Cuyama Basin Groundwater Sustainability
Agency Board of Directors

Agenda
December 6, 2017

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, December 6, 2017 at 4:00 PM, at the Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254

To hear the session live please access via the toll-free number at (888) 222-0475 Code 6375195#.

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 Jessica Alwan at (916) 915-7337 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 4885 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 (Yurosek)**
2. **Roll call (Yurosek)**
3. **Pledge of Allegiance**
4. **Approval of minutes (Yurosek)**
5. **Request for RMC Contract Approval (Beck)**
6. **Report of the Executive Director (Beck)**
    a. **Progress**
    b. **Presentation of USGS data proposed for January session**
    c. **Next steps**
7. **Financial Report (Beck)**
8. **Report of the General Counsel (Hughes)**
9. **Report of the Advisory Committee and referral of matters to the Advisory Committee (Beck)**
10. **Reports of the Ad Hoc Committees**
    a. **Budget Ad Hoc Committee (Beck)**
    b. **Grant Application Ad Hoc Committee (Beck)**
    c. **GSP Consultant Ad Hoc Committee (Beck)**
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. Unscheduled comments will be limited to three minutes.

13. Adjourn

Cuyama Basin Groundwater Sustainability Agency (GSA)

Draft Board of Directors Meetings Minutes **November 1, 2017**

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

The Cuyama Basin GSA Board of Directors met at approx. 4:00 PM.

PRESENT: Directors: Chairman Derek Yurosek, Tom Bracken, Jane Wooster, George Cappello, Byron Albano, Cory Bantilan, Glenn Shephard, Das Williams

Alt. Directors: Debbie Arnold, Alan Christensen, John Coats

ABSENT: Lynn Compton, David Couch, Paul Chounet

1. **Call to order**
   Chair Yurosek calls the meeting to order at approx. 4:00 PM.

2. **Roll call**
   Chair Yurosek calls roll of the Board (shown above).

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

4. **Chair Yurosek opens to floor to comments on the meeting minutes.**

   Public Comment: A request was made to further detail public comments and improve consistency in public comments.

   With no additional comments a motion was made by Director Bracken to approve the minutes, second by Director Shephard with unanimous approval. Motion passed.

5. **Board interview of GSP Preparation Consultant firms.**

   Hydrometrics
   Derrik Williams presented initially, and introduced the team including J. Michael Harty, Bryan Bondy, and Tim Leo among others on the proposed team. Bryan Bondy will be local project lead and focus on policy and decisions that will need to be made by the CBGSA Board while Tim Leo will lead the technical team and Ellen Cross (not in attendance) will lead the stakeholder engagement process. They provided a 15-minute presentation, as distributed in the Board of Directors packet, highlighting their team and process for completion.

   Jim Beck, Executive Director, proceeded with a list of prepared questions for Hydrometrics.

   In summary, Mr. Williams noted that Hydrometrics' has a close working relationship with the Department of Water Resources (DWR) and have been providing advice by working with clients to outline implementation processes by focusing on developing expectations. He noted they have an

unmatched understanding of GSPs and have conducted similar work with the State Water Resources Control Board which has allowed them to better to understand their perspective and approach.

Hydrometrics discussed that the first hurdle will be to have everyone understand the path of decisions, definition of terms, process, and technical information needed to make decisions. They intend to prioritize informing stakeholders first by laying out the entire two-year program. Additionally, because of the newness of the Sustainable Groundwater Management Act (SGMA), they will need to set expectations and provide meaningful opportunities for those impacted to be engaged and have a say in the process.

Regarding the USGS model, there is an expectation there will be errors in the model. The expectation at completion is that the model will help inform decisions and to build a model that DWR will accept as part of the Groundwater Sustainability Plan (GSP) but expanding groundwater model is not too onerous.

The Hydrometrics proposal covers costs as envisioned to evaluate and update the model. Once the model is built, water budgets will be relatively easy to pull out. The model can have uncertainty, and study of additional uncertain factors will be used develop actions and projects that are fair and trusted.

The Hydrometrics team added that they will need to develop the plan in a way that will be effective for all the stakeholders. The GSA will need to have a website and make online access to information available through a communications plan that is public and updated based off input. The goal is to create a system that will make management easier either for varying water use, financial, or other reasons.

The Hydrometrics team impressed that the biggest problem with the project is the timeframe, a year and a half including notice. Quick distribution of information is needed, to make decisions especially when members of the GSA may require respective county decisions. Meetings will need to be held often, make decisions quickly and then move forward. They will work to determine the best way to be inform the community and get opinions from the stakeholders through well-attended meetings, make decisions, and incorporate into the Plan. The challenge will be making informed decisions on the difficult matters including how to best determine if models are effective, to keep DWR from taking over the process. There are many difficult matters, but the focus is to get done on time and on budget.

Chair Yurosek proceeded to open informal questions from the Directors to Hydrometrics.

The Directors questioned the Hydrometrics team regarding integrating climate change at high altitude. The Hydrometrics team noted that DWR wants to see that the GSP is robust including climate change, has an endpoint, and that it has the supporting projects. The intent will be to work on the model and use assumptions to make policy decision on sustainability. The model will tell if projects will get to sustainability with climate change assumptions and contemplate adaptive management to address climate change in the future.

Hydrometrics was also asked to respond to how with the short timeframe will they develop a plan that works for all stakeholders and takes everything into consideration.

Hydrometrics responded that the GSPs and regulations are dependent upon public input for key issues, but will make sure everyone is heard. The project manager role will be to inform the Board and ensure policies are fair, to ultimately guide and understand the implications of the decision. The Board will

decide what is fair because SGMA is focused on local decisions and local control. They will plan to convene workshops to discuss fairness of GSP and host ongoing conversations with the Board and SAC to determine fairness. Hydrometrics sees an important part of their role as understanding how the Basin works and relative tradeoffs.

The Directors asked the Hydrometrics team to address their concerns that only 5% (approx.) of their proposal is dedicated to onsite hours and what that will translate to for the CBGSA. Hydrometrics assured the Directors that they will be responsive to what is needed for the project. Ms. Cross' time is at 15%, and will reallocate hours based off needs, and 20% of time is dedicated to outreach, communication, and conflict resolution. Hydrometrics' time onsite will depend on engagement need of the Board and SAC, estimated at 1-2 times per month but will increase based off schedule.

Hydrometrics was also asked about components of plans that will allow for acceptance or denial of plan viability. They responded that the draft outline is a bulleted list of regulations; the first part of which is complete noting that DWR is committed to local management if reasonable. CBGSA will need projects, funding, and public acceptance to support that sustainability been defined and is there a path to get there.

The Directors requested that the team provide a real-world example of sustainable yield vs undesirable results. Hydrometrics noted that sustainability is a policy concept to give options to the Board. With water levels as the example, some Basins will determine significantly below the surface while others determine a level closer to ground surface. They will try to get a set of reasonable levels throughout Basin. Undesirable results are how much the CBGSA is willing to compromise on those levels. If it is 90% above, then yes by DWR. However, sustainable yield could be changed based off location of pumping.

The Hydrometrics team was asked when allocations occur, how they envision it being completed. They responded that because legal teams understand rights under groundwater law they will need to educate clients because there are unsettled questions. Everyone will need to understand basis of groundwater rights; the attorneys will help to ensure there is a consensus of fairness.

Hydrometrics was also asked about practical methods to managing groundwater recharge. They responded that if they can find a source of water that can be put in the ground as a possibility, one source is storm water. They would want to investigate if excess flows could be captured and redistributed. It is not easy to import groundwater, but will be looked at as an action.

The Hydrometrics team was also asked about Mr. Harty's and Mr. Bondy's engagement and frequency of being in the Basin. They intend for Mr. Bondy to be available more as he can respond quickly and convey local concerns to Mr. Harty, who as project manager, will ensure the project is on time and on budget.

The Board broke for a 15-minute recess between presentations.

RMC

Lyndel Melton presented initially, and introduced the team including Ali Taghavi as Technical Advisor, John Ayres for Sustainability Analysis, Rob Morrow for Alternative Analysis, Brian Van Lienden for GSP Preparation, and Charles Gardiner for Decision Facilitation among others on the proposed team. They provided a 15-minute presentation, as distributed in the Board of Directors packet, highlighting their team and process for completion.

Jim Beck, Executive Director, proceeded with a list of prepared questions for Hydrometrics.

In summary, it was noted that Mr. Gardnier has worked directly with the SWRCB, while RMC's work has been supporting clients through SWRCB processes. They noted that tools have been developed and are available for other regions and CBGSA to use. The RMC team is also working on the DWR regional pilot for local needs and helping to determine what DWR can provide.

The RMC team noted two critical steps to completion: education, and developing a level of trust. The group needs to trust that everyone has a common understanding for how to move forward. With SGMAs focus on local control, RMC will operate with transparency to compile all data, check adequacy, and vet the information.

Relative to the USGS model, they added that each model will need to be adjusted for local needs, that the current data in the model is not clear. Their first step will be a hydrogeologic review, then to evaluate the data and platform, integrate into a comprehensive model, calibrate and verify the model, then evaluate for sustainability options. The model area only covers a portion of the Basin, the current budget reflects data in current area while other areas will have additional analysis. They estimated 10-12 months to assess the current or develop new model depending on funding with completion by end of 2019.

One of RMC's goals will be to create a space for constructive conversations. The engagement plan is road mapping with stakeholder to look at best ways to analyze to link technical work and issues then map out over next couple of years. The team has significant experience in working with disadvantaged communities and are currently contracted with SLDMWA including Merced, San Joaquin County and Coachella.

RMC summarized that development of special management area boundaries will be a decision of the Board as an option with SGMA. RMCs role is to support and defend management areas that give CBGSA the option to be flexible in different parts of the Basin and used as a tool to manage basin effectively ie: physical conditions, gradient, jurisdictional.

The RMC team responded that trust may be the largest hurdle, but there is no simple solution. They will need to understand overdraft conditions and look at options then engage community and make decisions at the local level.

Chair Yurosek proceeded to open informal questions from the Directors to RMC.

Regarding USGS calibration and sensitivity analysis, the RMC team noted it will need to be updated to 2015/2017 and get into existing or new platform. They will look at groundwater levels, streamflow conditions and best fit historical levels so that water budgets make sense. RMC can provide the review, but are open to utilizing technical advisory committee.

In terms of the biggest problem they may face, RMC discussed that the "big picture" will be to determine the solutions desired by the Basin. They can look at many options (moving water, looking at alternative ways to move storm water to agricultural land) but gaining consensus in solutions is the challenge.

To fix the model and integrate current conditions that are verifiable by the person pumping, RMC would use existing information to incorporate into the model but will also require ground-truthing.

To make the USGS information presentable to the public, RMC will work with stakeholders to see how they would like the information presented, possibly web-based for physical conditions underground. Additionally, workshops can be held to review and provide datasets and visuals to share and understand process, assumptions, and calibration.

