JOINT MEETING OF CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD OF DIRECTORS AND STANDING ADVISORY COMMITTEE

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

Standing Advisory Committee

Roberta Jaffe Chairperson
Brenton Kelly Vice Chairperson
Claudia Alvarado
Brad DeBranch
Louise Draucker
Jake Furstenfeld
Joe Haslett
Mike Post
Hilda Leticia Valenzuela

AGENDA

June 6, 2018

Agenda for a special meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors and Standing Advisory Committee to be held on Wednesday, June 6, 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
Conference Room 271 (second floor)
1055 Monterey Street
San Luis Obispo, Ca 93408

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 4853 Primero Street, New Cuyama, California. 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. May 2, 2018

5. Report of the General Counsel
    a. Funding Agreements Update
    b. ACWA Pool for GSA Legal Protection
6. Report of the Standing Advisory Committee
7. Groundwater Sustainability Agency
    a. Report of the Executive Director
    b. Progress & Next Steps
8. Groundwater Sustainability Plan
    a. Groundwater Sustainability Plan Update
    b. Technical Forum Update
    c. Description of the Plan Area
    d. Public Workshop and Stakeholder Engagement Update
9. Financial Report
    a. Financial Management Overview
    b. Hallmark Group Task Order
    c. Woodard & Curran Task Orders
    d. Payment of Bills
    e. DWR Grant
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. Public Workshop (6:30 pm) – Cuyama Valley Recreation District, 4885 Primero Street, New Cuyama, CA
14. Adjourn

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Notes on Workshops:

Public Workshop (English) (6:30 pm) – Cuyama Valley Recreation District, 4885 Primero Street, New Cuyama, CA

Public Workshop (Spanish) (6:30 pm) – Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA
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Cuyama Basin Groundwater Sustainability Agency

Acronyms List

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
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
TO	Task Order
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
Ventura	County of Ventura
WC	Woodard & Curran (GSP Development Consultant)
WMA	Water Management Area

Cuyama Basin Groundwater Sustainability Agency
Board of Directors Meeting

May 2, 2018

Draft Meeting Minutes

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

PRESENT:
Yurosek, Derek – Chair
Albano, Byron
Bantilan, Cory
Cappello, George
Chounet, Paul
Christensen, Alan – *Alternate for David Couch*
Klinchuch, Matt – *Alternate for Tom Bracken*
Shephard, Glenn
Williams, Das
Wooster, Jane
Beck, Jim – Executive Director
Hughes, Joe – Legal Counsel

ABSENT:
Compton, Lynn – Vice Chair

1. **Call to order**
   Chair Derek Yurosek called the meeting to order at 4:02 pm.

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.

3. **Board Protocol**
   Cuyama Basin Groundwater Sustainability Agency (CBGSA) Executive Director Jim Beck provided background on the process for Board and public interactions, and Chair Yurosek reiterated the need to use speaker slips when an audience member would like to comment on an agenda item. To keep the Board meeting flowing smoothly, Chair Yurosek outlined the process where discussion will occur first at the Board level and then public comment will be addressed for those that have filled out a comment card.

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

5. Approval of Minutes

Chair Yurosek opened the floor for comments on the April 4, 2018 CBGSA Board meeting minutes. Minor editorial changes were suggested and a motion was made by Director Glenn Shephard and second by Director Jane Wooster to approve the minutes. The motion passed unanimously and the minutes were adopted. Director Das Williams abstained from the vote since his alternate attended the April 4, 2018 meeting.

6. Report of the General Counsel

a. Funding Agreements Update

Legal Counsel Joe Hughes provided an update on the draft funding agreement that is required by the County of San Luis Obispo and the Cuyama Community Services District (CCSD). He reported that the process was slowed down a little due to the County of Kern participation issue. He also reported that he worked with San Luis Obispo County (SLO) staff to revise the agreement to apply to just the entities requiring an agreement—SLO and the CCSD.

David Couch Alternate Alan Christensen arrived at 4:14 pm

Director Williams asked for an update on the County of Kern issue, and alternate Director Alan Christensen responded that County of Kern elected officials are still discussing this item. He let the CBGSA know there was a recent redistricting in Kern County and they are still working on the transition to the new Supervisor and resolution to this issue.

Director Byron Albano asked if Kern County does pay would that invalidate the funding agreement. Mr. Hughes replied that the way the funding agreement is set up is between SLO and CCSD; however, if the first assessment deck is reshuffled, we would need to recalculate the first assessment.

Alternate Christensen reported that the County of Kern is concerned with the frequency of assessments and asked how many there will be. Mr. Beck responded that there are only two assessments for the completion of the plan, with the second scheduled for June 2018, but after that time DWR reimbursements will kick in.

Director Paul Chounet said he voted on the payment of cashflow based on everyone paying and expressed concern taking the funding agreement to his Board if the County of Kern does not pay.

Alternate Christensen said he was clear during allocation negotiations that he did not have the authorization to pay funds, but voted on an allocation.

Director Williams said Santa Barbara County is committed to the CBGSA and its participation is not contingent on other members paying, but he expressed concern about the concept of another member paying the County of Kern's portion and the bias this might create.

Director Wooster made a motion to authorize the funding agreement subject to final review by legal counsel. The motion was seconded by Director Williams, opposed by Director Chounet, abstained by alternate Christensen and passed with a simple majority.

Director Albano asked that Director Chounet let his Board know the situation with the County of Kern and the discussions that occurred among the Board.

7. Report of the Standing Advisory Committee and referral of matters to the SAC

CBGSA Standing Advisory Committee (SAC) Chair Robbie Jaffe provided a verbal report on the April 26, 2018 SAC meeting. Her written report is included below.

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CBGSA – Standing Advisory Committee Report
To: the GSA Board
From: Roberta Jaffe, SAC Chair
Re: SAC Meeting 4/29/18

Eight of nine committee members were present.
We had a full room, with the audience representing the community, especially residents from the western portion of the Cuyama Basin.
You will be hearing similar reports as to what we heard and discussed at our meeting, so I will present highlights and key questions that were asked by the SAC and the audience.

Two items that will be moving forward for your approval based on the unanimous approval of the SAC:

- that the meeting time of the SAC be changed from 3:00-5:00 to 4:00 – 6:00. This time adjustment will make it easier for all members of the SAC to attend as well as those from the community.

- to adopt SAC Guidelines that clarify the roles and responsibilities of SAC members. These Guidelines were developed by an ad hoc committee of Vice-Chair Kelly, Member Draucker and myself, presented to the March SAC meeting, and then revised based on feedback and approved at our last meeting. The Guidelines elaborate on the Article 8.1 of the Joint Power Agreement which establishes the SAC within the GSA. The Guidelines include sections on Purpose, Membership, Terms and Responsibilities, Decision Making, Meetings, Officers and Finance. The one area of negotiation was related to whether an alternate to the GSA Board could serve on the SAC. A compromise was reached allowing an alternate to serve on the SAC, but to recuse him or herself from a SAC meeting if they know they will be sitting on the upcoming GSA Board meeting.

We received an update on the Groundwater Sustainability Plan led by Woodard & Curran team member Brian Van Lienden and a stakeholder outreach report from Mary Currie.
Our next phase of GSP development will focus on developing sustainability goals. Sustainability Indicators and Sustainability Thought Questions were introduced. These questions will be a key focus in the upcoming June workshops to help us develop our desired outcomes.

An important component of their update was the report on data collection progress, including a helpful matrix of data collected by sub region. Questions were asked as to whether pumping data would be collected, so current use could be analyzed; if satellite imagery would be used for evaluating land
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subsidence and groundwater use. In addition, questions were asked as to how the data will be validated. As SAC Chair, I ask the GSA Board ensure that these questions will be addressed and that the data will be both objective and verifiable.

We reviewed the first draft of the Description of the Plan Area which will be a component of the GSP. Written comments will be received on this until May 24th. Concern was expressed that agricultural land use will only be shown until 2014, since significant changes have taken place in different areas of the Basin since then.

Woodard & Curran shared their recommendation for a data management system.
Mary Currie gave an update on stakeholder outreach including the introduction of the first GSA newsletter which was published this week as part of the quarterly Cuyama Recreation Guide which all residents receive.

Ray Shady from Grapevine Capital presented on the new vineyard, called North Fork Ranch Vineyard, that has been installed in the western portion of the Basin. 12 agricultural wells and 850 acres of grapes have been planted after the passage of SGMA. The vineyard only occupies 10% of the 8700-acre parcel that was purchased by Harvard University's Endowment Fund in 2012. New hydrogeologic information was presented to support the vineyard's groundwater as coming from an isolated sub-basin. This data will need to be validated and compared with other data on this area. Mr. Shady projected that a total of 2 AFY per acre would be used to irrigate the vineyard (a total of 1700 AFY for the current vineyard). This projection is based on a statewide average and may not be accurate for the extreme heat of the Cuyama Basin. One of the slides presented set objectives of creating a separate management area and potentially submitting for a boundary modification separating the western end from the Basin (a proposal that has already been denied by DWR). Key questions that were asked about the new vineyard by the SAC and the audience included: what evidence is there for impermeable boundaries that isolate their water supply; what the plans are regarding submitting a boundary modification; what evidence is there that Cottonwood Canyon area's water supply would not be impacted by the new vineyard; what the downstream impact would be if the Cuyama River is the recharge source for the vineyard's water; and what are Harvard's plans for the remaining 90% of the land that they own as part of this parcel. The SAC and audience appreciated the sharing of information about the vineyard with the community and hope for further dialogue.

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a. SAC Guidelines and Responsibilities
Mr. Beck provided a brief overview of the SAC guidelines and responsibilities and let the Board know the SAC adopted the guidelines at the April 26, 2018 meeting. A motion was made by Director Shephard and second by Director Chounet. The motion passed unanimously.

8. Groundwater Sustainability Agency

a. Report of the Executive Director
Mr. Beck reported that we received the first funds from the first assessment. He thanked the Cuyama Basin Water District for paying their portion of the assessment.

b. Board Meeting Conflict on July 4, 2018
At the April 4, 2014 Board meeting, Mr. Beck reported that there was a CBGSA Board meeting
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conflict with the 4th of July national Holiday. He suggested we move the Board meeting to following week on July 11th, but keep the SAC meeting on June 28, 2018. Per the Board, an email was sent to Board member's staff after the April Board meeting to ensure July 11th was not a conflict. Since no conflicts were reported, Director Glenn Shephard made a motion to move the July 4th CBGSA Board meeting to July 11th. The motion was seconded by Director Cory Bantilan, and passed unanimously. Director Chounet said there is a CCSD meeting on July 11th at 7 p.m., but he said he can make it work. Director Williams also said he has a conflict, but he can make it work.

c. Revise Standing Advisory Committee Meeting Time

The SAC asked to move their starting time to 4 p.m. to facilitate greater community participation. A motion was made by Director Chounet to move the SAC meeting time to 4 p.m. The motion was seconded by Director Cappello and passed unanimously.

d. Progress & Next Steps

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

9. Groundwater Sustainability Plan

a. Groundwater Sustainability Plan Update

GSP consultant Woodard & Curran (W&C) staff Brian Van Lienden provided an update on the GSP development. Regarding the request for data, Chair Yurosek commented that the May 31, 2018 deadline may be too soon. Director Cappello also let Mr. Van Lienden know they are working on a limited timeframe to get him their data. Chair Yurosek encouraged Mr. Van Lienden to continue to work with Cuyama Basin Water District's (CBWD) Matt Klinchuch to get the word out on specific data needs with the CBWD.

Director Albano expressed concern about calling the Ventucopa area by that name and would like W&C to consider using more generic names (to not imply Water Management Areas).

SAC Chair Jaffe asked for clarification on what defines "historic" data needs, and Mr. Van Lienden replied that "historic" could mean as recent as last week.

b. Technical Forum Update

Mr. Van Lienden reported that the April 6, 2018 technical forum was attended by 15 individuals including representatives from the CBWD, EKI, Grapevine Capital, County of San Luis Obispo and W&C. Topics for discussion included Cuyama Valley geology and the model grid. The next monthly meeting is scheduled for Friday, May 4, 2018.

Director Albano asked which companies were represented and Mr. Van Lienden replied that Santa Barbara Pistachio Company and Grapevine Capital had representatives on the call.

Director Wooster expressed concern regarding the makeup of the technical call and indicated that having more CBGSA participants would seem appropriate.

Director Albano asked what the purpose of the input received from these calls is, and what are the participating technical staff bringing to the table. Mr. Van Lienden said they have technical

expertise in the basin that can be of use to W&C as they develop the GSP. Mr. Beck commented that the benefit of receiving technical comments on the front side of the GSP development can streamline things.

Director Chounet asked for clarification regarding the structure of the technical forum asking if it is a technical advisory committee or a technical forum. Mr. Beck replied that it is a technical forum.

SAC Vice Chair Kelly said his opinion of the technical forum is not to inject opposition, but to function as a peer-review mechanism.

c. Description of the Plan Area

Mr. Van Lienden provided an update on the Description of the Plan Area and reported that the plan can be accessed via the CBGSA's website. Public comments are due May 24, 2018 to Taylor Blakslee at tblakslee@hgcpm.com.

d. Data Management Approach

Mr. Van Lienden provided an update on the data management approach and asked the Board for consensus on using Opti. Mr. Beck let the Board know he had sat in on presentations regarding Opti and that it is a good tool that is within the budget of the CBGSA.

Director Wooster encouraged meeting attendees to provided well data to W&C for the development of a robust model.

e. Stakeholder Engagement Update

GSP outreach consultant the Catalyst Group's Charles Gardiner provided an update on stakeholder engagement and reminded attendees of the upcoming public workshops on June 6, 2018.

10. Grapevine Capital Partners Presentation

Grapevine Capital Partner staff Ray Shady provided a presentation on Grapevine Capital Partners' operations. His presentation focused on who they are and the data they have shared with W&C. Mr. Shady's presentation can be accessed on the CBGSA's website.

Director Albano asked where Grapevine Capital thinks their water will come from to sustain their operations. Mr. Shady replied that their analysis of river flow events is enough to sustain their vineyard operations.

Director Wooster questioned Mr. Shady's assertion that they do not receive recharge from Cottonwood Creek. Cleath-Harris Geologists Neil Currie reported that the bedrock comes to the surface and that is why Cottonwood Creek is flowing at the surface.

Director Bantilan asked W&C how long the peer review process will take. Mr. Van Lienden reported that they should have their basic sense of the Cuyama basin geology in 2-3 weeks and will provide a report at the June Board meeting and public workshop. Director Shephard asked is there are any established Best Management Practices or acceptability of the data W&C is receiving. Mr. Beck said W&C will provide an update on the quality of the data.

Director Bantilan asked if technical forum participants will weigh-in on the information Grapevine Capital's presented. Mr. Van Lienden said they will be discussing geology on the next technical forum call. Director Bantilan said hearing the pros and cons from the technical forum is important for the Board to hear and Chair Yurosek agreed that this will be important.

Cuyama Valley landowner Randall Tognazzini asked when Cleath-Harris Geologists was hired. Mr. Shady said before planting and then they were re-engaged to assess the Russell fault when insufficient data was indicated by the California Department of Water Resources during the boundary modification process.

Mr. Tognazzini asked if the artesian well was thermal based. Mr. Shady replied that the well pressure is gravity based. Mr. Tognazzini asked why they have not developed the reminder of their 8,700 acres. Mr. Shady said they feel confident with his team's current analysis that supports the 850 acres of plantings. Mr. Tognazzini asked how you have a vision for the future if the river isn't flowing. Mr. Shady mentioned flash flow events and downstream streamflow gages that help them support their plantings.

Cuyama Valley landowner Steve Gliessman asked how many acre feet (af) of water is in their basin. Mr. Shady said they estimated 54,000 af in their sub-basin. Mr. Gliessman asked how long will that last since the river has not flowed for some time. Mr. Gliessman also asked how upstream capture will affect Grapevine Capital's operations. Mr. Shady said that that is a big question that will need to be addressed by the Sustainable Groundwater Management Act.

Audience member Ann Myhre commented that it seems like Mr. Shady is making the case to divide the basin and asked him if that is where they are heading. Mr. Shady replied that from a geologic standpoint, yes, but from a community perspective they are asking to be a separate Water Management Area. Ms. Myhre asked if they will be contributing towards costs as a member of the CBGSA community. Mr. Shady said they believe the data they supplied is valued at something, but have not committed to monetary contributions at this time. Director Williams asked that Grapevine Capital consider a financial contribution considering the additional burden on W&C to analyze their data.

Director Wooster asked how many wells they drilled to water the 850 acres. Mr. Shady reported that they have 12 production wells.

Alternate Alan Christensen left the meeting.

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11. Financial Report

a. Financial Management Overview
Mr. Beck provided an update on the financial costs through March 2018.

b. Fiscal Year 2018/19 Budget Development
Mr. Beck provided an overview of the FY 2018-19 budget. He noted that we met with the budget ad hoc group on March 26, 2018 and reviewed the draft FY 2018-19 budget with Director Bantilan, Chounet and Bracken; Matt Klinchuch; and Matt Young. A motion was made by Director Cappello to adopt the FY 2018-19 budget and was seconded by Director Shephard. A supermajority vote of 75 percent is required to pass the budget and was met with a 77.78

percent approval vote. Alternate Christensen had left the meeting, and Director Compton was not able to attend, and thus, did not vote on this item.

Directors Bantilan and Williams left at 6:44 pm

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c. Payment of Bills

Mr. Beck reported on the payment of bills. A motion was made by Director Shephard and seconded by Director Wooster to approve payment of the bills through the month of March 2018 in the amount of $182,809.03, pending receipt of funds. The motion passed unanimously.

12. Reports of the Ad Hoc Committees

Nothing to report.

13. Directors' Forum

Nothing to report.

14. Public comment for items not on the Agenda

Lee Knudtson with Wellntel introduced the company he works for that provides remote well monitoring technology.

15. Adjourn

Chair Yurosek adjourned the CBGSA Board at 6:55 pm.

I, Jim Beck, Executive Director to the Cuyama Basin Groundwater Sustainability Agency Board of Directors, do hereby certify that the foregoing is a fair statement of the proceedings of the meeting held on Wednesday, May 2, 2018, by the Cuyama Basin Groundwater Sustainability Agency Board of Directors.

Jim Beck
Dated: June 6, 2018

TO: Board of Directors
Agenda Item No. 6

FROM: Roberta Jaffe, Standing Advisory Committee Chair

DATE: June 6, 2018

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 May 31, 2018 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: May 31, 2018
Submitted to the GSA Board June 6, 2018
By Roberta Jaffe, SAC Chair
Brenton Kelly SAC Vice-Chair

The SAC report will have a new format that will focus on key discussion areas and recommendations from the SAC to the GSA board. When the SAC has differing opinions on a topic, majority and minority opinions will be included in the report.

All 9 members of the SAC were present (one over telephone).
Areas of discussion were as follows:

1. Sustainability. Each SAC meeting has an educational topic. For this meeting the topic was Sustainability in preparation for the upcoming workshops. We spent a half hour getting a much better understanding of what the DWR parameters are and the challenges we will have in addressing them. We especially focused on three graphs that were sourced by Woodard & Curran from the DWR that show examples of pathways to sustainability using historical data and establishing minimum thresholds and measureable objectives. We discussed the complexities of determining the minimum threshold for each of the undesirable results, especially groundwater level as we deliberate on these decisions over the next few months. While we strive to set ideal objectives, we will need to consider each minimal threshold and objective within multiple contexts including physical capacities, economic impacts, and environmental concerns. The various costs of any planned projects and actions will determine whether a solution is affordable. Several commenters expressed concerns regarding the numerous peer reviewed reports that indicate long term overdraft with subsequent undesirable conditions that pre-date SGMA and the need to set minimum thresholds at levels that existed before 2015.

2. Data Collection. The data matrix on Page 25 of the GSA Board packet was reviewed and discussed as being very relevant as a way to get a big picture of missing data. Several key questions were asked:
Question: How is data validated before it is included in the model?
Response: It is looked at in comparison to other data from official sources.

Question: Is there a need for pumping data and if so will you be able to get it?
Response: Pumping data can be estimated from land use and cropping pattern data, however, more information would be helpful if it were available.

Question: Will we be able to get surface water flow data?
Response: This is a gap, but there are some budgeted funds that can install some surface monitoring equipment.

Question: How will these sustainability goals be enforced or will they just be voluntary?
Response: The GSA has some power to impose fines on violators if it chooses to.

3. Plan Area Description Draft. The comment period on the draft Description of the Plan Area closed May 24. A matrix of comments was presented and a procedure established: those who commented will be sent responses and comment on these by June 8th; then adjusted comments/responses will be integrated into an updated version that will be reviewed by both the SAC and then the GSA Board.

4. Technical Forum. We received a brief summary from the monthly Technical Forum. (in the GSA packet, page 27) Questions were asked as to whether data that is provided is just added or if it is validated. W&C response is the sources of data and the approach will be reported after data collection is complete. There is concern among several SAC members that data be peer reviewed & verified before being used in the model.

5. Outreach. SAC committee members brought up concern that there is confusion among residents regarding all of the different groups/agencies dealing with water and what the purpose is of the various meetings that are taking place. Resolution is that Mary Currie will work with SAC member Jake Furstenfeld and Chair Jaffe to develop a list of the different groups/agencies and their purpose and meeting times. In addition, a calendar of water-related meetings will be developed. These will be posted in key locations in the Basin as well as online.
The Family Resource Center has distributed over 500 fliers in English and Spanish about the June 6th workshops. Sandwiches for the workshops have been donated by the Cuyama Buckhorn.

4. Miscellaneous questions and discussion.
• Satellite data from ITRC should be ready soon. This will provide a basis for looking at climate change as well as land use estimates between 1996 – 2016. This will be used as the calibration period for the Model.
• Next proposed SAC education topic: Groundwater Monitoring Network.
• A brief discussion was held on how/if management areas will be used. W&C thought this would be discussed further in August once the model could provide some initial guidance.
• The UCSB survey will be conducted throughout the Cuyama Valley June 18-28 with follow up. The goal is to reach every household and gather information related to census and water use. By September there should be some analysis ready to share with the SAC and GSA and incorporated into the GSP.

5. Summary.
Overall the meeting went very well. SAC Members are listening to each other and engaging more in the conversation. The educational session on Sustainability was excellent, with time for discussion, questions and explanations. The educational component of the SAC agenda will continue to be important and informative as we move forward into more complex topics with critical decisions to be made. There were repeated questions throughout the meeting related to data collection: how will gaps be addressed and how will data be validated before being used in the model.

TO: Board of Directors
Agenda Item No. 7b

FROM: Jim Beck, Executive Director

DATE: June 6, 2018

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.

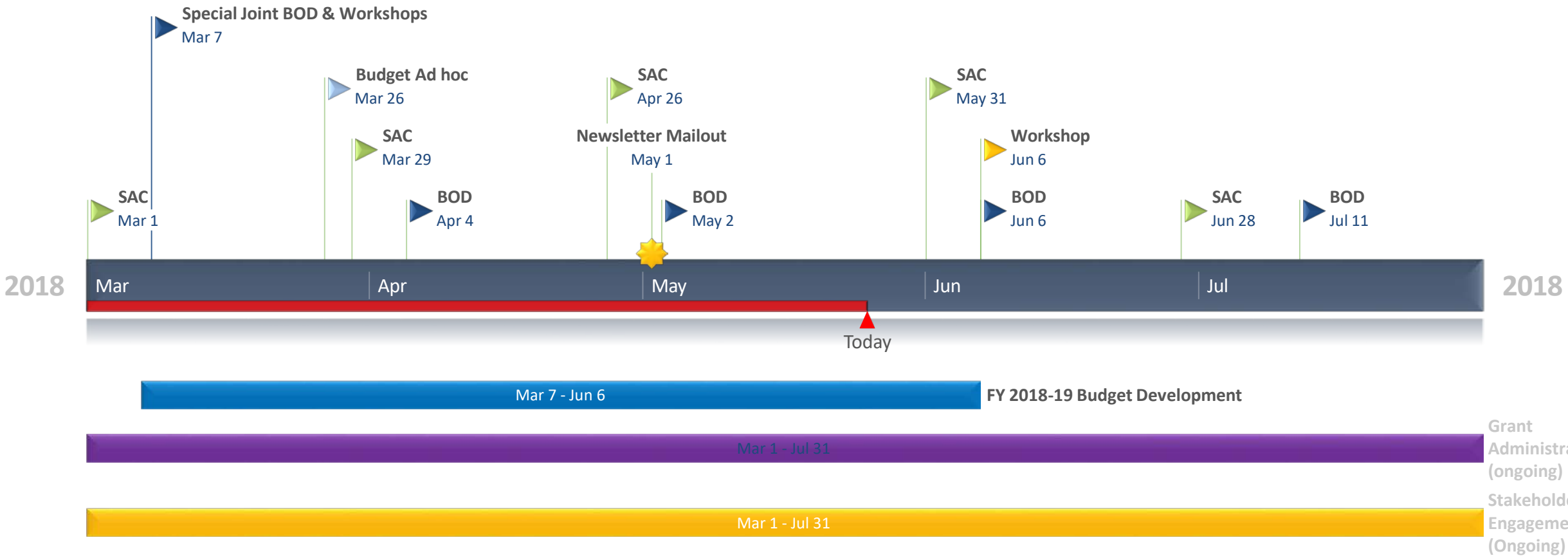
Cuyama Basin Groundwater Sustainability Agency

Progress & Next Steps

June 6, 2018

Cuyama Basin Groundwater Sustainability Agency

Near-Term Schedule



Cuyama Basin Groundwater Sustainability Agency

Program Schedule

Dec 6 - Mar 7	**Task 1: GSP & Stakeholder Engagement Strategy Development**
Dec 6 - Oct 26	**Task 2: Data Management System, Data Collection, Plan Review**
Jan 1 - Nov 30	**Task 3: Plan Area, HCM, Groundwater Conditions**
Dec 6 - Feb 28	**Task 4: Basin Model and Water Budget**
Apr 2 - Dec 28	**Task 5: Establish Basin Sustainability Criteria**
Apr 2 - Oct 26	**Task 6: Monitoring Networks**
Mar 1 - Feb 28	**Task 7: Project and Actions for Sustainability Goals**
Dec 3 - Feb 28	**Task 8: GSP Implementation Plan**
Dec 6 - Jun 28	**Task 9: GSP Document Development**
Dec 6 - Jun 28	**Task 10: Outreach, Education and Communication**
Dec 6 - Jun 28	**Task 11: Project Management**

Accomplishments & Next Steps

Accomplishments

- ✓ DWR Grant award notification
- ✓ Initial DWR Grant paperwork submitted

Next Steps

- Prepare for second assessment (in June)
- Prepare expanded financial report

TO: Board of Directors
Agenda Item No. 8a

FROM: Jim Beck, Executive Director

DATE: June 6, 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 (GSP) consultant Woodard & Curran's GSP update is provided as Attachment 1.

