

Glenn Groundwater Authority

Groundwater Sustainability Agency

PO Box 351, Willows, CA 95988 | 530.934.6501

Board of Directors Meeting Materials

December 15, 2020 | 1:30 PM

LOCATION: Teleconference

Pursuant to Governor Newsom's Executive Order N-29-20 this meeting will be conducted by teleconference.

The meeting can be accessed via telephone at **+1 (786) 535-3211** or by computer, smartphone, or tablet at:

<https://global.gotomeeting.com/join/851466597>

Meeting Access Code: 851-466-597

1. CALL TO ORDER

The Chairperson will call the meeting to order.

2. ROLL CALL

Roll call will be conducted.

3. APPROVAL OF MINUTES

- a. *Approval of meeting minutes from November 9, 2020.

Draft meeting minutes are attached.

Attachments

- Meeting minutes from November 9, 2020

Glenn Groundwater Authority

Groundwater Sustainability Agency

PO Box 351, Willows, CA 95988 | 530.934.6501

Meeting Minutes

Glenn Groundwater Authority Board of Directors

November 9, 2020 | 1:30 pm

LOCATION: Teleconference

Pursuant to Governor Newsom's Executive Orders N-29-20 this meeting was conducted by teleconference. The meeting was accessible via telephone, computer, smartphone or tablet.

Director Members Present:	Alternate/2 nd Alternate Directors	Agency Representing:
X John Viegas	Vince Minto	County of Glenn
X Bruce Roundy (1:36- audio present)	Pete Carr	City of Orland
	Ed Vonasek (2 nd)	City of Orland
X Gary Hansen	X Evan Markey	City of Willows
George Nerli	Leslie Nerli	Glide Water District
John Amaro	X Thad Bettner	Glenn-Colusa Irrigation District
X Charles Schonauer	X Emil Cavagnolo	Orland-Artois Water District
	Andrea Jones (2 nd)	Orland-Artois Water District
X Randy Hansen	Wade Danley	Kanawha Water District
	Michael Alves (2 nd)	Kanawha Water District
X Mark Lohse	Seth Fiack	Monroeville Water District
Gary Enos	Lance Boyd	Princeton-Codora-Glenn Irrigation District/ Provident Irrigation District

Others in attendance:

Lisa Hunter, GGA/Glenn County; Valerie Kincaid, GGA Counsel; Brandon Davison, DWR; Don Rust, Glenn County Planning and Community Development; Jaime Lely; Dana Pressley; David Ceppos, Consensus and Collaboration Program; David Kehn, CalWater/GGA TAC; Richard Harriman, Northern California Environmental Defense Center; Jim Brobeck; Holly Reimers; Joshua Dowell; Mary Fahey, CGA

1. CALL TO ORDER

John Viegas, GGA Vice Chair, called the meeting to order at 1:30 pm.

2. ROLL CALL

Roll call was taken and indicated above. Lisa Hunter reviewed the remote meeting protocols.

3. APPROVAL OF MINUTES

- a. *Approval of meeting minutes from October 12, 2020.

The meeting minutes from October 12, 2020 were approved as presented.

Motion: Gary Hansen, Second: Charles Schonauer, Vote: Unanimous

Roll Call Vote

John Viegas: AYE

Gary Hansen: AYE

Charles Schonauer: AYE

Randy Hansen: AYE

Mark Lohse: AYE

4. PERIOD OF PUBLIC COMMENT

None.

5. STAFF UPDATES

Ms. Hunter indicated a Program Manger Report is included in the meeting packet. She highlighted the Golden State Risk Management Authority trainings and the *Water Markets, SGMA & California's First Open-Source Water Accounting and Trading Platform* webinar. She noted contact information and location transition tasks are continuing and the billing will be sent out soon for the self-bill parcels. The 2019/2020 annual audit will be taking place beginning with an introduction phone meeting on November 17. The audit will be conducted remotely this year. The Sustainable Groundwater Management Coordinator grant was submitted on October 15 by the Colusa County Resource Conservation District and review is now taking place. The Northern Sacramento Valley Inter-Basin Coordination group has met and is an important venue for staff level and consultant lead communications regarding coordination across basin boundaries and to identify and resolve potential issues throughout GSP development. The next meeting is December 1.

6. FINANCIAL REPORT

- a. *Review and accept Monthly Activities Report.
- b. *Review and consider approval of claims.

There was a motion to accept the Monthly Activities Report and approve the claims.

Motion: Charles Schonauer, Second: Bruce Roundy, Vote: Unanimous

Roll Call Vote

John Viegas: AYE

Bruce Roundy: AYE

Gary Hansen: AYE

Charles Schonauer: AYE

Randy Hansen: AYE

Mark Lohse: AYE

7. COLUSA SUBBASIN GROUNDWATER SUSTAINABILTY PLAN

- a. Receive update on Plan development and activities.
- b. Receive update on GSP Development Grants (Proposition 1 and Proposition 68).
- c. Receive update on Project Agreements.
- d. *Presentation and Discussion on the Proposed Colusa Subbasin Outreach Strategy and Upcoming Public Meetings.

Ms. Hunter stated the Davids Engineering memo provided updates on GSP development and activities. There are brief status updates included in the Program Manager Report on the GSP Development Grants and Project Agreements. She introduced Dave Ceppos, Consensus and Collaboration Program, who presented on the proposed Colusa Subbasin Outreach Strategy and upcoming public meetings.

Mr. Ceppos reviewed the outline of the presentation and noted that most recently, targeted outreach has been rather minimal, which was an intentional strategy to reduce "stakeholder fatigue" and maintain cost-effectiveness. He reviewed the GSP development schedule highlighting public outreach points with regards to GSP development milestones. The proposed future strategy includes maximizing public awareness and

beneficial user input to support board decision-making, to create a robust Administrative Record, all while creating cost and operational efficiency and effectiveness during the current COVID conditions. An additional near-term goal is to update the Communications and Engagement Plan to reflect these changes. Mr. Ceppos reviewed the traditional media strategy, as well as expansion into social media platforms, including Facebook and Twitter, and potentially Instagram and LinkedIn. The Administrative Record will be designed to capture Beneficial User input, maximize opportunities for input, prepare standing Board updates on input received, and ultimately be included as an Appendix in the final GSP.