In terms of the budget, it was noted that the grant application is in process, and RMC provided an overview of the pricing presented noting additional costs for development of a new model. The current model will be sufficient for the SGMA process but at some point, it may be desired to develop a model for the entire Basin which could potentially be funded through the grant.

The Board broke for a 10-minute recess after the presentations.

6. Chair Yurosek opened the floor to public comment regarding GSP Preparation Consultant firm interviews.

Director Albano provided an overview of the interview process noting that all firms were interviewed by the Ad Hoc Committee last week. The Ad Hoc Committee determined that the Amec Foster team lacked local experience and did not present cohesively as a team. In addition, the Ad Hoc Committee noted that Dudek was competent and capable, but not right firm for the Valley due to a lower percentage of time allocated to outreach. The Ad Hoc Committee wanted to narrow down the candidate pool to two firms to provide for quality interviews with the Board.

In summary, the public commented questioning why Dudek was not brought to the Board for interview given their history of service with the Valley. The commenters were satisfied with the rational as provided by the Ad Hoc Committee in the introduction.

Another comment was that the GSP should include entire Basin. The commenter felt it was answered by both teams, but was not clear what data was missing from USGS. They wanted to know specifically what kind of monitoring will take place noting there will be a need for ground-truthing in the Valley. The Board responded that it is a clear expectation that both firms understand they will need to complete a data assessment and do not consider it as a differentiating factor.

It was asked how the firms can get the data that is not public information. The Board responded that they will seek voluntarily submitted information from landowners and that part of the process will be presenting to the Board how to achieve the goals and utilize the public in that process.

Another question was related to public engagement and what it would look like with the GSP consultant. There were concerns that there are non-participating members of the community, the commenter asked how to bring them into the discussions (potentially due to language and limited internet as examples). The Directors responded that there will have to be a creative engagement process addressing uniqueness of Cuyama. The answers are clear at this point, but the Board is selecting based on ability to complete the GSP process.

It was noted by the Directors that because RMC is the grant proposal consultant as well they had information from the Stakeholder Advisory Committee which was reflected in the presentation. It was also discussed that the Basin has had 5 years of community meetings and that some community members simply do not want to participate in the process.

Another public comment was regarding beneficial users and how the CBGSA will look at the economic impact on disadvantaged communities. They would like to make sure the CBGSA has enough depth to analyze impacts of less plantings, fewer jobs, reduced school enrollment, requesting that they pay attention to that and consider those elements. The Directors responded that both teams addressed the economics and the general sentiment is that either team will ensure it is covered in the GSP.

Another comment was that Hydrometrics seemed better organized, while RMC moved quickly and did not transition well.

Finally, a letter received in advance of the meeting requesting detail in the stakeholder engagement process, technical assistance, SGMA disclosures, and spatial technologies which were previously responded to by the teams in the presentations.

Chair Yurosek opened the Board to discussion of the firms interviewed.

The Directors discussed that both firms were impressive and qualified candidates. Some Directors liked Hydrometrics noting their enthusiasm over the technical aspect while others preferred RMC. It was discussed that they took different strategies for how to appeal to the Board that the firms highlighted a focus on outreach and conflict management to get to one Plan. One Director noted that the reason the process would fail is the GSA's lack of consensus. The Directors continued highlighting the strengths and weaknesses of both firms, discussed the cost proposals, and the team members that would directly engage with the CBGSA.

A motion was made by Director Williams for Hydrometrics to be selected as the GSP Development Consultant, Director Bantilan seconded the motion. Motion failed 44.44% yes to 55.56% no.

Chair Yurosek reopens floor to public comment.

The Directors requested feedback from Executive Director Beck who commented that both firms will do a great job and have respected track records. He noted that Hydrometrics was focused on their technical capability while RMC was focused on their plan implementation. The Directors also commented that RMC has been collaborative, responsive and worked well with the CBGSA during the grant application process.

A motion was made by Director Cappello for RMC to be selected as the GSP Development Consultant, Director Bantilan seconded the motion. Motion passed unanimously.

Director Yurosek requested the Board consider directing the Ad Hoc Committee to bring back the contract at next month for Board review.

A motion was made by Director Shephard to direct the Ad Hoc Committee to continue contracting with RMC, the motion was seconded by Director Bantilan. Motion passed unanimously.

7. Report of the Advisory Committee

Executive Director Beck reported that this agenda item will be used to present items to the Board that are not covered in other places on the agenda and report as a standing committee back to the entire Board. He noted that they are working on developing a regular session for the Stakeholder Advisory Committee prior to the Board sessions. Next month will be the first report. The Executive Director team will be providing agendas, administrative support, and will be following guidelines and will be reflected in minutes of meeting. The agenda and minutes will be held on the website.

8. Receive an update from the Executive Director regarding the application and agreement with the California Department of Water Resources for the Sustainable Groundwater Planning Grant Program's "Groundwater Sustainability Plans and Projects" solicitation.

Executive Director Beck noted that they have received the RMC draft proposal which will be distributed to Stakeholder Advisory Committee. The comments received are administrative and will be posted when finalized. The CBGSA will have limited comment windows due to the timeframe, a clean, redline, and table of comments will be distributed.

9. Receive an update from Legal Counsel regarding contracting with Executive Director and future task order needs; discussion and possible action regarding approval of task order for Board of Directors and Advisory Committee meeting management, GSP consultant management, financial information coordination, and outreach.

Joe Hughes reported on the Hallmark Group consulting agreement, the direction was for signature by Director Yurosek. Task order 1 is submitted per the distributed materials. For the process going forward, all future task orders for additional scope will be submitted to the Board for approval.

A motion was made by Director Wooster to approve Hallmark Group Task Order 1 as presented in the Board Packet, Director Bantilan seconded the motion. Motion passed unanimously.

10. Consider option for public CBGSA Board of Directors meeting teleconferencing.

The Board discussed the option for adding teleconferencing to the monthly meetings. A public request was made to add a designated receiver of texts for future sessions.

A motion was made by Director Williams for Hallmark Group to provide teleconferencing for future sessions, Director Shephard seconded the motion. Motion passed unanimously.

11. Public comment for items not on the Agenda.

Chair Yurosek opens floor to comments without response.

12. Adjourn

Chair Yurosek adjourns the Cuyama Basin GSA Board of Directors meeting at approximately 8:30 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 Thursday, November 1, 2017, by the Cuyama Basin Groundwater Sustainability Agency Board of Directors.

Jim Beck

Dated: November 1, 2017

TO: **Cuyama Basin Groundwater Sustainability Agency Board of Directors**

FROM: **Jim Beck, Executive Director**

DATE: **December 6, 2017**

SUBJECT: **Agenda Item #5: Request for RMC Contract Approval**

Issue

Selected consultant contract approval to initiate CBGSA GSP development.

Recommended Motion

Approval and execution of the proposed RMC contract and associated task order.

Discussion

At the November session, the CBGSA Board of Directors unanimously selected RMC as the GSP Development Consultant. The formal contracting documents have been prepared and are ready to be executed by Chair Yurosek to initiate GSP Development activities.

WOODARD & CURRAN

TERMS & CONDITIONS

CONSULTING SERVICES AGREEMENT
CUYAMA BASIN GROUNDWATER SUSTAINABILITY PLAN DEVELOPMENT

The following Standard Terms and Conditions constitute the terms of this agreement ("Agreement") between Woodard & Curran, Inc. ("Consultant"), with an address of 2175 N. California Blvd, Suite 315, Walnut Creek, CA 94596, and the Cuyama Basin Groundwater Sustainability Agency, ("Client"), with an address of _____, with respect to the performance of services that are described in Exhibit A and that will be more specifically described in individual Task Orders, the form of which is attached hereto (also referred to hereinafter as the "Scope of Services").

WHEREAS, it is the desire of the Client to contract the services generally described in Exhibit A; and Consultant desires to perform the services generally described in Exhibit A.

NOW THEREFORE, the parties hereto agree as follows:

1. Scope of Services

Consultant, as representative of the Client, shall perform the services generally described in Exhibit A and as specifically described in each Task Order. A Task Order shall be deemed effective and incorporated herein upon the issuance of and execution by both of the parties. An executed Task Order shall be subject to the terms and conditions set forth in this Agreement and in the event of any conflict between the terms of a Task Order and the Agreement, the terms of the Agreement shall prevail.

1.1 Assumptions. The Consultant's Scope of Services and the compensation are conditioned upon, and are subject to, the assumptions set forth in each Task Order.

1.2 Change in Scope of Services. Client may, at any time, by written order, request changes to the Scope of Services or work to be performed in any specific Task Order. If the Scope of Services in a Task Order is changed in a manner that will increase or decrease Consultant's costs or the time required to perform the services under this Agreement, there will be an equitable adjustment to this Agreement that must be signed by both parties.

2. Consultant's Responsibilities

Consultant shall be responsible for the following:

2.1 Consultant will perform all work in accordance with the Scope of Services in each Task Order.

2.2 Consultant will perform all work in a professional manner that is consistent with other professionals performing similar work in the geographic area at the time services are rendered. No warranty, express or implied, is made or intended by the Consultant's undertaking herein or its performances of services, and it is agreed that Consultant is not a fiduciary or municipal advisor to the Client.

2.3 Consultant shall comply with all laws and regulations applicable to Consultant's performance of the Scope of Services.

2.4 Consultant shall assign a project manager to act as Consultant's representative with respect to services to be rendered under this Agreement.

2.5 Consultant shall have all licenses and permits required to perform the Scope of Services.

3. Client's Responsibilities

Client shall do the following in a timely manner so as not to delay the services of Consultant:

3.1 Designate in writing a person to act as Client's representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define Client's policies and decisions with respect to Consultant's services described in the Scope of Services. Such person shall have complete authority to bind Client financially with respect to the payment of services to be rendered under this Agreement.

3.2 Provide all criteria and full information as to Client's requirements for the project ("Project"), including design objectives and constraints, performance requirements, and any budgetary limitations; and furnish copies of all design and construction standards which Client will require to be included in any drawings and specifications.

3.3 Provide Consultant with all available information pertinent to the Project including previous reports and any other documents and data relative to design or construction of the Project, all of which Consultant shall be entitled to use and rely upon with respect to the accuracy and completeness thereof, in performing the services under this Agreement.

3.4 Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by Consultant; and provide written comments within a reasonable time so as not to delay the services of Consultant; and give prompt written notice to Consultant whenever Client observes or otherwise becomes aware of any development that may affect the Scope of Services or timing of Consultant's services.

3.5 Ensure Consultant, its agents and representatives have safe access to the Project site, buildings thereon, and other locations as required to perform the Scope of Services.

3.6 If applicable, retain its own Independent Registered Municipal Advisor ("IRMA) pursuant to the Municipal Advisor Rule of the Securities and Exchange Commission, and rely upon such advisor, it being the understanding that Consultant is not providing the services of an IRMA. Client shall retain and consult with an IRMA prior to acting on any information and material under the Agreement.