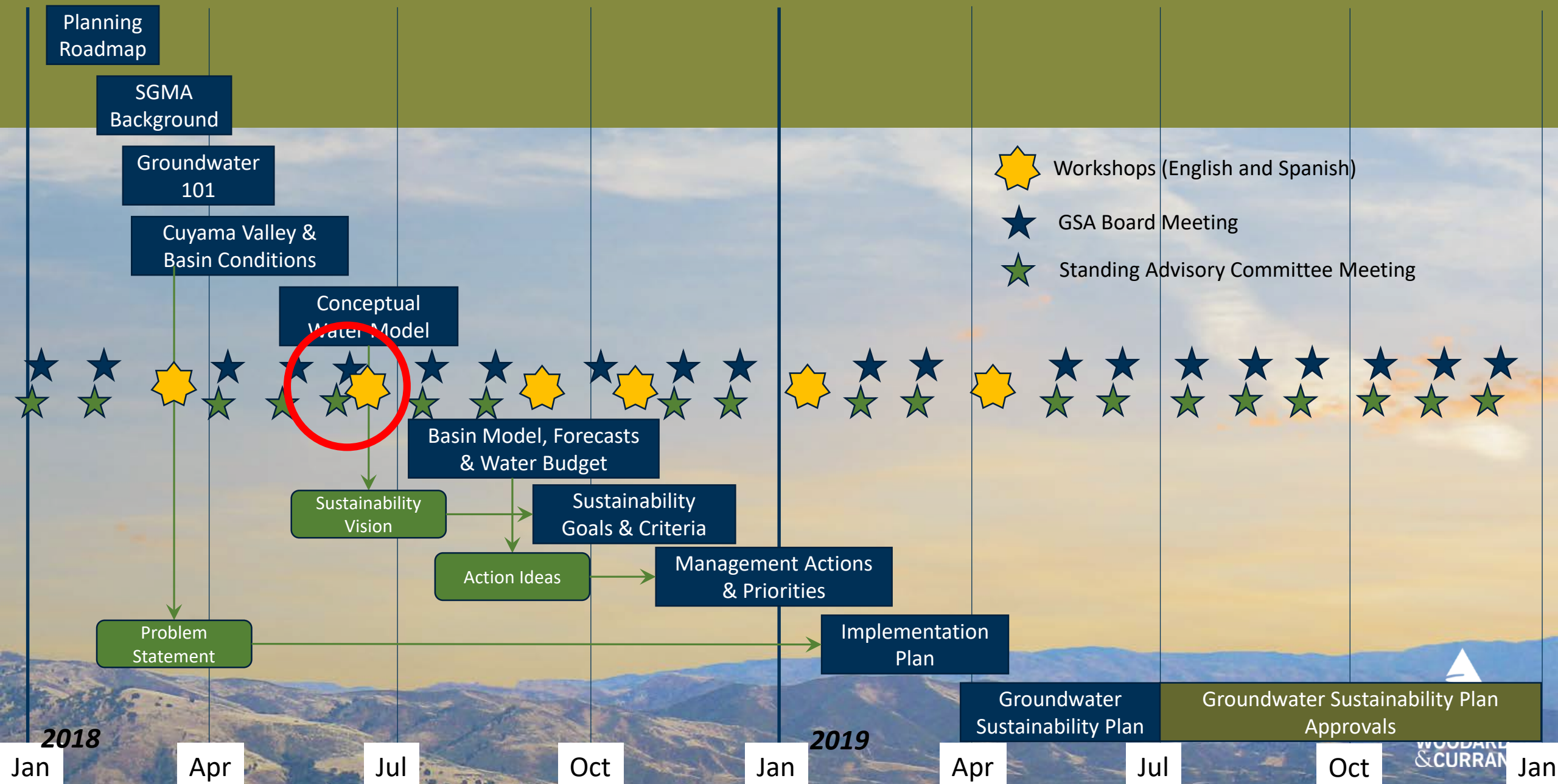
Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Update

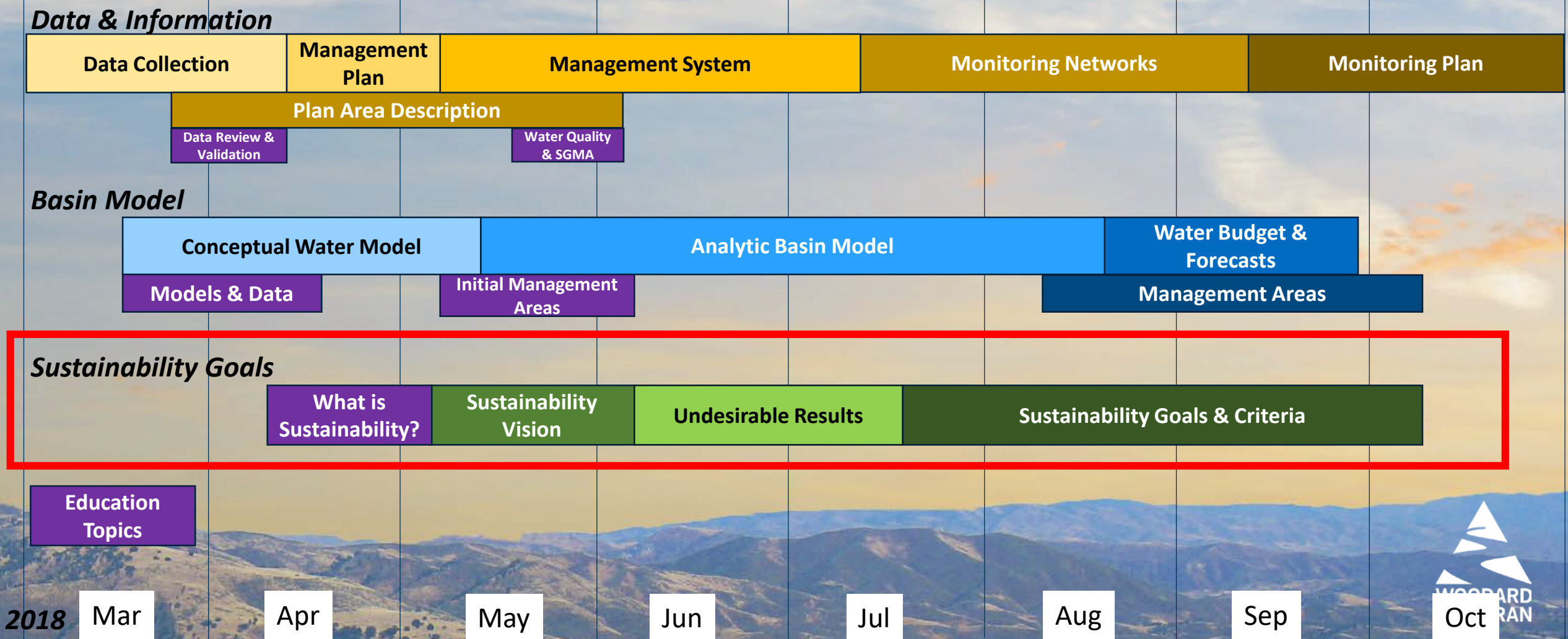
June 6, 2018

WOODARD &CURRAN

Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap



Cuyama Basin Groundwater Sustainability Plan – Discussion Topics



Cuyama GSP Sustainability Goals Timeline

- May and June SAC and Board Meetings and Workshop:
  - Solicit initial input on sustainability vision and goals
- July/August:
  - Review undesirable result narratives
  - Discuss ideas for thresholds and objectives
- September/October:
  - Develop quantitative thresholds and objectives for each indicator

WOODARD &CURRAN

Sustainability Indicators in the Cuyama Basin

Sustainability Indicators	Lowering GW Levels	Reduction of Storage	Land Subsidence	Surface Water Depletion	Degraded Water Quality
Metrics Defined by SGMA	Groundwater elevation	Total volume	Rate and extent of subsidence	Volume or rate of depletion	Migration of plumes; constituent concentrations

Workshop Discussion Questions

Sustaining the future of the Cuyama Valley

- What does sustainability of the Cuyama Valley mean for you?
- Is your picture of the future different from the Cuyama Valley you know today, if it is, how is it different?

The role of water in the future of the Cuyama Valley

- What do you see as important challenges or undesirable effects for the future of water in the Valley for the following?
  - Water and Jobs
  - Water and Community/Households
  - Water and Small Farms
  - Water and Large Farms
  - Water and Natural Resources

WOODARD &CURRAN

May GSP Accomplishments

- ✓ Distributed draft Description of Plan Area GSP section
- ✓ Continued data collection and processing
- ✓ Initiated implementation of data management system
- ✓ Continued work on conceptual basin model
- ✓ Continued work on GSP numerical model
- ✓ Distributed CBGSA newsletter – 1st Edition!

WOODARD &CURRAN

Summary of Data Collection Efforts (as of May 25)

- Data/information received from:
  - Santa Barbara, San Luis Obispo and Ventura Counties
  - Cuyama CSD
  - 11 landowners within Cuyama Basin Water District
  - 4 Other landowners

Data Type	Cuyama Basin WD	Cuyama CSD	Ventucopa	West Cuyama	Other
Geology	●	●	◖	●	○
GW Levels	●	●	○	◖	○
GW Well Locations	◖	◖	◖	◖	◖
GW Pumping	○	○	○	○	○
Land Use/Cropping	●	●	◖	◖	◖
Precipitation	◖	●	◖	○	○
Subsidence	◖	◖	◖	○	○
Surface Water Flow	○	○	○	○	○
Water Quality	◖	◖	○	○	○

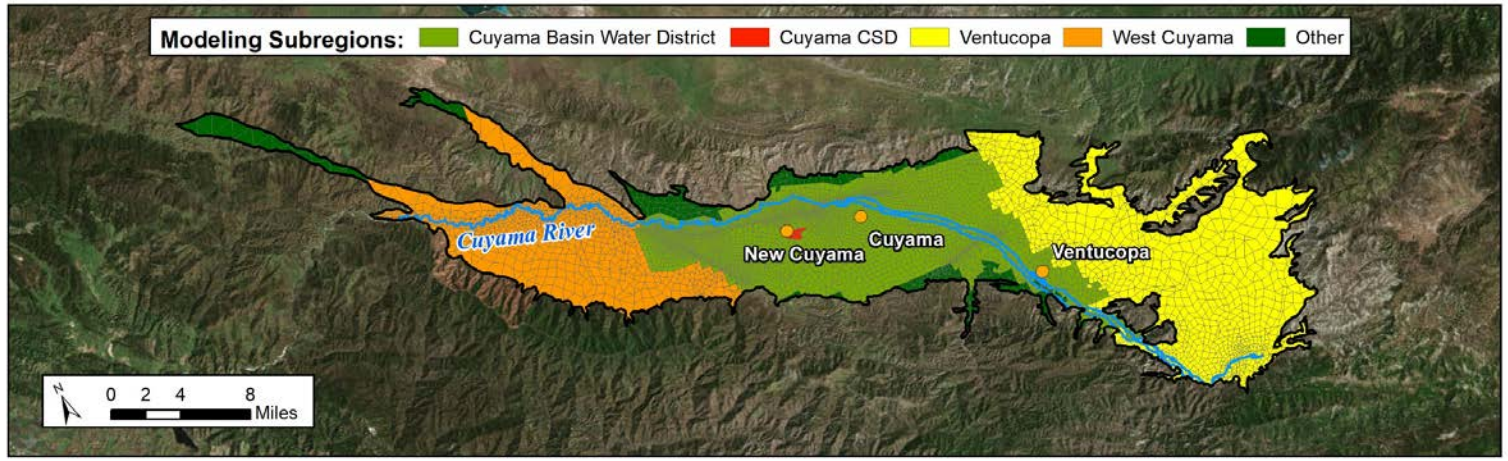
Key

● Robust data available

◖ Moderate data available

○ Little or no data available

Note: Synthetic data will be developed where little or no data is available for groundwater pumping and surface water flows



TO: Board of Directors
Agenda Item No. 8b

FROM: Jim Beck, Executive Director

DATE: June 6, 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 May 4, 2018 technical forum meeting is provided as Attachment 1, and the next forum is scheduled for June 8, 2018 at 2 pm.

COMMITMENT & INTEGRITY
DRIVE RESULTS

1545 River Park Drive | Suite 425
Sacramento, California 95815
www.woodardcurran.com

T 916.999.8700

MEETING MEMORANDUM

PROJECT: Cuyama Basin Groundwater Sustainability Plan Development

MEETING DATE: 5/4/2018

MEETING: Technical Forum Conference Call

ATTENDEES: Matt Young (Santa Barbara County Water Agency)
Cathy Martin (San Luis Obispo County)
Matt Klinchuch (Cuyama Basin Water District)
Dennis Gibbs (Santa Barbara Pistachio Company)
Jeff Shaw (EKI)
Neil Currie (Cleath-Harris Geologists)
John Fio (HydroFocus)
Brian Van Lienden, Lyndel Melton, Ali Taghavi, John Ayres & Sercan Ceyhan (Woodard & Curran)

1. AGENDA

- Model grid update
- Hydrogeology
- Hydrology
- Land and water use
- Data collection update
- Next steps

2. DISCUSSION ITEMS

The following table summarizes discussion items raised at the meeting and the plans for resolution identified for each item.

Item No.	Discussion Item	Plan for Resolution
1	The updated model grid was provided for review on April 19, 2018.	Since no comments were provided, the W&C team is moving forward with the current grid.
2	The technical analysis needs to account for an unnamed fault near Cottonwood Canyon.	Neil Currie will provide information related to this fault. W&C will review this information and incorporate it into the hydrogeologic conceptual model (HCM). No change needed to the model grid as it appears to be of sufficient resolution to allow incorporation, as appropriate, into the model.

3	The HCM should use Delong's mapping of terrace outcrops.	W&C will review this information and incorporate it into the HCM.
4	We need to make clear in reporting where data came from, how it was validated and how it was used	Once the data collection effort is complete, W&C will report to the CBGSA and Technical Forum the sources of data and the approach used for data validation..
5	Materials should be sent out for review prior to the call. Technical forum members would like to see a draft HCM document prior to the next call.	Presentation materials will be sent out prior to each call, with documents provided as available. The W&C team will attempt to provide a draft HCM document prior to the next call.
6	Why has work begun on the numerical model before completion of the HCM? Don't we need a water budget before we can develop the numerical model?	Work on the numerical model needs to be done in parallel with the HCM to meet the aggressive project schedule. Information from the HCM will still be incorporated into the numerical model. W&C will develop a rough water budget for review; however, the numerical model will be the primary source of water budget information.
7	The upper and lower Morales formations have different anisotropy and need to be treated differently in the HCM and numerical model	This is consistent with the W&C team's understanding. Assessment of these formations will be primarily based on the USGS representation.
8	How is daily precipitation data developed? How are PRISM block data mapped to the numerical model grid?	PRISM includes daily data back to 1981; prior to that daily data will be developed by matching similar years. PRISM block data will be mapped to the model grid using spatial interpolation.
9	Will stakeholders be able to review groundwater level and hydrograph information?	Groundwater level information will be provided as part of the Groundwater Conditions portion of the GSP. Additional groundwater level information will be accessible to stakeholders through the Opti data management system once it is developed.

May 4th Technical Forum Discussion

- Model grid update
- Hydrogeology
- Hydrology
- Land and water use
- Data collection update
- Next steps

- Next Meeting – June 8th
- Monthly Meetings – first Friday after each Board meeting

WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 8c

FROM: Jim Beck, Executive Director

DATE: June 6, 2018

SUBJECT: Description of the Plan Area

Issue
Update on the Description of the Plan Area.

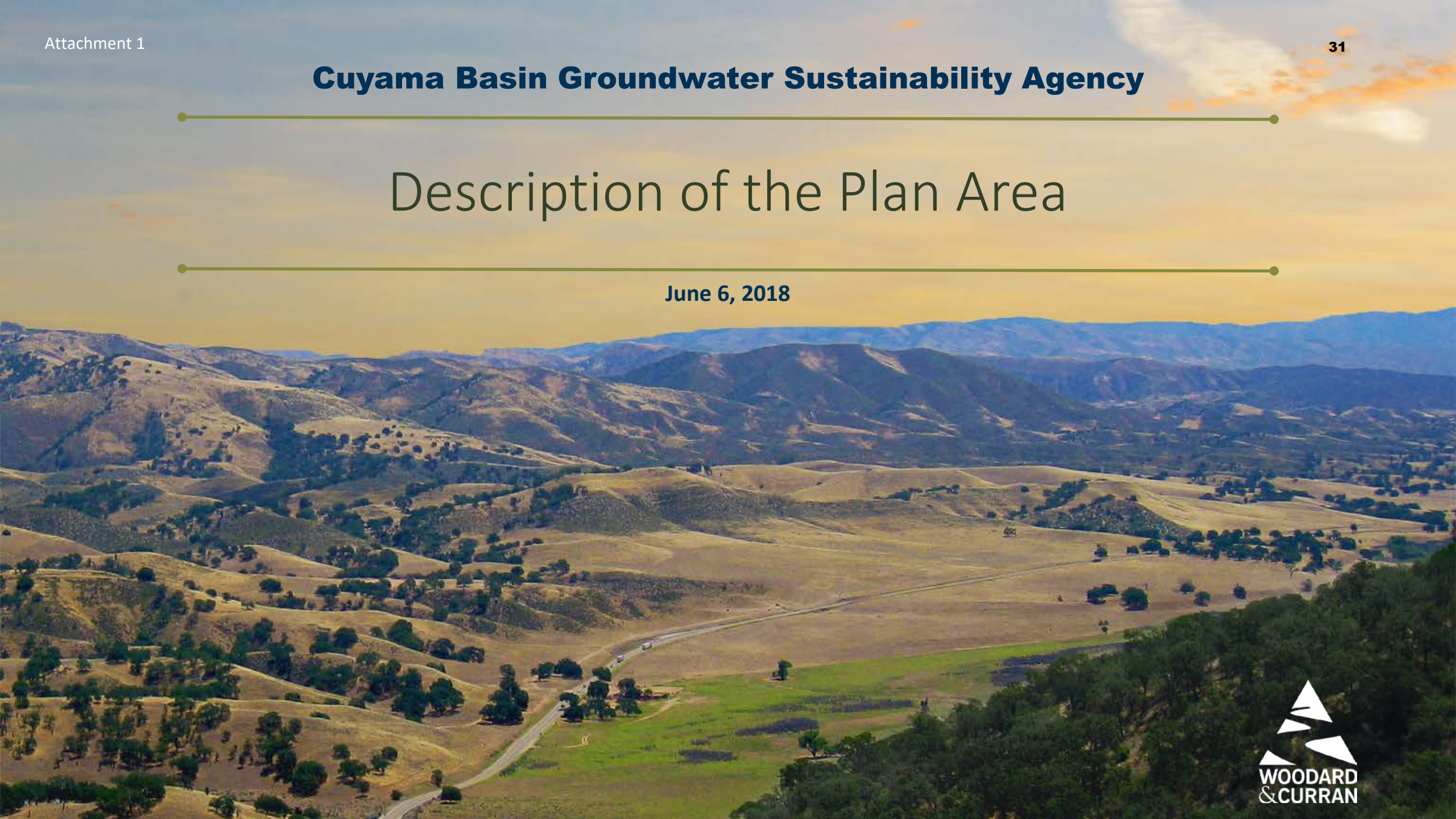
Recommended Motion
None – information only.

Discussion
Provided as Attachment 1 is a summary slide regarding an update on the Description of the Plan Area.

Cuyama Basin Groundwater Sustainability Agency

Description of the Plan Area

June 6, 2018



WOODARD &CURRAN

Description of Plan Area

- Draft GSP Section provided to SAC and Board for review as part of Board Packet on April 20th
- Description of Plan Area describes:
  - Plan Area definition and setting
  - Existing surface water and groundwater monitoring programs
  - Existing water management programs
  - General Plans in the Plan Area
- Comment period closed May 24th

WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 8d

FROM: Jim Beck, Executive Director

DATE: June 6, 2018

SUBJECT: Public Workshop and Stakeholder Engagement Update

Issue
Update on the Cuyama Basin Groundwater Sustainability Agency Groundwater Sustainability Plan public workshops and stakeholder engagement.

Recommended Motion
None – information only.

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

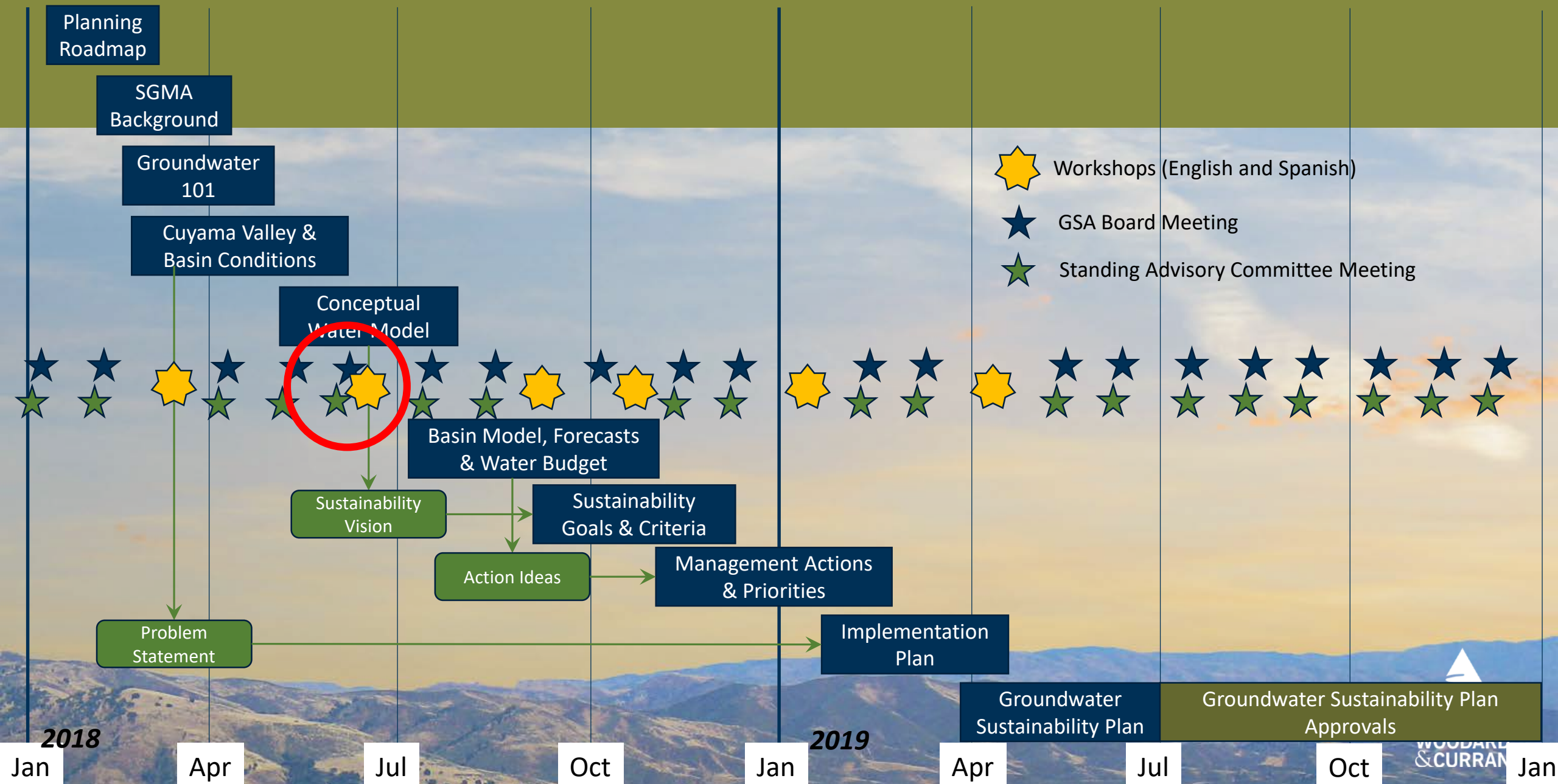
Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Stakeholder Engagement Update

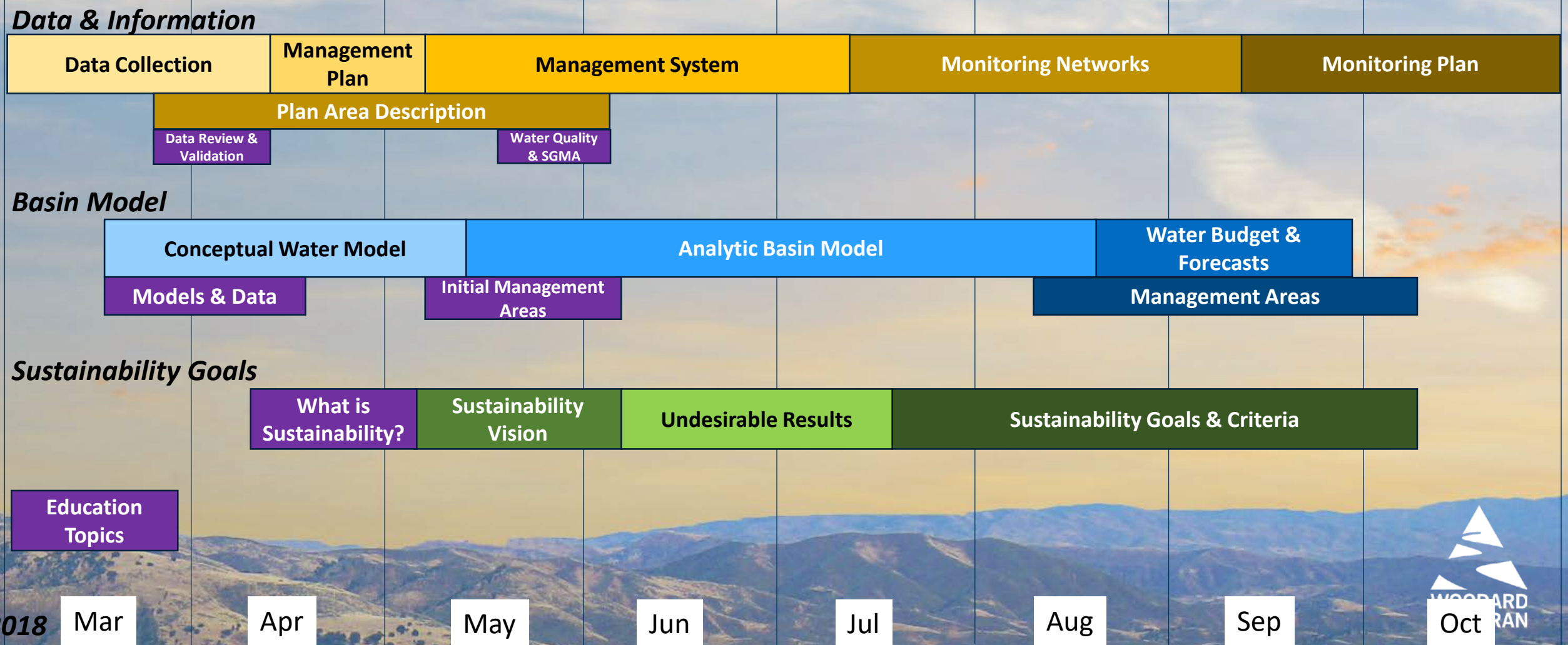
June 6, 2018

WOODARD &CURRAN

Cuyama Basin Groundwater Sustainability Plan – Planning Roadmap



Cuyama Basin Groundwater Sustainability Plan – Discussion Topics



Outreach Activities

- CBGSA Newsletter – Issued May 1
- June 6 Workshops Announced
  - English at 6:15 pm at the Cuyama Recreation District facility
  - Spanish at 6:15 pm at Cuyama Family Resources Center
- Next Steps
  - Conduct June 6 community workshops
  - Discuss workshop results and gather SAC and Board input next month
  - Continue planning educational topics for SAC meetings