There was a question regarding how inter-basin coordination will be included in the record. Mr. Ceppos noted there are requirements for inter-basin coordination which will be included in record. A comment was made on weighing the cost and benefit received to ensure efforts are efficient and economic. Discussion took place on a comment to potentially look into other platforms such as MeWe or Parler and suggestions to ensure posts show up in Facebook feeds. It was also clarified that “traditional media” includes print media such as local newspapers. Strategies can also be used to “boost” Facebook posts, which may require additional investment. A question was asked if the purpose is intended to be educational or to gather input or both? Mr. Ceppos stated it will likely be both. A posting calendar will help guide those decisions, which will eb and flow as different topics are highlighted. It was mentioned that member agency (e.g. City of Orland, City of Willows) social media can help get information out quickly and create enhanced networking. A comment was made that the Communications and Engagement Plan should address how input will be utilized in the GSP. It should document the input received and note how the GSA addressed the input in the GSP. A comment was made that in the past, word of mouth has been an important way to communicate including clubs, postings, school websites, post at the post office, and farm youth groups.

No opposition to proposed strategy was raised. Mr. Viegas asked if cost projections were available prior to moving forward. Mr. Ceppos noted the draft narrative of the strategy is being developed and cost estimates could be shared with the board.

There was a motion to approve the Colusa Subbasin Outreach Strategy and upcoming public meetings plan as presented pending a more comprehensive written plan which may need additional board action.

Motion: Chuck Schonauer, Second: Gary Hansen, Vote: Unanimous

Roll Call Vote

John Viegas: AYE

Bruce Roundy: AYE

Gary Hansen: AYE

Charles Schonauer: AYE

Randy Hansen: AYE

Mark Lohse: AYE

8. GOLDEN STATE RISK MANAGEMENT AUTHORITY BOARD OF DIRECTORS ELECTION

- a. *Consider nominating the Glenn Groundwater Authority as a candidate district for the election to serve on the Golden State Risk Management Authority Board of Directors for a two-year term beginning July 1, 2021.
- b. *Authorize the Program Manager to submit nomination notification to the Golden State Risk Management Authority.

Mr. Viegas introduced the item. There was currently no interest for an individual to serve on the Golden State Risk Management Authority Board of Directors. No action was taken and the items died due to lack of a motion.

9. *APPROVE 2021 MEETING SCHEDULE

Ms. Hunter reviewed the draft meeting scheduled and stated it is consistent with the current meeting schedule to meet the 2nd Monday of each month at 1:30 pm with the exception of a standing meeting conflict with a Northern California Water Association (NCWA) meeting. The schedule has been adjusted to accommodate that conflict. It seems likely that the teleconference option will remain in place for the next few months and a physical meeting location could be determined at a later date. Physical meeting room options mentioned in the past few months include the Planning and Community Development Services Agency conference room, the Glenn County Board of Supervisors Chambers, the Glenn-Colusa Irrigation District conference room, or the City of Willows, City Council Chambers. Valerie Kincaid mentioned this is the regular meeting schedule; however, board members should be prepared for special meetings as needed mid-2021 through GSP adoption. A motion was made to approve the 2021 meeting schedule.

Motion: Bruce Roundy, Second: Randy Hansen, Vote: Unanimous

Roll Call Vote

John Viegas: AYE

Bruce Roundy: AYE

Gary Hansen: AYE

Charles Schonauer: AYE

Randy Hansen: AYE

Mark Lohse: AYE

10. COMMITTEE UPDATES

- a. Executive Committee
 - i. CGA/GGA Joint Executive Committee
- b. Stakeholder Engagement Committee
- c. Technical Advisory Committee

Ms. Hunter noted the Executive Committee has not met since May and has nothing new to report; however, more regular meetings should be expected in the future. The Stakeholder Engagement Committee has not met and has nothing to report. The Technical Advisory Committee (TAC) met jointly with the CGA TAC on October 16, 2020. The consulting team provided a presentation and there was good discussion on a variety of topics, which are noted in the meeting packet. The board should expect more detailed information and recommendations to start coming from the TAC as GSP development continues. She encouraged the board members to review the TAC presentations that are posted on the website which will inform future decision-making. The next Joint CGA/GGA TAC is scheduled to meet November 13, 2020.

11. MEMBER REPORTS AND COMMENTS

Gary Hansen thanked Mr. Viegas for running the meeting. Mr. Schonauer mentioned the weather has been dry and expressed the need for rain.

12. NEXT MEETING

The next regular meeting is scheduled for December 15, 2020 at 1:30 pm.

13. ADJOURN

The meeting was adjourned at 2:54 pm.

DRAFT

4. PERIOD OF PUBLIC COMMENT

Members of the public are encouraged to address the GGA Board of Directors on items relevant to the GGA. Public comments are limited to no more than 5 minutes. No action may be taken on public comments.

5. STAFF UPDATES

The program manager will provide brief status updates. Reminders and/or clarifications may also be made at this time.

6. FINANCIAL REPORT

- a. *Review and accept Monthly Activities Report.
- b. *Review and consider approval of claims.

The Monthly Activities Report and Claims Summary are attached.

Attachments

- Monthly Activities Report
- Claims Summary

Monthly Activities Report

Glenn Groundwater Authority
 Monthly Activities Report
 October 2020

	Description	Amount
Beginning Balance		\$ 686,799.42
Revenue		
	PY DIRECT ASMTS 10/5/20	\$ 37.45
	PY DIRECT ASMTS 10/5/20	\$ 10.61
	PY DIRECT ASMTS 10/5/20	\$ 377.31
	CY SEC 1ST QTR INT 20-21	\$ 26.08
Total Revenue		\$ 451.45
Expenses		
	A-87 COST	\$ 220.75
Total Expenses		\$ 220.75
Ending Balance		\$ 687,030.12

Claims Summary

Glenn Groundwater Authority
Invoices to be paid
Meeting Date: December 15, 2020

Invoice Date	Invoice Number	Description	Amount
10/31/2020	1178.01-4247	Davids Engineering, Inc. (HCM/Water Budget)	\$ 2,630.50
10/31/2020	1178.03-4248	Davids Engineering, Inc. (GSP Development)	\$ 27,991.00
11/30/2020	1178.01-4283	Davids Engineering, Inc. (HCM/Water Budget)	\$ 3,030.25
11/30/2020	1178.03-4291	Davids Engineering, Inc. (GSP Development)	\$ 30,637.75
12/1/2020	1253	O'Laughlin & Paris LLP	\$ 595.00
Total			\$ 64,884.50

7. FISCAL YEAR 2019/2020 ANNUAL AUDIT

- a. Receive presentation of Draft *Glenn Groundwater Authority Groundwater Sustainability Agency Financial Statements and Supplementary Information Year Ended June 30, 2020*.

