

**CGA/GGA Joint Technical Advisory Committee Meeting  
Agenda Packet**

**August 12, 2022**

# Staff Report

**To:** CGA-GGA Joint TAC

**Agenda Item:** 2. Approval of Minutes

**Date:** August 12, 2022

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## Background

The March 11, 2022 and May 13, 2022 CGA/GGA Joint TAC Meeting minutes were approved by the CGA TAC on July 8, 2022. Due to lack of a quorum, the GGA was unable to consider approval.

The July 8, 2022 CGA/GGA Joint TAC Meeting minutes have been prepared for review.

## Recommendation

GGA Action Only: Approve the March 11, 2022 and May 13, 2022 CGA/GGA Joint TAC Meeting minutes.

CGA/GGA Action: Approve the July 8, 2022 CGA/GGA Joint TAC Meeting minutes.

## Attachments

- March 11, 2022 CGA/GGA Joint TAC Meeting minutes
- May 13, 2022 CGA/GGA Joint TAC Meeting minutes
- July 8, 2022 CGA/GGA Joint TAC Meeting minutes

# CGA/GGA Joint Technical Advisory Committee Meeting

## MEETING MINUTES

March 11, 2022 | 1:00 p.m.

Due to safety concerns and directives from the Governor and Federal Government related to COVID-19,

**This meeting was held remotely ONLY.**

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### 1. Call to Order, Roll Call, and Introductions

The meeting was called to order at approximately 1:03 p.m.

#### In Attendance:

##### Committee Members:

GGA: Emil Cavagnolo, Zac Dickens, Leslie Nerli, Don Bills, Mark Lohse.

CGA: Denise Carter, Jim Wallace, Bill Vanderwaal, Deke Dormer, Ben King, Brandon Davison (DWR, ex-officio)

A quorum of both member groups was present.

**Others in Attendance:** Lisa Hunter (GGA Staff), Grant Davids (Davids Engineering, Inc.), Jim Brobeck, Katie Klug (Davids Engineering), Ken Loy (West Yost), Jeff Davids (Davids Engineering), Anna Reimer (West Yost), Luis Mendoza (Glenn County), Arne Gustafson, Ritta Martin, Joe Turner, Shelly Murphy (CGA), Jaime Lely.

### 2. Approval of Minutes (CGA TAC, GGA TAC)

#### a. \*August 13, 2021 CGA/GGA Joint TAC Meeting

**CGA:** Committee Member Bill Vanderwaal moved to approve the minutes from the August 13, 2021 CGA/GGA Joint TAC Meeting. Member Deke Dormer seconded and the motion passed per roll call vote.

Ben King- Aye

Bill Vanderwaal- Aye

Deke Dormer- Aye

Jim Wallace - Aye

**GGA:** Committee Member Don Bills moved to approve the minutes from the August 13, 2021 CGA/GGA Joint TAC Meeting. Member Emil Cavagnolo seconded and the motion passed per the following roll call vote:

Don Bills- Aye

Emil Cavagnolo- Aye

Mark Lohse- Aye

Zac Dickens - Aye

Leslie Nerli- no audio during vote

### 3. Period of Public Comment

No public comment was heard.

### 4. Presentation: Review of Sustainable Management Criteria in Colusa Subbasin Groundwater Sustainability Plan

#### List of Acronyms:

CEQA – California Environmental Quality Act  
GDE - Groundwater Dependent Ecosystems  
GSA – Groundwater Sustainability Agency  
GSP – Groundwater Sustainability Plan  
MO – Measurable Objective  
MT – Minimum Threshold  
PMAs – Projects and Management Actions  
PPT – Powerpoint Presentation  
SGMA – Sustainable Groundwater Management Act  
SMC – Sustainable Management Criteria  
TAC – Technical Advisory Committee  
UR – Undesirable Result

Grant Davids of consulting firm Davids Engineering provided an overview of agenda presentation items 4 and 5. Mr. Davids introduced Ken Loy of West Yost who gave a presentation on the sustainability management criteria included in the final Colusa Subbasin GSP.

#### Proceedings/Discussion:

Ben King asked for clarification on the statement that the final GSP is more protective, whereby Mr. Loy explained that the City of Orland was concerned about the minimum thresholds being too low and that the final GSP has raised those thresholds to address that concern.

Mr. King also asked if all three stages are being monitored on the multi-completion wells, whereby Mr. Loy confirmed they were.

Leslie Nerli stated the new municipal well being built in the City of Orland would be an appropriate well monitoring site.

Jim Wallace asked if the technical team has been monitoring each individual well and comparing the data to the MT's and Annual Report, whereby Mr. Grant Davids stated that information would be presented later in the meeting.

### 5. Presentation: Colusa Subbasin Groundwater Sustainability Plan Annual Report

Mr. Loy turned the presentation over to Katie Klug of Davids Engineering, who reviewed the GSP Annual Report and overview of groundwater conditions and water supply through Water Year 2021.

Ms. Klug turned the presentation over to Anna Reimer of West Yost who reviewed groundwater conditions and measured land subsidence for the subbasin. Grant and Jeff Davids (Davids Engineering) answered various questions on different slides throughout the presentation related to groundwater storage calculations and the annual and cumulative changes in groundwater storage.

The presentation was then handed back to Ms. Klug to present information on water supply and water use, in addition to water use sectors, projects and management actions updates, the well monitoring pilot project, and data related to groundwater extraction. Ms. Klug invited comments and questions from the presentation, and encouraged members to suggest any additional information that should be available in the Annual Report.

### **Proceedings/Discussion:**

Mr. King asked if there is a separate measure for critical infrastructure in relation to subsidence; whereby, Mr. Loy stated there is not. Mr. King also asked what the role of the TAC is in reporting out the subsidence information and engaging the respective Boards; whereby, Mr. Loy referred Mr. King to Chapter 7 of the GSP Implementation section for guidance. Ms. Hunter stated there is a lot of coordination expected between the respective boards and TACs as the TACs report out to their respective Boards.

Mr. King asked if the reported deliveries that go out of the basin from the Tehama-Colusa Canal are included in the information presented, whereby Ms. Klug stated the information is based on contractors from each of the respective service areas and includes upstream and downstream deliveries.

Jim Brobeck asked if the reports of sinkholes are reflected in the subsidence readings; whereby, Mr. Loy stated the phenomenon may be related but the subsidence measurement is a different metric and reviewed the recent sightings and reports of sinkholes in the area.

Jim Brobeck asked if data would be gathered from the irrigation districts for groundwater extraction in regards to the expansion of groundwater infrastructure; whereby, Ms. Klug said data availability is sparse and does not have information related to that.

Jim Wallace asked how many applications were received for the well monitoring pilot program and what the expected cost is per site; whereby, Ms. Klug stated the cost per site is approximately \$9,000-\$10,000, and Ms. Hunter stated the project is still expanding as a Round 2 solicitation just ended and staff also reached out to sites that were not selected the first round to gauge interest to be included in the program. Approximately sixteen sites have indicated interest in the program.

Jim Brobeck asked how the wells are characterized as well as the well depths for each well in the well monitoring pilot program to ensure the sites are appropriate, whereby Mr. Grant Davids stated the program is less focused on collecting scientific data and more focused on determining the cost for monitoring groundwater production. Mr. Loy further stated that each of the Representative Monitoring Network wells in the program do have screen levels and the data Mr. Brobeck asked for included in the GSP.

Lisa Hunter stated the presentation and related materials would be available online shortly.

## **6. \*Approve 2022 CGA/GGA Meeting Schedule**

Ms. Hunter introduced the item and noted that the CGA TAC no longer has a quorum. Ms. Hunter suggested the group discuss what the anticipated workload for the committee would be and how often the group would need to meet or table the item to a later meeting.

Mr. Bills asked how the meeting schedule corresponds to the short time frame in between state mandated deadlines, whereby Ms. Hunter stated documents should be available as needed for review prior to the meetings.

Mr. King suggested conducting meetings on another week day besides Friday, as well as combining the two TACs into one body so as to increase the chances of having a quorum. Mr. King also spoke to the need to have data and reports available for review sooner, whereby Mr. Grant Davids stated going forward the reports should be expected sooner but the GSP regulations have made the deadlines very tight. Discussion ensued.

Ms. Hunter noted that soon there will not be consultants involved as much in the meetings going forward.