WOODARD &CURRAN

TO: Board of Directors
Agenda Item No. 9a

FROM: Jim Beck, Executive Director

DATE: June 6, 2018

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

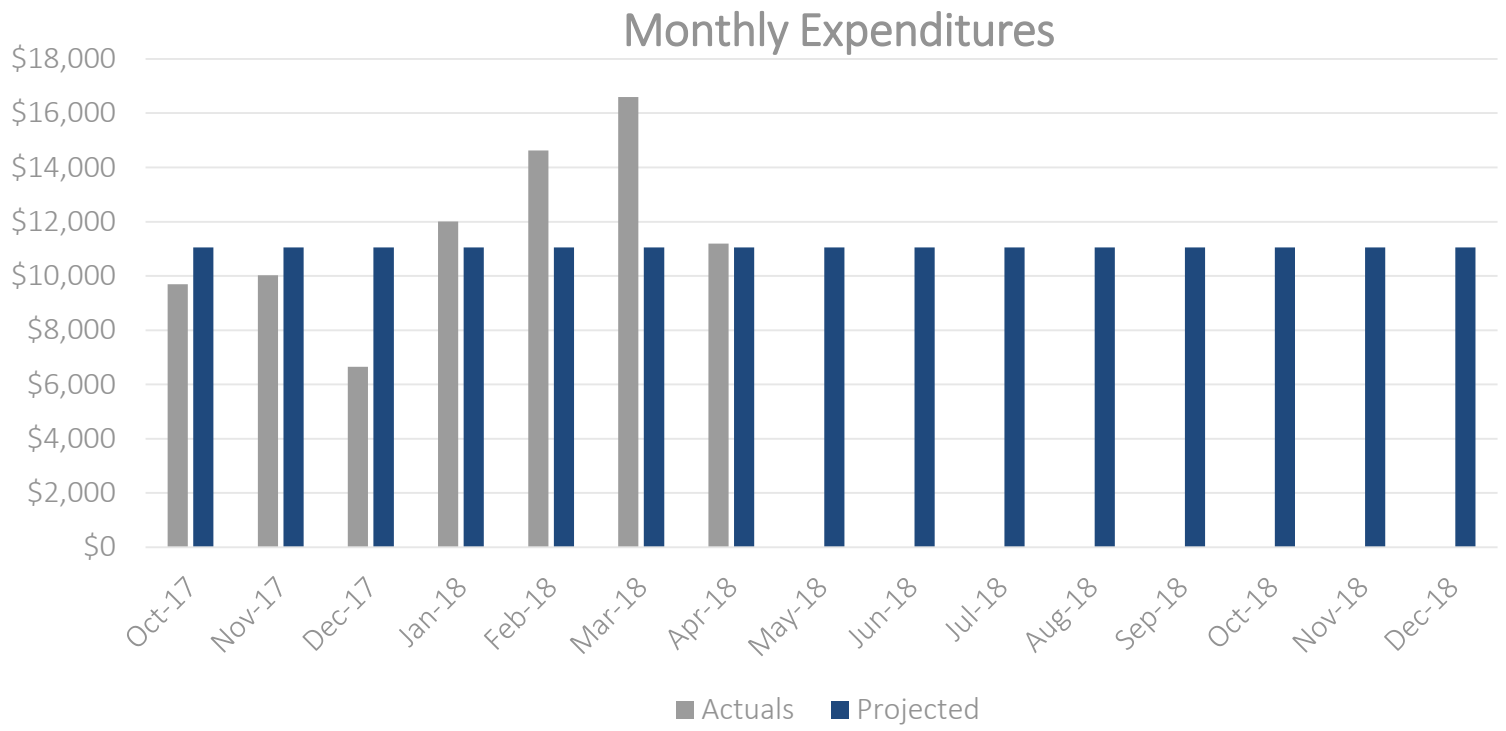
Financial Report

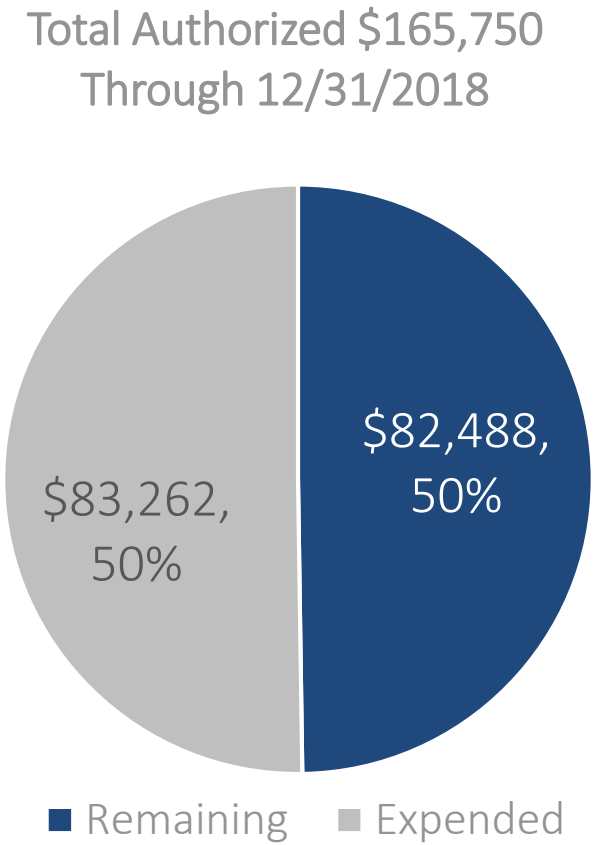
June 6, 2018

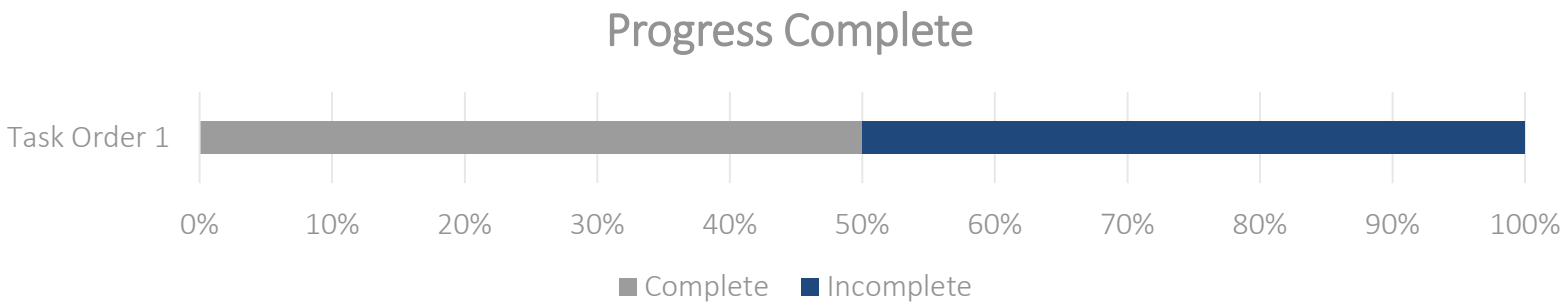
CBGSA OUTSTANDING INVOICES

Task	Invoiced Through	Cumulative Total
Legal Counsel	4/19/2018	$11,723.36
Executive Director	4/30/2018	$37,369.05
GSP Development	4/30/2018	$268,404.47
TOTAL		$317,496.88

Executive Director Task Order 1

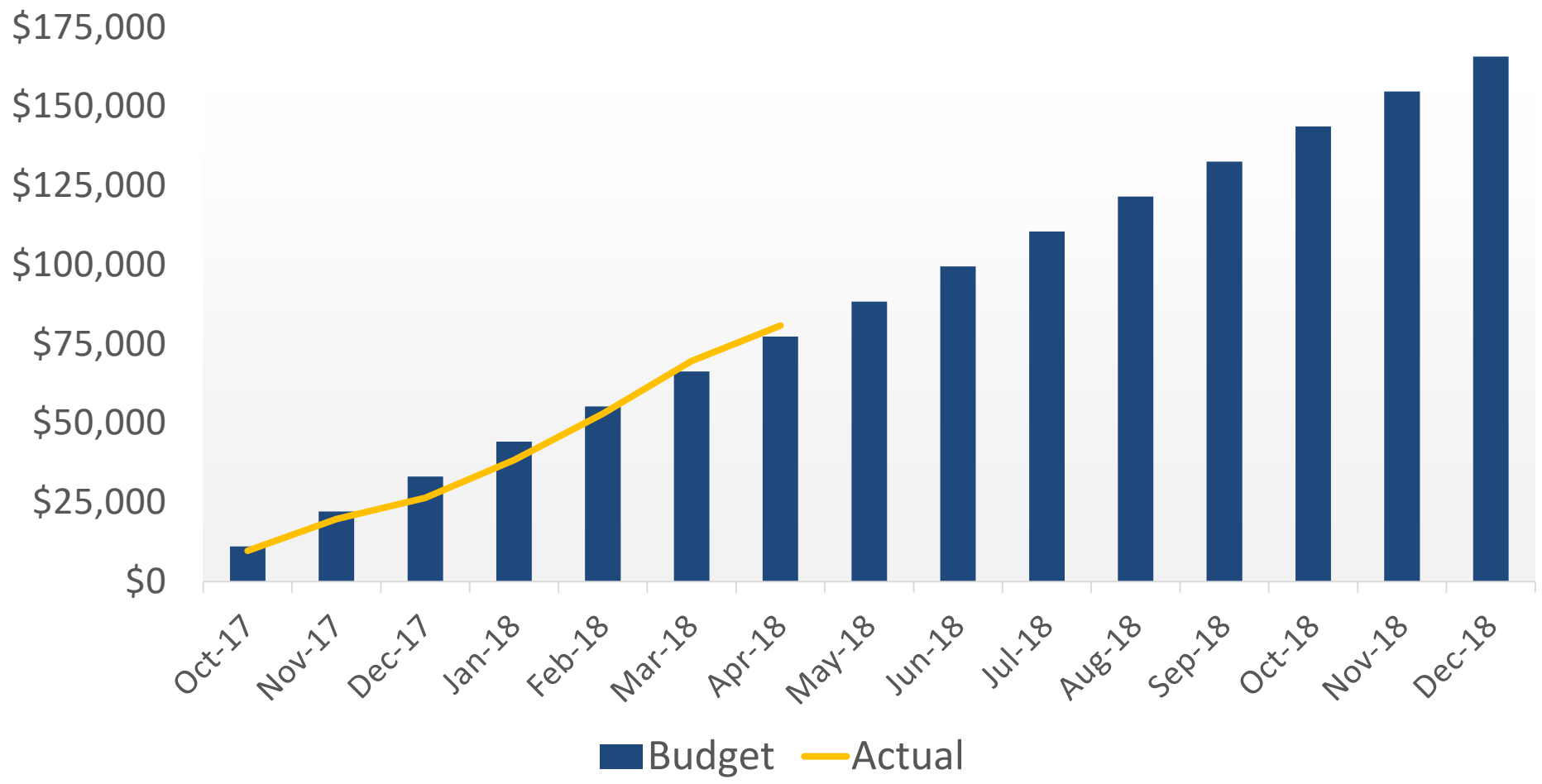




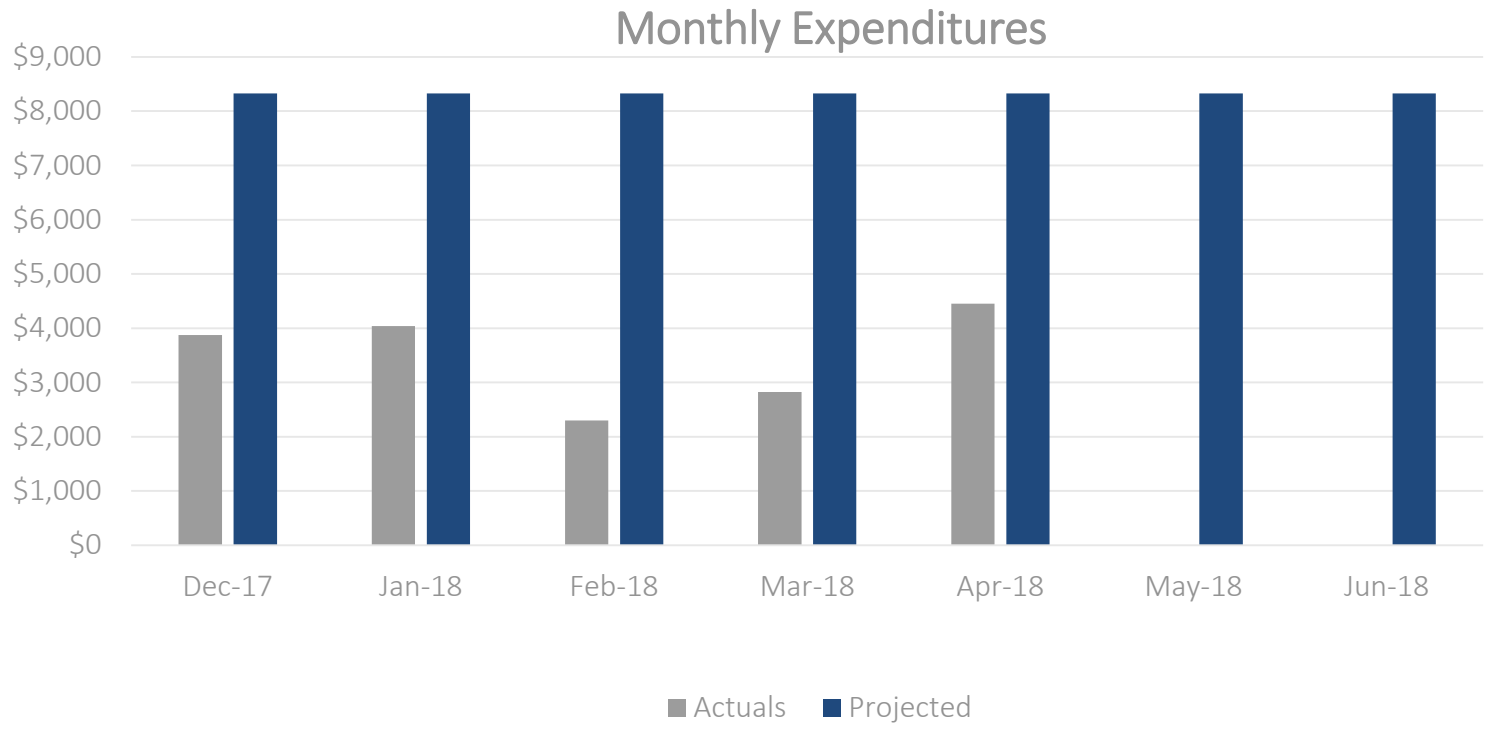


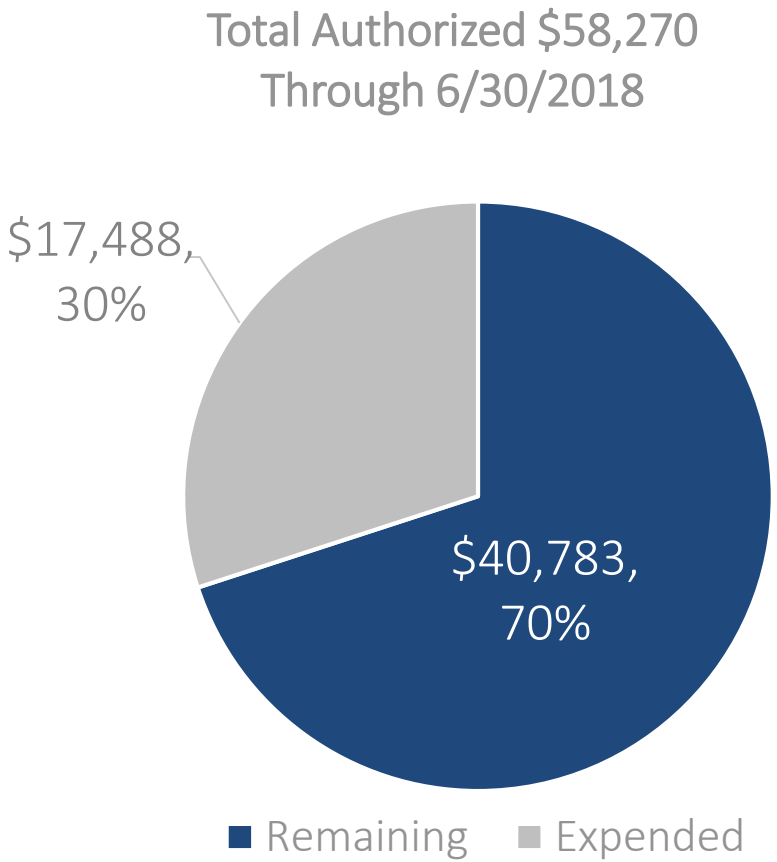
HALLMARK GROUP Capital Program Management