On June 15, 2020, the GGA Board approved the CliftonLarsonAllen LLP (CLA) Engagement Letter to provide services to complete the Fiscal Year 2019-2020 Annual Audit. Staff has coordinated with CLA staff to provide necessary documentation and clarification as needed. The draft audit report is attached. The highlighted portions of the Management's Discussion and Analysis section require staff input, which will be provided prior to finalizing the report. CLA staff will present an overview of the audit report and be available to answer any questions or receive input.

Attachments

- Draft *Glenn Groundwater Authority Groundwater Sustainability Agency Financial Statements and Supplementary Information Year Ended June 30, 2020*.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY**

**FINANCIAL STATEMENTS AND
SUPPLEMENTARY INFORMATION**

YEAR ENDED JUNE 30, 2020

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
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YEAR ENDED JUNE 30, 2020**

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**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
LIST OF DIRECTORS
YEAR ENDED JUNE 30, 2020**

NAME	AGENCY	POSITION
John Viegas	County of Glenn	Director
Bruce Roundy	City of Orland	Director
Gary Hansen	City of Willows	Director
George Nerli	Glide Water District	Director
John Amaro	Glenn-Colusa Irrigation District	Director
Charles Schonauer	Orland-Artois Water District	Director
Randy Hansen	Kanawha Water District	Director
Gary Enos	Princeton-Codora-Glenn Irrigation District/Provident Irrigation District	Director
Mark Lohse	Monroeville Water District	Director
Vince Minto	County of Glenn	Alternate
Pete Carr	City of Orland	Alternate
Evan Markey	Cal-Water Local Manager, City of Willows	Alternate
Leslie Nerli	Glide Water District	Alternate
Thaddeus Bettner	Glenn-Colusa Irrigation District	Alternate
Emil Cavagnolo	Orland-Artois Water District	Alternate
Wade Danley	Kanawha Water District	Alternate
Lance Boyd	Princeton-Codora-Glenn Irrigation District/Provident Irrigation District	Alternate
Seth Fiack	Monroeville Water District	Alternate
Ed Vonasek	City of Orland	2nd Alternate
Andrea Jones	Orland-Artois Water District	2nd Alternate
Michael Alves	Kanawha Water District	2nd Alternate



INDEPENDENT AUDITORS' REPORT

Board of Directors
Glenn Groundwater Authority
Groundwater Sustainability Agency
Willows, California

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities and the major fund, of the Glenn Groundwater Authority Groundwater Sustainability Agency (the Authority), as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and the major fund of the Authority, as of June 30, 2020, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and budgetary comparison schedule on pages 3 and 15 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated [DATE], 2020 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

Roseville, California
[DATE], 2020

REQUIRED SUPPLEMENTARY INFORMATION

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2020**

This section of Glenn Groundwater Authority Groundwater Sustainability Agency's (the Authority), annual financial report provides an overview of the Authority's financial activities for the fiscal year ended June 30, 2020. This section should be read in conjunction with the Authority's financial statements, which immediately follow this section.

FINANCIAL HIGHLIGHTS

Key financial highlights for the fiscal year include the following:

- The assets of the Authority exceeded its liabilities at June 30, 2020 by \$764,700.
- The Authority's total assets increased by \$405,741.

AUTHORITY HIGHLIGHTS

- Proposition 218 Property Related Fee process (Public Hearing and consideration of adoption of fee on July 8, 2019)
- Member agency contribution requirements ended this fiscal year (inter-governmental revenue)
- Groundwater Sustainability Plan (GSP) Projects in process
 - Hydrogeologic Conceptual Model and Water Budget Project
 - Request for Proposals process for remaining tasks for Colusa Subbasin GSP development
- Continuing obligations for agency business and public participation (Board meetings, public outreach events, coordination with neighboring agencies, etc)

OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the Authority's basic financial statements. The Authority's basic financial statements are comprised of three components, government - wide financial statements, fund financial statements, and notes to the basic financial statements. This report also includes additional required supplementary information in addition to the basic financial statements.

REQUIRED FINANCIAL STATEMENTS

Government-Wide Financial Statements are designed to provide readers with a broad overview of Authority finances, in a manner similar to a private-sector business.

The *Statements of Net Position* include information on the Authority's assets and liabilities and provide information about the nature and amounts of investments in resources (assets) and the obligations to Authority creditors (liabilities). Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2020**

REQUIRED FINANCIAL STATEMENTS (CONTINUED)

The *Statements of Activities* presents information showing how net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods (e.g., uncollected taxes and earned but unused vacation leave).

Both of these government-wide financial statements distinguish functions of the Authority that are principally supported by intergovernmental revenues (governmental activities). The governmental activities of the Authority are Groundwater Sustainability Agency activities in compliance with the Sustainable Groundwater Management Act and related groundwater sustainability activities. There are no business-type activities.

Fund Financial Statements are groupings of related accounts that are used to maintain control over resources that have been segregated for specific activities or objectives. The Authority, like other state and local governments, uses fund accounting to ensure and to demonstrate finance-related legal compliance. The Authority's fund is a *governmental fund*.

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However unlike the government-wide financial statements, governmental funds financial statements focus on near-term inflows and outflows of spendable resources, as well as of balances of spendable resources available at the end of the fiscal year. Such information may be useful in evaluating the Authority's near-term requirements. Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financing decisions. Both the governmental funds balance sheet and the governmental funds statement of revenues, expenditures, and changes in fund balances provide a reconciliation to facilitate comparison between governmental funds and governmental activities.

Notes to the Basic Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes to the basic financial statements can be found immediately following the basic financial statements.

Other Information

In addition to the basic financial statements and accompanying notes, this report presents certain required supplementary information concerning the Authority's budgetary comparative information for the general fund.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2020**

GOVERNMENT-WIDE FINANCIAL ANALYSIS

The *Statement of Net Position* provides information about the financial position of the Authority as a whole, including all assets and liabilities on the full accrual basis. Over time, increases or decreases in the Authority's net position may serve as one useful indicator of the Authority's overall financial position. In the case of the Authority, total assets exceeded liabilities by \$764,700 as of the close of the fiscal year. This amount is the total net position as of June 30, 2020.

