

Cosumnes Groundwater Authority
Meeting of the Board of Directors
Agenda

When: 9:00 am – 12:00 pm, Monday, October 17, 2022

Where: Galt Police Department Community Room
455 Industrial Drive
Galt, CA 95632

Zoom: Via Zoom: <https://us02web.zoom.us/j/85927144584>
Meeting ID: 859 2714 4584
Call in Number: 1-669-900-9128

PUBLIC COMMENT – Any member of the public may address the Board concerning any matter on the agenda before or during its consideration of the matter. Public comment is limited to three (3) minutes per person. For good cause, the Board Chair may waive these limitations.

ACCESSIBILITY - If you have a disability and require a reasonable accommodation to fully participate in this event, please contact Austin Miller (CGA Secretary) before the day of the meeting via email [info@CosumnesGroundwater.org] or telephone [916-526-5447] to discuss your accessibility needs.

Call to Order

1. Introductions
 - a. Determine if Quorum is Present
 - b. Agenda Overview
 - c. Three-month look ahead
2. Public Comment on Non-Agenda Items - Limit of 3 minutes per speaker.
Comment will be received for items not on the agenda, but within the jurisdiction of the agency. The Board will hear comment but may not take action on issues raised on non-agenda items.

Action Items

3. Consent Items (*5 minutes*)
 - a. Minutes – September 19, 2022
 - b. Consideration of Findings Related to Remote Meetings Pursuant to AB 361
 - c. Financial Report – October 2022
4. Delta Conveyance Project Draft Environmental Impact Report Public Comment (15 minutes)
5. DWR SGMA Implementation Grant (45 minutes)
 - a. Grant Writing Services
 - b. PMA Committee Report Back

- c. DWR SGMA Implementation Grant Application Recommendations
 - d. Application Development Next Steps
- 6. Water Year 2022 Annual Report Preparation (15 minutes)
 - 7. Outreach and Engagement Update (10 minutes)

Informational Items *(15 minutes)*

- 8. CGA Staff Report
- 9. DWR North Central Regional Office Update
- 10. Upcoming Agenda Items
- 11. Director/GSA Comments

Adjourn Meeting

**Cosumnes Groundwater Authority
Board of Directors Meeting**

Meeting Minutes
September 19, 2022 - 9:00am

Call to Order: 9:05 am

- 1) Introductions / Determine if Quorum is Present
 - a. Directors in Attendance: Rick Wohle, Mark Stretars, Chris Hunley, Herb Garms, Gary Thomas, Jay Vandenburg, Leo VanWarmerdam

Action Items

- 2) Consent Items
 - a. Agenda – September 19, 2022
 - b. Minutes – August 15, 2022
 - c. Consideration of Findings Related to Remote Meetings Pursuant to AB 361
 - d. Financial Report – September 2022

Director Thomas moved to approve all consent items.

Director Wohle seconded the motion.

The motion passed with all in favor (Hunley absent).

- 3) Preparation for Grant Writing

Director Wohle moves to have staff prepare agreements with EKI and SAFCA to map out CGA's approach to preparing a DWR SGMA implementation grant and that EKI should bring recommendations to the Board, that the Board would then work with SAFCA/grant writer to develop the application.

Director Thomas seconded the motion.

The motion passed with all in favor.

- 4) Projects and Management Actions Update

Staff led a presentation on CGA's approach to projects and the PMA Committee Charge. All present members of the Board affirmed their understanding to the approach.

- 5) Outreach and Engagement

Staff provided an update on outreach and engagement efforts

Information Items

- 6) Long Term Funding
Discussed upcoming SCI meeting on funding
- 7) CGA Staff Report
CGA Staff provided an update on Delta Conveyance Project as well as a Watershed Coordinator's Report
- 8) DWR North Central Regional Office Update
DWR Staff provided a monthly update on DWR activities
- 9) Upcoming Agenda Items
- 10) Director Comments

Adjourn Meeting

Vice Chair Stretars adjourned the meeting by consensus at 12:03pm

Cosumnes Groundwater Authority

Financial Report

September 2022

<u>Expenses</u>		
Description	Vendor	Amount
Staff Support (SRCD, September)	Sloughhouse RCD	\$ 6,400.00
Staff Support (SSCAWA, September)	SSCAWA	\$ 6,380.00
Legal Services (August)	Downey Brand	\$ 4,628.00
Monitoring Professional Services (September)	MLJ Environmental	\$ 1,516.25
Total Monthly Expenses		\$ 18,924.25

<u>Revenue</u>		
Description	Source	Amount
Total Monthly Revenue		\$ -

Monthly Change	\$ (18,924.25)
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**Cosumnes Groundwater Authority
Board of Directors Meeting**

Agenda Date: October 17th, 2022

Agenda Item #: 4

Agenda Item Subject: Delta Conveyance Project Draft Environmental Impact Report

To: CGA Board of Directors

From: CGA Staff

Background

Links: [Delta Conveyance Project Website](#)

- DWR has extended the deadline for accepting written comments through December 16, 2022.
- [Chapter 8](#) describes the environmental setting and study area for groundwater; analyzes impacts that could result from construction, operation, and maintenance of the project; and provides mitigation to reduce the effects of impacts. This chapter also analyzes the impacts on groundwater resources that could result from implementation of compensatory mitigation required for the project and analyzes the impacts that could result from the mitigation measures proposed in other resource chapters in the Draft Environmental Impact Report.
- On August 11, 2022, the Delta Counties Coalition released a response to the Governor's newly release [Water Supply Strategy](#) and the Delta Conveyance Project. [Read response here.](#)

Staff Recommendation

- Provide direction on drafting a comment letter for the Delta Conveyance Project Draft Environmental Impact Report.

**Cosumnes Groundwater Authority
Board of Directors Meeting**

Agenda Date: October 17th, 2022

Agenda Item #: 5

Agenda Item Subject: DWR SGMA Implementation Grant

To: CGA Board of Directors

From: CGA Staff

Background

Links: [DWR SGM Grant Program Website](#) | [DWR SGM Grant Scoring Criteria](#)

- \$200 million for high and medium priority subbasins
- Deadline: November 30, 2022

Grant Writing Services

At the September CGA Board Meeting, the Board directed Staff to prepare agreements with EKI and SAFCA to map out CGA's approach to preparing a DWR SGMA Implementation Grant and that EKI should bring recommendations to the Board and then the Board would work with SAFCA/the grant writer to develop the application.