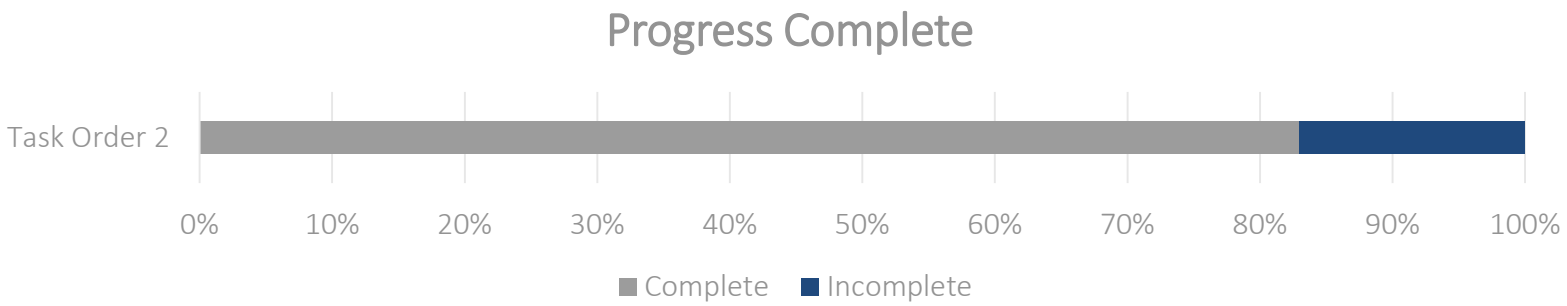
Task Order No. 1: Budget to Actual



Executive Director Task Order 2

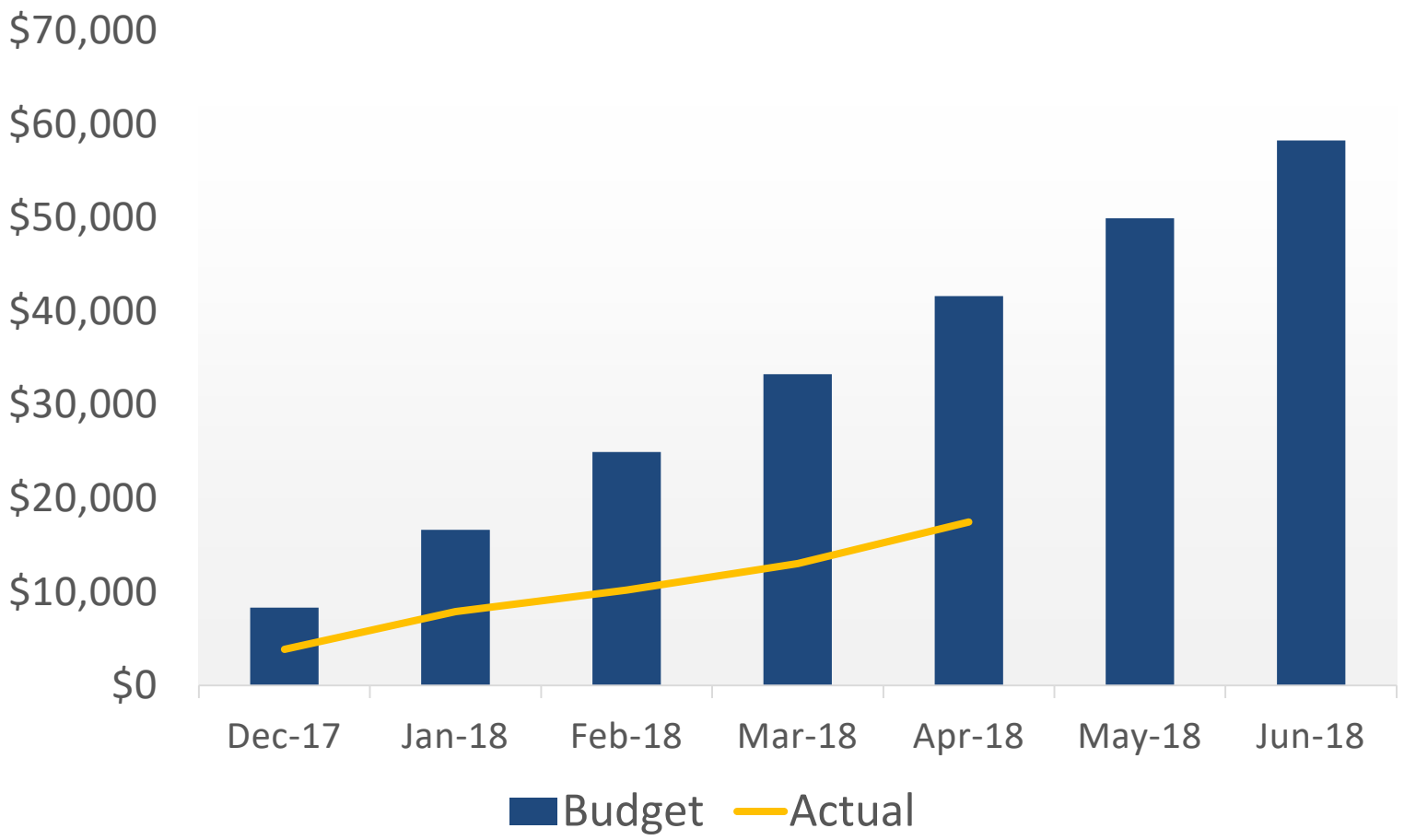




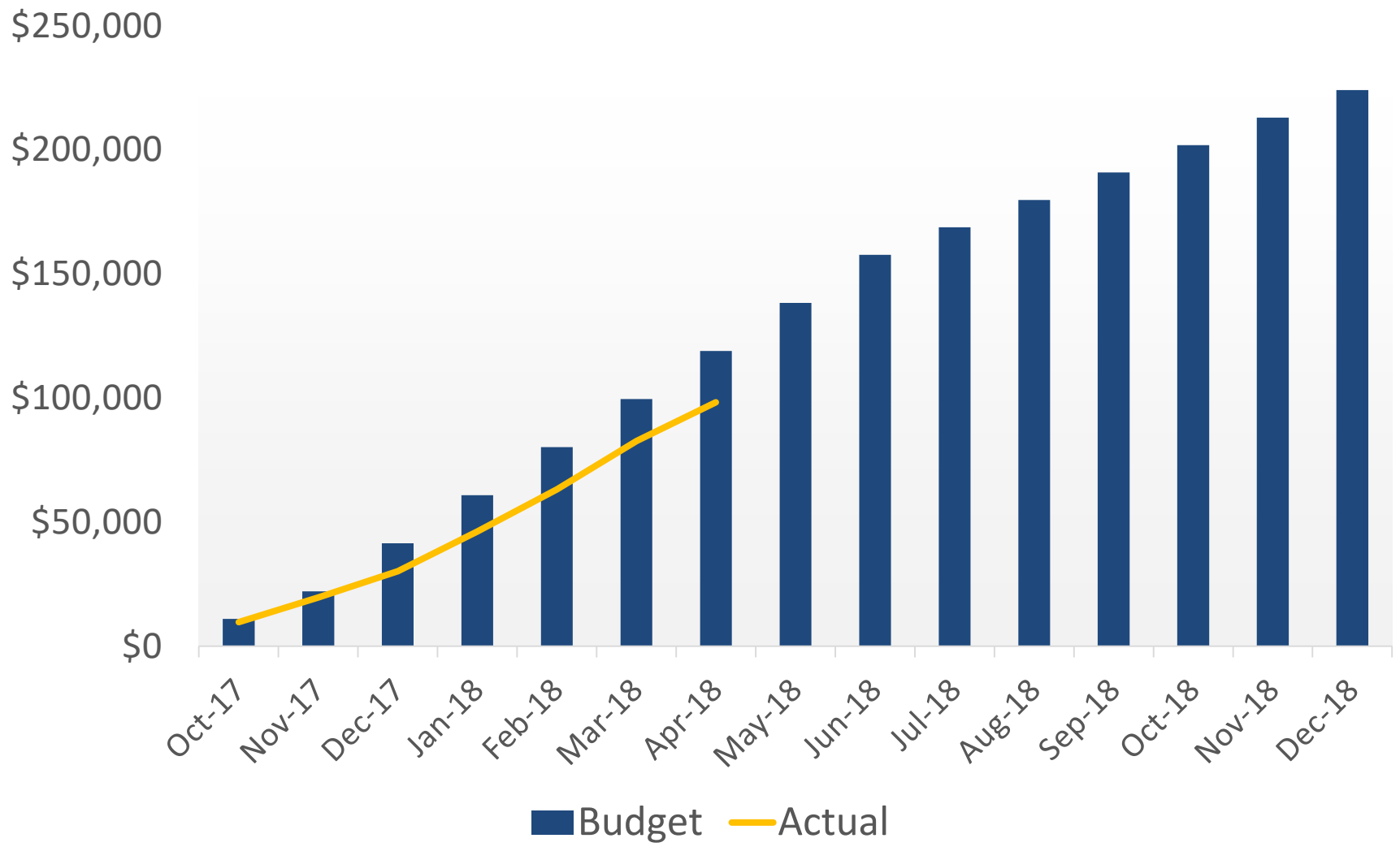


HALLMARK GROUP Capital Program Management

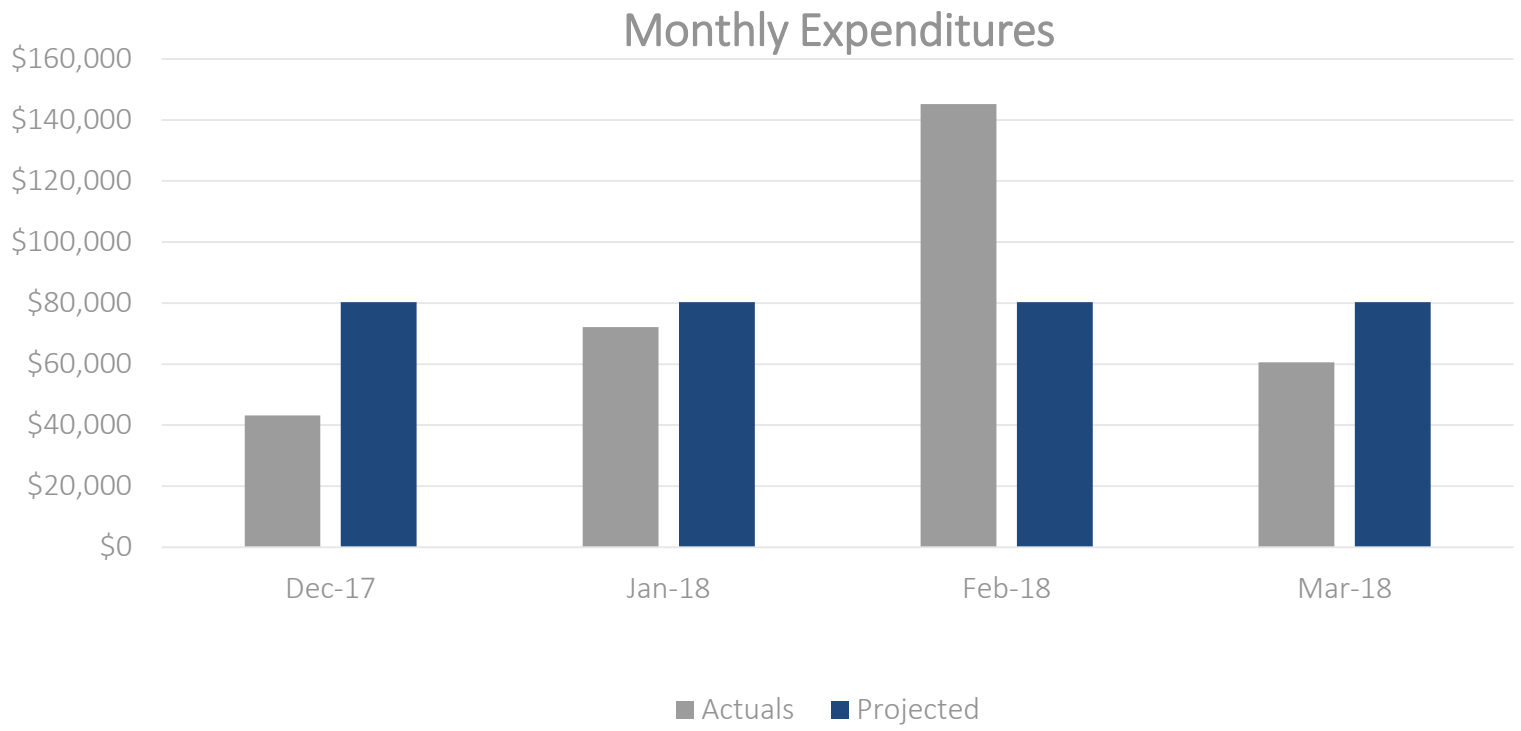
Task Order No. 2: Budget to Actual

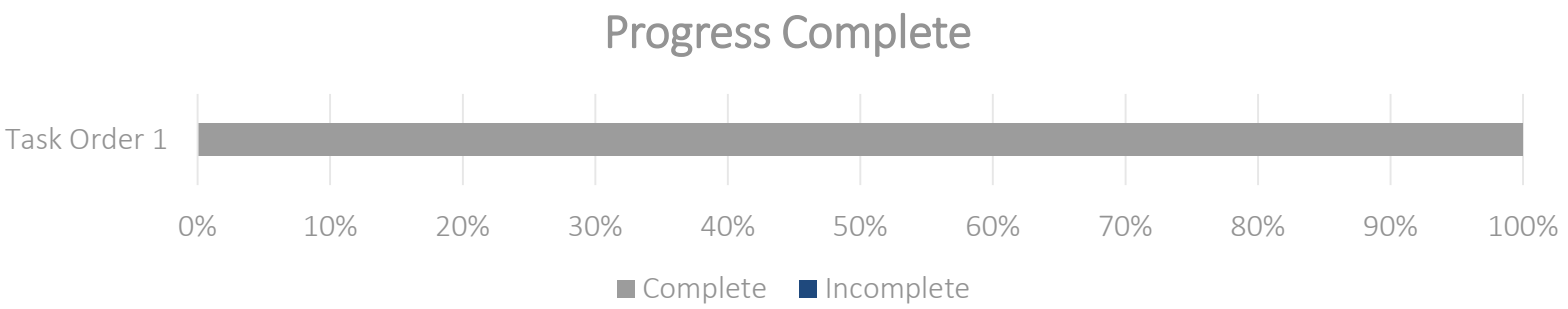


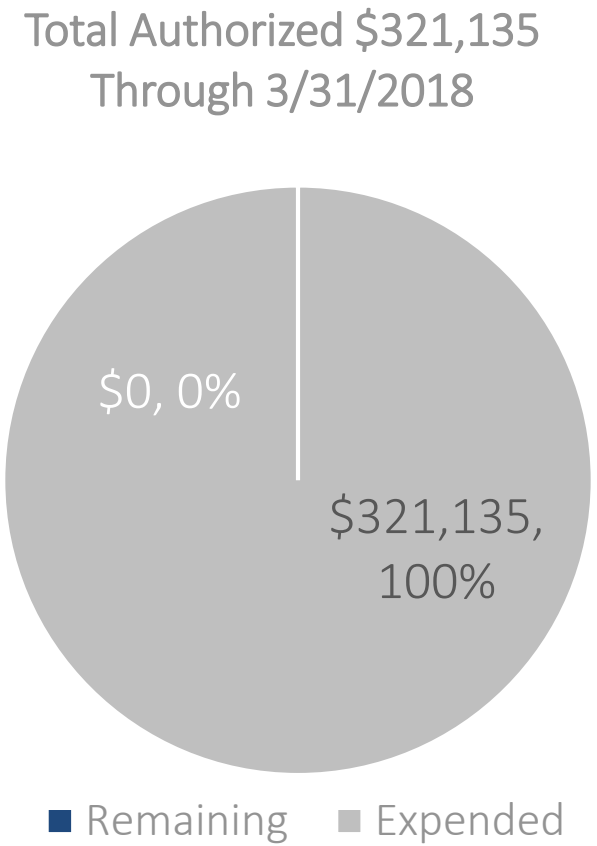
Task Order Nos. 1 & 2: Budget to Actual



GSP Development Task Order 1

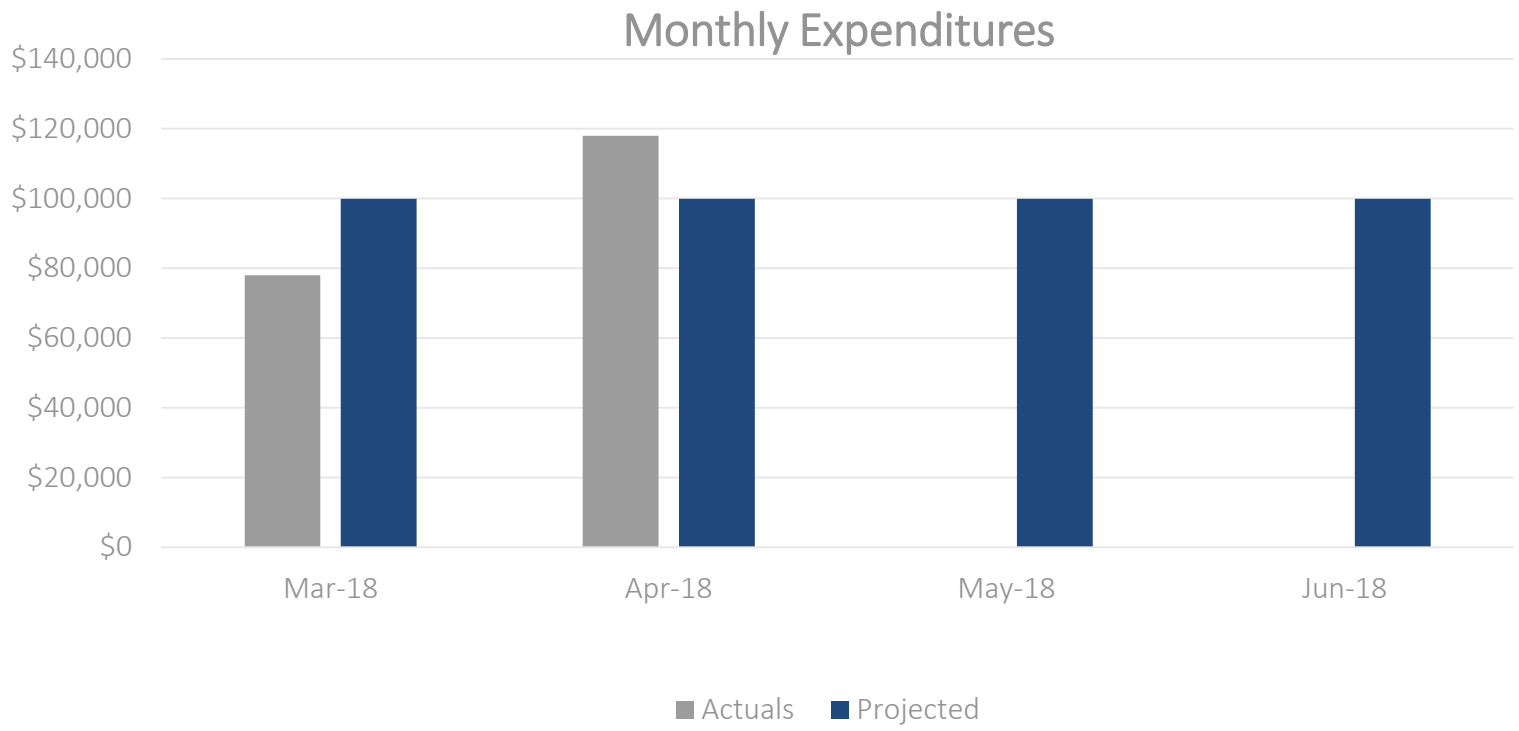


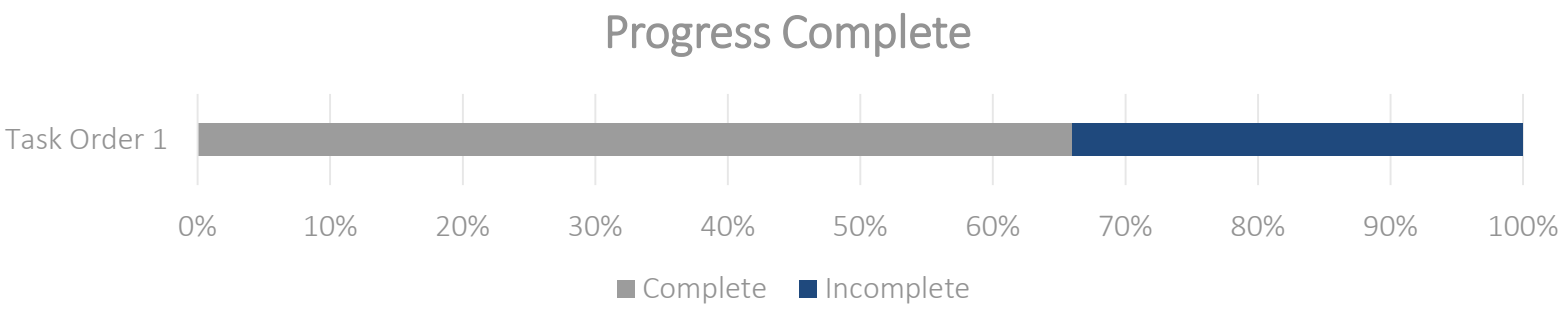


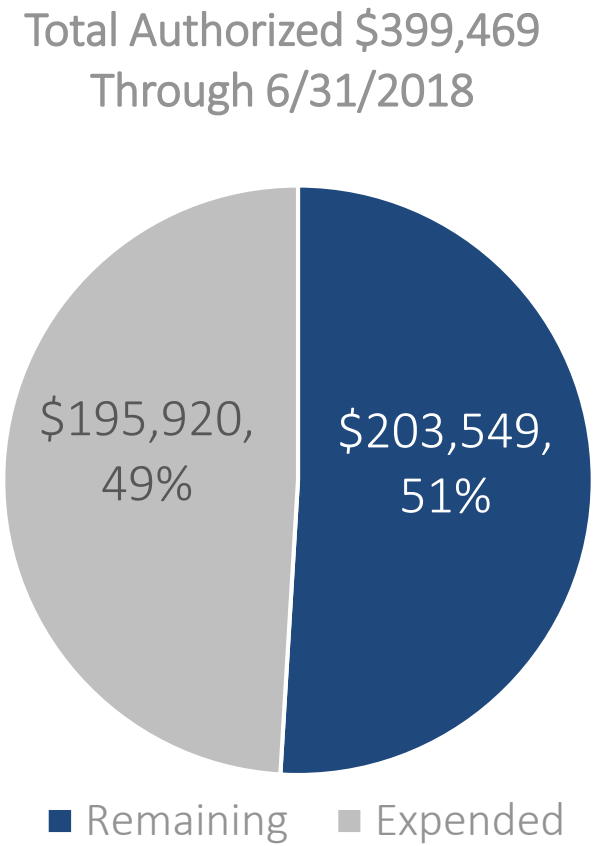


HALLMARK GROUP Capital Program Management

GSP Development Task Order 2

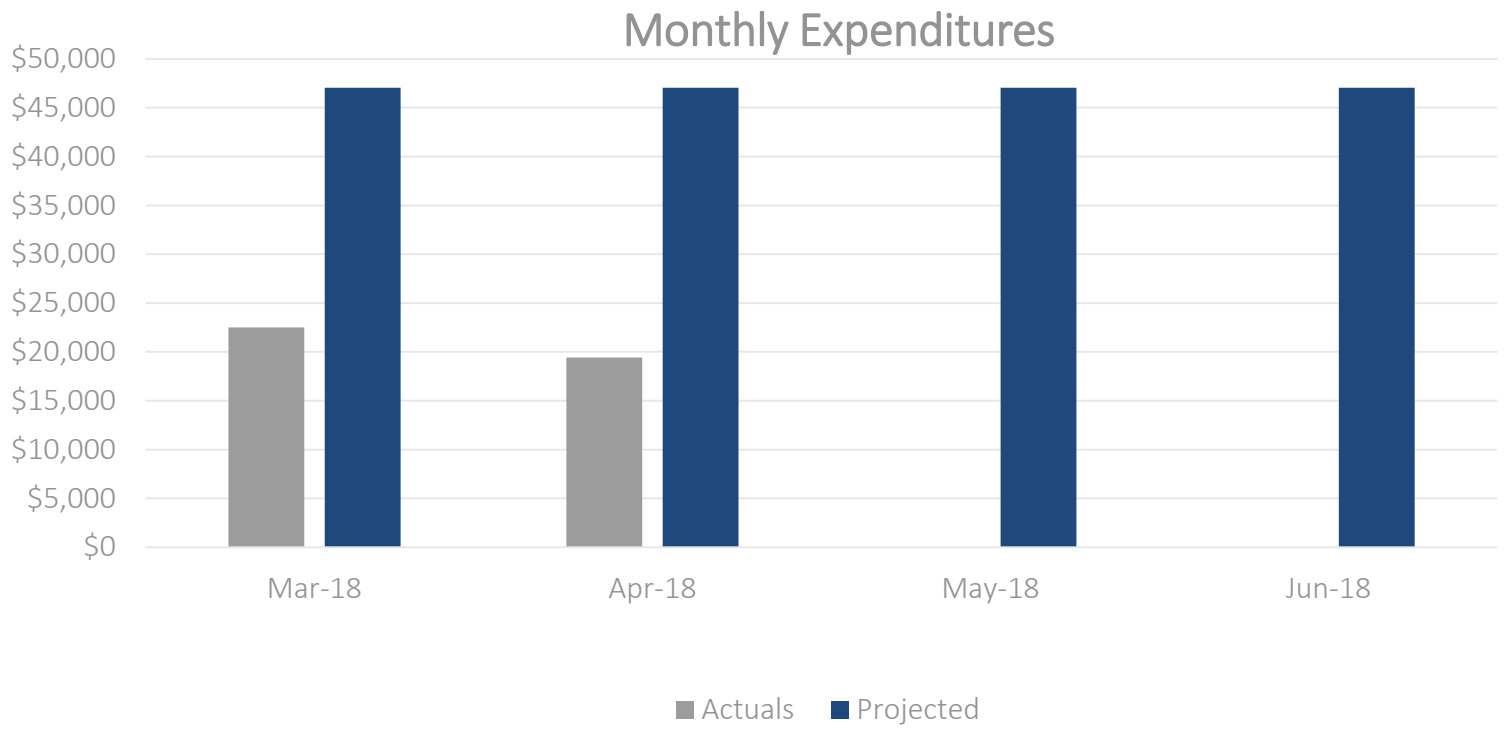


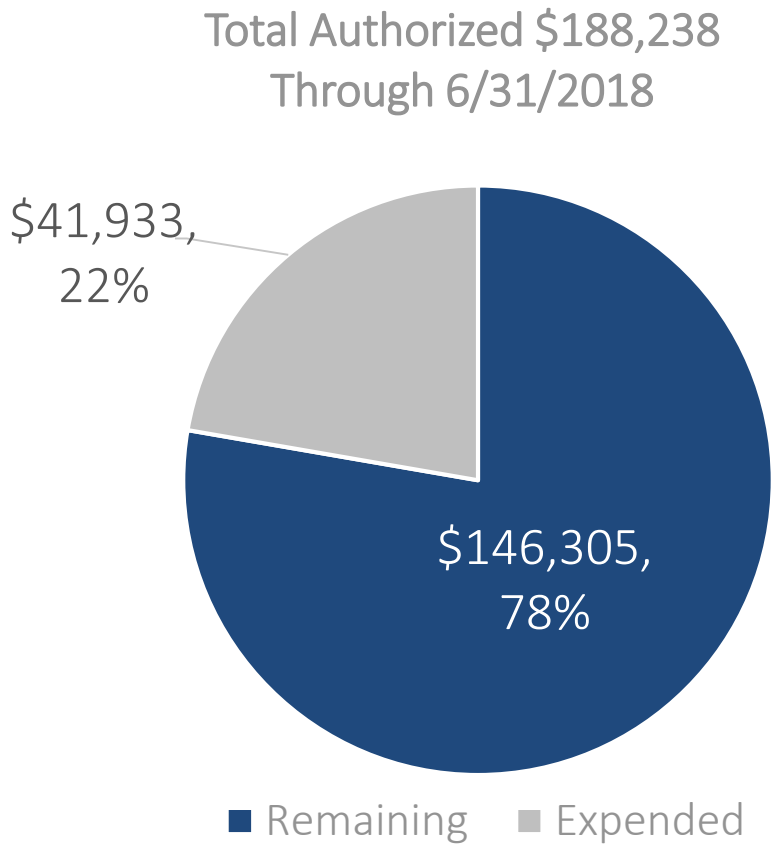


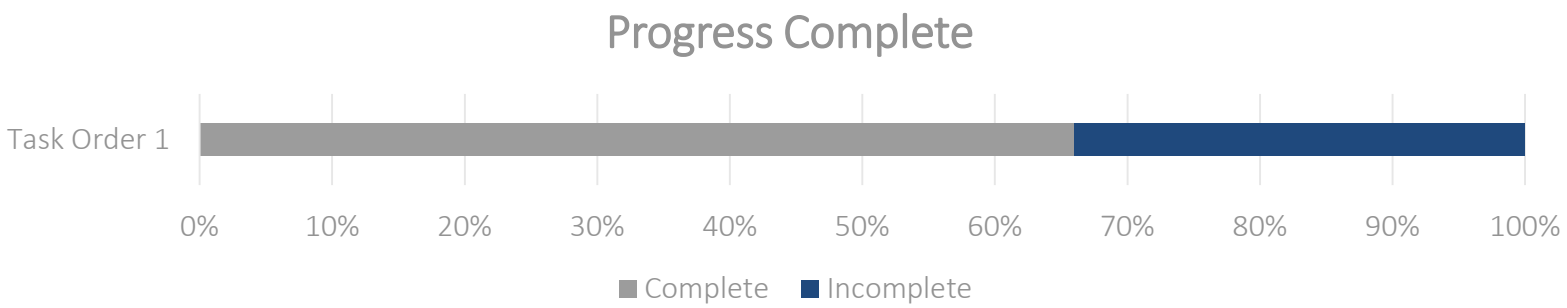


HALLMARK GROUP Capital Program Management

GSP Development Task Order 3







HALLMARK GROUP Capital Program Management

TO: Board of Directors
Agenda Item No. 9b

FROM: Jim Beck, Executive Director

DATE: June 6, 2018

SUBJECT: Hallmark Group Task Order

Issue
Consider authorizing an amendment to the Hallmark Group Task Order No. 2.

Recommended Motion
Authorize Amendment No. 1 to Task Order No. 2 for continuation of the Hallmark Group's services through June 30, 2019 in the amount of $63,840.

Discussion
Task Order No. 2 was originally authorized by the Cuyama Basin Groundwater Sustainability Agency Board of Directors on December 6, 2017 to provide additional services identified by the Board including budget development and administration, financial management, and outreach facilitation. This task order is set to expire June 30, 2018, and Amendment 1 would provide an extension through June 30, 2019 in an amount of $63,840 for a total not to exceed amount of $122,110.

Amendment 1 matches the amount budgeted in the approved Fiscal Year 2018/19 budget.

Attachment 1

TASK ORDER CB-HG-002 AMENDMENT 1

AGREEMENT FOR EXECUTIVE DIRECTOR SERVICES

AGREEMENT NO. 201709-CB-001
June 6, 2018

HALLMARK GROUP Capital Program Management

Persistence | Proficiency | Performance

HALLMARK GROUP Capital Program Management

June 6, 2018

This letter serves as the mutual agreement to amend the existing contract AGREEMENT NO. 201709-CB-001 between The Hallmark Group and the Cuyama Basin Groundwater Sustainability Agency to add funds in the amount of $63,840.00 and additional time of 365 days to the existing contract. This will be reflected in the revised Task Order 2 with an effective date of July 1, 2018.

The term of this agreement is July 1, 2018 through June 30, 2019.

The maximum amount of this Agreement after this amendment is $122,110.00.

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY	HALLMARK GROUP
Signature	Signature
Date	Date

TASK ORDER CB-HG-002

AMENDMENT 1

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY EXECUTIVE DIRECTOR

Task Order No.:	CB-HG-002
Contractor:	The Hallmark Group
Request for Services:	Executive Director
Agreement Number:	201709-CB-001
Amount:	$63,840.00
Contract Period:	July 1, 2018 – June 30, 2019

Check One:

- Task Order Initiation
- ✓ Task Order Amendment/Modification
- Task Order Notice to Proceed
- Task Order Close-out

DESCRIPTION OF TASK

The Cuyama Basin Groundwater Sustainability Agency (CBGSA) was formed on June 6, 2017 and requests Hallmark Group provide Executive Director services to perform management and administrative duties in the role of a general manager supporting staff for a public agency acting as a Groundwater Sustainability Agency. The role of the Executive Director has expanded, and the tasks below have been identified as additional support needs for the GSA including budget development, financial administration, and outreach planning. We will continue to provide the same level of service as identified in the original task order with the exception of tasks required for the initial set up of the organization.

SCOPE OF WORK FOR CBGSA EXECUTIVE DIRECTOR

TASK 1 – BUDGET DEVELOPMENT & ADMINISTRATION

Contractor will perform the following budget development and administration services:

1.1 Develop FY 19/20 FY Budget, Including Scope, Schedule and Cost

1.2 Ad Hoc Committee Meeting Coordination

TASK 2 – FINANCIAL MANAGEMENT

Contractor will perform the following financial management services:

2.2 Monthly Invoicing / Accounts Receivable / Collections

2.3 Monthly Accounts Payable

2.4 Monthly Record Keeping

2.5 Annual Coordination with Outside Auditor

2.6 Monthly Coordination with Grant Invoicing

2.7 Grant Administration (anticipated quarterly)

2.8 Grant Reports to DWR

TASK 3 – OUTREACH FACILITATION

Contractor will perform the following outreach facilitation services:

3.2 Workshops and Meetings

Task Order CB-HG-002 is being amended to extend the term for 12 months from 7 to 19 months. The amended term of this Task Order is from July 1, 2018 to June 30, 2019. No further services are to be provided from the time funds are depleted until a Task Order Amendment has been approved. Work will be performed in accordance with the following schedule.

TASK NUMBER	DELIVERABLE	TARGET DATE
1.1	Present FY 19/20 Budget to Board of Directors for approval	Q1 2019
2.2	Monthly schedule of receivables	Monthly
2.3	Monthly schedule of payables	Monthly
2.8	Grant report	Quarterly
3.2	Attend program workshops or meetings with GSP development consultant	Quarterly

TERM

The current amount of the task order is $58,270.00. The Task order is being amended to add $63,840.00. The total amount of this Task Order, including this amendment shall not exceed $122,110.00. Contractor shall invoice all services according to 201709-CB-001. The term of this Task Order is July 1, 2018 through June 30, 2019.

DETAILED COSTS

Contractor shall invoice all services according to the Agreement. The total amount of this Task Order shall not exceed $122,110.00 which will include additional funds for direct costs related to printing.

CONTACT PERSONS

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY	HALLMARK GROUP
Representative: Derek Yurosek	Representative: Charles R. Gardner Jr.
P.O. Box 20157	1901 Royal Oaks Drive, Suite 200
Bakersfield, CA 93390	Sacramento, CA 95815
Phone: (661) 323-4005	Phone: (916) 923-1500
Email: dyurosek@bolthouseproperties.com	Email: cgardner@hgcpm.com

AUTHORIZED SIGNATURES

Contractor and the Cuyama Basin Groundwater Sustainability Agency agree that these services will be performed in accordance with the terms and conditions of Standard Agreement Number 201709-CB-001.