AUTHORITY'S NET POSITION

	<u>2020</u>	<u>2019</u>	<u>\$ Change</u>	<u>% Change</u>
Assets				
Current assets	\$ 941,257	\$ 535,516	\$ 405,741	75.77%
Total assets	<u>941,257</u>	<u>535,516</u>	<u>405,741</u>	<u>75.77%</u>
Liabilities				
Current liabilities	176,557	58,148	118,409	203.63%
Total liabilities	<u>176,557</u>	<u>58,148</u>	<u>118,409</u>	<u>203.63%</u>
Net position				
Unrestricted	764,700	477,368	287,332	60.19%
Total net position	<u>\$ 764,700</u>	<u>\$ 477,368</u>	<u>\$ 287,332</u>	<u>60.19%</u>

The Authority's net position increased by \$287,330, primarily from **an increase in revenues.**

AUTHORITY'S CHANGES IN NET POSITION

	<u>2020</u>	<u>2019</u>	<u>\$ Change</u>	<u>% Change</u>
Program revenues				
Agency Contributions	\$ 140,514	\$ 386,548	\$ (246,034)	-63.65%
Intergovernmental Revenues	112,401	26,596	85,805	0.00%
Total program revenues	<u>252,915</u>	<u>413,144</u>	<u>(160,229)</u>	<u>-38.78%</u>
General revenues				
Interest Income	38,919	8,407	30,512	362.94%
Special Assessment	455,734	-	455,734	0.00%
Taxes	1,214			
Total general revenues	<u>495,867</u>	<u>8,407</u>	<u>487,460</u>	<u>5798.26%</u>
Total revenues	748,782	421,551	327,231	77.63%
Program expenses	<u>461,450</u>	<u>246,454</u>	<u>214,996</u>	<u>87.24%</u>
Change in net position	287,332	175,097	112,235	64.10%
Net position - beginning	<u>477,368</u>	<u>302,271</u>	<u>175,097</u>	<u>100.00%</u>
Net position - ending	<u>\$ 764,700</u>	<u>\$ 477,368</u>	<u>\$ 287,332</u>	<u>60.19%</u>

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2020**

The increase in special assessment is due to....The decrease in agency contributions is mostly attributable to agreed-upon member agency contributions and interest received. Expenses in the current year increased over the prior year due to increased Groundwater Sustainability Plan development tasks, increased administrative support, and increased professional services.

Government-Wide Financial Statements are presented on an “*economic resources*” measurement focus and on the accrual basis of accounting, which is similar to the accounting used by most private-sector companies. All of the current fiscal year’s revenues and expenses are taken into account regardless of when cash is received or paid.

BUDGETARY HIGHLIGHTS

Total expenditures were \$45,498 under budget. Special department expenses were underspent.

ECONOMIC FACTORS AND NEXT YEAR’S BUDGET

A five-year estimated budget was developed during the Proposition 218 Property-Related Fee process which will be used to guide setting the annual budget. Factors include estimating administrative costs, insurance, legal fees, professional services, Groundwater Sustainability Plan development costs (examples: technical support, public outreach, studies, writing the plan) including reimbursement of costs from grants when possible, and other related tasks.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview for those who are interested in the Authority’s financial position. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to: Program Manager, Glenn Groundwater Authority, 720 N. Colusa Street, Willows, CA 95988

BASIC FINANCIAL STATEMENTS

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
STATEMENT OF NET POSITION
JUNE 30, 2020**

ASSETS

Cash and Investments	\$ 815,176
Due from Other Governments	119,080
Interest Receivable	<u>7,001</u>
 Total Assets	 <u>941,257</u>

LIABILITIES

Accounts Payable	151,698
Due to Other Governments	<u>24,859</u>
 Total Liabilities	 <u>176,557</u>

NET POSITION

Unrestricted	<u>764,700</u>
 Total Net Position	 <u><u>\$ 764,700</u></u>

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

See accompanying Notes to Basic Financial Statements.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
STATEMENT OF ACTIVITIES
YEAR ENDED JUNE 30, 2020**

EXPENSES	
Professional Services	\$ 453,979
Office Expense	5,671
Insurance	1,800
Total Expenses	<u>461,450</u>
 PROGRAM REVENUES	
Agency Contributions	140,514
Intergovernmental	112,401
Net Program Revenues (Expenses)	<u>(208,535)</u>
 GENERAL REVENUES	
Special Assessment	455,734
Taxes	1,214
Interest Income	38,919
Total General Revenues	<u>495,867</u>
 CHANGE IN NET POSITION	 287,332
Net Position - Beginning of the Year	<u>477,368</u>
 NET POSITION - END OF YEAR	 <u><u>\$ 764,700</u></u>

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

See accompanying Notes to Basic Financial Statements.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
BALANCE SHEET – GOVERNMENTAL FUND
JUNE 30, 2020**

ASSETS

Cash and investments	\$	815,176
Due from Other Governments		119,080
Interest Receivable		<u>7,001</u>
 Total Assets	 \$	 <u><u>941,257</u></u>

**LIABILITIES, DEFERRED
INFLOWS OF RESOURCES
AND FUND BALANCES**

Liabilities:		
Accounts Payable		151,698
Due to Other Governments		<u>24,859</u>
Total Liabilities		176,557
Deferred Inflows of Resources:		
Unavailable Revenue		<u>112,401</u>
Fund Balance:		
Unassigned		<u>652,299</u>
 Total Liabilities, Deferred Inflows of Resources, and Fund Balance	 \$	 <u><u>941,257</u></u>

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

See accompanying Notes to Basic Financial Statements.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
RECONCILIATION OF THE GOVERNMENTAL FUNDSBALANCE SHEET TO THE
GOVERNMENT-WIDE STATEMENT OF NET POSITION – GOVERNMENTAL ACTIVITIES
JUNE 30, 2020**

Fund Balance - Total Governmental Fund: \$ 652,299

Amounts reported for governmental activities in the statement of net position are different because:

Receivables not collected during the availability period are deferred in the fund statements. 112,401