4. Subcontracts

4.1 If requested by Client, the Consultant will recommend the Client's engaging the services of laboratories, testing services, subconsultants, or third parties to perform suitable aspects of the Services. Invoices for such third-parties will be reviewed by the Consultant, and the Consultant will make recommendations to the Client regarding payment. Payment to these third-parties will be made directly by the Client. The Consultant will recommend the use of such third parties with reasonable care, but does not guarantee their services and will not be liable for their errors or omissions.

4.2 In the alternative, Consultant may subcontract any portion of the Scope of Services to a subcontractor approved by Client, and the Consultant will add a 10% surcharge on invoices paid directly by the Consultant for laboratories, testing services, subconsultants, or other third-parties, and that surcharge will be reflected on Consultant's monthly invoices submitted to Client.

5. Billing and Payment

5.1 Client shall pay Consultant in accordance with the payment methods, rates, and charges set forth in the Scope of Services, Task Order or otherwise agreed upon. Consultant will submit monthly invoices for services rendered and expenses incurred during the previous period. Payment may be issued by check or electronic transfer as follows:

By Check:
Woodard & Curran, Inc.
PO Box 983122
Boston, MA 02298-3112

By Electronic Transfer:
TD Bank
ABA: 211274450
Account Number: 2428214338

5.2 Payment will be due upon receipt of Consultant's invoice. Payments due Consultant and unpaid under the terms of this Agreement shall bear interest from forty-five (45) days after the date payment is due at the rate of one and one half (1.5) percent per month (18 percent per annum) until paid in full. In the event that Consultant is compelled to take action to collect past due payments, the Client will reimburse Consultant for all costs and expenses of collection including, without limitation, all court costs and reasonable attorney's fees and costs.

5.3 Reimbursable Expenses include actual expenditures made by Consultant, including, but not limited to:

5.3.1 transportation and living expenses incurred in connection with travel on behalf of the Client;

5.3.2 overnight or priority postage and costs for special handling of documents;

5.3.3 renderings and models requested by the Client;

5.3.4 expense of overtime work requiring higher than regular rates;

5.3.5 expense of any additional insurance coverage or limits, including professional liability insurance, requested by the Client in excess of that normally carried by Consultant and Consultant's consultants;

5.3.6 automobile expenses for personal vehicles at the prevailing Internal Revenue Service (IRS) reimbursement rate, plus toll charges, for travel in conduct of the work, or rental of vehicles plus gasoline and toll charges for traveling to conduct the work;

5.3.7 use of company field vehicle will be charged according to Consultant's current rates;

5.3.8 charges for materials and equipment provided directly by Consultant will be billed according to Consultant's current rates;

5.3.9 purchase or rental of specialized equipment and other supplies necessary to conduct the work;

5.3.10 computer, drafting, typing and other services or labor provided by outside contract personnel or vendors.

5.4 If the Project is suspended or abandoned in whole or part, Consultant shall be compensated for all services performed prior to receipt of written notice from the Client of such suspension or abandonment, together with Reimbursable Expenses then due plus Project closeout costs actually incurred. If the Project is resumed after being suspended for more than three (3) months, Consultant's compensation shall be equitably adjusted between the Client and Consultant.

5.5 No deductions shall be made from Consultant's compensation on account of sums withheld from payments to contractors, nor shall payment to Consultant be contingent upon financing arrangements or receipt of payment from any third party.

5.6 If the Client fails to make payment when due Consultant for services or Reimbursable Expenses, Consultant may, upon seven days' written notice to Client, suspend performance of services under this Agreement. Unless payment in full is received by Consultant within seven days of the date of the notice, the suspension shall take effect without further notice. In the event of a suspension of services, Consultant shall have no liability to Client for delay or damage caused Client or others because of such suspension of services.

5.7 If Client objects to all or part of any invoice, Client shall notify Consultant in writing within two weeks of the date of the invoice, and shall pay that portion of the invoice not in dispute within 30 days after the date of receipt of the invoice. Provided that an objection is made in good faith, the parties shall immediately make every effort to settle the disputed portion of the invoice. If the dispute is resolved in favor of Consultant, interest shall accrue on the unpaid portion of the invoice in accordance with Section 5.2 of this Agreement.

5.8 If circumstances or conditions not originally contemplated or known to Consultant are revealed, and affect the Scope of Services, compensation, schedule, allocation of risks or other material terms of this Agreement, Consultant shall be entitled to an appropriate adjustment in its schedule, compensation or other terms of the Agreement in accordance with its standard rates. Changed conditions include, but are not limited to, the following: (i) change in the instructions or approvals given by Client that necessitate revisions in the instruments of service; (ii) decisions of the Client not rendered in a timely manner; (iii) significant change in the Project including, but not limited to, size, quality, complexity, Client's schedule or budget, or procurement method; (iv) failure of performance on the part of the Client or the Client's consultants or contractors; (v) revision of documents (drawings and/or specifications) to reflect construction cost modifications; (vi) modifications to the construction phase drawings and specifications due to changes in program, size, quality, complexity, schedule, construction cost, financing, or method of bidding; (vii) additional program, feasibility or planning studies for this or other Project sites; or (viii) enactment or revision of codes, laws or regulations or official interpretations which necessitate changes to the Scope of Services.

6. Ownership and Use of Documents

6.1 All documents including drawings and specifications prepared or furnished by Consultant (and Consultant's independent professional associates, subcontractors and consultants) pursuant to this Agreement are instruments of service in respect of the Project and Consultant shall retain an ownership and property interest therein whether or not the Project is completed. Client may take and retain copies for information and reference in connection with the use and occupancy of the Project by Client and others. However, such documents are not intended or represented to be suitable for reuse by Client or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by Consultant for the specific purpose intended will be at Client's sole risk and without liability or legal exposure to Consultant or to Consultant's independent professional associates, subcontractors and consultants from all claims, damages, losses and expenses including attorney's fees arising out of or resulting therefrom. Any such verification or adaptation will entitle Consultant to further compensation rates to be agreed upon by Client and Consultant.

6.2 Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of Consultant's rights under this section.

7. Limitation of Liability

7.1 To the greatest extent permitted by law, the total liability, in the aggregate, of Consultant and Consultant's officers, directors, employees, agents, and independent professional associates and consultants, and any of them, to Client and any one claiming by, through or under Client, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to Consultant's services, Task Orders or this Agreement, from any cause or causes whatsoever, including, but not limited to, the negligence, errors, omissions, strict liability, breach of contract, breach of warranty of Consultant or Consultant's officers, directors, employees, agents or independent professional associates or consultants, or any of them, shall not exceed the total covered amount available under Consultant's applicable insurance policy limits set forth herein.

7.2 Neither party shall be responsible or held liable to the other for special, indirect, or consequential damages, including, but not limited to, loss of profit, loss of investment, loss of product, business interruption, or liability for loss of use of facilities or Client's existing property, however the same may be caused.

8. Insurance

8.1 Consultant is protected by Workers' Compensation Insurance in statutory amounts; General Liability Insurance of $1,000,000 per occurrence and $2,000,000 in the aggregate; and Professional Liability Insurance of $1,000,000 per claim and in the aggregate. Consultant will furnish client a certificate of insurance, upon written request, evidencing such coverage and limits. The Client and Consultant waive all rights of subrogation against: 1) each other and their subconsultants, subcontractors, agents and employees, each of the other, and 2) the Client's contractor (if any) and its subcontractors, for damages caused by fire or other perils to the extent

covered by property insurance maintained by the Client or its contractor. The Client shall require a similar waiver from any contractor.

9. Indemnification Hold Harmless

9.1 Consultant agrees to indemnify and hold Client, its directors, shareholders, employees, and assigns harmless from and against all claims, damages, causes of actions, and fines to the extent such claims, damages, causes of action and fines are based on or arise out of Consultant's negligent acts or negligent omissions.

9.2 Client agrees to indemnify and hold Consultant, its directors, shareholders, employees, and assigns harmless from and against all claims, damages, causes of actions, and fines to the extent such claims, damages, causes of action and fines are based on or arise out of Client's negligent acts or negligent omissions.

10. Delays/Force Majeure

10.1 Except as specifically set forth in this Agreement, neither party shall hold the other responsible or liable for damages or delays in performance caused by acts of God, interruptions in the availability of labor, or other events beyond the control of the other party, or that could not have been reasonably foreseen or prevented. For this purpose, such acts or events shall include unusually severe weather affecting performance of services, floods, epidemics, war, riots, strikes, lockouts, or other industrial disturbances, protest demonstrations, unanticipated Project site conditions, and inability, with reasonable diligence, to supply personnel, equipment, or material to the Project. Should such acts or events occur, both parties shall use their best efforts to overcome the difficulties arising and to resume as soon as reasonably possible the normal pursuit of the Scope of Services. Delays within the scope of this provision which cumulatively exceed thirty (30) days in any six (6) month period shall, at the option of either party, make the applicable Task Order subject to termination or to renegotiation. Both parties acknowledge that Consultant does not have control over the review and approval times required by any public authorities that may have jurisdiction over the Project and any Project times shall be equitably adjusted by the parties to account for such review and approval process.

11. Notice

11.1 All notices authorized or required between the parties, or required by any of the provisions herein, shall be given in writing and shall be sent by certified mail, return receipt requested, and deposited with an accepted postal service, postage prepaid, and addressed to the intended party at the address set forth in the first paragraph of these Terms and Conditions. Notices sent in this manner shall be deemed given seven business days after being mailed. Notices may also be given by personal delivery, sent via a regionally recognized overnight carrier (i.e. FedEx, UPS), and shall be deemed given when delivered.

12. Dispute Resolution

12.1 Step Negotiations. The parties shall attempt in good faith to resolve all disputes ("Controversy") promptly by negotiation, as follows. Any party may give the other party written notice of any Controversy not resolved in the normal course of business. Managers of both parties at levels at least one level above the Project personnel involved in the Controversy shall meet at a mutually acceptable time and place within five business days after delivery of such notice, and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the Controversy. If the matter has not been resolved within thirty days from the referral of the Controversy to the managers, or if no meeting has taken place within ten days after such referral, either party may initiate mediation as provided hereinafter. All negotiations pursuant to this clause are confidential and shall be treated as compromise and settlement negotiations for purposes of the Federal Rules of Evidence and state Rules of Evidence.

12.2 Mediation. In the event that any Controversy arising out of or relating to this Agreement is not resolved in accordance with the procedures provided herein, such Controversy shall be submitted to mediation with a mutually agreed upon mediator. The mediation shall be filed at the regional office of the agreed upon mediator closest to the Project site. The mediation shall take place at Consultant's office unless otherwise agreed to by the parties. If the mediation process has not resolved the Controversy within thirty days of the submission of the matter to mediation, or such longer period as the parties may agree to, the mediation process shall cease. All mediation documents and discussions pursuant to this clause are confidential and shall be treated as compromise and settlement negotiations for purposes of the Federal Rules of Evidence and state Rules of Evidence. Nothing herein shall limit the rights and remedies that the parties may have under this Agreement or under other legal and equitable proceedings.