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY	HALLMARK GROUP
_____	_____
Signature	Signature
_____	_____
Date	Date

Draft Task Order No. 2, Amendment No. 1

ESTIMATED ANNUAL LEVEL OF EFFORT (HOURS)

	Classification	Executive Director	Project Controls Manager	Project Administrator	Total Hours
Total Labor (Hours)		74	100	197	371
Task 1	Budget Development & Administration	16	2	23	41
Task 1.1	Develop Monthly Budget , Including Scope, Schedule and Cost	7	1	8	16
Task 1.2	Ad Hoc Committee Meeting Coordination	9	1	15	25
Task 2	Financial Management	34	98	142	274
Task 2.1	Initial Coordination & Financial Mgmt Setup for CBGSA Mgt.	0	0	0	0
Task 2.2	Monthly Invoicing / Accounts Receivable / Collections	4	6	24	34
Task 2.3	Monthly Accounts Payable	4	6	24	34
Task 2.4	Monthly Record Keeping	4	6	48	58
Task 2.5	Annual Coordination with Outside Auditor	2	4	2	8
Task 2.6	Monthly Coordination w Grant Invoicing	4	36	4	44
Task 2.7	Grant Administration (anticipated quarterly)	4	36	8	48
Task 2.8	Grant Reports to DWR	12	4	32	48
Task 3	Outreach Facilitation	24	0	32	56
Task 3.1	Develop Stakeholder Outreach Process	0	0	0	0
Task 3.2	Workshop and Ad Hoc Committee Meeting Coordination	24	0	32	56

ESTIMATED ANNUAL COSTS (DOLLARS)

	Classification	Executive Director	Project Controls Manager	Project Administrator	Total Cost
	Rate / Hour	$250	$200	$100	
Total Labor		$18,500	$20,000	$19,700	$58,200
Task 1	**Budget Development & Admin**	$4,000	$400	$2,300	$6,700
Task 1.1	Develop Monthly Budget , Including Scope, Schedule and Cost	$1,750	$200	$800	$2,750
Task 1.2	Ad Hoc Committee Meeting Coordination	$2,250	$200	$1,500	$3,950
Task 2	**Financial Management**	$8,500	$19,600	$14,200	$42,300
Task 2.1	Initial Coordination & Financial Mgmt Setup for CBGSA Mgt.	$0	$0	$0	$0
Task 2.2	Monthly Invoicing / Accounts Receivable / Collections	$1,000	$1,200	$2,400	$4,600
Task 2.3	Monthly Accounts Payable	$1,000	$1,200	$2,400	$4,600
Task 2.4	Monthly Record Keeping	$1,000	$1,200	$4,800	$7,000
Task 2.5	Annual Coordination with Outside Auditor	$500	$800	$200	$1,500
Task 2.6	Monthly Coordination w Grant Invoicing	$1,000	$7,200	$400	$8,600
Task 2.7	Grant Administration (anticipated quarterly)	$1,000	$7,200	$800	$9,000
Task 2.8	Grant Reports to DWR	$3,000	$800	$3,200	$7,000
Task 3	**Outreach Facilitation**	$6,000	$0	$3,200	$9,200
Task 3.1	Develop Stakeholder Outreach Process	$0	$0	$0	$0
Task 3.2	Ad Hoc Committee Meeting Coordination	$6,000	$0	$3,200	$9,200
Total Travel					$1,440
Mileage [miles/ $0.54]					$1,440
Hotel [nights / rooms / $90 /Approx. 15% tax]					$0
Per Diem [days / Persons / $46]					$0
Total Other Direct Costs					$4,200
Printing / Reprographics					$2,400
Conference Line [Approx. $150/ mo based on usage]					$1,800
Monthly Fee Proposal					$5,320
Total Fee Proposal					$63,840

TO: Board of Directors
Agenda Item No. 9c

FROM: Jim Beck, Executive Director

DATE: June 6, 2018

SUBJECT: Woodard & Curran Task Orders

Issue
Consider authorizing additional work task orders for Groundwater Sustainability Plan technical consultant Woodard & Curran.

Recommended Motion
Authorize Task Order Nos. 4 and 5 for Groundwater Sustainability Plan consultant Woodard & Curran in an amount not to exceed $1,224,282.00.

Discussion
The attached task orders authorize Groundwater Sustainability Plan (GSP) consultant Woodard & Curran to perform necessary work for Category 1 and 2 GSP development for the Cuyama Basing Groundwater Sustainability Agency.

Task Order Cost Allocation Summary:
Task Order No. 4 – Category 2 – $764,396
Task Order No. 5 – Category 1 – $459,886

The scope of work included in these Task Orders is limited to those tasks and subtasks for which budget is authorized, and are provided as Attachment 1 and 2, respectively.

These amounts match the approved FY 2018-19 budget.

TASK ORDER NUMBER 4

Issued Pursuant to the Consulting Services Agreement Between Woodard & Curran, Inc. and Cuyama Basin Groundwater Sustainability Agency, dated as of June 6, 2018.

This Task Order is issued pursuant to, and in accordance with the Agreement, the terms and conditions of which are incorporated herein by this reference. Unless otherwise specified, all capitalized terms used in this Task Order shall have the same meaning as used in the Agreement. This Task Order will not be deemed valid and binding upon the Parties until both Consultant and Client have both signed below.

Scope of Services:
Consultant agrees to provide the Services described in the attached Task Order No. 4 – Scope of Services.

Schedule:
Consultant shall perform the services under this Task Order No. 4 according to the schedule included in Exhibit A of the Agreement and Table 1 and 2 below.

Compensation:
For all Services duly rendered hereunder, Client shall pay Consultant in accordance with the Rate Table; and for Reimbursable Expenses. Compensation for Task Order No. 4 shall not exceed $764,396, as detailed in the attached budget.

Designated Project Representative

Client: Jim Beck

Consultant: Lyndel Melton

Effective date: June 6, 2018

IN WITNESS WHEREOF, the undersigned have caused this Task Order to be duly executed by their authorized representatives set forth below.

Woodard & Curran, Inc.	**Cuyama Basin Groundwater Sustainability Agency**
Signed_____	Signed_____
Name_____	Name_____
Title_____	Title_____

Table 1. Task Order 4 Deliverables

Task		Sub-task	Deliverables	Deliverable Date
2	Data Management System, Data Collection and Analysis, and Plan Review	2.2	• Cuyama Basin Data Management System	Oct 2018
		2.3	• Draft Data Management System section of the GSP	Oct 2018
3	Description of the Plan Area, HCM, and GW Conditions	3.1	• Draft Hydrogeological Conceptual Model section of the GSP	Sep 2018
			• Draft Groundwater Conditions section of the GSP	Oct 2018
4	Basin Model and Water Budget	4.3	• Calibration results for updated Cuyama Valley groundwater model	Nov 2018
		4.4	• Historical water budgets for the years 2006-2015	Nov 2018
		4.5	• Current condition and forecasted future condition water budgets	Dec 2018
		4.6	• Draft Water Budget section of the GSP	Jan 2019
		4.7	• Model simulation results of alternative management scenarios	Feb 2019
		4.8	• Technical memorandum that describes the groundwater model assumptions and results	Mar 2019
5	Establish Basin Sustainability Criteria	5.2	• Sustainability goal and undesirable results narratives for the GSP	Jul 2018
		5.4	• Minimum thresholds for all sustainability indicators	Sep 2018
		5.5	• Measurable objectives for all sustainability indicators	Sep 2018
		5.6	• Interim milestones for all sustainability indicators	Sep 2018
		5.7	• Draft Sustainable Management Criteria section of the GSP	Oct 2018

7	Projects and Actions for Sustainability Goals	7.1	• Management Program document	Dec 2018
		7.2	• Assessment of potential projects	Oct 2018
		7.3	• Prioritized list of projects and management actions	Jan 2019
		7.4	• Draft Projects and Management Actions Section of the GSP	Feb 2019
8	Groundwater Sustainability Plan Implementation	8.5	• Draft Implementation section of the GSP	Feb 2019
9	GSP Document Development	9.2	• Reference compilation	Jun 2019
		9.3	• Administrative Draft of the GSP	Feb 2019
		9.4	• Public Draft of the GSP	Apr 2019
		9.4	• Final Draft of the GSP	Jun 2019
10	Education, Outreach and Communication	10.1	• Implementation of the Stakeholder Engagement Strategy Plan • Meeting materials, agendas, and meeting summaries for each meeting	Jun 2019
		10.2	• Other outreach materials as described in the plan	Jun 2019
11	Project Management	11.1	• Documentation of QA/QC activities • Monthly invoices	Jun 2019
		11.2	• Coordination activities as needed	Jun 2019

Table 2. Anticipated Task Order 4 Meetings

Month	Type	Participants	Meeting Topics
July 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Basin model development (Task 4) • Management program and potential projects (Task 7)
Aug 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Data management system development (Task 2)
Sept 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Basin Sustainability criteria (Task 5)

Oct 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Historical water budgets (Task 4)
Nov 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Prioritization of projects and management actions (Task 7)
Dec 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Current and future water budgets (Task 4)
Jan 2019	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Groundwater sustainability plan implementation (Task 8)
Feb 2019	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• GSP Administrative Draft (Task 9)
Mar 2019	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• GSP Administrative Draft comments (Task 9)
Apr 2019	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• GSP Public Draft (Task 9)
May 2019	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• GSP Public Draft comments (Task 9)
June 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• GSP Final Draft (Task 9)

The Cuyama Basin Groundwater Sustainability Agency (CBGSA) submitted a grant application to the California Department of Water Resources (DWR) for a Sustainable Groundwater Plans and Projects Grant. The application includes a Category 2 Application for preparation of a Groundwater Sustainability Plan. The CBGSA intends to authorize work associated with the general Category 2 scope of work thru a series of one or more Task Orders. Each Task Order will include specific scope, schedule, and budget authorization. The following describes the scope of work. The scope of work included in this Task Order is limited to those tasks and subtasks for which budget is authorized, as shown in the attached budget.

Scope of Work – Category 2 Groundwater Sustainability Plan

Task 2: Data Management System, Data Collection and Analysis, and Plan Review

The CBGSA will develop a data management system (DMS) that can store, report, and visualize information to support development and implementation of the GSP, as well as continued monitoring of the basin and sustainability tracking. The DMS will manage and present the data in a centralized and transparent environment to enable utilization of the same tools and data by CBGSA stakeholders. The data will be used to support GSP development and to demonstrate progress towards basin sustainability, and will be used to communicate with basin stakeholders and the State.

Subtask 2.2 – Develop a Data Management System

A DMS will be developed to store and report information about the implementation of the GSP, demonstrated progress toward meeting sustainability goals, and ongoing monitoring of the groundwater basin. It will allow storage of monitoring data and water budget data collected in Task Orders 1 and 2 as well as automated reporting to the State. The success of the DMS will depend on its ability to support all activities needed to ensure basin sustainability, including monitoring, development and implementation of projects and management actions, modeling, water budget development, and outreach. The approach to development will include 1) identifying the goals and objectives for the DMS; 2) selection of an appropriate DMS platform; 3) customization and implementation of the DMS; 4) migration of GSP data into the DMS and testing; and 5) development of documentation and training. To ensure successful implementation, all phases of development will be performed in a transparent environment with active stakeholder involvement.

Identify Goals and Objectives for the DMS and Select a DMS Platform

The CBGSA will conduct a cross-sectional analysis within the basin to document and assess the availability and usage of data management tools within the basin, as well as statewide or federal databases that provide data relevant to water management within the basin. The purpose of this analysis is to identify any gaps in data collection and management to support sustainable groundwater management and whether existing local, state, and federal data management systems can be utilized or interlinked to the DMS to optimize data storage, sharing, processing, and visualization.

The assessment will collect information on existing data management tools and processes used by stakeholders within the basin. The assessment will include information on the purpose and functionality of the existing data management systems, including the data stored and the technology environment, and their applicability to meet the success criteria for supporting GSP development and sustainable groundwater management. The success criteria for the DMS will be determined by the CBGSA and can include the following features: ability to support seamless coordination, ability to support GSP development, provide for centralized project information

and document management, ability to track undesirable results, ability to track sustainability, ability to maintain autonomy and data privacy, and ability to transparently share public data throughout the basin.

The outcome should include confirmation of whether an existing DMS will meet the success criteria, if an existing DMS may need to be modified, or if a customized DMS should be developed. When assessing the DMS's ability to support GSP development and implementation, there are features that should be considered that meet both the procedural needs of the GSA as well as data management success criteria and cost objectives for both the development and maintenance of the DMS. Input will be required from the participating stakeholders to prioritize the desired features that will be included in the DMS. After prioritization is completed, a DMS platform will be selected and recommended for implementation.

Customize and Implement DMS

It is anticipated that no existing DMS will meet all the success criteria and the selected DMS will require some enhancement. The customized user interfaces and modules will be designed based on user needs and system features identified previously. The DMS framework will be designed to meet the requirements of these features and additional technology considerations. The key goal of the user interface design will be ease-of-use, ease-of-access, and ease-of-learning. The core database will be designed with all the planned enhancements and modules in mind such that system integration will work without any difficulty as new features and modules are added to the system. The framework of the DMS should allow it to have the capability to be linked to other databases and allow that data to be displayed for visualization and inclusion in analysis as needed. This includes the ability (through various protocols) to link to existing local, state, and federal databases. This framework reduces the need to store data collected through other monitoring programs, while also giving participating agencies the ability to continue to maintain autonomy and use their already established data management systems, if desired.

The DMS will be implemented in a modular fashion with an incremental development approach, such that at critical stages of implementation, user feedback is received and the system is continuously enhanced for usability and user acceptance. The enhancements will be integrated with each other at every stage of project development to ensure seamless functionality and interconnection.

Migrate GSP Data and Perform Testing of DMS

Data collected in Task Orders 1 and 2 will be loaded into the DMS. This task assumes that all quality control checks have been completed on data to be incorporated into the DMS (including the removal of outliers and suspect data), that all data have been reconciled to standardized benchmarks (e.g., all groundwater level data are in elevations using the same datum), and that all data are in a consistent format.

A comprehensive testing approach and acceptance plan will be developed and will include stakeholder participation to ensure the system meets or exceed user needs. The testing plan will also ensure all data is loaded, accessed, and maintained according to stakeholder preferences for autonomy and privacy. Testing will be performed according to the plan and user sign-off will be obtained at completion.

Complete Documentation and Perform User Training

A user manual will be developed which will document overall system architecture, the interactions between each module, and usage of the system, including how to import and manage data, how to generate reports, and

how to visualize results. A DMS Administrator's user manual will also be developed to document system administration, including user management and permissions and privacy management. The user manuals will be provided electronically and made accessible in the system and in hard copy format.

Up to two training workshops (including at least one in-person workshop) will be held to explain the framework and usage of the system to end-users. Training materials will be prepared on the usage of the DMS and provided at the workshops. The training materials will include a presentation, quick start guides and helpful hints, and the user manual, as needed. Specialized training workshops will also be held for DMS Administrators to explain user management, permissions, privacy setting management, and troubleshooting.

Subtask 2.3 – Develop Draft Data Management Section for the GSP

This task will prepare a draft Data Management section for the GSP. Preparation of this report section will incorporate information from previous subtasks (2.1-2.2).

Task 2 Deliverables

- Up to one coordination meeting will be held with stakeholders, including the GSA Board, Ad Hoc Committee, and/or advisory committee (budget and scope for meetings included in Task 10)
- A DMS that can store and report data related to the development and implementation of the Cuyama Basin GSP
- Electronic copies of all information and data collected
- User manuals and presentation materials
- Up to two training workshops (including one in-person workshop)
- Prepared draft and final sections of the GSP related to the DMS, monitoring evaluation, existing management programs, and general plans

Task 3: Description of the Plan Area, Hydrogeologic Conceptual Model, and Groundwater Conditions

CBGSA will prepare the Hydrogeologic Conceptual Model (HCM) and prepare a draft groundwater conditions section for the GSP.

Subtask 3.2 – Develop Hydrogeologic Conceptual Model

The Basin Setting portion of the GSP is made up of three components - the Hydrogeologic Conceptual Model (HCM), the Groundwater Conditions, and the Water Budget. The components of the Basin Setting establish the conditions of the basin which includes a description of the physical characteristics of the basin as well as the dynamic components affecting the water budget. The development of the HCM will utilize the most recent and readily available data, at least through December 2015, in an effort to account for changes in land use and increases in pumping since January 2015 which have affected the conditions of the basin. This task prepares the HCM component of the Basin Setting. CBGSA will perform the following activities to prepare the HCM section of the GSP:

- Refine and update the current HCM to meet the requirements in the regulations and as described in the *Hydrogeologic Conceptual Model BMP* document released by DWR in December 2016.
- Develop a graphical and narrative description of the physical components of the basin
    - Regional geologic and structural setting
    - Identification of aquifers and aquitards within the Cuyama Valley Groundwater Basin (Basin)

- Identification of primary use, water quality, and structural properties of aquifers within the Basin, as appropriate
- Description of basin boundaries
- Cross Sections showing aquifers and aquitards within the Basin, as appropriate
- Maps of topography, surficial geology, soils, recharge and discharge areas, springs, seeps and wetlands, surface water bodies, and source and point of delivery for imported water supplies. Collect and review well completion reports, Basin-wide as appropriate.

Subtask 3.3 – Prepare Draft Groundwater Conditions Section for the GSP

This task will prepare a draft Groundwater Conditions section for the GSP. Preparation of this report section will include incorporation of information from previous subtasks, collection of data and available previous reports, and analysis that will be needed to prepare components of the section to meet regulatory requirements. Much of this section will be prepared using existing information from the Cuyama Valley Hydrologic Model (CUVHM), as well as data from the western basin, and observed data. Specific components of groundwater conditions include:

- Development of groundwater contour maps for the Basin, as appropriate for each principal aquifer
- Identification of flow directions and regional patterns of groundwater movement
- Development of hydrographs of monitoring wells
- Display of vertical gradients, historical trends, and spatial coverage
- Graphs of cumulative change in storage
- Cross sections of salinity in the Basin, as appropriate
- Maps of known groundwater quality issues, land subsidence rates and total land subsidence, interconnected surface water systems, and groundwater-dependent ecosystems
- Table of quantity and timing of surface water depletions
- Documentation of baseline conditions (either January 1, 2015, or other as selected)

Task 3 Deliverables

- Up to two coordination meetings (including up to one in-person meeting) will be held with stakeholders, including the GSA Board, Ad Hoc Committee, and/or advisory committee (budget and scope for meetings included in Task 10)
- Figures and maps depicting the HCM
- Initial drafts of the HCM and Groundwater Conditions section of the GSP

Task 4: Basin Model and Water Budget

CBGSA will conduct a rapid assessment of the existing CUVHM and data from the western Cuyama Basin area. Based on this assessment, necessary enhancements to the model will be made to support water budget development and technical analyses of management actions and projects for the GSP.

The CUVHM model was developed by the United States Geological Survey (USGS) using a MODFLOW framework. The CUVHM model includes a geohydrologic framework, hydrologic budget, and modeling component and has a domain that extends over half of the Basin, while covering the majority of the Basin's water use. However, shortcomings of the CUVHM model include a lack of coverage of the entire groundwater

basin and absence of current data for recently developed portions of the Basin. The Santa Barbara Water Authority has been aware of these shortcomings and has already begun executing a data-based approach to collect data for areas outside the CUVHM and newly developed areas within the CUVHM. This task will build off local efforts underway to create an accurate and comprehensive model of the Basin, either by updating the existing model or developing a new Basin-wide model.

Subtask 4.2 – Develop Updated Groundwater Model

A groundwater model will be developed that either builds on the CUVHM model data either in the existing MODFLOW platform or in the IWFM platform. The model will include an expanded geographic extent to cover the entire groundwater basin and will incorporate the enhancements and refinements that were identified in Subtask 4.1. For schedule and budget purposes, this workplan assumes that the CUVHM datasets will be migrated into the IWFM platform.

The existing simulation period of CUVHM is 1950 to 2010. GSP regulation requires water budgets to be developed for historical, current, and projected conditions. To use the model to develop historical and current water budgets, the simulation period of the model will be extended, using the most recent data, at minimum through 2015. Updating the model simulation period requires collection of the following time series data for the period 2010 through 2015 to the greatest extent available:

- Historical precipitation
- Crop acreages and crop evapotranspiration
- Agricultural practices such as growing periods, irrigation efficiency, and frost protection
- Water supply data related to groundwater pumping and surface water use
- Surface water diversions where applicable
- Stream flows at the periphery of model domain
- Ecological and environmental water uses

The data collection effort will include outreach to local agency representative within the Cuyama Basin to ensure the availability and use of appropriate data for updating the model and to foster transparency regarding the data that is used to develop the model. Once the data is collected, the extended timeseries will be incorporated into the existing model datasets to extend the simulation period through 2015.

The model will also be refined to develop reporting areas consistent with management areas determined in the GSP and so that the model will simulate the entire Cuyama Valley groundwater basin. Additional areas identified as needing improvement will be enhanced by resolving any data inconsistencies or gaps. Data elements that should be enhanced will be prioritized in order of importance of the data for developing water budget elements. Data obtained during the model assessment will be reviewed and any relevant and unambiguous data will be incorporated into the model input data.

Following the incorporation of new data into the model, CBGSA will conduct a high-level recalibration of the Basin-wide model with data enhancements. Preliminary water budgets for the entire Cuyama Valley groundwater basin will be validated with available crop data and agricultural demand estimates at the local level.

Subtask 4.3 – Perform Model Calibration

This Subtask includes performing calibration of the updated model using industry-standard methodologies and practices. The model calibration will be updated to achieve a reasonable agreement with a set of observed data for the following:

- Regional spatial distribution of groundwater levels, using contours of groundwater levels at selected tie intervals
- Local seasonal and long-term trends in groundwater levels at selected target wells with reasonably consistent long-term groundwater level records
- Rate and direction of groundwater flows, using the published data on groundwater flows
- Streamflows at selected stream gauging stations using the monthly flow records

The selected model parameters, including surface and subsurface hydrology, hydrogeology, and soil properties will be modified in a systematic process to achieve the best fit for the above calibration targets. In addition, automated calibration processes will be used, as needed, to ensure that the final calibrated parameters are within an acceptable range. In addition, a sensitivity analysis will be performed for selected parameters to gain an understanding of the model sensitivity to the key parameters, and the range of accuracy of the model calibration. Results of the model calibration will be reported and presented along with industry standard statistics for documentation purposes.

Subtask 4.4 – Develop Historical Water Budget Estimates

In this Subtask, historical water budgets will be developed for the entire Cuyama Valley groundwater basin. The water budgets will be developed for the years 2006-2015 using the results of the updated and recalibrated Cuyama Valley groundwater model. CBGSA will conduct the following activities:

- Develop historical total water budget (groundwater systems, stream system, and land surface system) consistent with the water budget components identified by DWR in its water budget framework schematic
- Develop methodology for estimating Sustainable Groundwater Yield for a base period using Cuyama Valley groundwater model results and other appropriate tools
- Present results to CBGSA Board members, advisory committee members and stakeholders to obtain feedback
- Document the results in the technical memorandum to be developed in Subtask 4.8

Outputs of the groundwater model will be aligned with the specific water budget reporting requirements established by the GSP Regulations and reported.

Subtask 4.5 – Develop Current and Future Water Budget Baselines

The current and future conditions water budget baselines will be developed using the updated Basin-wide groundwater model. CBGSA will collect, analyze, and prepare input data sets for the model to develop baseline scenarios representing the current and forecasted future hydrologic conditions in the basin. These two baseline scenarios will be developed to represent the current and projected future land use, water demand, and water supply data conditions. These baseline condition datasets will be incorporated into the model, along with any proposed sustainable management practices over the planning horizon. The current and future baseline conditions will be simulated using a 50-year hydrologic period selected from the period 1950-2015. The outputs

from the Baseline scenarios will be processed to develop current and forecasted future water budget conditions for the entire Cuyama Valley groundwater basin.

Subtask 4.6 –Prepare Draft Water Budget Section for the GSP

This Subtask will prepare a draft Water Budget section for the GSP. Preparation of this section will include documentation and use of the outputs of the groundwater model. Water budget information will be populated by the groundwater modeling efforts described in Subtask 4.5. Specific components to be documented in this section include:

- Identification of a hydrologic base period
- Analysis of hydrologic conditions, water demand and surface water supply availability
- Total surface water entering and exiting the basin
- Inflow to groundwater systems by source type
- Outflow from groundwater systems by source type
- Change in groundwater storage
- Sustainable yield estimate
- Development of a historical water budgets for the years 2006-2015
- Development of a current conditions baseline water budget using a 50-year historical hydrologic period selected from the 1950-2015 period
- Development of a projected future conditions baseline water budget using a 50-year historical hydrologic period selected from the 1950-2015 period

Subtask 4.7 – Modeling Support for GSP Alternatives Analysis

This Subtask will use the revised or new Basin-wide Cuyama Basin groundwater model to provide assistance to evaluate projects and management actions under consideration for use in the GSP. This Subtask will formulate alternative management scenarios and utilize the model to evaluate occurrence and frequency of undesirable results, maintenance of minimum thresholds, and attainment of measurable objectives. It is assumed that up to four alternative management scenarios will be developed and simulated in the groundwater model:

- A scenario focusing on demand-side changes to the Cuyama Basin water budget
- A scenario focusing on water supply changes to the Cuyama Basin water budget
- Up to two balanced scenarios that will achieve groundwater sustainability in the basin

The results of these model simulations will be evaluated using the sustainability criteria developed in Task 5.

Subtask 4.8 – Prepare Modeling Technical Memorandum

CBGSA will document the modeling effort and its results in a technical memorandum that includes documentation of:

- Identification and resolution of data discrepancies between the model and collected data
- Data incorporated into the model to simulate the entire Cuyama Valley groundwater basin
- Data incorporated into the model to extend the simulation period to 2015
- Changes to model parameters made during calibration process
- Development of historical water budget estimates
- Assumptions made for current and future baseline condition scenario runs

Task 4 Deliverables

- Up to four coordination meetings (including up to 1 in-person meetings) will be held with stakeholders, including the GSA Board, Ad Hoc Committee, and/or advisory committee (budget and scope for meetings included in Task 10)
- Calibration results for the updated Cuyama Valley groundwater model
- Estimated historical water budgets for the years 2006-2015
- Current condition and forecasted future condition water budgets based on a 50-year hydrology selected from the 1950-2015 historical period
- A draft Water Budget section for the GSP
- Assumptions for alternative management scenarios
- Model simulation results of alternative management scenarios to evaluate occurrence and frequency of undesirable results, maintenance of minimum thresholds and attainment of measurable objectives
- A technical memorandum that describes the groundwater model assumptions and results

Task 5: Establish Basin Sustainability Criteria

In this task, CBGSA will identify sustainable management criteria for the GSP and develop an initial draft GSP section on sustainable management criteria. This section will describe the metrics used to track the sustainability goal, develop a description of undesirable results for the six sustainability indicators, and set thresholds to detect undesirable results through the use of minimum thresholds, interim milestones, and measurable objectives.

Subtask 5.1 – Identify Sustainability Goal

CBGSA will identify a sustainability goal for the GSP. The sustainability goal is a mission statement for the GSP that meets local needs while promoting sustainable use of groundwater in the basin. The sustainability goal will be developed with input from local stakeholders and input from regulatory agencies.

Subtask 5.2 – Establish Undesirable Results

CBGSA will identify undesirable results for each sustainability indicator, including a narrative description of what each undesirable result is and their potential effects on the beneficial uses and users of groundwater, on land uses, and land owners. A description will be developed for each sustainability criteria and what constitutes an undesirable outcome/result. The description will be used throughout the GSP as a check for whether the GSP is adequately preventing undesirable results through implementation. The narrative is also used to help set threshold on monitoring to avoid future undesirable results. An undesirable result narrative will be prepared for the applicable criteria:

- Groundwater levels
- Groundwater storage
- Seawater intrusion – Potentially express as salinity
- Groundwater quality
- Subsidence
- Surface water and groundwater interaction

This task will also evaluate conditions in the basin to determine if undesirable results as defined by the undesirable results narrative are occurring in the basin. Documentation of the evaluation will include a

narrative, maps of the monitoring or model results used to evaluate the presence or absence of undesirable results, a description of the methodology used to evaluate monitoring results to identify undesirable results, and maps of the locations of any undesirable results that are occurring.

Subtask 5.3 – Define Management Areas and Representative Monitoring

This task will define the management areas delineated in the GSP and prepare rationale for representative monitoring.

