



# CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY STANDING ADVISORY COMMITTEE

## Committee Members

Roberta Jaffe (Chair)  
Brenton Kelly (Vice Chair)  
Claudia Alvarado

Brad DeBranch  
Louise Draucker  
Jake Furstenfeld

Joe Haslett  
Mike Post  
Hilda Leticia Valenzuela

## AGENDA

September 27, 2018

**Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee to be held on Thursday, September 27, 2018 at 4:00 PM, at the Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254. To hear the session live, call (888) 222-0475, code: 6375195#.**

### **Teleconference Locations:**

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

7870 Fairchild Ave  
Winnetka, CA 91306

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

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

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Approval of Minutes
5. Report of the General Counsel
6. Groundwater Sustainability Agency
  - a. Report of the Executive Director
  - b. Board of Directors Agenda Review
7. Groundwater Sustainability Plan
  - a. Groundwater Sustainability Plan Update
    - i. Monitoring Networks Section Release

- ii. Update on Data Management System Release
  - iii. Management Areas Discussion
  - b. Discussion on Hydrogeologic Conceptual Model Section – **ACTION**
  - c. Discussion on Groundwater Conditions Section
  - d. Technical Forum Update
  - e. Stakeholder Engagement Update
8. Items for Upcoming Sessions
9. Committee Forum
10. Public comment for items not on the Agenda

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

11. Adjourn

# Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee Meeting

August 30, 2018

## Draft Meetings Minutes

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

### PRESENT:

Jaffe, Roberta – Chair  
Kelly, Brenton – Vice Chair  
Alvarado, Claudia  
DeBranch, Brad  
Draucker, Louise  
Furstenfeld, Jake  
Post, Mike  
Valenzuela, Hilda Leticia  
Beck, Jim – Executive Director  
Hughes, Joe – Legal Counsel

### ABSENT:

Haslett, Joe

#### 1. Call to Order

Chair Roberta Jaffe called the Standing Advisory Committee (SAC) to order at 4:00 pm.

#### 2. Roll Call

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

#### 3. Pledge of Allegiance

The pledge of allegiance was led by Chair Jaffe.

#### 4. Approval of Minutes

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Executive Director Jim Beck presented the July 26, 2018 SAC minutes. Minor editorial changes were suggested, and a motion was made by Vice Chair Brenton Kelly to approve the minutes and seconded by Committee Member Brad DeBranch. The motion passed unanimously.

#### 5. Report of the General Counsel

Nothing to report.

#### 6. Discussion of Special Session for Public Review

Vice Chair Kelly reported that an ad hoc was appointed consisting of Committee Members Jake Furstenfeld, Louise Draucker, Claudia Alvarado, and himself met to discuss what they understood to be the limitations of holding a separate study group meeting to review the various Groundwater Sustainability Plan (GSP)

sections. They considered the following issues: budget, Brown Act, financial, legal, and preserving objectivity and impartiality.

The ad hoc proposed the idea of hosting a special session and felt these considerations could be addressed sufficiently. Vice Chair Kelly reported on how the ad hoc planned on constructing the meeting, which is expressed in his resolution memo to the CBGSA SAC. Chair Jaffe thanked the ad hoc and opened the floor for discussion.

Committee Member Draucker commented that the SAC would not be making decisions at the meetings. Mr. Beck asked when going through a particular document, how will they resolve technical issues without technical experts present. Vice Chair Kelly said the intent of meeting is to articulate questions the group may have to bring up to W&C at the following SAC meeting.

Local landowner Ann Myhre said she could understand why the concept of study groups was brought up, but when she thought about it further, she felt it was a slippery slope. She expressed her concern with the risk of unintentionally violating the Brown Act with a simple discussion. Vice Chair Kelly stated he felt that the discussions held at the study groups would be narrow enough to avoid Brown Act violations. Ms. Myhre said the SAC is putting themselves at risk without even knowing it. Chair Jaffe asked Ms. Myhre for clarification on the risk. Ms. Myhre replied that it is so easy to reach consensus in a committee and express your opinions but discussing what type of action the SAC is intending to take is another story.

CBGSA Board Director Jane Wooster said that committee members are expected to be prepared to come to a meeting and there are already workshops set up that can serve this function. She mentioned the SAC was appointed at the direction of the CBGSA and would need review the meeting requirements/parameters. Ms. Wooster said she thought such a meeting should be done in conjunction with the Board. She agreed with Ms. Myhre regarding the risk of the SAC holding such a meeting.

Vice Chair Kelly honored the different perspectives that were addressed and acknowledged potential risk.

Chair Jaffe said the original intent was to form a study group to understand the Groundwater Sustainability Plan (GSP) sections that were coming out for review and the SAC is ultimately trying to review these sections in a group setting without violating the Brown Act and without putting more responsibility on W&C and the Hallmark Group.

Triangle E. Farms owner Jim Wegis said his concern in reviewing GSP sections without the experts, is that it can obfuscate things.

Local resident Sue Blackshear said the idea of the study group is to have some relaxed time to digest the material and to get a handle on it, not to vote on it and form a bloc. She mentioned that she does not see a problem with having such a meeting.

CBGSA Board Director George Cappello said it is up to the individual to study the material and ask questions in the appropriate venues. He expressed concern of lawsuits arising from potential Brown Act violations.

Local landowner Steve Gliessman expressed the feeling of being muzzled. He said there is rarely an opportunity to ask questions and explore topics at the Board meeting, and can only really do this at the SAC meetings. He mentioned that he was looking forward to reading through the document as a group and feels like that opportunity is getting squashed.

Committee Member Furstenfeld asked if there is a way to have a forum to discuss the sections.

Mr. Beck commented that the committee members are in the same place as everyone else and this is not a unique situation. Mr. Beck said he has never seen a committee meet separately to review documents. He stated what usually happens is committees will ask questions during the meeting and the experts will take as much time as necessary to address your questions. He said another issue with holding an additional meeting is some of the Committee Members may not be able to attend and this can create an accessibility issue with some Members having access to information that not all do. Mr. Beck said the SAC's most cost-effective option, with the lowest risk is, is extending the SAC meeting.

Chair Jaffe stressed the SAC's desire to comply with the Brown Act and this is why the idea of study groups was brought up.

CBGSA Board Director Byron Albano said that he is wondering where W&C will have the time to discuss the technical and political issues with the tight timeframe. He mentioned both the Board and SAC are frustrated with not having enough time. Mr. Albano suggested that everyone should read the Department of Water Resources (DWR) best practices at least twice. Additionally, he mentioned the Cuyama Basin Water District (CBWD) has their consultant coming and reporting at the CBWD meetings, which are not moving at the same speed of W&C. He said that the CBWD meetings are open and recommended that residents, Committee members, and Board members attend those. Lastly, he suggested that perhaps Santa Barbara Organic Pistachio Company owner Gene Zannon could organize a hydrogeologist session to understand educational sections.

Chair Jaffe asked Mr. Beck to clarify the Brown Act issues of attending CBWD meetings. Mr. Beck replied that all of the SAC committee members could attend the CBWD meeting, but less than a quorum could talk. Mr. Beck said he will have legal counsel Joe Hughes send out clarification on this item.

Committee Member Mike Post said he wanted to echo Mr. Beck in that over 30 years of working in public service he has never seen study groups happen. He said a special session does not specify who is taking responsibility for the equipment and potential Public Records Act documentation. He said he believes that everyone has good intentions, but good intentions do not protect you from the law.

Mr. Albano asked what the purpose of meeting separately is and what would be done with the information. Chair Jaffe said the purpose is to understand the material more and use that information to comprehend the GSP sections in a more in-depth way.

Chair Jaffe asked Mr. Beck how to proceed procedurally from here. Mr. Beck said that the SAC can make a motion and vote on this, or the SAC can decide to not vote and report the discussions held to the Board, including the suggestion of attending the CBWD meetings. Mr. Beck said there could be a discussion at the joint Board and SAC meeting on September 5, 2018.

The SAC committee decided to discuss the study group in further detail at the September 5, CBGSA Board of Directors and SAC joint meeting:

## **7. Groundwater Sustainability Agency**

### **a. Report of the Executive Director**

Nothing to report.

**i. Groundwater Sustainability Plan Section Development Strategy and Responsibility**

Mr. Beck provided a brief overview of the document which is included in the SAC packet. He mentioned he had received a number of questions regarding the Board and SAC's role in the GSP document review process. Additionally, he wanted to make clear that the Board and SAC is not precluded from providing their personal comments on GSP sections.

Mr. Beck reported that while a range of GSP section comments are received, grammatical comments will not be tracked in the comment matrix to keep the matrix to a manageable size. He reported that the GSP document review process begins with stakeholders having four weeks to provide comments regarding GSP sections; then, W&C will draft a comment response matrix and distribute a revised draft to stakeholders, the SAC, and the Board. An initial review will occur at the SAC meeting following the draft.

Mr. Beck said he wanted to be clear that the SAC does not have to solve problems. If consensus is reached, great, but it does not have to be. Chair Jaffe said she really appreciates Mr. Beck writing this process report.

Vice Chair Kelly appreciated the flexibility with reviewing the GSP sections but asked if a redline strikeout version would be included with the revised draft. Mr. Van Lienden stated he was concerned with the effort required when addressing additional comments that arise from an additional review of a redline strikeout version and to remain on-budget, and on-schedule, they will only release a final, clean draft that stakeholders can review to see how it tracks with their potential comments.

Mr. Albano asked if it would be better for the SAC to group the comments to educate the CBGSA Board members to read those comments. He mentioned that he is a little concerned that the SAC is directing staff to edit the documents as opposed to presenting their comments to the Board. Mr. Beck said we are trying to prevent the process from devolving into that, but that is a good characterization.

Ms. Wooster suggested individuals redline their copy and then check W&C's copy to see if their comments were addressed. She said that everyone should take the responsibility on themselves individually. Ms. Wooster asked if the version can be marked clearly on the top of the page of each section, and staff agreed to this.

Mr. Cappello asked if the Board will get the original document or the revised document including the SAC's comments. Mr. Beck said the Board will receive the original.

Chair Jaffe asked if the Board requires a supermajority vote on these GSP sections. Mr. Beck said he will have Joe Hughes clarify.

A motion was made by Vice Chair Kelly and seconded by Committee Member Jake Furstenfeld to approve the Groundwater Sustainability Plan Section Development Strategy and Responsibility report. The motion passed unanimously.

**b. SGMA Educational Items: How a Model Works – Current and Future Conditions and Management Actions & Projects**

GSP Consultant Woodard & Curran Project Manager Brian Van Lienden provided an update on the

educational items entitled “How a Model Works – Current and Future Conditions” and “Management Actions & Projects.”

Local landowner Steve Gliessman asked, for domestic water use, how would the model be used for areas not in the Cuyama Community Services District. Mr. Van Lienden replied that the model will be based on estimated using recent census information that is being developed.

Ms. Blackshear said she was confused about the 1967-2017 date range and thought the model was not going to go back that far. Mr. Van Lienden said they are just looking at 50 years of data for precipitation and resulting runoff and recharge.

Mr. Van Lienden asked if anyone has ideas for demand management and potential water supply projects, to please let him know as they start developing management actions.

Mr. Gliessman asked Mr. Van Lienden if they have looked into moving groundwater from plentiful areas to areas that are lacking. Mr. Van Lienden said they will investigate this.

Mr. Cappello said W&C really needs to explore downstream impacts before getting to far into exploring capturing flood flows.

Ms. Wooster commented that trying to buy water from the coastal areas does not seem sustainable.

Committee Member Furstenfeld suggested prescribed burning (forest management) to remove non-native brush that is sucking up water.

**c. Board of Directors Agenda Review**

Mr. Beck provided an overview of the September 5, 2018 Joint Meeting of CBGSA Board of Directors and Standing Advisory Committee agenda.

**8. Groundwater Sustainability Plan**

**a. Groundwater Sustainability Plan Update**

Mr. Van Lienden provided an update on GSP activities, which is included in the SAC packet.