## **7. Member Reports and Comments**

Ben King asked for a status update on the new well ordinance expected in Glenn County; whereby, Ms. Hunter stated the County is currently working on a draft ordinance and soliciting commentary from various agencies. Mr. King also asked if there is a comment period and if the County plans on collaborating with Colusa County; whereby, Ms. Hunter stated Glenn County has been reviewing what other counties are currently doing and though there is no formal comment period, they are still accepting feedback.

## **8. Adjourn**

The meeting was adjourned at 3:41 p.m.

# CGA/GGA Joint Technical Advisory Committee Meeting

## MEETING MINUTES

May 13, 2022 | 1:00 p.m.

### In Person Meeting Locations:

Colusa County, Market Street, Suite 102, Colusa, CA 95932

Glenn County, 225 N. Tehama St., Willows, CA 95988

The meeting was also held remotely via Zoom.

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### **1. Call to Order, Roll Call, and Introductions**

Denise Carter called the meeting to order at approximately 1:00 p.m.

#### **In Attendance:**

##### **Committee Members:**

GGA: Zac Dickens, Matt Deadmond, and Mark Lohse. Emil Cavagnolo and Don Bills attended remotely as members of the public and did not count toward a quorum or vote.

CGA: Denise Carter, Darrin Williams, and Ben King. Jim Wallace and Brandon Davison (DWR, ex-officio) attended remotely as members of the public and did not count toward a quorum or vote.

A quorum of both member groups was not present.

**Others in Attendance:** Lisa Hunter (GGA Staff), Grant Davids (Davids Engineering, Inc.), Katie Klug (Davids Engineering), Ken Loy (West Yost), Anna Reimer (West Yost), Holly Dawley (GCID), Arne Gustafson, Greg Plucker (Colusa County), Jaime Lely, Anjanette Shadley (Western Canal Water District), Tiffanee Hutton, Ashley Driver (landowner), Michael Bolzowski (Cal Water), Richard (last name unknown)

### **2. Approval of Minutes (CGA TAC, GGA TAC)**

#### **a. \*March 11, 2022 CGA/GGA Joint TAC Meeting**

A quorum of CGA TAC members was not present. A quorum of GGA TAC members was not present. The item was tabled for a future meeting.

### **3. Period of Public Comment**

No public comment was heard.

### **4. Subsidence Benchmark Update**

Ken Loy of West Yost gave a presentation on existing land subsidence benchmarks and proposed new benchmark location areas for the Colusa Subbasin.

## **Proceedings/Discussion:**

Mr. Loy reviewed a map of the subbasin illustrating each of the land subsidence benchmarks and measurement data for the Subbasin, noting that additional surveys need to be conducted of the area.

Ms. Carter asked how often the benchmark surveys are done, whereby Mr. Loy stated there is no specific guideline for how often, but the InSAR data is conducted monthly. Ben King asked how long the InSAR data has been collected for, whereby Anna Reimer of West Yost stated since June of 2015.

Donald Bills provided observations of certain areas of the map, encouraging the additional benchmark sites be around the Orland-Artois area. Mr. Bills asked if there have been any physical manifestations of subsidence, whereby Mr. Loy stated the consultant team is unable to positively identify if potholes, canal breaks, etc. are a direct result of subsidence. Discussion ensued on earth fissuring and its relation to subsidence. Mr. King commented on sink holes and their relation to subsidence.

Mr. Loy offered a quick tutorial on the causes of land subsidence, whereby the committee agreed and Mr. Loy reviewed the geologic environmental characteristics about the basis and the potential and direct causes of land subsidence for the area.

Mr. Loy stated there is \$68,000 in funding to install new benchmarks and include those benchmarks in future surveys. He went on to focus on the Glenn County area of the subsidence map, and reviewed the recommended sites specific to Glenn County. Discussion ensued regarding potential sites and the data that was used for the site placement recommendations.

Mr. Loy invited comments on the potential site areas discussed and Mr. Dickens asked if the surveying would be done by Davids Engineering or subcontracted, whereby Mr. Loy stated the grant funding is provided to Davids Engineering; West Yost is subcontracted through this agreement and West Yost will be subcontracting with Jim Frame for surveying and reviewed the surveying process. Mr. Dickens asked what the level of coordination would be with DWR, whereby Brandon Davison and Mr. Loy explained the communication and the coordination that would occur with the DWR surveyor.

Ms. Carter asked the committee to contact herself or Lisa Hunter if they would like to provide local assistance for this project, whereby Mr. King stated he would be interested.

Mr. Loy reviewed the sites recommended for additional benchmarks in the Colusa County area. Discussion ensued on the viability of the sites. Ashley Driver encouraged the committee to also consider municipal wells in the Grimes area. Richard (last name unknown) asked if data from GPS units has been considered, whereby Mr. Loy stated the new sites will utilize GPS data.

## **5. Hydrogeologic Investigation Update**

Mr. Loy provided a presentation on the hydrogeologic investigation work plan with a deadline for the end of June.

### **Proceedings/Discussion:**

Mr. Loy stated the plan will be directed from the GSP and reviewed the outline of the workplan. Mr. Loy reviewed each of the hydrogeologic investigation tasks to be completed.

Mr. King provided commentary and suggestions related to the tasks. Discussion ensued.

### **6. Well Monitoring Pilot Project Update**

Katie Klug of Davids Engineering gave a presentation on phase one and phase two for the Well Monitoring Pilot Program, stating this is a voluntary, non-regulatory program and reviewed the program background and goals.

### **Proceedings/Discussion:**

Ms. Klug stated twelve sites are being considered for enrollment in the Program and staff has reached out to landowners that have expressed interest in participating.

Mr. Bills asked if the counties or other agencies are being notified of the program to increase interest in the program, whereby Ms. Klug stated there is a level of collaboration but no specific contacts. Discussion ensued surrounding the identified sites and the solicitation process.

### **7. 2023 SGMA Grant Funding Schedule**

Lisa Hunter reviewed the 2023 SGMA grant funding schedule, stating the purpose of the item is to highlight potential grant funding, noting that staff is focusing on the second round of funding to open in September 2022. She emphasized only one application per basin is allowed. Mr. Davison noted this funding is available through Proposition 68, also noting award approval will occur mid next year. Mr. Davison encouraged each respective agency to have projects in mind and as ready as possible for when the funding become available. Ms. Carter noted technical assistance for putting together the potential projects may be needed, and each agency's respective TAC should discuss highest priority projects and then discuss jointly at next meeting. Mr. King encouraged the committee to research further funding and consider the allocation of that funding.

### **8. Member Reports and Comments**

Mr. King noted research he has been conducting of historical documents in relation to the watershed before Reclamation District 108 was formed.

### **9. Next Meeting: July 8, 2022**

The meeting was adjourned at 3:00 p.m.

# CGA/GGA Joint Technical Advisory Committee Meeting

## MEETING MINUTES

July 8, 2022 | 1:00 p.m.

### In Person Meeting Locations:

Colusa County Courthouse, 547 Market Street, Suite 102, Colusa, CA 95932

Glenn County Planning and Community Development Services, 225 N. Tehama St., Willows, CA 95988

The meeting was also held remotely via Zoom.

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### **1. Call to Order, Roll Call, and Introductions**

Denise Carter called the meeting to order at approximately 1:00 p.m. She also introduced Carol Thomas-Keefer as the new CGA Program Manager.

### **In Attendance:**

#### **Committee Members:**

GGA: Zac Dickens, Mark Lohse and Don Bills. Emil Cavagnolo and Tavis Beynon attended remotely as a member of the public and did not count toward a quorum or vote.

CGA: Denise Carter, Darrin Williams, Ben King, and Jim Wallace. Bill Vanderwaal and Brandon Davison (DWR, ex-officio) attended remotely as members of the public and did not count toward a quorum or vote.

**Others in Attendance:** Lisa Hunter (GGA Staff), Carol Thomas-Keefer (CGA Staff), Grant Davids (Davids Engineering, Inc.), Katie Klug (Davids Engineering), Ken Loy (West Yost), Arne Gustafson, Lisa Porta, Jennifer Wallace, Lester Messina, Shelly Murphy, Rich Sullivan, Holly Dawley (GCID), Patricia Vellines (DWR)

### **2. Approval of Minutes (CGA TAC, GGA TAC)**

- a. **\*March 11, 2022 CGA/GGA Joint TAC Meeting**
- b. **\*May 13, 2022 CGA/GGA Joint TAC Meeting**

Mr. King requested that Ken Loy's responses to his questions be included in the minutes. Chair Carter indicated that the minutes should remain brief, but stated that the information would be provided separately to all of the Joint TAC members.

