Discussion on the placeholder section.

Recommended Motion
None – information only.

Discussion
An overview on the placeholder section 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

April 3, 2019

WOODARD &CURRAN

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

WOODARD &CURRAN

Cuyama Valley Groundwater Basin Groundwater Sustainability Plan Placeholder Sections Draft

Prepared by:

March 2019

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1.2.8 Plan Elements from CWC Section 10727.4 1-3
Chapter 2 Basin Settings 2-4
2.1 Hydrogeologic Conceptual Model 2-4
2.1.10 Hydrogeologic Conceptual Model Data Gaps 2-4
2.2 Groundwater Conditions 2-4
2.2.4 Change in Groundwater Storage 2-4
2.2.8 Interconnected Surface Water Systems 2-6
2.2.9 Groundwater Dependent Ecosystems 2-9
2.2.10 Data Gaps 2-9
Chapter 4 Monitoring Networks 2-11
4.10 Depletions of Interconnected Surface Water Monitoring Network 2-11
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List of Figures

No table of figures entries found.

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 IWFM 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.

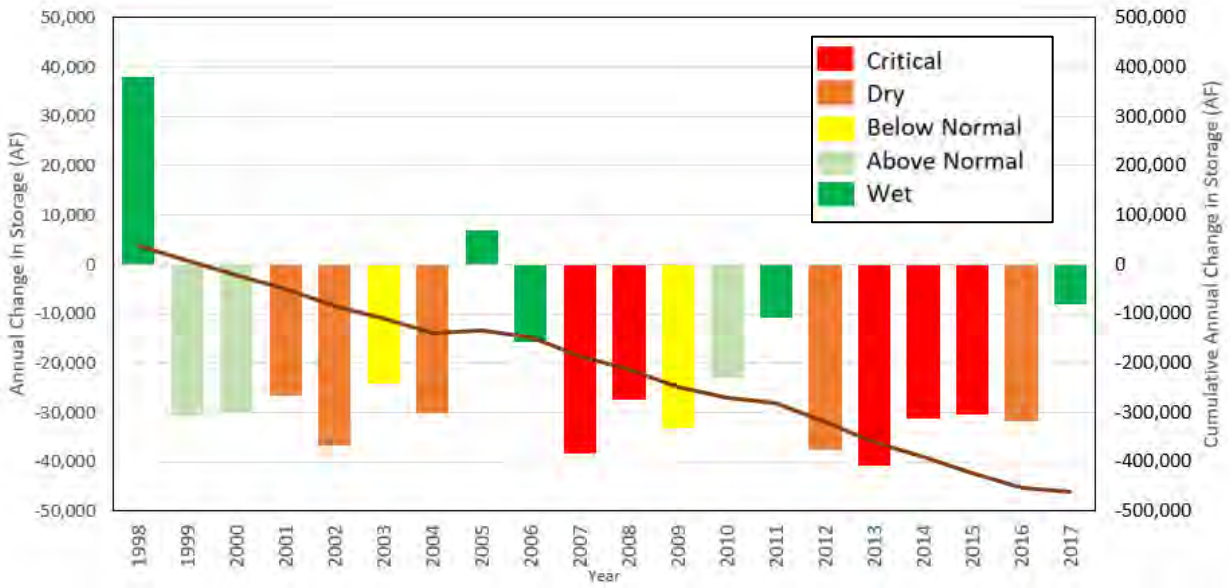
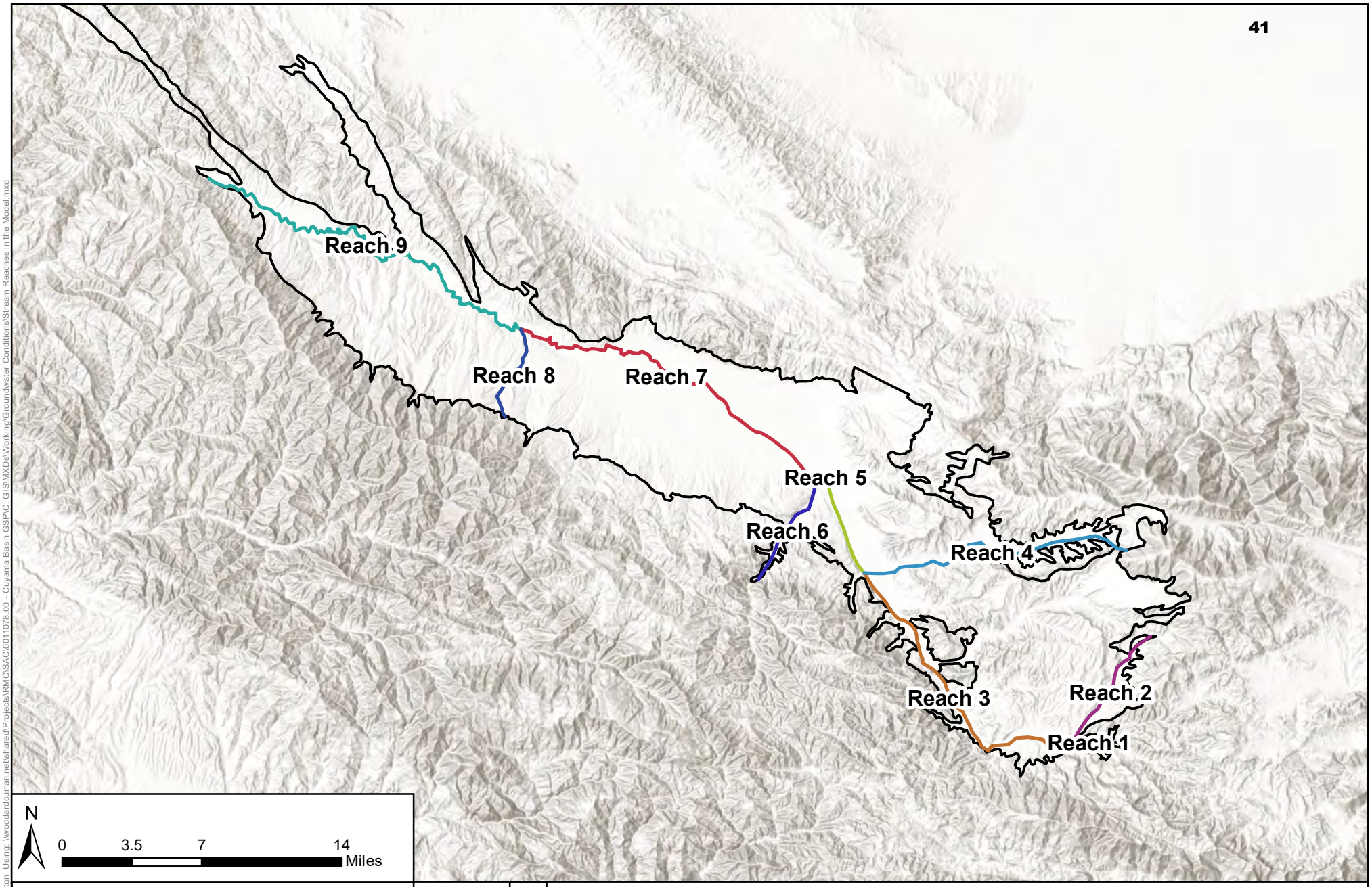


Figure 2-1 Cuyama Groundwater Storage by Year, Water Year Type, and Cumulative Water Volume

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.



N

0 3.5 7 14 Miles

Stream Reaches Used in Cuyama Groundwater Model

Cuyama Basin Groundwater Sustainability Agency

Cuyama Valley Groundwater Basin Groundwater Sustainability Plan

March 2019

WOODARD &CURRAN

Legend

Cuyama Basin

Stream Reach

1
2
3
4
5
6
7
8
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.

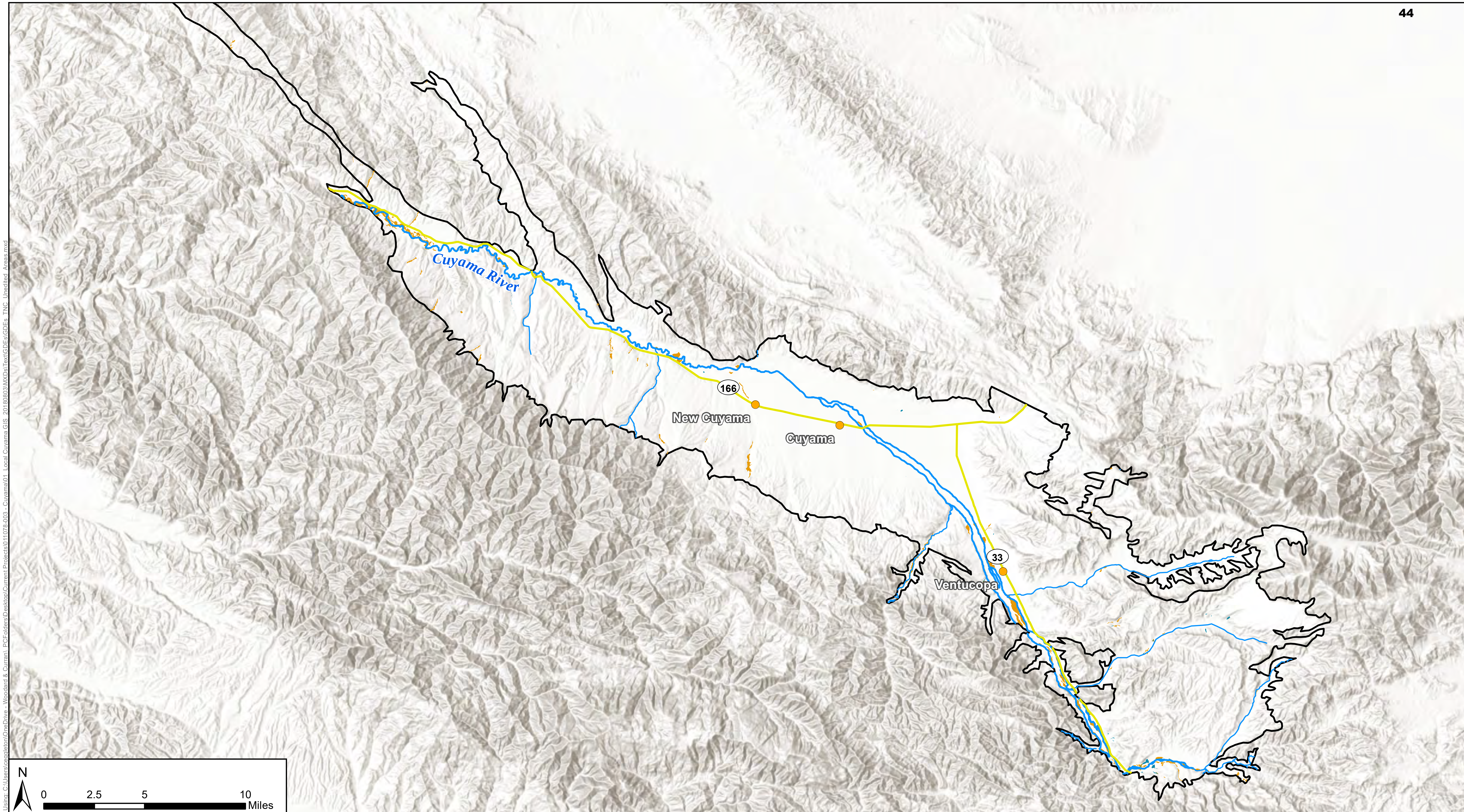
A Woodard and Curran licensed wetlands biologist performed verification of the NCCAG dataset using remote sensing techniques, supported by a small amount of in person field verification. This work was documented in a Technical Memorandum included in Appendix X. The analysis was performed by groupings, 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



Legend

- Cuyama Basin
- TNC Identified Potential GDE Wetland
- TNC Identified Potential GDE Vegetation
- Towns
- Cuyama River
- Streams
- Highways

Draft

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

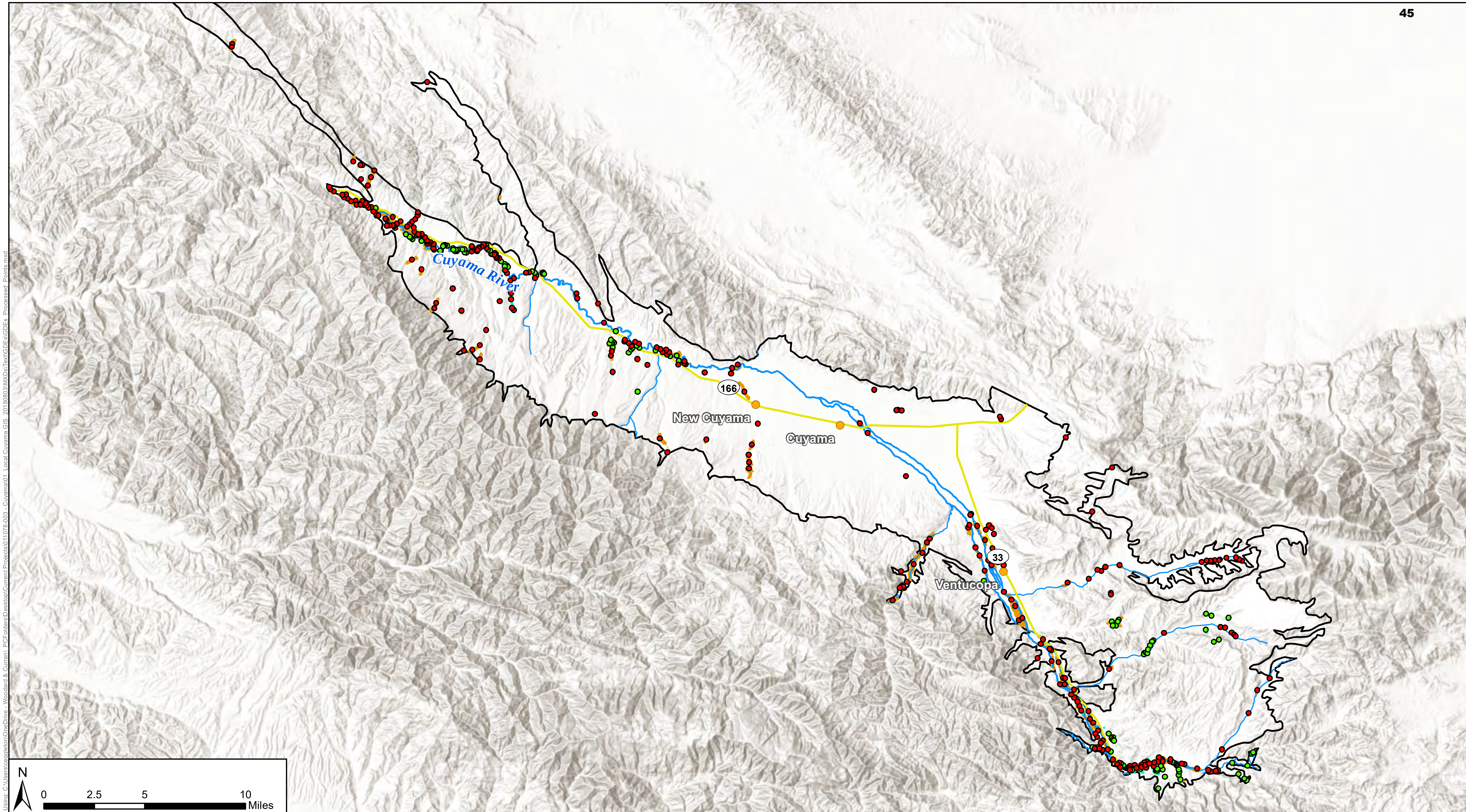


Figure 2-4 - Cuyama Basin NCAG GDE Point Analysis

Cuyama Basin Groundwater Sustainability Agency

Cuyama Valley Groundwater Basin Groundwater Sustainability Plan

March 2019

WOODARD & CURRAN

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

DRAFT

Cuyama River

166

New Cuyama

Cuyama

33

Ventucopa

N

0 2.5 5 10 Miles

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

Cuyama Basin Groundwater Sustainability Agency

Cuyama Valley Groundwater Basin Groundwater Sustainability Plan

March 2019

WOODARD &CURRAN

Legend

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

DRAFT

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

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	*Hesperoyucca whipplei, Arctostaphylos glauca, Lepidospartum squamatum, Ericameria nauseosa, Eriogonum fasiculatum, Bromus carinatus*	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	*Lepidospartum squamatum, Ericameria nauseosa, Eriogonum fasiculatum*	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	*Juncus xiphoides, Juncus patens, Typha domingensis, Scirpus microcarpus, Salix exigua, Salix laevigata, Castilleja sp.*	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	*Clematis ligusticifolia, Juncus effusus, Salix laevigata, Urtica dioica*	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: Board of Directors
Agenda Item No. 7c

FROM: Lyndel Melton, Woodard & Curran (W&C)

DATE: April 3, 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

April 3, 2019

WOODARD &CURRAN

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.

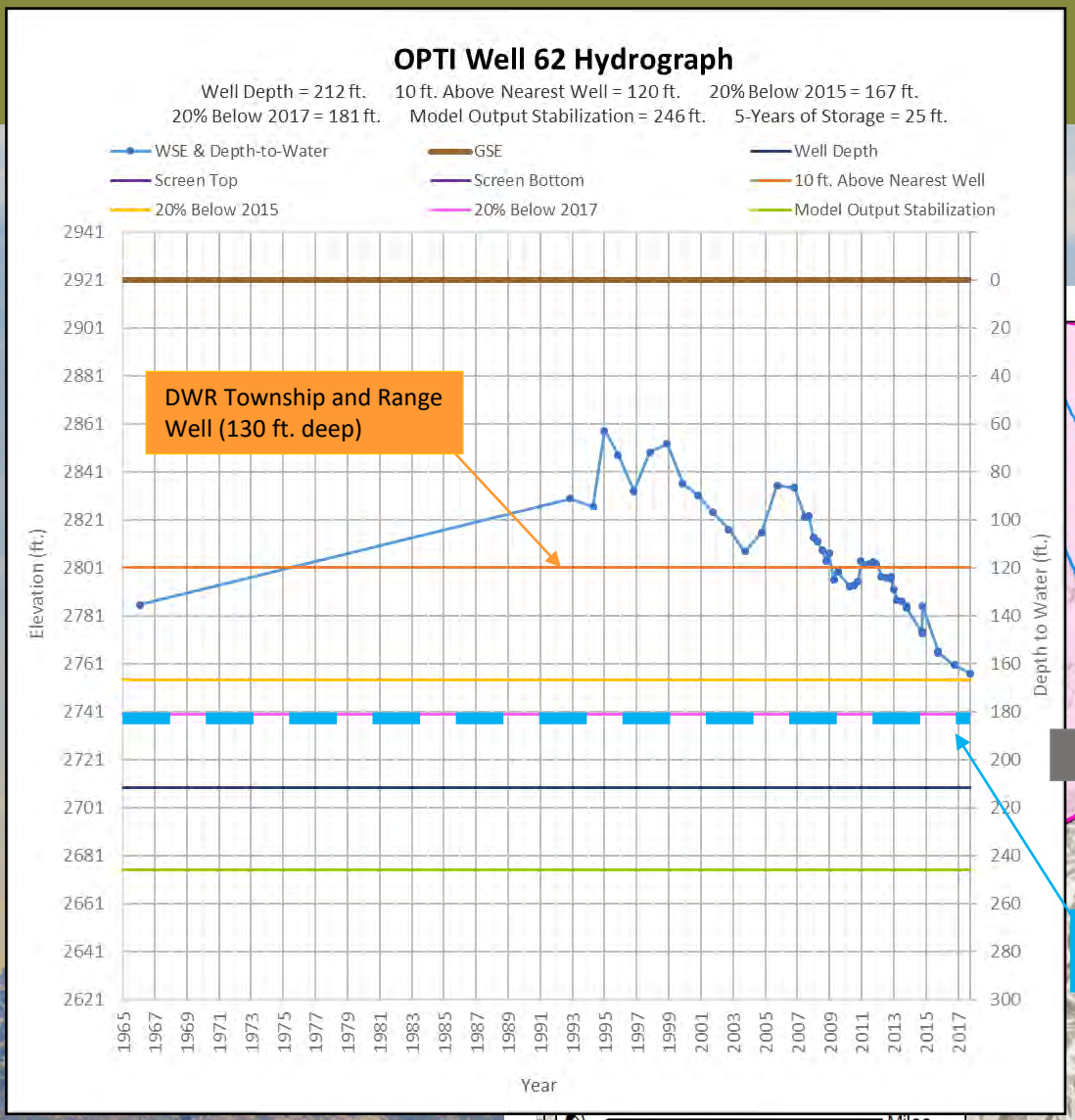
MO = Measurable Objective
MT = Minimum Threshold
**A supermajority vote of 75% is needed for each rationale to be passed by the Board.*