Vice Chair Kelly asked what the status of the Undesirable Results Narrative is and Mr. Van Lienden replied W&C has received over 300 comments on it and some were related to the thresholds document. W&C is strategizing how to pair reviews of the related documents together.

**b. Technical Forum Update**

Mr. Van Lienden provided an overview of the August 3, 2018 technical forum call. A summary of the issues discussed is provided in the packet.

Mr. Van Lienden reported that moving forward, the tech forum will occur before the SAC to better facilitate technical input to the GSP development process.

**c. Hydrogeologic Conceptual Model Update**

Mr. Van Lienden provided an update on the Hydrogeologic Conceptual Model (HCM).

Mr. Van Lienden said W&C had received 300-400 comments regarding the HCM and Hydrogeologist

John Ayres will be presenting the HCM for consideration of adoption at the next SAC meeting on September 27, 2018.

**d. Groundwater Conditions**

Mr. Van Lienden provided an overview of the groundwater conditions.

Mr. Van Lienden reported on the validation of Grimmway and Bolthouse data with other public well data. CBGSA Director and Grimmway employee George Cappello informed the group that pump companies test their wells.

Mr. Gliessman asked if some of the wells are drilled below the groundwater basin and Grapevine Capital Ray Shady said they have drilled their wells to bedrock.

**e. Monitoring Networks**

Mr. Van Lienden provided an overview of the monitoring networks.

Chair Kelly asked if monitoring wells are distinct from production wells. Mr. Cappello commented that you would need to catch a production well at a non-use period, so the well levels are not jumping all over the place. Mr. Cappello said Grimmway could let W&C know what wells are available and when.

Chair Jaffe asked if standard monitoring procedures will be developed. Mr. Van Lienden said they will and will be part of the normal review process with the SAC and Board.

Chair Jaffe asked if we are not proposing to monitor heavy metals for budget reasons. Mr. Van Lienden said this is a reason, and SGMA management actions do not mandate mitigation for this.

**f. Stakeholder Engagement Update**

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

Chair Jaffe asked if a SAC quorum will need to meet at the Cuyama Valley Family Resource Center to adjourn to the Recreation District. Hallmark Group's Taylor Blakslee confirmed.

**9. Items for Upcoming Sessions**

Nothing to report.

**10. Committee Forum**

Chair Jaffe informed the group of the Union of Concerned Scientists' recent publication which features several SAC Committee Members and is a good article that features Cuyama Valley.

Vice Chair Kelly thanked the Hallmark Group and WH&C for keeping the website updated. He said the website is a very useful tool.

**11. Public comment for items not on the Agenda**

Mr. Gliessman suggested an educational item on water quality monitoring and why water quality monitoring is performed. Mr. Van Lienden said we will have a monitoring section coming out next month and can report on some of this.



Ms. Myhre said this falls under the California State Water Resources Control Board (SWRCB) and you may want to invite someone from them to talk to the SAC and Board after next July.

A brief discussion occurred regarding the upcoming workshop on September 5, 2018 and Mr. Albano said having individuals contribute personal comments would be more helpful than “consensus” derived from a table of participants.

Ms. Jaffe said in her experience, small groups foster more information, so maybe some combination will be helpful. She mentioned that it is important to set feedback parameters out at the beginning of the meeting to receive effective feedback. Vice Chair Kelly said takeaways are important to clarify at workshops, and Chair Jaffe said we need to encourage the use of comment sheets.

## **12. Adjourn**

Chair Jaffe adjourned the meeting at 7:00 p.m.

I, Jim Beck, Executive Director of the Cuyama Basin Groundwater Sustainability Agency, do hereby certify that the foregoing is a fair statement of the proceedings of the meeting held on Thursday August 30, 2018, by the Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee.

Jim Beck

Dated: September 27, 2018



TO: Standing Advisory Committee  
Agenda Item No. 6b

FROM: Jim Beck, Executive Director

DATE: September 27, 2018

SUBJECT: Board of Directors Agenda Review

**Issue**

Review of the October 3, 2018 Cuyama Basin Groundwater Sustainability Agency Board of Directors agenda.

**Recommended Motion**

None – information only.

**Discussion**

The October 3, 2018 Cuyama Basin Groundwater Sustainability Agency Board of Directors agenda is provided as Attachment 1 for review.



# CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD OF DIRECTORS

## Board of Directors

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

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

## AGENDA

October 3, 2018

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, October 3, 2018 at 4:00 PM, at the Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254. To hear the session live call (888) 222-0475, code: 6375195#.

### **Teleconference Locations:**

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

County Government Center  
 1055 Monterey Street, Room D361  
 San Luis Obispo, CA 93408

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1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Approval of Minutes
  - a. September 5, 2018
5. Report of the General Counsel
6. Report of the Standing Advisory Committee

7. Groundwater Sustainability Plan
  - a. Groundwater Sustainability Plan Update
    - i. Monitoring Networks Section Release
    - ii. Update on Groundwater Conditions Section
    - iii. Update on Data Management System Release
    - iv. Management Areas Discussion
  - b. Hydrogeologic Conceptual Model Section Adoption
  - c. Technical Forum Update
  - d. Stakeholder Engagement Update

8. Groundwater Sustainability Agency
  - a. Report of the Executive Director
  - b. Progress & Next Steps

9. Financial Report
  - a. Financial Management Overview
  - b. Financial Report
  - c. 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



TO: Standing Advisory Committee  
Agenda Item No. 7a

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

DATE: September 27, 2018

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 consultant Woodard & Curran's GSP updates are provided as the following attachments:

- Attachment 1 – GSP Update
- Attachment 2 – Monitoring Networks Section Release
- Attachment 3 – Update on Data Management System Release
- Attachment 4 – Management Areas Discussion

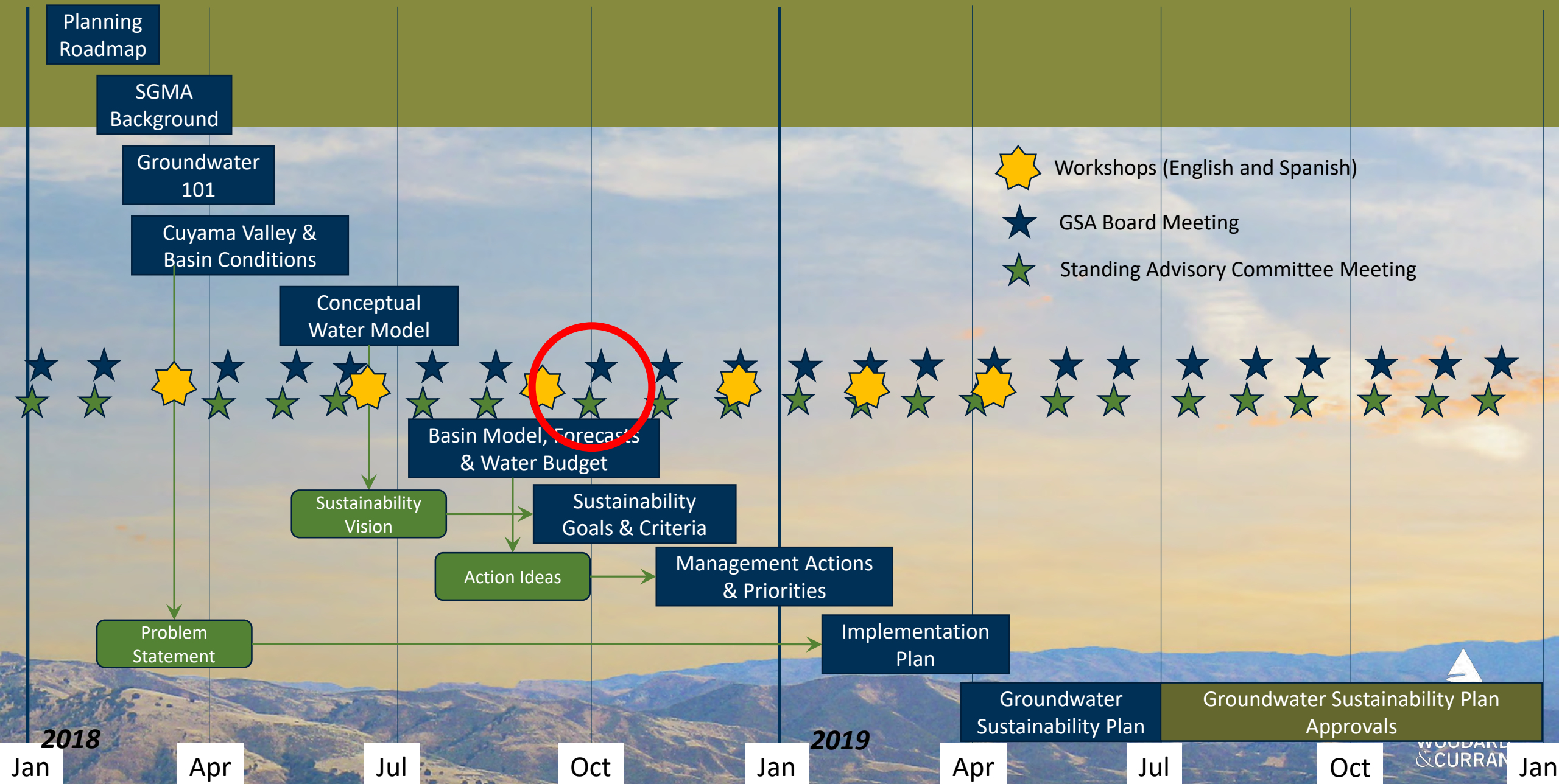
Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Update

September 27, 2018



# Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap <sup>15</sup>



# September GSP Accomplishments

- ✓ Conducted Cuyama Basin GSP Workshops
- ✓ Distributed draft Monitoring Networks section
- ✓ Identified well locations for CA DWR Technical Support Services
- ✓ Released draft data management system application
- ✓ Refined historical calibration of GSP numerical model