EKI has prepared an additional Scope of Work for Grant Development for the Board's consideration. This is included in the next agenda item (annual report).

Additionally, CGA Staff developed a MOA between CGA and the Sacramento Area Flood Control Agency (SAFCA), for Board consideration, to clearly articulate the roles and responsibilities of each organization during grant development and submission.

PMA Report Back and Draft Grant Recommendations

On October 11th, the PMA Committee met to discuss the PMA and Data Gap Descriptions drafted by CGA Staff and the newly released DWR SGM Grant solicitation. The Committee also discussed draft recommendations from EKI and provided direct feedback that has been incorporated into the materials presented here (attached).

Application Development Next Steps:

CGA is moving quickly over the next few months to ensure we complete an application by the November 30th deadline. The following schedule has been developed to allow sufficient timing for interim milestones to be met:

- October 25th: Joint PMA Committee and Citizen Advisory Committee Meeting
 - Review/Finalize DWR Grant Recommendations
 - Additional meetings in early November may be considered

- November 21st: CGA Board Meeting
 - Finalize DWR Grant Application
- November 29th: Application Submittal to DWR

Attachments

- [MOA for Grant Writing Services, SAFCA](#)
- [Draft PMA and Data Gaps Descriptions](#)
- [Draft Recommendations for DWR SGM Grant, EKI Presentation](#)

Staff Recommendation

- Provide direction on grant writing approach.

Agreement No. _____

Memorandum of Agreement Between

**The Cosumnes Groundwater Authority and the Sacramento Area Flood Control Agency
For
Grant Preparation Services Related to the California Department of Water Resources'
Sustainable Groundwater Management Grant Program for Implementation of Adopted
Groundwater Sustainability Plans**

This Memorandum of Agreement (“MOA”) between the Cosumnes Groundwater Authority (“CGA”) and the Sacramento Area Flood Control Agency (“SAFCA”) (collectively, “Parties”) shall be effective as of _____, 2022.

RECITALS

WHEREAS, CGA is a joint powers agency created by the seven Groundwater Sustainability Agencies with authority and responsibility under the California Sustainable Groundwater Management Act of 2014 (SGMA) for sustainably managing groundwater use in the Cosumnes Subbasin; and

WHEREAS, SAFCA is a joint powers agency created under the SAFCA Joint Exercise of Powers Agreement dated January 17, 1991 and the Sacramento Area Flood Control Agency Act, California Water Code Appendix Sections 130 et seq.; and

WHEREAS, SAFCA is exploring opportunities to re-operate reservoirs in the American River watershed to provide more space for flood control in the most severe flood events; and

WHEREAS, SAFCA believes that its ability to secure state funding for such reservoir re-operation will be greatly enhanced if this effort produces multiple benefits beyond flood risk reduction including the benefit of making water stored in Folsom Reservoir available under appropriate circumstances for increasing groundwater recharge in the South American and Cosumnes Basins; and

WHEREAS, CGA has adopted and is planning to implement a Groundwater Sustainability Plan (GSP) for the Cosumnes Subbasin that anticipates the benefits of the increased groundwater recharge; and

WHEREAS, the Parties recognize that numerous technical and institutional barriers must be overcome in order to link SAFCA’s reservoir reoperation program to CGA’s groundwater recharge effort; and

WHEREAS, the Parties further recognize that the California Department of Water Resources (DWR) Sustainable Groundwater Management Grant Program for implementation of

adopted GSP's ("Implementation Grant Program") could provide funding to address a number of these barriers; and

WHEREAS, the Parties desire to collaborate in preparing a request to receive Implementation Grant Program funding for activities that would facilitate implementation of the Cosumnes Basin GSP.

NOW, THEREFORE the Parties agree as follows:

AGREEMENT

1. Grant Preparation. CGA agrees to serve as the grant applicant. Toward that end, SAFCA agrees to provide CGA with the grant writing services of Mick Klasson, a planning and grant writing consultant who has provided services to SAFCA for more than 20 years and has been successful in securing several million dollars in grants to support SAFCA's flood risk reduction and related activities. At SAFCA's expense, which the Parties anticipate will not exceed \$20,000, Mr. Klasson will prepare the GSP Implementation grant as directed by CGA staff and in accordance with the Implementation Grant Program guidelines adopted by DWR.

2. Technical Support. CGA agrees to provide the technical support needed for Mr. Klasson to prepare the grant request. This support will consist of technical material, project descriptions, maps, data, institutional commitments, and other information relevant to the grant request gathered by CGA staff and consultants retained by CGA focusing on CGA's priorities for grant funding to be determined to facilitate GSP implementation.

3. Timing. The DWR SGM Grant Program solicitation is now open through November 30, 2022. If the supporting technical information is available, Mr. Klasson believes the grant can be written within the current grant program timeline. Institutional commitments to the extent they are required will be obtained by CGA well in advance of the grant request deadline. Mr. Klasson has provided Attachment 1, Draft DWR Grant Preparation Schedule for CGA.

4. Notice. Any notice pertaining to the performance of this MOA should be delivered by mail or e-mail to the following individuals:

For SAFCA:

Gary Bardini, Director of Planning
Sacramento Area Flood Control Agency
1325 J Street, 15th Floor
Sacramento, CA 95814
BardiniG@saccounty.net

For CGA:

Austin Miller, Administrator
Cosumnes Groundwater Authority
8970 Elk Grove Blvd.
Elk Grove, CA 95624

5. Termination. Either Party may terminate this MOA at any time by providing notice to the other Party of the decision to terminate and the cause therefor. Otherwise, this MOA will terminate upon submittal of the DWR SGM Grant Program request to DWR.

IN WITNESS WHEREOF, the Parties hereto enter into this MOA as of the date first set forth above.