13. Termination

13.1 Either party shall have the right to terminate this Agreement or a Task Order for convenience, at its option, by sending a written Notice of Termination to the other party. The Notice of Termination shall specify the applicable Task Order, when and which services will be discontinued and when termination shall be effective, provided that no termination shall be effective less than ten (10) calendar days after receipt of the Notice of Termination. No later than thirty (30) calendar days after termination, Client shall pay Consultant for all services performed and charges incurred prior to termination, including, without limitation, costs and expenses related

to putting Project documents and analyses in order and rescheduling personnel and equipment.

13.2 Either party shall have the right to terminate this Agreement or a Task Order for cause if the other party commits a material breach of this Agreement and fails to cure such breach within ten (10) days. A Notice of Default, containing specific reasons for termination, shall be sent to the defaulting party, and both parties shall cooperate in good faith to cure the default or defaults stated in the Notice of Default. Termination shall not be effective if the breach has been remedied within ten (10) days after the defaulting party's receipt of the Notice of Default or the later date specified in the Notice of Default, or, if the defaulting party has begun to cure such default within such period and such default cannot reasonably be cured within such period, if such defaulting party diligently prosecutes curing such default to completion (provided that such provision shall not apply to Client's failure to timely pay an invoice). In the event of termination for cause, Consultant shall be paid the same as in the case of termination for convenience and the parties shall have their remedies at law as to any other rights and obligations between them, subject to the other terms and conditions of this Agreement.

14. Health and Safety

14.1 Consultant and its employees shall follow health and safety precautions which meet federal, state and local regulations. If asked to conduct any activities which do not conform to said regulations, or which Consultant determines in its sole discretion to be unsafe or unhealthy, Consultant shall have the option to stop work immediately and inform Client of unacceptable health and safety conditions, and both parties shall enter into good-faith negotiations to remedy the unacceptable conditions. If no remedy can be agreed upon, Consultant and Client may terminate the applicable Task Order or this Agreement in accordance with the terms stated herein.

14.2 Consultant will not implement or be responsible for health or safety procedures other than for its own employees. Consultant shall not share any responsibility for the acts or omissions of other parties on the Project or have control or charge of, or be responsible for safety precautions and programs of Client or other contractors. Unless otherwise agreed in the Scope of Services, Consultant's observation and testing of portions of the work of other parties on a project site shall not relieve such other parties from their responsibilities for performing their work in accordance with applicable plans, specifications and health and safety requirements. Client agrees to notify such contractors or other parties accordingly.

15. Environmental Conditions and Subsurface Risks

15.1 Where the Scope of Services includes or requires on-site work, visits, investigations, or explorations, Consultant and Client agree to the following:

15.1.1 Hazardous Substances. Client acknowledges that Consultant has neither created nor contributed to the creation of any hazardous waste, hazardous substance, radioactive material, toxic pollutant, asbestos, or otherwise dangerous substance (collectively referred to as "hazardous substance"), or dangerous condition at the Project site. Consequently, Client agrees to defend, indemnify and hold Consultant harmless from and against any and all claims, damages, losses, fines, suits or causes of action (collectively referred to as "claims") relating to personal injury; property damage; non-compliance or liability arising under environmental laws including, but not limited to, RCRA, CERCLA or similar federal or state laws, to the extent the claims are based on or arise from the existence or release of any hazardous substances. The term "property" as used herein means all real and personal property, including, without limitation, tangible and intangible rights and interests, economic or other losses, or other rights with respect thereto.

15.1.2 Client's Duty to Notify Consultant of Hazards. Client shall provide Consultant with all information known to Client with respect to the existence or suspected existence of any hazardous substances at, on, or in close proximity to the Project site. Client will advise Consultant immediately of any information which comes into Client's possession regarding the existence of any such potentially hazardous substances, or any condition known to Client to exist in, on, under or in the vicinity of the Project site which might present a potential danger to human health or the environment.

15.1.3 Consultant shall take reasonable precautions for the health and safety of its employees while at the Project site with consideration for the available information regarding existing hazards.

15.1.4 Control of Project Site. Client acknowledges that it is now and shall remain in control of the Project site at all times. Consultant shall have no responsibility or liability for any aspect or condition of the Project site, now existing or hereafter arising or discovered. Consultant does not, by entry into an agreement with Client or its performance of services under any such agreements, assume any responsibility or liability with respect to the Project site; nor shall any liability or responsibilities be implied or inferred by reason of Consultant's performance of any work at the Project site.

15.1.5 Right of Entry. Unless otherwise agreed, Client will furnish right-of-entry on the land for Consultant to

make the planned borings, explorations, or field tests. Consultant will take reasonable precautions to minimize damage to the land from use of equipment, but has not included in its fee the costs for restoration of damage that may result from Consultant's operations, or the operations of any person or entity engaged by Consultant in the performance of services under this agreement. If Consultant is required to restore the land to its former condition, such work will be accomplished and the costs, plus fifteen percent (15%), will be added to Consultant's fee.

15.1.6 Subsurface Risks. Client recognizes that special risks occur whenever engineering or related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing program, implemented with appropriate equipment and experience by personnel under the direction of a trained professional who functions in accordance with a professional standard of practice may fail to detect certain hidden conditions. For similar reasons, actual environmental, geological, and geotechnical conditions that the Consultant properly inferred to exist between sampling points may differ significantly from those that actually exists. The Client acknowledges these risks.

15.1.7 Consultant will exercise reasonable and professional care in seeking to locate subterranean structures in the vicinity of proposed subsurface explorations at the Project site. Consultant will contact public utilities and review plans and information, if any, provided by public utilities, public agencies and Client. So long as Consultant observes such standard of care, Consultant will not be responsible for any unavoidable damage, injury, or interference with any subterranean structures, pipe, tank, cable or any other element or condition if not called to Consultant's attention prior to commencement of services or which is not shown, or accurately located, on plans furnished to Consultant by Client or by any other party, or which could not have been reasonably identified by Consultant.

16. Samples

16.1 Non-Hazardous Samples. Consultant will dispose of all soil, rock, water, and other samples thirty (30) days after submission of Consultant's initial report. Client may request, in writing, that any such samples be retained beyond such date, and in such case Consultant will ship such samples to the location designated by Client, at Client's expense. Consultant may, upon written request, arrange for storage of samples at Consultant's offices at mutually agreed storage charges. Consultant will not give Client prior notice of intention to dispose of samples.

16.2 Hazardous Samples. Although the Client shall have the obligation to dispose of any "hazardous" samples, if samples collected from the Project site contain substances defined as "hazardous" by federal, state, or local statutes, regulations, codes, or ordinances, Consultant shall, at its option, have the right to: (1) dispose of samples by contract with a qualified waste disposal contractor; (2) in accordance with Client's written directions, ship such samples by an appropriately licensed transporter to a licensed disposal site; or (3) return such samples by an appropriately licensed transporter, to Client. Client shall pay all costs and expenses associated with the collection, storage, transportation, and disposal of samples. If Client requests in writing, that any such sample be retained for a period in excess of thirty (30) days, Consultant will store such samples at Client's expense and Client will pay an additional fee as charged by Consultant in accordance with its standard laboratory schedule for storage of samples of a "hazardous substance."

17. Miscellaneous

17.1 This Agreement and any Task Orders issued hereunder shall be governed and construed in accordance with the laws of the State of California.

17.2 Any action to enforce or interpret this Agreement or a Task Order shall be commenced or maintained only in the judicial or administrative tribunal in the jurisdiction of the State of California, and each party waives any venue, convenient forum, removal, jurisdiction, or other rights to the contrary.

17.3 Section headings in this Agreement are included herein for convenience of reference only, and shall not constitute a part of the Agreement or for any other purpose.

17.4 The Client and Consultant respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such party with respect to all covenants of this Agreement. Neither the Client nor Consultant shall assign, sublet or transfer any interest in this Agreement without the written consent of the other.

17.5 This Agreement and any Task Orders issued hereunder represent the entire and integrated Agreement between the Client and Consultant, and supersedes all prior negotiations, representations or agreements, either written or oral, and may be amended only by written instruments, including Task Orders, signed by both Client and Consultant.

17.6 If any provision of this Agreement or a Task Order is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this Agreement or a Task Order be construed to remain fully valid, enforceable and binding on the parties.

17.7 Any estimates or opinions of Project or construction costs are provided by Consultant on the basis of Consultant's experience and qualifications as a consultant and

represents its best judgment as an experienced and qualified consultant familiar with the construction industry. Since Consultant has no control over the cost of labor, materials, equipment or services furnished by others or over competitive bidding or market conditions, it cannot guarantee that proposals, bids or actual Project costs or construction costs will not vary from any estimates or opinions of costs prepared by Consultant. Similarly, since Consultant has no control over building operation and/or maintenance costs, Consultant cannot and does not guarantee that the actual building system operating or maintenance costs will not vary from any estimates given by Consultant. No fixed limit of construction costs is established as a part of this Agreement.

17.8 This Agreement was jointly drafted and both parties had an opportunity to negotiate its terms and to obtain the assistance of counsel in reviewing its terms prior to execution. This Agreement and Task Orders shall be construed neither against nor in favor of either party, but shall be construed in a neutral manner.

(Signatures on next page)

IN WITNESS WHEREOF, the parties have executed this Agreement on the date set forth below:

CONSULTANT:

WOODARD & CURRAN, INC.

By: _____

Printed:_____

Title:_____

Thereunto duly authorized

Date:_____

CLIENT:

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

By: _____

Printed: _____

Title: _____

Thereunto duly authorized

Date: _____

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.

Proposed Scope of Work

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:

1. A Category 1 Application for three specific projects:
    a. Groundwater Monitoring Well Network Expansion
    b. Evapotranspiration Evaluation for Cuyama Basin Region
    c. Surface Water Monitoring Program
2. A Category 2 Application for preparation of a Groundwater Sustainability Plan.

It is anticipated that the CBGSA will be notified by DWR of potential award of the grant application in the January to February 2018 timeframe. The CBGSA intends to authorize work associated with the following general scopes of work thru a series of one or more Task Orders. Each Task Order will include specific scope, schedule, and budget authorization. The scope of work, schedule, and budget included in the Task Orders may vary from the following scope of work, and will be determined based on the results of the scope and budget of DWR grant awards.

Scope of Work – Category 1 Projects

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 2.1 – Perform METRIC ET Evaluation

The following activities will be performed under this subtask:

- Evaluate precipitation records from CIMIS and local weather stations to select appropriate years for evaluation. It is expected that the selected years will include wet, dry, and average precipitation years in order to target the METRIC study to provide information on crop evapotranspiration for each different year types. Water years (Oct-Sep) will be used to capture the rainfall cycle. Available LandSAT images

will be examined for the potential selection years to make sure that at least one image per month will be available without cloud cover in the area of interest.