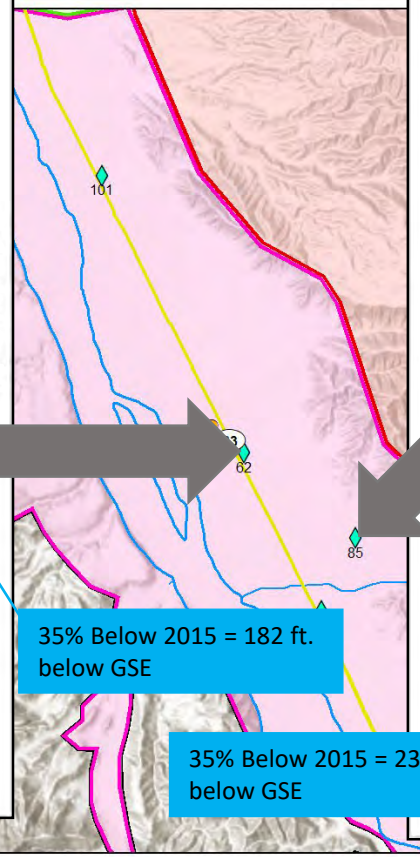
WOODARD &CURRAN

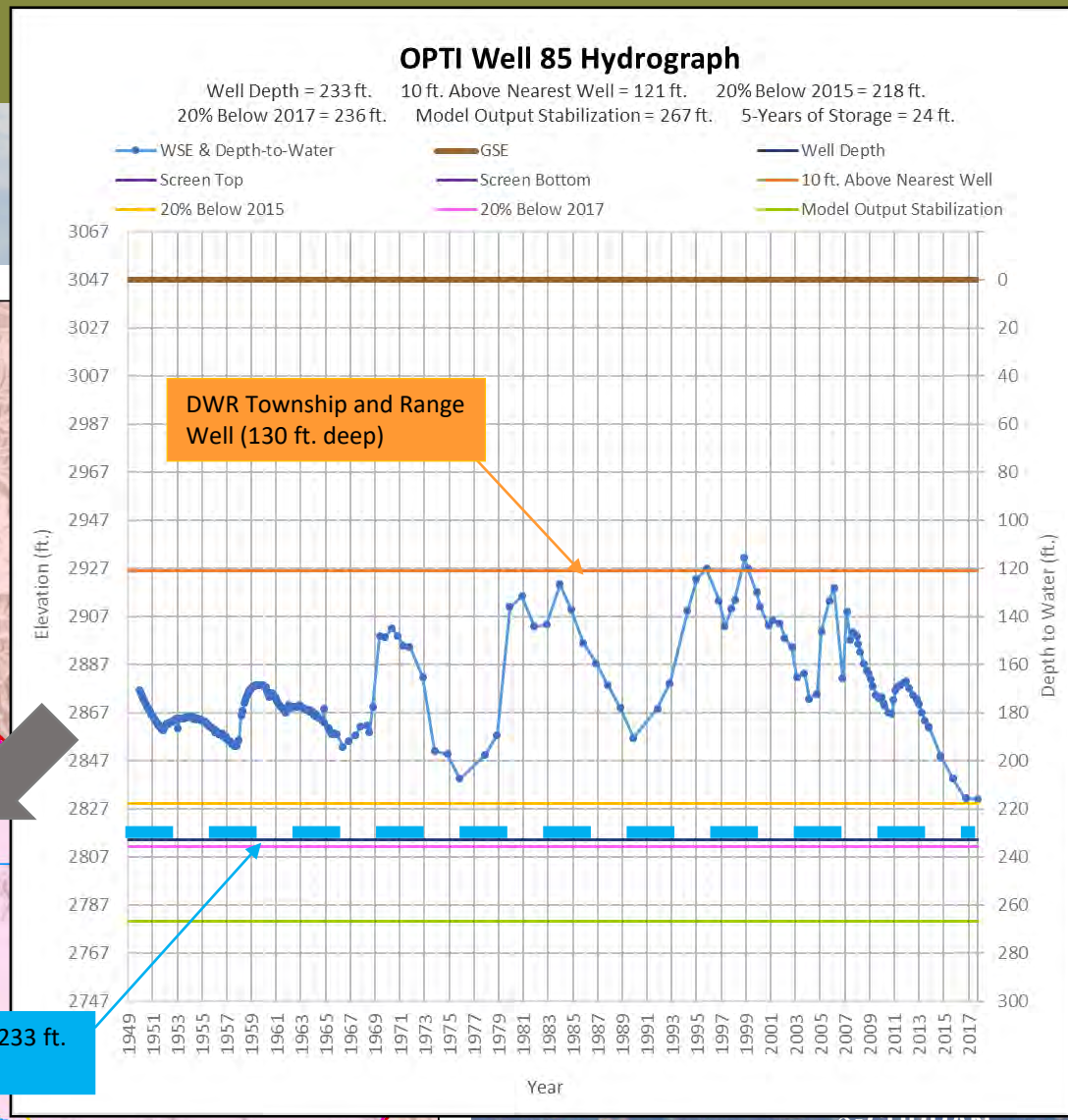
Revised Staff Recommendation

- 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

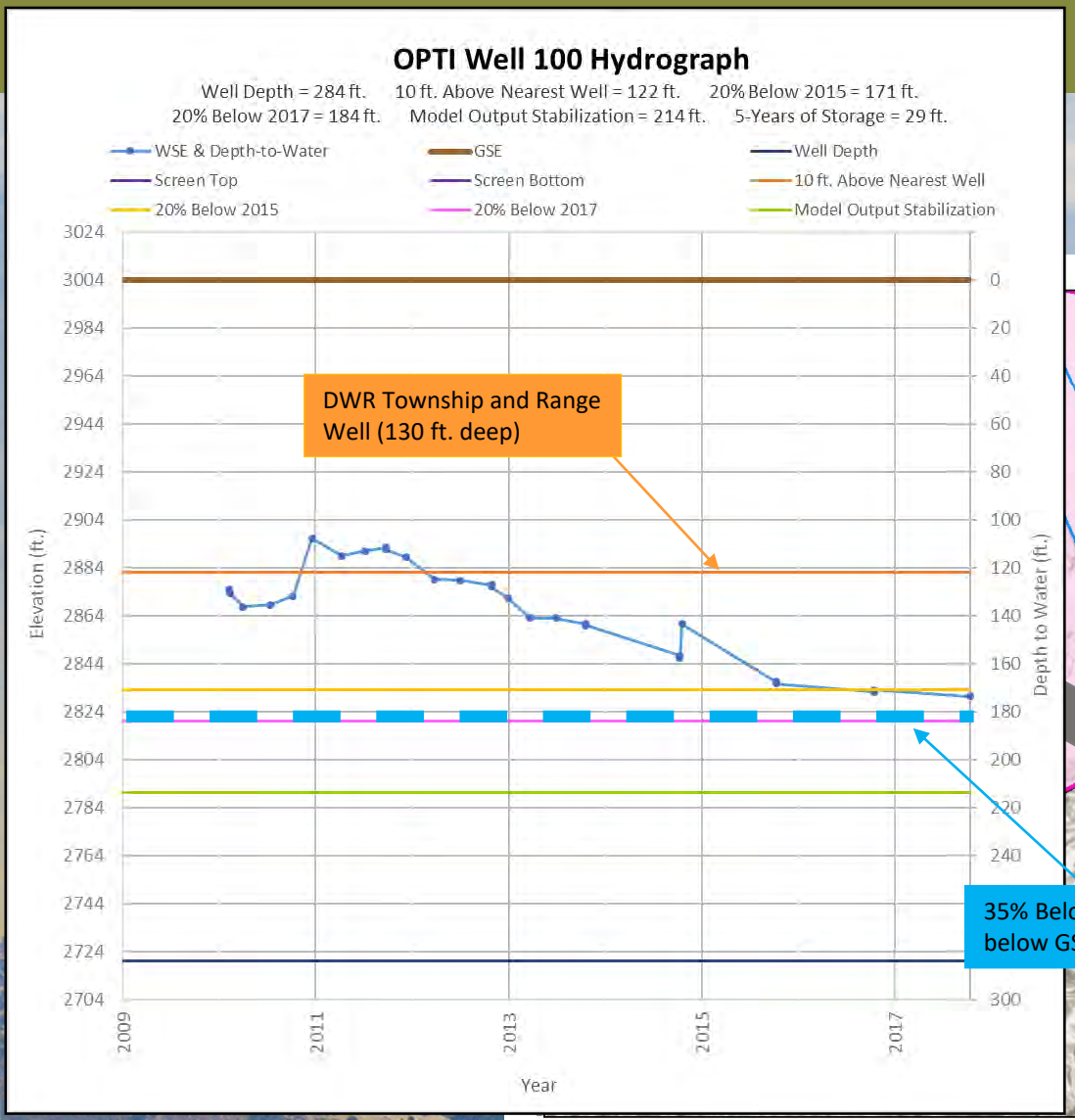
Proposed Eastern Region Thresholds

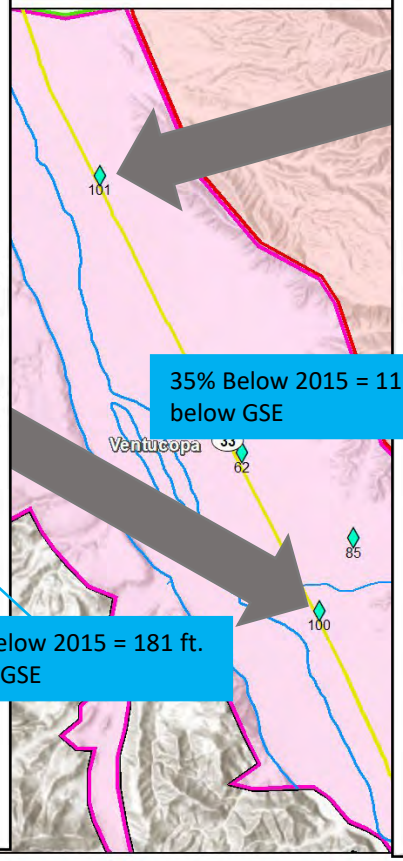


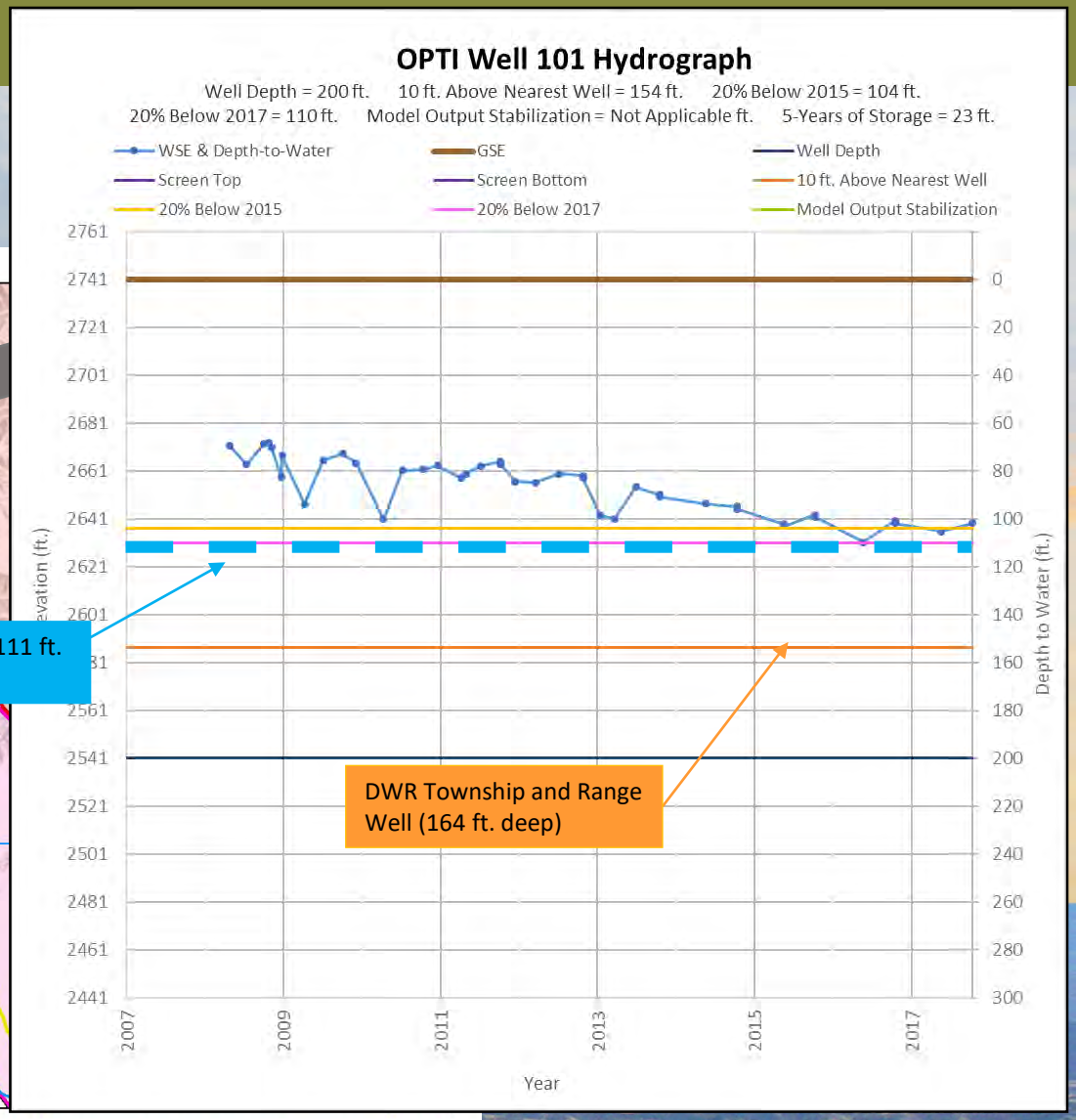




Proposed Eastern Region Thresholds







TO: Board of Directors
Agenda Item No. 7d

FROM: Lyndel Melton, Woodard & Curran (W&C)

DATE: April 3, 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

April 3, 2019

WOODARD &CURRAN

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

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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.

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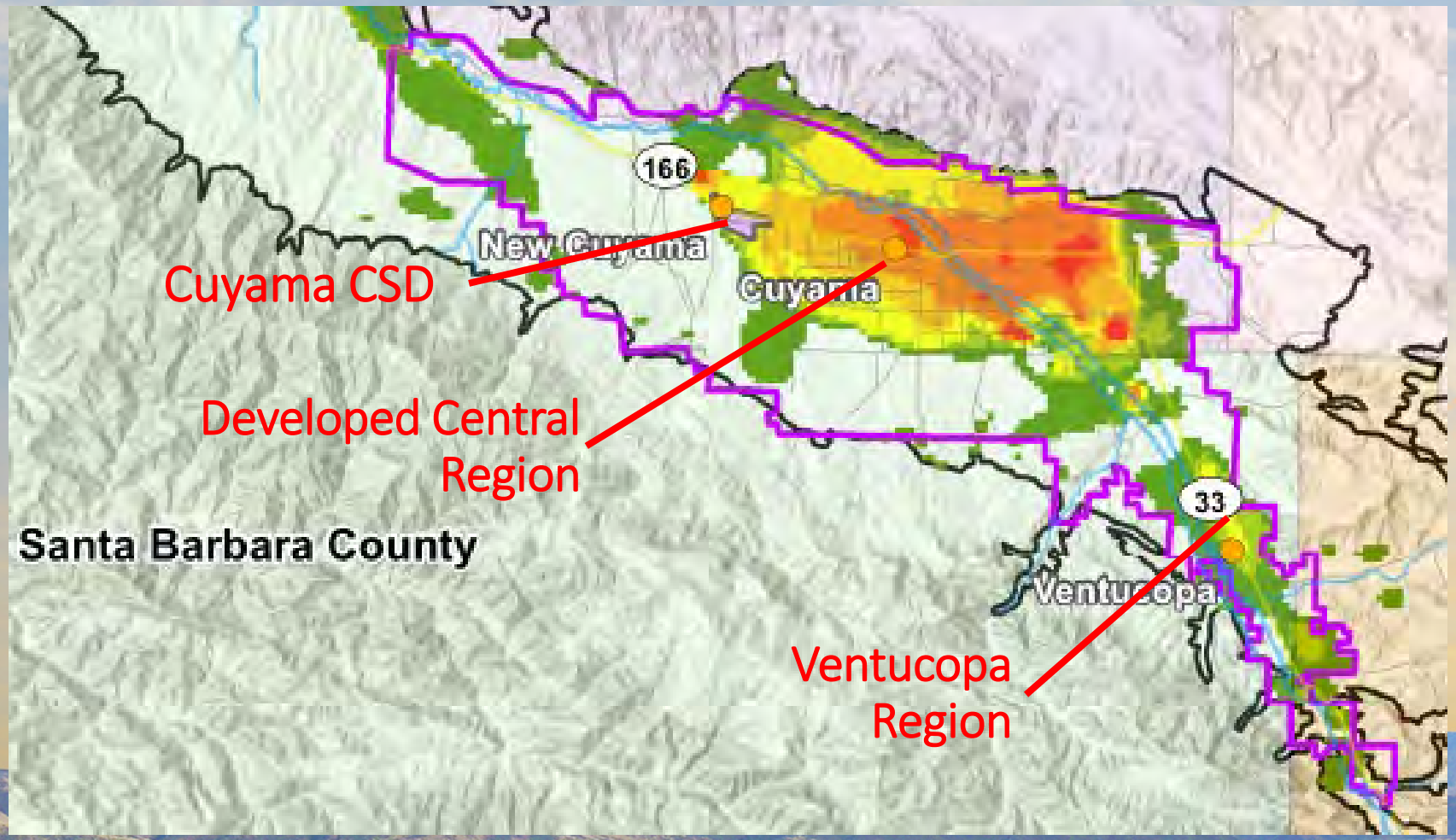
Two (or Three) Potential Management Areas



Options for Management Area Administration

1. GSA Responsible for Management Area(s)

2. GSA Delegates Administration of Management Area(s) to:
   - 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

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Areas of Potential Delegation

Things to Delegate

- Management Actions
- Pumping Reductions
- Water Supply Projects 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 (hydrologically and economically) 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

WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 7e

FROM: Lyndel Melton, Woodard & Curran (W&C)

DATE: April 3, 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

April 3, 2019

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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

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Future Conditions

Annual Precipitation

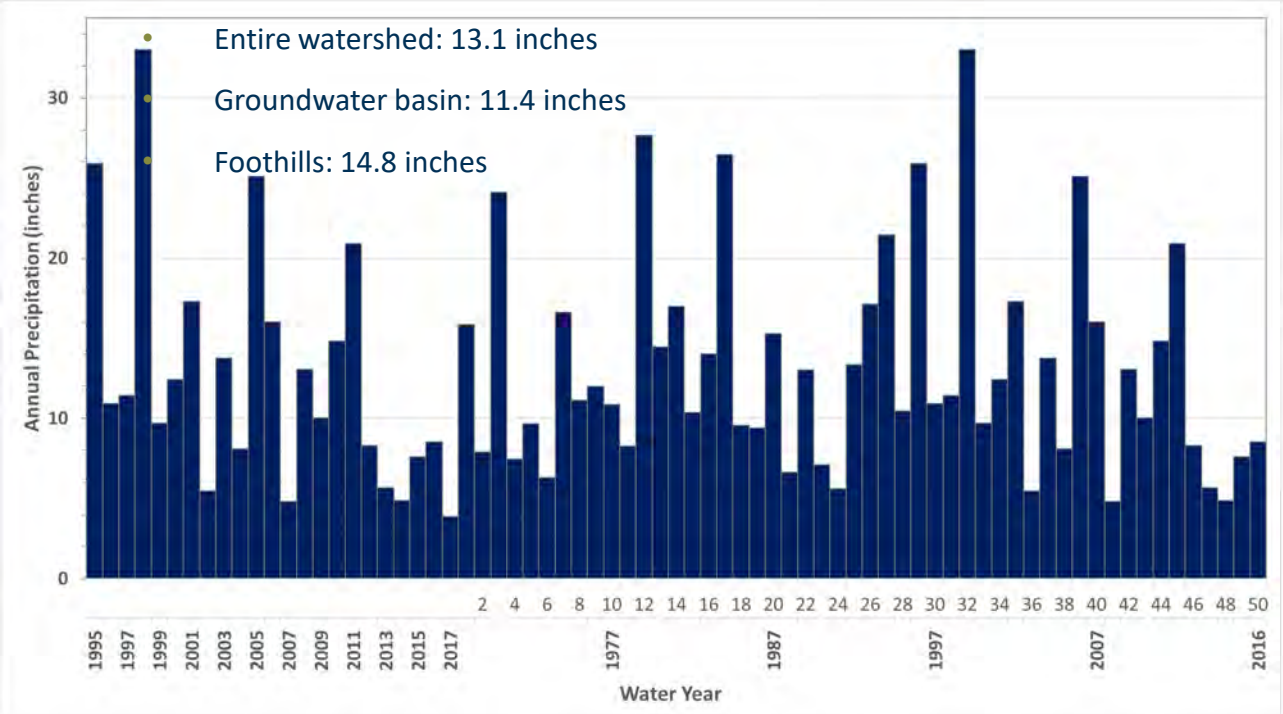
(based on adjusted PRISM dataset)

Average Annual Precipitation (50 years)

Entire watershed: 13.1 inches

Groundwater basin: 11.4 inches

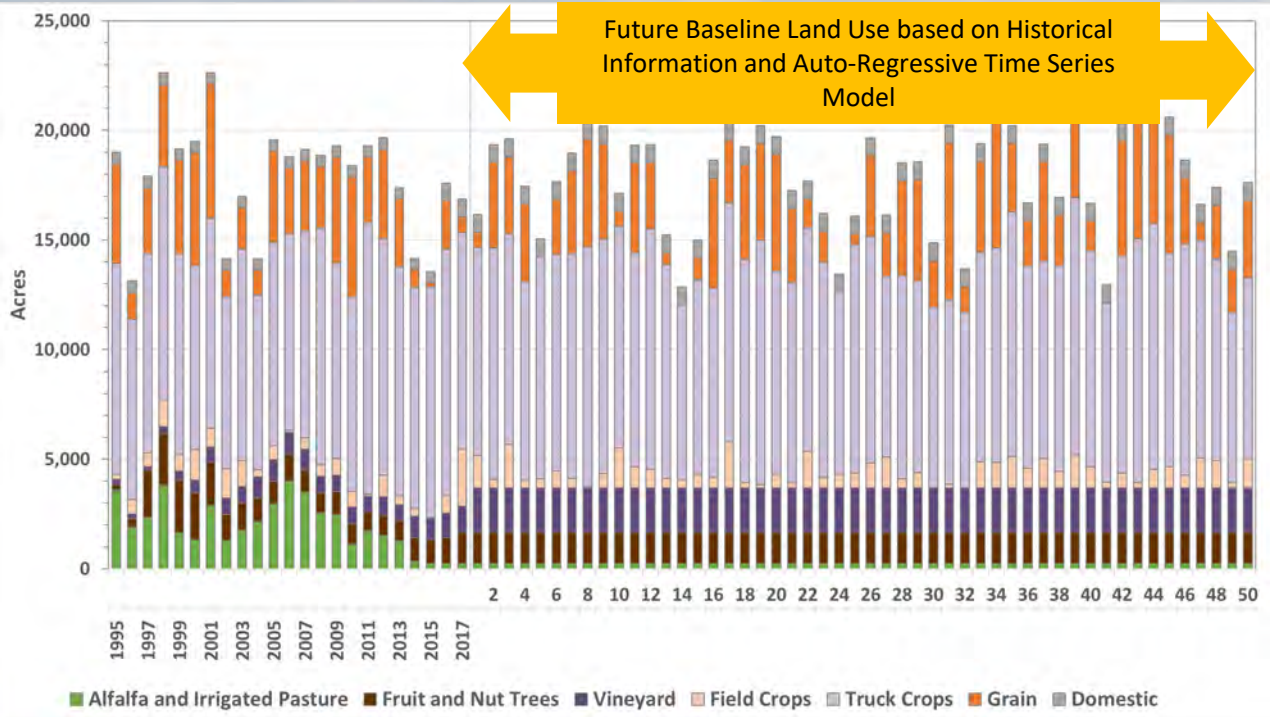
Foothills: 14.8 inches



Land Use

(based on historical information and ARMA Model)

Future Baseline Land Use based on Historical Information and Auto-Regressive Time Series Model



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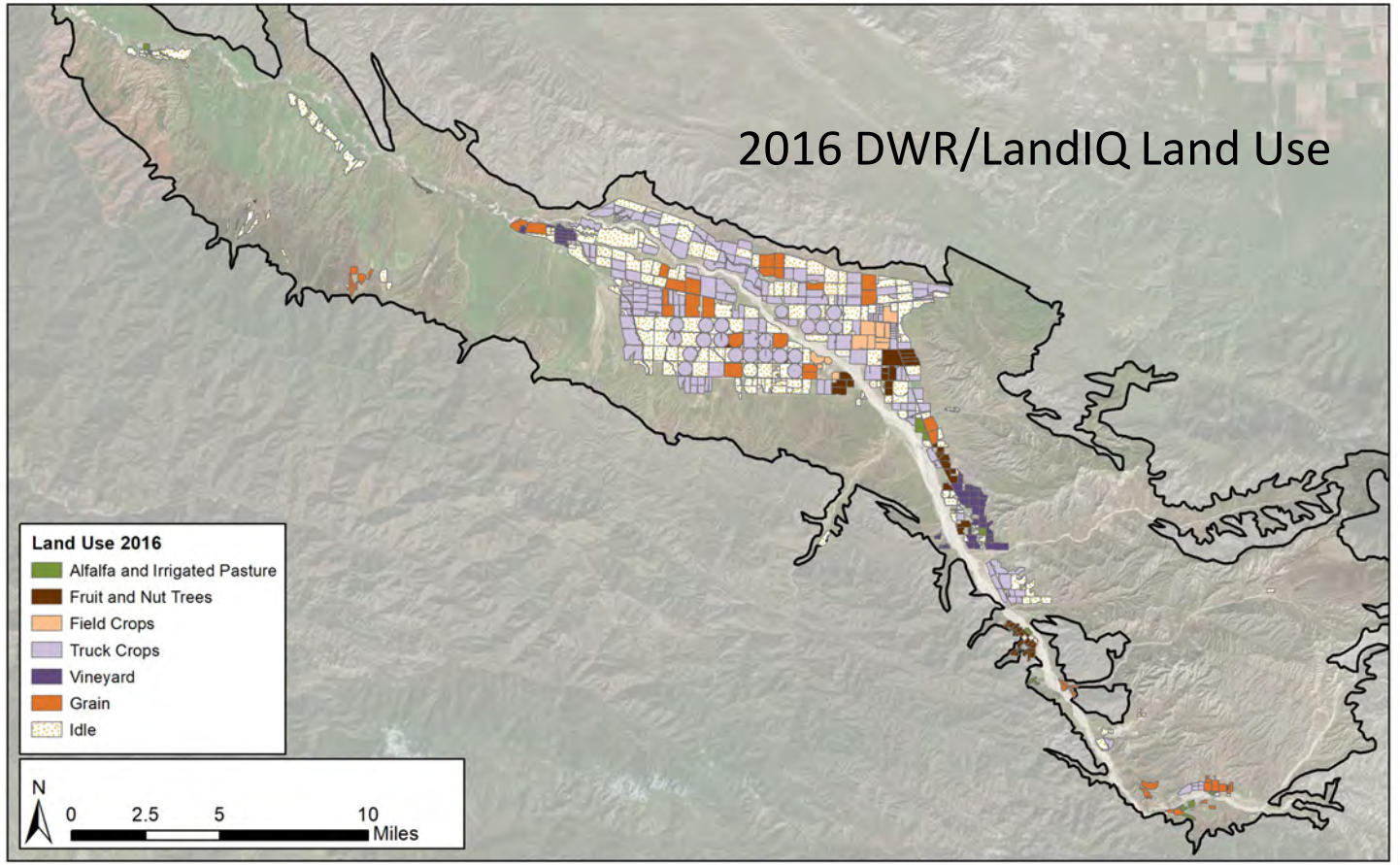
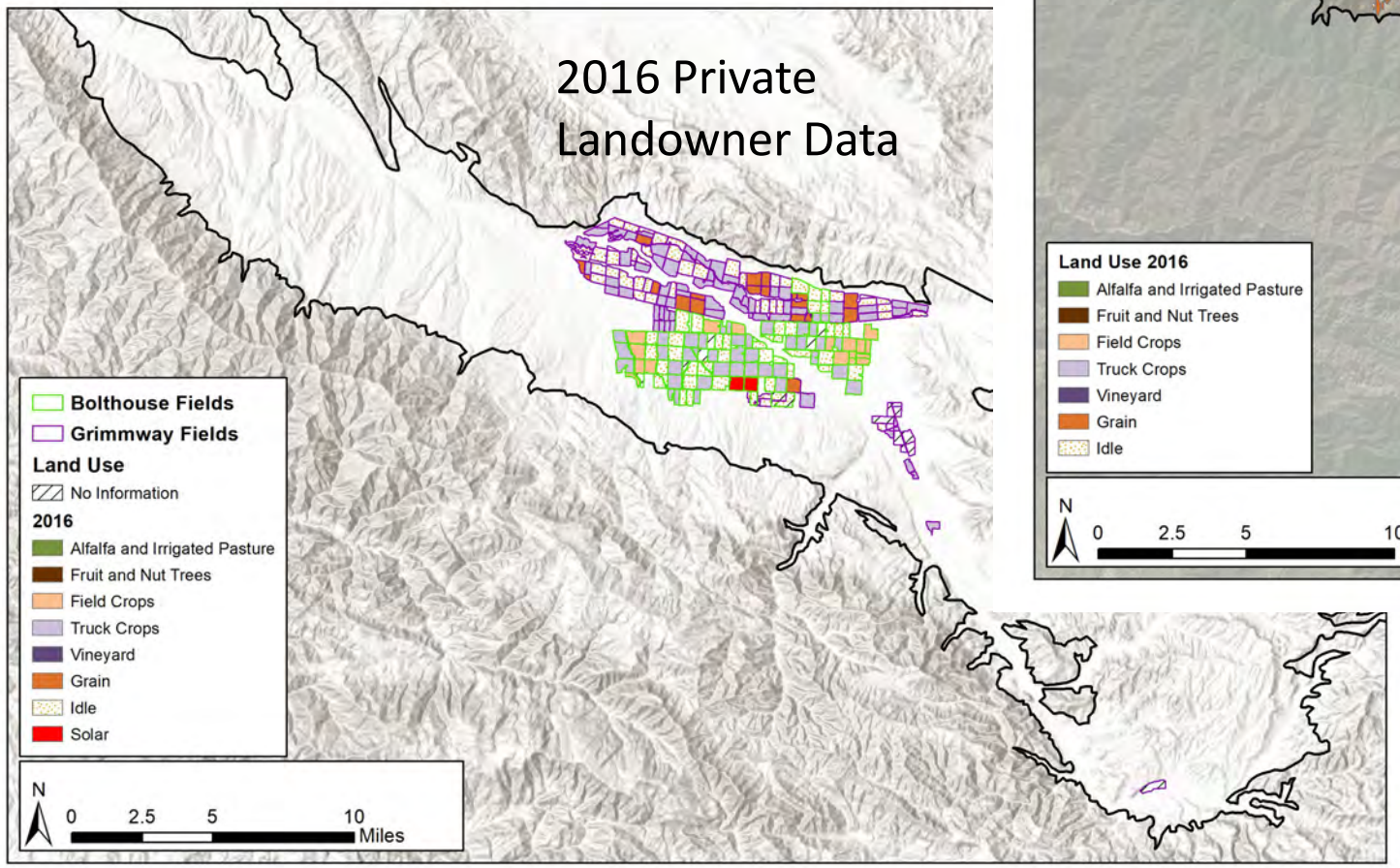
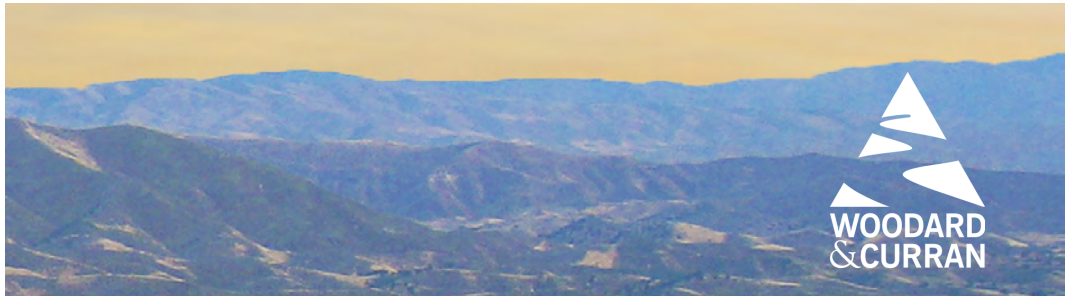
2016/17 Land Use Data