Cosumnes Groundwater Authority

Sacramento Area Flood Control Agency

By: _____
Austin Miller, Administrator

By: _____
Richard M. Johnson, Executive Director

Date: _____

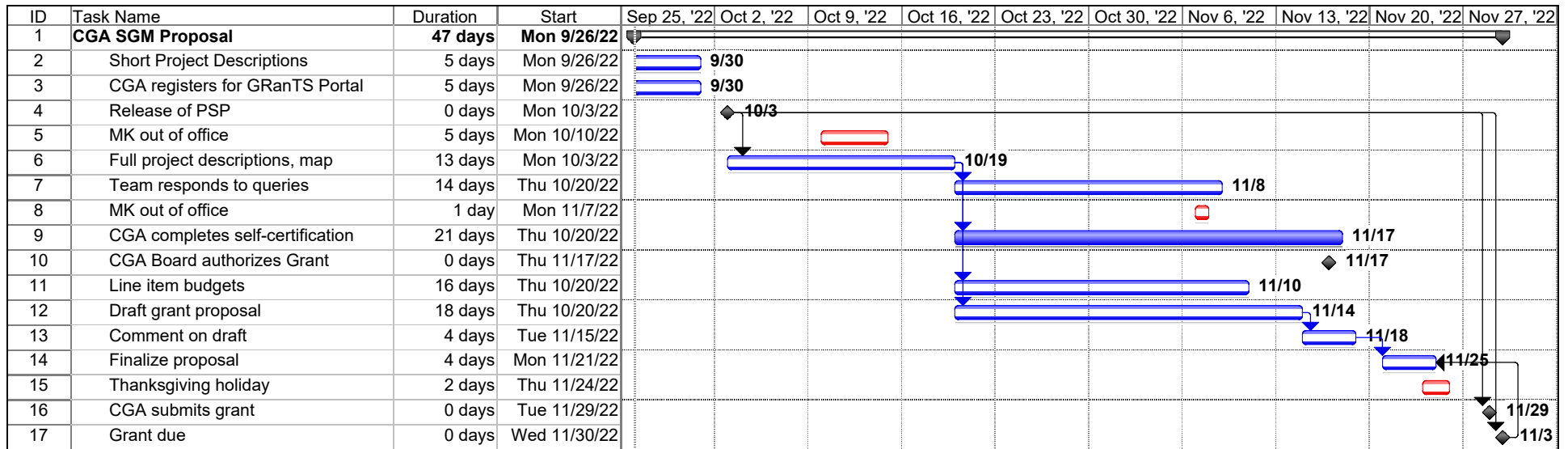
Date: _____

APPROVED AS TO FORM:

APPROVED AS TO FORM:

By: _____
Rebecca Smith, CGA Counsel

By: _____
Jeremy Goldberg, Agency Counsel



Project: Draft CGA SGM grant schedu
Date: Mon 9/26/22

Task

Split

Progress

Milestone

Summary

Project Summary

External Tasks

External Milestone

Deadline

Page 1

Activity Name	Reference in GSP	Description	Benefit	Response to Comment	Estimated Cost	Implementing Agency	DWR Grant Priority
Riparian Corridor (GID, Clay) MAR Analysis	18.2.4 Other PMAs	Explore multi-benefit opportunities for diversions to interior Basin drainages to increase recharge from leakage and reconnect their lower reaches in the floodplains	Aquifer Storage Capacity; interconnected surface waters; GDE	Farm Bureau		CGA	High
Folsom South Canal Service Area MAR Analysis	PMA #2 Flood-MAR	Explore the ability to use FSC as conveyance for MAR practices. Form partnerships and coordinate with stakeholders to form a mutually beneficial approach to utilize FSC. Implore learned recharge operations from other pilot projects to inform MAR along FSC.				CGA	High
SMUD Partnership to Explore Recharge Potential	PMA #2 Flood-MAR, 18.2.4 Other PMAs	Evaluate the efficacy of securing water for recharge projects from existing SMUD water rights. Implore learned recharge operations from other pilot projects to inform MAR along FSC.	Aquifer Storage Capacity			CGA	High
Distributive Recharge Projects	18.2.4 Other PMAs	Evaluate the efficacy of local recharge projects such as catch ponds, dry wells, seepage pits, and other water substitution practices.		Farm Bureau		CGA	High
Laguna Del Sol Recharge Pilot Project	PMA #2 Flood-MAR, 18.2.4 Other PMAs	Expand the existing dry well pilot project by testing and evaluating various dry well design performance. Explore and calibrate non-intrusive geophysical technologies by comparing to bore holes. Use information gathered from this pilot project to expand dry well operations to other locations, particularly along the FSC and other conveyance features.	Aquifer Storage Capacity; interconnected surface waters; GDE			OHWD	High
Exploring Amador Water Recharge/In lieu Potential	18.2.4 Other PMAs	Explore projects that utilize potentially available surface water from Amador County and existing infrastructure.	Aquifer Storage Capacity; interconnected surface waters; GDE			ACGMA	High
Cosumnes River Riparian Corridor MAR Analysis	18.2.4 Other PMAs	Explore multi-benefit opportunities for off stream impoundments to store floodwater, including potential stormwater diversions from the Cosumnes River to augment storage/recharge on the south side of the river. Coordinate with Agency and NGO partners working with landowners near the Cosumnes River to develop multibenefit projects that offer recharge and agricultural and/or habitat preservation benefits.	Aquifer Storage Capacity; interconnected surface waters; GDE			CGA	Low
Exploration of Supply Augmentation	18.2.4 Other PMAs	Additional capacity to explore the feasibility of supply augmentation projects.	Aquifer Storage Capacity	Farm Bureau, ESJ			High