- CIMIS weather data will be downloaded for each selected water year. The solar radiation and relative humidity data will be quality controlled and corrected if necessary.
- Twelve to fourteen images will be processed per year for each year that is evaluated. METRIC will provide daily actual ETc and Kc on a pixel by pixel basis throughout the image. The Kc values for each pixel will be interpolated between images on a daily basis. Daily corrected ETo will then be used to compute ETc for each pixel and these values will be summed on a monthly basis to determine monthly ET.
- The deep percolation of precipitation will be estimated spatially throughout the area. It is anticipated that spatial information from the NRCS Soil Surveys of the area will be required to estimate soil available water holding capacity. This combined with ETc and monthly precipitation will be sued to estimate the deep percolation of precipitation. The final product will be a map showing the amount of soil available water holding capacity on a monthly basis.

Subtask 2.2 – Review and Validation of METRIC ET Results

The METRIC ET results developed in subtask 2.1 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)

Scope of Work – Category 2 Groundwater Sustainability Plan

Task 1: Initiate Work Plan for GSP and Stakeholder Engagement Strategy Development

Subtask 1.1 Work Plan for GSP

The CBGSA will initiate the Work Plan with the stakeholders, identifying and describing the activities necessary to initiate the Stakeholder Engagement Strategy, and will refine the GSP scope to ensure successful development of the GSP including development of a schedule. The Work Plan will be developed consistent with the Scope of Work proposed here, within the framework included in the anticipated DWR grant award for GSP development, and with input by the CBGSA Board and/or advisory committee.

Subtask 1.2 Stakeholder Engagement Strategy

The first step in implementing the Stakeholder Engagement Strategy will be to engage the CBGSA Board and the advisory committee and discuss the process as to how the GSP development effort will provide opportunities for engagement, discussions, and comments. The Cuyama Basin has a wide variety of stakeholders, represented by the composition of the CBGSA Board of Directors. Stakeholder interests include: The Cuyama Basin Water District (District), the Cuyama Community Services District (CSD), the four overlying counties (Santa Barbara County Water Agency, San Luis Obispo, Ventura, and Kern), the CBGSA Advisory Committee, the Cuyama Valley Community Association (CVCA), disadvantaged communities, Federal and State agencies, environmental groups interested in downstream fisheries, and smaller agricultural interests. The Stakeholder Engagement Strategy will address outreach challenges including: building trust between residents, agricultural interests, and environmental interests; language barriers; and the need for strong but transparent facilitation. The Stakeholder Engagement Strategy will include:

- Explanation of the GSA's decision-making processes
- Identification of opportunities for public engagement
- Discussion of how public input will be used
- Descriptions of how CBGSA will encourage active involvement of diverse social, cultural, and economic elements of the population
- Descriptions of the methods the CBGSA will use to inform the public about GSP implementation
- Development of a project schedule
- Data review and evaluation
- Discussion of public access to existing and future monitoring data
- Holding meetings with the advisory committee for technical review of GSP progress and increase transparency

Draft and final versions of the Stakeholder Engagement Strategy and refined GSP Development Work Plan will be developed in consultation with GSA member agency personnel. It is assumed that up to four meetings

(including at least one in-person meeting) will be held with members of the CBGSA Board, Ad Hoc committee and/or advisory committee as part of development of the GSP Workplan and Stakeholder Engagement Strategy.

Task 1 Deliverables

- Up to four 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 11)
- Draft Stakeholder Engagement Strategy Plan
- Draft GSP Development Work Plan
- Final Stakeholder Engagement Strategy Plan
- Final GSP Development Work 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 2.1 – Perform Data and Information Collection and General Plan Review

CBGSA will collect recent and historical information and data for use in completing GSP development tasks. This data and information will be stored and managed in the DMS. Data collected will include geographic information systems (GIS) data, well and well monitoring data, other data from existing monitoring programs, general plans, existing studies, and additional data and reports as needed for GSP preparation. It is understood that different geographic regions of the Cuyama Basin have varying volumes of readily available data, however this task will gather as much readily available data throughout the basin and will identify areas that have data gaps. Data gathered under this task will be collected by engaging stakeholders and all interested parties through targeted outreach and communication. This task will include the following activities:

- Data collection process standardization and template development
- Identification of existing monitoring programs, including:
    - California Statewide Groundwater Elevation Monitoring (CASGEM),
    - Department of Water Resources (DWR) Water Data Library
    - DWR Well Completion Report Database
    - State Water Resource Control Board (SWRCB) monitoring programs
    - Irrigated Lands
    - Geotracker
    - Senate Bill 4
    - Other state programs
    - Groundwater Ambient Monitoring and Assessment (GAMA)
    - United States Geological Survey (USGS) monitoring programs
    - Stream/river gauges, irrigation diversions, and other surface waters
    - Subsidence surveys, as available
    - Local agency data
- Collection of data using templates
- Processing and review of data by the consultant, Board, Ad Hoc committee and/or advisory committee

- Aggregation of data where duplicative

This task will also collect, review, and evaluate existing groundwater management programs and general plans in the GSP area by collecting reports on groundwater management programs and evaluating how those programs will interact with SGMA implementation through the GSP. Evaluation of general plans will include how the general plans affect GSP implementation, and how GSP implementation affects general plan implementation.

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 2.1 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 2.1 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 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 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 develop a description of the GSP Plan Area, prepare the Hydrogeologic Conceptual Model (HCM), and prepare a draft groundwater conditions section for the GSP.

Subtask 3.1 – Develop Description of the Plan Area

The Plan Area description will include a map of the Cuyama Basin (as currently defined by Bulletin 118), the CBGSA boundary, a description of the area that is managed, how the area is managed, a description of how the GSA is organized, how its governance is operated, and who participated in its formation. The following activities will be performed under this task:

- Develop maps depicting the Plan Area as required by regulation
- Develop maps showing jurisdictions
- Summarize land use and groundwater well elements in the basin
- Develop map of communities reliant upon groundwater
- Describe conjunctive use programs in the basin

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 Plan Area and HCM
- Initial drafts of the Plan Area, 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 4.1 – Perform Assessment of Existing Model

CBGSA will assess the existing CUVHM model. During the assessment, CBGSA will identify any enhancements and refinements needed for the existing CUVHM model to be suitable for the SGMA analysis, including expansion to cover the entire Cuyama Valley groundwater basin and to include developed regions not currently reflected in CUVHM. In addition, the assessment will determine the appropriate model platform for the GSP water budget and alternatives analysis. Based on the outcome of the assessment, CBGSA will implement necessary model updates to make the model ready to perform the GSP analyses. This task will specifically assess the following model components:

- HCM: Analyze existing well logs to evaluate the information contained in the existing 3-layer CUVHM.
- Crop Acreage and Crop Evapotranspiration: Collect available historical crop data and information on irrigation and frost protection practices and conduct an assessment of the accuracy of the crop evapotranspiration estimates used in the CUVHM.
- Water Supply: Evaluate the completeness of the data related to groundwater pumping (recorded, reported, or estimated) and surface water use, including historical precipitation.
- Model Boundary Conditions: Evaluate the representational accuracy of the specified boundary conditions and their impact on the accuracy of the model results and identify updates needed to geographically expand the model so it can perform a proper and complete assessment of the entire Cuyama Valley groundwater basin.
- Model Platform: Assess the costs and benefits and schedule implications of building on and expanding the model in the existing MODFLOW framework or migration of the model datasets to the Integrated Water Flow Model (IWFM) water resources management and planning modeling platform developed by DWR.
- Model Update Needs: Identify the necessary model updates needed expand on the existing CUVHM model or migrate the model datasets into the IWFM platform for SGMA.

Subtask 4.2 – Develop Updated Groundwater Model

Depending on the outcome of the model assessment in Subtask 4.1, 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 (see figure below)
- 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 six coordination meetings (including up to 2 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)
- Enhancements and refinements identified from assessment of the existing groundwater model
- 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 6: Monitoring Networks

CBGSA will develop a monitoring program that builds on the existing monitoring network to track future progress toward the GSP sustainability goals. The results of the proposed monitoring network evaluation (Category 1 project proposal) will be incorporated into this task.

Subtask 6.1 – Establish Monitoring Networks and Methodology

This task will establish monitoring networks for the six sustainability indicators. Each monitoring network will be established to meet GSP regulations and will consider spatial density of monitoring locations, vertical density (depth) of monitoring locations to ensure that monitoring occurs for each sustainability indicator in all primary aquifers in the basin. This task will establish the frequency of monitoring for each sustainability indicator, develop maps of monitoring locations, and develop protocols for each type of monitoring used. Representative monitoring is likely to be used for several sustainability indicators. This task will develop the rationale for using representative monitoring and will identify how representative monitoring for any sustainability indicator will be established. Representative monitoring descriptions in this task will also consider spatial and vertical density, monitoring frequency, and data gaps. If data gaps exist in the monitoring network, they will be identified during network development and an implementation plan for data gaps will be developed.

In establishing the monitoring network, this task will review and evaluate a variety of monitoring strategies and technologies to comply with basin management requirements. The task will compare the cost and effectiveness of traditional well monitoring strategies with other technologies including satellite imagery. The evaluation will include, at minimum, the assessment the use of a modified Mapping of EvapoTranspiration with Internal Calibration (METRIC) procedure to calculate actual evapotranspiration using LandSat Thematic Mapper (LandSat) data. This innovative procedure was developed by the Irrigation Training and Research Center (ITRC) at California Polytechnic State University. Regardless of the monitoring methodology selected, all monitoring protocols will be developed in a transparent and publicly accessible manner. The public will be encouraged and able to access monitoring data and provide input.

Subtask 6.2 – Prepare Draft Monitoring Networks Criteria Section for GSP

This task will prepare a draft Monitoring Section for the GSP that includes the following components required by regulation:

- Monitoring objectives for the GSP
- Evaluation of alternative monitoring strategies, including but not limited to, satellite imaging
- Description of how monitoring may vary by management area
- Methodology
- Description of how representative monitoring may be used to monitor for some sustainability indicators
- Monitoring rationale, describing why the monitoring network will adequately monitor for undesirable results
- Monitoring protocols, including a description of technical standards, data collection methods, and other procedures
- Data analysis and reporting protocols
- Description of how monitoring can detect impacts to beneficial users of groundwater

- Description of how monitoring changes in groundwater conditions is adequate to support water budget calculations during GSP implementation
- Review and improvement of the monitoring network
- Data gaps and identifies a plan to fill data gaps

Task 6 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)
- Monitoring networks for all six sustainability indicators
- A draft Monitoring Networks Section for the GSP
- Monitoring protocols

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. The preliminary schedule for completion of the Groundwater Sustainability Plan is included on the following page.