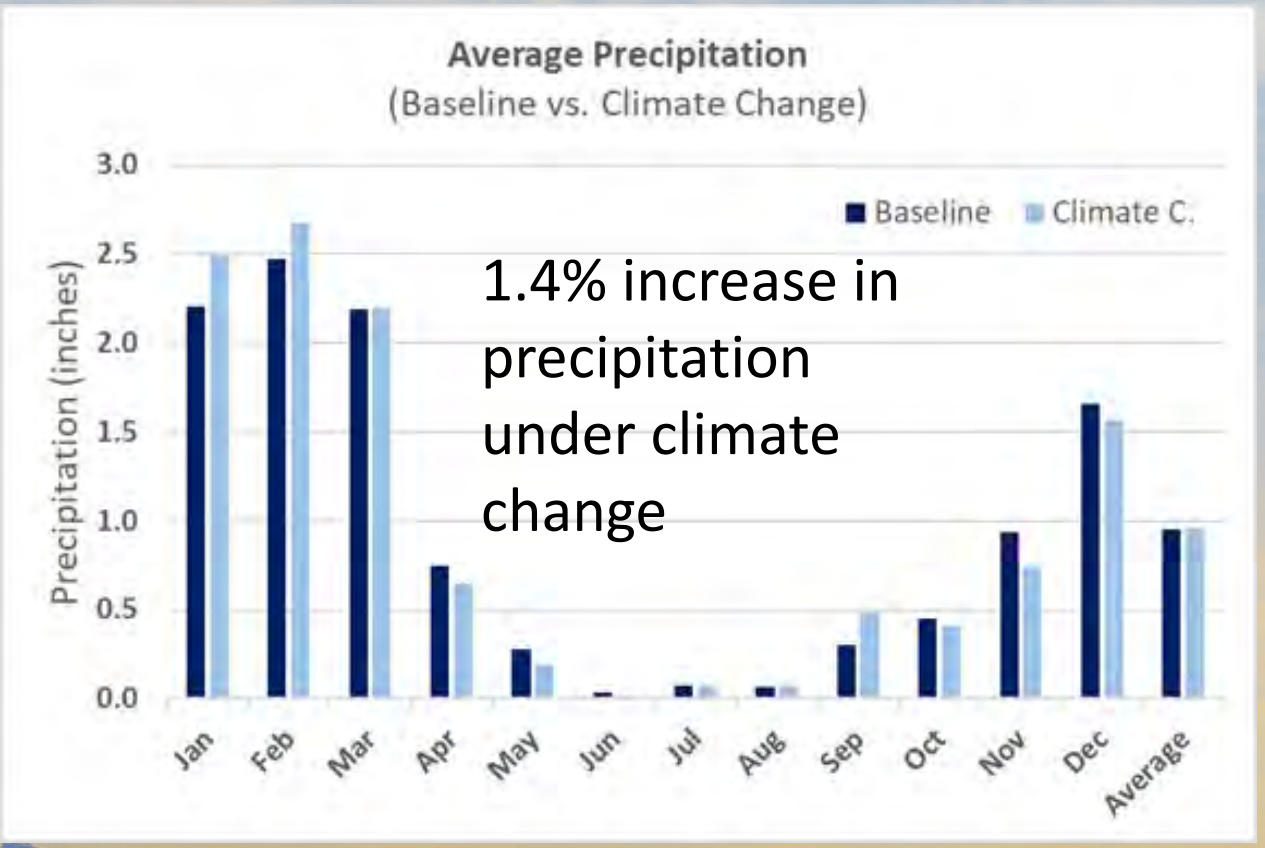


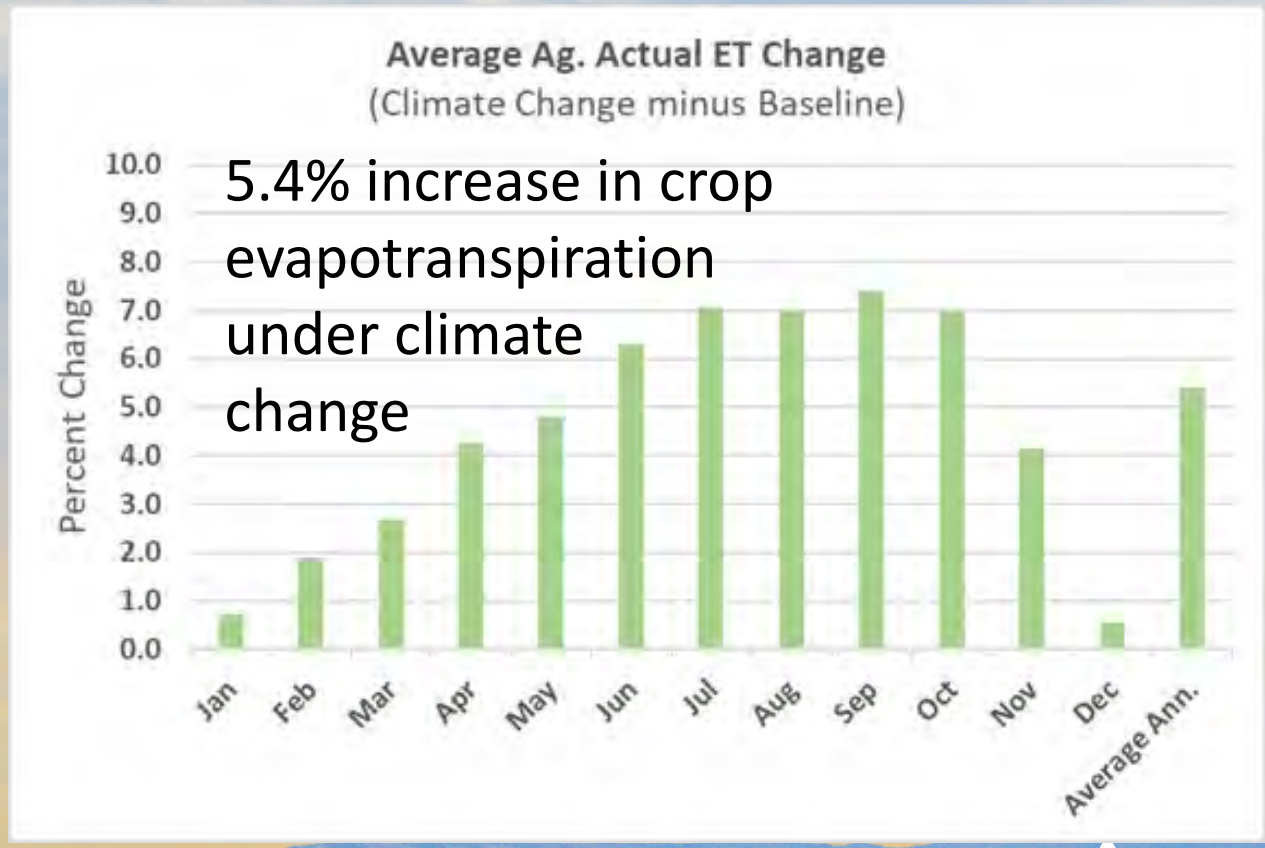


Future Baseline Conditions Under Climate Change

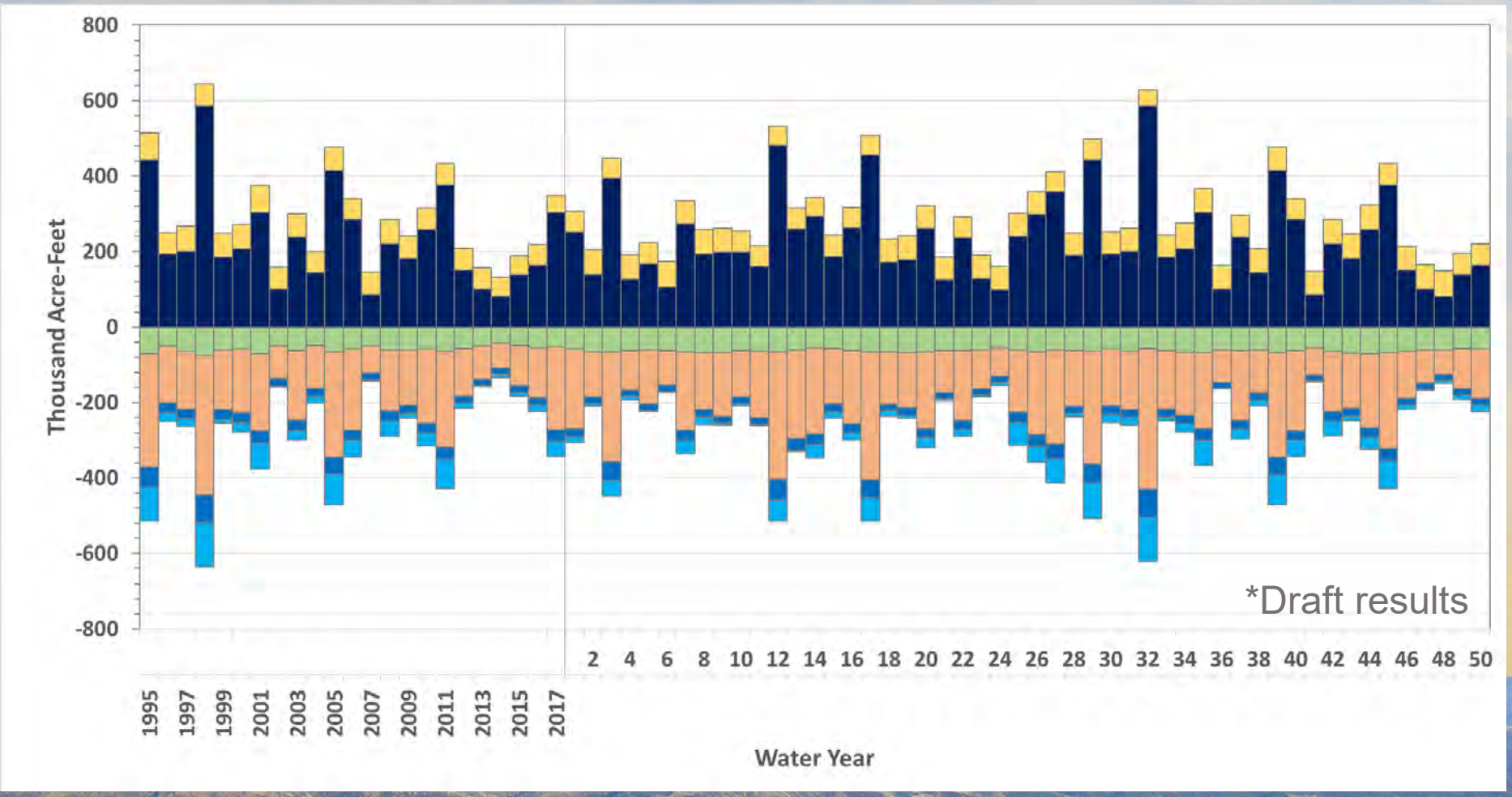
- Year 2040 land use and population
  - Assumed to be the same as Current Conditions
- Uses 1967- 2017 historical hydrology
- Datasets modified to reflect climate change:
  - Precipitation
  - Crop and native vegetation evapotranspiration
  - Modifications made using factors provided by CA DWR

Future Baseline Conditions Under Climate Change





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

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

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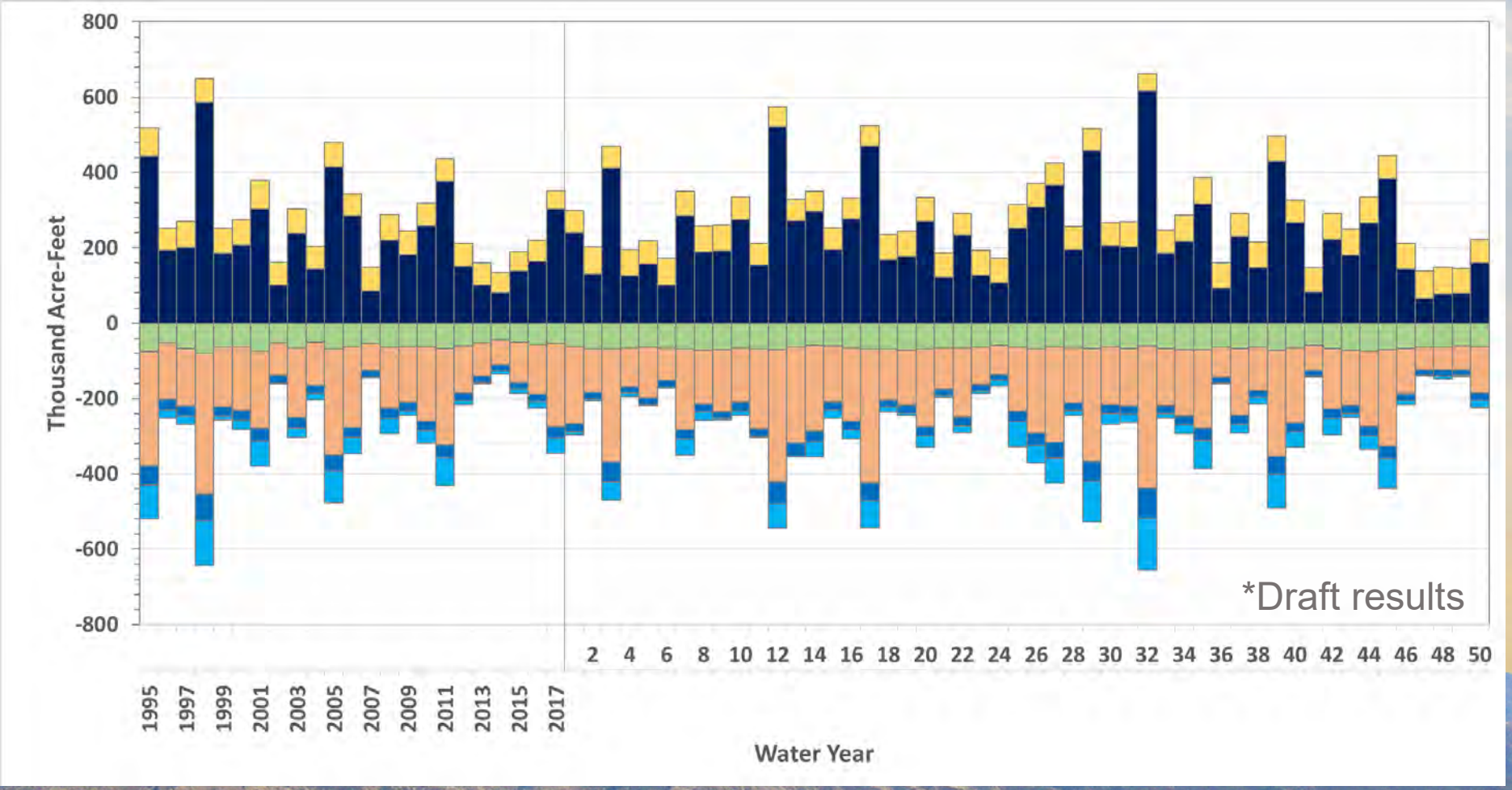

Average Annual (50 years)

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

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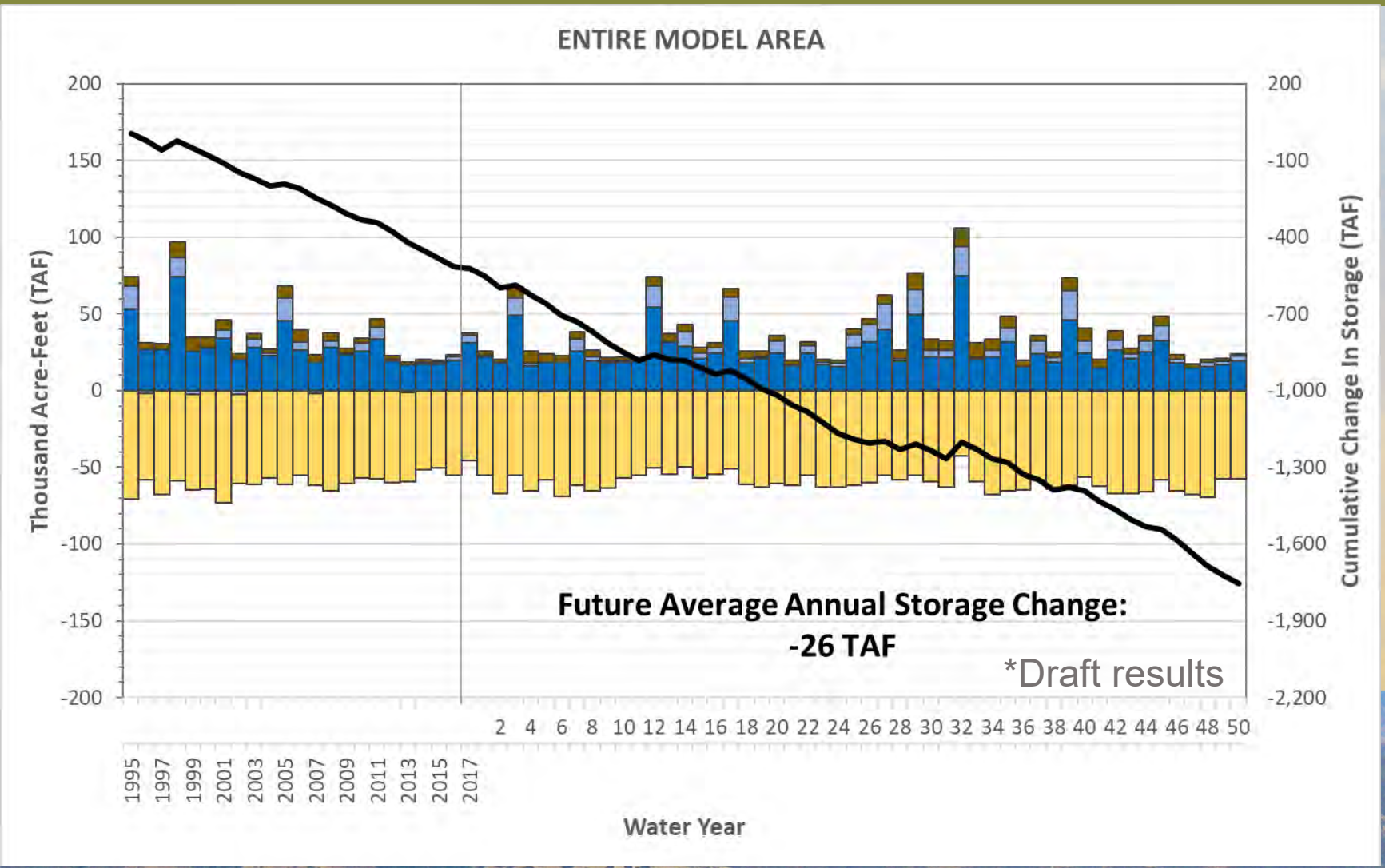
Future Conditions without Climate Change: Basin-Wide Groundwater Budget



Average Annual (50 years)

Inflows:

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

Outflows:

GW Pumping	60 TAF

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Future Conditions with Climate Change: Basin-Wide Groundwater Budget

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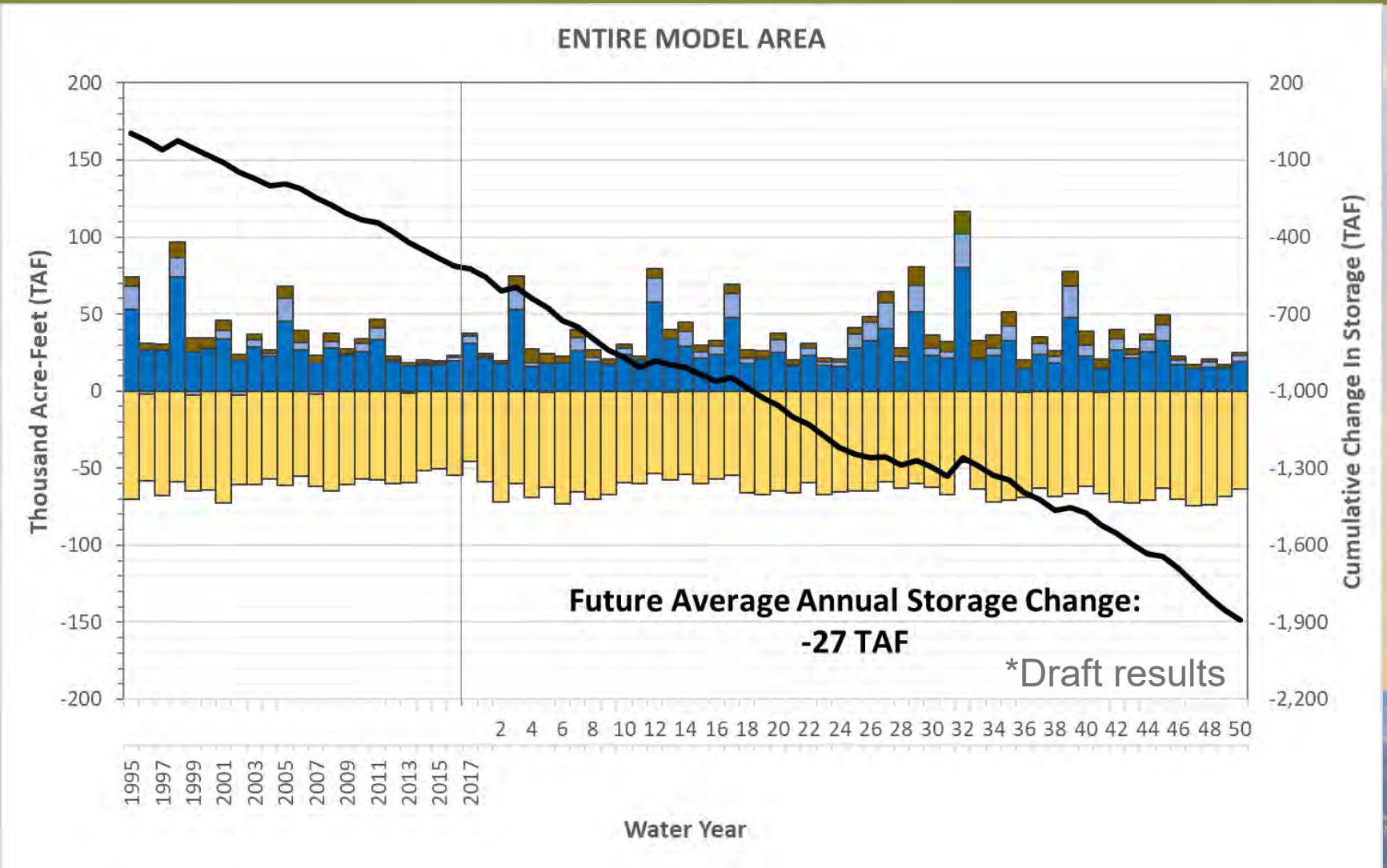

Average Annual (50 years)

Inflows:

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

Outflows:

GW Pumping	63 TAF

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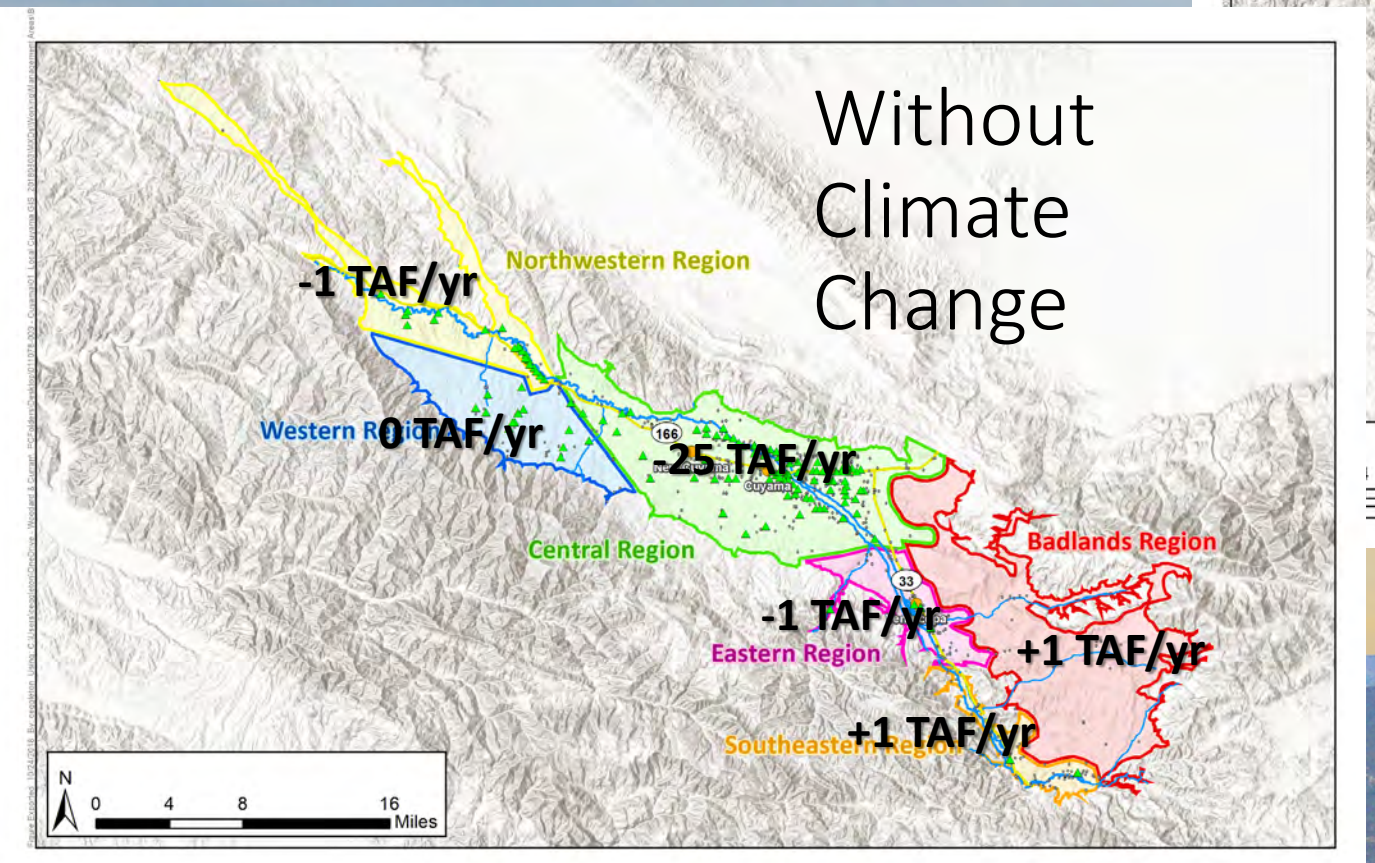
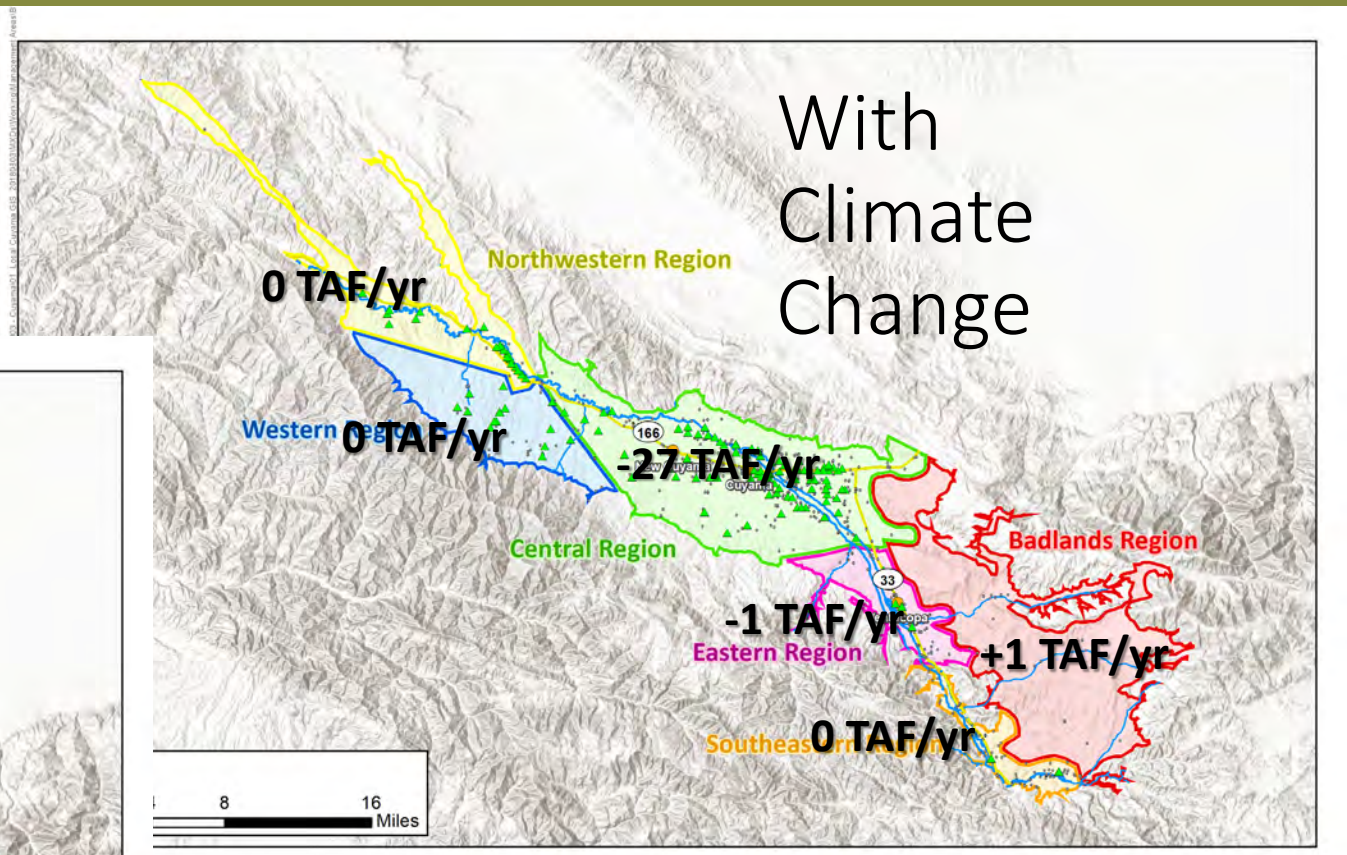
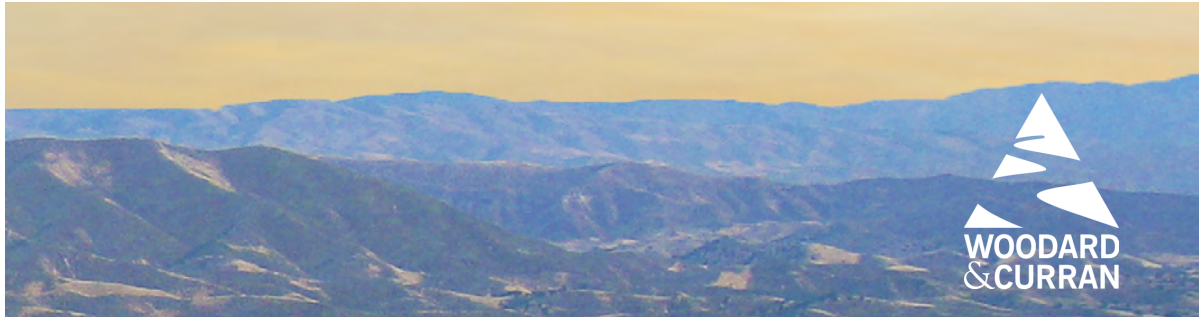
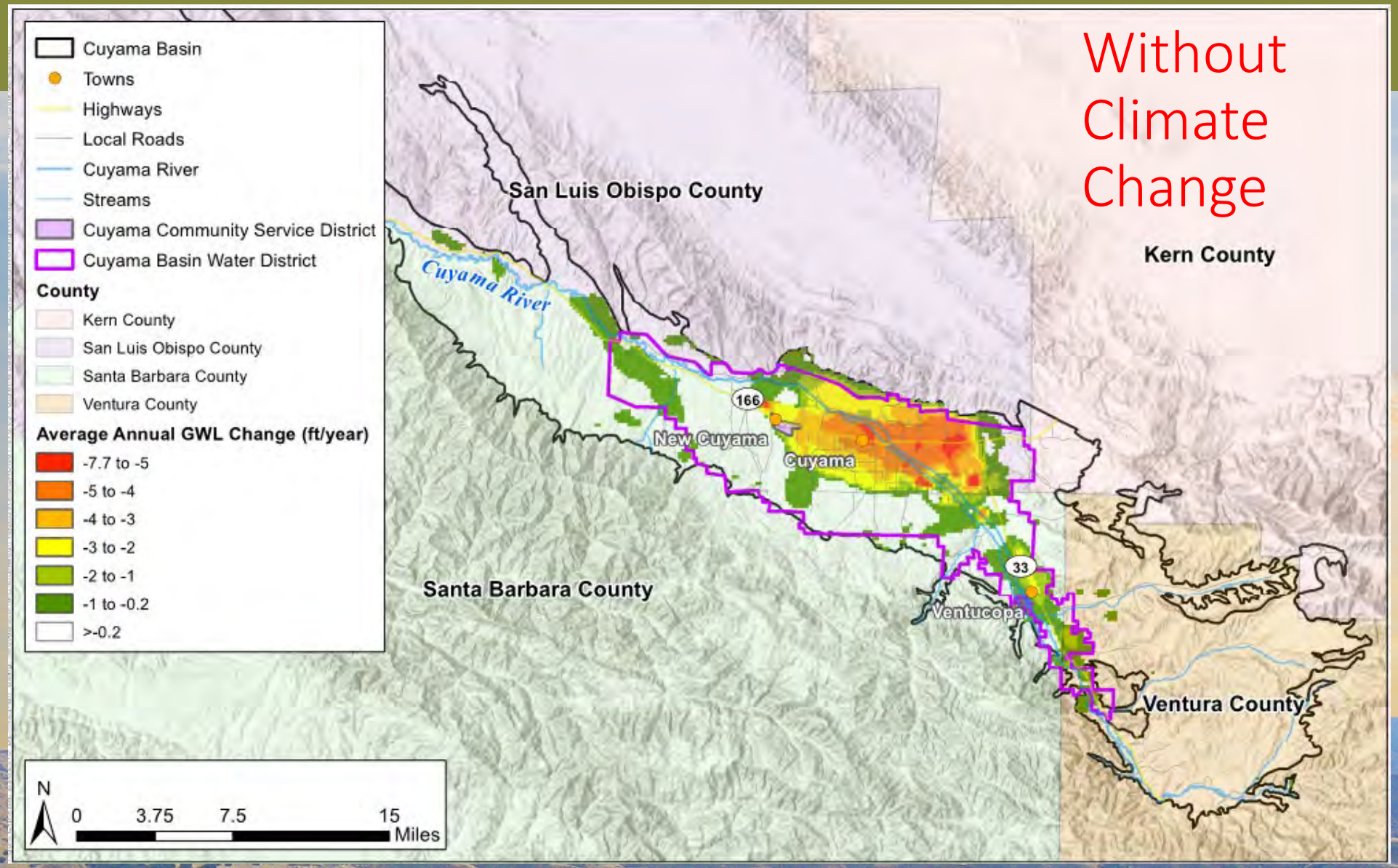
Average Annual Storage Change by Region