Activity Name	Reference in GSP	Focus Area	Description	Benefit	Response to Comment	Estimated Cost	Implementing Agency	Timing	Grant Priority
Conduct Well Census	19.1.2 Data Gap Filling Efforts	Model	Inventory projects to verify well use, status, construction, and density within the Basin.	Improve the future reliability of the water budget.			CGA		High
Surface Water Diversions Inventory	19.1.2 Data Gap Filling Efforts	Model	Develop system to inventory surface water diversions and return flows to support surface water budget calculations and quantify surface water depletions.	Improve the future reliability of the water budget.			CGA		High
Delineation of Managed Wetlands	19.1.2 Data Gap Filling Efforts	Model, GDEs	Delineation of Managed Wetlands as a refinement of the current land use categories of "Native Water" and the Riparian component of "Native Vegetation."				CGA		Medium
Land Use Verification	19.1.2 Data Gap Filling Efforts	Model	Routine/annual field- verification and updating of mapped land use utilized by the model.	Improve the future reliability of the water budget.			CGA		High
Compile Well Construction Information	19.1.2 Data Gap Filling Efforts	Model	Compile available well construction information to update incomplete information for wells in the DMS. The RMW network wells are a priority, and efforts can include video logging to identify well perforation intervals where information is not available.				CGA		High
Expand Monitoring Sites (Basin Plain)	19.1.2 Data Gap Filling Efforts	DACs, GDEs, Domestic/Shallow	Expand paired multiple depth well monitoring sites across Basin boundaries to improve characterization of interconnected surface water, conditions that influence domestic/shallow wells conditions specifically in DAC, that influence GDEs, and cross-boundary flows.		TNC, Espinosa, Flewellyn,		CGA		High
Analysis of Potential Perched Aquifers	19.1.2 Data Gap Filling Efforts	GDEs, Model	Assess the hydraulic connection between the Principal Aquifer and potential perched aquifers. This can be accomplished with aquifer pumping test(s) when possible, requiring multiple monitoring well depths, and monitoring water level changes over short time periods in paired monitoring wells.		TNC, NOAA, CDFW		CGA		Medium
Expand Monitoring Sites (Basin Foothills)	19.1.2 Data Gap Filling Efforts	Model	Add monitoring sites in Amador County to address spatial variability and uncertainty in water table conditions in the Basin Foothills Subarea.				ACGMA		Medium
Geophysical Studies	19.1.2 Data Gap Filling Efforts	Model	Coordinate additional geophysical surveys integrated with monitoring well construction to map the thickness and extent of the inferred clay bed thought to be present beneath the western third of the Basin and possibly associated with the interface between the Victor Formation and Laguna Formation	Better understand the extent of clay lens throughout the Subbasin. Better inform model conditions. Potential identification of perched aquifers.			CGA		High
Dry Creek Gauge	19.1.2 Data Gap Filling Efforts	Model	Activate Dry Creek surface water gauging station and incorporate into monitoring network.				CGA		High
Cross-boundary Flow Coordination	19.1.2 Data Gap Filling Efforts	Model	Coordinate monitoring with SASb and ESJ Subbasin to quantify and track changes in cross-boundary flows.				CGA		Medium
Incorporation of Public Datasets	19.1.2 Data Gap Filling Efforts	Model	Continue the routine download of public datasets and tools employed to support management activities as they become available (e.g., GDE Pulse tool, Groundwater Ambient Monitoring and Assessment [GAMA] data, etc.).				CGA		Medium
GDE Rooting Depth Study		GDE	Melissa Rohde is preparing some info/SOW.						Medium
Domestic Well Impact Analysis		DACs, Domestic/Shallow Wells	Update previous analysis done during GSP development.		TNC				High

Activity Name	Reference in GSP	Description	Benefit	Response to Comment	Estimated Cost	Implementing Agency	Priority	DWR Grant Priority	Notes
Monthly CGA Meeting Technical Support	19.1.4 Stakeholder Engagement								
Technical Advisory Committee	19.1.4 Stakeholder Engagement								
Citizen Advisory Committee	19.1.4 Stakeholder Engagement								
Website	19.1.4 Stakeholder Engagement						Low		Cost Share
Inter-Basin Coordination Agreement	19.1.4 Stakeholder Engagement								
Public Workshops	19.1.4 Stakeholder Engagement								
Development of Annual Report	19.1.6 Annual Reporting				~\$50k/year	CGA	Low		Cost Share
Monitoring	19.1.1 Monitoring and Data Collection				~\$40k/year	CGA	Low		Cost Share
Domestic Well Owner Technical Support									
Archoe Public Facility Well and Recharge Education	18.2.4 Other PMAs	Apply for a new facility well for Arcohe School. Develop a groundwater recharge program for the campus and couple that with their educational garden utilizing Best Management Practices (BMP's) for Irrigation Water Management, Nutrient Management, and Integrated Pest Management. Educational component on water savings gardening is a community wide benefit that can provide water savings outreach back to homeowners.				Galt Irrigation District			

Activity Name	Reference in GSP	Description	Benefit	Response to Comment	Estimated Cost	Implementing Agency	DWR Grant Priority
City of Galt Recycled Water Project	PMA #4 City of Galt Recycled Water Project (18.2.2)					City of Galt	Medium
Cosumnes River Flow Augmentation Project	PMA #3 OHWD Flow Augmentation Project (18.2.2)					OHWD	Medium
Participation in Groundwater Banking Discussions	PMA #6 Groundwater Banking (18.2.3)	Work with Basin landowners, GSA members, and regional stakeholders to develop necessary policies and procedures to define the Basins approach to groundwater banking.				CGA	Medium
Low Impact Demand Development	18.2.4 Other Projects	Implement Low Impact Development practices in the City of Galt.				City of Galt	Low

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EKI TECHNICAL PRESENTATION

COSUMNES SUBBASIN GSP IMPLEMENTATION

17 OCTOBER 2022

COSUMNES GROUNDWATER AUTHORITY BOARD OF DIRECTORS MEETING

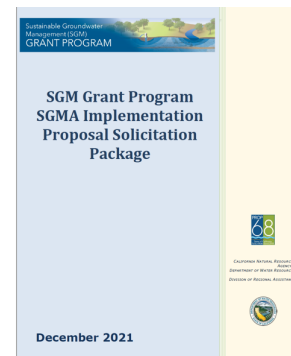
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GRANT SOLICITATION

- Opened October 4th, with applications due by November 30th
- Very competitive: total of \$230 million available for 94 eligible basins (\$2.5 million per basin if split evenly)
- Each grant can ask for \$1 to \$20 million
- Cost share not required; however, additional points will be given to those who have a cost share of at least 5% of total project cost
 - Shows commitment!!
- All work must be completed by June 30, 2026



Program Schedule and Key Dates	
Milestone or Activity	Tentative Schedule
SGMA Implementation Round 2 Grant Solicitation Opens	October 4, 2022
SGMA Implementation Round 2 - Application Workshop	October 20, 2022, 10 a.m.-Noon (PST)
SGMA Implementation Round 2 Grant Solicitation Closes	November 30, 2022, at 5 p.m. (PST)
Draft Award List Posted for Public Review	May 2023
Final Award List Posted	August 2023
Execute Agreements	September-November 2023