On motion made by Mr. King, seconded by Mr. Wallace, and unanimously carried, CGA TAC approved the minutes of the March 11, 2022 CGA/GGA Joint TAC Meeting and the May 13, 2022 Joint TAC meeting.

A quorum of GGA TAC members was not present. The item was tabled for a future meeting.

### **3. Period of Public Comment**

No public comment was heard.

### **4. Joint TAC Meeting Schedule for Remainder of 2022**

Lisa Hunter reviewed the staff report recommending that the Joint TAC schedule monthly meetings through October to meet the DWR grant submittal schedule this fall; no meetings were proposed for November and December. Mr. King recommended that meetings should be scheduled for November and December in case they are needed; following discussion, it was agreed that, due to holidays, a meeting would be scheduled for December 9, but no meeting would be scheduled for November.

On motion made by Mr. Williams, seconded by Mr. King, and unanimously carried, the CGA TAC approved the proposed Joint TAC meeting schedule for the remainder of 2022, with the inclusion of a meeting on December 9.

A quorum of GGA TAC members was not present. The item was tabled for a future meeting.

Ms. Carter additionally noted that future meetings would allow for remote meeting participation in accordance with Brown Act requirements so that board members who were not able to appear in person could participate and vote.

### **5. Subsidence Benchmark Update**

Ken Loy of West Yost reported that, pursuant to discussion at the last Joint TAC meeting, efforts were successful to refine the proposed subsidence benchmark locations and the benchmarks were installed. He noted that five new locations were added in Glenn County and seven new locations were added in Colusa County and the height reference was established for each. He acknowledged the work of Jim Frame with Frame Surveying and Mapping in completing the work within the project schedule. He added that the Subsidence Benchmark Project report is now completed.

#### **Proceedings/Discussion:**

Mr. Loy reviewed a map of the subbasin illustrating the land subsidence benchmarks and identified the 12 new locations. He indicated that, while this first step has been successfully completed, it is important to begin considering how to get the entire network resurveyed in order to accurately track and measure subsidence.

Mr. King asked why NAD83 was used for reference, as opposed to sea level. Mr. Loy responded that NAD83 is vertical reference used by DWR and others.

Mr. King also questioned the stability of new Benchmark #8 DRYS at Dry Slough Road. The benchmark is positioned on an old ag well pad and may not provide accurate subsidence data, and perhaps it should be replaced. Mr. Loy pointed out the special note regarding this benchmark located on page 2 of the report and an additional measurement would be necessary during the survey process. Ms. Carter noted that the funding period for this grant is now ended, so any additional work would have to be done as part of a future project. Following discussion, it was agreed that the DRYS benchmark should be considered for replacement in a future benchmark survey project.

Mr. Williams asked about the locations of the master benchmarks; Mr. Loy responded the benchmarks are included in the report and the DWR reports.

Ms. Carter asked Mr. Davison (DWR) about the process for obtaining funding to resurvey the benchmarks in Spring 2023. Mr. Davison stated that the GSAs should determine the best grant funding source (possibly Technical Services Support), then prepare and submit to DWR a draft scope of work with budget and schedule.

Donald Bills noted that GPS receivers were used to record height values and asked about the accuracy of those values. Mr. Loy noted that the report identifies the accuracy of the height values at 0.16 foot. He pointed out that future resurveys would be done with the same level of accuracy. Mr. Bills also asked about the best frequency for resurveying, noting the differences that would be apparent seasonally. Mr. Loy pointed out that the differences that occur seasonally would definitely affect results; consequently, resurveying in the same season is the best way to cancel out the effects of seasonal changes and obtain consistent results. There was some discussion on InSAR data complications relating to agricultural activities such as leveling.

## **6. Hydrogeologic Investigation Update**

Mr. Loy provided a brief overview of the Hydrogeologic Investigation report currently underway. He reported that due to staff illness, completion of the report has been somewhat delayed. He noted that the report was intended to identify data gaps in the hydrogeologic model and help structure a work plan which could be used to support developing future grant applications. He noted that the key elements include the Shallow Groundwater Monitoring Network, including the nexus between shallow groundwater and Groundwater Dependent Ecosystems, as well as the looming issue of groundwater and surface water interactions; the Water Quality Monitoring Network expansion; the Surface Water Monitoring Network expansion, including some stream gauging; Land Subsidence Benchmarking, and Investigation of the Subbasin Western Boundary. Mr. Loy indicated that he hoped to have the report complete and available for review and discussion at the Joint TAC's August meeting.

Mr. King inquired about water quality work pertaining to arsenic, iron, and manganese near the Sutter Buttes and asked Mr. Loy to consider those for possible inclusion.

## **7. Well Monitoring Pilot Project Update**

Katie Klug of Davids Engineering gave a brief update on phase one and phase two for the Well Monitoring Pilot Program, stating this is a voluntary, non-regulatory program funded by the GSP grant.

### **Proceedings/Discussion:**

Ms. Klug stated that phase one included four sites, installed in 2021. Phase two added twelve additional sites, installed in May and June 2022. Although all sites are currently in Colusa County, locations in both Glenn and Colusa Counties would be considered if the program expands. She stated that data will be collected through December 2024, and includes well flow rate, volume pumped, and groundwater level at each well. Individual well owners can access data for their own wells through a web-based portal, and GSA staff can access all data, which will be used to generate reports.

Mr. Bills asked if ongoing DWR monitoring data was also being included in the water level data collection, and Ms. Klug noted the monitoring network for the subbasin consists of 48 wells and includes wells monitored by DWR.

Mr. King mentioned that the cost to install this program across the entire subbasin had been estimated at about \$18 million. Ms. Klug clarified that was a very rough estimate that was determined by multiplying the cost of equipment and installation at each site (approximately \$7,000) by the estimated 2,600 ag wells in the subbasin.

## **8. Discussion of 2022/2023 Grant Application**

Grant Davids provided an overview of the 2022/2023 SGMA grant funding opportunity, noting that the second solicitation is scheduled to open in October 2022, with approximately \$200 million total available to medium and high priority basins. Only one application per subbasin will be funded, with grants capped at \$20 million per application. Additionally, projects must be able to be completed with the grant's 3-year time frame. Mr. Davids stated that the purpose of today's item was to begin discussions on importance and prioritization of projects in order to develop a project list that can be brought back to the CGA and GGA boards for recommendation by September or October.

In response to a comment by Mr. King, discussion followed regarding whether all projects should be run through the GSAs or led by individual project proponents. While the GSAs will coordinate the grant applications, Ms. Carter stated that the GSAs do not have the ability to manage all projects, and the agencies should instead coordinate activities and projects. Mr. Brandon Davison (DWR) stated that the group should refer to the grant guidelines regarding project eligibility. In response to questions, Mr. Davison responded that projects that are shovel-ready or have greater planning completed will score higher than projects in early planning stages. He also noted that DWR may choose to limit funding for some projects if certain project components are not consistent with GSP or appropriate for grant funding. Finally, he pointed out that projects within or benefitting severely disadvantaged communities will receive higher scores. Overall, he recommended that project applications be well-planned and consistent with GSPs and the guidelines.

Mr. Davids reviewed the various types of projects and activities that might be considered for grant funding, including: support for ongoing development and implementation of Projects and Management Actions (PMAs); support of recharge project implementation; addressing critical data gaps identified in the GSP; updating and improving analytic tools needed to support groundwater management and 5-year GSP updates; supporting interbasin coordination; and addressing GSP deficiencies that may be noted from DWR or others.

Additional discussion followed regarding implementation of recharge projects, and the group agreed that in-lieu recharge and the Ephemeral Stream recharge project should receive a higher priority. Discussion then focused on the potential for continued dry conditions, and it was agreed to continue this discussion at future meetings with the intent of possibly creating a drought response plan that could give farmers and the community an opportunity to plan for potential reductions in extractions. Mr. Bills noted that a conservation education program could assist with early voluntary reductions.

Ms. Carter and Mr. Davids requested that the group review the PMAs and if possible, provide a status update on planning and engineering. Mr. Davids also suggested the committee members review projects for prioritization and provide a rating of A-B-C, with "A" being higher priority, "C" being lower priority, for each project for discussion at the next meeting. It was requested to send comments to GSA staff.

## **9. Drought Update**

Ms. Carter reported that, in Colusa County, 22 homeowners were being delivered water, and another six applications were being reviewed to determine if bowls could be lowered, if a tank was needed, or the well was dry.