Average Annual Groundwater Level Change



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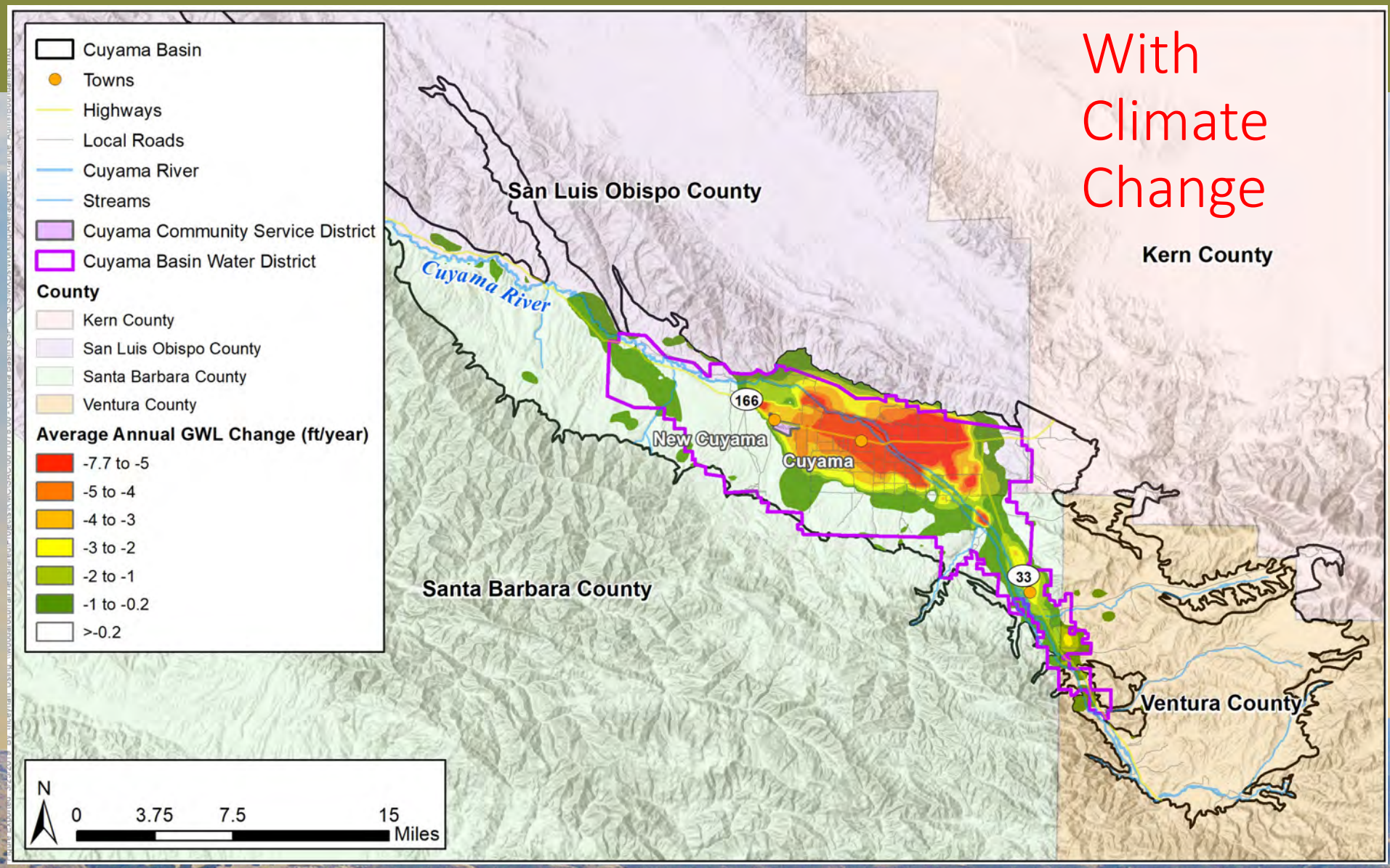
Average Annual Groundwater Level Change



WOODARD &CURRAN

Future Basin Sustainability Simulations

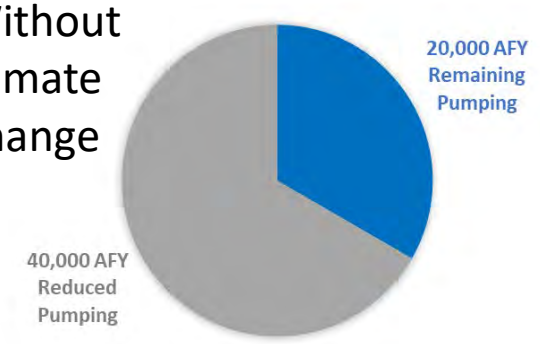
- Simulations Performed:
  - Pumping reductions only (without climate change)
  - Pumping reductions only (with climate change)
  - Pumping reductions with water supply projects (without climate change)
  - Pumping reductions with water supply projects (with climate change)
- Assumptions for reducing 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

WOODARD &CURRAN

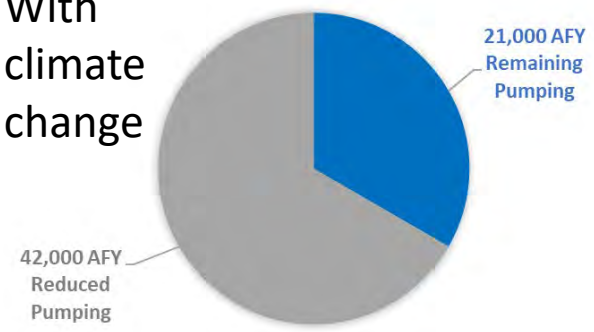
Future Conditions – Pumping Reductions Only Scenarios – Basin-Wide

Pumping reductions required to eliminate cumulative decline in storage

Without climate change

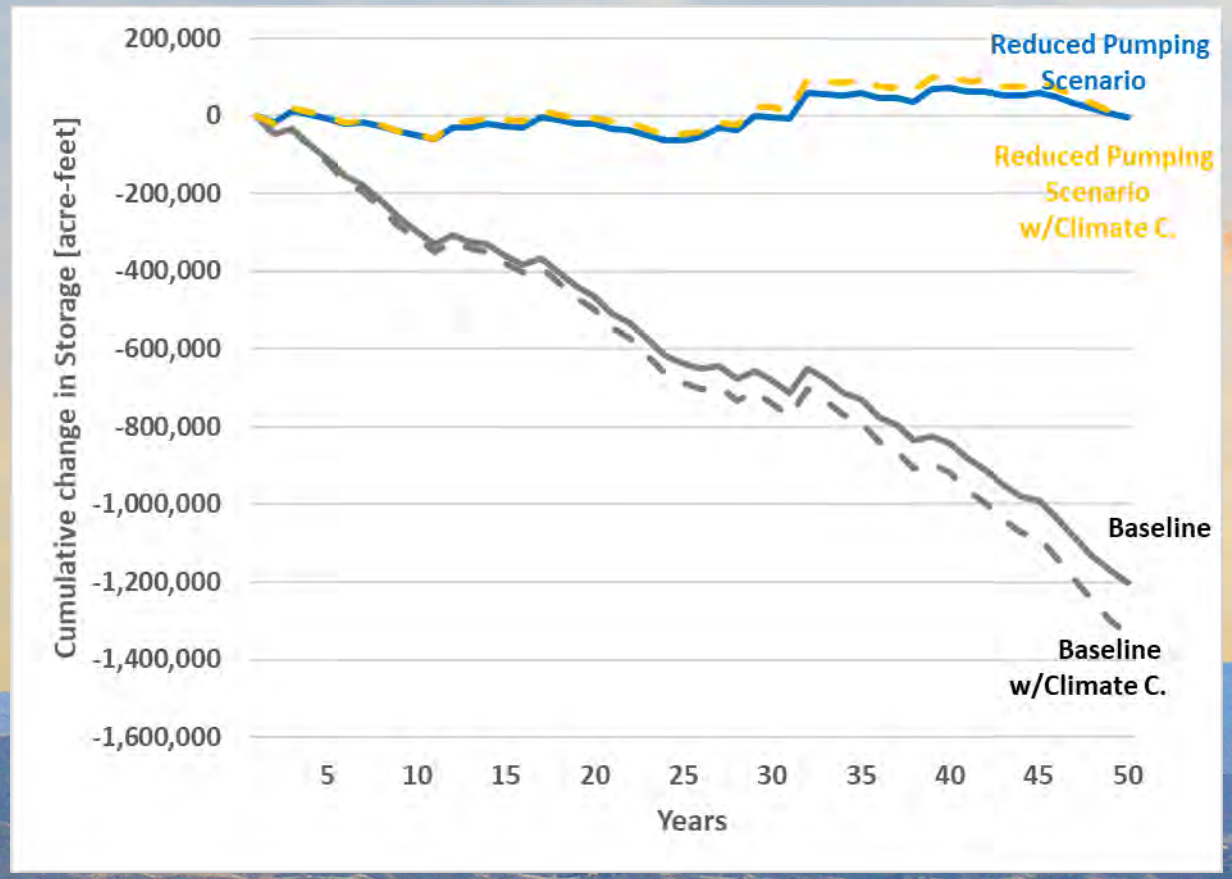


With climate change



	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**

Projected change in storage under Baseline and reduced pumping conditions

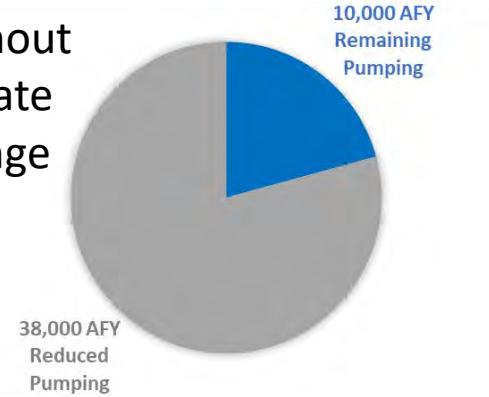


Future Conditions – Pumping Reductions Only Scenarios – Central Developed Region

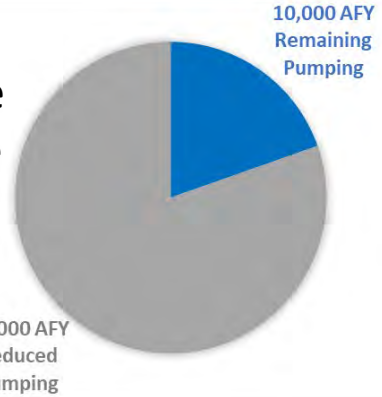
DRAFT

Pumping reductions required to eliminate cumulative decline in storage

Without climate change

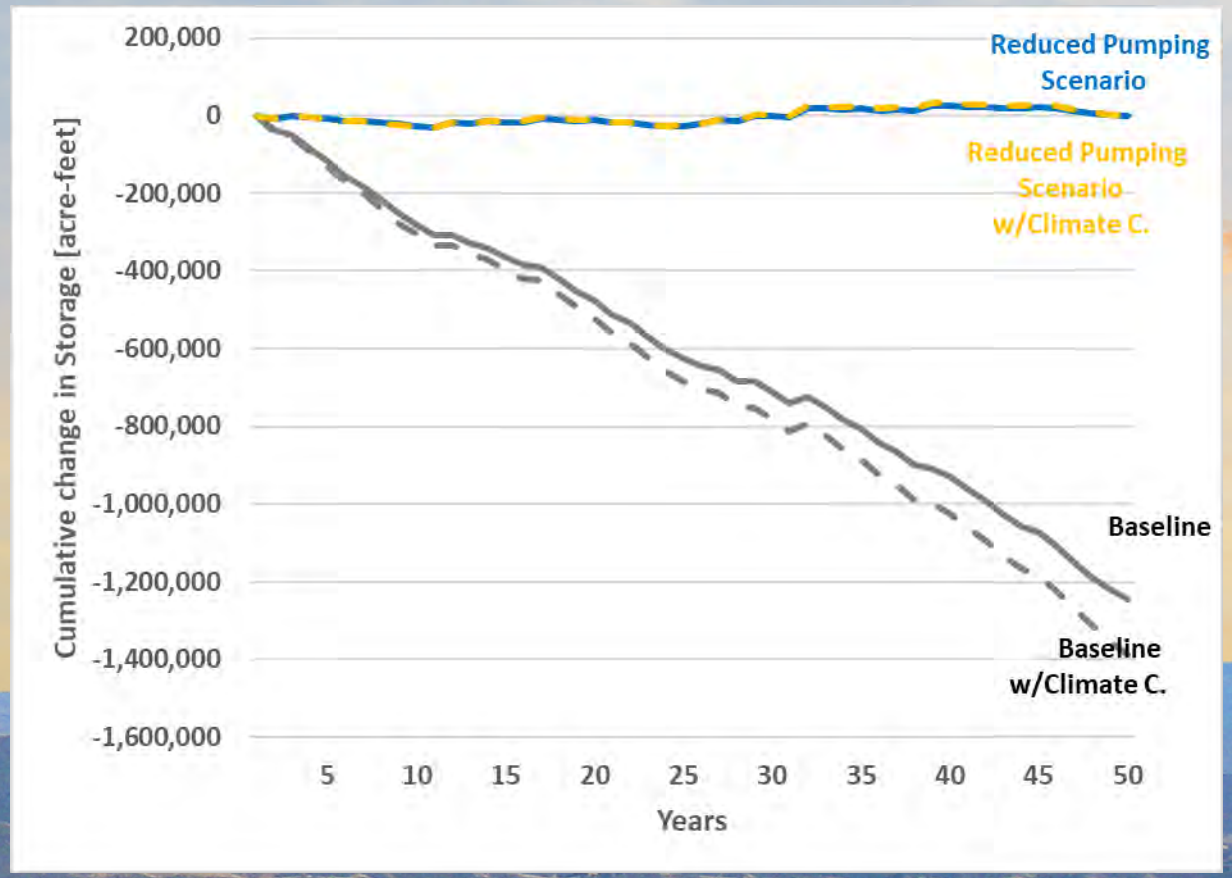


With climate change



	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**

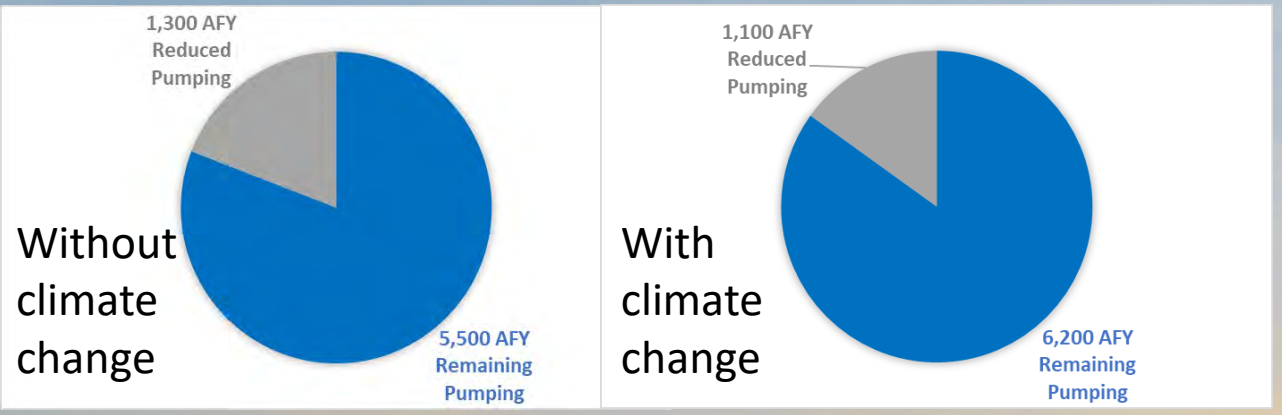
Projected change in storage under Baseline and reduced pumping conditions



Future Conditions – Pumping Reductions Only Scenarios – Ventucopa Region

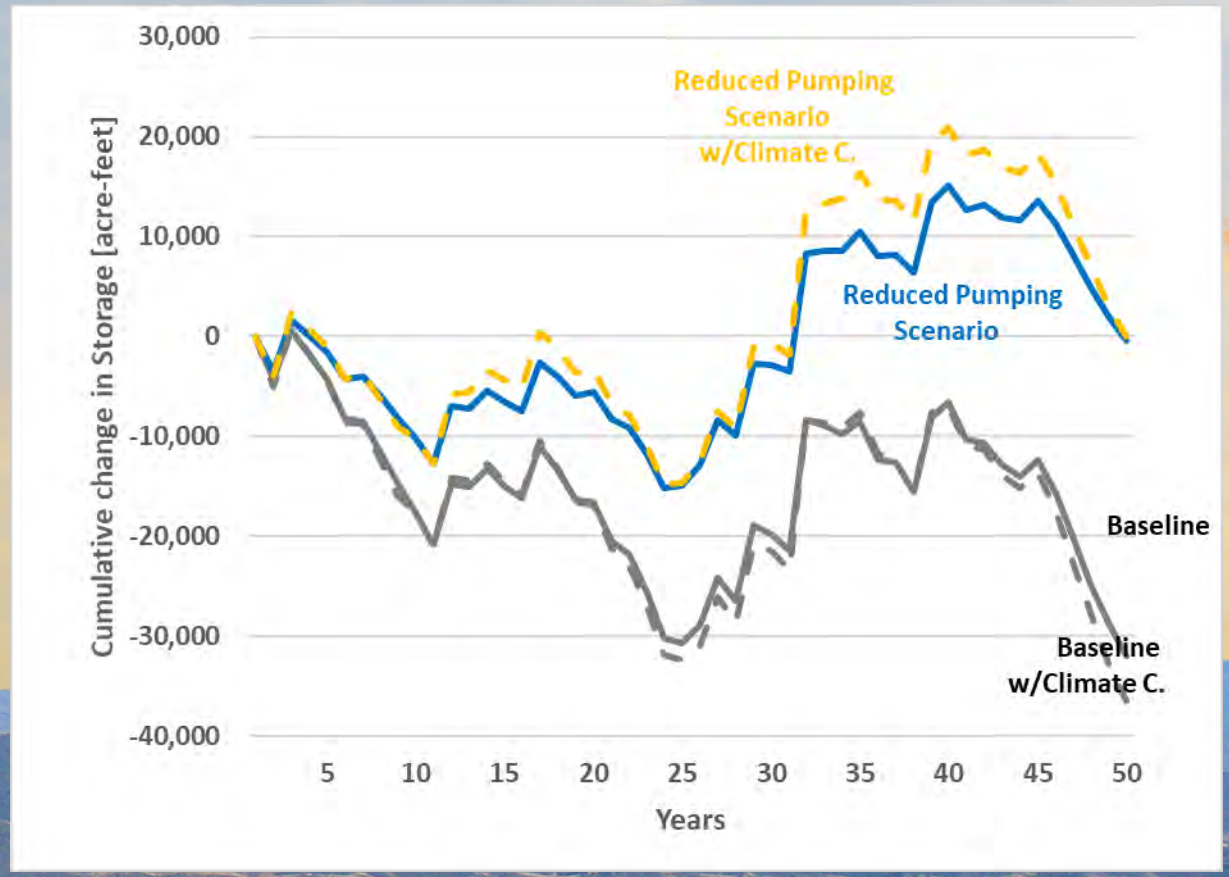
DRAFT

Pumping reductions required to eliminate cumulative decline in storage



	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**

Projected change in storage under Baseline and reduced pumping conditions

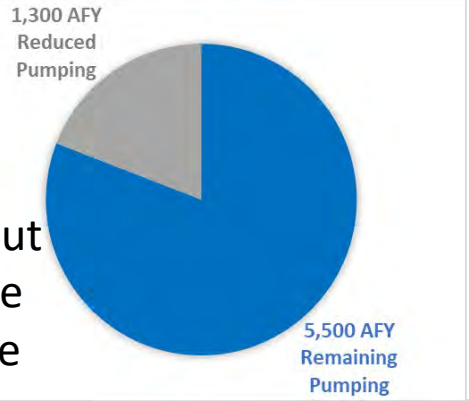


Future Conditions – Pumping Reductions Only Scenarios – Ventucopa Region

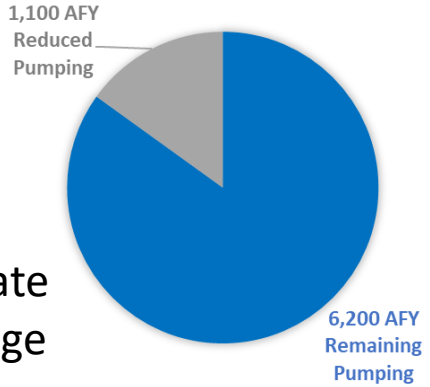
DRAFT

Pumping reductions required to eliminate cumulative decline in storage

Without climate change

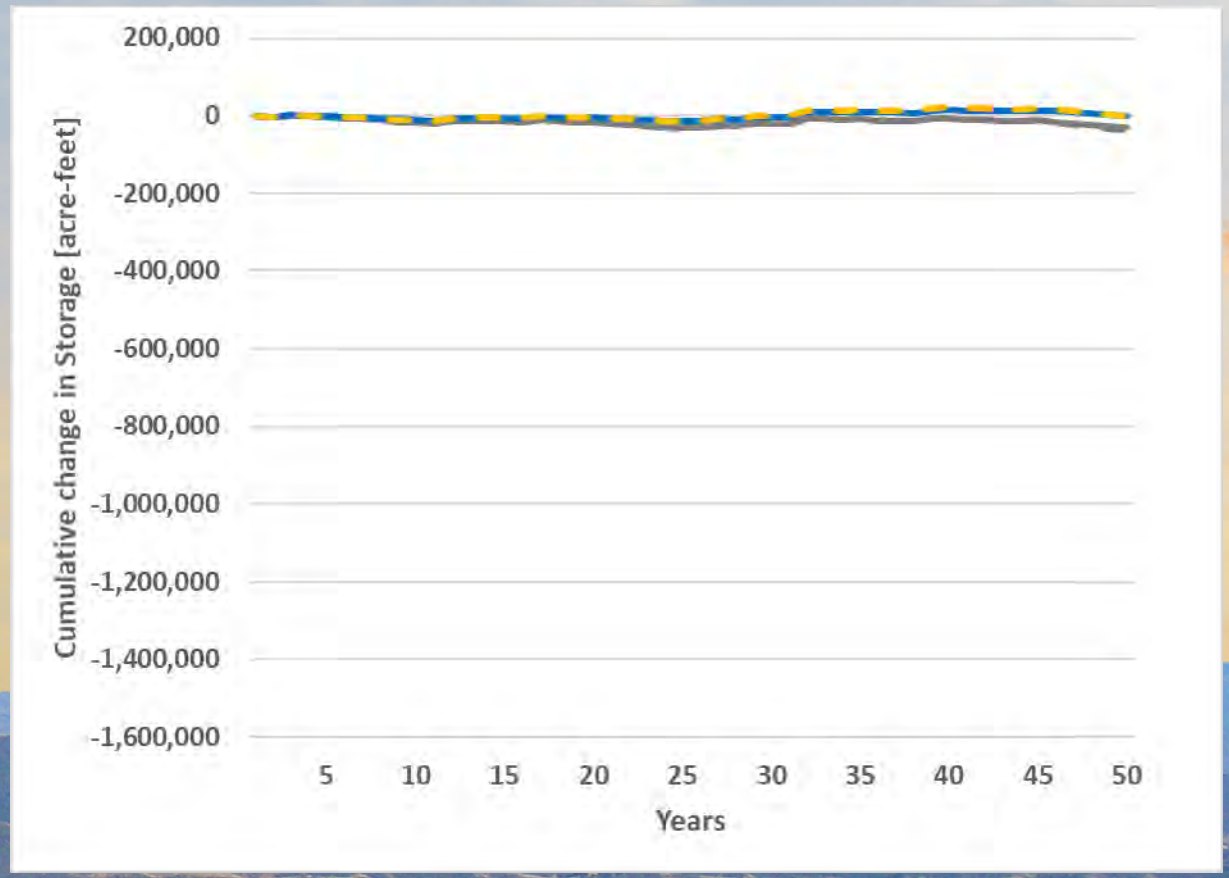


With climate change



	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**

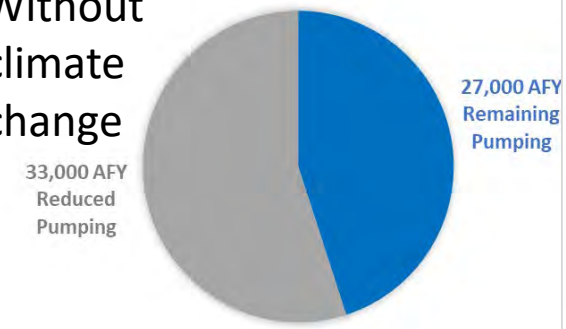
Projected change in storage under Baseline and reduced pumping conditions



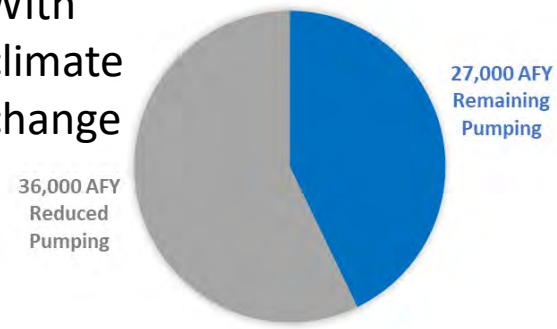
Future Conditions – Pumping Reductions with Water Supply Projects – Basin-Wide