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APPLICATION COMPONENTS

■ Work Plan

A. General - Project Descriptions:

- | | | |
|--------------|---|--|
| EKI/CGA | { | <ul style="list-style-type: none"> ■ Justification ■ Goals, objectives, needs & how they will be met ■ Expected benefits for Implementation Projects / Description of how the Planning Project is well-coordinated |
| Grant Writer | { | <ul style="list-style-type: none"> ■ How the project will benefit an Underrepresented Community (URC), Tribe or Severely Disadvantaged Community (SDAC) ■ How the project will positively impact issues associated with small water systems or shallow wells ■ How the project addresses the Human Right to Water |
| EKI/CGA | { | B. Scope of Work & Deliverables |
| Both | { | <ul style="list-style-type: none"> C. Budget D. Schedule |

Note: EKI will provide descriptive technical information and the Grant Writer will provide explanatory text, edit all text for consistency, populate all necessary tables (Budget, Schedule), & assemble all pieces.

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PROPOSED COSUMNES PROJECTS

1. **Managed and Natural Aquifer Recharge** (Section 18.2.4 in the GSP)
 - Stream impoundments to store rainfall runoff.
 - Surface water from outside the basin delivered by natural drainages .
 - Local farm-scale rainwater capture projects.
2. **Representative Monitoring Network Improvements** (Section 19.1.2 “Data Gap Filling Efforts” in the GSP)
3. **Water Conservation** (Section 18.2.4 in the GSP)
 - Land use changes toward less water intensive crops.
 - Water use efficiency, management and conservation projects.
4. **Voluntary Land Repurposing** (Section 18.2.3 PMA #5)

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MANAGED AND NATURAL AQUIFER RECHARGE (1 OF 3)

LOCAL DIVERSION PROJECTS

- Outreach to landowners along Dry Creek & Laguna Creek to identify lands with existing diversion infrastructure & willingness to participate.
- Locate Project sites focused along Dry Creek and Laguna Creek.
- Rank potential sites based on location & surface/subsurface hydrogeologic conditions.
- CGA select up to 4 sites to secure access for confirmation studies & project development
 - Confirm site suitability (geophysics/infiltration tests/source water and groundwater quality)
 - Plan & design diversion and recharge infrastructure for 1-2 sites
 - Approve plans and construct infrastructure
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., meters, weirs, monitoring wells, etc.)
- Update appropriate model input files

Table 1. Summary of Available Surface Water Supplies from Water Year 1990 through 2021.

Creek	90 th Percentile Flow, CFS	Max Diversion Flow Rate, CFS	Max. Avg Annual Diversion Volume, AF	Expected Avg Annual Diversion Volume, AF (Note 1)
Badger Creek	26	24	700	700
Laguna Creek	325	225	7,300	1,000
Hadselville Creek	20	6	100	100
Jackson Creek	136	127	2,700	800
Dry Creek	412	392	10,500	1,000
Total:			21,300	3,600

Notes:

- 1.) The expected near-term diversion volume is based on a maximum diversion of 15 CFS. Higher rates of diversion may be possible depending on site specific constraints and available funding.

Note: Model-calculated surface water flows suggest that 85% of available surface water for diversions are from flows in Dry and Laguna Creeks. The runoff would be directed to local percolation basins and/or dry wells for infiltration into the Basin if site suitability assessments confirm project feasibility.

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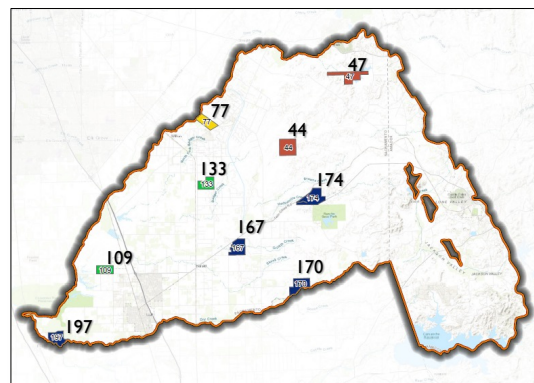
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MANAGED AND NATURAL AQUIFER RECHARGE (2 OF 3)

ON-FARM STORMWATER CAPTURE

- Utilize data from the GSP and CoSANA model to identify high volume sites with acceptable soil conditions
- Rank candidate sites base on expected runoff volumes, expected infiltration rates & subsurface conditions
- CGA select up to 4 sites to secure access to
 - Confirm site suitability (geophysics/infiltration tests/source water and groundwater quality)
 - Plan & design diversion and recharge infrastructure for 1-2 sites
 - Approve plans and construct infrastructure
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., meters, weirs, monitoring wells, sampling stations, etc.)



Note: Map shows example land parcels with model-calculated average (1990-2021), annual runoff in acre-feet (AF).

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MANAGED AND NATURAL AQUIFER RECHARGE (3 OF 3) FLOOD-MAR ANALYSIS (LAGUNA CREEK)

- Multi-benefit Flood-MAR Opportunities Analysis
- Draft Scope of Work developed by cbec eco engineering
 - Data Discovery
 - Field Data Collection and Monitoring
 - Hydrologic Model Development
 - Hydraulic Model Development and Simulation
 - Ecological Floodplain Inundation Potential Analysis (EcoFIP)
 - Reporting and Outreach

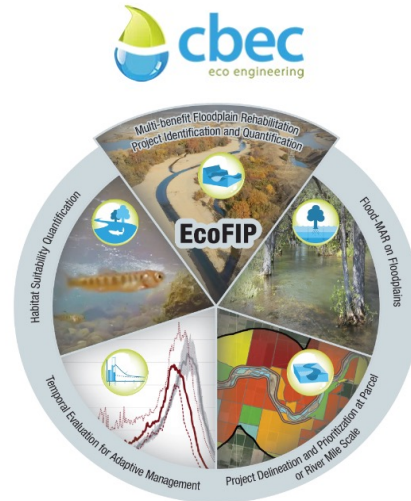


Figure 1 – EcoFIP ecohydraulic modeling framework.