# Cuyama Basin Groundwater Sustainability Agency

## Monitoring Networks

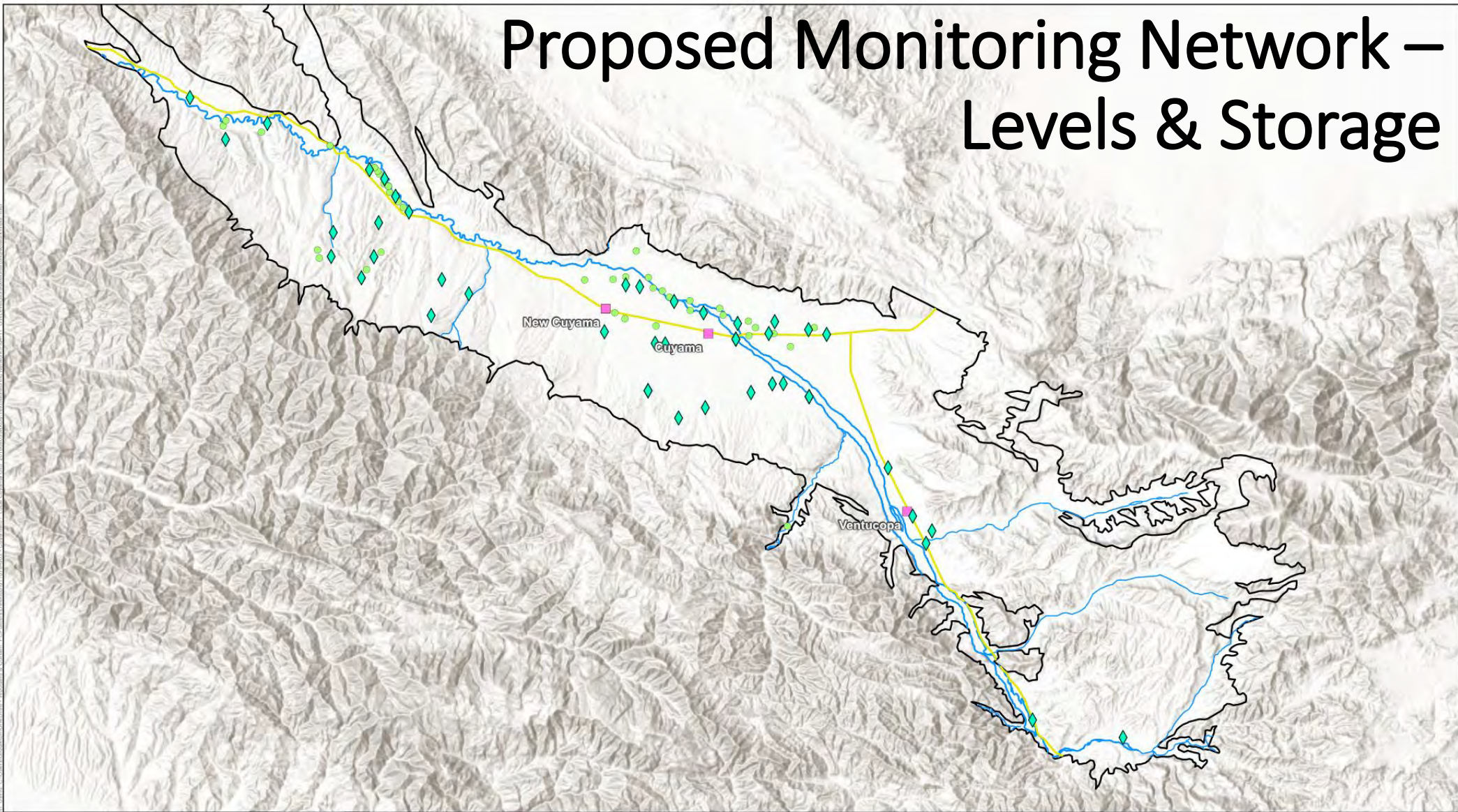
September 27, 2018



# Monitoring Networks Draft GSP Section

- Draft GSP Section provided to SAC and Board for review as part of Board Packet on September 21<sup>st</sup>
- Monitoring Networks section describes:
  - Existing monitoring used
  - Groundwater level and storage monitoring network
  - Degraded water quality monitoring network
  - Land subsidence monitoring network
  - Depletions of interconnected surface water monitoring network
- Comments are due on October 19<sup>th</sup>

# Proposed Monitoring Network – Levels & Storage



**Figure 4-17: Cuyama GW Basin Groundwater Level & Storage Monitoring Network Wells**  
 Cuyama Basin Groundwater Sustainability Agency  
 Cuyama Valley Groundwater Basin Groundwater Sustainability Plan  
 September 2018



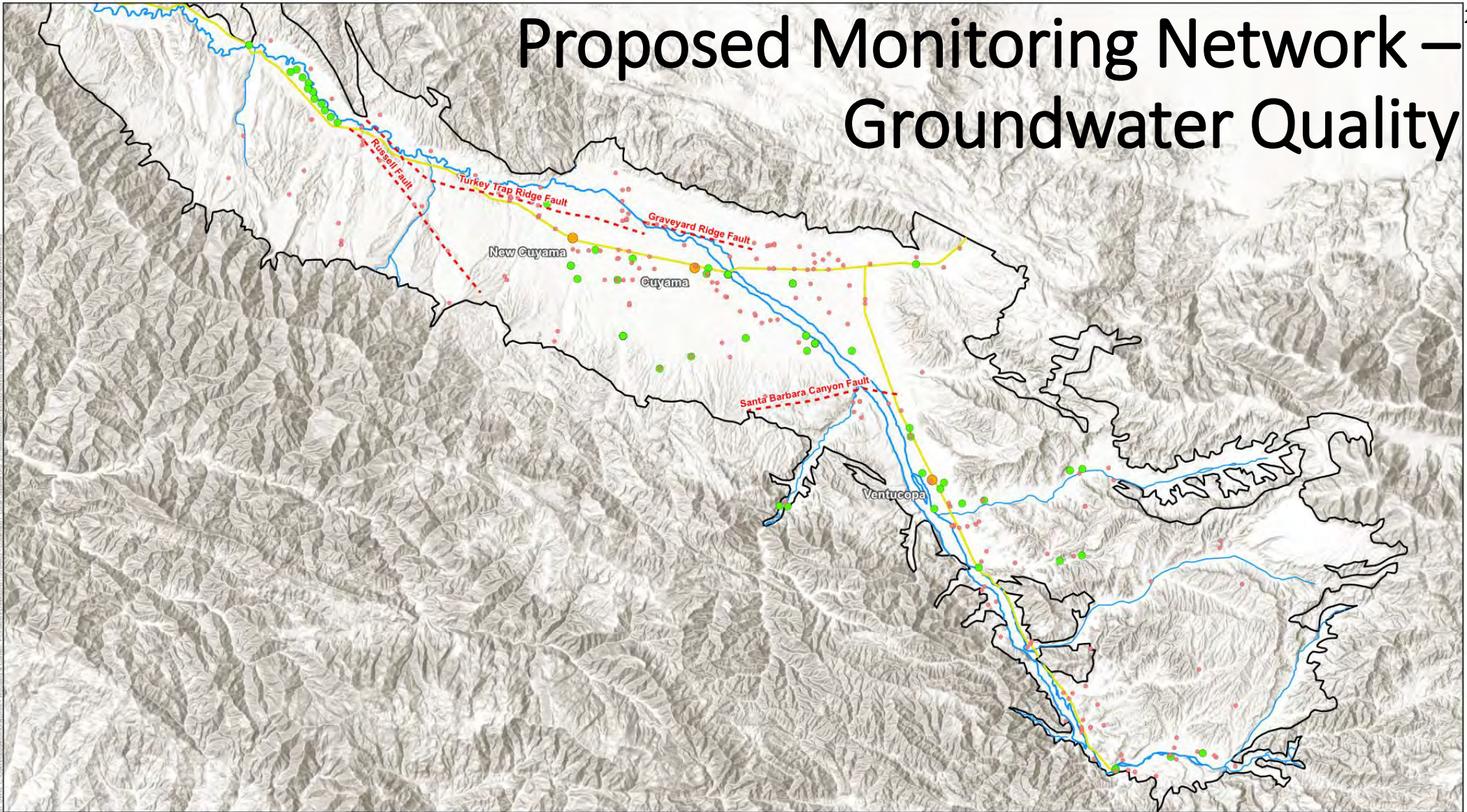
Legend

- Cuyama Basin
- Towns
- Highways
- Cuyama River
- Streams

- Monitoring Network Wells**
- ◆ Representative Wells
  - Monitoring Network Wells



# Proposed Monitoring Network – Groundwater Quality



**Figure 4-18: Cuyama GW Basin Groundwater Quality Monitoring Network Wells**  
 Cuyama Basin Groundwater Sustainability Agency  
 Cuyama Valley Groundwater Basin Groundwater Sustainability Plan  
 September 2018



Legend

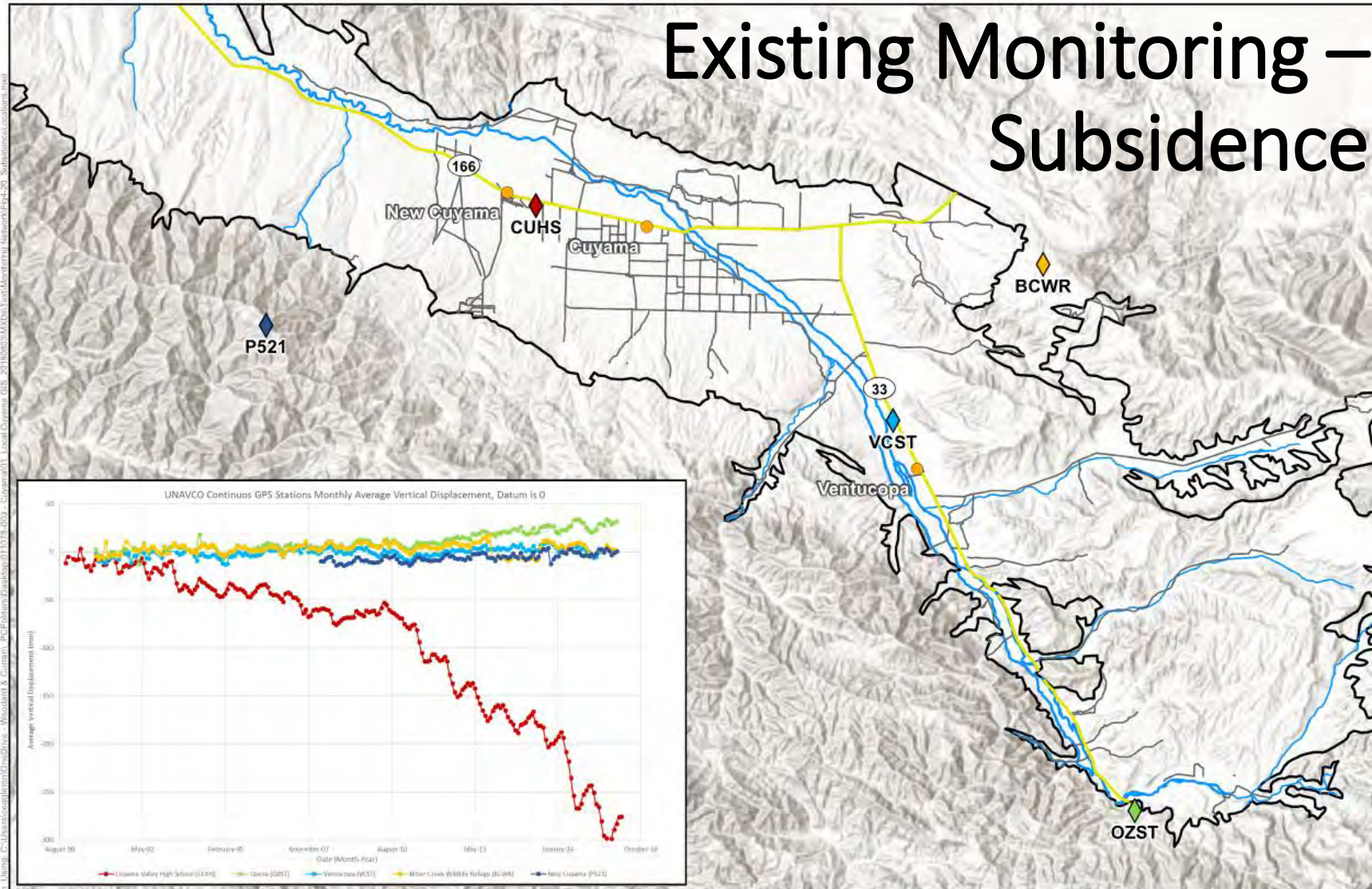
- Cuyama Basin
- Towns
- Highways
- Cuyama River
- Streams
- - - Faults
- Representative Wells and Groundwater Quality Monitoring Network Wells
- Non-Groundwater Quality Monitoring Network Wells

All wells included in the Groundwater Quality Monitoring Network have been measured since 1/1/2008. Wells measured prior to 2008 are not included.