Net Position of Governmental Activities \$ 764,700

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

See accompanying Notes to Basic Financial Statements.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
STATEMENT OF REVENUES, EXPENDITURES, AND
CHANGES IN FUND BALANCES – GOVERNMENTAL FUND
YEAR ENDED JUNE 30, 2020**

REVENUES

Agency Contributions	\$ 140,514
Special Assessment	455,734
Taxes	1,214
Interest Income	38,919

Total Revenues	636,381
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EXPENDITURES

Professional Services	453,979
Office Expense	5,671
Insurance	1,800

Total Expenditures	461,450
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CHANGE IN FUND BALANCE	174,931
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Fund Balance - Beginning of the Year	477,368
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FUND BALANCE - END OF YEAR	\$ 652,299
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DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

See accompanying Notes to Basic Financial Statements.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND
CHANGES IN FUND BALANCES – GOVERNMENTAL FUND TO THE GOVERNMENT-WIDE
STATEMENT OF ACTIVITIES – GOVERNMENTAL ACTIVITIES
YEAR ENDED JUNE 30, 2020**

Net Change to Fund Balance - Governmental Fund	\$	174,931
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Amounts reported for governmental activities in the statement of activities are different because:

Revenues in the statement of activities that do not provide current financial resources are not reported as revenue in the governmental fund.

112,401

Change in Net Position of Governmental Activities	\$	<u>287,332</u>
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DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

See accompanying Notes to Basic Financial Statements.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
NOTES TO BASIC FINANCIAL STATEMENTS
JUNE 30, 2020**

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

The Glenn Groundwater Authority Groundwater Sustainability Agency (the Authority) was created by forming a Joint Exercise of Powers Agreement, signed by nine local agencies, with the purpose of being a Groundwater Sustainability Agency for the Glenn County portion of the Colusa Subbasin, which is part of the Sacramento Valley Groundwater Basin.

The State of California under the Sustainable Groundwater Management Act (SGMA) law requires all lands within a high or medium priority designated groundwater basin to be covered by a Groundwater Sustainability Plan developed by Groundwater Sustainability Agencies that must be completed by January 31, 2022 in non-critically over drafted basins. These plans will require steps to achieve and maintain sustainability of groundwater conditions for all parts of the basins throughout California, and will potentially require data collection and management actions such as requiring meters, reporting of groundwater use, and a plan to recharge depleted aquifers.

Glenn Groundwater Authority Member Agencies include:

- City of Orland
- City of Willows
- County of Glenn
- Glenn-Colusa Irrigation District
- Glide Water District
- Kanawha Water District
- Orland-Artois Water District
- Princeton-Codora-Glenn Irrigation District
- Provident Irrigation District
- Monroeville Water District

The basic financial statements present information on the financial activities of the Authority. The financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The more significant of the accounting policies are described below.

B. Basis of Presentation and Accounting

Government-Wide Statements

The statement of net position and statement of activities display information about the primary government (the Authority). These statements include the financial activities of the overall Authority.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
NOTES TO BASIC FINANCIAL STATEMENTS
JUNE 30, 2020**

The statement of activities demonstrates the degree to which program expenses of a given function are offset by program revenues. Program expenses include direct expenses, which are clearly identifiable with a specific function, and allocated indirect expenses. Program revenues include Agency contributions that are restricted to meeting the operational or capital requirements of a particular program. Revenues that are not classified as program revenues are presented instead as general revenues.

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when incurred, regardless of the timing of related cash flows. Nonexchange transactions, in which the Authority gives (or receives) value without directly receiving (or giving) equal value in exchange, include intergovernmental revenues. Revenues from grants, entitlements, and donations are recognized in the fiscal year in which all eligibility requirements have been satisfied.

Fund Financial Statements

The Authority is engaged in a single-governmental activity and has only a general fund. The governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, revenues are recognized when measurable and available (susceptible to accrual). Revenues are accrued when their receipt occurs within sixty days after the end of the accounting period so as to be measurable and available. Expenditures are generally recorded when a liability is incurred, as under accrual accounting.

C. Use of Estimates

The preparation of basic financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

D. Fund Balances – Governmental Fund Financial Statements

Beginning with the fiscal year 2018, the Authority implemented GASB Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*. This statement provides more clearly defined fund balance categories to make the nature and extent of the constraints placed on a government's fund balance more transparent. The following classifications describe the relative strength of the spending constraints placed on the purposes for which resources can be used:

- Nonspendable fund balance – amounts that cannot be spent because they are either not spendable in form or legally or contractually required to remain intact.
- Restricted fund balance – amounts with constraints placed on their use by those external to the Authority, including creditors, grantors, contributors or laws and regulations of other governments. It also includes constraints imposed by law through constitutional provisions or enabling legislation.
- Committed fund balance – amounts that can only be used for specific purposes determined by formal action of the Authority's highest level of decision-making

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
NOTES TO BASIC FINANCIAL STATEMENTS
JUNE 30, 2020**

authority (the Authority) and that remain binding unless removed in the same manner. The underlying action that imposed the limitation needs to occur no later than the close of the reporting period.

- Assigned fund balance – amounts that are constrained by the Authority’s intent to be used for specific purposes. The intent can be established at either the highest level of decision making or by a body or an official designed for that purpose.
- Unassigned fund balance – the residual classification that includes amounts not contained in the other classifications.

The Authority’s governing board establishes, modifies, or rescinds fund balance commitments and assignments by passage of a resolution. When restricted and unrestricted resources are available for use, it is the Authority’s policy to use restricted resources first, followed by unrestricted committed, assigned, and unassigned resources as they are needed.

NOTE 2 CASH AND INVESTMENTS

Cash and investments at June 30, 2020 consisted of the following:

Cash in County Treasury	<u>\$815,176</u>
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The Authority maintains all of its cash and investments with the County of Glenn in an investment pool. On a quarterly basis, the Department of Finance allocates interest to participants based upon their average daily balances. Required disclosure information regarding categorization of investments and other deposit and investment risk disclosures can be found in the County’s financial statements. The County of Glenn’s financial statements may be obtained by contacting the County Glenn Department of Finance office at 516 W. Sycamore Street Willows, CA 95988.

GASB Statement No. 40 requires additional disclosures about a government’s deposits and investment risks that include credit risk, custodial risk, concentration risk, and interest rate risk. The Authority has no deposit or investment policy that addresses a specific type of risk.