Ms. Hunter reported on behalf of Glenn County that since 2021 a total of 361 well incident reports had been received through the County's reporting system, with 236 of those reported to be dry. She stated that a variety of programs were available for assistance, including a water tank/water hauling and drinking water delivery program and municipal supply expansion projects. Nearly \$23 million through the Small Community Drought Relief Program and \$800,000 through the Urban and Multi-benefit Drought Relief Program have been received by agencies in the County. She announced the Drought Task Force meeting is scheduled for August 11 and the well permit moratorium had been extended for up to one year and is set to expire June 22, 2023.

## **10. Member Reports and Comments**

No member reports or comments were heard.

## **11. Next Meeting: August 12, 2022**

The meeting was adjourned at 3:17 p.m.

# Staff Report

**To:** CGA-GGA Joint TAC

**Agenda Item:** 4. Joint TAC Meeting Schedule for Remainder of 2022

**Date:** August 12, 2022

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## Background

The 2022 meeting schedule was discussed at the March 11, 2022 meeting. Based on comments received at that meeting, and the anticipated work to be completed in connection with preparing for the upcoming grant application, staff prepared and presented a proposed meeting schedule for the TACs' consideration at the July 8, 2022 meeting.

After discussion, the CGA TAC approved the following schedule:

- August 12, 2022
- September 9, 2022
- October 14, 2022
- No meeting in November 2022
- December 9, 2022

It was further noted that additional meetings could be called if necessary, or meetings could be cancelled if they are not needed.

Due to lack of a quorum, the GGA was not able to approve the meeting schedule.

## Recommendation

GGA Action Only: Approve the meeting schedule for the remainder of 2022.

## Attachments

- None

## Staff Report

**To:** CGA-GGA Joint TAC

**Agenda Item:** 5. Discussion of 2022/2023 Grant Application/Project Prioritization

**Date:** August 12, 2022

### Background

DWR is administering the Sustainable Groundwater Management (SGM) Grant Program Sustainable Groundwater Management Act (SGMA) Implementation funding solicitation using funds authorized by the California Budget Act of 2021 (Stats. 2021, ch. 240, § 80) and the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68). The program is summarized below:

- Anticipated Opening Date: October 2022
- Period of Performance: 3 years
- Expected Award Announcement: July 2023
- Agreements executed: September/November 2023
- Total Est. Funding Available: \$202,500,000, from General Fund and Proposition 68
- Estimated amount per award: \$1,000,000 to \$20,000,000
- Description: DWR will solicit proposals to award funding through a competitive application basis for tasks and activities that help the basins reach sustainability through investments in groundwater recharge and/or projects that prevent or clean up contamination of a groundwater that serves as a source of drinking water. Tasks and activities can also include updating/revising/modifying a GSP(s).
- Work Allowed: Planning & Implementation Projects.
- **Only one application will be accepted per basin.**
- No match funding required. Funding is provided in arrears as reimbursement, quarterly invoices.

As this opportunity draws nearer, it is critical that the CGA and GGA coordinate on a single application for the Colusa Subbasin. The CGA and GGA have directed their respective TACs to coordinate through the Joint TAC to review and recommend a prioritized list of GSP Implementation Studies and/or PMAs to include in the grant application. The Colusa Subbasin GSP Projects and Management Actions (PMAs) (planned, ongoing, and potential) should be reviewed, along with any new potential PMAs. To assist in this effort, Davids Engineering has compiled a list of projects, management actions and studies for the Colusa Subbasin. Each item includes a project description, estimated cost, and benefit, as well as a column for items to be ranked.

More information about the grant program can be found on DWR's website at:  
<https://water.ca.gov/work-with-us/grants-and-loans/sustainable-groundwater>

## Recommendation

Review the project list compiled by Davids Engineering and rank each project by priority (i.e., A for highest priority, B for medium priority, C for lowest priority); review and compile project rankings, and hold discussion to begin prioritizing studies and PMAs to recommend for inclusion in the SGM grant application.

## Attachments

- SGMA Round 2 Grant Funding Application Project List spreadsheet

Please use zoom function to read electronically.

Table 1. SGMA Implementation Round 2 Grant Funding Application Project List

\* Information adapted from Tables 6-2, 6-3, and 7-1 of the Colusa Subbasin GSP.