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

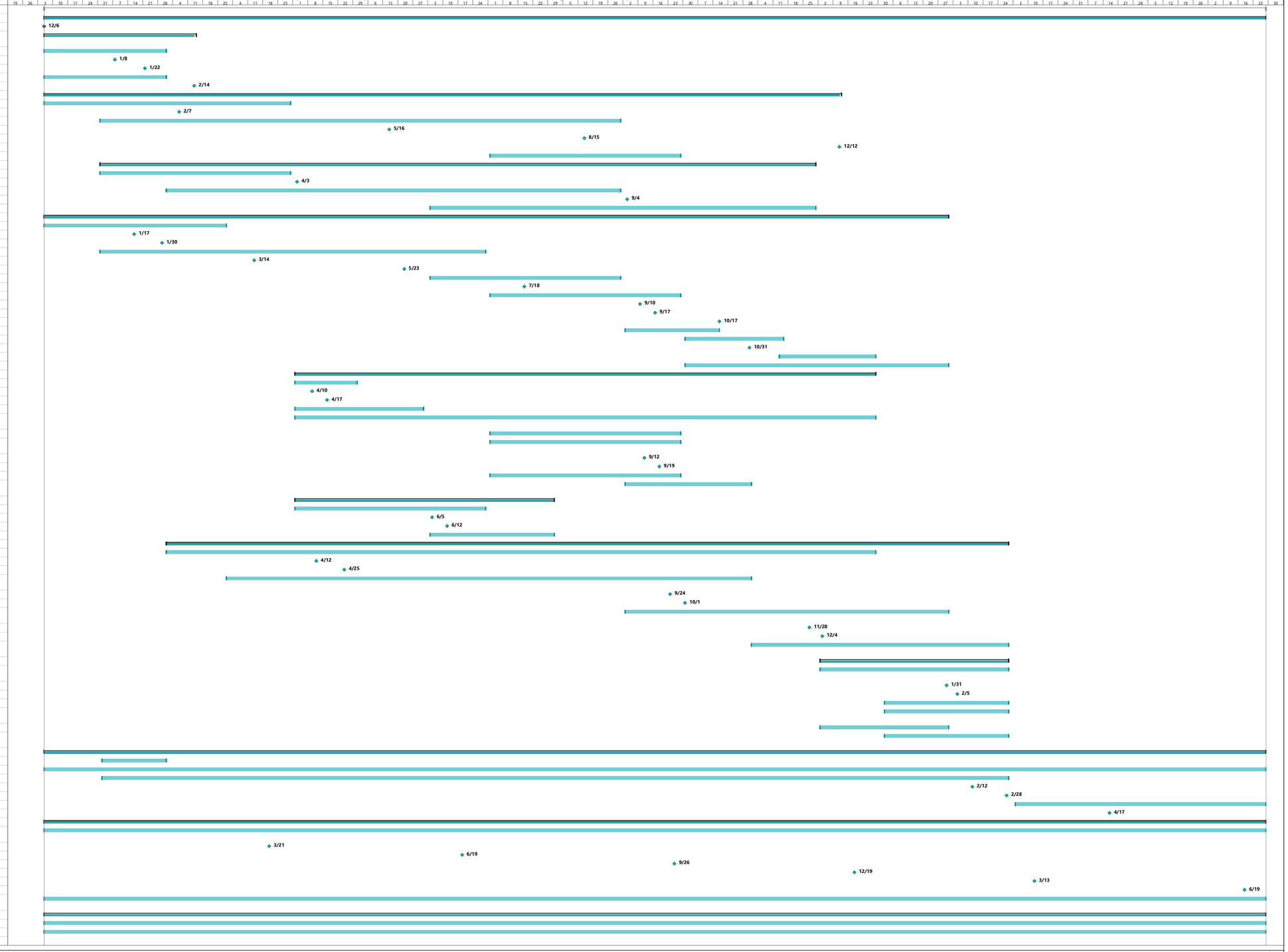
Activities to be conducted under this task are related to grant administration, including invoicing and reporting. Specifically, this task will include processing eight (8) quarterly reports throughout the extent of the funding agreement as well as a project completion report upon submittal of the Final 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 Plan
Schedule

ID	Task Name	Start	Finish	Predecessors	Duration
0	**Cuyama**	**Wed 12/6/17**	**Fri 6/28/19**		**408 days?**
1	**Cuyama Groundwater Sustainability Plan Schedule DRAFT**	**Wed 12/6/17**	**Fri 6/28/19**		**408 days**
2	Notice to Proceed	Wed 12/6/17	Wed 12/6/17		0 days
3	**Task 1: GSP & Stakeholder Engagement Strategy Development**	**Wed 12/6/17**	**Wed 2/14/18**		**51 days**
4	Subtask 1.1: Work Plan for GSP	Wed 12/6/17	Wed 1/31/18		41 days
5	CBGSA Advisory Committee Meeting	Mon 1/8/18	Mon 1/8/18		0 days
6	Ad Hoc Meeting	Mon 1/22/18	Mon 1/22/18		0 days
7	Subtask 1.2: Stakeholder Engagement Strategy	Wed 12/6/17	Wed 1/31/18		2.05 mons
8	Public Meeting	Wed 2/14/18	Wed 2/14/18		0 days
9	**Task 2: DMS, Data Collection, Plan Review**	**Wed 12/6/17**	**Wed 12/12/18**		**266 days**
10	Subtask 2.1: Data Collection, General Plan Review	Wed 12/6/17	Fri 3/30/18		4.15 mons
11	Ad Hoc Meeting	Wed 2/7/18	Wed 2/7/18		0 days
12	Subtask 2.2: Data Management System	Mon 1/1/18	Fri 8/31/18		175 days
13	Ad Hoc Meeting	Wed 5/16/18	Wed 5/16/18		0 days
14	Ad Hoc Meeting	Wed 8/15/18	Wed 8/15/18		0 days
15	Ad Hoc Meeting	Wed 12/12/18	Wed 12/12/18		0 days
16	Subtask 2.3: Draft Data Management Section for GSP	Mon 7/2/18	Fri 9/28/18		3.25 mons
17	**Task 3: Plan Area, HCM, Groundwater Conditions**	**Mon 1/1/18**	**Fri 11/30/18**		**240 days**
18	Subtask 3.1: Description of Plan Area	Mon 1/1/18	Fri 3/30/18		3.25 mons
19	CBGSA Advisory Committee Meeting	Tue 4/3/18	Tue 4/3/18		0 days
20	Subtask 3.2: Hydrogeological Conceptual Model	Thu 2/1/18	Fri 8/31/18		7.6 mons
21	CBGSA Advisory Committee Meeting	Tue 9/4/18	Tue 9/4/18		0 days
22	Subtask 3.3: Draft GW Conditions Section for GSP	Mon 6/4/18	Fri 11/30/18		6.5 mons
23	**Tasks 4: Basin Model and Water Budget**	**Wed 12/6/17**	**Thu 1/31/19**		**302 days**
24	Subtask 4.1: Assessment of Existing Model	Wed 12/6/17	Wed 2/28/18		61 days
25	Ad Hoc Meeting	Wed 1/17/18	Wed 1/17/18		0 days
26	CBGSA Advisory Committee Meeting	Tue 1/30/18	Tue 1/30/18		0 days
27	Subtask 4.2: Develop Updated GW Model	Mon 1/1/18	Fri 6/29/18		6.5 mons
28	CBGSA Advisory Committee Meeting	Wed 3/14/18	Wed 3/14/18		0 days
29	Ad Hoc Meeting	Wed 5/23/18	Wed 5/23/18		0 days
30	Subtask 4.3: Model Calibration	Mon 6/4/18	Fri 8/31/18		65 days
31	CBGSA Advisory Committee Meeting	Wed 7/18/18	Wed 7/18/18		0 days
32	Subtask 4.4: Historical Water Budget	Mon 7/2/18	Fri 9/28/18		65 days
33	Ad Hoc Meeting	Mon 9/10/18	Mon 9/10/18		0 days
34	CBGSA Advisory Committee Meeting	Mon 9/17/18	Mon 9/17/18		0 days
35	Public Meeting	Wed 10/17/18	Wed 10/17/18		0 days
36	Subtask 4.5: Current and Future Water Budget	Mon 9/3/18	Tue 10/16/18		1.6 mons
37	Subtask 4.6: Draft Water Budget Section for GSP	Mon 10/1/18	Thu 11/15/18		1.7 mons
38	Ad Hoc Meeting	Wed 10/31/18	Wed 10/31/18		0 days
39	Subtask 4.7: Alternative Modeling Support	Wed 11/14/18	Fri 12/28/18		33 days
40	Subtask 4.8: Modeling TM	Mon 10/1/18	Thu 1/31/19		4.45 mons
41	**Task 5: Establish Basin Sustainability Criteria**	**Mon 4/2/18**	**Fri 12/28/18**		**195 days**
42	Subtask 5.1: Identify Sustainability Goal	Mon 4/2/18	Mon 4/30/18		1.05 mons
43	CBGSA Advisory Committee	Tue 4/10/18	Tue 4/10/18		0 days
44	Ad Hoc Meeting	Tue 4/17/18	Tue 4/17/18		0 days
45	Subtask 5.2: Establish Undesirable Results	Mon 4/2/18	Thu 5/31/18		2.2 mons
46	Subtask 5.3: Management Areas and Representative Monitoring	Mon 4/2/18	Fri 12/28/18		9.75 mons
47	Subtask 5.4: Minimum Thresholds	Mon 7/2/18	Fri 9/28/18		3.25 mons
48	Subtask 5.5: Measurable Objectives, Margin of Flexibility	Mon 7/2/18	Fri 9/28/18		3.25 mons
49	CBGSA Advisory Committee	Wed 9/12/18	Wed 9/12/18		0 days
50	Ad Hoc Meeting	Wed 9/19/18	Wed 9/19/18		0 days
51	Subtask 5.6: Interim Milestones	Mon 7/2/18	Fri 9/28/18		3.25 mons
52	Subtask 5.7: Draft Sustainable Managaement Criteria Section for GSP	Mon 9/3/18	Wed 10/31/18		2.15 mons
53	**Task 6: Monitoring Networks**	**Mon 4/2/18**	**Tue 7/31/18**		**87 days**
54	Subtask 6.1: Monitoring Networks and Methodology	Mon 4/2/18	Fri 6/29/18		3.25 mons
55	CBGSA Advisory Committee Meeting	Tue 6/5/18	Tue 6/5/18		0 days
56	Ad Hoc Meeting	Tue 6/12/18	Tue 6/12/18		0 days
57	Subtask 6.2: Draft Monitoring Networks Section of GSP	Mon 6/4/18	Tue 7/31/18		2.1 mons
58	**Task 7: Projects and Actions for Sustainability Goals**	**Thu 2/1/18**	**Thu 2/28/19**		**281 days**
59	Subtask 7.1: Management Program	Thu 2/1/18	Fri 12/28/18		11.85 mons
60	CBGSA Advisory Committee Meeting	Thu 4/12/18	Thu 4/12/18		0 days
61	Ad Hoc Meeting	Wed 4/25/18	Wed 4/25/18		0 days
62	Subtask 7.2: Projects, Management Actions, Adaptive Management Actions	Thu 3/1/18	Wed 10/31/18		8.75 mons
63	CBGSA Advisory Committee Meeting	Mon 9/24/18	Mon 9/24/18		0 days
64	Ad Hoc Meeting	Mon 10/1/18	Mon 10/1/18		0 days
65	Subtask 7.3: Prioritization of Projects and Management Actions	Mon 9/3/18	Thu 1/31/19		5.45 mons
66	Ad Hoc Meeting	Wed 11/28/18	Wed 11/28/18		0 days
67	CBGSA Advisory Committee Meeting	Tue 12/4/18	Tue 12/4/18		0 days
68	Subtask 7.4: Draft Projects and Management Actions Section of GSP	Thu 11/1/18	Thu 2/28/19		4.3 mons
69	**Task 8: Groundwater Sutainability Plan Implementation**	**Mon 12/3/18**	**Thu 2/28/19**		**64 days**
70	Subtask 8.1: GSP Implementation Schedule and Reporting	Mon 12/3/18	Thu 2/28/19		3.2 mons
71	CBGSA Advisory Committee Meeting	Thu 1/31/19	Thu 1/31/19		0 days
72	Ad Hoc Meeting	Tue 2/5/19	Tue 2/5/19		0 days
73	Subtask 8.2: GSP Implementation Costs and Funding	Wed 1/2/19	Thu 2/28/19		2.1 mons
74	Subtask 8.3: Parties Affected, Effects of Undesirable Results	Wed 1/2/19	Thu 2/28/19		2.1 mons
75	Subtask 8.4: Groundwater Model and DMS Planning	Mon 12/3/18	Thu 1/31/19		2.2 mons
76	Subtask 8.5: Draft Plan Implementation Section for GSP	Wed 1/2/19	Thu 2/28/19		2.1 mons
77	**Task 9: GSP Document Development**	**Wed 12/6/17**	**Fri 6/28/19**		**408 days**
78	Subtask 9.1: Develop GSP Outline, Style Guidance	Tue 1/2/18	Wed 1/31/18		1.1 mons
79	Subtask 9.2: Reference Tracking and Storage	Wed 12/6/17	Fri 6/28/19		408 days
80	Subtask 9.3: Administrative Draft	Tue 1/2/18	Thu 2/28/19		303 days
81	CBGSA Advisory Committee Meeting	Tue 2/12/19	Tue 2/12/19		0 days
82	Ad Hoc Meeting	Thu 2/28/19	Thu 2/28/19		0 days
83	Subtask 9.4: Public Draft and Final	Mon 3/4/19	Fri 6/28/19		85 days
84	Public Meeting	Wed 4/17/19	Wed 4/17/19		0 days
85	**Task 10: Outreach, Education ande Communication**	**Wed 12/6/17**	**Fri 6/28/19**		**408 days**
86	Subtask 10.1: Implement Stakeholder Engagement Strategy	Wed 12/6/17	Fri 6/28/19		408 days
87	Outreach Meeting	Wed 3/21/18	Wed 3/21/18		0 days
88	Outreach Meeting	Tue 6/19/18	Tue 6/19/18		0 days
89	Outreach Meeting	Wed 9/26/18	Wed 9/26/18		0 days
90	Outreach Meeting	Wed 12/19/18	Wed 12/19/18		0 days
91	Outreach Meeting	Wed 3/13/19	Wed 3/13/19		0 days
92	Outreach Meeting	Wed 6/19/19	Wed 6/19/19		0 days
93	Subtask 10.2: Outreach, Education & Communication Docs.	Wed 12/6/17	Fri 6/28/19		408 days
94	**Task 11: Project Management**	**Wed 12/6/17**	**Fri 6/28/19**		**408 days**
95	Subtask 1.1: Program Managment	Wed 12/6/17	Fri 6/28/19		408 days
96	Subtask 11.2: Grant Funding Administration	Wed 12/6/17	Fri 6/28/19		408 days
97					