N  
 0 1.75 3.5 7 Miles



# Existing Monitoring – Subsidence



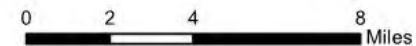
**Figure 4-20: Currently Active Subsidence Monitoring Locations**

Cuyama Basin Groundwater Sustainability Agency  
 Cuyama Valley Groundwater Basin Groundwater Sustainability Plan  
 September 2018



Legend

- Cuyama Basin
- Cuyama River
- Towns
- Streams
- Highways
- Local Roads



# Cuyama Basin Groundwater Sustainability Agency

## Data Management System

September 27, 2018



# Data Management System

- Draft Data Management System (DMS) for the Cuyama Groundwater Basin posted to GSA website on Thursday, September 20
- Data Management System includes information on:
  - Groundwater wells
  - Groundwater levels and quality
  - Surface water flows
  - Precipitation
  - Subsidence
- A quick start guide is included with instructions on how to use the DMS

# Cuyama Basin Groundwater Sustainability Agency

## Management Areas

September 27, 2018





# Process for Defining Management Areas

- Solicited public input at September Workshop (Sep)
- Screen and evaluate the options (Sep)
- Develop technically-based recommendation (Sep-Oct)
- Present recommendation to SAC and Board (Oct)
- Revised as needed (Oct)
- Board adoption (Nov)

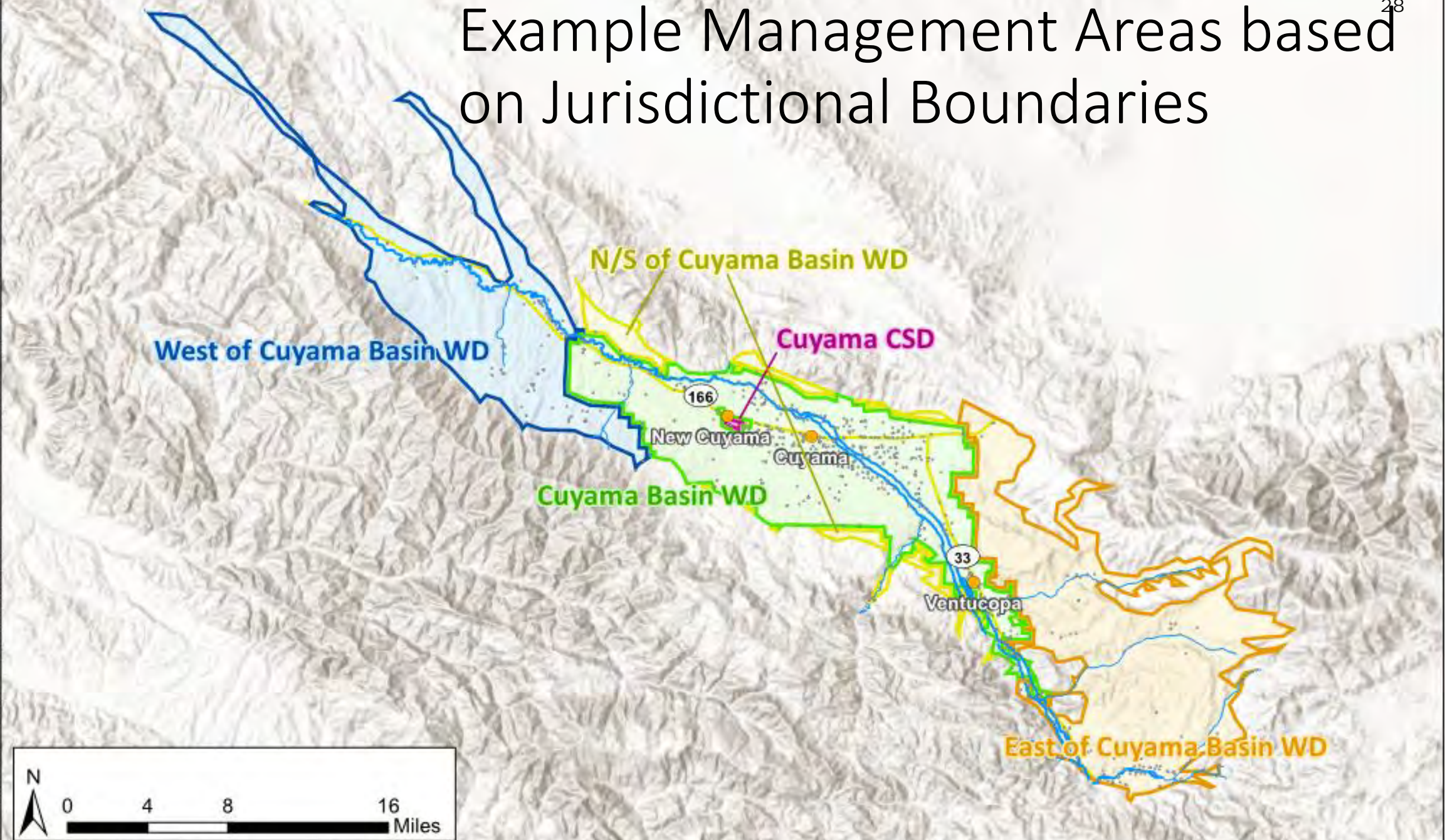
# What is a Management Area?

- Management areas are optional but may be established at GSA's discretion
- A management area can be used to:
  - Set different minimum thresholds
  - Set different measurable objectives
  - Set up different density and frequency of monitoring
- Without management areas it is difficult to have different minimum thresholds and measurable objectives

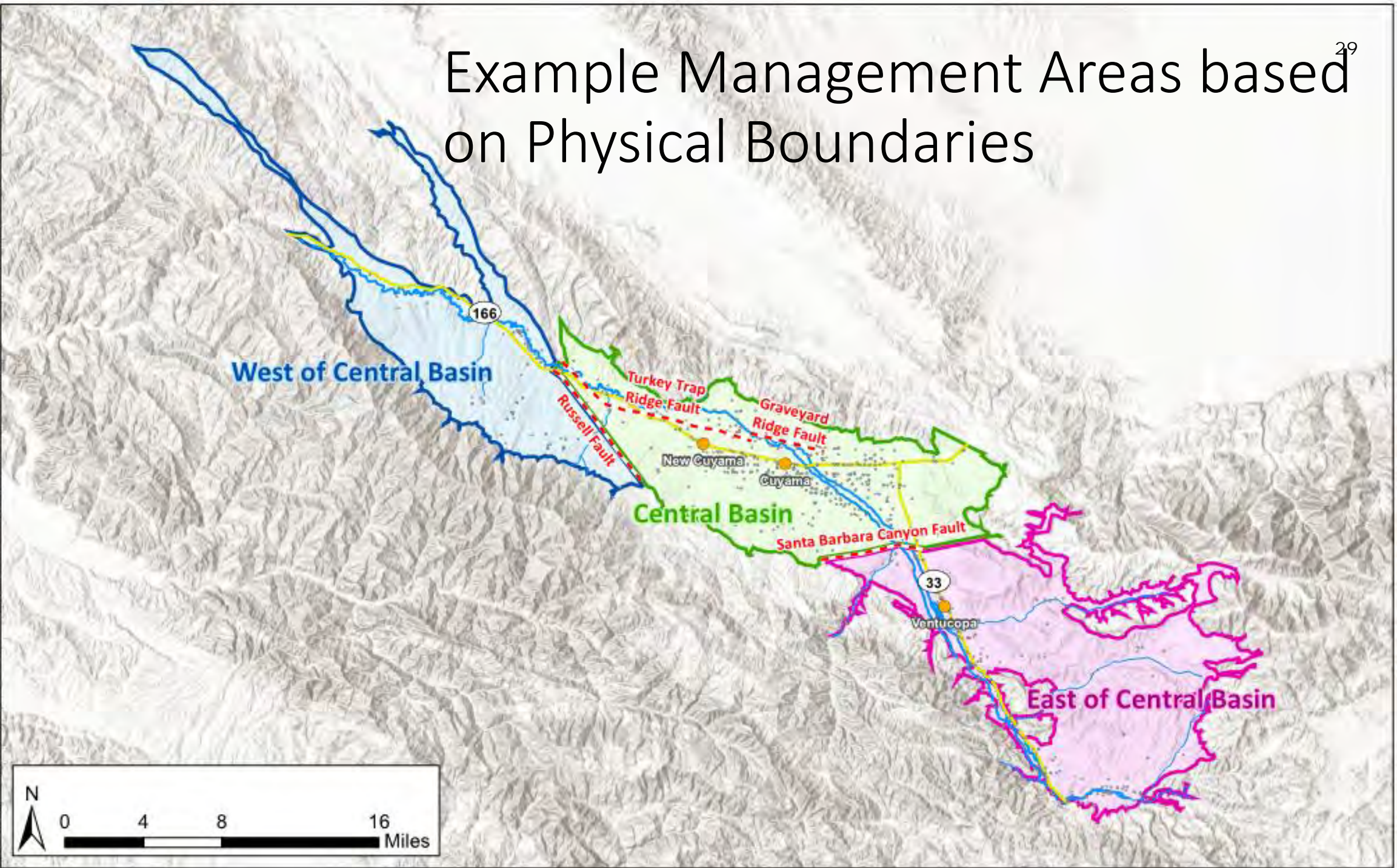
# Options for the Cuyama Groundwater Basin

- Potential Jurisdictional Boundaries
  - Cuyama Community Services District
  - Cuyama Basin Water District
  - Areas Outside Both Districts
  - Four Counties
- Potential Physical Boundaries
  - Russell Fault
  - Santa Barbara Canyon Fault
- Current Basin Conditions
  - Based on current groundwater levels

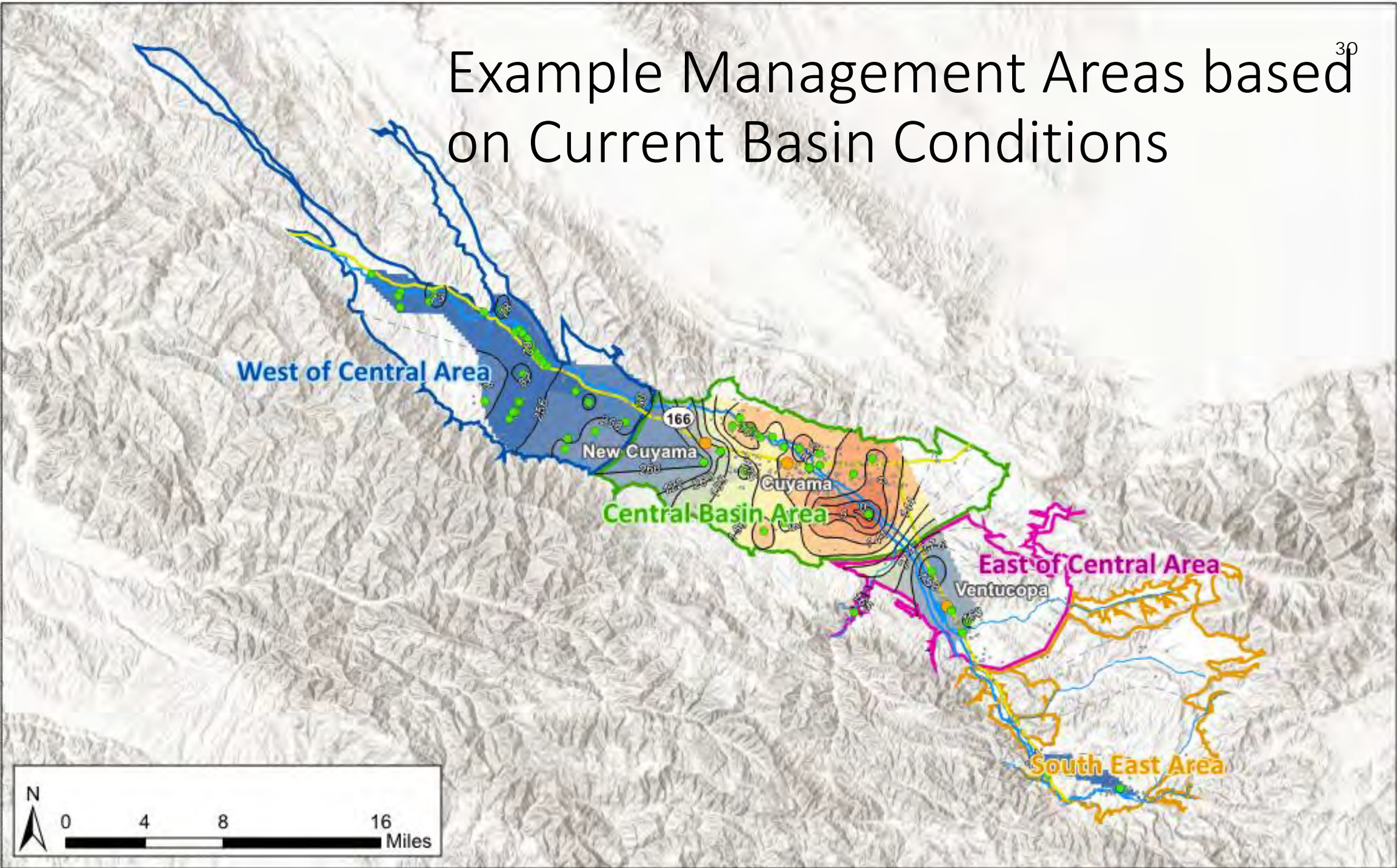
# Example Management Areas based on Jurisdictional Boundaries