Management areas can be set for scientific and jurisdictional reasons. During GSP development, reasons to delineate a management area may become apparent from scientific justification, such as the extent of a barrier or fault, the location of salinity plumes, or the presence or absence of major aquifers. Jurisdictional management areas may also be created to match management of an area to the jurisdiction of a local agency. Documentation will include a discussion of the conditions in the management area, why they are significant (if scientific), and provide a map of management areas in the GSP.

Representative monitoring is the use of one monitoring methodology to represent monitoring of a sustainability criteria that may be difficult to monitor for. Representative monitoring used in the GSP will be justified during GSP development. This task will consider how representative monitoring and management areas will affect sustainability thresholds for the six sustainability criteria. For representative monitoring, this task will evaluate the appropriateness of use of representative monitoring and consider how they cover minimum thresholds, measurable objectives, and interim milestones for each sustainability indicator. If representative monitoring is used for a sustainability indicator, this task will provide the rationale for the representative monitoring and explain how the representative will prevent the occurrence of undesirable results. Management areas may have different thresholds and may use different representative monitoring and/or different thresholds than other areas. This task will describe the rationale for those differences.

Subtask 5.4 – Develop Minimum Thresholds

This task will establish the minimum thresholds for the six sustainability indicators. The methodologies used to set this threshold will be developed and documented and will explain how the thresholds selected will prevent the occurrence of undesirable results. Options for each of the minimum thresholds will be presented to stakeholders for discussion and input. Thresholds will be presented using maps, graphs, tables, and a supporting narrative in the GSP.

Subtask 5.5 – Develop Measurable Objectives and Margin of Operational Flexibility

This task will establish the measurable objective thresholds for the six sustainability indicators. The methodologies used to set this threshold will be developed and documented and will explain how the thresholds selected will allow for a reasonable margin of operational flexibility before undesirable results occur. Thresholds will be presented using maps, graphs, and tables.

Subtask 5.6 – Develop Interim Milestones

CBGSA will identify an interim milestone for each sustainability indicator and describe how each one was established, its relationship to the minimum threshold and measurable objective, how it was selected, and how it may affect the interests of beneficial uses and users of groundwater in the basin.

Subtask 5.7 – Prepare Draft Sustainable Management Criteria Section for the GSP

This task will prepare a draft Sustainable Management Criteria section for the GSP. Preparation of this report section will incorporate information from previous subtasks (5.1-5.6), including the development and achievement of goals, thresholds, objectives, and milestones.

Task 5 Deliverables

- Up to two coordination meetings (including up to one in-person meeting) will be held with stakeholders, including the GSA Board, Ad Hoc Committee, and/or advisory committee (budget and scope for meetings included in Task 10)
- Draft and final sustainability goal and undesirable results narrative for the GSP
- Measurable objectives, minimum thresholds, margins of operational flexibility, and interim milestones or representative thresholds for all six sustainability indicators.
- A draft Sustainable Management Criteria section for the GSP

Task 7: Projects and Actions for Sustainability Goals

CBGSA will identify and prioritize projects and management actions that will be implemented. This will also include adaptive management actions that will be implemented should groundwater conditions not adequately respond to implementation of the GSP. This task will design a management program that considers potential projects and management actions to develop a management approach that meets regulatory requirements and local needs. Projects and management actions to be considered will be solicited as part of the stakeholder engagement strategy, and will potentially include, but will not be limited to, these identified options:

- Demand management (potentially including rotational fallowing or land retirement)
- Method or framework for water accounting
- Upstream capture of Twitchell Reservoir spills
- Improved wet season recharge capabilities
- Groundwater banking of exchanged surface water supplies
- Regional water exchanges involving imported/State Water Project water and Twitchell Reservoir surface water supplies
- Exchange of purchased imported water via the Central Coast Aqueduct with Cuyama River flows tributary to Twitchell Reservoir
- Water exchanges between sub-basins
- Purchase of new supplies with development of a new 30-mile pipeline
- Reuse of water from ongoing industrial/oil and gas operations
- Education on and subsidies for agricultural water conservation
- Capture of local stream flood flows for recharge of the groundwater basin
- Conservation programs
- Purchase or transfer and importation of a new supply
- Development of a groundwater storage and recovery

Subtask 7.1 – Develop Management Program

This task is dedicated to recognizing the Cuyama Basin is critically over-drafted and the communities who rely on groundwater from the basin need long-term, stable water supplies to augment the current groundwater supplies. CBGSA will develop the management program that documents and plans the implementation of

projects and actions in the plan area. The objective of the management program will be to achieve the basin's sustainability goal (identified in Task 5) by including projects and management actions that will allow the basin to avoid undesirable results for each of the sustainability indicators in the future. The management program will identify management options, research and vet the management options, and select management options for implementation. The management program will identify implementation hurdles and provide a program summary. The program summary will describe how the program will meet sustainability targets and forecast the effectiveness of the program, as well as provide a list of management options.

Subtask 7.2 – Identify Projects, Management Actions, and Adaptive Management Actions

This task will identify projects and management actions for consideration as part of GSP implementation. Each project or management action will be collected, described, and analyzed for effectiveness. Projects deemed as sustainable and reliable sources of water will be identified by stakeholders and compiled. This task will perform analyses to identify the benefits and limitations of each project option. Analyses will include evaluation of water supplies added (average yield, reliability, and variability), estimated project and unit water costs, project schedule, potential challenges, and water quality components. For each project, project descriptions, maps, order of magnitude cost estimates, and other relevant documentation will be developed as needed to accurately describe each option. This task will assess up to six potential projects focused on contributing toward a long-term water supply solution for the Cuyama Basin.

In performing this task, it is expected that the groundwater model that was updated in Task 3 will be used when appropriate, and other analysis methods will be used in areas where the model is not appropriate. The description of each project and management action will include, but is not limited to:

- Detailed description, per regulations
- Cost estimates and funding mechanisms
- Public notice and outreach process
- Summary of permitting and regulatory process
- Explanation of benefits
- Explanation of regional and project economic benefits and/or impacts
- Explanation of how the project will be accomplished
- Explanation of the source and reliability of water if imported supplies are a part of the project
- How the project is supported by the best available science
- How uncertainty is considered
- CEQA/NEPA considerations
- Overall acceptability

This task will culminate in a list of projects to be further analyzed and prioritized. This task will include up to three meetings with potential project partners such as and Santa Maria Valley Water Conservation District.

Subtask 7.3 – Prioritization of Projects and Management Actions

CBGSA will perform an assessment of numerous alternative water management scenarios—projects, programs, and management actions or strategies—for managing groundwater use sustainably. Prioritization methodology will be discussed with stakeholders and a ranking system will be developed. The prioritization will consider, at minimum, water supply, water quality improvement, environmental components, and regional and economic

benefits. Once the prioritization process is established, projects will be scored and ranked. As part of this process, each of the projects and management actions identified in Subtask 7.2 will be prioritized. Projects meeting the most objectives and ranking the highest will be recommended for implementation under the GSP.

Subtask 7.4 – Prepare Draft Projects and Management Actions Section for GSP

This task will prepare a draft Projects and Management Actions section for the GSP. Preparation of this report section will incorporate information from previous subtasks (subtasks 7.1-7.3) including the development of the management program, management actions, and prioritization of projects and actions.

Task 7 Deliverables

- Up to six coordination meetings (including up to two in-person meetings) will be held with stakeholders, including the GSA Board, Ad Hoc Committee, and/or advisory committee (budget and scope for meetings included in Task 10)
- Assessment of up to six potential projects
- A prioritized list of projects and management actions
- Management Program
- A draft Projects and Management Actions section for the GSP

Task 8: Groundwater Sustainability Plan Implementation

The plan implementation section of the GSP documents and plans how implementation actions will be performed and work together to maintain compliance with the regulations and to achieve sustainability. The implementation plan will include the management program, implementation schedule, GSP costs and funding, data management plan, model updates, and other GSP implementation activities. The implementation plan will be developed to be a section in the GSP that includes subsections that contain the results of the subtasks below.

Subtask 8.1 – GSP Implementation Schedule and Reporting

This task will develop the GSP's implementation schedule, which will document when various GSP components will be conducted. This task will also describe the activities and timing of activities needed to prepare the annual GSP report and the 5-year update reports required by regulations.

Subtask 8.2 – GSP Implementation Costs and Funding

This task will prepare a cost estimate to determine the expected costs of GSP implementation. The cost analysis will consider costs associated with monitoring activities, data management activities, implementation of projects and management actions, CBGSA management (staff costs and overhead costs), as well as reporting costs for the annual reports and 5-year updates and reporting required by regulation.

This task will also describe how CBGSA will fund GSP implementation. The description will consider and evaluate the mechanisms available to CBGSA. Potential funding mechanisms include the use of grants, assignment of fees and fines, income from water market management (if used), and other methods as identified during analysis. The description of funding will be developed with input from GSA representatives and will consider legal limitations and hurdles (such as Proposition 218) to funding options.

Subtask 8.3 – Parties Affected by GSP and Effects of Undesirable Results on Beneficial Uses

This task identifies and describes the parties potentially affected by the GSP and the nature of consultation with those parties. The description will include the land uses and property interests affected, and the types of parties affected.

This task will also evaluate the potential effects of undesirable results on beneficial uses in the basin. Evaluation will consider all six undesirable results, and their effects on beneficial uses of groundwater such as: domestic uses, municipal uses, irrigation uses, industrial uses, federal lands, disadvantaged communities, and other uses including property interests. Disadvantaged communities will be especially considered as the GSP has potential to affect many aspects of the communities, from employment to the availability of health care. If undesirable results are thought to be currently occurring, this task will evaluate the effect of these undesirable results on beneficial uses.

Subtask 8.4 – Groundwater Model and Data Management System Implementation Planning

This task will document how the groundwater model will be used and updated during GSP implementation, especially at the 5-year updates. This task will include data updates, future model runs and calibration, and how model use will be documented.

Planning will also guide the GSP's use of the DMS during implementation. This task will describe the methodology to be used to collaborate and collect data from other agencies, and state and federal agencies. DMS maintenance activities and quality assurance/quality control (QA/QC) planning for data to be entered into the DMS will also be documented.

Subtask 8.5 – Develop Draft Plan Implementation Section for GSP

This task will prepare a draft Plan Implementation section for the GSP. Preparation of this report section will incorporate information from previous subtasks (subtasks 8.1-8.4) including the implementation schedule, reporting, and planning guidance for DMS use.

Task 8 Deliverables

- Up to two coordination meetings (including up to one in-person meeting) will be held with stakeholders, including the GSA Board, Ad Hoc Committee, and/or advisory committee (budget and scope for meetings included in Task 10)
- A draft Plan Implementation section for the GSP

Task 9: Groundwater Sustainability Plan Document Development

Under this task, CBGSA will prepare an outline for the GSP, an administrative draft of the GSP, a public review draft of the GSP, and a final draft of the GSP. Each GSP draft will include all required sections of the GSP, including appendices. Note that the completion of this task will involve meetings with CBGSA Board and/or advisory committee members – scope and budget for these meetings are included in Task 10.

Subtask 9.1 – Develop GSP Outline and Style Guidance

CBGSA will develop a GSP outline that will be used for the GSP document development. This task will also prepare a GSP report style guide for distribution to authors during GSP development. The style guide is valuable for guiding report authors during report writing to ensure report sections are formatted similarly and use consistent terminology when describing GSP components.

Subtask 9.2 – Perform Reference Tracking and Storage

This task will be used to track references used during GSP preparation. GSP regulations require that a copy of every reference used in GSP preparation that is not easily available be included with the GSP submission. This task will collect copies of all references used in the report for compilation and submittal along with the completed GSP.

Subtask 9.3 – Prepare Administrative Draft GSP

CBGSA will prepare an administrative draft of the GSP that includes the GSP's supporting appendices. The administrative draft will be reviewed by the CBGSA partners' staff and other stakeholders involved in the GSP development process. After comments on the administrative draft are received, they will be compiled and a response to comments will be prepared. Comments incorporated into the GSP will be used to prepare the public draft of the GSP.

Subtask 9.4 – Prepare Public Draft and Final GSP

CBGSA will prepare a public draft of the GSP and the GSP's supporting documentation. The public draft GSP will be circulated for public review and comment. After comments on the public draft are received, they will be compiled and a response to comments document will be prepared. Comments incorporated into the GSP will be used to prepare the final draft of the GSP. Once finalized, the GSP will be adopted by the GSA.

Task 9 Deliverables

- Up to two coordination meetings (including up to one in-person meeting) will be held with stakeholders, including the GSA Board, Ad Hoc Committee, and/or advisory committee (budget and scope for meetings included in Task 10)
- GSP outline and style guidance
- Administrative Draft of the GSP
- Reference compilation
- Response to comments
- Public Draft of the GSP
- Response to comments
- Final GSP

Task 10: Education, Outreach and Communication

Successful implementation of the GSP will depend on efficient outreach, education, and communication, and facilitation between the GSA and locals/stakeholders. Stakeholder engagement includes efforts made to understand stakeholder concerns, educate stakeholders on SGMA efforts, and involve stakeholders in the activities and decision-making process.

Subtask 10.1 – Implement Stakeholder Engagement Strategy

Work under this task will implement the Stakeholder Engagement Strategy prepared under Task 1. All outreach performed will be documented and compiled for submittal with the GSP as required by regulation. The engagement strategy will accommodate language barriers through producing documents in both English and Spanish. Note that the completion of the above Tasks 1 through 9 will involve meetings with stakeholders, including CBGSA Board, Ad Hoc Committee and/or advisory committee members – the scope and budget for all meetings required for completion of the GSP, including those required for each of the preceding tasks, are organized and budgeted under this task. While the specific outreach efforts required will be identified as part of the Stakeholder Engagement Strategy to be prepared in Task 1, for budget and schedule purposes it is assumed that the following outreach efforts will need to be conducted as part of development of the GSP:

- Project meetings (assume 1 meeting per month on average; with up to 8 in-person meetings and the rest as conference calls)

  - CBGSA advisory committee,
  - State and federal agencies
  - Local agencies
  - Non-governmental organizations
- CBGSA Board and/or Ad Hoc Committee presentations (assume up to 8 in-person meetings)
- Up to 15 conference calls with the CBGSA Board, Ad Hoc Committee and/or advisory committee
- Public meetings (assume up to 3 meetings)
- Maintenance of a bilingual website
- Flyers/handouts
- Translation of educational/informational materials
- Teleconferences

Subtask 10.2 – Education, Outreach and Communication Documentation

This task documents the outreach, education and communication performed during GSP development. Documentation will include identification of participants, the nature of consultation with parties affected by the GSP, a list of public meetings held where the GSP was discussed or considered by the GSA, and a collection and posting of comments received regarding the GSP. Meeting summaries and/or presentations will be compiled and included in an appendix of the GSP. All outreach documents and presentations will be provided in both English and Spanish to accommodate the primary languages of all community members. This task will also be used to maintain the interested parties' list that documents people or entities who express interest in the GSP.

Task 10 Deliverables

- Implementation of the Stakeholder Engagement Strategy Plan
- Meeting materials, agendas, and meeting summaries for each meeting
- Other outreach materials as described in the plan
- Compilation of all outreach performed for submittal with GSP

Task 11: Project Management

Under this task, CBGSA will plan and track significant activities leading to development of the Cuyama Basin GSP. This task includes program management (including project coordination and QC activities) and grant funding administration.

Subtask 11.1 – Program Management

Program management will consider the evolving landscape of SGMA as regulatory considerations, political activities, and changes in other conditions affect GSP development. Program management will be used to guide the GSP development process and to perform change management to the scope of work as necessary. Program management will also include coordination among the GSP development team and will include managing subcontractors, tracking and preparing invoices, tracking project progress, and conference calls and in-person meetings to perform coordination as needed.

In addition, a quality assurance/quality control (QA/QC) approach will be developed that identifies how GSP components will be reviewed and checked for accuracy and completion. The approach will then be used during implementation to perform QA/QC activities.

Subtask 11.2 – Grant Funding Administration

Activities to be conducted under this task are related to grant administration, including invoicing and reporting. Specifically, this task will include processing eight (8) quarterly reports throughout the extent of the funding agreement as well as a project completion report upon submittal of the Final GSP to DWR. Grant management also includes regular communication with DWR's grant manager.

Task 11 Deliverables

- Documentation of QA/QC activities
- Quarterly progress reports and invoices
- Coordination activities as needed
- Attendance at two coordination meetings with DWR (to kick-off and close the project)

Cuyama Groundwater Sustainability Agency

Task Order No. 4 - Groundwater Sustainability Plan

Tasks		Labor										ODCs		Total
Task #	Task	Project Manager	Tech Advisor / QA/QC	Modeling Lead	Data Management	GSP Lead	Outreach	Staff/GIS	Admin / Tech Editing	Total Hours	Total Labor Costs (1)	ODCs	Total ODCs (3)	Total Fee
Task #		$266	$295	$222	$249	$249	$222	$178	$105					
1	1 - GSP & Stakeholder Strategy Development													
1	Work Plan for GSP									0	$0		$0	$0
1	Stakeholder Engagement Strategy									0	$0		$0	$0
	Subtotal Task 1:	0	0	0	0	0	0	0	0	0	$0	$0	$0	$0
2	2 - Data Management System, Data Collection and Analysis, and Plan Review													
2.1	Perform Data and Info. Collection and General Plan Review									0	$0		$0	$0
2.2	Develop a Data Management System				4	4	4	16		28	$5,728	$500	$550	$6,278
2.3	Develop Draft Data Management Section for GSP	4	4		22	8		50	4	92	$19,034	$113	$124	$19,158
	Subtotal Task 2:	4	4	0	26	12	4	66	4	120	$24,762	$613	$674	$25,436
3	3 - Description of the Plan Area, Hydraulic Conceptual Model, and Groundwater Conditions													
3.1	Develop Description of Plan Area									0	$0		$0	$0
3.2	Develop Hydrogeological Conceptual Model	4		20				16		40	$8,352		$0	$8,352
3.3	Prepare Draft Groundwater Conditions Section for GSP	4	4	16		20		40	4	88	$18,316	$222	$244	$18,560
	Subtotal Task 3:	8	4	36	0	20	0	56	4	128	$26,668	$222	$244	$26,912
4	4 - Basin Model and Water Budget													
4.1	Perform Assessment of Existing Model									0	$0		$0	$0
4.2	Develop Updated Groundwater Model									0	$0		$0	$0
4.3	Perform Model Calibration	4	8	24		8		80		124	$24,984	$500	$550	$25,534
4.4	Develop Historical Water Budget Estimates	4	24	48		8		128		212	$43,576	$500	$550	$44,126
4.5	Develop Current and Future Water Budget Baselines	4	24	36		8		96		168	$35,216	$500	$550	$35,766
4.6	Prepare Draft Water Budget Section for GSP	8	16	36		36		80	4	180	$38,464	$500	$550	$39,014
4.7	Modeling Support for GSP Alternatives Analysis	12	48	128		64		280		532	$111,544		$0	$111,544
4.8	Prepare Modeling Technical Memorandum	8	16	32		8		40	4	108	$23,484	$662	$728	$24,212
	Subtotal Task 4:	40	136	304	0	132	0	704	8	1324	$277,268	$2,662	$2,928	$280,196
5	5 - Establish Basin Sustainability Criteria													
5.1	Identify Sustainability Goal									0	$0		$0	$0
5.2	Establish Undesirable Results									0	$0		$0	$0
5.3	Define Management Areas and Representative Monitoring	2		2		16		16		36	$7,808		$0	$7,808
5.4	Develop Minimum Thresholds	2		2		16		16		36	$7,808		$0	$7,808
5.5	Develop Measurable Objectives and Margin of Operational Flexibility	2		2		16		16		36	$7,808		$0	$7,808
5.6	Develop Interim Milestones	2		2		16		16		36	$7,808		$0	$7,808
5.7	Prepare Draft Sustainable Management Criteria Section for GSP	4	2	4		24		40	4	78	$16,058	$371	$408	$16,466
	Subtotal Task 5:	12	2	12	0	88	0	104	4	222	$47,290	$371	$408	$47,698
6	6 - Monitoring Networks													
6.1	Establish Monitoring Networks and Methodology									0	$0		$0	$0
6.2	Prepare Draft Monitoring Networks Section for GSP									0	$0		$0	$0
	Subtotal Task 6:	0	0	0	0	0	0	0	0	0	$0	$0	$0	$0
7	7 - Projects and Actions for Sustainability Goals													
7.1	Develop Management Program									0	$0		$0	$0
7.2	Identify Projects, Management Actions, and Adaptive Management Act	6	18	14		48		96		182	$39,054		$0	$39,054
7.3	Prioritization of Projects & Management Actions	8	32	28		68		132		268	$58,212		$0	$58,212
7.4	Prepare Draft Projects and Management Actions Section for GSP	4	4			40		40	4	92	$19,744		$0	$19,744
	Subtotal Task 7:	18	54	42	0	156	0	268	4	542	$117,010	$0	$0	$117,010
8	8 - Groundwater Sustainability Plan Implementation													
8.1	GSP Implementation Schedule and Reporting	4	4			24		24		56	$12,492		$0	$12,492
8.2	GSP Implementation Costs and Funding	4	4			24		28		60	$13,204		$0	$13,204
8.3	Parties Affected by GSP and Effects of Undesirable Results on Benefic	4	4			24		28		60	$13,204		$0	$13,204
8.4	Groundwater Model and Data Management System Implementation Pla	4	4	16	16					40	$9,780		$0	$9,780
8.5	Develop Draft Plan Implementation Section for GSP	4	4	8	8	32		40		96	$21,100		$0	$21,100
	Subtotal Task 8:	20	20	24	24	104	0	120	0	312	$69,780	$0	$0	$69,780
9	9 - Groundwater Sustainability Plan Document Development													
9.1	Develop GSP Outline and Style Guidance	4	2			16				22	$5,638		$0	$5,638
9.2	Perform Reference Tracking and Storage	2	2			16		24		44	$9,378		$0	$9,378
9.3	Prepare Administrative Draft GSP	16	24	12	12	64		64	16	208	$45,996		$0	$45,996
9.4	Prepare Public Draft and Final GSP	9	15	6	6	45		45	12	138	$30,120		$0	$30,120
	Subtotal Task 9:	31	43	18	18	141	0	133	28	412	$91,132	$0	$0	$91,132
10	10 - Outreach, Education and Communication													
10.1	Implement Stakeholder Engagement Strategy	40	8	6	6	36	100		16	212	$48,670	$5,973	$6,570	$55,240
10.2	Outreach, Education & Communication Documentation	4	4		8	16	20		16	68	$14,340		$0	$14,340
	Subtotal Task 10:	44	12	6	14	52	120	0	32	280	$63,010	$5,973	$6,570	$69,580
11	11 - Project Management													
11.1	Program Management	23	14			18			12	67	$15,990	$251	$276	$16,266
11.2	Grant Funding Administration		10			40		42		92	$20,386		$0	$20,386
	Subtotal Task 11:	23	24	0	0	58	0	42	12	159	$36,376	$251	$276	$36,652
	TOTAL	200	299	442	82	763	124	1493	96	3499	$753,296	$10,092	$11,100	$764,396

2018 Standard Rates	
Labor Category	**Rate**
Engineer 1 (E1) Scientist 1 (S1) Geologist 1 (G1) Planner 1 (P1) Technical Specialist 1 (TS1)	157
Engineer 2 (E2) Scientist 2 (S2) Geologist 2 (G2) Planner 2 (P2) Technical Specialist 2 (TS2)	182
Engineer 3 (E3) Scientist 3 (S3) Geologist 3 (G3) Planner 3 (P3) Technical Specialist 3 (TS3)	206
Project Engineer 1 (PE1) Project Specialist 1 (PS1) Project Geologist 1 (PG1) Project Planner 1 (PP1) Project Technical Specialist 1 (PTS1)	215
Project Engineer 2 (PE2) Project Specialist 2 (PS2) Project Geologist 2 (PG2) Project Planner 2 (PP2) Project Technical Specialist 2 (TS2)	229
Project Manager 1 (PM1) Technical Manager 1 (TM1)	244
Project Manager 2 (PM2) Technical Manager 2 (TM2)	258
Senior Project Manager (SPM) Senior Technical Manager (STM)	274
Senior Technical Practice Leader (STPL)	301
National Practice Leader (NPL) Strategic Business Unit Leader (SBUL)	315
Software Engineer 1 (SE1)	140
Designer 1 (D1)	145
Designer 2 (D2)	153
Designer 3 (D3) Senior Software Developer (SSD)	158
Senior Designer (SD)	165
Project Assistant (PA)	108
Marketing Assistant (MA) Graphic Artist (GA)	115
Senior Accountant (SA) Billing Manager (BM)	125
Marketing Manager (MM) Graphics Manager (GM)	145

Note: The individual hourly rates include salary, overhead and profit. Other direct costs (ODCs) such as reproduction, delivery, mileage (as allowed by IRS guidelines), and travel expenses will be billed at actual cost plus 10%. Subconsultants will be billed as actual cost plus 10%. Woodard & Curran, Inc., reserves the right to adjust its hourly rate structure at the beginning of each year for all ongoing contracts.

TASK ORDER NUMBER 5

Issued Pursuant to the Consulting Services Agreement Between Woodard & Curran, Inc. and Cuyama Basin Groundwater Sustainability Agency, dated as of June 6, 2018.

This Task Order is issued pursuant to, and in accordance with the Agreement, the terms and conditions of which are incorporated herein by this reference. Unless otherwise specified, all capitalized terms used in this Task Order shall have the same meaning as used in the Agreement. This Task Order will not be deemed valid and binding upon the Parties until both Consultant and Client have both signed below.

Scope of Services:
Consultant agrees to provide the Services described in the attached Task Order No. 5 – Scope of Services.

Schedule:
Consultant shall perform the services under this Task Order No. 5 according to the schedule included in Exhibit A of the Agreement and Table 1 and 2 below.

Compensation:
For all Services duly rendered hereunder, Client shall pay Consultant in accordance with the Rate Table; and for Reimbursable Expenses. Compensation for Task Order No. 5 shall not exceed $459,886, as detailed in the attached budget.

Designated Project Representative

Client: Jim Beck

Consultant: Lyndel Melton

Effective date: June 6, 2018

IN WITNESS WHEREOF, the undersigned have caused this Task Order to be duly executed by their authorized representatives set forth below.