Pumping reductions required to eliminate cumulative decline in storage

Without climate change

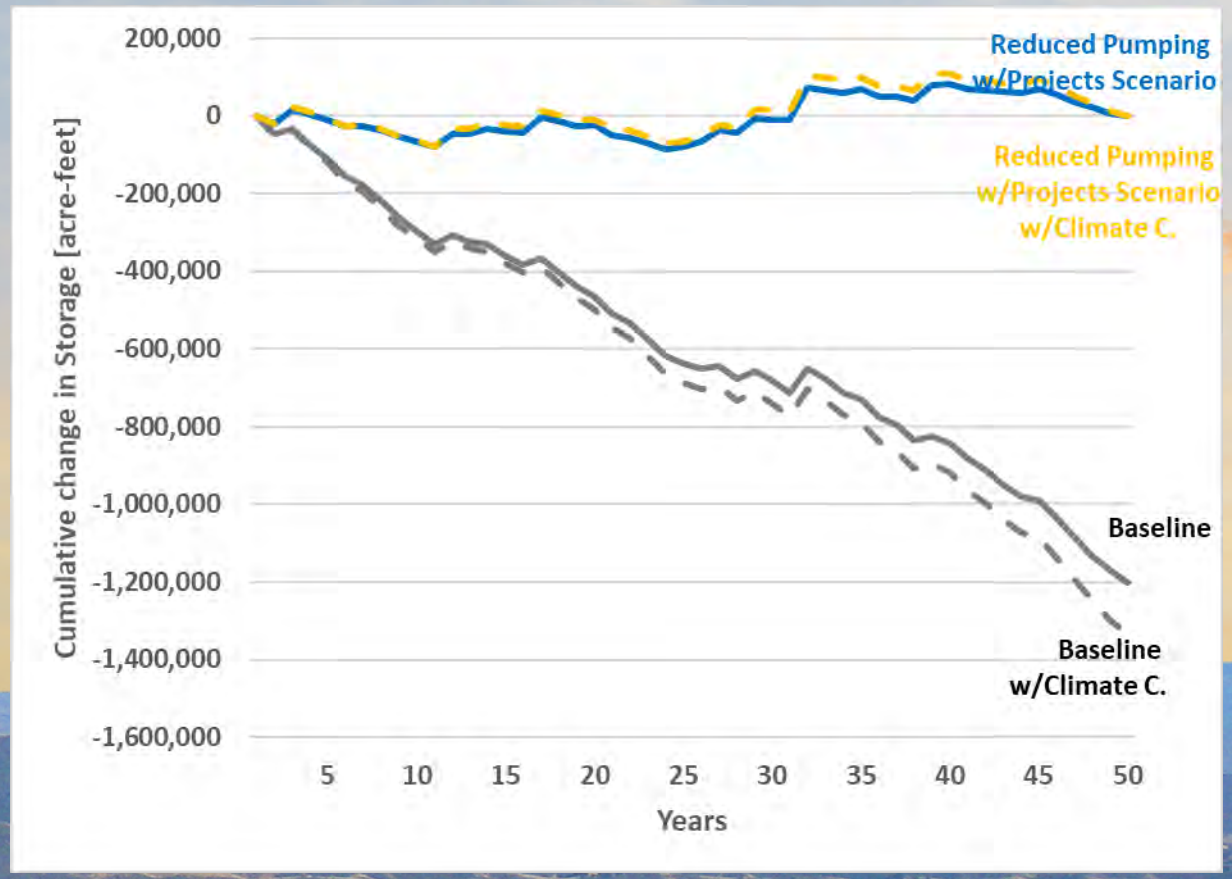


With climate change



	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**

Projected change in storage under Baseline and reduced pumping conditions



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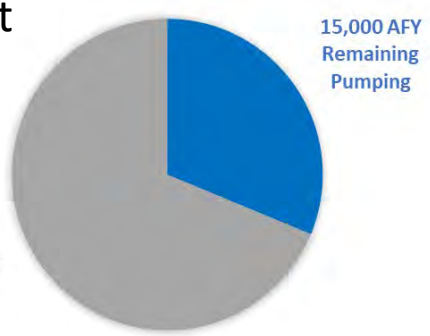
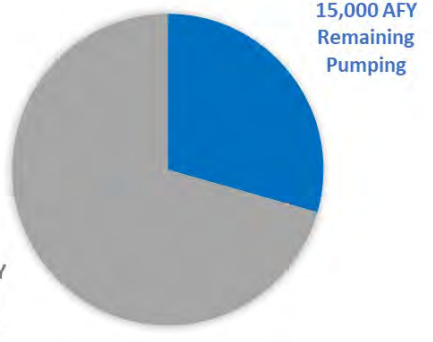
Future Conditions – Pumping Reductions with Water Supply Projects – Central Developed Region

Pumping reductions required to eliminate cumulative decline in storage

Without climate change

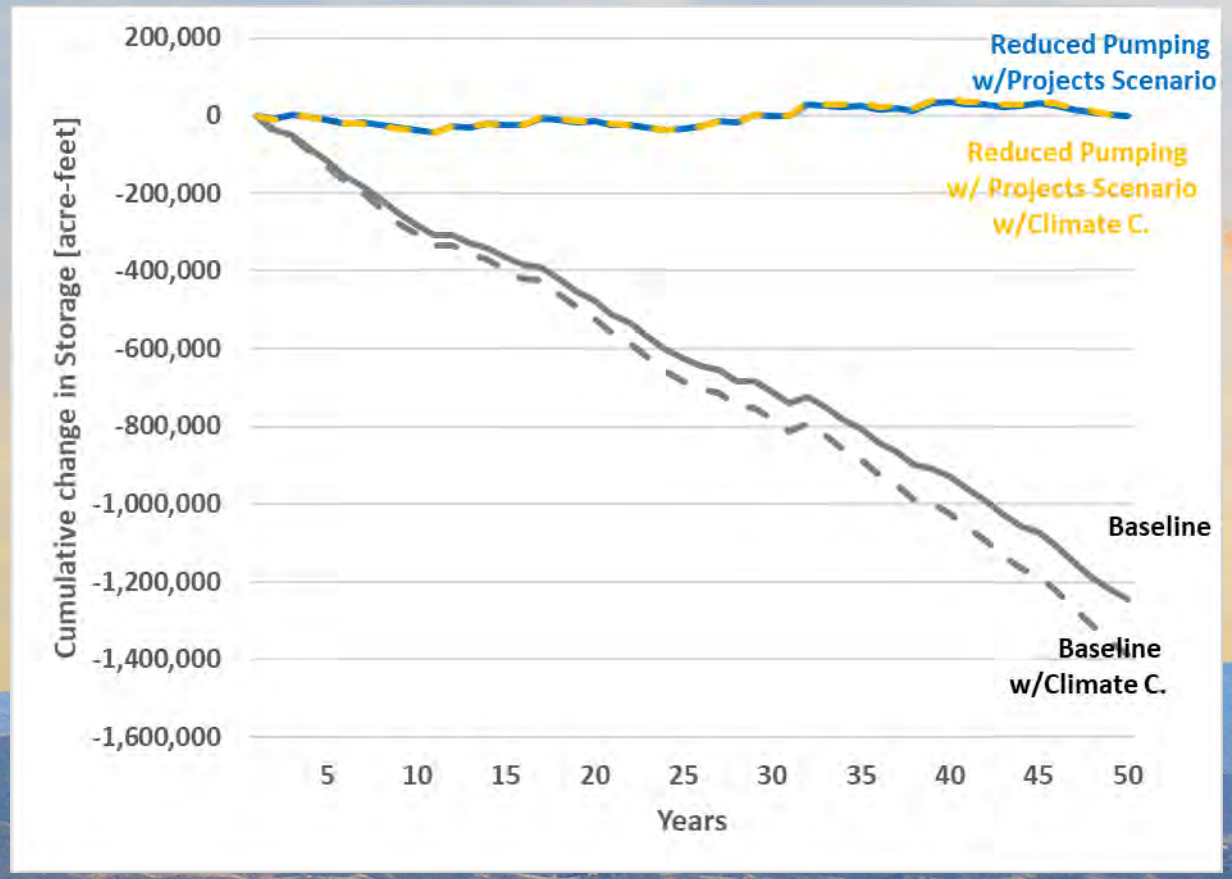


With climate change



	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**

Projected change in storage under Baseline and reduced pumping conditions



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

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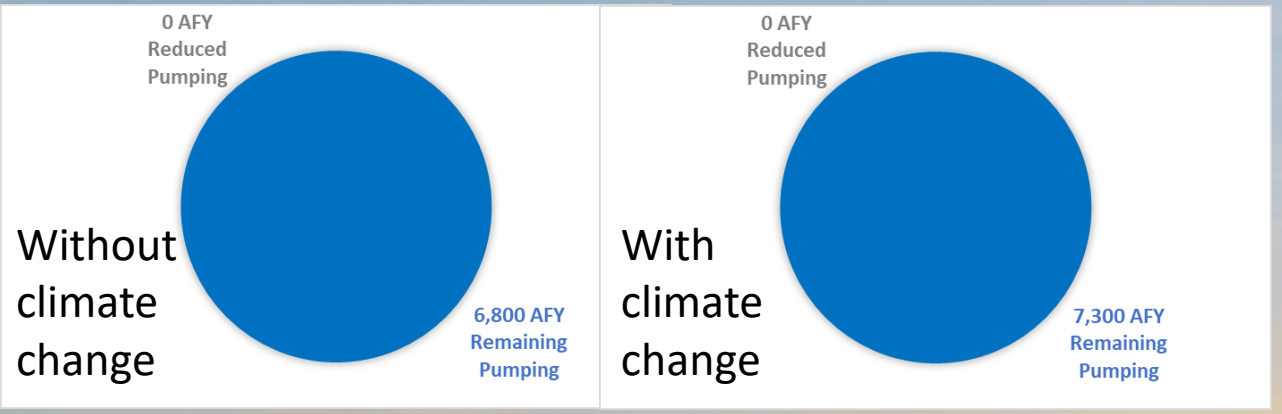
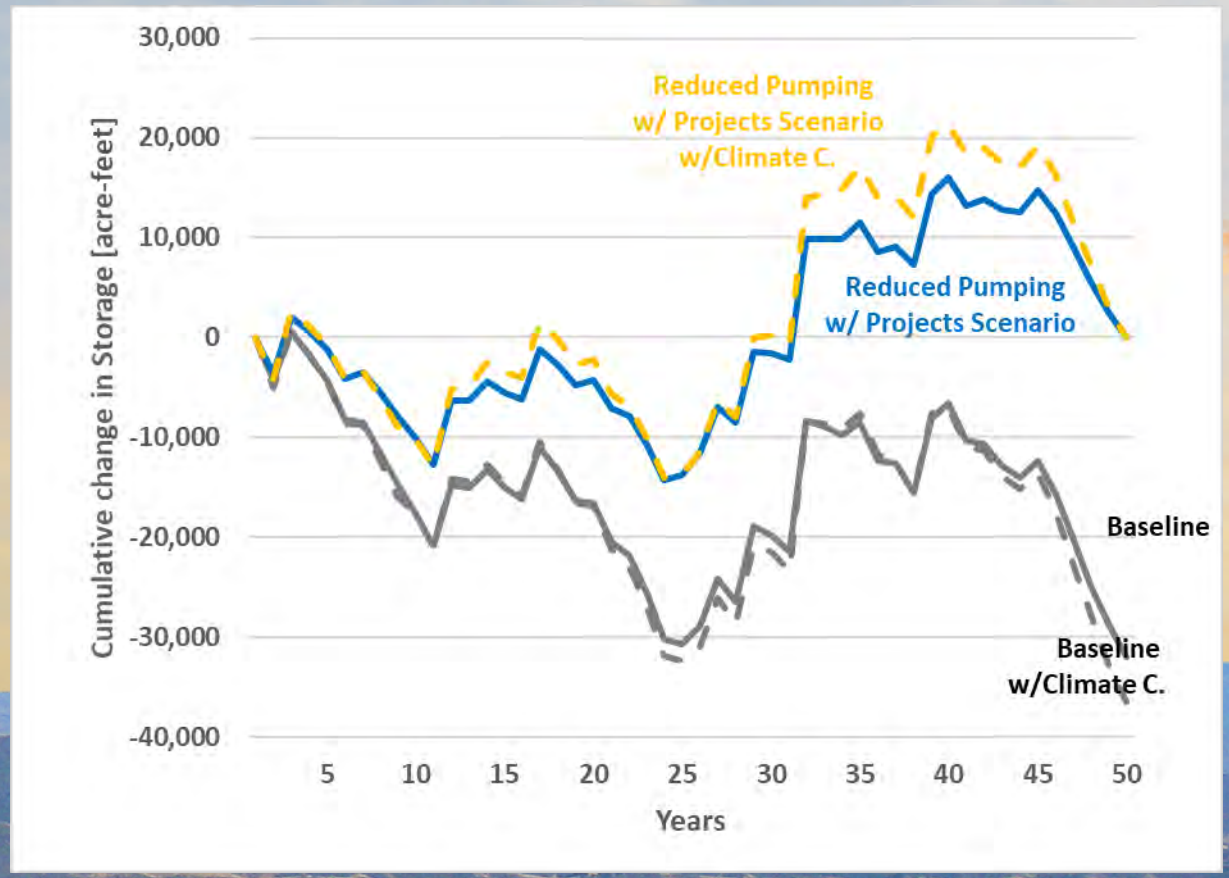
Pumping reductions required to eliminate cumulative decline in storage



	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**

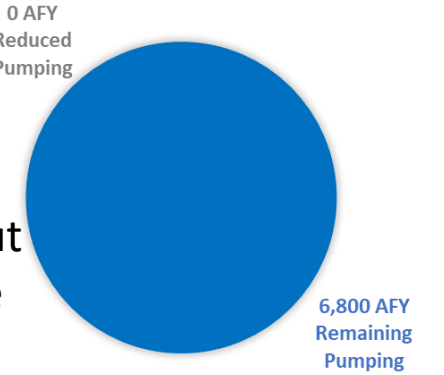
Projected change in storage under Baseline and reduced pumping conditions



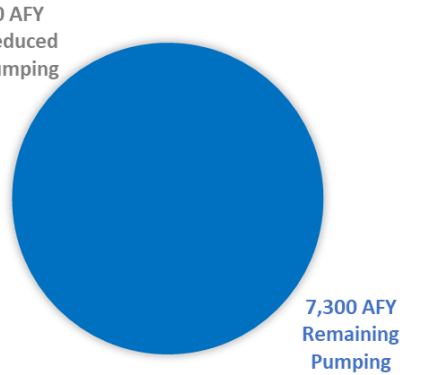
Future Conditions – Pumping Reductions with Water Supply Projects – Ventucopa Region

Pumping reductions required to eliminate cumulative decline in storage

Without climate change

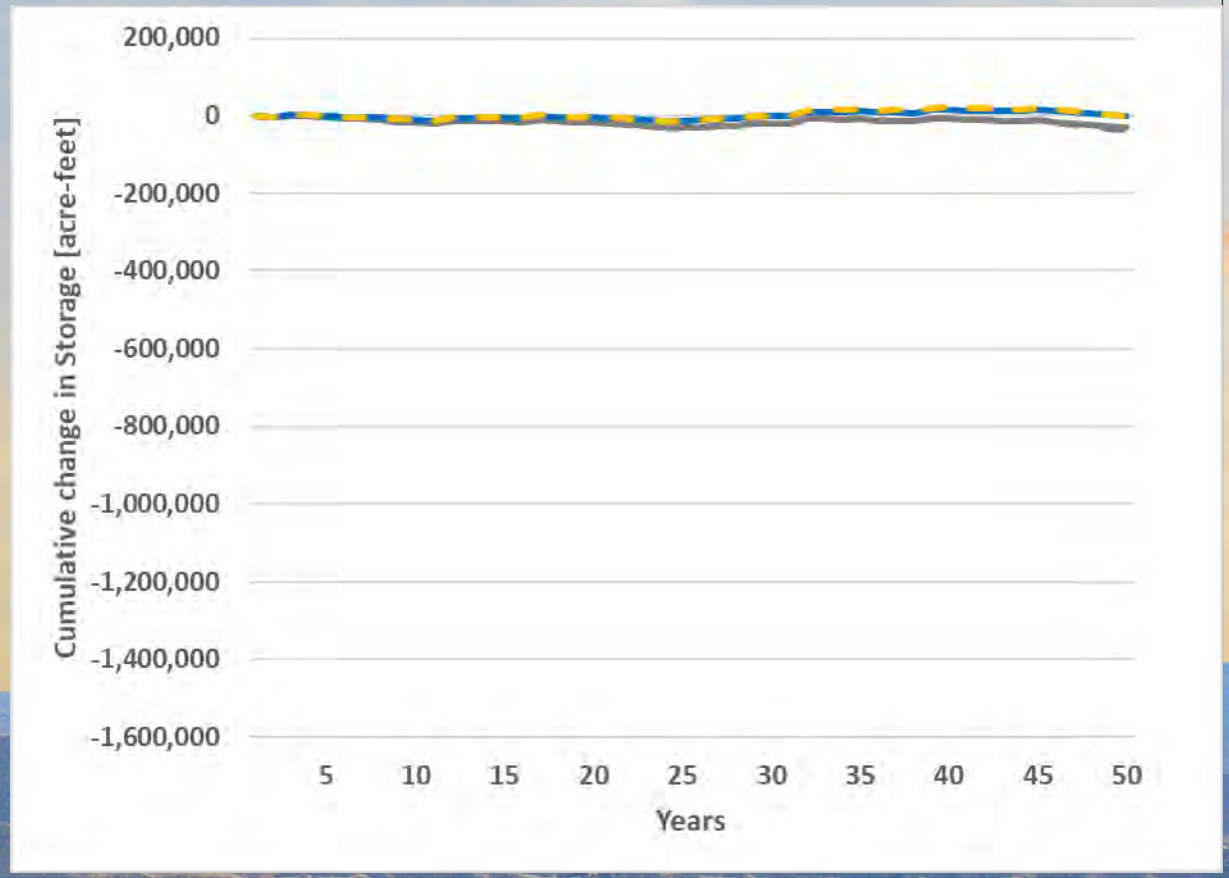


With climate change



	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**

Projected change in storage under Baseline and reduced pumping conditions



Future Basin Sustainability Simulations: Basin-Wide Summary of Results

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	WITHOUT WATER SUPPLY PROJECTS				WITH WATER SUPPLY PROJECTS			
	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE	BASELINE	SCENARIO	BASELINE W/ CLIMATE CHANGE	SCENARIO W/ CLIMATE CHANGE
INFLOWS								
Deep Percolation (+)	26,000	12,000	26,000	11,000	26,000	18,000	26,000	18,000
Gain from Stream (+)	4,000	4,000	5,000	5,000	4,000	4,000	5,000	4,000
Subsurface Inflow(+)	4,000	4,000	5,000	5,000	4,000	5,000	5,000	5,000
OUTFLOWS								
Pumping (-)	60,000	20,000	63,000	21,000	60,000	27,000	63,000	27,000
% Reduction on Pumping		**-67%**		**-67%**		**-55%**		**-57%**
STORAGE CHANGE	**-26,000**	**0**	**-27,000**	**0**	**-26,000**	**0**	**-27,000**	**0**

WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 7f

FROM: Lyndel Melton, Woodard & Curran (W&C)

DATE: April 3, 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

April 3, 2019

WOODARD &CURRAN

Conceptual GSP Implementation Timeline

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

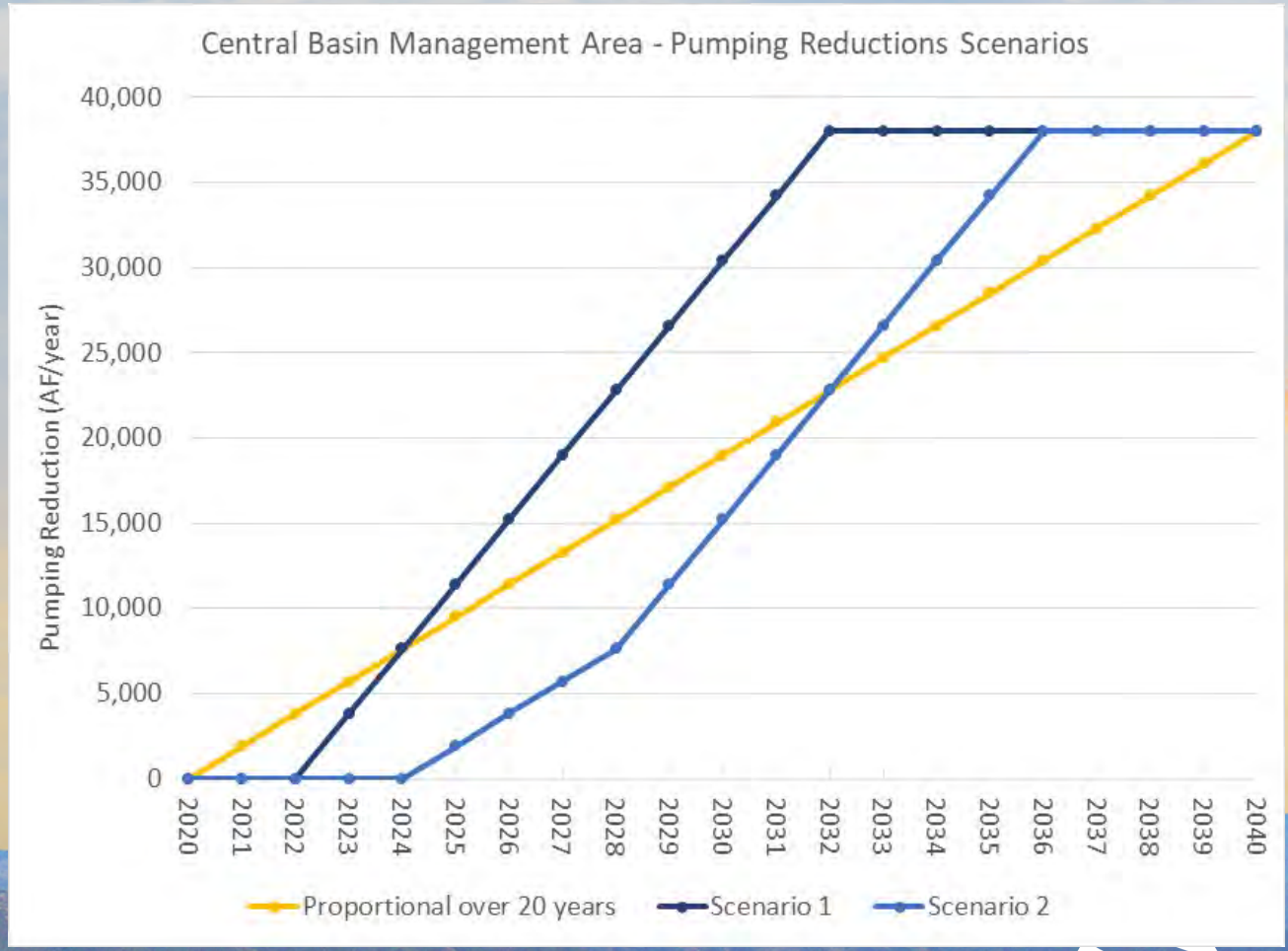
2020	2025	2030	2035	2040
Set up and Initiate Monitoring and Pumping Allocation Programs	**Project Implementation and GSP Evaluation/Update**	**Project Implementation and GSP Evaluation/Update**	**Achieve Groundwater Basin Sustainability**	
• Establish monitoring network and initiate monitoring and reporting • Evaluate/refine thresholds and monitoring network • Install new monitoring wells and equipment • Management Area development and administration. • Develop pumping monitoring program* • Set up and initiate pumping allocation program* • Project analysis and feasibility • Public outreach	• **GSA conducts 5-year evaluation/update** • Monitoring and reporting continues • Evaluate/refine thresholds and monitoring network • Refine water budget • Management Area administration • Pumping monitoring program continues* • Continue implementation of pumping allocation program* • Plan/design/construct small to medium sized projects* • Outreach continues	• **GSA conducts 5-year evaluation/update** • Monitoring and reporting continues • Evaluate/refine thresholds and monitoring network • Refine water budget • Management Area administration • Pumping monitoring program continues* • Continue implementation of pumping allocation program* • Plan/design/construct larger projects* • Outreach continues	• **GSA conducts 5-year evaluation/update** • Monitoring and reporting continues • Evaluate/refine thresholds and monitoring network • Refine water budget • Management Area administration • Pumping monitoring program continues* • Pumping allocation program fully implemented* • Project implementation completed* • Outreach continues	

***Potential management area specific implementation**

WOODARD &CURRAN

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



WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 7fi

FROM: Lyndel Melton, Woodard & Curran (W&C)

DATE: April 3, 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

April 3, 2019

WOODARD &CURRAN

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

WOODARD &CURRAN

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
  - Hybrid of the two approaches
  - De minimis users may be exempted
- Grants & loans can be pursued for some activities to offset some portion of above costs

WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 7g

FROM: Charles Gardiner, Catalyst Group

DATE: April 3, 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.

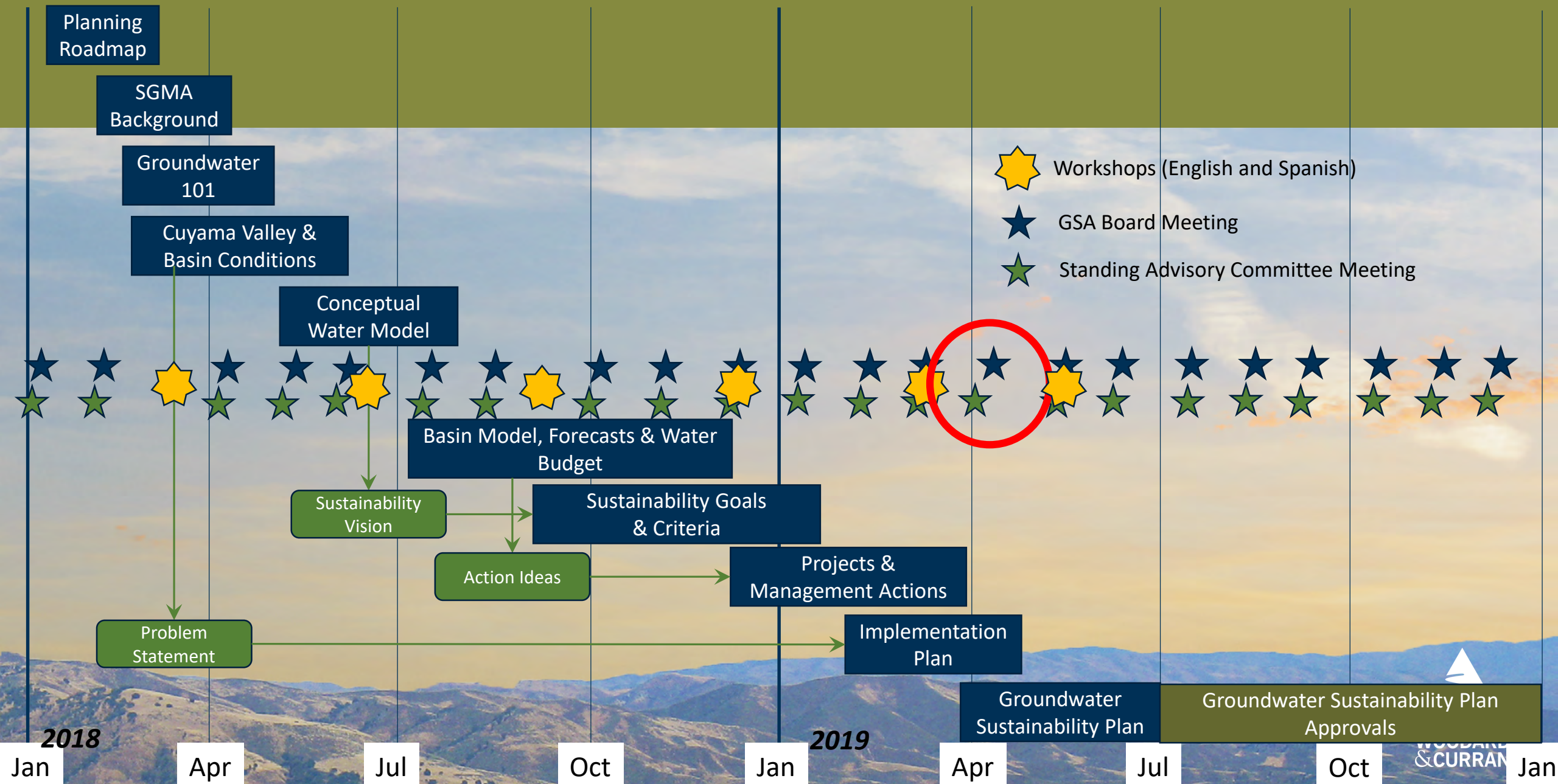
Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Stakeholder Engagement Update

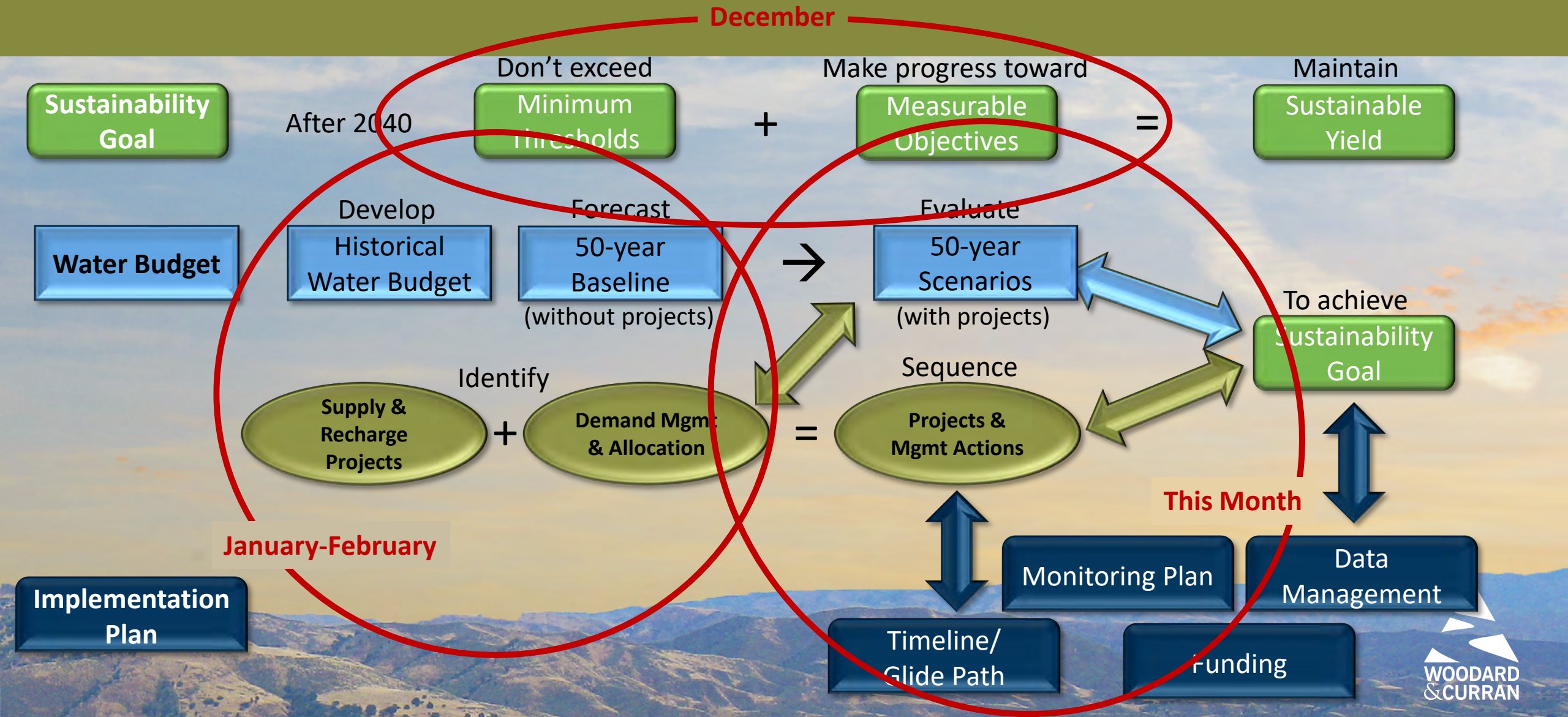
April 3, 2019

WOODARD &CURRAN

Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap



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

WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 7gi

FROM: Charles Gardiner, Catalyst Group

DATE: April 3, 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 it's 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: Board of Directors
Agenda Item No. 8c

FROM: Jim Beck, Executive Director

DATE: April 3, 2019

SUBJECT: Progress & Next Steps

Issue
Report on the progress and next steps for Cuyama Basin Groundwater Sustainability Agency activities.