# Example Management Areas based on Physical Boundaries



# Example Management Areas based on Current Basin Conditions



# Recommended Management Areas

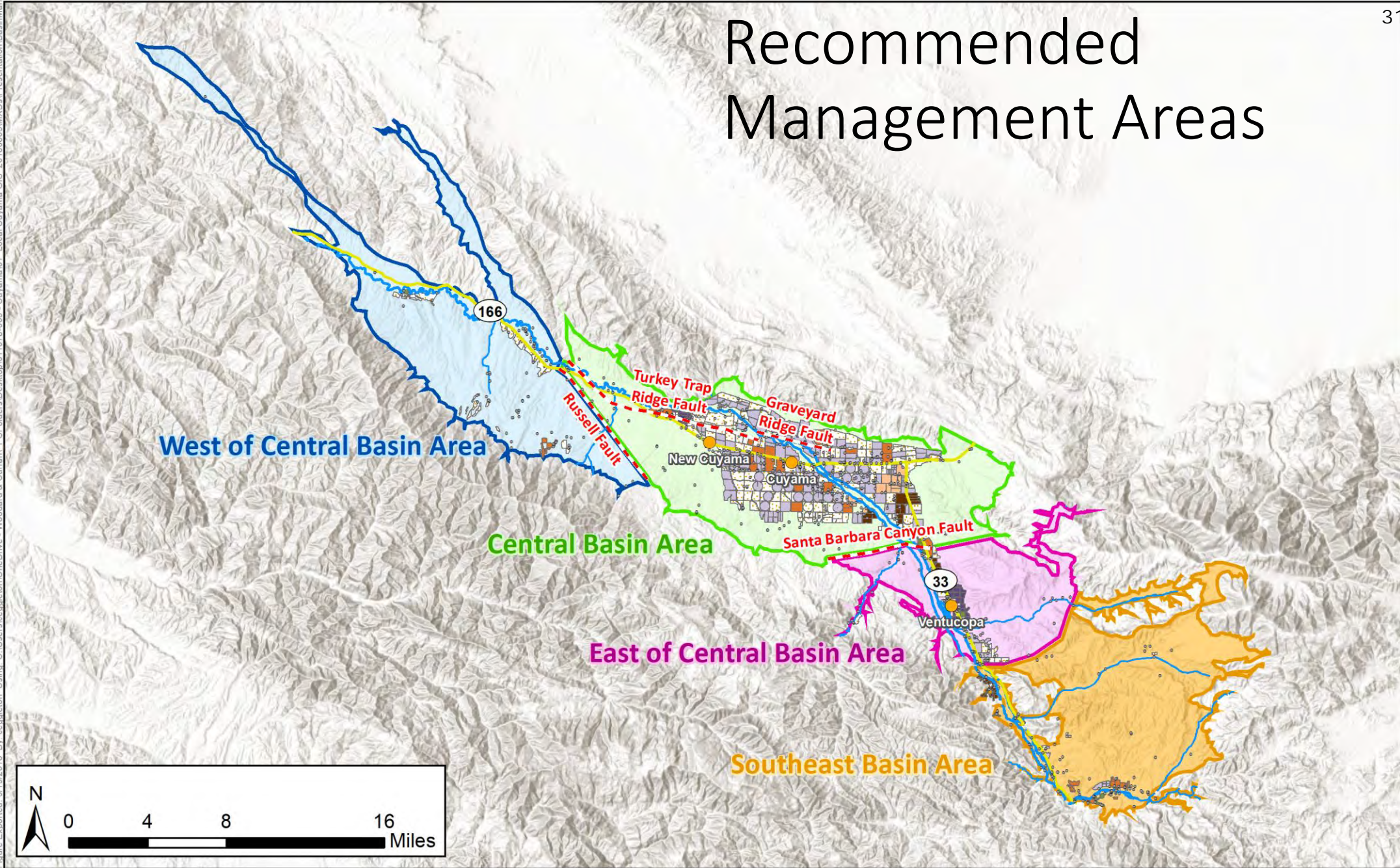


Figure Exported: 9/19/2018, By: ceapleton, Usmap, C:\Users\ceapleton\OneDrive - Woodard & Curran\ PC\Folders\Desktop\011078-003 - Cuyama\01 - Local Cuyama GIS - 20180803\WXDs\Presentation\BasinManagement



TO: Standing Advisory Committee  
Agenda Item No. 7b

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

DATE: September 27, 2018

SUBJECT: Discussion on Hydrogeologic Conceptual Model Section

**Issue**

Recommend adoption of the Hydrogeologic Conceptual Model.

**Recommended Motion**

Adopt the Hydrogeologic Conceptual Model.

**Discussion**

An overview of the Hydrogeologic Conceptual Model is provided as Attachment 1.



Cuyama Basin Groundwater Sustainability Agency

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# Discussion on Hydrogeologic Conceptual Model

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September 27, 2018



# Discussion on Hydrogeologic Conceptual Model

- The Hydrogeologic Conceptual Model provides the geologic information needed to understand the framework that water moves through in the basin.
- Hydrogeologic Conceptual Model section includes:
  - Regional Geologic and Structural Setting
  - Geologic History
  - Geologic Formations/Stratigraphy
  - Faults and Structural Features
  - Principal Aquifers and Aquitards
  - Topography, Surface Water and Recharge

# Discussion on Hydrogeologic Conceptual Model

- Received 205 comments from 14 reviewers
- Summary of major comments:
  - Concerns about faults
  - Concerns about hydrogeologic features
  - Concerns about items that will be addressed in other GSP sections

# Discussion on Hydrogeologic Conceptual Model

- Are there geologic conditions about the Basin that are not yet incorporated into the HCM?
- Do any of the components of the HCM need further clarification?
  - Regional Geologic and Structural Setting
  - Geologic History
  - Geologic Formations/Stratigraphy
  - Faults and Structural Features
  - Principal Aquifers and Aquitards
  - Topography, Surface Water and Recharge



TO: Standing Advisory Committee  
Agenda Item No. 7c

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

DATE: September 27, 2018

SUBJECT: Discussion on Groundwater Conditions Section

**Issue**

Discussion on the Groundwater Conditions section.

**Recommended Motion**

None – information only.

**Discussion**

An update on the groundwater conditions section is provided as Attachment 1.

# Cuyama Basin Groundwater Sustainability Agency

## Discussion on Groundwater Conditions

September 27, 2018



# Discussion on Groundwater Conditions

- The Groundwater Conditions Section describes and presents groundwater trends, levels, hydrographs and level contour maps, estimates changes in groundwater storage, identifies groundwater quality issues, addresses subsidence and surface water interconnection.
- The Groundwater Conditions section includes:
  - Groundwater trends
  - Changes in groundwater storage (placeholder)
  - Land subsidence
  - Groundwater quality
  - Interconnected surface water systems (placeholder)
  - Groundwater dependent ecosystems (placeholder)

# Discussion on Groundwater Conditions

- Are there groundwater conditions about the Basin that are not yet incorporated into the Groundwater Conditions section?
- Do any of the components of the Groundwater Conditions section need further clarification?
  - Groundwater trends
  - Land subsidence
  - Groundwater quality





TO: Standing Advisory Committee  
Agenda Item No. 7d

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

DATE: September 27, 2018

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 August 31, 2018 technical forum meeting is provided as Attachment 1, and the next forum is scheduled for October 26, 2018.



## MEETING MEMORANDUM

PROJECT: Cuyama Basin Groundwater Sustainability Plan Development

MEETING DATE:  
8/31/2018

MEETING: Technical Forum Conference Call

ATTENDEES: Matt Young (Santa Barbara County Water Agency)  
Matt Scudato (Santa Barbara County Water Agency)  
Matt Klinchuch (Cuyama Basin Water District)  
Dennis Gibbs (Santa Barbara Pistachio Company)  
Neil Currie (Cleath-Harris Geologists)  
John Fio (EKI)  
Jeff Shaw (EKI)  
Anona Dutton (EKI)  
Brian Van Lienden (Woodard & Curran)  
Sercan Ceyhan (Woodard & Curran)  
Ali Taghavi (Woodard & Curran)  
Byron Clark (Davids Engineering)

### 1. AGENDA

- Approach for Cuyama Basin model development
- Preliminary modeling results for Cuyama Basin groundwater conditions
- Next steps

### 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	Will you make the IDC and IWFM model files available for review?	Jeff Shaw	Model files will be made available once the model is fully calibrated. Calibration is still ongoing for both the IDC and IWFM, and will be refined based on stakeholder feedback
2	What is the status of the IDC calibration?	Jeff Shaw	As mentioned above, IDC calibration continues to be refined; however, the model is currently reasonable enough to move forward with groundwater model calibration. Additional back and forth with IDC and IWFM will take place during the full model calibration.
3	What factors/parameters are most sensitive to agricultural efficiency levels in the model?	John Fio	There are many factors that affect agricultural efficiency; the target soil moisture fraction is one of the last factors to be refined as part of the calibration.



4	There are some years (e.g. 2002) where the model currently shows small net loss from the groundwater aquifer to the stream. Is this correct?	John Fio	This is a preliminary result, which is subject to ongoing revisions, refinement, and correction.
5	Some wells are at the edge of the Upper and Lower Morales formations; this could explain why groundwater levels in those wells are dipping recently	Neil Currie	This will be considered as model refinement continues.
6	Are calibration results available for the western portion of the basin?	Neil Currie	Results for this area are not yet complete because model calibration is being done from upstream to downstream.
7	Is the drop in CSD well levels related to subsidence?	Jeff Shaw	There may be a relationship, but subsidence is likely to have a small effect on aquifer storage
8	Reductions in CSD well levels may be related to development of the nearby Duncan Family Farms in the <b>late 1990's</b>	Dennis Gibbs	This will be investigated and considered as part of the model refinement.
9	A deep percolation estimate of 38 taf/year is concerning because tests have shown water in the aquifer to be very old	Dennis Gibbs	The deep percolation value will be refined as the model calibration is completed
10	Does the model have a time lag in deep percolation to the aquifer?	John Fio	Yes, there is a time lag because the model includes an unsaturated zone between the root zone and the groundwater zone.
11	<b>What are the model's initial conditions?</b>	John Fio	Initial conditions are based on observed historical data at the beginning of the calibration period in 1994
12	Does the model represent discontinuities near Santa Barbara Fault as part of the initial conditions? This could improve run-time.	John Fio	The available data does not have the resolution necessary to do so. The model solves for the discontinuities as part of its solution.
13	Is the Santa Barbara Fault keyed into bedrock at its east end?	John Fio	Yes
14	Are you comparing the model to the USGS model?	Anona Dutton	The USGS model is used for reference and for comparison, but their model data is not used directly with the exception of the geologic layering in the center of the basin. There are tables comparing water budgets in last Technical Forum Call.

Cuyama Basin Groundwater Sustainability Agency

# Technical Forum Update

September 27, 2018

# September 21<sup>st</sup> Technical Forum Discussion

- Monitoring Networks
- Numerical Model Development Update
- Management Areas
- DWR Technical Services Program
- Next steps
- Next Meeting – October 19<sup>th</sup>
- Monthly Meetings – first Friday before each Standing Advisory Committee meeting

# Technical Forum Members

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



TO: Standing Advisory Committee  
Agenda Item No. 7e

FROM: Mary Currie, Catalyst Group

DATE: September 27, 2018

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, the September 5, 2018 Workshop Summary is provided as Attachment 2, and an updated matrix that matches GSP sections with corresponding educational topics is provided as Attachment 3.