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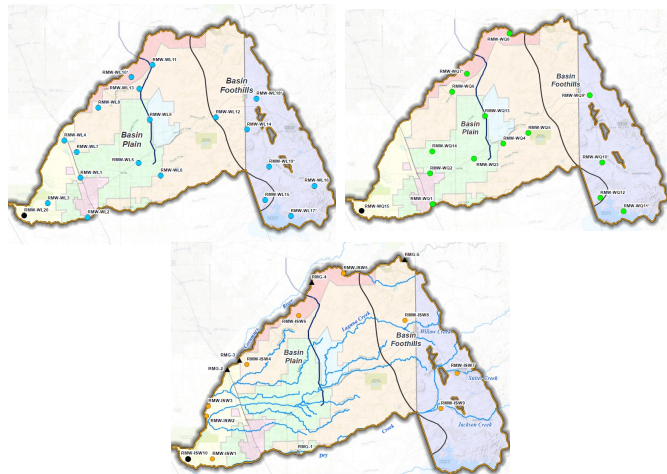
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REPRESENTATIVE MONITORING NETWORK IMPROVEMENTS

- The SGMA Monitoring Network (RMWs) provides data to evaluate Sustainable Management Criteria (SMCs) and assess Sustainability Indicators for the Basin
- Multiple data gaps within the networks were identified in the GSP
- Improving the monitoring network includes the following task
 - Downhole video log/surveying of current RMWs
 - Construct monitoring well sites located near DACs, GDEs areas, and within the mapped cone of depression
 - Expand the network of supplemental domestic and agricultural wells to confirm the SGMA monitoring network is representative. (supplemental wells do not have assigned SMCs)
 - Update appropriate model input files



Note: Wells and other relevant monitoring infrastructure installed as part of the demonstration projects will be incorporated into the SGMA Monitoring Network as appropriate to also fill identified data gaps.

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WATER CONSERVATION

- Additional outreach to landowners
- Use updated land use data (work task under Land Repurposing project) and update ET estimates to refine consumptive use estimates
- Identify & rank candidate demonstration project sites based on site conditions (soil characteristics, land uses, current irrigation & water practices, & conduciveness to testing selected BMPs)
- CGA select up to 4 sites to secure access for
 - Site inspection by Agricultural Consultant
 - Identify recommended BMPs & plan/design conservation activities
 - Approve plans & construct necessary field modifications and necessary infrastructure
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., meters, weirs, monitoring wells, etc.)
- Update appropriate model input files

Soil moisture monitoring



Flow meter monitoring



Note: Commercially available weather stations can be installed along with other tracking equipment to measure and record soil moisture, water flows, water levels, and climate data at strategically placed stations in the basin.

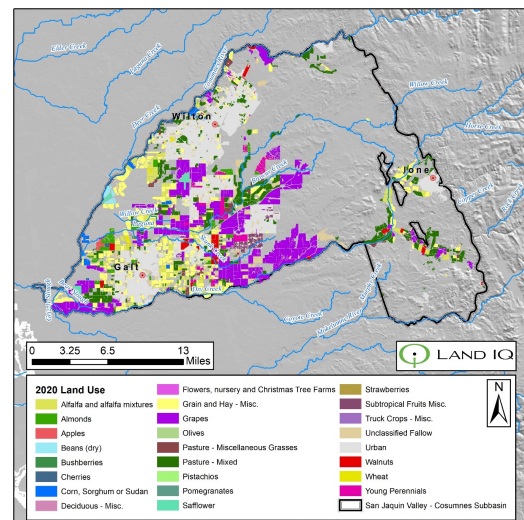
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VOLUNTARY LAND REPURPOSING

- Additional outreach to landowners
- Update land use map & data
- Develop scoring framework to identify & rank sites for possible projects
 - Land characteristics
 - Revenue generated by existing use
 - Landowner preferences
 - Implementation timeframe & estimated benefits
- Identify 2 to 3 demonstration projects
- Locate, design & construct necessary monitoring equipment to quantify benefits (e.g., meters, weirs, monitoring wells, etc.)
- Update appropriate model input files



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EKI'S NEXT STEPS

- Finalize Project Descriptions
 - Project justifications
 - Goals, objectives, & needs
 - Expected benefits
 - Scope of work
 - List of deliverables
- Draft Budgets & Schedules
- Continue coordination with CGA staff

LAND REPURPOSING

Land Repurposing is included as Project and Management Action (PMA) #5 in the GSP and includes voluntary changes in land use to reduce groundwater extractions. In the guidance document *Advancing Strategic Land Repurposing and Groundwater Sustainability in California*, the Environmental Defense Fund (EDF) defined land repurposing as any activity that converts previously irrigated agricultural land to new uses that reduce groundwater demand or use and provide some other measurable benefits to the environment. The GSP assumed that 750 – 1,000 acres could be repurposed during Phase 1 of implementation (approximate savings of 2,700 AFY of groundwater). This demonstration project will develop protocols and methods to identify and prioritize target lands for repurposing.

The Land Repurposing demonstration project will support landowners in the required application processes, scoring framework to maximize project ranking, guidance with contracting protocol, construct infrastructure necessary to track and verify actual water use and water savings, and then implement the specific options identified for each test site.

- Utilize 2020 land use data to preliminarily identify the magnitude and distribution of potentially greatest water consuming crops (for example, alfalfa, pasture, and orchards such as walnuts and almonds).
- Update land use map and data to represent current conditions (assumed to be based on 2024 growing season).
- Develop scoring framework to identify and rank land areas for voluntary land repurposing that consider the following factors:
 - Land characteristics such as soil type, topography, subsurface characteristics such as geological layers, proximity to surface water, and suitability for alternative uses.
 - Revenue generated by existing use.
 - Landowner preferences, stakeholder input, and regional coordination.
 - Implementation timeframe and estimated benefits.
- Explore potential options to incentivize participation in land-repurposing program (e.g., CGA funded programs, mitigation or conservation banks, conservation easements, soil carbon sequestration/credits, solar rentals, grazing leases, and so forth).
- Identify two to three demonstration projects for implementation by CGA.
- Locate, design and construct necessary monitoring equipment to track recharge and quantify benefits (e.g., meters, weirs, monitoring wells, and so forth).
- Update appropriate model input files.