Woodard & Curran, Inc.	**Cuyama Basin Groundwater Sustainability Agency**
Signed_____	Signed_____
Name_____	Name_____
Title_____	Title_____

Table 1. Task Order 5 Deliverables

Task		Sub-task	Deliverables	Deliverable Date
1	Groundwater Monitoring Well Network Expansion	1.3	• GIS files for new monitoring well locations	Jul 2018
		1.4	• Well owner consent forms	Oct 2018
		1.5	• Installation of pressure transducers in existing wells	Feb 2019
		1.6	• Water quality sampling results	Jun 2019
		1.7	• Draft and final technical memorandums	Jun 2019
		1.8	• Meeting materials, agendas, and meeting summaries for each meeting	Jun 2019
2	Evapotranspiration Evaluation for Cuyama Basin Region	2.2	• Monthly ETc estimates and deep percolation estimates for selected years	Aug 2018
		2.3	• Draft and final technical memorandums	Aug 2018
3	Surface Water Monitoring Program	3.3	• Well owner consent forms	Sep 2018
		3.4	• Installation of stream gauges	Oct 2018
		3.5	• Draft and final technical memorandums	Jun 2019
		3.6	• Meeting materials, agendas, and meeting summaries for each meeting	Jun 2019
11	Project Management	11.1	• Documentation of QA/QC activities • Monthly invoices	Jun 2018
		11.3	• Coordination activities as needed	Jun 2018

Table 2. Anticipated Task Order 5 Meetings

Month	Type	Participants	Meeting Topics
July 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Results of Data gap analysis and well identification (Task 1) • Identification of known watersheds and recommended monitoring locations (Task 3)
Aug 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Monthly ETc and deep percolation estimates (Task 2)
Dec 2018	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Draft surface water monitoring TM (Task 3)
Feb 2019	In-Person	• CGBSA Board Members • CBGSA Advisory Committee	• Draft groundwater water monitoring TM (Task 1)

The Cuyama Basin Groundwater Sustainability Agency (CBGSA) submitted a grant application to the California Department of Water Resources (DWR) for a Sustainable Groundwater Plans and Projects Grant. The application includes a Category a Application for preparation of a Groundwater Sustainability Plan. The CBGSA intends to authorize work associated with the general Category 1 scope of work thru a series of one or more Task Orders. Each Task Order will include specific scope, schedule, and budget authorization. The following describes the scope of work. The scope of work included in this Task Order is limited to those tasks and subtasks for which budget is authorized, as shown in the attached budget.

Scope of Work – Category 2 Groundwater Sustainability Plan

Task 1: Groundwater Monitoring Well Network Expansion

This task will improve existing groundwater elevation and water quality monitoring within the Cuyama Basin by expanding the groundwater monitoring network. This task includes performing a data gap analysis, identifying existing wells for inclusion, obtaining permission from landowners to add their wells to the monitoring network, installing monitoring equipment, providing monitoring protocols in selected wells, and performing water quality sampling at selected wells.

This task is coordinated with an existing project underway by the Santa Barbara County Water Agency (SBCWA), who has received funding from a 2016 Stressed Basins Grant award. SBCWA plans to spend up to $100,000 to improve groundwater monitoring in the Santa Barbara County portion of the Cuyama Basin. The portion of the SBCWA within the Cuyama Basin is not classified as a Severely Disadvantaged Community (SDAC), and the task proposed here in this scope of work will cover the majority of the remaining portion of the Cuyama Basin.

Subtask 1.1 - Compilation of Existing Data

Existing groundwater studies within the Cuyama Basin and recorded groundwater data will be reviewed for the quality, spatial extent, and monitoring methods, at minimum. Studies and data will be collected from a variety of sources, including the United States Geological Survey (USGS), the United States Bureau of Reclamation (USBR), local water authorities and purveyors (including the Santa Barbara Water Authority), and universities (including Cal Poly). The collected sources and groundwater data will be reviewed to establish the baseline of existing data and data needs, and the monitoring methods previously or currently used in the basin.

Subtask 1.2 – Perform Data Gap Analysis

The existing monitoring network will be reviewed to identify areas in the basin that are not adequately monitored. A data gap analysis will be based on the spatial extent and screened intervals of existing monitoring wells. Areas without either adequate spatial density or wells screened in primary aquifers will be identified as a data gap. Results of the data gap analysis will narrow the area to explore for existing wells to include in the monitoring network.

Subtask 1.3 – Identify Potential Monitoring Wells

DWR well completion reports will be collected and reviewed to identify private and/or abandoned public wells within data gap areas to potentially add to the network. Wells will be identified based on their proximity to an identified data gap, total and screened depths, geology, and other factors. A list of new potential monitoring wells will be generated. Wells currently monitored on a bi-annual basis will also be evaluated and considered for installation of continuous monitoring equipment.

Subtask 1.4 – Obtain Permission from Well Owners

Individual well owners will be contacted to discuss voluntarily adding their well to the monitoring grid. Discussion will include the well information such as location, depth, accessibility, future maintenance, use, and other factors related to monitoring the well. Well owners will be asked to complete a formal consent form to document their permission to add the well(s) to the monitoring network. Signed consent forms will be filed with the CBGSA. Only wells with consenting land owners will be added to the network; this is entirely a voluntary action by the well owners and they must give consent to prior to participation as neither the GSA nor GSP can mandate well monitoring. This subtask will include contacting well owners by mail, phone, and in person at the monitoring well site to establish and document monitoring information.

Subtask 1.5 – Install Equipment and Provide Monitoring Protocols

Wells that receive permission to be included within the monitoring network will be added to the water level monitoring grid. This subtask will prepare monitoring protocols for implementation by the CBGSA. Ten wells will be equipped with monitoring equipment consisting of continuous, telemetered monitoring sensors where recommended and appropriate. Only existing, drilled wells will be retrofitted with monitoring equipment; no new wells will be drilled or installed as part of this subtask. The focus for installation locations will be to fill identified data gaps in areas of intensive groundwater use identified under subtask 1.3.

Prior to engaging in field work, a Health and Safety Field Plan will be prepared to document potential hazards, necessary trainings, and establish a communication plan and emergency procedures while in the field. Once the plan is prepared, a meeting will be held to review the plan, travel logics, packing list, personal safety and security concerns, and any remaining training needs.

Subtask 1.6 – Perform Water Quality Sampling

Representative water quality sampling and testing will be performed at selected wells to help assess groundwater quality conditions within the in the Cuyama Basin. It is assumed that wells selected for sampling will be among those wells in which monitoring equipment is installed in subtask 1.5, with sampling performed up to a total of two times per well (Spring and Fall).

Subtask 1.7 – Prepare Draft and Final Technical Memorandum

The results of the groundwater monitoring network expansion will be summarized in a TM. The TM will identify monitoring methods, existing wells selected and authorized to participate in the monitoring well network and will include maps, monitoring protocols, and document-installed equipment.

Subtask 1.8 – Stakeholder Coordination, Community Outreach and Education

Three meetings will be held throughout the duration of the subtask to promote collaboration across SDAC stakeholders in the basin, discuss outstanding items, and generate action items for advancing the project. Objectives for each meeting are as follows:

- **Meeting #1:** Discuss findings from data gap analysis.
- **Meeting #2:** Share results of well identification and strategy to obtain owner permission.
- **Meeting #3:** Review draft TM and obtain comments from stakeholders.

Additionally, this subtask will work to engage community members with efforts related to the increased groundwater monitoring. Outreach efforts will include producing and distributing educational materials, holding

public forums, and receiving input from community members. All outreach and education efforts will accommodate both English and Spanish speakers.

Task 1 Deliverables

- Summary of Existing Data
- Health and Safety Plan
- Compilation of well completion reports for wells selected for monitoring (with redacted information)
- GIS files for new monitoring well locations (and existing elevation data, where available)
- Well owner consent form template
- Installation of up to ten pressure transducers will be installed in existing wells
- Water quality sampling results at selected monitoring well locations
- Attendance at three coordination meetings (in person or via conference call)
- Draft and Final Technical Memorandum

Task 1 Assumptions

- No new wells will be drilled; only existing wells will be added to the network
- Participation in the monitoring network by land owners is voluntary

Task 2: Evapotranspiration Evaluation for Cuyama Basin Region

In this task, a spatial evapotranspiration (ET) evaluation will be performed for selected historical years throughout the Cuyama Basin. The task will include performing a "Mapping of EvapoTranspiration with Internal Calibration" (METRIC) ET (or similar) evaluation of the Cuyama Basin, performing review and validation of the METRIC ET results, and developing a technical memorandum that describes the approach and results.

Subtask 2.2 – Review and Validation of METRIC ET Results

The METRIC ET results developed in Task Order 3 will be reviewed and compared with existing crop evapotranspiration and deep percolation estimates. The results of this review will be used to adjust the METRIC ET evaluation if necessary and will be documented in the technical memorandum.

Subtask 2.3 – Prepare Draft and Final Technical Memorandum

Draft and final versions of a technical memorandum will be developed that document the assumptions, approach and results of the METRIC ET analysis.

Task 2 Deliverables

- Monthly ETc estimates for selected years
- Deep percolation estimates on a monthly basis for selected years
- Draft and Final Technical Memorandum

Task 3 Surface Water Monitoring Program

This task will improve surface water monitoring within Cuyama Basin by increasing the number of stream gauges to improve understanding of surface water conditions in the Basin. Activities performed under this task will assist in identifying surface water inflows and how surface water moves through the basin. Elements of this task include identifying viable surface water bodies (including ephemeral and intermittent creeks, fully flowing

creeks, and the Cuyama River), identification of monitoring sites, and installation of gauges in recommended locations.

Subtask 3.1 – Identify Watersheds and Monitoring Locations

This subtask will gather and review existing data appropriate to development of the program including maps, geographic information system (GIS) data, analytical tools, related plans, permits, and storm water management information. This subtask will also review and identify watershed and sub-watershed planning boundaries to characterize the land use, public agency and water utility boundaries, surface water resources, and water quality priorities. This process will help identify areas lacking monitoring (i.e. stream gauges) and plan strategic monitoring points to improve understanding of surface water regimes at a basin-scale.

This subtask will also interview local water users to gain an improved understanding of stream conditions, as local water users are often very knowledgeable about local conditions. Additionally, land owners will be contacted to discuss willingness to grant property access for any new stream gauges.

Subtask 3.2 – Recommend Monitoring Methods

This task will review and document surface water monitoring methods available for use in the basin. Methods will be reviewed for accuracy, cost of installation, maintenance needed, and other factors as identified. The most appropriate monitoring methods available for use in the Cuyama Basin will be recommended for installation.

Subtask 3.3 - Obtain Permission from Land Owners

Land owners identified as willing to grant property access for stream gauges under subtask 3.1 will be followed-up with to obtain formal permission. Discussion will include the location, accessibility, future maintenance, use, and other factors related to surface water monitoring. Land owners will be asked to sign a formal consent form to document their permission for property access. Signed consent forms will be filed with the CBGSA. This is an entirely voluntary action taken by the land owners and only sites with permission granted will be approved for stream gauge installation. This subtask will include contacting land owners by mail, phone, and in person at the stream gauge site to establish and document monitoring information.

Subtask 3.4 - Install Stream Gauges

Sites that receive access permission from land owners will have new stream gauges installed to monitor surface water. This subtask will prepare monitoring protocols for implementation by the CBGSA and install selected stream gauges. Selected streams will be equipped with gauges. For cost purposes, it is assumed that six new stream gauges will need to be installed. Once gauges are installed, a rating curve will be established. The rating curve will be regularly updated to accommodate for stream channel changes and installation specifics. The focus for installation locations will be to fill identified data gaps in areas lacking surface water monitoring identified under subtask 3.2.

Prior to engaging in field work, a Health and Safety Field Plan will be prepared to document potential hazards, necessary trainings, and establish a communication plan and emergency procedures while in the field. Once the plan is prepared, a meeting will be held to review the plan, travel logistics, packing list, personal safety and security concerns, and any remaining training needs.

Subtask 3.5 – Prepare Draft and Final Technical Memorandum

Selected monitoring locations and methodologies will be documented in a TM. The TM will describe the location, nature, and challenges related to the locations of new stream gauges added to the surface water monitoring network.

Subtask 3.6 – Stakeholder Coordination, Community Outreach and Education

Three meetings will be held throughout the duration of the subtask to promote collaboration across stakeholders (including the GSA Board, Ad Hoc Committee, and Advisory Committee), discuss outstanding items, and generate action items for advancing the project. Objectives for each meeting are as follows:

- **Meeting #1:** Identify known watersheds and monitoring areas; gather stakeholder input on data gaps.
- **Meeting #2:** Discuss recommended monitoring locations and methods
- **Meeting #3:** Review draft TM and obtain comments from stakeholders.

Additionally, this subtask will work to engage community members with efforts related to increased surface water monitoring. Outreach efforts will include producing and distributing educational materials, holding public forums, and receiving input from community member.

Task 3 Deliverables

- Health and Safety Plan
- GIS files for new gauge locations
- Draft and Final Technical Memorandum

Task 3 Assumptions

- Attendance at three coordination meetings (in person or via conference call)
- Up to 6 new stream gauges will be installed

Task 4: Project Management

This task includes project coordination, project management, and quality control (QC) activities on all deliverables. This task also includes coordination and communication with DWR, the CBGSA, and other relevant agencies, along with budget tracking and submittal of progress reports and invoices.

Subtask 4.1 – Grant Management and Administration

Grant management and administration will be performed to ensure compliance with the grant requirements and agreements. Activities performed under this subtask include preparation and submittal of supporting grant documents and coordination with DWR and partnering agencies.

Under this subtask, progress reports detailing work will be prepared during the reporting period and will include sufficient information for DWR program manager to understand and include backup documentation submitted with invoices.

In addition, a Grant Completion Report will be prepared and submitted to the DWR Project Manager for comments and review no later than 90 days after work completion. Using comments from the DWR Project Manager, the Final Grant Completion Report will be prepared and presented.

Subtask 4.2 – Quality Control

QC will be performed for all deliverables and work products. An independent review of each project component will be performed prior to submittal.

Subtask 4.3 – Project Management

This subtask will include all other management activities related to the project, including coordination, invoice development, and creation of back-up documentation. Budget and schedule tracking will also be performed under this subtask.

Task 4 Deliverables

- Project Invoices
- Grant Reporting Documentation
- Draft and Final Grant Completion Report
- Monthly coordination teleconferences
- Documentation of QC activities
- Coordination activities, as needed
- Attendance at up to two coordination meetings with DWR (to kick-off and close the project)

Cuyama Groundwater Sustainability Agency

Task Order No. 5 - Category 1 Projects

Tasks		Labor										ODCs		Total
Task #	Task	Project Manager	Tech Advisor / QA/QC	Modeling Lead	Data Management	GSP Lead	Outreach	Staff/GIS	Admin / Tech Editing	Total Hours	Total Labor Costs (1)	ODCs	Total ODCs (3)	Total Fee
Task #		$266	$295	$222	$249	$249	$222	$178	$105					
1	1- Groundwater Monitoring Well Network Expansion													
1.1	Compilation of Existing Data									0	$0		$0	$0
1.2	Perform Data Gap Analysis									0	$0		$0	$0
1.3	Identify Potential Monitoring Wells	4				16		48		68	$13,592		$0	$13,592
1.4	Obtain Permission from Well Owners	4				16		80		100	$19,288	$2,000	$2,200	$21,488
1.5	Install Equipment and Provide Monitoring Protocols	4				80		80		164	$35,224	$20,000	$22,000	$57,224
1.6	Perform Water Quality Sampling	4				16		160		180	$33,528	$20,000	$22,000	$55,528
1.7	Prepare Draft and Final Technical Memorandum	10	8			32		48	4	102	$21,952		$0	$21,952
1.8	Stakeholder Coordination, Community Outreach & Education	18				18	60	18	6	120	$26,424		$0	$26,424
	Subtotal Task 1:	44	8	0	0	178	60	434	10	734	$150,008	$42,000	$46,200	$196,208
2	2 - Evapotranspiration Evaluation for Cuyama Basin Region													
2.1	Perform Metric ET Evaluation									0	$0		$0	$0
2.2	Review and Validation of METRIC EC Results		2	12		4		12		30	$6,386		$0	$6,386
2.3	Prepare Draft and Final Technical Memorandum	2	4	24		16		40	4	90	$18,564		$0	$18,564
	Subtotal Task 2:	2	6	36	0	20	0	52	4	120	24950	0	$0	$24,950
3	3 - Surface Water Monitoring Program													
3.1	Identify Watersheds and Monitoring Areas									0	$0		$0	$0
3.2	Recommend Monitoring Methods									0	$0		$0	$0
3.3	Obtain Permission from Land Owners	4				16		80		100	$19,288	$2,000	$2,200	$21,488
3.4	Install Stream Gauges	4				40		60		104	$21,704	$108,000	$118,800	$140,504
3.5	Prepare Draft and Final Technical Memorandum	10	8			20		40		78	$17,120		$0	$17,120
3.6	Stakeholder Coordination, Community Outreach & Education	18				18	60	18		114	$25,794		$0	$25,794
	Subtotal Task 3:	36	8	0	0	94	60	198	0	396	83906	$110,000	$121,000	$204,906
4	4 - Project Management													
4.1	Grant Management and Administration	14				24			14	52	$11,170		$0	$11,170
4.2	Quality Control	4	30			4				38	$10,910		$0	$10,910
4.3	Program Management	6				14	30			50	$11,742		$0	$11,742
	Subtotal Task 4:	24	30	0	0	42	30	0	14	140	$33,822	$0	$0	$33,822
	Total	106	52	36	0	334	150	684	28	1390	$292,686	$152,000	$167,200	$459,886

2018 Standard Rates	
Labor Category	**Rate**
Engineer 1 (E1) Scientist 1 (S1) Geologist 1 (G1) Planner 1 (P1) Technical Specialist 1 (TS1)	157
Engineer 2 (E2) Scientist 2 (S2) Geologist 2 (G2) Planner 2 (P2) Technical Specialist 2 (TS2)	182
Engineer 3 (E3) Scientist 3 (S3) Geologist 3 (G3) Planner 3 (P3) Technical Specialist 3 (TS3)	206
Project Engineer 1 (PE1) Project Specialist 1 (PS1) Project Geologist 1 (PG1) Project Planner 1 (PP1) Project Technical Specialist 1 (PTS1)	215
Project Engineer 2 (PE2) Project Specialist 2 (PS2) Project Geologist 2 (PG2) Project Planner 2 (PP2) Project Technical Specialist 2 (TS2)	229
Project Manager 1 (PM1) Technical Manager 1 (TM1)	244
Project Manager 2 (PM2) Technical Manager 2 (TM2)	258
Senior Project Manager (SPM) Senior Technical Manager (STM)	274
Senior Technical Practice Leader (STPL)	301
National Practice Leader (NPL) Strategic Business Unit Leader (SBUL)	315
Software Engineer 1 (SE1)	140
Designer 1 (D1)	145
Designer 2 (D2)	153
Designer 3 (D3) Senior Software Developer (SSD)	158
Senior Designer (SD)	165
Project Assistant (PA)	108
Marketing Assistant (MA) Graphic Artist (GA)	115
Senior Accountant (SA) Billing Manager (BM)	125
Marketing Manager (MM) Graphics Manager (GM)	145

Note: The individual hourly rates include salary, overhead and profit. Other direct costs (ODCs) such as reproduction, delivery, mileage (as allowed by IRS guidelines), and travel expenses will be billed at actual cost plus 10%. Subconsultants will be billed as actual cost plus 10%. Woodard & Curran, Inc., reserves the right to adjust its hourly rate structure at the beginning of each year for all ongoing contracts.

TO: Board of Directors
Agenda Item No. 9d

FROM: Jim Beck, Executive Director

DATE: June 6, 2018

SUBJECT: Payment of Bills

Issue
Consider approving the payment of bills for April 2018.

Recommended Motion
Approve payment of the bills through the month of April 2018 in the amount of $155,772.34.

Discussion
Consultant invoices for the month of April 2018 are provided as 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.: 2018-CBWD-TO1-04A
Task Order: HG-001
Date: May 18, 2018

For professional services rendered for the month of April 2018

Task Order	Sub task	Task Description	Billing Category	Month Ending	Hours	Rate	Amount
HG-001	1	GSA Board of Directors and Advisory Committee Meetings	Executive Director	4/30/2018	12.50	$ 250.00	$ 3,125.00
			Project Coordinator	4/30/2018	41.25	$ 100.00	$ 4,125.00
						Total Task 1 Labor	$ 7,250.00
HG-001	2	Consultant Management and GSP Development	Executive Director	4/30/2018	5.25	$ 250.00	$ 1,312.50
			Project Coordinator	4/30/2018	15.75	$ 100.00	$ 1,575.00
						Total Task 2 Labor	$ 2,887.50
HG-001	3	Financial Information Coordination	Executive Director	4/30/2018	2.00	$ 250.00	$ 500.00
			Project Coordinator	4/30/2018	1.00	$ 100.00	$ 100.00
						Total Task 3 Labor	$ 600.00
HG-001	4	CBGSA Outreach	Executive Director	4/30/2018	0.00	$ 250.00	$ -
			Project Coordinator	4/30/2018	0.75	$ 100.00	$ 75.00
						Total Task 4 Labor	$ 75.00
						Total Labor	$ 10,812.50
		Travel					$ 132.68
						SubTotal Travel	$ 132.68
		Other Direct Costs	Conference Calls - April 2018				$ 237.33
							$ -
			ODC Mark Up			5%	$ 11.87
						SubTotal Other Direct Costs	$ 249.20
						Total Travel & Other Direct Costs	$ 381.88
						TOTAL AMOUNT DUE FOR THIS INVOICE	$ 11,194.38

HALLMARK GROUP Capital Program Management

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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.: 2018-CBWD-TO1-04A
Task Order: HG-001
Date: May 18, 2018

For professional services rendered for the month of April 2018

HG-001	Original Totals	Amendment(s)	Total Committed	Previously Billed	Current Billing	Remaining Balance
Task 1	$ 63,000.00	$ -	$ 63,000.00	$ 50,740.29	$ 7,250.00	$ 5,009.71
Task 2	$ 54,750.00	$ -	$ 54,750.00	$ 14,956.06	$ 2,887.50	$ 36,906.44
Task 3	$ 12,750.00	$ -	$ 12,750.00	$ 650.00	$ 600.00	$ 11,500.00
Task 4	$ 31,500.00	$ -	$ 31,500.00	$ 1,266.86	$ 75.00	$ 30,158.14
Travel & ODCs	$ 3,750.00	$ -	$ 3,750.00	$ 2,003.14	$ 381.88	$ 1,364.98
Insurance	$ -	$ 2,451.00	$ 2,451.00	$ 2,451.00	$ -	$ -
Total	$ 165,750.00	$ 2,451.00	$ 168,201.00	$ 72,067.37	$ 11,194.38	$ 84,939.26

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Task Order #1
Activities for the Month of April 2018:

J. Beck

Task 1: GSA Board of Directors and Advisory Committee Meetings

- Prepared for and attended monthly Cuyama Basin Groundwater Sustainability Agency (CBGSA) Standing Advisory Committee (SAC) and Board of Directors meetings.
- Assisted in the development of the SAC and Board agendas.
- Reviewed CBGSA BOD Meeting Agenda with D. Yurosek.
- Reviewed CBGSA quarterly newsletter.
- Addressed Board ethics training inquiry.
- Discussed SAC agenda items with Cuyama Basin Water District attorney Ernest Conant.

Task 2: Consultant Management and GSP Development

- Met with CBGSA Management Team on a weekly basis.
- Participated on initial Woodard & Curran and EKI technical forum call.
- Reviewed draft Description of Plan Area.
- Reviewed Woodard & Curran work plan.

Task 3: Financial Information Coordination

- Reviewed/drafted first assessment payments with Hallmark employee Taylor Blakslee.
- Met with County of Kern Supervisor Zack Scrivner and County Administrative Officer Chief Deputy Alan Christensen regarding the County of Kern's participation in the CBGSA.
- Reviewed consultant invoice status with Taylor Blakslee.
- Discussed the funding agreement with Klein DeNatale Goldner legal counsel Joe Hughes.

Task 4: CBGSA Outreach

- Nothing to report.

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Task Order #1
Activities for the Month of April 2018:

T. Blakslee

Task 1: GSA Board of Directors and Advisory Committee Meetings

- Prepared Board documents for the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Standing Advisory Committee (SAC) and Board of Directors meetings.
- Prepared SAC and Board minutes.
- Developed SAC and Board agendas.
- Prepared SAC, Board and public meeting packets.
- Attended/facilitated SAC and Board meetings.
- Continued to facilitate collection of Form 700s for the Board, SAC, alternates and team members.
- Created a memo outlining the procedures for participating remotely in a Brown Act meeting.
- Assisted in revisions to the draft SAC guidelines and responsibilities.
- Met with County of Kern Supervisor Zack Scrivner, County Administrative Officer Chief Deputy Alan Christensen and CBGSA Executive Director Jim Beck on the County's participation in the CBGSA.
- Updated financial snapshots showing overall budget to actuals variance.

Task 2: Consultant Management and GSP Development

- Coordinated weekly meetings with the technical Groundwater Sustainability Plan (GSP) consultants.
- Develop agendas and action logs for weekly consultant meetings.
- Participated in the initial technical forum call between EKI and GSP consultant Woodard & Curran.
- Strategized data requests and reporting with Woodard & Curran staff.
- Reviewed Description of Plan Area.

Task 3: Financial Information Coordination

- None

Task 4: CBGSA Outreach

- Reviewed the CBGSA quarterly newsletter.