Cuyama Basin Groundwater Sustainability Agency

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# Groundwater Sustainability Plan Stakeholder Engagement Update

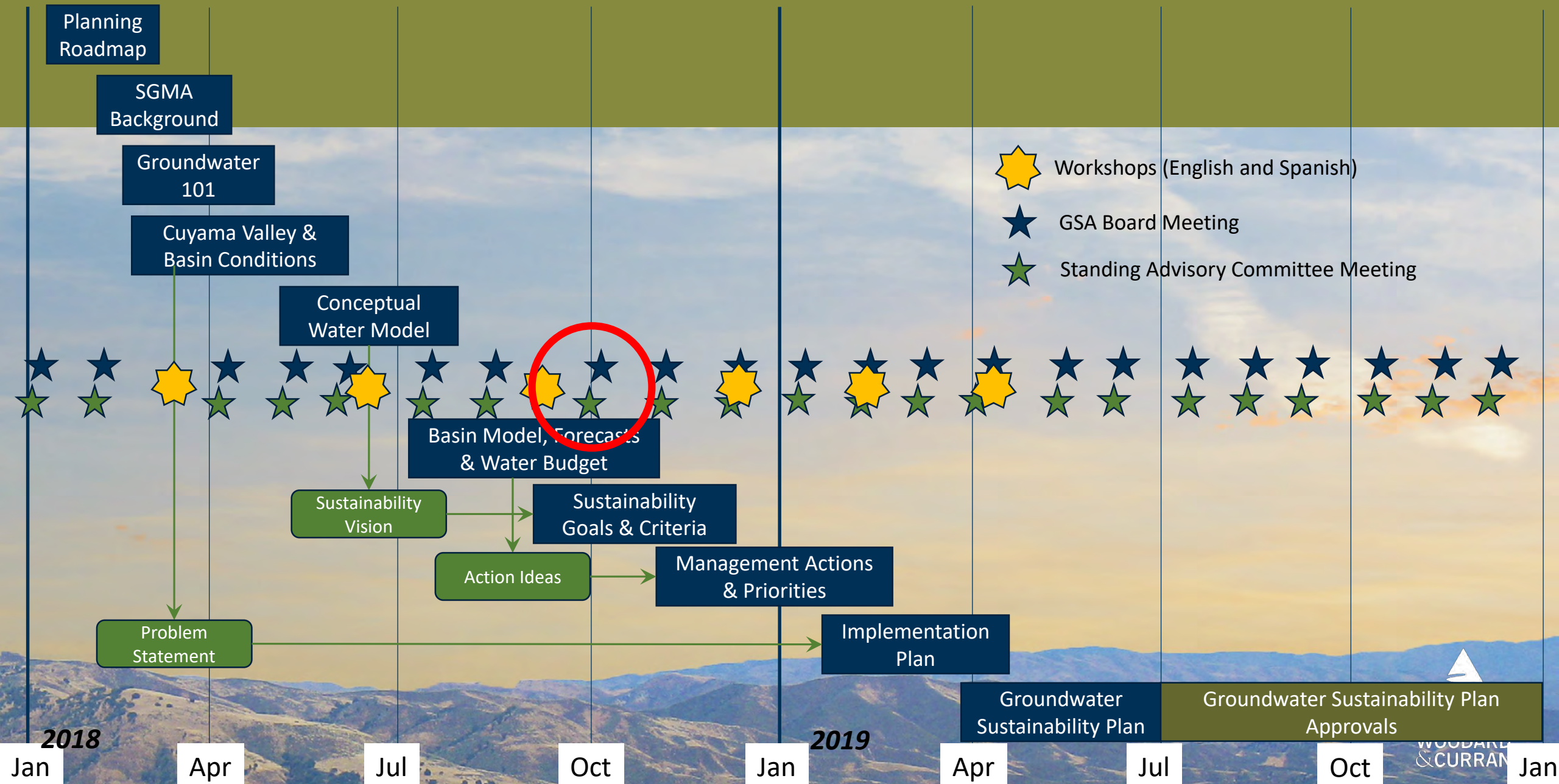
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September 27, 2018

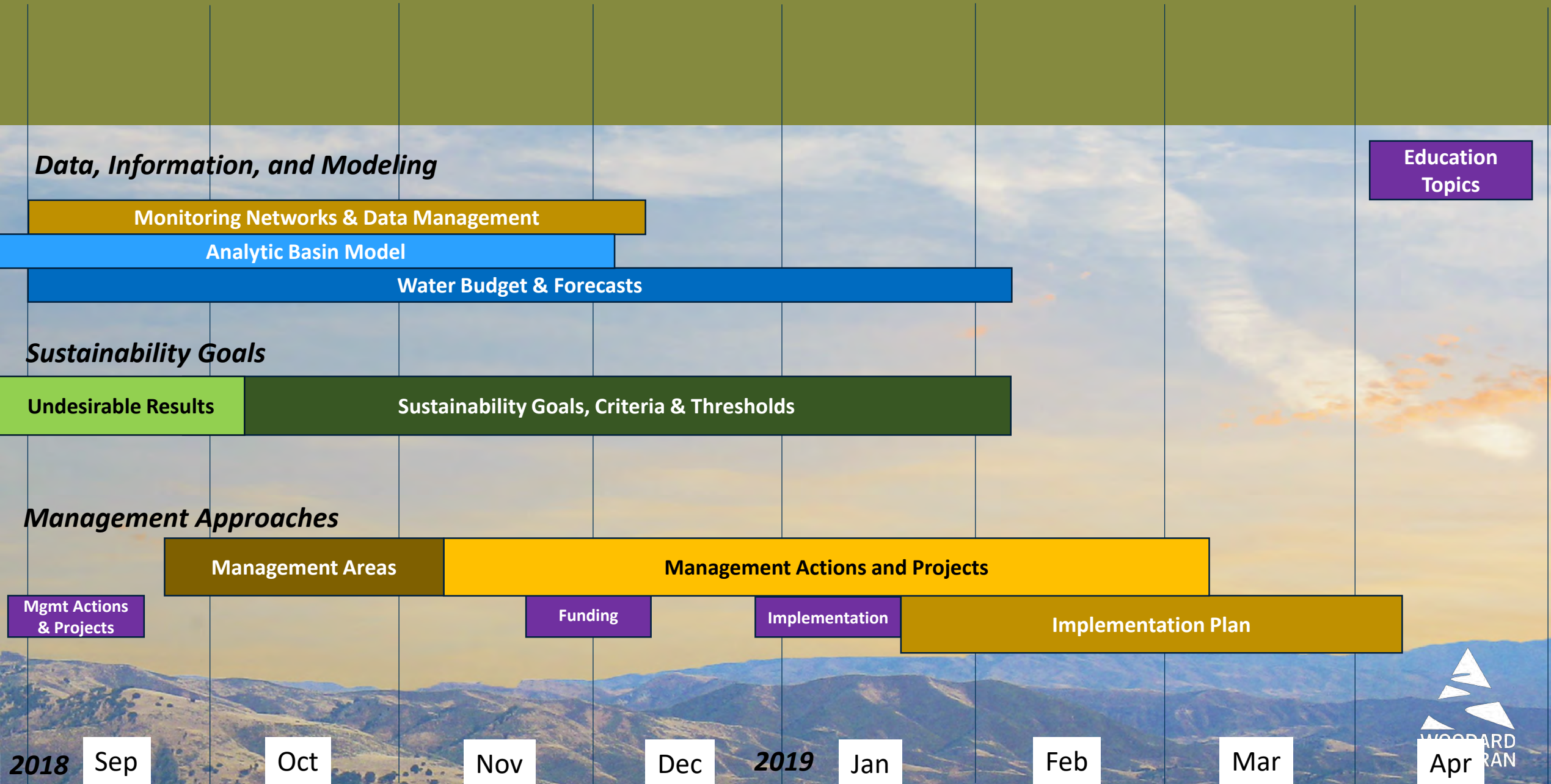




# Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap <sup>49</sup>



# Cuyama Basin Groundwater Sustainability Plan – Discussion Topics <sup>50</sup>



# Outreach Activities

- **September Workshops**
  - Topics: Modeling update and initial discussion of management areas and groundwater management actions and projects
  - Summary posted and in packet
  - Feedback and improvements for next workshop?
- **Newsletter #3 – November 1**
- **Community Workshops – December 5**
  - Water Budget
  - Sustainability Goals and Thresholds

## Cuyama Basin Groundwater Sustainability Public Workshops September 5, 2018, New Cuyama, CA Summary of Comments and Questions

### Background

On September 5, 2018, Cuyama Basin Groundwater Sustainability Agency Board of Directors and the Standing Advisory Committee hosted two community workshops at the Cuyama Recreation District facility in New Cuyama, CA. The workshops were noticed through a number of methods (*See Appendix A: Workshop Notification*).

The workshop began at about 6:35 pm and concluded at approximately 8:30 pm. The English language workshop was attended by approximately 35 community members, farmers, ranchers, and landowners, not including CBGSA Board members, Standing Advisory Committee members, county staff, and consultants. The Spanish language workshop was attended by five community members (*See Appendix B: Participants at September 5, 2018 CBGSA Workshop that Signed In*).

Both of the workshops had three presentations that include time for discussion and questions and answers. The input gathered from the workshops, along with seven written comments, is provided below.

### Workshops Presentation #1: Modeling Cuyama Basin Groundwater Conditions

Following a presentation on modeling Cuyama Basin groundwater conditions, workshop participants provided the following comments, observations, and questions.

#### Participant Comments and Questions Received – English Language Workshop

1. Question: Explain primary and secondary axes and what are the Average Annual Volume numbers on slide 26, Groundwater Budget: Basin-Wide. Answer: The left axis shows the groundwater gains (e.g., recharge) and losses (e.g., pumping) each year. The right axis depicts the cumulative change in groundwater storage, as shown with the black line on the graph. The average annual volumes are the estimated average annual gains or losses from the groundwater basin, as calculated by the model.
2. Question: The numbers shown as model results today are not calibrated. The community should not assume the numbers fully depict the historical conditions or trends? Answer: Yes, the model is not yet fully calibrated; the numbers are preliminary and are likely to change.
3. Question: When mentioning domestic use, the population you used was in the thousands? Answer: No, the estimated population for the Community Services District is approximately 800. This estimate will be updated with new information when available.
4. Comment: The point is there is a downward trend in groundwater storage, and the point is to figure out how to get it not to go down. It looks like we are down 200 feet, but the water budget graph makes it look like there is the same amount of water coming in as is going. Answer: The annual water budget is balanced on the graph by the amount of change in water storage (purple). Most years, there is a decline in water storage.
5. Question: What is the definition of “developed land?” Answer: Anything with agricultural and urban use on it.