Component 1

Budget Categories	Grant Amount
(a) Grant Agreement Administration	\$0
(b) Environmental / Engineering / Design	\$0
(c) Implementation / Construction	\$0
(d) Monitoring / Assessment	\$0
(e) Engagement / Outreach	\$0
Total:	\$0

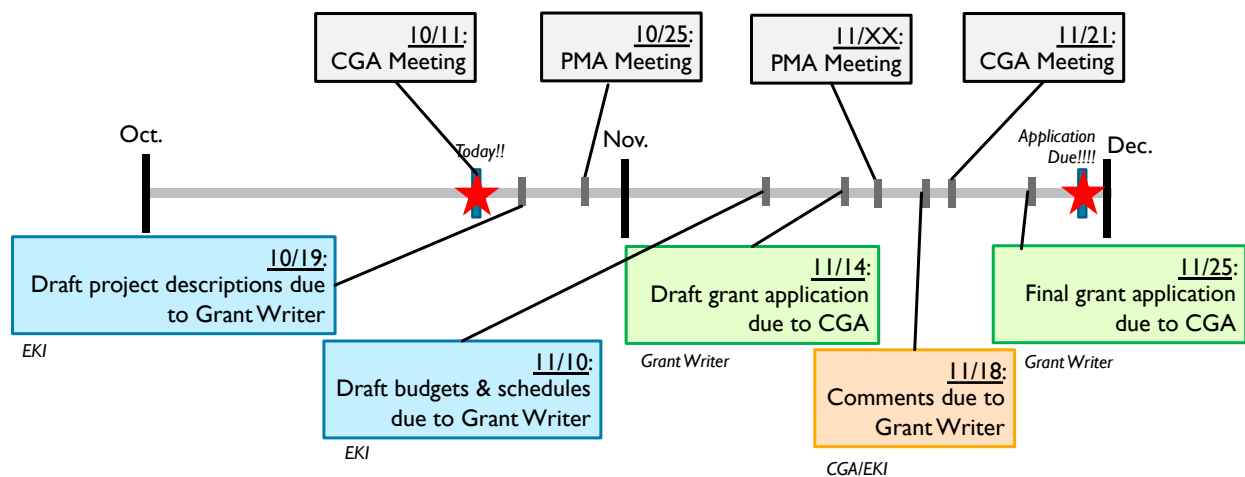
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TIMELINE



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**Cosumnes Groundwater Authority
Board of Directors Meeting**

Agenda Date: October 17th, 2022

Agenda Item #:  **6**

Agenda Item Subject: Water Year 2022 Annual Report Preparation

To: CGA Board of Directors

From: CGA Staff

Background

The Sustainable Groundwater Management Act (SGMA) requires Groundwater Sustainability Agencies (GSAs) to submit annual reports to the Department of Water Resources each April 1 following the adoption of a Groundwater Sustainability Plan (GSP). Annual reports will provide information on groundwater conditions and implementation of the GSP for the prior water year. EKI Environmental and Water, Inc. prepared the Water 2021 report and, after consulting with CGA Staff, has prepared an additional scope of work for the project.

Attachments

- [EKI Scope of Work, Annual Report Development](#)

Staff Recommendation

- Authorize the extension of EKIs contract to include preparation of the Water Year 2022 Annual Report, including additional outreach and technical support for CGA meetings.

October 13, 2022

SCOPE OF WORK

Introduction

Per the Cosumnes Groundwater Authority (CGA) request, below is a proposed scope of work for EKI over the next 12-months of Cosumnes Subbasin Groundwater Sustainability Plan (GSP) implementation.

Task 1: Water Year (WY) 2022 Annual Report

WY 2022 Annual Report preparation includes three subtasks: 1) Data Compilation; 2) Groundwater Flow Model Extension; and 3) Write and Submit Annual Report. Data compiled under Task 1 will either be used directly to produce necessary graphics and tables for the Annual Report (subtask 3) or be used to update CoSANA model input files (subtask 2):

1. Data Compilation: Groundwater elevation data from Representative Monitoring Wells (RMWs) and supplemental wells (*to be provided by Watershed Coordinator*); Water quality data from RMW Water Quality (RMW-WQ) network wells and publicly available data for wells across the Basin (*to be provided by Watershed Coordinator*); Download data from available stream gauges (*to be provided by Watershed Coordinator*); Estimate Dry Creek data using C2VSim and publicly available data (*to be done by EKI*); Annual verification and update of land use maps (*to be provided by Watershed Coordinator*); Utilize satellite imagery to identify the spatial and temporal distribution of dry stream reaches in the Basin (*to be provided by Watershed Coordinator*); Download land subsidence data (*to be done by EKI*); Download precipitation data (*to be done by EKI*); Obtain, process, and estimate surface water delivery data as needed from appropriate GSAs, online resources and updated references (*download guidance provided by EKI and data to be provided by Watershed Coordinator*); Compile pumping data from appropriate GSAs, and download available Public Water System (PWS) pumping data (*download guidance provided by EKI and data to be provided by Watershed Coordinator*); Compile monthly Camanche Reservoir stage (*to be provided by Watershed Coordinator*); Compile voluntary groundwater extraction data (*to be provided by Watershed Coordinator*); and Compile status report on Project and Management Actions (PMAs) (*to be provided by Watershed Coordinator*).
2. Groundwater Flow Model Extension: Extending and updating the Numerical Model to run through September 2022 (i.e., WY 2022). This involves updating input files to include surface water delivery, pumping, ET, and land use data between October 2021 to September 2022 compiled under subtask 1, running the model, and post-processing results. The model results will be used to estimate agricultural pumping, streamflow depletions, and the change in groundwater storage for purposes of the WY 2022 Annual Report.
3. Write and Submit Annual Report: Prepare draft and final text, graphics, and tables as described in 23-CCR § 356.2 for submittal of the WY 2022 Annual Report to DWR by CGA. As required by the regulations, WY 2022 water levels will be compared to Sustainable Management Criteria and results summarized. This subtask includes required coordination and communication with CGA.

Task 2: Data Management System (DMS) Support

The DMS includes both spatial and temporal data for the Cosumnes Basin, and these data types are linked through use of a Geographic Information System (GIS) geodatabase. The DMS allows for accurate and efficient export of information for GSP analysis, reporting, and data addition.