Recommended Motion
None – information only.

Discussion
A presentation on the progress and next steps for Cuyama Basin Groundwater Sustainability Agency activities is provided as Attachment 1.

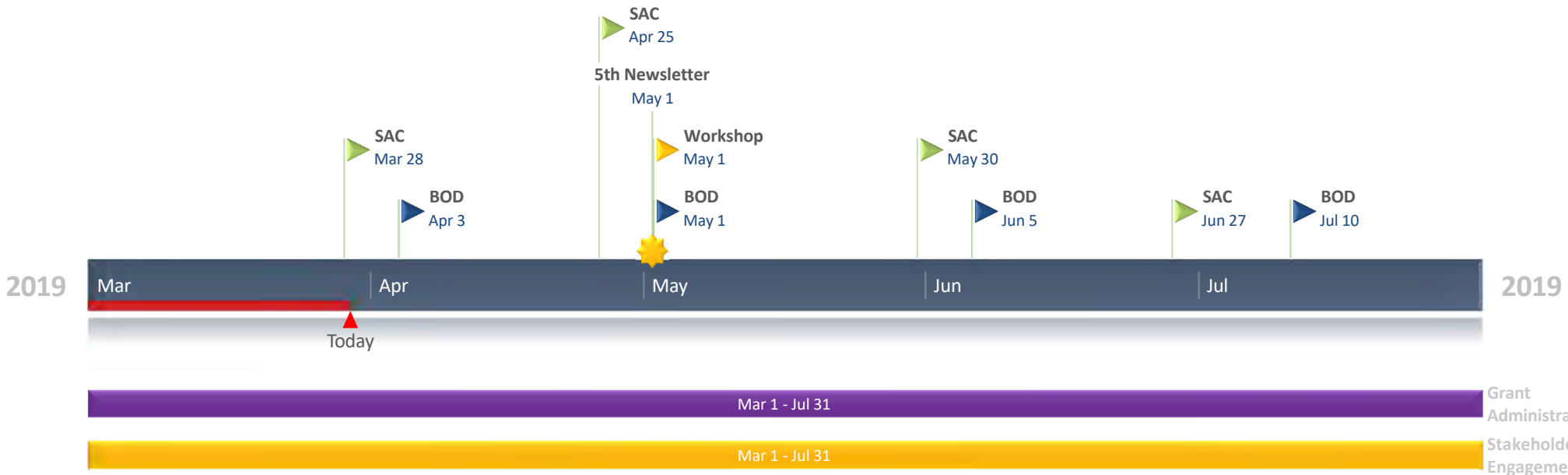
Cuyama Basin Groundwater Sustainability Agency

Progress & Next Steps

April 3, 2019

Cuyama Basin Groundwater Sustainability Agency

Near-Term Schedule



Feb 2019 Accomplishments & Next Steps

Accomplishments

- ✓ Assisted in developing Board and SAC strategy for remaining GSP components
- ✓ Processed California Association of Mutual Water Companies and Walter Mortensen insurance applications
- ✓ Attended Grant Administration Agreement Kick-Off meeting

Next Steps

- Determine audit frequency
- Draft FY 2019-20 budget and update cash flow
- Meet with Budget ad hoc

TO: Board of Directors
Agenda Item No. 9a

FROM: Taylor Blakslee, Hallmark Group

DATE: April 3, 2019

SUBJECT: Financial Management Overview

Issue
Overview of the financial management for Cuyama Basin Groundwater Sustainability Agency activities.

Recommended Motion
None – information only.

Discussion
A presentation on the financial management for Cuyama Basin Groundwater Sustainability Agency activities is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

Financial Report

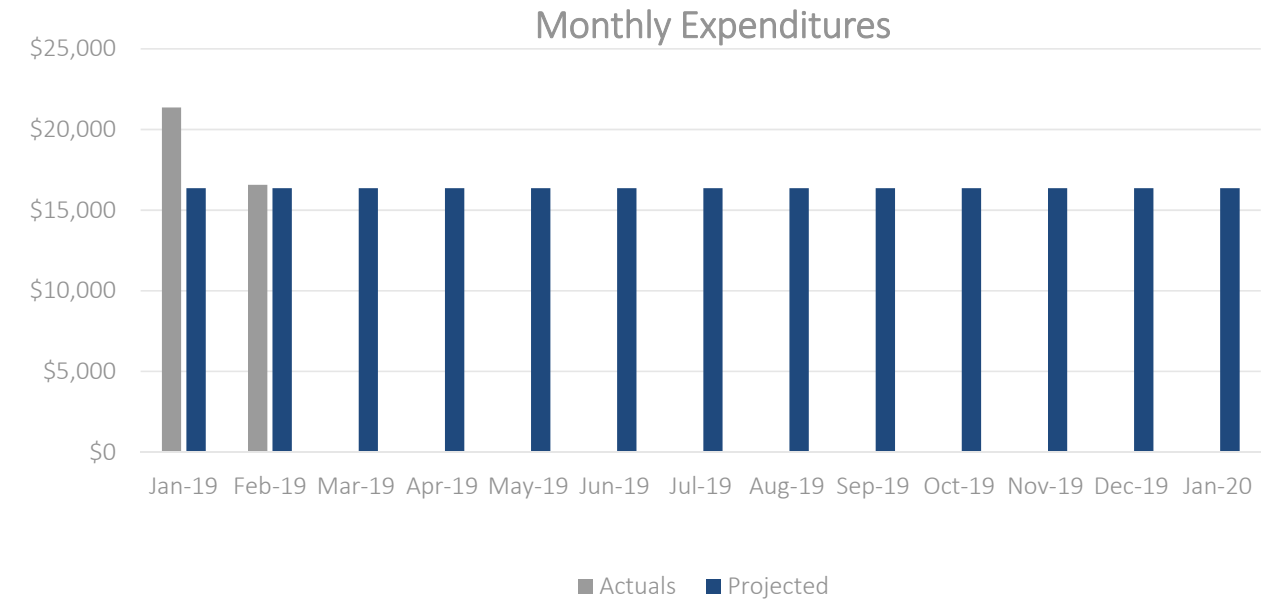
April 3, 2019

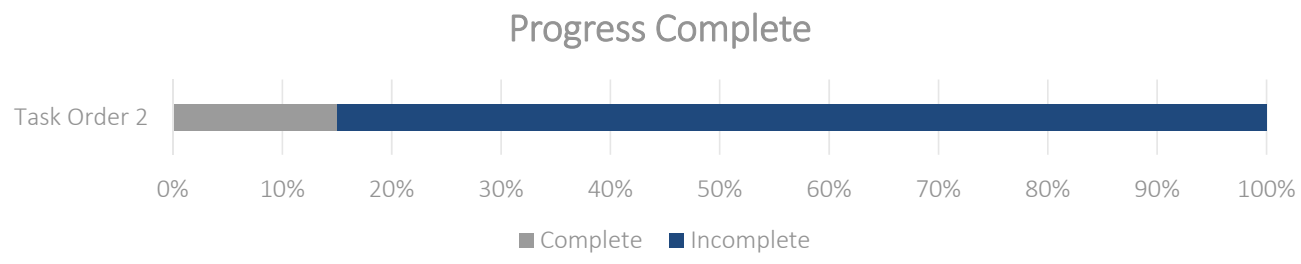
CBGSA OUTSTANDING INVOICES

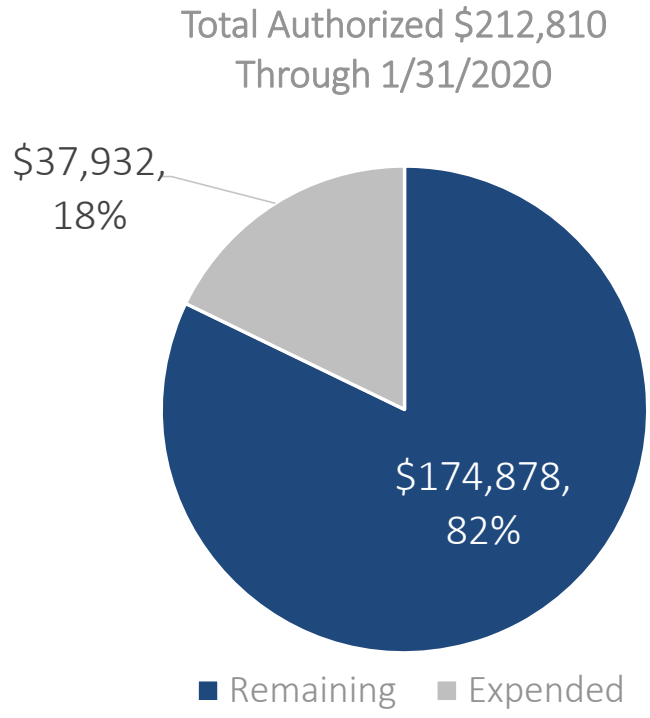
Task	Invoiced Through	Cumulative Total
Legal Counsel	2/19/2019	$28,589.00
Executive Director	2/28/2019	$149,184.00
GSP Development	2/22/2019	$1,102,785.00
TOTAL		$1,280,558.00

HALLMARK GROUP Capital Program Management

Executive Director Task Order 3

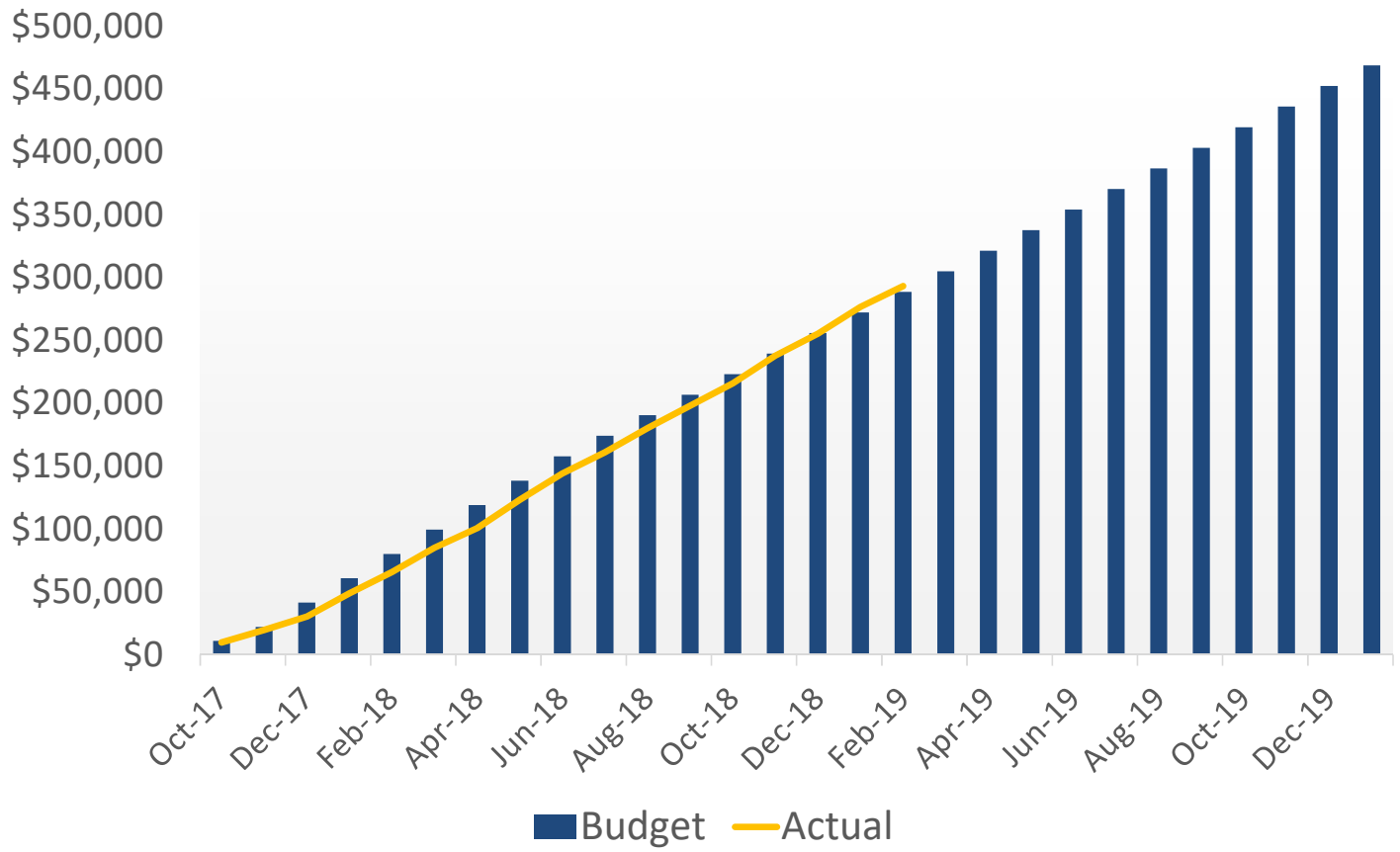




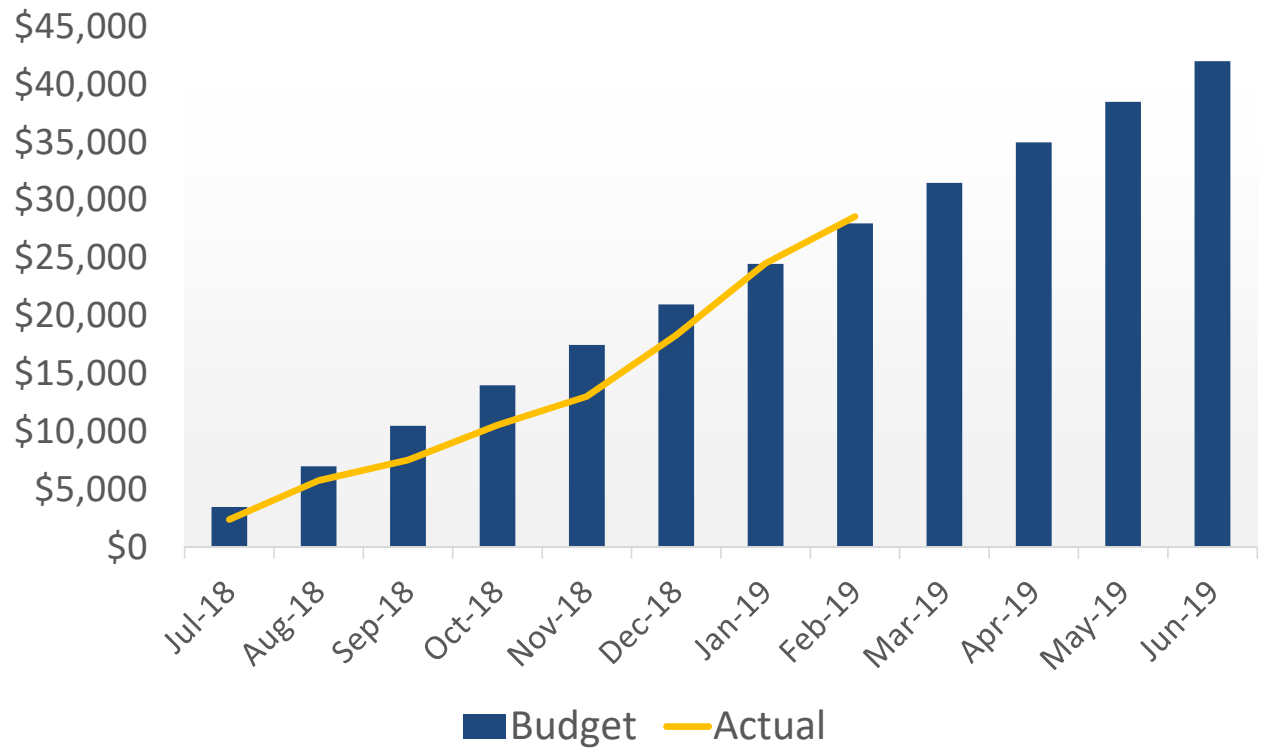


HALLMARK GROUP Capital Program Management

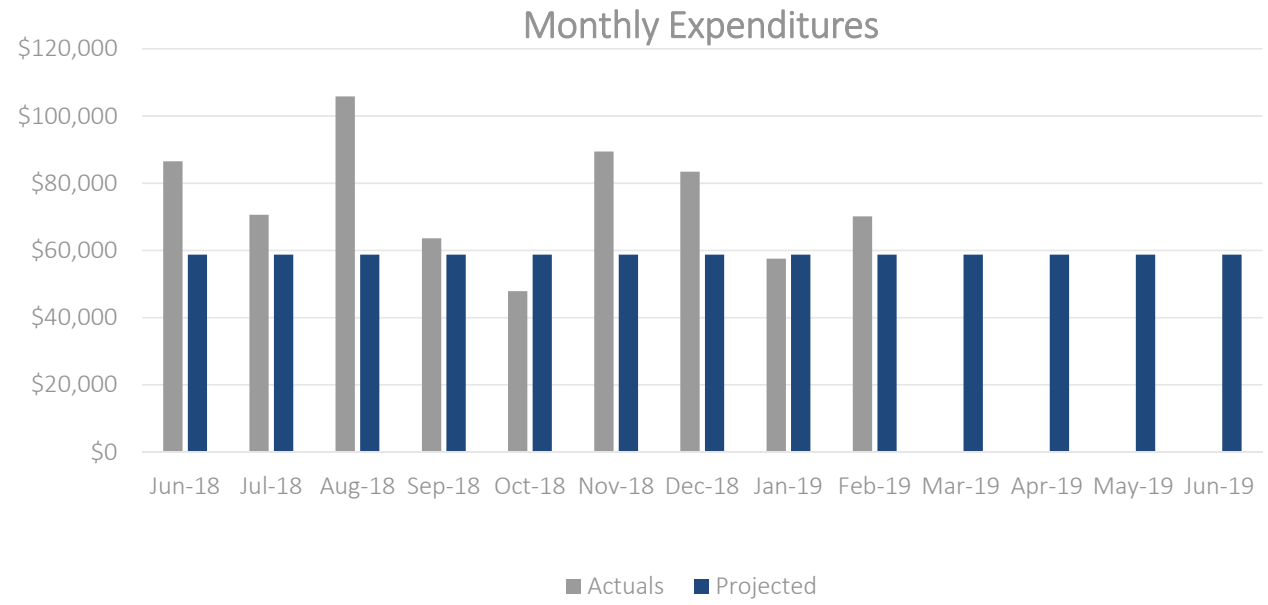
Task Order Nos. 1-3: Budget to Actual

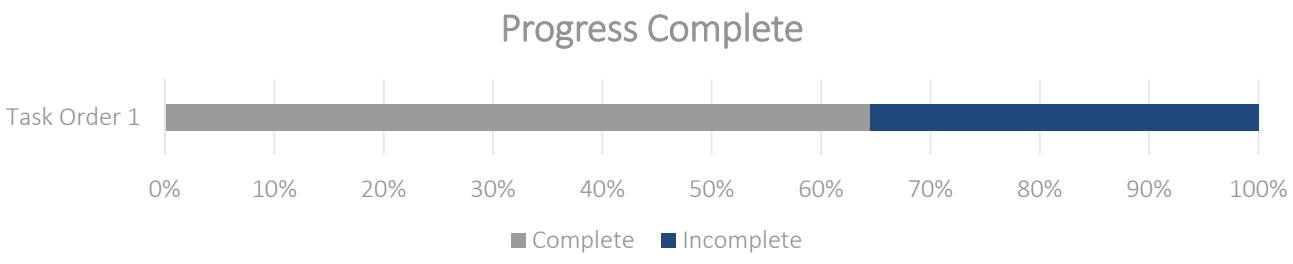


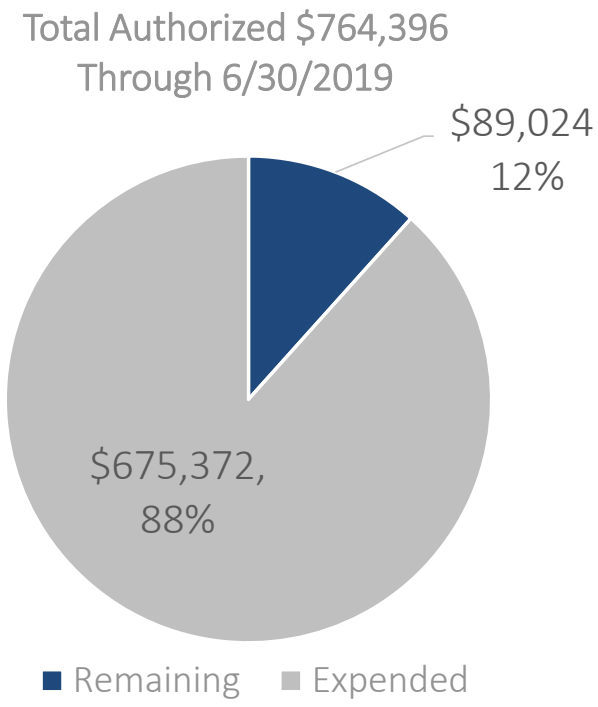
Legal Counsel: Budget to Actual (FY 18-19)



GSP Development Task Order 4

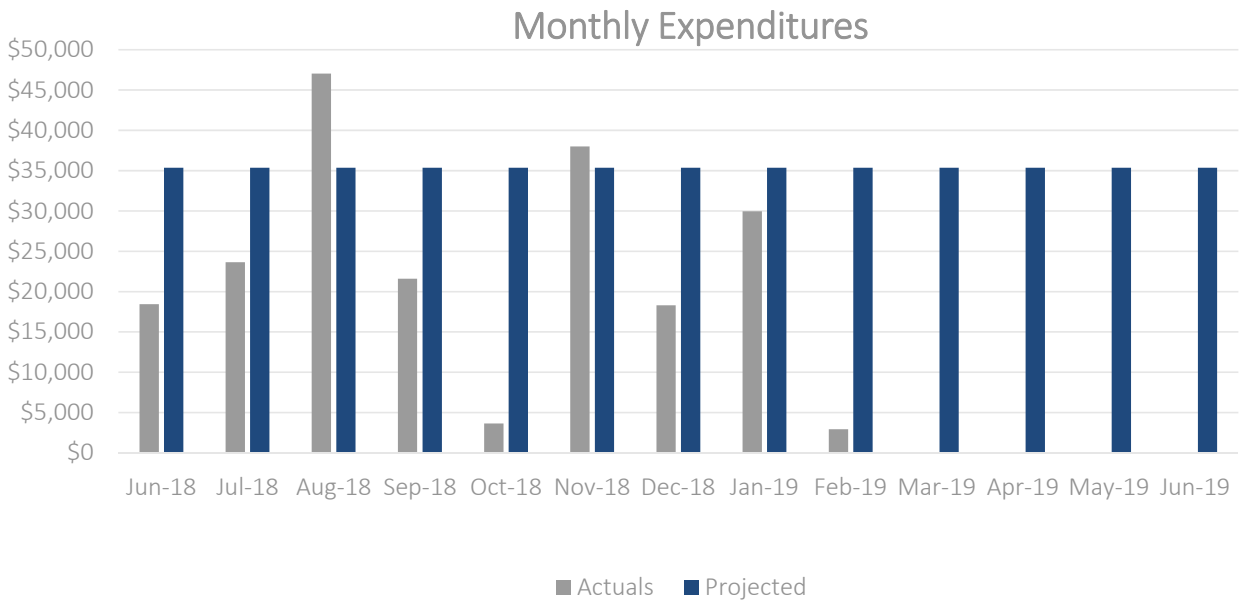


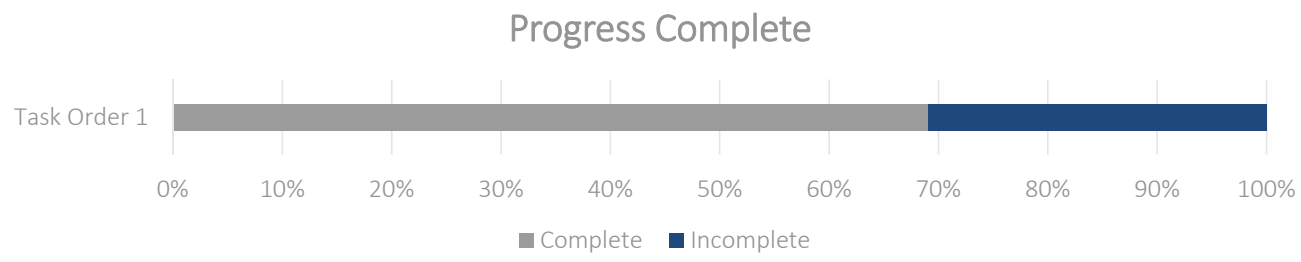


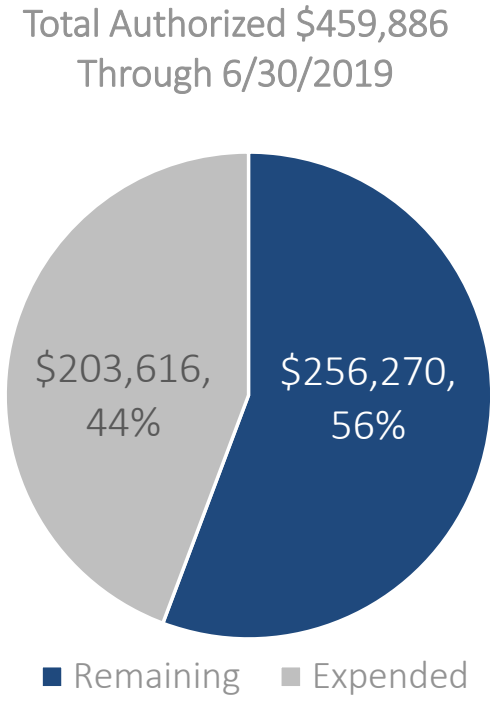


HALLMARK GROUP Capital Program Management

GSP Development Task Order 5

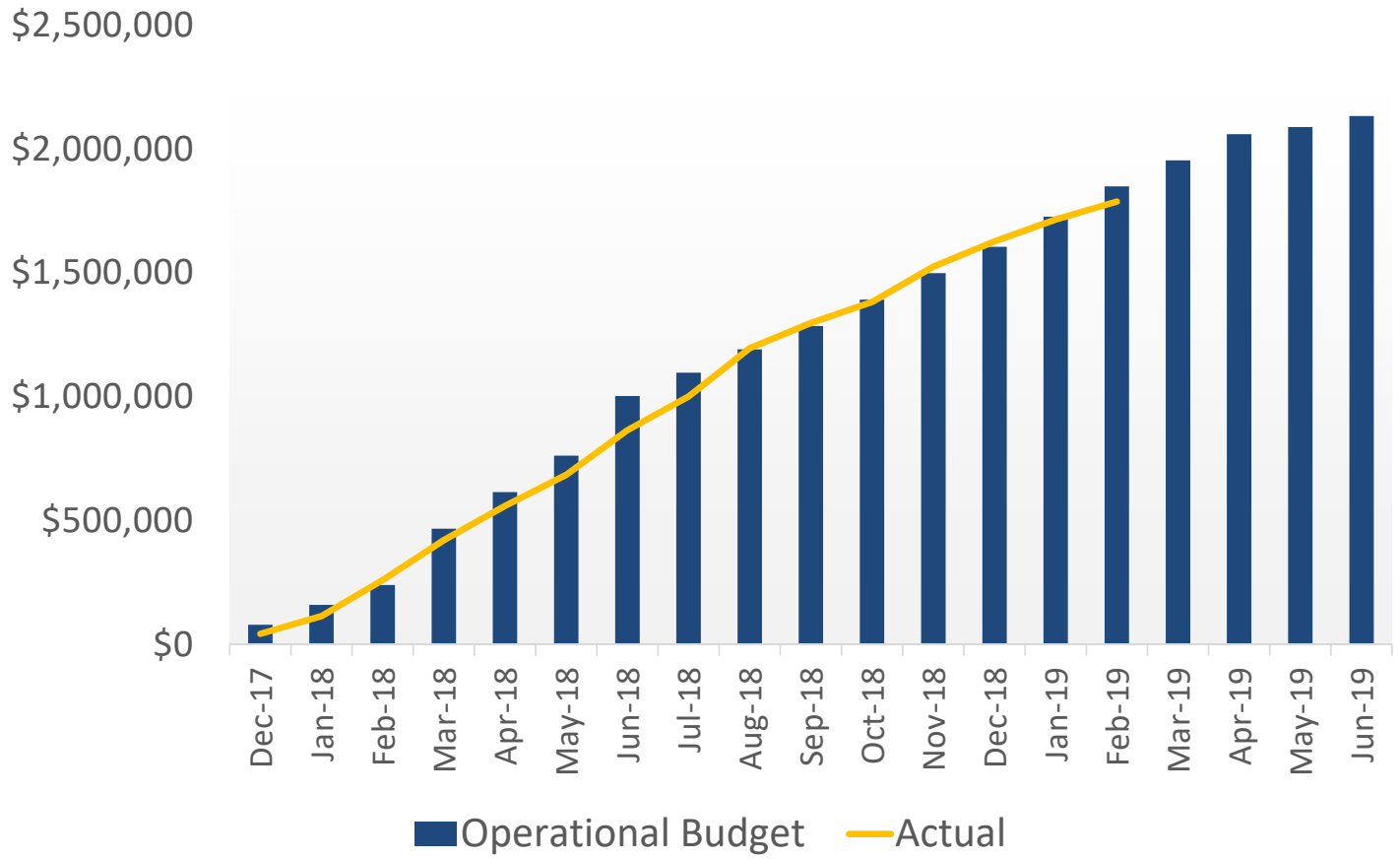






HALLMARK GROUP Capital Program Management

W&C Budget - Operational



TO: Board of Directors
Agenda Item No. 9b

FROM: Taylor Blakslee, Hallmark Group

DATE: April 3, 2019

SUBJECT: Financial Report

Issue
Financial Report

Recommended Motion
None – information only.