Project: Cuyama
Date: Fri 11/17/17

Task | Milestone | Summary | Manual Summary Rollup

		Labor														Outside Services							ODCs	Total
		Leslie Dumas	Ali Taghavi	Lyndel Melton	Brian Van Lienden	Rob Morrow	John Ayres	Frank Qian	Enrique Lopezcalva	Lindsey Wilcox	Dawn Flores	Staff Support	Graphics	Admin.	Total Hours	Total Labor Costs (1)	Charles Gardiner	Jeff Barry	Tim Nicely	Duncan MacEwan	Bryan Thoreson	Total Subcontractor Hours	Total Subcontractor Labor Costs	Total ODCs (3)	Total Fee
		Advisor	Advisor	Project Manager	GSP Preparation	Alternatives Analysis	Sustainability Analysis	Integrated Model	Decision Support	Funding Options	Data Management	Misc	Graphics	Word Processing			Decision Facilitation	Geohydrology	Geohydrology	Economic Analyses	Irrigation Practices				
Task No.	Description	$266	$295	$310	$249	$266	$249	$178	$295	$222	$222	$178	$113	$105			$205	$250	$195	$220	$202				
1	**1 - Develop Work Plan for GSP Development**																								
1	Develop Stakeholder Engagement Strategy	2		16									4	2	24	$6,154	32					32	$6,560	$0	$13,370
1	Develop GSP Development Workplan	2	2	4	20	8	8		2		2		4	2	54	$13,158		12	4	2	2	20	$4,624	$0	$18,244
	Subtotal Task 1:	4	2	20	20	8	8	0	2	0	2	0	8	4	78	$19,312	32	12	4	2	2	52	$11,184	$0	$31,614
2	**2 - Data Management System, Information and Data Collection**																								
2.1	DMS Set Up			2							12	40			54	$10,404						0	$0	$1,100	$11,504
2.1	DMS Outputs and Interfaces			2							12	40			54	$10,404						0	$0	$0	$10,404
2.1	DMS Populate with data (happens in each task as developed)			2							12	100			114	$21,084						0	$0	$0	$21,084
2.1	DMS QA/QC			2							24	24			50	$10,220						0	$0	$0	$10,220
2.2	ID and Collect Monitoring and Management Programs			2			4					8			14	$3,040			4			4	$780	$0	$3,898
2.2	ID and Collect General Plans			2			4					8			14	$3,040			4			4	$780	$0	$3,898
2.2	ID Existing Monitoring			2			4					8			14	$3,040			4			4	$780	$0	$3,898
2.2	Collect/Process/Aggregate Monitoring Data			2			16				20	30			68	$14,384						0	$0	$0	$14,384
2.2	Data Collection Standardization and Templates			2			4					8			14	$3,040			4			4	$780	$0	$3,898
	Subtotal Task 2:	0	0	18	0	0	32	0	0	0	80	266	0	0	396	$78,656	0	0	16	0	0	16	$3,120	$1,100	$83,188
3	**3 - Plan Area and Basin Setting**																								
3.1	**Plan Area**														0	$0						0	$0	$0	$0
3.1	ID and describe authority/organization of GSA			2	8							8			18	$4,036						0	$0	$0	$4,036
3.1	Maps			2	16						8	40			66	$13,500					4	4	$808	$0	$14,389
3.1	ID and description of parties affected by GSP in basin and how affected			2	8										10	$2,612				40		40	$8,800	$0	$12,292
3.2	**Hydrogeologic Conceptual Model**																								
3.2	Aquifers and Aquitards	2		2			8					8			20	$4,568		8	16			24	$5,120	$0	$10,200
3.2	Basin Boundaries (lateral / bottom)	2		2			8					8			20	$4,568		8	16			24	$5,120	$0	$10,200
3.2	Maps and Cross Sections	2		2			8					8			20	$4,568		8	16			24	$5,120	$0	$10,200
3.3	**Groundwater Conditions**																								
3.3	Maps		2	2			8	32							44	$8,898						0	$0	$0	$8,898
3.3	Cumulative Change in Storage		2	2			8	32							44	$8,898						0	$0	$0	$8,898
3.3	Cross Section of seawater intrusion (Salinity)		2	2			8	16							28	$6,050						0	$0	$0	$6,050
3.3	Document conditions at January 1, 2015		2	2			8	16							28	$6,050						0	$0	$0	$6,050
	Subtotal Task 3:	6	8	20	32	0	56	96	0	0	8	72	0	0	298	$63,748	0	24	48	40	4	116	$24,968	$0	$91,213
4	**4 - Basin Model and Water Budget**																								
4.1	**Assessment of Existing Model**																								
4.1	Review conceptual model		6	2	4			24			4				40	$8,546						0	$0	$0	$8,546
4.1	Review crop acreage and ET		6	2				16			4				28	$6,126					40	40	$8,080	$0	$15,014
4.1	Evaluate completeness of water supply data		6	2	4			24			4				40	$8,546						0	$0	$0	$8,546
4.1	Identify Data Gaps		6	2	4			24			4				40	$8,546						0	$0	$0	$8,546
4.2	**Identify Enhancement of Existing Model**																								
4.2	ID Enhancements needed		12	2				20							34	$7,720		8				8	$2,000	$0	$9,920
4.2	Formulate Scope/Schedule/Budget		12	2				20							34	$7,720						0	$0	$0	$7,720
4.3	**Development of Water Budget**																								
4.3	Refine CUVHM input files		8	2				32							42	$8,676						0	$0	$0	$8,676
4.3	High level recalibration		8	2				32							42	$8,676						0	$0	$0	$8,676
4.3	Validate results		8	2				32							42	$8,676						0	$0	$0	$8,676
4.3	Historical Water Budget		8	2				32							42	$8,676		16	8			24	$5,560	$0	$14,792
4.3	Select Base period		8	2				32							42	$8,676						0	$0	$0	$8,676
4.3	Methodology for estimating Sustainable Yield		8	2				32							42	$8,676						0	$0	$0	$8,676
4.3	Prepare TM		8	8				32						2	50	$10,746						0	$0	$0	$10,746
	Subtotal Task 4:	0	104	32	12	0	0	352	0	0	16	0	0	2	518	$110,006	0	24	8	0	40	72	$15,640	$0	$127,210
5	**5 - Establishment of Basin Sustainability Criteria**																								
5.1	Sustainability Goal			2	2	8	16								28	$7,230						0	$0	$0	$7,230
5.2	Undesirable Results Narrative			2	2	16	16								36	$9,358						0	$0	$0	$9,358
5.3	Define Management Areas			2	2		8					8			20	$4,534						0	$0	$0	$4,534
5.3	Representative Monitoring			2	4		40					8			54	$13,000		8	8			16	$3,560	$0	$16,916
5.4	Set Minimum Thresholds			2	2		12					40			56	$11,226						0	$0	$0	$11,226
5.5	Set Measurable Objectives			2	2		12					40			56	$11,226						0	$0	$0	$11,226
5.5	Set Margin of Operational Flexibility			2	2		12					40			56	$11,226						0	$0	$0	$11,226
5.6	Set Interim Milestones			2	2		12					40			56	$11,226						0	$0	$0	$11,226
	Subtotal Task 5:	0	0	16	18	24	128	0	0	0	0	176	0	0	362	$79,026	0	8	8	0	0	16	$3,560	$0	$82,942
6	**6 - Monitoring Networks**																								
6	Evaluate Existing Monitoring			2			24								26	$6,596		8	8			16	$3,560	$0	$10,512
6	Develop Monitoring Rationale and Protocols	8		2			8								18	$4,740						0	$0	$0	$4,740
6	Consider Management Areas and Representative Monitoring			2			8								10	$2,612		4	8			12	$2,560	$0	$5,428
6	Develop Monitoring Network			2			20					60			82	$16,280						0	$0	$0	$16,280
6	Show adequacy of Monitoring Network for URs			2			8								10	$2,612		4	8			12	$2,560	$0	$5,428
6	Monitoring Summary and Plan			2			8					20			30	$6,172		4	8			12	$2,560	$0	$8,988
	Subtotal Task 6:	8	0	12	0	0	76	0	0	0	0	80	0	0	176	$39,012	0	20	32	0	0	52	$11,240	$0	$51,376
7	**7 - Projects and Actions for Sustainability Goals**																								
7.1	Develop Management Program			2	20	40			24			40			126	$30,440						0	$0	$0	$30,440
7.2	ID and Describe Projects and Actions			2	20	40			24			40			126	$30,440		20	20			40	$8,900	$0	$40,230
7.3	Evaluate Projects and Actions		20	2	10	40		120				40			232	$48,130				100	20	120	$26,040	$0	$76,774
7.1	Management Program Summary		4	2	10	20		20	4		20			2	82	$18,120				20		20	$4,400	$0	$22,960
	Subtotal Task 7:	0	24	8	60	140	0	140	52	0	0	140	0	2	566	$127,130	0	20	20	120	20	180	$39,340	$0	$170,404
8	**8 - GSP Implementation Plan**																								
8	GSP Implementation Plan	2	4	2	20	10	10							2	50	$12,672						0	$0	$0	$12,672
8	GSP Implementation Cost Estimate	2		2											4	$1,152				40		40	$8,800	$0	$10,832
8	GSP Implementation Funding Estimate	2		2						8					12	$2,928				20		20	$4,400	$0	$7,768
8	GSP component implementation planning	2	4	2			8	8			8				32	$7,524						0	$0	$0	$7,524
	Subtotal Task 8:	8	8	8	20	10	18	8	0	8	8	0	0	2	98	$24,276	0	0	0	60	0	60	$13,200	$0	$38,796
9	**9 - GSP Document Preparation**																								
9.1	Outline and Style Guide			2											2	$620						0	$0	$0	$620
9.2	Reference Tracking and Storage														0	$0						0	$0	$0	$0
9.3	Administrative Draft	4	2	8	80	40	40	8		4	8	40	16	16	266	$59,350		12	12	12	8	44	$9,596	$4,400	$74,306
9.3	Stakeholder Review and Comments	4	2	8	20							8	8	16	66	$13,122						0	$0	$0	$13,122
9.4	Final	4	2	4	20							8	8	8	54	$11,042						0	$0	$4,400	$15,442
9.4	Board(s) Adoption of GSP			4											4	$1,240						0	$0	$0	$1,240
	Subtotal Task 9:	12	6	26	120	40	40	8	0	4	8	56	32	40	392	$85,374	0	12	12	12	8	44	$9,596	$8,800	$104,730
10	**10 -Outreach and Communication**																								
10	Implement Stakeholder Outreach Plan				20										20	$4,980	50					50	$10,250	$2,200	$18,455
10	Meetings and outreach materials			54	54	80									188	$51,466	100					100	$20,500	$13,200	$87,216
10	Outreach and Communication Documentation/Compilation				4	8					24				36	$7,396	20					20	$4,100	$0	$11,906
	Subtotal Task 10:	0	0	54	78	88	0	0	0	0	0	24	0	0	244	$63,842	170	0	0	0	0	170	$34,850	$15,400	$117,577
11	**11 - Project Management**																								
11.1	QA/QC plan	4	4	8										2	18	$4,934						0	$0	$0	$4,934
11.1	QA/QC implementation	8	8	16					4						36	$10,628						0	$0	$0	$10,628
11.2	Program Management			16	8	8	8							40	80	$15,272	4	4		4		12	$2,700	$0	$18,242
11.3	PM Coordination			24	12	12	12								60	$16,608						0	$0	$0	$16,608
	Subtotal Task 10:	12	12	64	20	20	20	0	4	0	0	0	0	42	194	$47,442	4	4	0	4	0	12	$2,700	$0	$50,412
	TOTAL	50	164	278	380	330	378	604	58	12	122	814	40	92	3322	$737,824	206	124	148	238	74	790	$169,398	$25,300	$949,462