Prioritization (Scale of 1-3, 1: low priority, 3: high priority)	Project Management Action, or GSP Study	Planned, Ongoing, or Potential	Status as of 2022	Project & Management Action or GSP Study Name	Project & Management Action Type	Proponent	Brief Description	Sustainability Indicators Expected to Directly Benefit					Benefit Area (e.g., subbasin-wide, district, localized)	Estimated Capital Cost (\$ for Planning/Design/Construction)	Estimated Annual/O&M Cost (Average \$/Year)	Estimated Benefit (Average Acre-Feet/Year)	Benefits in Areas of Concern (emphasis on Groundwater Levels and Land Subsidence)	Funding Eligibility	Funding Eligibility Notes	Cost Sharing Potential	Approximate Time to Completion (Within Grant Timeline)	
								Groundwater Levels	Groundwater Storage	Surface Water Depletion	Land Subsidence	Water Quality										
Project	Project	Planned	Planned (no change in status noted)	Colusa County Water District (CCWD) In-Lieu Groundwater Recharge	In-lieu Groundwater Recharge	CCWD	CCWD will utilize 30 taf of additional surface water for irrigation in all years but Shasta Critical years for in-lieu recharge. The additional surface water will be made available through full use of the district's existing Central Valley Project (CVP) contract and annual and multi-year water purchase and transfer agreements. Additional surface water deliveries are estimated to be 27 taf/yr, enabling reduction of groundwater pumping by a like amount.	X	X	X	X			\$100,000	\$2,000,000	27,000	Yes	Yes	Project development only, no purchasing water		1-3 years (Program implementation anticipated in 2023, see GSP Table 6-5)	
Project	Project	Planned	Planned (no change in status noted)	Colusa Drain MWC (CDMWC) In-Lieu Groundwater Recharge	In-lieu Groundwater Recharge	CDMWC	CDMWC diverters use both ground and surface water because Colusa Drain supplies are insufficient to satisfy all irrigation requirements. This project would provide additional surface supplies averaging approximately 28 taf/yr in the Drain allowing CDMWC diverters to increase their diversions of surface water to provide in-lieu groundwater recharge of a like amount.	X	X	X	X			\$100,000	\$1,700,000	28,000	Yes	Yes	Project development only, no purchasing water		1-2 years (Program operation anticipated in 2022, see GSP Table 6-8)	
Project	Project	Planned	Planning for expansion in progress (recharge occurred in fall/winter 2021)	Subbasin Multi-Benefit Groundwater Recharge	Direct Groundwater Recharge	CGA, GGA and TNC	The Nature Conservancy (TNC) is partnering with entities for an on-farm, multi-benefit groundwater recharge incentive program. The pilot program was initiated in Colusa County in 2018 and concluded in the spring of 2021, with plans to expand and continue into the future. DWR is a partner in the Subbasin Multi-Benefit Groundwater Recharge project as it moves into the expanded program.	X	X	X	X			\$4,000 per site	\$3,000 per site for site management	5,200	Potentially	Yes	Project development only, no purchasing water		1-3 years (Program expansion anticipated in 2022/2023 if deemed appropriate, see GSP Table 6-13)	
Project	Project	Planned	Active planning in progress	Orland-Artois Water District (OAWD) Land Annexation and Groundwater Recharge	Direct and In-lieu Groundwater Recharge	OAWD	OAWD is planning to annex approximately 12,000 acres of groundwater-dependent agricultural lands. Additional direct recharge may be considered on suitable annexed lands. The project is an area where groundwater levels have been in decline in recent years. It is estimated that a long-term average of approximately 23 taf/yr of surface water would be available, reducing groundwater pumping by approximately 23 taf/yr.	X	X	X	X			\$20,000,000	\$2,630,000	22,500	Yes	Yes	Project development only, no purchasing water		3-5 years (Program operation anticipated in 2025, see GSP Table 6-15)	
Project	Project	Planned	Active implementation (project is funded by existing P&G grant)	Sycamore Slough Groundwater Recharge Pilot Project	Direct Groundwater Recharge	Landowner	Proctor and Cambie (P&C) and Davis Ranches have entered into an agreement to implement a 10-year groundwater recharge pilot project. A 66-acre field on Davis Ranches will receive surface water for groundwater recharge and provide habitat for migrating shorebirds. Water would be diverted from the Sacramento River during fall/winter months using existing riparian rights or would be available from settlement contract supplies (should the project begin before November 1). An expansion of the project is planned for recharge and revegetation in the neighboring Sycamore and Dry Sloughs.	X	X	X	X			\$28,000	\$26,000	500	No	N/A	Project already funded through P&G grant		9 years (existing P&G grant duration 10 years, see GSP Table 6-18)	
Project	Project	Ongoing	Ongoing, pending extension (no change in status noted)	Reclamation District 108 (RD108) and Colusa County Water District (CCWD) Agreement for Five-Year In-Lieu Groundwater Recharge Project	In-lieu Groundwater Recharge	RD108 and CCWD	CCWD (and Dunningan Water District [DWD]) purchases surface water from RD108 for distribution within its service area. The agreement expires in 2022. This project supplies additional surface water to CCWD (and DWD) that provides in-lieu recharge.	X	X	X	X			not available	not available	8,000	Yes	No	Purchasing and trading water is ineligible		Ongoing (5-year agreement ended 2022, extension pending)	
Project	Project	Ongoing	Ongoing (no change in status noted)	Glenn-Colusa Irrigation District (GCID) Strategic Winter Water Use for Groundwater Recharge and Multiple Benefits	Direct and In-lieu Groundwater Recharge	GCID	GCID holds a water right for winter water. This project will increase the groundwater recharge and habitat enhancement benefits of winter water use by increasing use for rice straw decomposition, irrigation, and frost control provided that certain constraints can be alleviated.	X	X	X				not available	not available	not available	No	Yes	Project development only, no purchasing water		Ongoing (since 2021)	
Project	Project	Ongoing	Ongoing (no change in status noted)	Sycamore Marsh Farm Direct Recharge Project	Direct Groundwater Recharge	Landowner	Sycamore Marsh Farm is developing a groundwater recharge plan to store groundwater. The plan provides for 205 acres of year-round recharge basins and 163 additional acres of winter recharge areas.	X	X	X	X			not available	not available	not available	No	Yes	Project development only, no purchasing water		Ongoing (since 2020)	
Project	Project	Ongoing	Ongoing (no change in status noted)	Glenn-Colusa Irrigation District Expansion of In-Basin Program for In-lieu Groundwater Recharge	In-lieu Groundwater Recharge	GCID	GCID has developed arrangements to supply district surface water to neighboring non-district agricultural lands that primarily use groundwater. These temporary arrangements expired in 2020. There is interest in continuing and expanding this in-basin surface water use for in-lieu groundwater recharge. Supplies would potentially be available only in Shasta Non-Critical years.	X	X	X	X			not available	not available	not available	Yes	Yes	Project development only, no purchasing water		Ongoing (since 2021)	
Project	Project	Ongoing	Ongoing (no change in status noted)	Orland Unit Water Users Association (OUWUA) Irrigation Modernization for Increased Surface Water Delivery and Reduced Groundwater Pumping	In-lieu Groundwater Recharge	OUWUA	Modernization of OUWUA southside system for more reliable and flexible farm deliveries that will provide incentive for growers to use more surface water and less groundwater.	X	X	X	X			not available	not available	not available	Yes	Yes			Ongoing	
Management Action	Management Action	Ongoing	Ongoing	Urban Water Conservation in Willows	Management Action	California Water Service - Willow District	This project includes urban water conservation measures through water waste prevention ordinances, metering, conservation pricing, public education, and outreach programs to assess and manage distribution system real loss, water conservation program coordination and staffing support, and other demand management measures.	X	X	X				not available	not available		2	No	Yes			Ongoing (since 2016)
Project	Project	Potential	Potential (no change in status noted)	Glenn-Colusa Irrigation District In-lieu Groundwater Recharge	In-lieu Groundwater Recharge	GCID	GCID will investigate, develop, and implement measures to incentivize additional use of surface water supplied by GCID, which will provide in-lieu recharge through reduced groundwater pumping.	X	X	X	X			not available	not available	not available	No	Yes				Unknown (estimated 3-5 years)
Project	Project	Potential	Potential (no change in status noted)	Westside Streams Diversion for Direct or In-lieu Groundwater Recharge	Direct and In-lieu Groundwater Recharge	CGA and GGA	A portion of western ephemeral stream flows could be diverted for in-lieu or direct groundwater recharge.	X	X	X	X			not available	not available	Up to 1,000-16,000 AF/yr, depending on scale of implementation (Up to 10 cfs-100 cfs captured Dec-Jun, see GSP table 6-30)	Potentially	Potentially	Project planning is eligible, but complete project is unlikely to be implemented within the grant timeline		Unknown (estimated 5+ years, especially if water rights application required)	
Project	Project	Potential	Potential (no change in status noted)	Sites Reservoir	Direct and In-lieu Groundwater Recharge	Sites Project Authority	The Sites Project is a new off-stream storage facility that is currently in development. Depending on project operation and yield, there is potential for groundwater benefits to accrue to the Subbasin from Sites Reservoir.	X	X	X	X			not available	not available	not available	Yes	N/A	Project timeline exceeds grant timeline		5+ years	
Project	Project	Potential	Potential (no change in status noted)	Delevan Pipeline Colusa Basin Drainage Canal System (Colusa Drain) Intertie	Direct and In-lieu Groundwater Recharge	Interested Stakeholder	Intertie between proposed Delevan Pipeline component of the Sites Reservoir Project and the Colusa Drain, providing a connection to downstream water users, and providing protection for the ecosystems, and earthquake resilience.	X	X	X	X			not available	not available	not available	Yes	N/A	Project timeline exceeds grant timeline		5+ years	
Project	Project	Potential	Potential (no change in status noted)	Orland Unit Water Users Association (OUWUA) Flood Water Conveyance	Direct Groundwater Recharge	OUWUA	Divert Stony Creek water at OUWUA's south diversion and convey it to various locations for direct recharge within the OUWUA service area.	X	X	X				not available	not available	not available	Yes	Potentially	Project planning is eligible; if water rights permitting is required this project is unlikely to be implemented within the grant timeline		Unknown (estimated 5+ years, especially if water rights application required)	
Project	Project	Potential	Potential (no change in status noted)	Orland-Artois Water District (OAWD) Direct Groundwater Recharge	Direct Groundwater Recharge	OAWD	OAWD would directly recharge groundwater. A pilot project was conducted in 2017.	X	X	X				not available	not available	not available	Yes	Yes	Project development only, no purchasing water		Unknown (estimated 3-5 years)	
Project	Project	Potential	Potential (no change in status noted)	Sycamore Slough Colusa Basin-Drain Multi-Benefit Recharge Project	Direct Groundwater Recharge	Landowner	Restoration of portions of Sycamore Slough would support diversion of winter flows from the Colusa Drain for recharge and restoration.	X	X	X				not available	not available	not available	Potentially	Yes	Project development only, no purchasing water		Unknown (estimated 1-3 years)	
Project	Project	Potential	Further concept development (proof-of-concept study in 2021)	Tehama-Colusa Canal Trickle Flow to Ephemeral Streams	Direct Groundwater Recharge	RD108	Operate Tehama-Colusa Canal (TCC) existing gates for discharge into ephemeral streams at a rate where they do not flow out of the Subbasin but recharge the groundwater system. Further concept development has occurred, with identification of potential streams, water sources, and operating strategies. Potential discharge locations have been identified with CCWD and TCCA. Coordination has also occurred with landowners to identify potential project monitoring and funding opportunities. In 2021, a proof-of-concept test of the trickle flow project and benefits was conducted when a portion of the Tehama-Colusa Canal was dewatered.	X	X	X				not available	not available	not available	Potentially	Yes	Project development only, no purchasing water		Estimated 1-2 years (implementation and monitoring during 1-2 dewatering periods)	
Project	Project	Potential	Potential (no change in status noted)	Enhanced Infiltration of Precipitation on Agricultural Lands	Direct Groundwater Recharge	CGA and GGA	Develop and adoption of on-farm cultural practices to reduce precipitation runoff and increase infiltration, which would result in increased storage of precipitation in the crop root zone, thereby reducing irrigation water requirements and achieving some direct groundwater recharge.	X	X	X				not available	not available	not available	Potentially	Yes			Unknown (estimated 1-3 years)	
Project	Project	Potential	Potential (no change in status noted)	Subbasin Flood-MAR	Direct Groundwater Recharge	CGA and GGA	The CGA and GGA would investigate, develop, and implement a program to divert flood waters within the Subbasin, when available, for spreading across agricultural lands for direct groundwater recharge.	X	X	X				not available	not available	not available	Potentially	Yes	Project development only, no purchasing water		Unknown (estimated 1-3 years)	

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Table 1. SGMA Implementation Round 2 Grant Funding Application Project List

\* Information adapted from Tables 6-2, 6-3, and 7-1 of the Colusa Subbasin GSP.