Discussion
The Cuyama Basin Groundwater Sustainability Agency's financial report is provided as Attachment 1.

The report includes:

- Statement of Financial Position, *as of February 28, 2019*
- Receipts and Disbursements, *as of February 28, 2019*
- A/R Aging Summary, *as of February 28, 2019*
- A/P Aging Summary, *as of February 28, 2019*
- Statement of Operations with Budget Variance, *July 2018 through February 2019*
- 2018/2019 Operational Budget, *July 2018 through June 2019*

CUYAMA BASIN GSA

FEBRUARY 28, 2019

FINANCIAL STATEMENTS

CUYAMA BASIN GSA
Statement of Financial Position
As of February 28, 2019

	Feb 28, 19
ASSETS	
Current Assets	
Checking/Savings	
Chase - General Checking	69,920
Total Checking/Savings	69,920
Accounts Receivable	
Accounts Receivable	52,270
Total Accounts Receivable	52,270
Total Current Assets	122,190
TOTAL ASSETS	**122,190**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	1,289,974
Total Accounts Payable	1,289,974
Total Current Liabilities	1,289,974
Total Liabilities	1,289,974
Equity	
Unrestricted Net Assets	-110,130
Net Income	-1,057,653
Total Equity	-1,167,783
TOTAL LIABILITIES & EQUITY	**122,190**

CUYAMA BASIN GSA
Receipts and Disbursements
As of February 28, 2019

Type	Date	Num	Name	Debit	Credit
Chase - General Checking					
Payment	07/02/2018	11366440	County of Kern	38,567.66	
Payment	07/05/2018	1001819148	County of Ventura	18,451.08	
Payment	07/05/2018	1039	Cuyama Basin Water District	387,307.44	
Payment	07/09/2018	9706702	Santa Barbara County Water Agency	56,306.25	
Payment	07/16/2018	10575	Cuyama Community Services District	3,251.50	
Bill Pmt -Check	07/18/2018	1006	HGCPM, Inc.		80,730.24
Bill Pmt -Check	07/18/2018	1007	Klein, DeNatale, Goldner		18,598.06
Bill Pmt -Check	07/18/2018	1008	Woodard & Curran		394,461.11
Payment	08/31/2018	10615	Cuyama Community Services District	2,982.30	
Check	09/30/2018	Fees	Chase Bank		95.00
Check	10/31/2018	Fees	Chase Bank		95.00
Check	11/30/2018	Fees	Chase Bank		95.00
Check	12/13/2018	1009	Santa Barbara County Water Agency		3,718.75
Check	12/31/2018	Fees	Chase Bank		95.00
Check	01/31/2019	Fees	Chase Bank		95.00
Payment	02/12/2019	2613575	County of San Luis Obispo	38,567.66	
Total Chase - General Checking				545,433.89	497,983.16
TOTAL				**545,433.89**	**497,983.16**

CUYAMA BASIN GSA
A/R Aging Summary
As of February 28, 2019

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Santa Barbara County Water Agency	0	0	0	21,670	30,600	52,270
TOTAL	**0**	**0**	**0**	**21,670**	**30,600**	**52,270**

CUYAMA BASIN GSA
A/P Aging Summary
As of February 28, 2019

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
CA Assoc of Mutual Water Companies	0	100	0	0	0	100
HGCPM, Inc.	16,572	21,360	17,497	22,081	71,674	149,184
Insurica	9,315	0	0	0	0	9,315
Klein, DeNatale, Goldner	4,029	6,224	5,280	2,477	10,578	28,589
Woodard & Curran	73,094	87,544	101,806	227,619	612,722	1,102,785
TOTAL	**103,010**	**115,228**	**124,583**	**252,178**	**694,975**	**1,289,974**

CUYAMA BASIN GSA
Statement of Operations with Budget Variance
July 2018 through February 2019

	Jul '18 - Feb 19	Budget	$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
Direct Public Funds				
Grants	0	1,143,996	-1,143,996	0%
Participant Assessments	52,270	0	52,270	100%
Total Direct Public Funds	52,270	1,143,996	-1,091,726	5%
Total Income	52,270	1,143,996	-1,091,726	5%
Cost of Goods Sold				
Program Expenses				
Category/Component 1				
Monitoring/AMP Implementation	267,994	316,783	-48,789	85%
Grant Administration	0	7,280	-7,280	0%
Total Category/Component 1	267,994	324,063	-56,069	83%
Category/Component 2				
GSP Development	654,265	595,512	58,753	110%
Grant Administration	0	14,130	-14,130	0%
Total Category/Component 2	654,265	609,642	44,623	107%
Total Program Expenses	922,260	933,705	-11,445	99%
Total COGS	922,260	933,705	-11,445	99%
Gross Profit	-869,990	210,291	-1,080,281	-414%
Expense				
Administration and Operation				
Administrative Overhead				
Bank Service Fees	475	0	475	100%
General Liability Insurance	9,315	12,108	-2,793	77%
Legal	28,589	28,000	589	102%
Other Admin Expense	100	1,330	-1,230	8%
Postage and Mailing Services	0	13,000	-13,000	0%
Travel, Conferences, Trainings	0	3,330	-3,330	0%
Total Administrative Overhead	38,479	57,768	-19,289	67%
Administration of GSA				
Executive Director				
GSA BOD Meetings	85,750	34,800	50,950	246%
Consult Mgmt and GSP Devel	22,775	29,200	-6,425	78%
Financial Information Coor	12,325	6,800	5,525	181%
CBGSA Outreach	7,213	17,600	-10,388	41%
Budget Devel and Admin	125	0	125	100%
Outreach Facilitation	7,150	10,800	-3,650	66%
Financial Management	9,225	21,760	-12,535	42%
Travel and Direct Costs	4,622	1,880	2,742	246%
Total Executive Director	149,184	122,840	26,344	121%
Total Administration of GSA	149,184	122,840	26,344	121%
Total Administration and Operation	187,663	180,608	7,055	104%
Total Expense	187,663	180,608	7,055	104%
Net Ordinary Income	-1,057,653	29,683	-1,087,336	-3,563%
Net Income	**-1,057,653**	**29,683**	**-1,087,336**	**-3,563%**

CUYAMA BASIN GSA
2018/2019 Operational Budget
July 2018 through June 2019

	Jul '18 - Jun 19
Ordinary Income/Expense	
Income	
Direct Public Funds	
Grants	1,966,858
Total Direct Public Funds	1,966,858
Total Income	1,966,858
Cost of Goods Sold	
Program Expenses	
Category/Component 1	
Monitoring/AMP Implementation	472,989
Grant Administration	13,104
Total Category/Component 1	486,093
Category/Component 2	
GSP Development	889,032
Grant Administration	25,434
Total Category/Component 2	914,466
Total Program Expenses	1,400,559
Total COGS	1,400,559
Gross Profit	566,299
Expense	
Administration and Operation	
Administrative Overhead	
General Liability Insurance	12,108
Legal	42,000
Other Admin Expense	2,000
Postage and Mailing Services	20,000
Travel, Conferences, Trainings	5,000
Total Administrative Overhead	81,108
Administration of GSA	
Executive Director	
GSA BOD Meetings	52,200
Consult Mgmt and GSP Devel	43,800
Financial Information Coor	10,200
CBGSA Outreach	26,400
Budget Devel and Admin	6,700
Outreach Facilitation	16,200
Financial Management	38,120
Travel and Direct Costs	2,820
Total Executive Director	196,440
Total Administration of GSA	196,440
Total Administration and Operation	277,548
Total Expense	277,548
Net Ordinary Income	288,751
Net Income	**288,751**

TO: Board of Directors
Agenda Item No. 9c

FROM: Taylor Blakslee, Hallmark Group

DATE: April 3, 2019

SUBJECT: Direction on Annual Audit

Issue
Annual Audit Firm and Period Selection

Recommended Motion
Solicit audit proposals from firms for one- and two-year periods.

Discussion
To comply with audit requirements of the Cuyama Basin Groundwater Sustainability Agency, the Hallmark Group recommends soliciting one-year, and two-year audit bids from the following Bakersfield audit firms:

- Daniells Phillips Vaughan & Bock
- Brown Armstrong
- Barbich Hooper King Dill Hoffman

TO: Board of Directors
Agenda Item No. 9d

FROM: Jim Beck, Executive Director

DATE: April 3, 2019

SUBJECT: Payment of Bills

Issue
Consider approving the payment of bills for February 2019.

Recommended Motion
Approve payment of the bills through the month of February 2019 in the amount of $93,694.98.

Discussion
Consultant invoices for the month of February 2019 are provided as Attachment 1.

Attachment 1

HALLMARK GROUP Capital Program Management

INVOICE

1901 Royal Oaks Drive
Suite 200
Sacramento, CA 95815

916 923.1500
hgcpm.com

To: **Cuyama Basin GSA**
c/o Jim Beck
4900 California Avenue, Ste B
Bakersfield, CA 93309

Please Remit To: **Hallmark Group**
1901 Royal Oaks Drive, Suite 200
Sacramento, CA 95815
P: (916) 923-1500

Invoice No.: 2019-CB-TO3-02
Task Order: CB-HG-003
Agreement No. 201709-CB-001
Date: March 15, 2019

For professional services rendered for the month of February 2019

Task Order	Sub Task	Task Description	Billing Classification	Hours	Rate	Amount
CB-HG-003	1	GSA Board of Directors and Advisory Committee Meetings	Executive Director	21.50	$ 250.00	$ 5,375.00
			Project Coordinator/Admin	56.75	$ 100.00	$ 5,675.00
					Total Sub Task 1 Labor	**$ 11,050.00**
CB-HG-003	2	Consultant Management and GSP Development	Executive Director	2.75	$ 250.00	$ 687.50
			Project Coordinator/Admin	14.75	$ 100.00	$ 1,475.00
					Total Sub Task 2 Labor	**$ 2,162.50**
CB-HG-003	3	Financial Information Coordination	Executive Director	0.00	$ 250.00	$ -
			Project Controls	4.75	$ 200.00	$ 950.00
			Project Coordinator/Admin	11.25	$ 100.00	$ 1,125.00
					Total Sub Task 3 Labor	**$ 2,075.00**
CB-HG-003	4	CBGSA Outreach	Executive Director	1.50	$ 250.00	$ 375.00
			Project Coordinator/Admin	3.00	$ 100.00	$ 300.00
					Total Sub Task 4 Labor	**$ 675.00**
					Total Labor	**$ 15,962.50**
		Travel	02/06/19, 02/28/19			$ 135.16
		Other Direct Costs:	Conference Calls			$ 316.14
			Office Supplies - 1099 Tax Forms			$ 11.25
			Printing Costs			$ 124.30
					SubTotal Travel and Other Direct Costs	**$ 586.85**
		ODC Mark Up			5%	$ 22.58
					Total Travel and Other Direct Costs	**$ 609.43**
					TOTAL AMOUNT DUE FOR THIS INVOICE	**$ 16,571.93**

Task Order	Original Totals	Amendment(s)	Total Committed	Previously Billed	Current Billing	Remaining Balance
CB-HG-003	$ 212,810.00	$ -	$ 212,810.00	$ 20,637.50	$ 15,962.50	$ 176,210.00
Travel and ODC	$ -	$ -	$ -	$ 722.20	$ 609.43	$ (1,331.63)
Total	$ 212,810.00	$ -	$ 212,810.00	$ 21,359.70	$ 16,571.93	$ 174,878.37

HALLMARK GROUP Capital Program Management

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

PROGRESS REPORT FOR TASK ORDER CB-HG-003

Client Name:	Cuyama Basin Groundwater Sustainability Agency	**Agreement Number:**	201709-CB-001
Company Name:	HGCPM, Inc. DBA The Hallmark Group	**Address:**	1901 Royal Oaks Drive, Suite 200 Sacramento, CA 95815
Task Order Number:	CB-HG-003	**Report Period:**	February 1-28, 2019
Progress Report Number:	2	**Project Manager:**	Jim Beck
Invoice Number:	2019-CB-TO3-02	**Invoice Date:**	March 15,2019

SUMMARY OF WORK PERFORMED

Task 1: Board and Standing Advisory Committee Meeting Facilitation

- Prepared for and attended monthly Cuyama Basin Groundwater Sustainability Agency (CBGSA) Standing Advisory Committee (SAC) and Board meetings.
- Drafted, prepared, and distributed documents for the CBGSA SAC and Board of Directors meeting packets.
- Drafted CBGSA SAC and Board minutes.
- Drafted, reviewed, and discussed SAC and Board agendas and cancellation notices.
- Distributed and tracked Form 700s.
- Discussed legal aspects for delegation of Management Area responsibilities.
- Assisted in developing Board and SAC strategy for remaining GSP components.

Task 2: GSP Consultant Management and GSP Development

- Prepared for, met with, and facilitated CBGSA Program Management Team (PMT) on a weekly basis to discuss Groundwater Sustainability Plan (GSP) section progress and outreach.
- Distributed Water Budget and Sustainability Thresholds GSP Chapters.
- Coordinated and attended Management Areas discussion meeting with W&C.
- Prepped for and attended Cuyama strategy call with PMT.
- Discussed the California Department of Water Resources (DWR) Technical Support Services application with W&C.

Task 3: Financial Management

- Drafted progress report for Hallmark services.

- Attended Grant Administration Agreement Kick-Off meeting with A. Regmi, D. Yurosek, B. Van Lienden, and J. Harris.
- Discussed Grant Administration Agreement with B. Van Lienden.
- Discussed Santa Barbara County Water Agency's grant with DWR invoice No. 10 with M. Young.
- Coordinated with counties regarding audit frequency.
- Processed billing and administration.
- Processed accounts payable and prepared financial statements.
- Reviewed California Association of Mutual Water Companies application.
- Reviewed and revised CBGSA insurance application.

Task 4: Stakeholder Outreach Facilitation

- Coordinated the update of the Cuyama Basin Groundwater Sustainability Agency (CBGSA) website with Board and Standing Advisory Committee minutes, agendas, GSP chapters, and GSP presentations.
- Updated CBGSA public stakeholder contact list.
- Distributed March 6, 2019 Public Workshops reminders.

DELIVERABLES AND COMPLETED TASKS

- Developed CBGSA Board agenda for February 6, 2019 and SAC agenda for February 28, 2019.
- Attended CBGSA Board meeting on February 6, 2019 and SAC meeting on February 28, 2019.
- Drafted meeting minutes for CBGSA Board meeting on February 6, 2019 and SAC meeting on February 28, 2019.
- Prepared for, met with, and facilitate CBGSA PMT on a weekly basis.

PLANNED OBJECTIVES FOR NEXT REPORTING PERIOD

- Prepare for and attend CBGSA Board meeting on March 6, 2019 and SAC meeting on March 28, 2019.
- Drafted progress report for Hallmark services.
- Coordinated the update of the CBGSA website with minutes, agendas, GSP sections, and GSP presentations.

SIGNIFICANT ISSUES OR CHALLENGES (IF ANY) AND POTENTIAL RESOLUTIONS

- There are no outstanding issues or challenges at this time.

GAN CONFERENCING
Bringing the world together

Invoice Date: 3/1/2019
Total: $1,098.12
Statement# 38573 Customer# 3122729

HGCPM, Inc. - Formerly Advance Education
1901 Royal oaks DR
Sacramento, CA 95815 -0000

Remit to:
Great America Networks Conferencing
15700 W. 103rd St
Suite 110
Lemont, IL 60439 6608

CALL US
1-877-438-4261

Summary

Balance Information	
Previous Balance	794.58
Payments Received - Thank you!	(794.58)
Balance Forward	
New Charges	
New Usage Charges	915.10
Recurring Charges	0.00
Taxes and Surcharges	183.02
Total New Charges	1,098.12
Total Amount Due	1,098.12

Payments

Description	Date	Amount
Payment Received, Thank you!	02/27/19	(794.58)
Subtotal		($794.58)

Taxes and Surcharges

Federal Universal Service Fund	183.02
Subtotal	$183.02

Management Reports

Usage by Category

Description	Calls	Minutes	Charge
Usage - Conference Calling	248	16,850.00	915.10
	248.00	16,850.00	915.10

Long Distance By Line

TN	Calls	Mins	Charge
	248	16,850.00	915.10
	248	16,850.00	915.10

Toll-free Usage

Cuyama BDSAC Conference ID: 4710932

#	Date	Time	Other	Location	Mins	Amt
1	02/06/19	05:32P	8186321116	Participant	107.00	5.35
2	02/06/19	05:56P	4157938420	Host	122.00	6.10
3	02/06/19	05:56P	6617662369	Host	140.00	7.00
4	02/06/19	05:57P	6507590535	Participant	118.00	5.90
5	02/06/19	05:57P	8057815275	Host	3.00	.15
6	02/06/19	05:59P	6612457232	Participant	134.00	6.70
7	02/06/19	06:01P	9169998777	Host	52.00	2.60
8	02/06/19	06:04P	8057815275	Host	2.00	.10
9	02/06/19	06:07P	9254872099	Host	130.00	6.50
10	02/06/19	06:57P	9169998777	Host	3.00	.15
11	02/06/19	07:02P	9169998777	Host	2.00	.10
12	02/06/19	07:04P	9169998777	Host	52.00	2.60
Subtotal			865.00			43.25

Cuyama BDSAC Conference ID: 4730440

#	Date	Time	Other	Location	Mins	Amt
1	02/21/19	06:43P	6613302610	Host	2.00	.10
Subtotal			2.00			.10

Cuyama BDSAC Conference ID: 4738605

#	Date	Time	Other	Location	Mins	Amt
1	02/28/19	03:56P	6617662369	Host	235.00	11.75
2	02/28/19	03:58P	6613951000	Host	118.00	5.90
3	02/28/19	03:58P	8188828503	Participant	232.00	11.60
4	02/28/19	03:59P	6172725538	Participant	330.00	16.50
5	02/28/19	04:00P	6613302610	Host	96.00	4.80
6	02/28/19	04:03P	9258581340	Host	32.00	1.60
7	02/28/19	04:05P	4155242290	Host	225.00	11.25
8	02/28/19	04:22P	2133092347	Host	199.00	9.95
9	02/28/19	04:35P	9258581340	Host	11.00	.55
10	02/28/19	04:42P	9256274112	Host	11.00	.55
11	02/28/19	04:58P	9256274112	Host	96.00	4.80

12	02/28/19	05:36P	6613302610	Host	16.00	.80
13	02/28/19	06:41P	9256274112	Host	69.00	3.45
14	02/28/19	06:48P	6613302610	Host	63.00	3.15
Subtotal			1,733.00			86.65

Cuyama GSA Conference ID: 4704831

#	Date	Time	Other	Location	Mins	Amt
1	02/01/19	11:56A	4157938420	Host	64.00	3.20
2	02/01/19	11:59A	4155242290	Host	61.00	3.05
3	02/01/19	11:59A	6614773385	Host	45.00	2.25
4	02/01/19	12:00P	5304058800	Host	60.00	3.00
5	02/01/19	12:02P	9256274112	Host	58.00	2.90
6	02/01/19	12:44P	6613321043	Host	16.00	.80
Subtotal			304.00			15.20

Cuyama GSA Conference ID: 4712614

#	Date	Time	Other	Location	Mins	Amt
1	02/07/19	03:26P	6613337091	Host	89.00	4.45
2	02/07/19	03:27P	4157938420	Host	89.00	4.45
3	02/07/19	03:30P	4159990316	Host	86.00	4.30
4	02/07/19	03:30P	9258581340	Host	86.00	4.30
5	02/07/19	03:32P	9169998777	Host	83.00	4.15
Subtotal			433.00			21.65

Cuyama GSA Conference ID: 4713867

#	Date	Time	Other	Location	Mins	Amt
1	02/08/19	11:57A	4157938420	Host	46.00	2.30
2	02/08/19	11:58A	6613337091	Host	45.00	2.25
3	02/08/19	11:58A	9256274112	Host	31.00	1.55
4	02/08/19	11:59A	6614773385	Host	44.00	2.20
5	02/08/19	11:59A	9169998777	Host	44.00	2.20
6	02/08/19	12:00P	4155242290	Host	43.00	2.15
Subtotal			253.00			12.65

Cuyama GSA Conference ID: 4723236

#	Date	Time	Other	Location	Mins	Amt
1	02/15/19	11:56A	6613337091	Host	70.00	3.50
2	02/15/19	11:57A	4155242290	Host	81.00	4.05
3	02/15/19	11:59A	4157938420	Host	91.00	4.55
4	02/15/19	11:59A	6613951000	Host	98.00	4.90
5	02/15/19	11:59A	9169998777	Host	97.00	4.85
6	02/15/19	12:00P	6614773385	Host	97.00	4.85
Subtotal			534.00			26.70

Cuyama GSA Conference ID: 4730426

#	Date	Time	Other	Location	Mins	Amt
1	02/21/19	05:58P	6614773385	Host	45.00	2.25
2	02/21/19	05:59P	6613337091	Host	44.00	2.20
3	02/21/19	06:00P	6613302610	Host	43.00	2.15
4	02/21/19	06:00P	8058867239	Host	43.00	2.15
5	02/21/19	06:00P	8318182451	Host	43.00	2.15
Subtotal			218.00			10.90

Cuyama GSA Conference ID: 4731234

#	Date	Time	Other	Location	Mins	Amt
1	02/22/19	11:00A	6613951000	Host	8.00	.40
Subtotal			8.00			.40

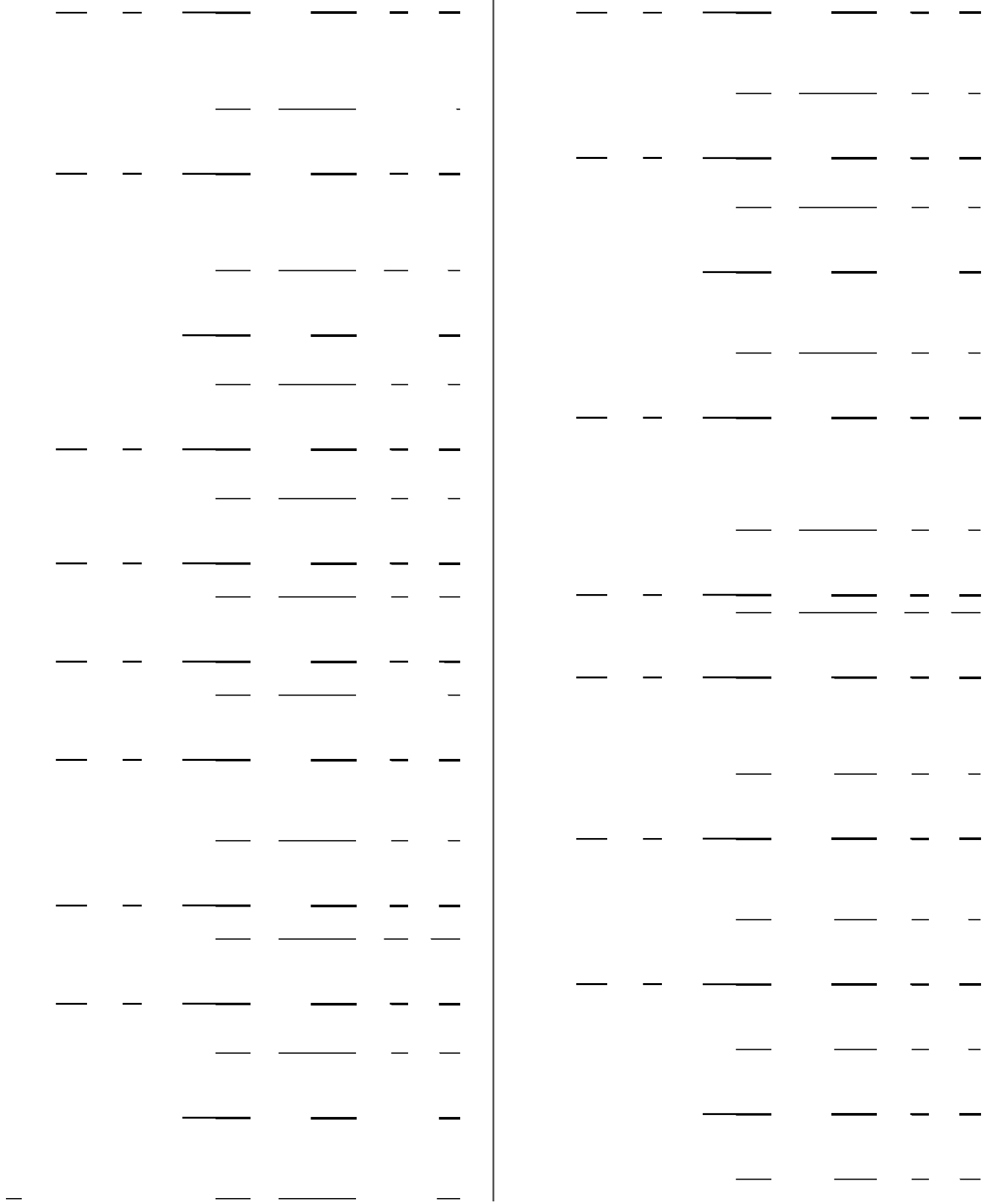
Cuyama GSA Conference ID: 4731347

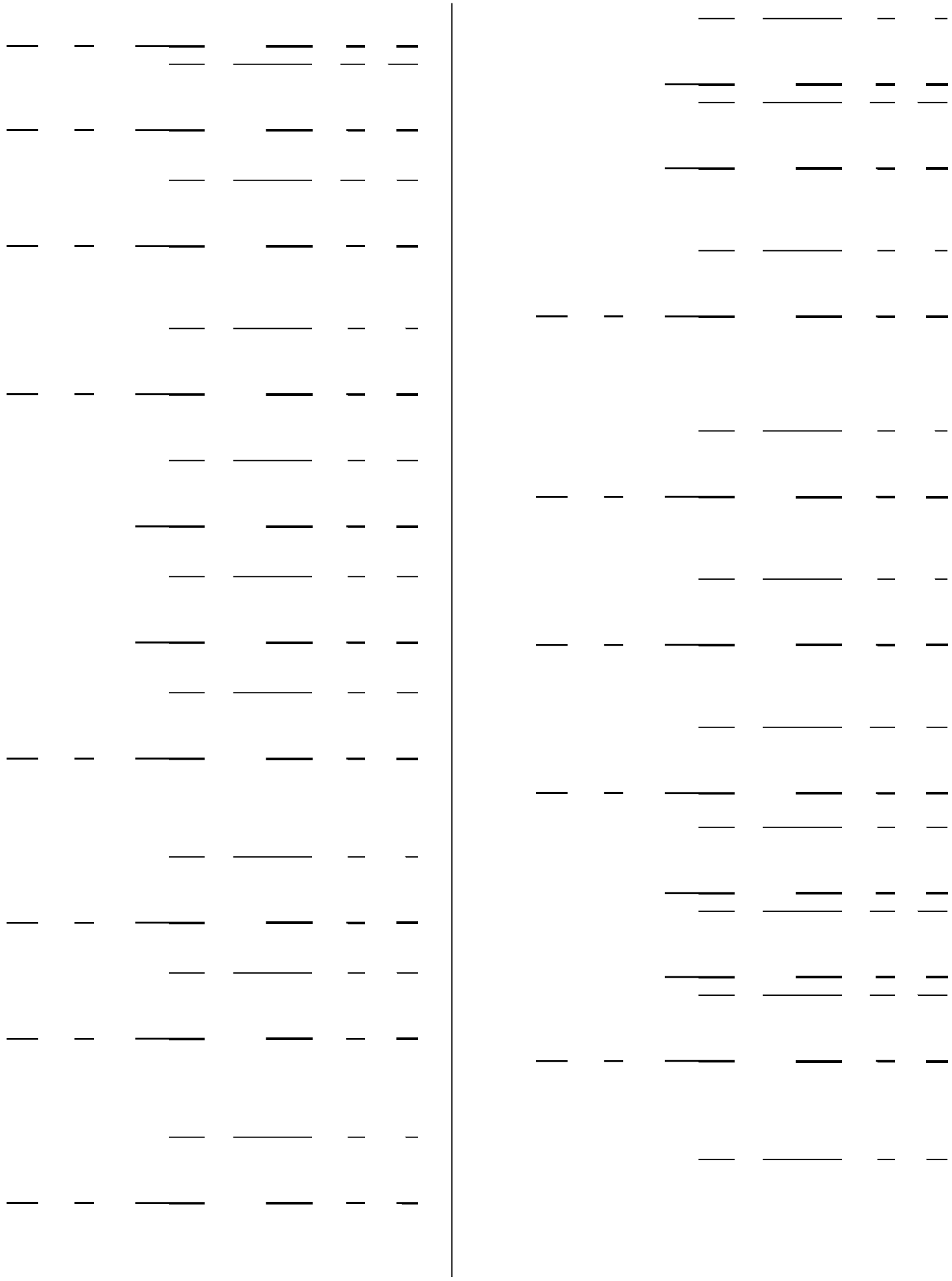
#	Date	Time	Other	Location	Mins	Amt
1	02/22/19	11:59A	4157938420	Host	117.00	5.85
2	02/22/19	12:00P	6613951000	Host	115.00	5.75
3	02/22/19	12:00P	6614773385	Host	116.00	5.80
4	02/22/19	12:00P	9256274112	Host	116.00	5.80
5	02/22/19	12:01P	6613337091	Host	115.00	5.75
6	02/22/19	12:02P	9169998777	Host	113.00	5.65
7	02/22/19	12:14P	4155242290	Host	19.00	.95
8	02/22/19	01:22P	4155242290	Host	34.00	1.70
Subtotal			745.00			37.25