Task 2 consists of evaluating and summarizing example user-friendly options that can build off the existing DMS to increase its effectiveness for groundwater management. EKI shall research select platforms being used by other GSAs to identify potential “off-the-shelf” or custom data management tools that can allow CGA to more readily review and visualize data, assist GSP implementation, and provide effective materials for public outreach. For example, a platform to consider is BasinScout, which can aggregate data and help users to prioritize land repurposing and conservation recommendations. The EQuIS platform is another potentially useful tool to check, edit, load, report, and visualize monitoring data.

The options to upgrade the DMS will be summarized and ranked in a technical presentation presented at the CGA Board of Directors monthly meeting. CGA can utilize the information provided to select their preferred tool to utilize moving forward with GSP implementation.

Task 3: Outreach Activities

Task 3 consists of supporting Technical Advisory Committee (TAC) meetings and Public Workshops as part of public outreach activities.

1. Technical Advisory Committee (TAC): Attend and participate in up to two TAC meetings. This will include developing technical presentations, which typically can require significant research and technical evaluations; running, extracting and summarizing results from CoSANA, and developing figures and graphics to guide CGA decision-making and planning. Topics can include, but are not limited to, current conditions of the Basin as described in the WY 2022 and WY 2023 Annual Reports, update GSP Implementation progress including PMA activities, monitoring updates and other relevant technical information requested by CGA. This task also assumes one person from EKI will be available for up to two debriefing calls with CGA staff following the TAC meetings.
2. Public Workshops: Prepare technical presentations and handout materials summarizing technical information to support CGA in up to four public workshops. It is assumed one person from EKI will attend the Public Workshops, as appropriate and as requested by CGA.

Task 4: Grant Support

Task 4 consists of EKI providing technical support for upcoming grant applications. This can include reviewing grant opportunities, reviewing or development of grant application materials (e.g., research, cost estimating, strategic planning meetings, etc.), conducting technical evaluations and performing model runs to evaluate potential PMA benefits, or other grant support activities as requested by CGA.

Task 5: GSP Implementation Technical Support to CGA

This task includes (1) routine budget management and monthly invoicing; (2) monthly coordination with the CGA secretary and Watershed Coordinator; (3) monthly planning meetings with CGA and facilitator to

ensure all critical GSP Implementation deadlines are being addressed and met; (4) attend monthly CGA Board meetings and PMA meetings to support CGA staff in responding to technical questions brought up at meetings and to help incorporate GSA and public comments into the GSP Implementation; and, (5) provide technical support for the Fee Study. It is assumed that at least one EKI member will attend the monthly CGA planning meetings, monthly CGA Board meetings and one PMA meeting per month. EKI will develop up to four technical presentations to be presented to the CGA Board. Developing the presentations can require research and technical evaluations, extracting and summarizing model results, and/or developing figures and graphics to provide guidance for decision-making and planning processes for CGA.

Project Schedule

The EKI Team is prepared to start work on the above Scope of Work immediately upon authorization to proceed.

Compensation for Consulting Services

Inasmuch as the exact level of effort required to complete the above Scope of Work cannot be known precisely, EKI proposes to perform the work on a time and materials expense reimbursement basis. A breakdown of the estimated budget is provided in Table 1 below.

Table 1. Proposed Project Budget

TASK	Cost
Task 1 – WY 2022 Annual Report	\$33,000
Task 2 – DMS Support	\$15,000
Task 3 – Outreach Activities	\$32,000
Task 4 – Grant Support	\$13,000
Task 5 – GSP Implementation Technical Support to CGA	\$62,000
TOTAL	\$155,000

**Cosumnes Groundwater Authority
Board of Directors Meeting**

Agenda Date: October 17th, 2022

Agenda Item #: 7

Agenda Item Subject: Outreach and Engagement

To: CGA Board of Directors

From: CGA Staff

Background

We have tentatively scheduled a public workshop to engage the community on a variety of groundwater sustainability topics. On December 6th (location TBD) interested community members and stakeholders will learn more about project planning efforts and the Cosumnes Groundwater Authority's first year as an organization.

Technical Advisory Committee

CGA Staff anticipate bringing a draft committee charter for a Technical Advisory Committee (TAC) for Board consideration. This TAC would play a similar role to the TAC and Surface Water Advisory Group (SWAG) convened under the subbasin working group prior to GSP adoption and submission. The TAC would meet up to twice a year to review annual monitoring data, project status, and other aspects of CGA work as appropriate.

Staff Recommendation

- Promote the Farmers Survey to help inform the DWR SGM Grant Application.
- Consider GSA specific outreach activities (formal/informal workshops with constituents, letter to the editor, mailers, etc.) coordinated with CGA efforts.

**Cosumnes Groundwater Authority
Board of Directors Meeting**

Agenda Date: October 17th, 2022

Agenda Item #: 8

Agenda Item Subject: CGA Staff Report

To: CGA Board of Directors

From: CGA Staff

Fall 2022 GSA Forum

DWR is hosting a virtual Fall 2022 Groundwater Sustainability Agency (GSA) Forum for GSA members and representatives on November 9, 2022, from 9:00 AM to noon. The Forum will be a platform for GSAs to come together to engage, exchange ideas, and establish professional networks. The theme of the upcoming Fall Forum is *Funding SGMA Implementation*. Follow [this link](#) to register for the event. An agenda will be provided to registered participants prior to the event. Please note that the event will be limited to 150 participants.

Watershed Coordinator Report

- Fall water levels and water quality samples have been collected by MLJ. These results will be compiled and be presented in December.
- COSANA modeling updates and monitoring coordination is continuing with the North and South American Subbasins.
- Ongoing coordination with DWR and USDA on OHWD's Laguna Del Sol Recharge Project – technical expertise, well diagnostics, geophysical and hydrological data gathering
- The CARCD DOC Multibenefit Land Repurposing Grant application is continuing to be developed. The grant application window is expected to be open and closed by the end of the calendar year.

Water Forum

Links: [Water Forum Website](#) | [Water Forum 2.0 Information](#)

- CGA staff are tracking conversations regarding the Water Forum 2.0 agreement.