Prioritization (Scale of 1-3, 1: low priority, 3: high priority)	Project Management Action, or GSP Study	Planned, Ongoing, or Potential	Status as of 2022	Project & Management Action or GSP Study Name	Project & Management Action Type	Proponent	Brief Description	Sustainability Indicators Expected to Directly Benefit					Benefit Area (e.g., subbasin-wide, district, localized)	Estimated Capital Cost (\$ for Planning/Design/Construction)	Estimated Annual/O&M Cost (Average \$/Year)	Estimated Benefit (Average Acre-Foot/Year)	Benefits in Areas of Concern (emphasis on Groundwater Levels and Land Subsidence)	Funding Eligibility	Funding Eligibility Notes	Cost Sharing Potential	Approximate Time to Completion (Within Grant Timeline)	
								Groundwater Levels	Groundwater Storage	Surface Water Depletion	Land Subsidence	Water Quality										
	Project	Potential	Potential (no change in status noted)	Reclamation District 108 "Boards In" Program	Direct Groundwater Recharge	RD108	RD108 would institute a voluntary or financially incentivized program in which landowners leave spill boards in place during the winter to capture rainfall and hold it on the fields for recharge.	X	X	X				Scalable (subbasin-wide or localized, depending on extent)	not available	not available	1,800	Yes	Yes		Estimated 1-2 years (implementation and monitoring during at least one off-season)	
	Project	Potential	Potential (no change in status noted)	Colusa County Public Water System Water Treatment Plant	In-lieu Groundwater Recharge	Interested Stakeholder	Construct a water treatment plant on the Sacramento River between Colusa and Grimes to provide treated surface water to public water supply systems in Colusa and possibly Sutter and Yolo Counties.	X	X	X				localized	not available	not available	not available	Potentially	N/A	Project timeline exceeds grant timeline	5+ years	
	Project	Potential	Potential (no change in status noted)	Glenn-Colusa Irrigation District Water Transfers to Tehama-Colusa Canal Authority (TCCA) CVP Contractors	In-lieu Groundwater Recharge	GCID	Evaluate potential for transferring water to CVP contractors served by the TCC for in-lieu groundwater recharge.	X	X	X				district	not available	not available	not available	Potentially	No	Ineligible if considered a water trading program	Unknown (estimated 3-5 years)	
	Project	Potential	Potential (no change in status noted)	Subbasin In-lieu Recharge & Banking Program	In-lieu Groundwater Recharge	South Valley Water Resources Authority	Incentivize taking available contract surface water in-lieu of pumping groundwater, providing dedicated contribution to local groundwater sustainability, with a portion available to San Joaquin Valley partners.	X	X	X	X	X		Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Potentially	Yes	Project development only, no purchasing water and potentially no direct subsidies	Yes (potentially subsidized by South Valley, districts)	Unknown (estimated 3-5 years)
	Project	Potential	Potential (no change in status noted)	Sycamore Marsh Farm In-lieu Recharge Project	In-lieu Groundwater Recharge	Landowner	Sycamore Marsh Farm is developing an in-lieu groundwater recharge plan, and could partner with additional lands in the CDMWC, allowing for diversion of surface water from CDMWC.	X	X	X	X	X		localized	not available	not available	not available	No	Yes	Project development only	Unknown (estimated 3-5 years)	
	Project	Potential	Potential (no change in status noted)	Westside Off-stream Reservoir and In-lieu Groundwater Recharge	In-lieu Groundwater Recharge	TCCA Contractors	Construct off-stream surface reservoirs along the western edge of the Subbasin and up-slope from the TCC to divert surplus Sacramento River flows (e.g., Section 215 water) into these storage reservoirs. Release stored water on demand to serve lands otherwise served by groundwater.	X	X	X				Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Potentially	Yes	Project development only, no purchasing water	Unknown (estimated 5+ years)	
	Management Action	Potential	Potential (no change in status noted)	Domestic Well Mitigation Program	Management Action	CGA and GGA	To mitigate the effects of domestic well stranding due to groundwater level decline, the CGA and GGA will investigate implementing domestic well mitigation programs in their respective portions of the Subbasin.	X						Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Yes	Potentially	Planning only; implementation exceeds grant timeline	Unknown (estimated 5+ years)	
	Management Action	Potential	Potential (no change in status noted)	Drought Contingency Planning for Urban Areas	Management Action	CGA, GGA, and cities (GSA member agencies)	The CGA and GGA will coordinate with M&I water suppliers dependent on groundwater to encourage drought planning consistent with the GSP.	X	X	X				Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Yes	Yes		Unknown (estimated 2-5 years)	
	Management Action	Potential	Potential (no change in status noted)	Long-Term Demand Management Action	Management Action	CGA and GGA	Demand management broadly refers to any water management activity that reduces the consumptive use of irrigation water. A demand management action is one that incentivizes, enables, or possibly requires water users to reduce their consumptive use.	X	X	X	X			Scalable (subbasin-wide or localized, depending on extent)	not available	Scalable	Scalable	Yes	Potentially	Planning only; implementation exceeds grant timeline	Unknown (estimated 5+ years)	
	Management Action	Potential	Potential (no change in status noted)	Strategic Short-Term Demand Management	Management Action	CGA and GGA	Develop a voluntary, flexible, short-run financial incentive program to alleviate impacts of drought in target areas through idling lands in drought-affected areas or in participating surface water-using portions of the Subbasin and conveying the saved surface water to the drought-affected areas.	X	X	X				Scalable (subbasin-wide or localized, depending on extent)	not available	Scalable	Scalable	Yes	Yes	Project development only, no direct financial incentives (payments)	Unknown (estimated 2-5 years)	
	Management Action	Potential	Potential (no change in status noted)	Well Abandonment Outreach and Funding Program	Management Action	CGA and GGA	Create a program providing outreach and education to landowners regarding the proper procedures for well decommissioning and abandonment, as well as funding sources. This effort would be accomplished by working with well permitting agencies.					X		subbasin-wide	not available	not available	not available	Potentially	Yes		Unknown (estimated 2-5 years)	
	Management Action	Potential	Potential (no change in status noted)	Preservation of Lands Favorable for Recharge	Management Action	CGA and GGA	Working cooperatively with the counties, investigate, design, and implement a program providing incentives to landowners with lands favorable to groundwater recharge to preserve them as agricultural or undeveloped lands on which groundwater recharge.	X	X	X				Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Potentially	Yes		Unknown (estimated 2-5 years)	
	Management Action	Potential	Potential (no change in status noted)	Review of County Well Permitting Ordinances	Management Action	CGA and GGA	Review and revise the county well permitting processes in the Subbasin to ensure that future well permitting aligns with the Subbasin sustainability goal and that future changes to well permitting are reviewed by the GSAs. The GSAs would work with the counties to review and suggest revisions to ordinances (these are outside of the jurisdiction of the GSAs).	X	X	X	X	X		subbasin-wide	not available	not available	not available	Yes	Yes		Unknown (estimated 2-5 years)	
	Management Action	Potential	Potential (no change in status noted)	Reduce Non-beneficial Evapotranspiration/Invasive Species Eradication	Reduce Groundwater Demand, Management Action	CGA and GGA	Removal of invasive, non-native plant species from riparian corridors and other areas to reduce evapotranspiration from shallow groundwater and support native ecosystem restoration.	X	X	X				Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Potentially	Yes		Unknown (estimated 2-5 years)	
	Management Action	Potential	Potential (no change in status noted)	Development of a Dedicated Network of Shallow Monitoring Wells for GDE Monitoring	Management Action, Closing Data Gaps	CGA and GGA	Evaluate and develop a dedicated network of shallow monitoring wells specifically planned and sited for monitoring conditions in areas of the Subbasin where GDEs are most likely to be found. This action is also expected to incorporate biological monitoring to inform the location of new shallow monitoring wells and monitor whether GDEs are being impacted by changing groundwater conditions.	X	X	X				subbasin-wide (data gaps study/monitoring)	not available	not available	not available	Potentially	Yes		Estimated 1-3 years	
	Project	Potential	Planning	Recharge Project	Direct Groundwater Recharge	CGA	Develop plans for a recharge project program, and/or complete the design/construction/implementation of one or more recharge projects identified through these planning efforts.	X	X	X	X			Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Potentially	Yes		Estimated 1-3 years	
	Project	Planned	Planning, RFP released, Proposals under review	Recharge Project	Direct Groundwater Recharge	GGA	Develop plans for a recharge project program, and/or complete the design/construction/implementation of one or more recharge projects identified through these planning efforts.	X	X	X	X			Scalable (subbasin-wide or localized, depending on extent)	not available	not available	not available	Potentially	Yes		Estimated 1-3 years	
	GSP Study	N/A	Further planning has occurred as part of the Hydrogeologic Investigation	Expand Shallow Groundwater Level Monitoring Network	GSP Study	CGA and GGA	To expand the shallow groundwater monitoring network, additional monitoring wells must be evaluated. This includes existing monitoring wells and suitable locations for the construction of new monitoring wells.	X	X	X				subbasin-wide (data gaps study/monitoring)	Scalable (~\$50,000 to evaluate existing wells, ~\$40,000 per well for new wells)	not available	not available	Potentially	Yes		Estimated 1-3 years	
	GSP Study	N/A	Further planning has occurred as part of the Hydrogeologic Investigation	Expand Water Quality Monitoring Network	GSP Study	CGA and GGA	This study will evaluate and expand additional groundwater quality monitoring wells.					X		subbasin-wide (data gaps study/monitoring)	Scalable (~\$50,000 for program development, ~\$50,000/yr for program administration, ~\$5,000/well for adding existing wells to program, ~\$120,000/well to construct new wells)	not available	not available	Potentially	Yes		Estimated 1-3 years	
	GSP Study	N/A	Further planning has occurred as part of the Hydrogeologic Investigation	Colusa Subbasin Western Boundary Investigation	GSP Study	CGA and GGA	This study will evaluate data to better understand the physical characteristics and groundwater conditions of the principal aquifer along the western margin of the Subbasin.							subbasin-wide (data gaps study/monitoring)	Estimated ~\$100,000	not available	not available	No	Yes		Estimated 1-3 years	
	GSP Study	N/A	Further planning has occurred as part of the Hydrogeologic Investigation	Westside Streams Monitoring Program	GSP Study	CGA and GGA	Streams originating from the Coastal Range west of the Subbasin will be evaluated for potential recharge volumes, water quality, and the interconnectedness of the streams and the groundwater system within the Subbasin.			X				subbasin-wide (data gaps study/monitoring)	Estimated ~\$225,000 for planning, installation, and monitoring (1 yr), ~\$105,000/yr annual monitoring	not available	not available	Potentially	Yes		Estimated 1-3 years	
	GSP Study	N/A	Further planning has occurred as part of the Hydrogeologic Investigation	Groundwater Well Monitoring Program	GSP Study	CGA and GGA	This pilot program will evaluate the costs and benefits of continuous groundwater monitoring data collection via six irrigation production wells. Program expansion throughout the Subbasin will be considered based on the data utility and costs of the pilot program.							subbasin-wide (data gaps study/monitoring)	Estimated ~\$265,000 for planning, installation, and monitoring (1 yr), ~\$130,000/yr annual monitoring	not available	not available	Potentially	Yes		Estimated 1-3 years	
	GSP Study	N/A	Potential (no change in status noted)	Groundwater Financial Incentives Investigation	GSP Study	CGA and GGA	This analysis will quantify the total costs of groundwater use and switching to surface water. The analysis will also identify grower financial incentives for in-lieu recharge and options for structuring those incentives.							subbasin-wide	Estimated ~\$160,000	not available	not available	Potentially	Yes		Estimated 1-3 years	
	GSP Study	N/A	Potential (no change in status noted)	CV2SimFG-Colusa Model Updates and Enhancement	GSP Study	CGA and GGA	This program will implement the periodic model data updates necessary to adequately represent near-term and future conditions within the Subbasin, and to support annual and five-year periodic GSP reporting to the DWR.							subbasin-wide	Estimated ~\$225,000	not available	not available	Potentially	Yes		Estimated 6-12 months	
	GSP Study	N/A	Potential (no change in status noted)	Well Inventory Program	GSP Study	CGA and GGA	This program will inventory the estimated 20% of groundwater wells unaccounted for within the Subbasin, and would seek to identify wells that are no longer active.							subbasin-wide	Estimated ~\$300,000 for first five years (planning, development, implementation), ~\$20,000/yr annual updates thereafter	not available	not available	Potentially	Yes		Estimated 1-3 years	