Required disclosures for the Authority’s deposit and investment risks at June 30, 2020 were as follows:

Credit risk	Not rated
Custodial risk	Not applicable
Concentration of credit risk	Not applicable
Interest rate risk	1.92 years

Investments held in the County’s investment pool are available on demand and are stated at cost plus accrued interest, which approximates fair value.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
NOTES TO BASIC FINANCIAL STATEMENTS
JUNE 30, 2020**

NOTE 3 RELATED PARTY TRANSACTIONS

The Authority's staff is under contract by Glenn County. During the fiscal year ended June 30, 2020, the Authority paid these departments \$95,447 for administrative services.

NOTE 4 RISK MANAGEMENT

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets, errors and omissions and natural disasters. The Authority is covered from risk of loss by Golden State Risk Management Authority.

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

REQUIRED SUPPLEMENTARY INFORMATION

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
BUDGETARY COMPARISON SCHEDULE – GENERAL FUND
YEAR ENDED JUNE 30, 2020**

	Original Budget	Final Budget	Actual Amount	Variance with Final Budget
Revenues				
Agency Contributions	\$ -	\$ 48,396	\$ 140,514	\$ 92,118
Intergovernmental Revenue	-	-	-	-
Special Assessment	458,552	458,552	455,734	(2,818)
Taxes	-	-	1,214	1,214
Use of Money and Property	-	-	38,919	38,919
Total Revenues	<u>458,552</u>	<u>506,948</u>	<u>636,381</u>	<u>129,433</u>
Expenditures				
Professional Services	338,752	433,964	453,979	(20,015)
Insurance	1,800	1,800	1,800	-
Special Department Expenses	118,000	71,184	-	71,184
Office Expense	-	-	5,671	(5,671)
Total Expenditures	<u>458,552</u>	<u>506,948</u>	<u>461,450</u>	<u>45,498</u>
EXCESS (DEFICIENCY) OF REVENUES OVER (UNDER) EXPENDITURES	<u>\$ -</u>	<u>\$ -</u>	174,931	<u>\$ 174,931</u>
Fund Balance - Beginning of the Year			<u>477,368</u>	
FUND BALANCE - END OF YEAR			<u>\$ 652,299</u>	

See accompanying Notes to Required Supplementary Information – Budget and Budgetary Reporting.

**GLENN GROUNDWATER AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
YEAR ENDED JUNE 30, 2020**

NOTE 1 BUDGET AND BUDGETARY REPORTING

The Authority prepares and legally adopts a final budget on or before June 30 of each fiscal year. The Authority operation, commencing July 1, is governed by the proposed budget, adopted by the Board of Directors in June of the prior year.

After the budget is approved, the appropriations can be added to, subtracted from, or changed only by Authority resolution. All such changes must be within the revenues and reserves estimated as available in the final budget or within revised revenue estimates as approved by the Authority.

An operating budget is adopted each fiscal year on the modified accrual basis. Additionally, encumbrance accounting is utilized to assure effective budgetary control. Encumbrances outstanding at year-end represent the estimated amount of the expenditures ultimately to result if the unperformed contracts in process at year-end are completed or purchased commitments satisfied. Such year-end encumbrances are reported as reservations of fund balances and do not constitute expenditures or liabilities because the commitments will be honored during the subsequent year and included in the subsequent year's budget. Unencumbered appropriations lapse at year-end.

The legal level of budgetary control (the level on which expenditures may not legally exceed appropriations) is at the object level. Object category levels of expenditures are as follows: salaries and benefits, services and supplies, and other charges.

OTHER REPORT

DRAFT REPORT
FOR DISCUSSION
PURPOSES ONLY



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL
OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER
MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS
PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

Board of Directors
Glenn Groundwater Authority
Groundwater Sustainability Agency
Willows, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Glenn Groundwater Authority Groundwater Sustainability Agency (the Authority) as of and for the year ended June 30, 2020, and the related notes to the financial statements, and have issued our report thereon dated [DATE].

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over financial reporting.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority’s financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority’s internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity’s internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

CliftonLarsonAllen LLP

Roseville, California
[DATE], 2020

PROFIT REPORT
PURPOSES ONLY
DISCUSSION

8. COLUSA SUBBASIN GROUNDWATER SUSTAINABILITY PLAN

- a. Receive update on Plan development and activities.
- b. Receive update on GSP Development Grants (Proposition 1 and Proposition 68).
- c. Receive update on Project Agreements.
- d. *Consider recommendation from the CGA/GGA Joint Technical Advisory Committee to adopt the Colusa Subbasin Sustainability Goal.
- e. *Consider recommendation from the CGA/GGA Joint Technical Advisory Committee to adopt the Colusa Subbasin Undesirable Results Statements.
- f. *Consider recommendation from the CGA/GGA Joint Technical Advisory Committee to approve the flyer and application for the Well Monitoring Pilot Program.
- g. Discussion on Project and Management Action solicitation form and approach to solicit ideas for initial Projects and Management Actions.

The Davids Engineering GSP Development Status Update Memo is attached highlighting Plan development and activities. Additional updates may be provided.

At the December 3 GGA Executive Committee meeting, the committee discussed potential approaches to provide more robust reports to the Board in preparation of decisions that will be made during the GSP development process. The committee has suggested including TAC meeting minutes and presentations in the Board meeting packet and to have presentations or reports to review at certain decision points for input and approval. For example, each GSP Chapter or particular components could be brought to the Board for input and approval to move forward into the final draft GSP. As a result of this discussion, the TAC meeting minutes from the November meeting and the presentations from the November and December meetings are included in the TAC update under Item 13.c. Staff or Executive Committee members may provide additional updates.

Sustainability Goal and Undesirable Results Statements

Sustainable Management Criteria included in the GSP require a qualitative description of the Sustainability Goal and descriptions of conditions that would be considered Significant and Unreasonable for each applicable Sustainability Indicator and therefore could lead to an Undesirable Result that could trigger State intervention. A draft Sustainability Goal and Undesirable Results statements were presented and discussed at the October 16 and November 13 CGA/GGA Joint TAC meetings.

While developing the draft goal and statements, stakeholder feedback from public workshops held in fall 2019, the Memorandum of Agreement (MOA) between the Colusa and Glenn Groundwater Authorities, and statements and goals put together in 2020 GSPs for other subbasins were considered. This has resulted in a draft goal and statements that use some existing language but are tailored for the Colusa Subbasin specifically.