6. Question: Why is evapotranspiration the only thing used to estimate pumping demand and not direct evaporation from spray irrigation or ponded water? Answer: Evapotranspiration includes estimates for direct evaporation.
7. Question: Is there a way to measure/monitor deep percolation? Answer: There is no easy way to measure that.
8. Question: On most of the graphs on slide 28, the actual groundwater levels look like they are deeper than what the model has estimated. Answer: Yes, the model still needs to be calibrated to develop closer alignment between modeled results and actual measurements. The team is working in the next several months to understand local irrigation practices better and calibrate the model.
9. Question: There may be different depths of screens in wells that could affect the well depth monitoring that the model has not captured. How hard is it to go back in and add layers for well? Answer: If we have data on it, then it can be added, but we do not want to break up existing layers into sub layers just to “brute force” the model.
10. Question: How is the pumping value calculated when the pumps do not have meters on them? Answer: We estimate the pumping demand based on domestic and agricultural users, and calculate pumping amounts based on those needs.
11. Question: Plants need water in the ground and there is water above ground, puddling, etc. How is this water considered in the model calculations? Answer: We capture the total irrigation water demand through the evapotranspiration calculations which direct evaporation is a part of.
12. Question: How is climate change incorporated into this model? Answer: The team will include one or more scenarios that estimate the future changes resulting from climate change (e.g., changing rainfall patterns, increased irrigation demand).
13. Question: Does the model take into account the changes in the basin as it narrows? It may be more than the model currently covers. Answer: We have implemented what the USGS implemented in their model for the shape of the basin, based on well logs (water and oil) and satellite data.
14. Comment: Recently the Government proposed selling leases for oil drilling (federal land in the foothills). Oil operations could use additional groundwater, particularly if fracking is involved. How would that be considered? Answer: Future water demands on the Cuyama Basin can be considered. We can look into how likely additional pumping from the Cuyama Basin would be.
15. Question: Is 90% irrigation efficiency realistic? Answer: Irrigation efficiency is based on evapotranspiration and not on other irrigation practices. The team will further clarify these calculations.
16. Question: How do subsidence and the loss of storage due to subsidence fit into the model? Answer: There are not simple, cost-effective ways to model subsidence. Subsidence and the potential loss of storage will be discussed and addressed in the GSP.
17. Question: How do you estimate and calibrate surface water flows if there are no good surface water gauges in the basin. Answer: The land surface component of the model simulates surface water flows based on available precipitation, soil and land use datasets. Then we compare the results with the available stream flow observations to make adjustments.
18. Question: Did the USGS study include surface flow in their model? Answer: USGS has limited information about surface flows, which the team is reviewing and comparing.
19. Comment: We would like to see how surface runoff is calculated and understand that a lot better. Specifically, about runoff of applied water.

20. Comment: It would be good to see the general trend of the basin groundwater depth.
21. Question: How are you looking at groundwater dependent ecosystems and all the wildlife that depends on that. Answer: We have a biologist who is reviewing and checking available data regarding groundwater dependent ecosystems in the basin. The team will prepare a memo summarizing the findings.
22. Comment: The model will be a working tool that is not 100% right and will be continued to be developed.
23. Question: How does the model take into consideration how some wells have declined and others have remained fairly stable? Answer: The model calculates water budget and elevation levels for each cell in the model based on the conditions in that cell. The calibration effort is getting the calculations to replicate real world measurement.
24. Question: With so many factors calculated in the model, it is important to understand the level of certainty that underlies the factors and model results. Can that uncertainty be quantified? Answer: The GSP will include a discussion of uncertainty and recommendations for reducing uncertainty in the future.

### Participant Comments and Questions - Spanish Language Workshop

1. Comment: It doesn't rain or snow much in the region.
2. Comment: Some of the wells shown are most likely abandoned oil wells. One of the stakeholder's parents worked there in the past.
3. Comment: Though water usage is low in November and December, the bills remain just as high as those received in June and July. Residents are not sure of the bill structure and would like to know more about the fixed costs.
4. Comment: Farmers proposed solutions to capture water, including installing rainwater harvesters and building more dams.
5. Comment: All assumptions used for the model seem right with respect to land use and water budget.
6. Comment: Empty farmlands are bad for public health and require additional dust control.
7. Comment: There are fewer workers coming in this year because there is less land in production.
8. Comment: Since the drought, less alfalfa has been grown in the region. Less alfalfa means fewer job opportunities and fewer workers.
9. Comment: Residents have noticed that fewer residents in the region leads to higher water bills. A lot of workers left during the drought, and those that remained noticed increased bill rates.

### Written Comments Received – Modeling

Written comments received pertaining to the modeling presentation and discussion are included below. The comment form provided to attendees posed the following questions: *“Do you have any additional questions or clarifications about the water model information you heard tonight? Was the presentation clear to you? What more would you like to know?”*

1. The presenter asked for information about the causes for the Cuyama Community Services District (CCSD) groundwater levels to drop after 2011 – the commenter noted that this was the year that Duncan Family Farms started farming irrigated land near the CCSD well – could there be a correlation?

2. I'd like to know the implications of water being removed from the older alluvium (beneath the aquitard) and being put into the newer alluvium (above the aquitard)? It is called "deep percolation" in the model but it clearly different/distinct from that water not being pumped and remaining in the deep alluvium. In addition, how does the pumping in one area affect others (cone of depression)? Does the heavy agricultural pumping make domestic wells have to be deeper? Who should bear these consequences if this occurs?
3. Excellent work, very understandable. Cuyama Community Services District had two wells. One went out of service a couple of years ago. I am wondering if your model is using numbers from two different wells? Regarding oil development on BLM lands on the eastern side at west end of Cuyama Basin – fracking is very unlikely. We do not need to address until permits are issued and drilling begins.
4. What sustainable options are you exploring? How can the options you are currently presenting be viable? You are addressing a model for "sustainability" by proposing a pipeline? How does that make sense?
5. The data needs to be clarified better. The bar charts are unclear with the slides. Also, in the previous workshop, geology and faults were a large topic. This was not discussed with the preliminary drafts and how those faults may affect the groundwater recovery and storage. The geologist was not entirely certain in the previous workshop so there are many assumptions that the drafts and data presented are assuming. Simulated flows into the river are not actual, especially if faults might cause a different flow. Are there underground river flows (data) available?

## Workshop Presentation #2: Management Actions and Projects

Following a presentation on potential management actions and projects for the Cuyama Basin, workshop attendees provided the following comments, observations, and questions.

### Participant Comments and Questions – English Language Workshop

1. Comment: Have you thought about the little canyons on the south side of the valley that flood during major rain events and have significant erosion issues? Maybe retaining structures in those creeks to break the velocity of the flows during those events and increase recharge. Also, storm flows take out a lot of bushes, which are important for retaining rainfall.
6. Comment: Use forest management practices to increase groundwater supplies. There isn't much of a demand for native vegetation, which takes a lot of water.
7. Question: Are cattle positive or negative in terms of water use? Can they be used to manage vegetation in rangeland?
8. Comment: There needs to be a way to use technology to figure out how to address these water issues and figure out what may work without spending a lot of money.
9. Comment: Look at technologies for improving the efficiency of agricultural water use and financing to support options. Using today's technology, distribution efficiencies should be much higher, and thus could move the glide path up a notch or two.
10. Question: How do we evaluate the sustainability of whatever project(s) we consider when some options may draw water from other basins? Answer: The options considered should help sustain the Cuyama Basin; the Board and Standing Advisory Committee may consider many factors in evaluating options.
11. Comment: Self-sustainability of the Cuyama Valley should be the first main focus instead of hauling water into the basin. Technologies should be the way to go. Focus on updating farms that may not be

efficient enough. Self-sustainability should be the first focus using technologies to improve irrigation efficiencies.

12. Comment: Talk to locals about efficiencies. Irrigation efficiency is part of the solution, but the actual definition of it should be clearer. A lot of water goes right back into the ground if you overwater. You lose some to evaporation, but most of the water is not being lost, its going back into the groundwater system.
13. Comment: Irrigation efficiencies can be improved, improve irrigation systems.
14. Question: Do the projects need to be suggested now? And implemented by 2020? Or do they get implemented later? Answer: The plan will include an evaluation of potential actions and an implementation plan for the most viable approaches. The actions and projects do not have to be implemented by 2020.
15. Question: Are we trying to reach 2015 levels? Or are we leveling off whenever we level off in 2040? Answer: There is no mandate to meet 2015 levels. The thresholds and objectives will define what the actions and projects need to achieve.
16. Question: Given that we are in critical overdraft, have we been in contact with DWR? They implied that levels could not change from now. Answer: The basin is not required to return to 2015 groundwater levels. The requirement is that the basin achieve sustainability, which the GSP will define for this basin.
17. Question: Explain the glidepath. How is it used, and is this just to help predict the future? Answer: The glidepath is included to establish a predictable plan for how and when the basin might achieve more sustainable conditions.
18. Question: Is there a way when considering purchasing water to evaluate how demands and supplies and price may change over time? Can you account for price changes over a 20-year purchase plan? Answer: The evaluation will estimate costs for the actions and projects considered.
19. Question: How would funds would be raised to buy that water? Answer: The GSP implementation plan will also describe how actions and projects will be funded.
20. Comment: Plant crops that use less water, e.g., perennial plants.
21. Comment: In five years, we will review the GSP, figure out what we did wrong, and figure out how to mitigate and fix it.
22. Comment: Range management might be the only option because any other activity may result in litigation about water use changes from users downstream.
23. Contact the Center for Irrigation Technology for information to evaluate irrigation efficiency actions.
24. The Santa Barbara County Range Improvement Association is developing actions to improve land management.
25. Question: What can be learned from other GSAs? Answer: The team is reviewing ideas being considered by other GSAs.

### Participant Comments Received – Spanish Language Workshop

1. Comment: If people can capture flows downstream, there must be a way for us to also capture stormwater upstream for groundwater recharge.
2. Comment: Water supply can be augmented by building more dams.



3. Comment: Infrastructure for stormwater capture to collect and store water on-site would be helpful to supplement nonpotable, domestic water uses during droughts. This is done in parts of Mexico and has proven to be effective.
4. Comment: Many people are not aware about water conservation. Teaching about water conservation in schools would help reduce water demand.
5. Comment: The whole town needs to be educated on water issues, including water supply and water quality.
6. Comment: Water quota may be necessary as has been done in parts of Mexico.
7. Comment: In the past, residents have received notices that severely limit residential water use. A potential solution is to install on-site or communal water reservoirs to supplement water shortages for emergency needs. This may require trucking water in to fill the reserve.

### Written Comments Received – Management Actions and Projects

Written comments received pertaining to the presentation on possible management actions are included below. The comment form posed the questions: *“Are there other actions or projects that you think should be considered? What management actions make the most sense to you and why?”*

1. I think water metering and water accounting are fundamental and necessary tools. Flood water capture to enhance aquifer recharge is a great idea. I think using broad scale earthworks would help recharge the aquifers without depriving folks downstream. I also don't think we should shy away from reducing demand by replacing more water intensive crops with more drought resistant ones, or appropriately managed livestock operations. I also love the woman's idea of using controlled burns to clear understory, for multiple reasons - mostly reducing the intensity of fire danger but also improving the water table.
2. The historic deforestation of oaks in the Cuyama Valley is something you should look at. I felt that there was too much talk of clearing vegetation to free up water without very much education on that matter on long term effects of that.
3. I would like to see this Basin managed to meet supply. Manage undergrowth in forested areas to optimize groundwater recharge and reduce fire danger.
4. Management needs to be sustained and hopefully regenerative; the ecological design system known as “permaculture” urges the use of mulching, contour swales, micro-irrigation, and careful crop planting. I urge further investigation into this design model. Things that need to be considered include climate change, changes in government, the loss of the EPA and new legislation. What can we do as a community to counter these changes to allow ourselves to flourish?
5. Based in the last piece of discussion in this section of the workshop, the six graphs on page 14 indicated that there are areas that are essentially sustaining currently. The speaker alluded that all data would be averaged to develop a plan for the whole basin. There clearly needs to be different management {in different areas} based on the graphed data on page 14. The areas and individuals in the sustained areas will be greatly impacted to average the area or bring them to an averaged sustainability. Areas that are overdrafted should have to make more drastic changes to compensate.
6. Capturing excess water should be considered. There is no water running routinely in the Cuyama River. Not changing what is delivered to people past Twitchell Reservoir. If a known volume is delivered downstream, maintain that delivery and capture any excess, or capture all runoff and release the current volumes that the down river users expect.

## Workshop Part 3: Concepts for Management Areas

Following a presentation on potential concepts for management areas to consider for the Cuyama Basin, workshop participants provided the following comments, observations, and questions.