TASK ORDER NUMBER 1

Issued Pursuant to the Consulting Services Agreement Between Woodard & Curran, Inc. and Cuyama Basin Groundwater Sustainability Agency, dated as of December 6, 2017.

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 Scope of Services.

Scope of Services:
Consultant agrees to provide the Services described in the attached Scope of Services consistent with the schedule include din Exhibit A of the Agreement.

Compensation:
For all Services duly rendered hereunder, Client shall pay Consultant in accordance with the Rate Table attached hereto for services rendered; and for Reimbursable Expenses and Miscellaneous Direct Expenses. Compensation for Task Order No. 1 shall not exceed $321,135 without written authorization.

Designated Project Representative

Client: Jim Beck

Consultant: Lyndel Melton

Effective date: December 6, 2017

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_____

TO: **Cuyama Basin Groundwater Sustainability Agency Board of Directors**

FROM: **Jim Beck, Executive Director**

DATE: **December 6, 2017**

SUBJECT: **Agenda Item #6: Report of the Executive Director**

Issue

To serve as an ongoing status update for the CBGSA.

Recommended Motion

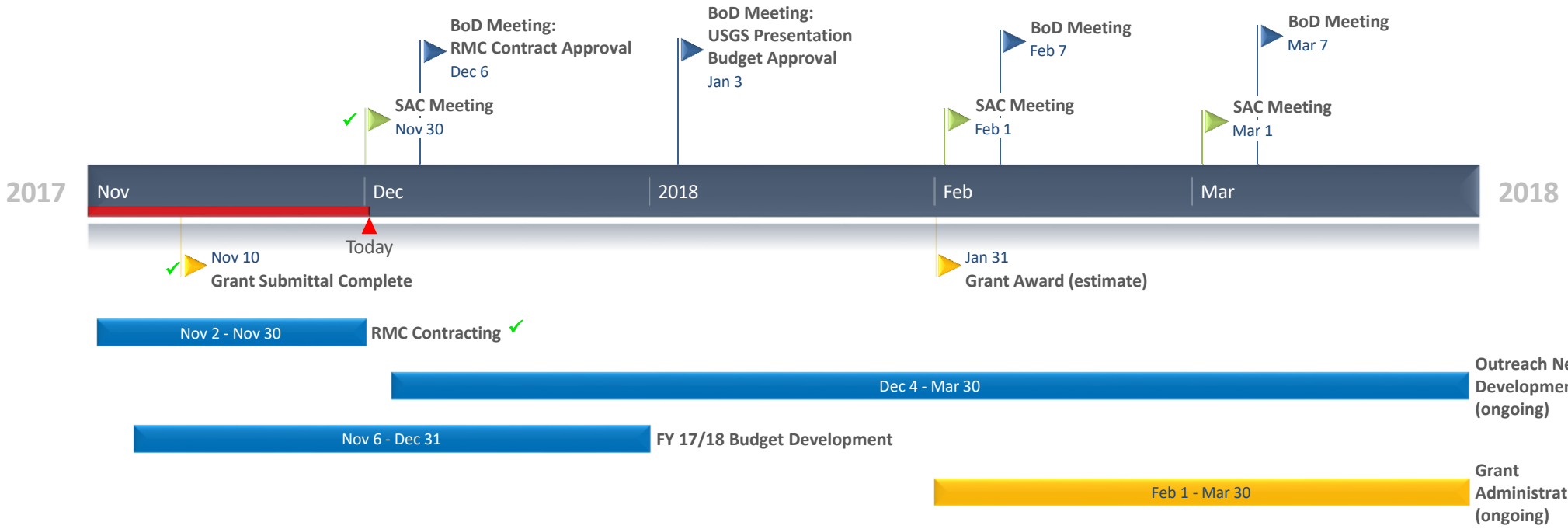
None required, for reference only.

Discussion

These documents will provide visual aid to the Board and public during the standing report of the Executive Director related to ongoing efforts, accomplishments, and next steps.

Cuyama Basin Groundwater Sustainability Agency

Near Term Schedule



HALLMARK GROUP Capital Program Management

Accomplishments

- ✓ Selection of GSP Consultant
- ✓ Submittal of Grant Application
- ✓ Development of Budget and Cost Allocation
- ✓ RMC Contract / Task Order Complete
- ✓ Identification of Financial Administration Needs
- ✓ Completion of GSP Public Notification
- ✓ SAC Convened and Cadence Set

Meetings

BoD est. monthly first Wednesday

SAC est. monthly Thursday before the BoD

GSP Development Consultant Selection Ad Hoc (complete)

Grant Application Ad Hoc (complete)

Budget Ad Hoc (in progress)

HALLMARK GROUP Capital Program Management

Executive Director Current Activities

In Scope

- BoD Meeting Management
- Standing Advisory Committee Management
- GSP Consultant Management
- Treasurer Coordination
- Outreach web postings, newsletter, and distributions.

Out of Scope

- Budget Ad Hoc Committee Management
- Budget Development
- Cost Allocation Development
- Grant Management

HALLMARK GROUP Capital Program Management

CBGSA FY 17/18 Needs

Budget Development and Administration

- Develop Monthly Budget , Including Scope, Schedule and Cost
- Ad Hoc Committee Meeting Coordination
- Technical Coordination with DWR
- Other Activities (as needed)

Financial Management

- Initial Financial Management Setup
- Invoicing /AP/AR/Collections
- Record Keeping
- Annual Coordination with Auditor
- Coordination w Grant Invoicing
- Grant Administration
- Grant Reports to DWR

HALLMARK GROUP Capital Program Management

CBGSA FY 17/18 Needs

Technical Coordination

- Representation at workshops
- Technical Coordination with DWR
- Other Activities (as needed)

Outreach Facilitation

- Develop Stakeholder Outreach Process
- Develop Collateral Materials
- Public and Media Relations
- Ad Hoc Committee Meeting Coordination

HALLMARK GROUP Capital Program Management

Next Steps

- Finalize and Approve CBGSA FY 17/18 Budget
- Finalize and Approve CBGSA Cost Allocation
- Implement Financial Administration
- Secure Interim Funding
- Initiate RMC Work for GSP Development