The Sustainability Goal and Undesirable Results statements provide a foundation to support development of other, quantitative Sustainable Management Criteria including Minimum Thresholds, Measurable Objectives, and Interim Milestones for each applicable Sustainability Indicator.

The CGA/GGA Joint TAC recommends the CGA and GGA Boards approve the Sustainability Goal and Undesirable Results Statements (attached). The CGA approved the Sustainability Goal and Undesirable Results Statements on November 24, 2020.

Well Monitoring Pilot Program

As part of the Proposition 68 SGM Round 3 grant proposal developed in fall 2019 and recently awarded to the CGA on behalf of the Colusa Subbasin, a task was included based on TAC recommendations to include a well monitoring pilot program. The proposed program includes the following activities:

- Collect information from voluntary participants regarding groundwater extraction and groundwater levels at individual wells.
- Identify selection criteria for participating wells, considering well location, groundwater use, equipment specifications, and other factors as identified.
- Conduct stakeholder outreach to enlist program participants.
- Evaluate options for data collection including periodic field visits and telemetry.
- Implement data collection activities and incorporate available data into GSP development process.
- Identify and evaluate options for basin-wide implementation, including estimation of initial and ongoing program costs.

Based on discussions with the TAC at the June, August, October, and November meetings, a brief informational flyer and application form have been developed in draft form. The CGA/GGA Joint TAC recommends the CGA and GGA Boards approve the flyer and application for the Well Monitoring Program. The CGA Board approved the recommendation on November 24, 2020.

It is anticipated that solicitation for program participation will begin in January 2021. The CGA/GGA Joint TAC is currently discussing screening and ranking criteria for the program. Factors identified in selecting applications from those received include the following:

- Eligibility
 - Agreement to make information collected publicly available
 - Agreement for GSA representatives to make site visits
 - Agreement to participate for a period of three years
 - Agreement to install approved flow meter and access tube for pressure transducer in well casing, if needed
 - Agreement to maintain cellular service for monitoring equipment telemetry during three-year enrollment period
 - Agreement to manually report pumping data during three-year enrollment period, in the event of device failure
- Other Factors
 - Location within the subbasin (desire to enroll participants in both Glenn and Colusa counties)
 - Water source (fields relying primarily on groundwater preferred)
 - Presence of an existing flow meter installed per manufacturer specifications

Project and Management Action Solicitation

Achieving and/or maintaining sustainable conditions in the Colusa Subbasin may require implementation of projects and management actions (PMAs) to avoid Undesirable Results in the long term. PMAs could include a combination of supply augmentation (e.g. Sites Reservoir and winter recharge projects) and demand reduction (e.g. invasive species eradication and groundwater allocation). The proposed approach to identifying, evaluating, and including PMAs in the Colusa Subbasin GSP is:

- Initial PMA Assessment – Initial compilation of ideas regarding potential PMAs based on stakeholder outreach, existing data and studies, and review of similar information from other basins.
- Screening Analysis of PMAs – Reconnaissance-level evaluation of the technical and economic considerations of identified PMAs; development and application of a screening process to identify PMAs for further consideration.
- Evaluation of Alternative Combinations of PMAs – Establish potential combinations of PMAs; evaluate potential benefits based on modeling; assess cost and schedule implications.

- Identification of Proposed Mix of PMAs for Inclusion in the GSP – Select final mix of PMAs for inclusion in 2022 GSP. Describe PMAs and implementation plan in sufficient detail to satisfy GSP regulations.

A draft template to solicit input from stakeholders on potential PMAs that could be implemented in the Colusa Subbasin was developed and reviewed with the TAC in June and November. Based on feedback received the template has been updated. The objective of this discussion is to provide the Board with an update and receive input on potential PMAs, the draft template, and the process to solicit input on potential PMAs from stakeholders within the basin.

It is important to note that collection of potential PMAs will continue throughout GSP development and included as an appendix to the Plan. A cutoff date for initial project evaluation will be determined in order to properly evaluate and narrow down the projects included in the final GSP. All other projects can be evaluated at a later date if desired. Documentation of the evaluation and selection process will be included in the GSP.

Attachments

- Davids Engineering GSP Development Status Update Memo
- Proposed Colusa Subbasin Sustainability Goal and Undesirable Results Statements
- Proposed Well Monitoring Program Informational Flyer
- Proposed Well Monitoring Program Participant Application
- Draft Projects and Management Actions Solicitation Form



*Specialists in Agricultural Water Management
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Memorandum

To: Colusa Groundwater Authority, Glenn Groundwater Authority
From: Davids Engineering
Date: 12/12/2020
Subject: **GSP Development Status Update**

This memorandum provides brief summary of activities related to the HCM and Water Budget Project and GSP Development Project for the Colusa Subbasin. In addition to recent activities, upcoming activities are discussed.

Draft GSP Document

A draft template for the GSP document has been developed and transmitted to members of the consultant team. This template is being used to prepare drafts of the Basin Setting (hydrogeologic conceptual model, groundwater conditions, and water budgets) and Sustainable Management Criteria sections of the plan. Once available, the draft Basin Setting sections will be made available as an administrative draft for review by GSA staff, and potentially others as identified. Comments on the administrative draft will be incorporated, with the goal of releasing a public review draft to the TAC and more broadly to stakeholders. It is anticipated that the draft Basin Setting sections will be available in January.

Interbasin Coordination

In an effort to support consistent representation of interbasin flows and stream-aquifer interaction with neighboring basins, information from the draft historical water budget for the Colusa Subbasin was compiled and shared with a group led by the Consensus Building Institute (CBI) and the Butte County Department of Water and Resource Conservation (BCDWRC) regarding subsurface flows between subbasins and surface water-groundwater interaction along boundary streams. For the Colusa Subbasin, interbasin flows include the interface with the Corning Subbasin to the north, Butte and Sutter subbasins to the east, and Yolo Subbasin to the south. Boundary streams include Stony Creek to the north and the Sacramento River to the east. Early indications are that the models are generally consistent in the direction of flow between subbasins, though additional coordination is underway to ensure that the preliminary comparisons are based on consistent methodologies. It is anticipated that additional details will be made available as the water budget information in each basin is developed. Currently, the status of modeling and associated water budget information within each basin varies, and it is anticipated that the process to coordinate with neighboring basins will evolve as more definitive information becomes available to support comparison and potential refinements to ensure consistency in estimates of subsurface interbasin flows and stream-aquifer interaction within the region.