### Participant Comments and Questions – English Language Workshop

1. Question: Can we use a combination of those management areas? Answer: Yes. The GSA could decide to combine concepts, or use a different approach not developed yet.
2. Comment: Divide by irrigated vs non-irrigated areas.
3. Comment: Blue areas (high GW levels) are traditionally grazing lands that use very little water, so why manage them?
4. Question: Why do we have so much area that is outside of main part of the basin? Why don't we just change the basin boundary? Answer: Boundary modifications could be considered, but the rules specify when DWR will consider changes.
5. Question: Do we really need management areas? It's hard to set them if we don't really know what they can and cannot do. Answer: This presentation is a preliminary presentation of concepts. Having no management areas is also an option. The team will provide additional information about what can and can't be accomplished with management areas.
6. Question: Could the plan set management areas based on data gaps, with the purpose of not necessarily setting thresholds and just trying to figure out what to do there? Answer: It is possible, but generally, management areas are to help set thresholds and to organize and implement management actions and projects.
7. Comment: Another data point would be rainfall in the foothills, can you establish management areas by rainfall patterns?
8. Question: What standard are federal lands under in terms of water use? Are there regulations they must comply with? Answer: The federal government is not bound by state law.
9. Question: If there have been grapes planted at the west end of the basin and the basin was in overdraft before that, who makes the decision for final water cutbacks. Answer: The GSA Board will decide on the management actions and implementation plan.
10. Question: Can you accomplish results without management areas? Yes, management areas are not required. The GSA is the managing and implementing agency, with or without management areas.

### Participant Comments – Spanish Language Workshop

1. Comment: Would prefer everything to be one management area since they are all connected. If there is a drought, the entire basin is affected.

### Written Comments Received – English Language Workshop

Written comments received pertaining to the presentation on concepts for management areas are included below. The comment form posed the questions: *Did the options presented to you make sense? What are the important considerations for establishing management areas in the Cuyama Basin – jurisdiction, geography, groundwater conditions, others?*

1. I favor management areas based on current basin conditions. At either end of the basin, near Ventucopa and west of New Cuyama water levels have held at same level thus they are sustainable. Grazing land – open land – use far less than an inch of water per acre year.
2. No, the options do not make sense in terms of what is actually sustainable. What options are you considering that are regenerative?

## Additional General Written Comments Received

The comment form included a final statement: *Please provide any additional comments regarding groundwater management in the Cuyama Valley.*

1. There is a lot of education to be done on holistic grazing, forest management, and how we can make sure that the management plan chosen isn't just stabilizing but thinking about regenerating our groundwater.
2. West end of basin where wells have been drilled beyond water table – I believe that these may have been drills for oil that did not pan out because that type of well was sometimes turned over to surface owner as water well.
3. I urge further investigation into permaculture and exploring regenerative options for water supply.
4. Clearly, data gathered suggests that management/subbasin areas are needed to address sustainability vs high overdraft. There are already {missing word} that indicates the Ventucopa area is currently sustaining or needs a little change. Where New Cuyama CSD needs more heavy investigation to achieve sustainability. Averaging these two areas will not fix the problem.
5. Consider putting workshops on YouTube/Web so that what is presented at the meeting can be presented without bias. The last Cuyama Rec District newsletter gave a biased overview of the previous workshop. Those not in attendance reading that accounting will not have all of the details.
6. Offer community-based groundwater-level monitoring network (using WellIntel tech). Provide well owners real-time well status - level pumping. Fill data gaps and calibrate numerical model.

## Appendix A – Workshop Notification

Two CBGSA notices were prepared for the September 5, 2018 workshops – one in English and one in Spanish. The notices were distributed as follows:

1. **August 1:** Cuyama Valley Recreation District newsletter included the Newsletter, edition 2, which announced the workshops on Sept. 5.
2. **August 8:** Mailed postcards to 694 parcel owners in the Cuyama Basin, 22 came back to the CBGSA marked *return to sender*.
3. **August 13:** Issued English and Spanish versions of the notice electronically to CBGSA email list, and to partners including Family Resource Center, Cuyama Community Association, BlueSky, and the four counties.
4. **August 14 through September 5:** Coordinated distribution of the workshop notices within Cuyama Basin by the volunteers at the Cuyama Valley Family Resource Center. More than 200 notices were distributed by volunteers through the FRC at locations including the Food Truck, The Place, along Hwy 33, and several other locations in New Cuyama.
5. **August 15:** Posted workshop notices to the CBGSA website.
6. **August 26:** SAC member Jake Furstenfeld agreed to post notices in the “finger” areas in Cuyama.
7. **August 24:** San Luis Obispo County emailed the workshop notices to their stakeholder list for Cuyama.
8. **August 29:** CBGSA issued a reminder email to its stakeholder list and partners.
9. **August 31:** San Luis Obispo emailed out a reminder notice to its Cuyama stakeholder email list.

## Appendix B

### Participants at September 5, 2018 CBGSA Workshops that Signed In

1. Jamee Menzies, ranch manager
2. Stephanie Menzies, ranch manager
3. Lee Knudtson, WellIntel
4. Edward Fetterman, resident
5. Mike Post, Standing Advisory Committee
6. Molly Ancel, program manager, resident
7. Neil Currie, Cleath-Harris Geologists
8. Natalie Medrano, resident, quail springs
9. Jenya Schneider, rancher/Ventucopa
10. Kate Morgan, farm intern
11. Jeffrey R., resident, quail springs
12. Jack Anderson, business owner -livestock
13. Sam Ihrig, Blue Sky
14. Jeff Shaw, EKI
15. Das Williams, CBGSA Board member
16. John Adam, Adam Ranch
17. Louise Draucker, Standing Advisory Committee
18. Jessica Hoffman, resident
19. Joe Haslett, Standing Advisory Committee
20. Matt Young, Santa Barbara County
21. George Adam, Adam Ranch
22. Matt K., Cuyama Basin Water District
23. Jim and Chris {last name not legible}
24. Robbie Jaffee, Standing Advisory Committee, Chair
25. Joshua Bower, resident
26. Tom Bracken, CBGSA Board member
27. George Capello, CBGSA Board member
28. Cory Batilan (sp?), Santa Barbara county
29. Brenton Kelly, Standing Advisory Committee, vice-chair
30. Paul Chounet, CBGSA Board member
31. Meg Brown, resident
32. Madeliene Fairbairn, UC Santa Barbara
33. Jane Wooster, CBGSA Board member
34. Ann Myhre, land owner
35. Claudia Alvarado, Standing Advisory Committee
36. Jean Gaillard
37. Nayeli Caro
38. Leticia Valenzue
39. Ramona Law, Blue Sky
40. Steven Adam
41. Jean Reyes, landowner, rancher

42. Jessica Bourboza (sp?), resident
43. Gary Moore, landowner
44. Marvin Rahe, farmer
45. Sue Blackshear, resident
46. Karen Lewis, rancher

Plan for Meeting Topics and GSP Section Submittals  
Posted to cuyamabasin.org September 21, 2018

**(NOTE: Information Subject to Change)**

Key: GSA Board adoptions and approvals Community Workshops

SAC/Board Mtg Dates	SAC Educational Topics	GSP Board/SAC Topics	Workshop Topics	GSP Section Submittals
June 28 July 11	<ul style="list-style-type: none"> <li>Monitoring of GW levels &amp; quality, SW flows</li> <li>What does SGMA require for water quality?</li> <li>Management Areas</li> </ul>	<ul style="list-style-type: none"> <li>Land and Water Use</li> <li>Sustainability (workshop results)</li> </ul>		<ul style="list-style-type: none"> <li>Plan Area (approval)</li> <li>HCM (review)</li> </ul>
July 26 August 1	<ul style="list-style-type: none"> <li>Calculating a Water Budget</li> <li>How a Model Works – Historical Calibration</li> </ul>	<ul style="list-style-type: none"> <li>Current Basin Water Conditions (GW levels &amp; quality, SW flows)</li> <li>Sustainability (draft Undesirable Results narrative)</li> </ul>		<ul style="list-style-type: none"> <li>Undesirable Results Narrative (review)</li> </ul>
August 30 September 5 <span style="background-color: #d9ead3;">Workshop</span>	<ul style="list-style-type: none"> <li>How a Model Works – Current and Future Conditions</li> <li>Management Actions &amp; Projects</li> </ul>	<ul style="list-style-type: none"> <li>Additional Info on Current Basin Water Conditions (GW levels &amp; quality)</li> <li>Monitoring Networks</li> </ul>	<ul style="list-style-type: none"> <li>Initial Model Results – Historical</li> <li>Assumptions for Current and Future Conditions</li> <li>Conceptual Management Areas</li> <li>Management Actions &amp; Projects</li> </ul>	<ul style="list-style-type: none"> <li>GW Conditions (review)</li> </ul>
September 27 October 3	<ul style="list-style-type: none"> <li>Discussion on HCM and GW Conditions GSP sections</li> </ul>	<ul style="list-style-type: none"> <li>Management Areas (discussion)</li> </ul>		<ul style="list-style-type: none"> <li>HCM (approval)</li> <li>Monitoring Networks (review)</li> </ul>
November 1 November 7	<ul style="list-style-type: none"> <li>Discussion on Monitoring Networks GSP section</li> <li>Funding Sources and Mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>Management Areas (approval)</li> <li>Sustainability Thresholds (discussion)</li> </ul>		<ul style="list-style-type: none"> <li>Data Management (review)</li> </ul>

SAC/Board Mtg Dates	SAC Educational Topics	GSP Board/SAC Topics	Workshop Topics	GSP Section Submittals
November 29 December 5 Workshop	<ul style="list-style-type: none"> <li>Implementation Plan</li> </ul>	<ul style="list-style-type: none"> <li>Draft Water Budgets (discussion)</li> <li>Management Actions and Projects (discussion)</li> </ul>	<ul style="list-style-type: none"> <li>Initial Model Results – Current and Future Conditions</li> <li>Sustainability Goals and Criteria</li> </ul>	<ul style="list-style-type: none"> <li>GW Conditions (approval)</li> <li>Undesirable Results Narrative (approval)</li> <li>Sustainability Thresholds (review)</li> </ul>
December 27? January 2	<ul style="list-style-type: none"> <li>Discussion on Sustainability Thresholds GSP section</li> </ul>	<ul style="list-style-type: none"> <li>Sustainability Thresholds (approval)</li> <li>Implementation Plan (discussion)</li> </ul>		<ul style="list-style-type: none"> <li>Monitoring Networks (approval)</li> </ul>
January 31 February 6 Workshop		<ul style="list-style-type: none"> <li>Management Actions and Alternatives Evaluations</li> </ul>	<ul style="list-style-type: none"> <li>Management Actions and Alternatives Evaluations</li> </ul>	<ul style="list-style-type: none"> <li>Data Management (approval)</li> <li>Water Budget (review)</li> <li>Projects &amp; Management Actions (review)</li> </ul>
February 28 March 6	<ul style="list-style-type: none"> <li>Discussion on Water Budgets and Projects and Actions GSP sections</li> </ul>	<ul style="list-style-type: none"> <li>Management Actions &amp; Projects (approval)</li> <li>Implementation Plan (proposed)</li> </ul>		<ul style="list-style-type: none"> <li>Sustainability Thresholds (approval)</li> <li>Implementation Plan (review)</li> </ul>
March 28 April 3 Workshop		<ul style="list-style-type: none"> <li>Implementation Plan (approval)</li> <li>GSP Public Draft</li> </ul>	<ul style="list-style-type: none"> <li>GSP Public Draft</li> </ul>	<ul style="list-style-type: none"> <li>Water Budget (approval)</li> <li>Management Actions &amp; Projects (approval)</li> <li>GSP Public Draft (review)</li> </ul>
April 25 May 1		<ul style="list-style-type: none"> <li>GSP Public Draft response to comments</li> </ul>		<ul style="list-style-type: none"> <li>Implementation Plan (approval)</li> </ul>
May 30 June 5		<ul style="list-style-type: none"> <li>GSP Final Draft</li> </ul>		<ul style="list-style-type: none"> <li>GSP Final Draft (approval)</li> </ul>