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Task Order #1
Activities for the Month of April 2018:

K.Sherry

Task 1: GSA Board of Directors and Advisory Committee Meetings

- None

Task 2: Consultant Management and GSP Development

- None

Task 3: Financial Information Coordination

- Billing and Administration

Task 4: CBGSA Outreach

- None

Project and Person Summary with Expense Detail

HALLMARK GROUP Capital Program Management

Date Range: 4/1/2018 - 4/30/2018

Client / *Project*	*Person* / *Expense Type*	*Date*	*Description*	*Mileage*	*Amount*
Cuyama Basin Water District					
1708-CBWD Cuyama Basin					
	Jim Beck				***$66.34***
	Mileage			*124.00*	*$66.34*
		4/4/2018	Travel to Cuyama for the 4/4 Board meeting	124.00	$66.34
	Taylor Blakslee				***$66.34***
	Mileage			*124.00*	*$66.34*
		4/26/2018	Travel to Cuyama for the 4/26 SAC meeting	124.00	$66.34
				Cuyama Basin Subtotal	**$132.68**
				Cuyama Basin Water District Subtotal	**$132.68**
				Grand Total	***$132.68***

GAN CONFERENCING
Bringing the world together

Invoice Date: 5/1/2018
Total: $704.48
Statement# 34893 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	637.53
Payments Received - Thank you!	(637.53)
Balance Forward	
New Charges	
New Usage Charges	595.00
Recurring Charges	0.00
Taxes and Surcharges	109.48
Total New Charges	704.48
Total Amount Due	704.48

Payments

Description	Date	Amount
Payment Received, Thank you!	4/23/18	(637.53)
Subtotal		**($637.53)**

Taxes and Surcharges

Federal Universal Service Fund	109.48
Subtotal	**$109.48**

Management Reports

Usage by Category

Description	Calls	Minutes	Charge
Usage - Conference Calling	217	11,570.00	595.00
	217.00	**11,570.00**	**595.00**

Long Distance By Line

TN	Calls	Mins	Charge
	217	11,570.00	595.00
	217	**11,570.00**	**595.00**

Most Expensive Calls (Toll Free)

From	To	Mins	Charge
7545420572		50.00	19.00
6614773385		159.00	7.95
6614773385		158.00	7.90
9167088767		155.00	7.75
9256274112		147.00	7.35
9169998780		143.00	7.15
6613951000		142.00	7.10
6613316986		141.00	7.05
4155242290		141.00	7.05
9165740697		135.00	6.75
		1,371.00	**85.05**

Toll-free Usage

Cuyama BDSAC Conference ID: 4345230

#	Date	Time	Other	Location	Mins	Amt
1	4/03/18	02:51P	9169998780	Host	61.00	3.05
2	4/03/18	02:56P	6502929100	Host	46.00	2.30
3	4/03/18	02:58P	6614773385	Host	54.00	2.70
4	4/03/18	02:58P	9258581340	Host	54.00	2.70
5	4/03/18	02:59P	6613337091	Host	53.00	2.65
6	4/03/18	03:00P	5596361166	Host	51.00	2.55
7	4/03/18	03:01P	9168063830	Host	51.00	2.55
8	4/03/18	03:42P	6502929100	Host	9.00	.45
Subtotal			**379.00**			**18.95**

Cuyama BDSAC Conference ID: 4347724

#	Date	Time	Other	Location	Mins	Amt
1	4/04/18	05:50P	6614773385	Host	106.00	5.30
2	4/04/18	05:56P	4157938420	Host	101.00	5.05
3	4/04/18	06:01P	4159990316	Participant	95.00	4.75
Subtotal			**302.00**			**15.10**

Cuyama BDSAC Conference ID: 4351229

#	Date	Time	Other	Location	Mins	Amt
1	4/06/18	03:53P	8055431413	Host	89.00	4.45
2	4/06/18	03:56P	6502929100	Host	86.00	4.30
3	4/06/18	03:56P	6614773385	Host	86.00	4.30
4	4/06/18	03:57P	6613337091	Host	85.00	4.25
5	4/06/18	03:58P	5307592484	Host	83.00	4.15
6	4/06/18	03:58P	9169998709	Host	84.00	4.20
7	4/06/18	03:59P	8057815275	Host	83.00	4.15
8	4/06/18	03:59P	9162338352	Host	83.00	4.15
9	4/06/18	03:59P	9258581340	Host	83.00	4.15
10	4/06/18	04:00P	5596361166	Host	81.00	4.05
11	4/06/18	04:01P	8054514179	Host	54.00	2.70
12	4/06/18	04:03P	8059523096	Host	78.00	3.90
13	4/06/18	04:03P	9168063830	Host	79.00	3.95
14	4/06/18	04:05P	8053193866	Host	77.00	3.85
15	4/06/18	04:55P	8054514179	Host	27.00	1.35
Subtotal			**1,158.00**			**57.90**

Cuyama BDSAC Conference ID: 4381432

#	Date	Time	Other	Location	Mins	Amt

1	4/26/18	04:55P	9169998780	Participant	143.00	7.15
2	4/26/18	04:58P	6613951000	Participant	142.00	7.10
3	4/26/18	04:59P	6613316986	Participant	141.00	7.05
4	4/26/18	05:02P	4155242290	Participant	141.00	7.05
5	4/26/18	05:06P	6614773385	Host	158.00	7.90
6	4/26/18	05:17P	9256274112	Participant	147.00	7.35
Subtotal			**872.00**			**43.60**

Cuyama GSA Conference ID: 4350676

#	Date	Time	Other	Location	Mins	Amt
1	4/06/18	11:56A	6614773385	Host	61.00	3.05
2	4/06/18	11:57A	4157938420	Host	61.00	3.05
3	4/06/18	11:59A	4155242290	Host	58.00	2.90
4	4/06/18	12:01P	9169998777	Host	57.00	2.85
Subtotal			**237.00**			**11.85**

Cuyama GSA Conference ID: 4361670

#	Date	Time	Other	Location	Mins	Amt
1	4/13/18	11:58A	9258581340	Host	63.00	3.15
2	4/13/18	11:59A	4157938420	Host	62.00	3.10
3	4/13/18	11:59A	6614773385	Host	62.00	3.10
4	4/13/18	11:59A	9169998777	Host	62.00	3.10
5	4/13/18	12:00P	6613337091	Host	62.00	3.10
6	4/13/18	12:03P	4155242290	Host	58.00	2.90
Subtotal			**369.00**			**18.45**

Cuyama GSA Conference ID: 4372258

#	Date	Time	Other	Location	Mins	Amt
1	4/20/18	10:27A	6614773385	Host	6.00	.30
Subtotal			**6.00**			**.30**

Cuyama GSA Conference ID: 4372387

#	Date	Time	Other	Location	Mins	Amt
1	4/20/18	10:59A	9169998777	Host	21.00	1.05
2	4/20/18	11:00A	6613321043	Host	20.00	1.00
3	4/20/18	11:00A	8318182451	Host	20.00	1.00
4	4/20/18	11:00A	9256274112	Host	20.00	1.00
Subtotal			**81.00**			**4.05**

Cuyama GSA Conference ID: 4372528

#	Date	Time	Other	Location	Mins	Amt
1	4/20/18	11:59A	4155242290	Host	51.00	2.55
2	4/20/18	11:59A	9256274112	Host	51.00	2.55
3	4/20/18	12:00P	4157938420	Host	50.00	2.50
4	4/20/18	12:00P	6613196477	Host	50.00	2.50
5	4/20/18	12:00P	9169998777	Host	50.00	2.50
6	4/20/18	12:01P	6614773385	Host	49.00	2.45
Subtotal			**301.00**			**15.05**

Cuyama GSA Conference ID: 4381420

#	Date	Time	Other	Location	Mins	Amt
1	4/26/18	04:59P	6614773385	Host	7.00	.35
Subtotal			**7.00**			**.35**

Cuyama GSA Conference ID: 4382208

#	Date	Time	Other	Location	Mins	Amt
1	4/27/18	11:55A	4157938420	Host	53.00	2.65
2	4/27/18	11:58A	6614773385	Host	50.00	2.50
3	4/27/18	11:58A	9258581340	Host	50.00	2.50
4	4/27/18	11:59A	6613337091	Host	49.00	2.45
5	4/27/18	12:00P	5306689282	Host	48.00	2.40
6	4/27/18	12:01P	4155242290	Host	47.00	2.35
Subtotal			**297.00**			**14.85**

GAN BREAKDOWN

April 2018

	$	18.95	
		15.10	
		57.90	
		43.60	
		11.85	
		18.45	
		0.30	
		4.05	
		15.05	
		0.35	
		14.85	
Subtotal	$	200.45	
Tax		36.88	18.40%
Total	$	237.33	

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.: 2018-CBWD-TO2-04A
Task Order: CB-HG-002
Date: May 18, 2018

For professional services rendered for the month of April 2018

Task Order	Sub task	Task Description	Billing Category	Month Ending	Hours	Rate	Amount
CB-HG-002	1	Budget Development & Admin	Executive Director	4/30/2018	0.00	$ 250.00	$ -
			Project Controls Manager	4/30/2018	0.00	$ 200.00	$ -
			Project Admin	4/30/2018	0.75	$ 100.00	$ 75.00
						Total Task 1 Labor	$ 75.00
CB-HG-002	2	Financial Management	Executive Director	4/30/2018	1.50	$ 250.00	$ 375.00
			Project Controls Manager	4/30/2018	3.25	$ 200.00	$ 650.00
			Project Admin	4/30/2018	10.25	$ 100.00	$ 1,025.00
						Total Task 2 Labor	$ 2,050.00
CB-HG-002	3	Outreach Facilitation	Executive Director	4/30/2018	4.50	$ 250.00	$ 1,125.00
			Project Admin	4/30/2018	12.00	$ 100.00	$ 1,200.00
						Total Task 3 Labor	$ 2,325.00
						Total Labor	$ 4,450.00
		Travel					$ -
						SubTotal Travel	$ -
		Other Direct Costs					$ -
			ODC Mark Up			5%	$ -
						SubTotal Other Direct Costs	$ -
						Total Travel & Other Direct Costs	$ -
						TOTAL AMOUNT DUE FOR THIS INVOICE	$ 4,450.00

CB-HG-002	Original Totals	Amendment(s)	Total Committed	Previously Billed	Current Billing	Remaining Balance
Task 1	$ 13,400.00	$ -	$ 13,400.00	$ 8,225.00	$ 75.00	$ 5,100.00
Task 2	$ 28,400.00	$ -	$ 28,400.00	$ 4,462.50	$ 2,050.00	$ 21,887.50
Task 3	$ 32,100.00	$ -	$ 32,100.00	$ 350.00	$ 2,325.00	$ 29,425.00
Travel & ODCs	$ 2,820.00	$ -	$ 2,820.00	$ -	$ -	$ 2,820.00
Total	$ 76,720.00	$ -	$ 76,720.00	$ 13,037.50	$ 4,450.00	$ 59,232.50

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Task Order #2
Activities for the Month of April 2018:

- **J. Beck**

Task 1: Budget Development & Administration

- Nothing to report.

Task 2: Financial Management

- Briefed Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board Chairman Derek Yurosek regarding the County of Kern's assessment.
- Reviewed the California Department of Water Resources Prop 1 grant award notice.
- Reviewed budget and assessments with the CBGSA consultants.

Task 3: Outreach Facilitation

- Toured the upper Ventucopa area in the Cuyama Valley with CBGSA Standing Advisory Committee (SAC) Vice Chair Brenton Kelly and SAC member Louise Draucker.
- Met with and toured the Cuyama Valley west basin with CBGSA SAC Chair Robbie Jaffe.

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Task Order #2
Activities for the Month of April 2018:

T. Blakslee

Task 1: Budget Development & Administration

- Coordinated with legal counsel on their revised budget amount and sent out revised FY 18-19 budget to the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Budget ad hoc.

Task 2: Financial Management

- Coordinated CBGSA bank account check signer authorization documents.
- Coordinated with legal counsel and San Louis Obispo County on the draft funding agreement.
- Worked with insurance provider to continue coverage.
- Touched base with Santa Barbara County Water Agency on their purchase order.
- Provided a W9 to Ventura County to enable payment processing.

Task 3: Outreach Facilitation

- Added contacts received via the website to our contact list.
- Reached out to stakeholders that had not previously provided their email addresses.
- Helped coordinate and participated on a tour of the upper Ventucopa area led by CBGSA Standing Advisory Committee Vice Chair Brenton Kelly and member Louise Draucker.
- Coordinated with Grapevine Capital's Ray Shady on his presentation to the SAC and Board meetings.
- Met and participated in a tour of the Cuyama Valley's west basin with SAC Chair Robbie Jaffe.

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Task Order #2
Activities for the Month of April 2018:

- **J. Harris**

Task 1: Budget Development & Administration

- None
-
-
-
-
-
-

Task 2: Financial Management

- Continue development of GL account structure.
- Accounting – accounts payable
- Banking – set-up, correspondence and deposit

Task 3: Outreach Facilitation

- None
-
-
-
-
-
-

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Staff Activities for the Month of April 2018:

- **J. Alwan – 3 Hours**
  - Financial Management
    - Bank Account Signatory Paperwork and Meeting
    - CBGSA Budget Review, Invoice Review, and Entry
    - CBGSA Reporting

HALLMARK GROUP Capital Program Management

CUYAMA BASIN MONTHLY REPORT

Task Order #2
Activities for the Month of April

K. Sherry

Task 1: Budget Development & Administration

- None

Task 2: Financial Management

- Monthly Billing & Administration

Task 3: Outreach Facilitation

- None

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

April 30, 2018
Bill No. 22930-001-0
JDH

Statement for Period through April 19, 2018

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

Date		Services	Hours	Amount
03/24/18	JDH	REVIEWED E-MAILS FROM KERN COUNTY REGARDING FUNDING; REVIEWED JPA AGREEMENT AND MEETING MINUTES REGARDING SAME.	1.00	270.00
03/27/18	RSP	REVIEWED CONFLICT OF INTEREST CODE; GATHERED SUPPORTING DOCUMENTS; LEGAL RESEARCH REGARDING CODE APPROVAL REQUIREMENTS; SUBMITTED DRAFT CODE TO FPPC.	1.50	285.00
04/03/18	JDH	REVIEWED DRAFT FUNDING AGREEMENT; TELEPHONE CONFERENCES WITH T. BLAKESLEE AND J. BECK REGARDING SAME AND BOARD MEETING.	1.00	270.00
04/04/18	JDH	ATTENDED APRIL REGULAR BOARD MEETING.	4.00	1,080.00
04/16/18	JDH	REVIEWED BUDGET AND RELATED ALLOCATION; REVIEWED AND REVISED DRAFT FUNDING AGREEMENT; TELEPHONE CONFERENCE WITH T. BLAKESEE REGARDING SAME; REPLIED TO E-MAIL FROM C. MARTIN INQUIRING ABOUT STATUS.	2.40	648.00
04/18/18	JDH	REVIEWED INQUIRY REGARDING ETHICS TRAINING; E-MAILED J. BECK REGARDING SAME.	0.40	108.00

		Rate	Hours	Amount
JDH	HUGHES, JOSEPH	270.00	8.80	2,376.00
RSP	PATEL, RAVI	190.00	1.50	285.00
Total Fees				**$2,661.00**

PAYMENT DUE UPON RECEIPT
PLEASE REFER TO BILL NUMBER LOCATED BENEATH STATEMENT DATE WHEN SUBMITTING PAYMENT
TO ENSURE PROPER CREDIT.
A FINANCE CHARGE OF 1 1/2% PER MONTH (18% ANNUALLY) WILL BE CHARGED ON ALL BALANCES OVER 30 DAYS.
FEDERAL I.D. NO. 95-2298220

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

Bill No. 22930-001-0 **April 30, 2018** **Page 2**
Client Ref: 22930 - 001

Costs and Expenses

Date	Expenses	Amount
04/05/18	TRAVEL EXPENSES 4/3 ROUND TRIP TRAVEL FOR MARCH BOARD MEETING - JOSEPH D. HUGHES	70.85
Total Costs and Expenses		**$70.85**

Current Charges	**$2,731.85**
Prior Statement Balance	26,568.84
Payments/Adjustments Since Last Bill	-0.00
Pay This Amount	**$29,300.69**

Any Payments Received After April 30, 2018 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
109

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

May 21, 2018
Project No: 0011078.01
Invoice No: 150335

Project 0011078.01 CUYAMA GSP

Professional Services for the period ending April 27, 2018

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

Professional Personnel

	Hours	Rate	Amount	
Engineer 1				
Bradley, Kelsey	5.00	157.00	785.00	
Geologist 2				
Salberg, Lauren	3.75	182.00	682.50	
National Practice Lead				
Melton, Lyndel	5.00	315.00	1,575.00	
Project Manager 2				
Van Lienden, Brian	8.00	258.00	2,064.00	
Senior Project Manager				
Long, Jeanna	3.00	274.00	822.00	
Totals	24.75		5,928.50	
Labor Total				**5,928.50**
		Total this Phase		**$5,928.50**

Phase 003 Description of the Plan Area, Hydraulic Conceptual Model, and Groundwater Conditions

Professional Personnel

	Hours	Rate	Amount	
Geologist 2				
Salberg, Lauren	31.75	182.00	5,778.50	
Planner 2				
Eggleton, Charles	1.50	182.00	273.00	
Totals	33.25		6,051.50	
Labor Total				**6,051.50**
		Total this Phase		**$6,051.50**

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

Project	0011078.01	CUYAMA GSP	Invoice	150335

Phase 004 Basin Model and Water Budget

Professional Personnel

	Hours	Rate	Amount	
Engineer 1				
Bradley, Kelsey	29.00	157.00	4,553.00	
Engineer 2				
Ceyhan, Mahmut	54.00	182.00	9,828.00	
Wicks, Matthew	64.00	182.00	11,648.00	
National Practice Lead				
Melton, Lyndel	6.50	315.00	2,047.50	
Project Engineer 1				
Amador, Dominick	.50	215.00	107.50	
Project Manager 2				
Cayar, Mesut	3.00	258.00	774.00	
Senior Technical Manager				
Taghavi, Ali	20.00	274.00	5,480.00	
Totals	177.00		34,438.00	
Labor Total				**34,438.00**

Reimbursable

Miscellaneous					
3/28/2018	Eggleton, Charles	Dibblee Geologic Maps for Model Construc		154.00	
3/28/2018	Eggleton, Charles	Geologic Maps for Model Building		14.00	
3/28/2018	Eggleton, Charles	Geologic Map purchase for Model construc		312.00	
Reimbursable Total			**1.1 times**	**480.00**	**528.00**
			Total this Phase		**$34,966.00**

Phase 005 Establish Basin Sustainability Criteria

Professional Personnel

	Hours	Rate	Amount	
National Practice Lead				
Melton, Lyndel	7.50	315.00	2,362.50	
Project Manager 2				
Ayres, John	52.00	258.00	13,416.00	
Van Lienden, Brian	10.00	258.00	2,580.00	
Totals	69.50		18,358.50	
Labor Total				**18,358.50**
		Total this Phase		**$18,358.50**

Project	0011078.01	CUYAMA GSP	Invoice	150335

Phase 006 Monitoring Networks

Professional Personnel

	Hours	Rate	Amount	
Planner 2				
Eggleton, Charles	93.50	182.00	17,017.00	
Project Manager 2				
Ayres, John	8.00	258.00	2,064.00	
Totals	101.50		19,081.00	
Labor Total				**19,081.00**
		Total this Phase		**$19,081.00**

Phase 007 Projects and Actions for Sustainability Goals

Professional Personnel

	Hours	Rate	Amount	
Engineer 1				
Bradley, Kelsey	50.00	157.00	7,850.00	
National Practice Lead				
Melton, Lyndel	1.00	315.00	315.00	
Project Manager 2				
Van Lienden, Brian	18.00	258.00	4,644.00	
Totals	69.00		12,809.00	
Labor Total				**12,809.00**
		Total this Phase		**$12,809.00**

Phase 010 Outreach, Education and Communication

Professional Personnel

	Hours	Rate	Amount	
Graphic Artist				
Fox, Adam	2.50	115.00	287.50	
National Practice Lead				
Melton, Lyndel	6.00	315.00	1,890.00	
Planner 1				
De Anda, Vanessa	2.50	157.00	392.50	
Project Manager 2				
Van Lienden, Brian	9.00	258.00	2,322.00	
Senior Technical Practice Lead				
Lopezcalva, Enrique	4.00	301.00	1,204.00	
Totals	24.00		6,096.00	
Labor Total				**6,096.00**

Project	0011078.01	CUYAMA GSP		Invoice	150335

Reimbursable

Vehicle Expenses					
3/7/2018	Melton, Lyndel	Board and Stakeholder meetings		318.28	
4/4/2018	Melton, Lyndel	Board Meeting		328.09	
4/26/2018	Van Lienden, Brian	Cuyama GSP SAC meeting		34.65	
4/27/2018	Van Lienden, Brian	Cuyama GSP SAC meeting		89.16	
Travel & Lodging					
3/7/2018	Melton, Lyndel	Board and Stakeholder meetings		30.04	
3/7/2018	Melton, Lyndel	Board and Stakeholder meetings		159.00	
Meals					
4/26/2018	Van Lienden, Brian	Cuyama GSP SAC meeting		11.34	
	Reimbursable Total		**1.1 times**	**970.56**	**1,067.62**

Consultant

Subcontractor Expense					
4/27/2018	The Catalyst Group, Inc.	Inv#301		7,117.26	
	Consultant Total		**1.1 times**	**7,117.26**	**7,828.99**
			Total this Phase		**$14,992.61**

Phase 011 Project Management

Professional Personnel

	Hours	**Rate**	**Amount**	
National Practice Lead				
Melton, Lyndel	6.50	315.00	2,047.50	
Planner 1				
De Anda, Vanessa	.50	157.00	78.50	
Project Assistant				
Hughart, Desiree	1.50	108.00	162.00	
Project Manager 2				
Ayres, John	4.00	258.00	1,032.00	
Van Lienden, Brian	8.00	258.00	2,064.00	
Senior Project Manager				
Long, Jeanna	1.50	274.00	411.00	
Totals	22.00		5,795.00	
Labor Total				**5,795.00**
		Total this Phase		**$5,795.00**

Phase 012 GW Monitoring Well Network Expansion (Cat 1 – Task 1)

Professional Personnel

	Hours	**Rate**	**Amount**
Planner 2			
Eggleton, Charles	10.50	182.00	1,911.00

Project	0011078.01	CUYAMA GSP			Invoice	150335
Project Manager 2						
Van Lienden, Brian			7.00	258.00	1,806.00	
Senior Project Manager						
Long, Jeanna			5.50	274.00	1,507.00	
	Totals		23.00		5,224.00	
	Labor Total					**5,224.00**
				Total this Phase		**$5,224.00**

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

Professional Personnel

		Hours	**Rate**	**Amount**	
Project Manager 2					
Van Lienden, Brian		46.00	258.00	11,868.00	
	Totals	46.00		11,868.00	
	Labor Total				**11,868.00**
			Total this Phase		**$11,868.00**

Phase 015 Project Management (Cat 1 – Task 4)

Professional Personnel

		Hours	**Rate**	**Amount**	
Project Manager 2					
Van Lienden, Brian		9.00	258.00	2,322.00	
	Totals	9.00		2,322.00	
	Labor Total				**2,322.00**
			Total this Phase		**$2,322.00**
			Total this Invoice		**$137,396.11**

Outstanding Invoices

Number	**Date**	**Balance**
146686	1/22/2018	43,199.00
147547	2/21/2018	72,133.13
148227	3/16/2018	145,251.07
149168	4/19/2018	161,008.36
Total		**421,591.56**

	Current Fee	**Previous Fee**	**Total**
Project Summary	**137,396.11**	**421,591.56**	**558,987.67**

Approved by: _____

Brian Van Lienden
Project Manager
Woodard & Curran

Progress Report

Cuyama Basin Groundwater Sustainability Plan Development

Subject:	**April 2018 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:	May 22, 2018
Project No.:	0011078.01

This progress report summarizes the work performed and project status for the period of March 31, 2018 through April 27, 2018 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 2 and 3, issued by CBGSA on March 7, 2018. Note that Task Order 1, issued by CBGSA on December 6, 2017, was 100% spent as of the March 2018 invoice.

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 Order 2, 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 Order 3, 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 1 and 2)

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 completed on this task during this reporting period	• Task 1 is completed; no work is anticipated during the next reporting period
Task 2: Data Management System, Data Collection and Analysis, and Plan Review	• Continued data and information outreach with Cuyama Basin agency representatives and landowners • Processing of data for inclusion in data management system	• Finalize data and information outreach efforts • Begin development of data management system once approval is received from the CBGSA Board (May 2, 2018)
Task 3: Description of the Plan Area, Hydrogeologic Conceptual Model, and Groundwater Conditions	• Submitted draft Plan Area section to GSA executive director. This section was then sent out to the Board and SAC for review. • Continued work on Hydrologic Conceptual Model (HCM) development	• Update Plan Area section in response to comments received • Develop HCM slides for June Workshop and draft HCM GSP section
Task 4: Basin Model and Water Budget	• Continued development of Integrated Water Flow Model (IWFM) of the Cuyama Basin, including initiating work on IWFM Demand Calculator (IDC)	• Continued development of IWFM model
Task 5: Establish Basin Sustainability Criteria	• Continued development of approach for identifying sustainability goals • Prepared materials on sustainability for presentation at SAC and Board meetings	• Develop additional materials to facilitate discussions on sustainability with at June SAC meeting and CBGSA Workshop
Task 6. Monitoring Networks	• Compilation and processing of available monitoring well locations and monitoring data	• Discuss monitoring well locations and gaps with SAC and CBGSA Board
Task 7: Projects and Actions for Sustainability Goals	• Identification and refinement of potential projects and actions	• Continued identification and refinement of potential projects and actions
Task 8. GSP Implementation	• No work was completed on this task during this reporting period	• No work is anticipated during the next reporting period

Task	Work Completed During the Reporting Period	Work Scheduled for Next Period
Task 9. GSP Development	• No work was completed on this task during this reporting period	• No work is anticipated during the next reporting period
Task 10: Education, Outreach and Communication	• Participated in meetings with CBGSA Board, Advisory Committee and local stakeholders • Developed initial CBGSA newsletter	• Continued participation in meetings with CBGSA Board and advisory committee and local stakeholders • Planning for June workshop
Task 11: Project Management	• Ongoing project management activities	• Ongoing project management activities

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

Task	Work Completed During the Reporting Period	Work Scheduled for Next Period
Task 12: Groundwater Monitoring Well Network Expansion	• Compilation and review of existing groundwater monitoring data within the Cuyama Basin	• Discuss with SAC and CBGSA Board existing monitoring well locations and areas where added monitoring may provide value • Develop summary of existing monitoring wells and data
Task 13: Evapotranspiration Evaluation for Cuyama Basin Region	• Initiated work efforts to develop additional historical land use and METRIC ET estimates for Cuyama Basin	• Continued efforts to develop additional historical land use and METRIC ET estimates for Cuyama Basin
Task 14: Surface Water Monitoring Program	• No work was completed on this task during this reporting period	• No work is anticipated during the next reporting 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 as of April 27, 2018. 49% of the available Task Order 2 budget has been expended ($195,919.67 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	$ 4,596.00	$ 5,928.50	$ 10,524.50	$ 37,932.50	22%
3	$ 24,182.00	$ 12,763.50	$ 6,051.50	$ 18,815.00	$ 5,367.00	78%
4	$ 103,880.00	$ 18,064.75	$ 34,966.00	$ 53,030.75	$ 50,849.25	51%
5	$ 60,676.00	$ 1,290.00	$ 18,358.50	$ 19,648.50	$ 41,027.50	32%
6	$ 65,256.00	$ 8,469.00	$ 19,081.00	$ 27,550.00	$ 37,706.00	42%
7	$ 36,402.00	$ 352.00	$ 12,809.00	$ 13,161.00	$ 23,241.00	36%
8	$ -	$ -	$ -	$ -	$ -	n/a
9	$ -	$ -	$ -	$ -	$ -	n/a
10	$ 45,420.00	$ 28,280.81	$ 14,992.61	$ 43,273.42	$ 2,146.58	95%
11	$ 15,196.00	$ 4,121.50	$ 5,795.00	$ 9,916.50	$ 5,279.50	65%
Total	**$ 399,469.00**	**$ 77,937.56**	**$ 117,982.11**	**$ 195,919.67**	**$ 203,549.33**	**49%**

Table 5 shows the percent spent for each task under Task Order 3 as of April 27, 2018. 22% of the available Task Order 3 budget has been expended ($41,933.00 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	$ 19,453.00	$ 5,224.00	$ 24,677.00	$ 28,567.00	46%
13	$ 69,706.00	$ -	$ 11,868.00	$ 11,868.00	$ 57,838.00	17%
14	$ 53,342.00	$ -		$ -	$ 53,342.00	0%
15	$ 11,946.00	$ 3,066.00	$ 2,322.00	$ 5,388.00	$ 6,558.00	45%
Total	**$ 188,238.00**	**$ 22,519.00**	**$ 19,414.00**	**$ 41,933.00**	**$ 146,305.00**	**22%**

3 Schedule Status

The project is on schedule. Work authorized under Task Order 1 is complete. Work under Task Orders 2 and 3 are scheduled to be completed on June 30, 2018.

4 Outstanding Issues to be Coordinated

There are no outstanding issues at this time.