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Prioritization (Scale of 1-3, 1: low priority, 3: high priority)	Project Management Action, or GSP Study	Planned, Ongoing, or Potential	Status as of 2022	Project & Management Action or GSP Study Name	Project & Management Action Type	Proponent	Brief Description	Sustainability Indicators Expected to Directly Benefit					Benefit Area (e.g., subbasin-wide, district, localized)	Estimated Capital Cost (\$ for Planning/Design/Construction)	Estimated Annual/O&M Cost (Average \$/Year)	Estimated Benefit (Average Acre-Feet/Year)	Benefits in Areas of Concern (emphasis on Groundwater Levels and Land Subsidence)	Funding Eligibility	Funding Eligibility Notes	Cost Sharing Potential	Approximate Time to Completion (Within Grant Timeline)
								Groundwater Levels	Groundwater Storage	Surface Water Depletion	Land Subsidence	Water Quality									
	GSP Study	N/A	Potential (no change in status noted)	Well Registration Program	GSP Study	CGA and GGA	This study will evaluate the potential of a program for landowners to inventory their well data. This will complement the well inventory program.						subbasin-wide	Estimated ~\$180,000 for first two years (planning, development, outreach), ~\$120,000 for next three years (compile data, continue outreach), ~\$15,000/yr annual updates thereafter	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Study	N/A	Potential (no change in status noted)	Increasing GSA Involvement in County Well Permitting and Land Use Planning	GSP Study	CGA and GGA	CGA and GGA will explore options for allowing GSA input to the counties' well permitting processes and land use planning. The objective of GSA input would be to ensure that wells are permitted and land uses are planned in a manner consistent with sustainable groundwater management according to the GSP.	X	X	X	X	X	subbasin-wide	Estimated ~\$150,000 for first two years (planning, investigation, coordination, standards), ~\$15,000/yr annual updates thereafter	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Study	N/A	Potential (no change in status noted)	GSA Coordination with Water Quality Coalitions and Regulatory Agencies	GSP Study	CGA and GGA	GSAs will coordinate with the various water quality coalitions, water stakeholders, and regulatory agencies regarding GSP and other regulatory program implementation. This will include helping to identify and address water quality problems across the Subbasin, including those affecting disadvantaged communities (DACs) and severely disadvantaged communities (SDACs), and consideration of opportunities to expand public water systems and consolidate small public systems to improve drinking water quality delivered to DACs and SDACs.					X	subbasin-wide	Estimated ~\$20,000/yr staff time for ongoing coordination	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Study	N/A	Potential (no change in status noted)	Evaluate Infrastructure Sensitivity to Subsidence	GSP Study	CGA and GGA	This study will evaluate the sensitivity of infrastructure in the Subbasin to potential subsidence rates.				X		subbasin-wide	not available	not available	not available	Yes	Yes			Estimated 1-3 years
	GSP Study	N/A	Potential (no change in status noted)	Participation in Interagency Drought Task Forces	GSP Study	CGA and GGA	The CGA and GGA should coordinate their responses to droughts with their respective county and state agency partners through existing Interagency Drought Task Forces established in each county by the Colusa and Glenn County Boards of Supervisors.	X	X	X	X	X	subbasin-wide	Part of GSAs' annual operating budget	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Study	N/A	Potential (no change in status noted)	Sutter Buttes Rampart Water Quality Interbasin Working Group	Interbasin Coordination	CGA and GGA	The CGA, GGA and the GSAs in the Butte, Sutter, Yolo, North Yuba and South Yuba Subbasins should participate in an interbasin working group focused on collaborative discussions, consensus-building and planning to address groundwater quality matters associated with the unique geology of the Sutter Buttes area.					X	subbasin-wide	Part of GSAs' annual operating budget	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Study	N/A	Potential (no change in status noted)	Sacramento Valley Subsidence Interbasin Working Group	Interbasin Coordination	CGA and GGA	The CGA and GGA should consider participating in a Sacramento Valley Subsidence Interbasin Working Group with DWR, the other GSAs in the Sacramento Valley and federal partners. The working group would provide a forum for collaborative discussions, consensus-building, and planning to address inelastic land subsidence in the Sacramento Valley.	X	X	X	X		subbasin-wide	Part of GSAs' annual operating budget	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Study	N/A	Planned	Sacramento Valley Interbasin Flow, Interconnected Surface Water Working Group	Interbasin Coordination	CGA and GGA	The CGA and GGA would participate in a the Interbasin Flow and Interconnected Surface Water Working Group with other GSAs in the Sacramento Valley (potentially together with DWR and federal partners). The working group would provide a forum for collaborative discussions, consensus-building, and planning to address interbasin flow and interconnected surface water in the Sacramento Valley.	X	X	X	X		subbasin-wide	not available	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Study	N/A	Planned	Other Inter-Basin Coordination Activities	Interbasin Coordination	CGA and GGA	The CGA and GGA would participate in other interbasin coordination activities that have yet to be determined. Interbasin coordination would occur with other GSAs in the Sacramento Valley, and potentially together with DWR and federal partners. Interbasin coordination efforts would provide a forum for collaborative discussions, consensus-building, and planning to address interbasin issues in the Sacramento Valley.	X	X	X	X	X	subbasin-wide	not available	not available	not available	Potentially	Yes			Estimated 1-3 years
	GSP Updates, Reporting	N/A	Potential (no change in status noted)	GSP Updates and/or Revisions	GSP Updates, Reporting	CGA and GGA	Complete updates and/or revisions to the GSP, particularly in response to comments and feedback from DWR (anticipated in 2023-2024).						subbasin-wide	Estimated \$150,000 to \$250,000	N/A	N/A	Potentially	Yes			Estimated 6-12 months
	GSP Updates, Reporting	N/A	Planned (annually)	GSP Annual Reports	GSP Updates, Reporting	CGA and GGA	Complete annual reports on GSP implementation activities (required to be prepared annually and submitted by April 1).						subbasin-wide	Estimated \$40,000-\$60,000	N/A	N/A	Potentially	Yes			Estimated 6 months, recurring annually
	GSP Updates, Reporting	N/A	Planned (at least every 5 years)	Periodic GSP Updates (At Least Every 5 Years)	GSP Updates, Reporting	CGA and GGA	Conduct periodic evaluations and updates to the Colusa Subbasin GSP, incorporating new information and data available since initial GSP development (required to be prepared and submitted at least once every five years).						subbasin-wide	Estimated \$150,000 to \$250,000	N/A	N/A	Potentially	Yes			Estimated 6-12 months, recurring
	GSP Updates, Reporting	N/A	Planned	Data Management System	GSP Updates, Reporting	CGA and GGA	Migrate all GSP-related data to a final DMS platform (solicit a qualified and preferred DMS developer, and contract with them to develop the DMS and migrate all data to the DMS).						subbasin-wide	Estimated \$150,000 to \$250,000	N/A	N/A	Potentially	Yes			Estimated 1-3 years