Cuyama GSA Conference ID: 4737034

#	Date	Time	Other	Location	Mins	Amt
1	02/27/19	04:51P	6613337091	Host	50.00	2.50
2	02/27/19	04:58P	9256274112	Host	43.00	2.15
3	02/27/19	04:59P	6614773385	Host	41.00	2.05
4	02/27/19	05:00P	6613951000	Host	40.00	2.00
Subtotal			174.00			8.70

A	Cuyama Charges:	
	1-Feb	$15.20
	6-Feb	$43.25
	7-Feb	$21.65
	8-Feb	$12.65
	15-Feb	$26.70
	21-Feb	$10.90
	21-Feb	$0.10
	22-Feb	$0.40
	22-Feb	$37.25
	27-Feb	$8.70
	28-Feb	$86.65
B	Subtotal	$263.45
C	Total Conf Line Charge	$915.10
D	Cuyama % of Total Bill (B/C)	29%
E	Fees	$183.02
F	Fee Incurred by Cuyama (D*E)	5269%
G	Total Cuyama Charge (B+F)	**$316.14**





FEB 21 2019

Account Statement

STAPLES
More Account™

Customer Service:
StaplesBusiness.accountonline.com
Account Inquiries:
1-800-767-1291 Fax 1-801-779-7425

Commercial Account
ADVANCE EDUCATION
138

Account Number: 6035 5178 1960 6970

Summary of Account Activity

Previous Balance	$0.00
Payments	-$0.00
Credits	-$0.00
Purchases	+$11.25
Debits	+$0.00
FINANCE CHARGES	**+$0.00**
Late Fees	+$0.00
New Balance	$11.25

Send Notice of Billing Errors and Customer Service Inquiries to:
STAPLES CREDIT PLAN
PO Box 790449, St. Louis, MO 63179-0449

Payment Information

Current Due		$11.25
Past Due Amount	+	$0.00
Minimum Payment Due	=	$11.25
Payment Due Date		**03/10/19**

Credit Line	$5,000
Credit Available	$4,982
Closing Date	02/13/19
Next Closing Date	03/15/19
Days in Billing Period	28

Please note that if we received your pay by phone or online payment between 5 p.m. ET and midnight ET on the last day of your billing period, your payment will not be reflected until your next statement.

Reminder: Payments can be made by mail, online or by calling 1-800-767-1291.
Note: In-store payments are not accepted.

T00L69

TRANSACTIONS

Trans Date	Location/Description	PO #	Order #	Amount
01/30	PUTNAM CT		9796228052	$ 11.25

FINANCE CHARGE SUMMARY

Your **Annual Percentage Rate (APR)** is the annual interest rate on your account.

Type of Balance	Annual Percentage Rate (APR)	Daily Periodic Rate	Balance Subject to Finance Charge	Finance Charge
PURCHASES				
REGULAR REVOLVING CREDIT PLAN	23.99%	0.06572%	$0.00	$0.00

1096 Forms
Aoyama

ENTERED

APPROVED PAYMENTS
Signature BY
Amount $11.25
Date 02/21/19
Company
Dept
Account

NOTICE: SEE REVERSE SIDE FOR IMPORTANT INFORMATION **Page 1 of 6** **This Account is Issued by Citibank, N.A.**

Please detach and return lower portion with your payment to insure proper credit. Retain upper portion for your records.

STAPLES
More Account™

Your Account Number is 6035 5178 1960 6970

PO BOX 790439
ST. LOUIS, MO 63179

Statement Enclosed

Payment Due Date	**March 10, 2019**
New Balance	**$11.25**
Past Due Amount	**$0.00**
Minimum Payment Due	**$11.25**

Amount Enclosed: $.

Print address changes on the reverse side.
Make Checks Payable to

STAPLES CREDIT PLAN
DEPT. 51 - 7819606970
PO BOX 78004
PHOENIX, AZ 85062-8004

OD00911607 1 AV 0.378 WC229784 TMN 015666 4195

ADVANCE EDUCATION
ACCOUNTS PAYABLE
1901 ROYAL OAKS DR STE 200
SACRAMENTO, CA 95815-4235

01660120
LOB 201 P102

04400 0001125 0001125 0002435 06035517819606970 0903

CUYAMA PRINTING COSTS

Board- 2/6/19

Document	B&W, or Color	Pages	Rate	Cost
Agenda (Board)	B&W	30	$ 0.10	$ 3.00
Agenda (Public)	B&W	40	$ 0.10	$ 4.00
Spanish Presentations	B&W	177	$ 0.10	$ 17.70
Sign-in Sheet	B&W	1	$ 0.10	$ 0.10
Board Packets	B&W	343	$ 0.10	$ 34.30
			Total Cost	$ 59.10

SAC- 2/28/19

Document	B&W, or Color	Pages	Rate	Cost
Agenda (Board)	B&W	30	$ 0.10	$ 3.00
Agenda (Public)	B&W	40	$ 0.10	$ 4.00
Spanish Presentations	B&W	180	$ 0.10	$ 18.00
Sign-in Sheet	B&W	1	$ 0.10	$ 0.10
SAC Packets	B&W	128	$ 0.10	$ 12.80
			Total Cost	$ 37.90

CUYAMA LANDOWNER PRINTING COSTS

February

Document	B&W, or Color	Pages	Rate	Cost
2/6 Board Packet	B&W	145	$ 0.10	$ 14.50
Workshop Notice	B&W	1	$ 0.10	$ 0.10
2/28 SAC Packet	B&W	127	$ 0.10	$ 12.70
			Total Cost	$ 27.30

Total Cost	$ 124.30

KLEIN, DENATALE, GOLDNER
COOPER, ROSENLIEB & KIMBALL, LLP

4550 CALIFORNIA AVENUE
SECOND FLOOR
BAKERSFIELD, CA 93309

MAILING ADDRESS:
P.O. BOX 11172
BAKERSFIELD, CA 93389-1172
(661) 395-1000
FAX (661) 326-0418
E-MAIL accounting@kleinlaw.com

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY
C/O HALLMARK GROUP
1901 ROYAL OAKS DRIVE, SUITE 200
SACRAMENTO, CA 95815

February 28, 2019
Bill No. 22930-001-141581
JDH

Statement for Period through February 19, 2019

Re: 22930 - CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY
001 GENERAL BUSINESS

Date		Services	Hours	Amount
01/22/19	JDH	E-MAILED T. BLAKSLEE REGARDING CONSULTANTS REQUIRED TO FILE FORM 700'S.	1.00	270.00
01/24/19	JDH	TELEPHONE CONFERENCE WITH T. BLAKSLEE REGARDING VARIOUS ISSUES.	0.50	135.00
01/25/19	JDH	WEEKLY PMT CALL.	0.70	189.00
01/25/19	JDH	REVISED BOARD MEMORANDUM REGARDING ELECTION OF OFFICERS; TELEPHONE CONFERENCE WITH T. BLAKSLEE REGARDING SAME.	1.00	270.00
01/25/19	DKK	RESEARCHED TREASURER AND AUDITOR APPOINTMENT REQUIREMENTS.	2.50	525.00
01/31/19	JDH	TELEPHONE CONFERENCE WITH A. DOUD.	0.30	81.00
01/31/19	JDH	ATTENDED SAC JANUARY REGULAR MEETING TELEPHONICALLY.	1.00	270.00
02/04/19	JDH	CONFERENCE WITH A. DOUD REGARDING GSP DEVELOPMENT.	0.50	135.00
02/05/19	JDH	TELEPHONE CONFERENCE WITH J. BECK.	0.60	162.00
02/06/19	JDH	TELEPHONE CONFERENCE WITH T. BLAKSLEE REGARDING OFFICER ELECTION; REVIEWED TREASURER POSITION STATUTES.	0.50	135.00
02/06/19	JDH	ATTENDED FEBRUARY REGULAR MEETING.	4.50	1,215.00
02/06/19	DM	REVIEWED JPA AGREEMENT AND SGMA TEXT; E-MAILED J. HUGHES REGARDING QUESTION BY BOARD DIRECTOR.	0.60	162.00
02/15/19	JDH	WEEKLY PMT CONFERENCE CALL.	1.50	405.00

KLEIN, DENATALE, GOLDNER, COOPER, ROSENLIEB & KIMBALL, LLP

Bill No. 22930-001-141581 **February 28, 2019** **Page 2**
Client Ref: 22930 - 001

		Rate	Hours	Amount
JDH	HUGHES, JOSEPH	270.00	12.10	3,267.00
DKK	KEY, DARIEN	210.00	2.50	525.00
DM	MULLINS, DENNIS	270.00	0.60	162.00
Total Fees				**$3,954.00**

Costs and Expenses

Date	Expenses	Amount
02/07/19	TRAVEL EXPENSES 2/6 ROUND TRIP TRAVEL TO NEW CUYAMA FOR FEBRUARY BOARD MEETING - JOSEPH D. HUGHES	75.40
Total Costs and Expenses		**$75.40**

Current Charges	**$4,029.40**
Prior Statement Balance	24,559.62
Payments/Adjustments Since Last Bill	-0.00
Pay This Amount	**$28,589.02**

Any Payments Received After February 28, 2019 Will Appear on Your Next Statement

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

TD BANK
Electronic Transfer:
⑆211274450 ⑆ 2427662596⑈

INVOICE

Jim Beck
Executive Director
Cuyama Basin Groundwater Sustainability Agency
c/o Hallmark Group
1901 Royal Oaks Drive, Suite 200
Sacramento, CA 95815

March 20, 2019
Project No: 0011078.01
Invoice No: 161007

Project 0011078.01 CUYAMA GSP

Professional Services for the period ending February 22, 2019

Phase 002 Data Management System, Data Collection and Analysis, and Plan Review

Professional Personnel

	Hours	Rate	Amount	
Software Engineer 1				
Rutaganira, Thierry	2.00	147.00	294.00	
Technical Assistant				
Nguyen, John	.50	108.00	54.00	
Totals	2.50		348.00	
Labor Total				**348.00**
		Total this Phase		**$348.00**

Phase 004 Basin Model and Water Budget

Professional Personnel

	Hours	Rate	Amount	
Engineer 2				
Ceyhan, Mahmut	17.00	187.00	3,179.00	
Totals	17.00		3,179.00	
Labor Total				**3,179.00**
		Total this Phase		**$3,179.00**

Phase 007 Projects and Actions for Sustainability Goals

Professional Personnel

	Hours	Rate	Amount	
Planner 2				
Eggleton, Charles	4.50	187.00	841.50	
Project Manager 2				
Van Lienden, Brian	41.00	266.00	10,906.00	
Totals	45.50		11,747.50	
Labor Total				**11,747.50**
		Total this Phase		**$11,747.50**

Please include our invoice number in your remittance. Thank you.

Project	0011078.01	CUYAMA GSP	Invoice	161007

Phase 008 Groundwater Sustainability Plan Implementation

Professional Personnel

	Hours	Rate	Amount	
Engineer 1				
Poore, Sebastien	24.75	162.00	4,009.50	
Engineer 2				
Ceyhan, Mahmut	27.50	187.00	5,142.50	
GIS Analyst				
Baldwin, Josh	10.00	101.00	1,010.00	
National Practice Leader				
Melton, Lyndel	2.00	320.00	640.00	
Planner 1				
Honn, Emily	2.50	162.00	405.00	
Project Manager 1				
Medlin, William	4.00	251.00	1,004.00	
Project Manager 2				
Van Lienden, Brian	15.00	266.00	3,990.00	
Senior Technical Practice Leader				
Taghavi, Ali	17.00	310.00	5,270.00	
Totals	102.75		21,471.00	
Labor Total				**21,471.00**
			Total this Phase	**$21,471.00**

Phase 009 Groundwater Sustainability Plan Document Development

Professional Personnel

	Hours	Rate	Amount	
National Practice Leader				
Melton, Lyndel	11.00	320.00	3,520.00	
Planner 2				
Eggleton, Charles	38.00	187.00	7,106.00	
Project Manager 2				
Van Lienden, Brian	1.00	266.00	266.00	
Totals	50.00		10,892.00	
Labor Total				**10,892.00**

Reimbursable

Vehicle Expenses			
1/31/2019	Van Lienden, Brian	Cuyama GSP SAC meeting	54.79
2/1/2019	Van Lienden, Brian	Cuyama GSP SAC meeting	61.15
2/2/2019	Van Lienden, Brian	Cuyama GSP SAC meeting	89.70
2/6/2019	Melton, Lyndel	Board Meeting	18.56
2/6/2019	Melton, Lyndel	Board Meeting	25.44
2/6/2019	Melton, Lyndel	Board Meeting	52.71
Travel & Lodging			
1/31/2019	Van Lienden, Brian	Cuyama GSP SAC meeting	107.99
1/31/2019	Van Lienden, Brian	Cuyama GSP SAC meeting	11.01
2/6/2019	Melton, Lyndel	travel to Board Meeting	45.50
2/7/2019	Melton, Lyndel	Board Meeting	45.50

Project	0011078.01	CUYAMA GSP		Invoice	161007
Meals					
1/31/2019	Van Lienden, Brian	Cuyama GSP SAC meeting		10.50	
	Reimbursable Total		**1.1 times**	**522.85**	**575.14**
Consultant					
Subcontractor Expense					
2/22/2019	The Catalyst Group, Inc.	Inv#387		9,364.10	
	Consultant Total		**1.1 times**	**9,364.10**	**10,300.51**
			Total this Phase		**$21,767.65**

Phase 010 Outreach, Education and Communication

Professional Personnel

	Hours	Rate	Amount	
Graphic Artist				
Fox, Adam	2.00	118.00	236.00	
National Practice Leader				
Melton, Lyndel	1.00	320.00	320.00	
Planner 1				
De Anda, Vanessa	5.25	162.00	850.50	
Project Manager 2				
Ayres, John	9.00	266.00	2,394.00	
Totals	17.25		3,800.50	
Labor Total				**3,800.50**
		Total this Phase		**$3,800.50**

Phase 011 Project Management

Professional Personnel

	Hours	Rate	Amount	
National Practice Leader				
Melton, Lyndel	9.00	320.00	2,880.00	
Planner 2				
Kidson, Jennifer	16.50	187.00	3,085.50	
Project Assistant				
Hughart, Desiree 1.25 110.00 137.50 Project Manager 2				
Van Lienden, Brian	6.00	266.00	1,596.00	
Senior Technical Practice Leader				
Lopezcalva, Enrique	.50	310.00	155.00	
Totals	33.25		7,854.00	
Labor Total				**7,854.00**
		Total this Phase		**$7,854.00**

Phase 013 Evapotranspiration Evaluation for Cuyama (Cat 1 – Task 2)

Professional Personnel

	Hours	Rate	Amount	
Project Manager 2				
Van Lienden, Brian	3.00	266.00	798.00	
Totals	3.00		798.00	
Labor Total				**798.00**

Project	0011078.01	CUYAMA GSP	Invoice	161007

Total this Phase **$798.00**

Phase 015 Project Management (Cat 1 – Task 4)

Professional Personnel

	Hours	Rate	Amount	
Project Manager 2				
Van Lienden, Brian	8.00	266.00	2,128.00	
Totals	8.00		2,128.00	
Labor Total				**2,128.00**

Total this Phase **$2,128.00**

Total this Invoice **$73,093.65**

Outstanding Invoices

Number	Date	Balance
152397	7/19/2018	180,525.65
153619	8/23/2018	135,300.00
154409	9/19/2018	195,124.42
155666	10/23/2018	101,772.20
156545	11/14/2018	84,659.70
157849	12/19/2018	142,959.49
159014	1/24/2019	101,806.18
160067	2/22/2019	87,543.93
Total		**1,029,691.57**

	Current Fee	Previous Fee	Total
Project Summary	**73,093.65**	**1,714,735.88**	**1,787,829.53**

Approved by:

Brian Van Lienden
Project Manager
Woodard & Curran

Progress Report

Cuyama Basin Groundwater Sustainability Plan Development

Subject:	**February 2019 Progress Report**
Prepared for:	Jim Beck, Executive Director, Cuyama Basin Groundwater Sustainability Agency (CBGSA)
Prepared by:	Brian Van Lienden, Woodard & Curran
Reviewed by:	Lyndel Melton, Woodard & Curran
Date:	March 20, 2019
Project No.:	0011078.01

This progress report summarizes the work performed and project status for the period of January 26, 2019 through February 22, 2019 on the Cuyama Basin Groundwater Sustainability Plan Development project. The work associated with this invoice was performed in accordance with our Consulting Services Agreement dated December 6, 2017, and with Task Orders 4 and 5, issued by the CBGSA on June 6, 2018. Note that Task Order 1, 2 and 3 were already 100% spent as of the beginning of this reporting period.

The progress report contains the following sections:

1. Work Performed
2. Budget Status
3. Schedule Status
4. Outstanding Issues to be Coordinated

1 Work Performed

A summary of work performed on the project during the current reporting period is provided in Tables 1 and 2 below. Table 1 shows work performed under Task Orders 2 and 4, which include tasks identified in the forthcoming Category 2 grant from the California Department of Water Resources (DWR). Table 2 shows work performed under Task Orders 3 and 5, which includes tasks identified in the forthcoming Category 1 grant from DWR.

Table 1: Summary of Task/Deliverables Status for Category 2 Tasks (Task Orders 2 and 4)

Task	Work Completed During the Reporting Period	Work Scheduled for Next Period
Task 1: Initiate Work Plan for GSP and Stakeholder Engagement Strategy Development	• Task 1 is completed; no work was undertaken on this task during this reporting period	• Task 1 is completed; no further work is anticipated
Task 2: Data Management System, Data Collection and Analysis, and Plan Review	• Final changes were made to the Data Management System in response to comments received.	• Task 2 is completed; no further work is anticipated
Task 3: Description of the Plan Area, Hydrogeologic Conceptual Model, and Groundwater Conditions	• Task 3 is completed; no work was undertaken on this task during this reporting period	• Task 3 is completed; no further work is anticipated
Task 4: Basin Model and Water Budget	• Sustainability and water supply scenarios were performed using the Integrated Water Flow Model (IWFM) and the results were presented to the Tech Forum, SAC and Board • A draft Water Budgets section was developed and submitted to the GSA Board for review	• Task 4 is completed; no further work is anticipated. Additional modeling work and updates to the Water Budget section will be performed in Task 9.
Task 5: Establish Basin Sustainability Criteria	• A draft Sustainability GSP section was developed and submitted to the GSA Board for review	• Task 5 is completed; no further work is anticipated. Additional updates to the Sustainability section will be performed in Task 9.
Task 6. Monitoring Networks	• Task 6 is completed; no work was undertaken on this task during this reporting period	• Task 6 is completed; no further work is anticipated

Task	Work Completed During the Reporting Period	Work Scheduled for Next Period
Task 7: Projects and Actions for Sustainability Goals	• Analyses were performed on potential projects and actions and presented to the Technical Forum, SAC and Board.	• Task 7 is completed; no further work is anticipated. A Projects and Actions GSP section will be developed under Task 9.
Task 8. GSP Implementation	• Developed updated presentation materials on the implementation plan and presented them for consideration by Technical Forum, SAC and Board	• Revise implementation plan components based on feedback from Technical Forum, SAC and Board
Task 9. GSP Development	• Developed GSP chapter contents for inclusion in the GSP Public Draft	• Additional development of the draft GSP
Task 10: Education, Outreach and Communication	• Participated in meetings with CBGSA Board and SAC	• Continued participation in meetings with CBGSA Board, SAC and local stakeholders
Task 11: Project Management	• Ongoing project management activities	• Ongoing project management activities

Table 2: Summary of Task/Deliverables Status for Category 1 Tasks (Task Orders 3 and 5)

Task	Work Completed During the Reporting Period	Work Scheduled for Next Period
Task 12: Groundwater Monitoring Well Network Expansion	• No work was undertaken on this Task during this reporting period.	• Refinement of proposed monitoring well locations
Task 13: Evapotranspiration Evaluation for Cuyama Basin Region	• Refinement of land use and METRIC ET estimates in Cuyama Basin model	• Continued refinement of land use and METRIC ET estimates in Cuyama Basin model
Task 14: Surface Water Monitoring Program	• No work was undertaken on this Task during this reporting period.	• Identification of surface water monitoring locations and gaps

Task	Work Completed During the Reporting Period	Work Scheduled for Next Period
Task 15: Category 1 Project Management	• Ongoing project management activities	• Ongoing project management activities

2 Budget Status

Table 3 shows the percent spent for each task under Task Order 1. 100% of the available Task Order 1 budget has been expended ($321,135.00 out of $321,135).

Table 3: Budget Status for Task Order 1

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
1	$ 35,768.00	$ 35,755.53	$ -	$ 35,755.53	$ 12.47	100%
2	$ 61,413.00	$ 61,413.00	$ -	$ 61,413.00	$ -	100%
3	$ 45,766.00	$ 45,766.00	$ -	$ 45,766.00	$ -	100%
4	$ 110,724.00	$ 110,724.00	$ -	$ 110,724.00	$ -	100%
5	$ -	$ -	$ -	$ -	$ -	n/a
6	$ -	$ -	$ -	$ -	$ -	n/a
7	$ 12,120.00	$ 12,120.00	$ -	$ 12,120.00	$ -	100%
8	$ -	$ -	$ -	$ -	$ -	n/a
9	$ -	$ -	$ -	$ -	$ -	n/a
10	$ 45,420.00	$ 45,432.47	$ -	$ 45,432.47	$ (12.47)	100%
11	$ 9,924.00	$ 9,924.00	$ -	$ 9,924.00	$ -	100%
Total	**$ 321,135.00**	**$ 321,135.00**	$ -	**$ 321,135.00**	$ -	**100%**

Table 4 shows the percent spent for each task under Task Order 2. 100% of the available Task Order 2 budget has been expended ($399,469.00 out of $399,469).

Table 4: Budget Status for Task Order 2

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
1	$ -	$ -	$ -	$ -	$ -	n/a
2	$ 48,457.00	$ 48,458.00	$ -	$ 48,458.00	$ (1.00)	100%
3	$ 24,182.00	$ 24,182.00	$ -	$ 24,182.00	$ -	100%
4	$ 103,880.00	$ 103,880.00	$ -	$ 103,880.00	$ -	100%
5	$ 60,676.00	$ 60,676.00	$ -	$ 60,676.00	$ -	100%
6	$ 65,256.00	$ 65,255.00	$ -	$ 65,255.00	$ 1.00	100%
7	$ 36,402.00	$ 36,402.00	$ -	$ 36,402.00	$ -	100%
8	$ -	$ -	$ -	$ -	$ -	n/a
9	$ -	$ -	$ -	$ -	$ -	n/a
10	$ 45,420.00	$ 45,420.00	$ -	$ 45,420.00	$ -	100%
11	$ 15,196.00	$ 15,196.00	$ -	$ 15,196.00	$ -	100%
Total	**$ 399,469.00**	**$ 399,469.00**	**$ -**	**$ 399,469.00**	**$ -**	**100%**

Table 5 shows the percent spent for each task under Task Order 3. 100% of the available Task Order 3 budget has been expended ($188,238.00 out of $188,238).

Table 5: Budget Status for Task Order 3

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
12	$ 53,244.00	$ 53,244.00	$ -	$ 53,244.00	$ -	100%
13	$ 69,706.00	$ 69,706.00	$ -	$ 69,706.00	$ -	100%
14	$ 53,342.00	$ 53,342.00	$ -	$ 53,342.00	$ -	100%
15	$ 11,946.00	$ 11,946.00	$ -	$ 11,946.00	$ -	100%
Total	**$ 188,238.00**	**$ 188,238.00**	$ -	**$ 188,238.00**	**$ -**	**100%**

Table 6 shows the percent spent for each task under Task Order 4 as of February 22, 2019. 88% of the available Task Order 4 budget has been expended ($675,371.80 out of $764,396).

Table 6: Budget Status for Task Order 4

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
1	$ -	$ -	$ -	$ -	$ -	n/a
2	$ 24,780.00	$ 24,445.50	$ 348.00	$ 24,793.50	$ (13.50)	100%
3	$ 26,912.00	$ 26,894.00	$ -	$ 26,894.00	$ 18.00	100%
4	$ 280,196.00	$ 277,011.26	$ 3,179.00	$ 280,190.26	$ 5.74	100%
5	$ 47,698.00	$ 47,641.88	$ -	$ 47,641.88	$ 56.12	100%
6	$ -	$ -	$ -	$ -	$ -	n/a
7	$ 117,010.00	$ 105,261.70	$ 11,747.50	$ 117,009.20	$ 0.80	100%
8	$ 69,780.00	$ 35,456.25	$ 21,471.00	$ 56,927.25	$ 12,852.75	82%
9	$ 91,132.00	$ -	$ 21,767.65	$ 21,767.65	$ 69,364.35	24%
10	$ 70,236.00	$ 65,965.60	$ 3,800.50	$ 69,766.10	$ 469.90	99%
11	$ 36,652.00	$ 22,527.96	$ 7,854.00	$ 30,381.96	$ 6,270.04	83%
Total	**$ 764,396.00**	**$ 605,204.15**	**$ 70,167.65**	**$ 675,371.80**	**$ 89,024.20**	**88%**

Table 7 shows the percent spent for each task under Task Order 5 as of February 22, 2019. 44% of the available Task Order 5 budget has been expended ($203,615.74 out of $459,886).

Table 7: Budget Status for Task Order 5

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
12	$ 196,208.00	$ 104,894.62	$ -	$ 104,894.62	$ 91,313.38	53%
13	$ 24,950.00	$ 22,445.51	$ 798.00	$ 23,243.51	$ 1,706.49	93%
14	$ 204,906.00	$ 57,588.06	$ -	$ 57,588.06	$ 147,317.94	28%
15	$ 33,822.00	$ 15,761.55	$ 2,128.00	$ 17,889.55	$ 15,932.45	53%
Total	**$ 459,886.00**	**$ 200,689.74**	**$ 2,926.00**	**$ 203,615.74**	**$ 256,270.26**	**44%**

3 Schedule Status

The project is on schedule. Work authorized under Task Orders 1, 2 and 3 are complete.

4 Outstanding Issues to be Coordinated

There are no outstanding issues at this time.