# Staff Report

**To:** CGA-GGA Joint TAC

**Agenda Item:** 6. Discussion of Integrated Regional Water Management Project Submittal

**Date:** August 12, 2022

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## Background

The NSV IRWM is soliciting for projects to be included in the NSV IRWM Plan (NSV IRWMP). The NSV IRWM spans a six-county area which includes Butte, Colusa, Glenn, Shasta, Sutter, and Tehama Counties. A grant funding opportunity for this region is due in February 2023 and may be a good fit for some of the Colusa Subbasin GSP projects. In order to be considered for IRWM funding, the projects must be included in an IRWMP. For the NSV IRWM, applications are submitted on an ongoing basis. The Technical Advisory Committee reviews the applications and makes a recommendation to the NSV IRWM Board as to whether the project should be included in the NSV IRWMP. The NSV IRWM Board approves projects to be added to the Plan. The deadline to submit project submittals in order to be considered for this round of funding is September 2, 2022.

The GGA Board discussed IRWM Project submittals on August 8, 2022 and was supportive of GGA staff coordinating with the CGA to submit projects to the IRWM for consideration to include in the NSV IRWMP.

Staff is interested in understanding if the Joint TAC has a preference of priority for project submittals.

The attached email provides additional details. The Project Submittal Form can be found on the NSV IRWM website at: <https://nsvwaterplan.org/mdocs-posts/nsv-irwm-project-submittal-form/>

## Recommendation

No action necessary.

## Attachments

- NSV IWRM Project Solicitation Email (8/1/22)
- Reference Project Prioritization Matrix from Item 5

## Lisa Hunter

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**From:** Lisa Hunter  
**Sent:** Tuesday, August 2, 2022 8:53 AM  
**Subject:** FW: Is your project looking for funding? Info on IRWM grant opportunity  
**Attachments:** Project\_submittal Form\_revision 3.2020\_7292022.doc; Accessible Implementation Grant Proposal Solicitation Package.pdf; Accessible Integrated Regional Water Management Grant Program Guidelines.pdf

Please see message below relating to the upcoming Integrated Regional Water Management (IRWM) grant funding opportunity. It's a great time to consider if you have a project that is or could be included in the IRWM Plan and would be a good fit for this round of funding.

Lisa Hunter  
Glenn County  
Water Resource Coordinator  
(530) 934-6540 (office)

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**From:** BCWater <[BCWaterFrontDeskHG@buttecounty.net](mailto:BCWaterFrontDeskHG@buttecounty.net)>  
**Sent:** Monday, August 1, 2022 11:06 AM  
**To:** BCWater <[BCWaterFrontDeskHG@buttecounty.net](mailto:BCWaterFrontDeskHG@buttecounty.net)>  
**Subject:** Is your project looking for funding? Info on IRWM grant opportunity

Good Morning,

The Department of Water Resources (DWR) has released the Proposition 1, Round 2 Proposal Solicitation Package (PSP) to fund IRWM projects. Up to \$1.2 Million is available in the Northern Sacramento Valley Integrated Regional Water Management (NSV IRWM) region and another \$1.1 million is available to the Mountain Counties Funding Area portion of the region. The NSV wants to know if your project is ready to receive funding. The application will be due February 1, 2023 and projects will be considered for inclusion in the funding application by the NSV TAC in September and by the NSV Board in October.

Please review the PSP and Guidelines (attached) to evaluate whether your project is a good fit for this funding opportunity. If you'd like to have it considered for funding by the NSV, please contact your County representative by **September 2, 2022** and provide a brief project description and estimated project budget. Eligible projects are listed in the Guidelines document on pages 11-13.

If your project is not yet included in the NSV IRWM Plan, please complete the attached application and send it to your County representative and to [cbuck@buttecounty.net](mailto:cbuck@buttecounty.net) by **September 2, 2022**. Reach out to your County rep if you have any questions.

The NSV TAC meets on September 21, 2022 and will be considering new projects to add to the Plan and projects to recommend to the NSV Board to include in the application for funding.

### County Representatives:

Christina Buck, Butte County; [cbuck@buttecounty.net](mailto:cbuck@buttecounty.net)  
Lisa Hunter, Glenn County; [lhunter@countyofglenn.net](mailto:lhunter@countyofglenn.net)  
Justin Jenson, Tehama County; [jjenson@tcpw.ca.gov](mailto:jjenson@tcpw.ca.gov)  
Vacant, Colusa County; contact [cbuck@buttecounty.net](mailto:cbuck@buttecounty.net)  
Guadalupe Rivera, Sutter County; [grivera@co.sutter.ca.us](mailto:grivera@co.sutter.ca.us)

Charleen Beard, Shasta County; [cbeard@co.shasta.ca.us](mailto:cbeard@co.shasta.ca.us)

Best,  
Christina Buck  
NSV IRWM TAC Chair

**Christina R. Buck, Ph.D.**

Assistant Director

Dept. of Water and Resource Conservation  
Butte County  
308 Nelson Avenue  
Oroville, CA 95965-3302  
Off: [530.552.3593](tel:530.552.3593)  
Cell: 530.864.6057  
[cbuck@buttecounty.net](mailto:cbuck@buttecounty.net)

# Staff Report

**To:** CGA-GGA Joint TAC

**Agenda Item:** 7. Drought Update

**Date:** August 12, 2022

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## Background

The ongoing drought and declining groundwater levels have created challenges in groundwater management for GSAs and other local agencies. The drought conditions have affected all beneficial groundwater users throughout the Colusa Subbasin.

Counties, GSAs, and others may share drought-related information including conditions, mitigation measures, pending actions, and similar topics to create a shared understanding of the impacts to the stakeholders in the Colusa Subbasin.

## Recommendation

No action necessary. Updates only.

## Attachments

- None