Sustainable Management Criteria

Draft Sustainability Goal and Undesirable Results statements were reviewed with the Joint TAC in November and modified based on input received. These components of the GSP are foundational to Plan development and are being considered by the GSA Boards for approval as drafts, recognizing that they will not be finalized until the full GSP is adopted and submitted to DWR by January 31, 2022.

Evaluation of potential minimum thresholds (MTs), measurable objectives (MOs), and other quantitative criteria (collectively referred to as thresholds) is underway and has been informed by input from the Joint TAC at its November meeting. Work is underway to establish draft thresholds for additional, more focused discussion at upcoming TAC and GSA board meetings. To support the development of draft thresholds for discussion and consideration, additional analysis of potential economic impacts to the subbasin of alternative thresholds is being conducted, with the support of ERA Economics, based in Davis.

On an ongoing basis, the Monitoring Network is currently being reviewed to identify recommended representative monitoring sites. Currently, it is anticipated that most, if not all, of the existing monitoring sites in Glenn and Colusa counties will be used to establish thresholds. Additional monitoring that may be needed to evaluate sustainability as part of GSP implementation is being considered, particularly with respect to water quality (e.g. potential mobilization of connate seawater due to groundwater pumping) and stream depletions (e.g. potential reductions in flows in streams traversing or bounding the basin) resulting from potential future increases in groundwater demands.

Discussion of MTs and MOs occurred with the TAC in November and will continue in upcoming meetings. Development of draft MTs and MOs is anticipated in early 2021, and it is anticipated that additional discussion with the GSA Boards will also occur at that time.

Well Monitoring Pilot Program

Development and implementation of the program is ongoing. A draft flyer describing the program and application form for potential participants was reviewed and discussed with the Joint TAC in November. Based on feedback received, the draft flyer and application have been updated and are planned to be released in January, along with conducting a landowner workshop to provide additional detail regarding the program and to receive feedback and answer questions from potential participants.

In order to implement the program prior to or near the start of the 2021 growing season, it is desired to complete program development by the end of 2020 to allow for advertising and implementation in early 2021 and selection of participants and deployment of monitoring equipment soon thereafter.

Projects and Management Actions

[From Prior Update] A template to allow interested stakeholders to submit ideas regarding potential Projects and Management Actions (PMAs) that could address potential sustainability challenges in the subbasin in the future has been developed and was presented to the TAC in June for feedback. The template has been updated, and options for distributing the template have been further discussed.

A draft matrix to compile potential PMAs has been developed, along with criteria for initial screening of submittals. Additionally, ideas for potential PMAs are being assembled based on input already received, existing Agricultural Water Management Plans, GSPs adopted in other basins in 2020, and other sources. Additional discussion of PMAs is planned to be held with the TAC in November.

[Updated Information] Additional information has been evaluated, including analysis of historical deliveries to Tehama-Colusa Canal (TC) Contractors relative to available surface water supplies. In

particular, the consultant team has compiled recent historical information on contract amounts and allocations (% of contract supply available by contractor on an annual basis) and is working to identify and evaluate historical intrabasin transfers among TC contractors and from Sacramento River Settlement Contractors (e.g. GCID, RD108 PCGID, PID).

Public Outreach

Substantial effort was dedicated in November to prepare for public outreach activities, including public workshops on December 9 and 10, as well as a Joint TAC meeting on December 11. Topics for the public workshops include (1) an overview of SGMA, the GSP development process and timeline; (2) current understanding of the hydrogeology and groundwater conditions of the subbasin; (3) draft historical, current, and projected water budgets for the subbasin; and (4) Projects and Management Actions that could be considered to maintain or achieve sustainable conditions moving forward.

Additionally, as part of the effort to engage stakeholders and encourage participation and input, the GSP Communication and Engagement Plan is being updated, social media presence was established (e.g. Facebook and Twitter), and procedures to maintain an Administrative Record of stakeholder input were refined.

Draft Sustainability Goal

The sustainability goal for the Colusa Subbasin GSP is to maintain, through a cooperative and partnered approach, locally managed sustainable groundwater resources to preserve, and enhance the economic viability, social well-being and culture of all Beneficial Uses and Users.

Draft Undesirable Results Statements

Note: Undesirable Results Statements are not required for Sustainability Indicators that are not likely to occur, for example, Seawater Intrusion. These statements can be updated over time. Most of these statements are similar. The main objective is to verify that the intent of the GSAs is to avoid undesirable results in the basin.

Groundwater Levels

The undesirable result for the chronic lowering of groundwater levels is a result that would cause significant and unreasonable reduction in the long-term viability of Beneficial Uses and Users over the planning and implementation horizon of this GSP.

Groundwater Storage

The undesirable result for the reduction of groundwater in storage is a result that would cause significant and unreasonable reduction in the long-term viability of Beneficial Uses and Users over the planning and implementation horizon of this GSP.

Seawater Intrusion

Seawater intrusion is not an applicable sustainability indicator, because seawater intrusion is not present and is not likely to occur in the Colusa Subbasin due to the distance from the Pacific Ocean, bays, deltas, or inlets.

- *Note: Language used for seawater intrusion is from DWR's Sustainable Management Criteria Best Management Practices (November 2017)*
- *Note: Subsurface salinity falls under the groundwater quality sustainability indicator*

Groundwater Quality

The undesirable result for degraded water quality is a result stemming from a causal nexus between groundwater quantity related activities, such as groundwater extraction or groundwater recharge, and groundwater quality that causes significant and unreasonable effects to Beneficial Uses and Users including reduction in the long-term viability of these uses over the planning and implementation horizon of this GSP.

- *Note: "Causal Nexus" is used to limit GSA's responsibility where it overlaps with existing issues, is naturally occurring, or is being covered by other programs*

Land Subsidence

The undesirable result for land subsidence is a result due to groundwater extraction that causes a significant and unreasonable reduction in the viability of the use of critical infrastructure over the planning and implementation horizon of this GSP.

Depletion of Interconnected Surface Water

The undesirable result for depletions of interconnected surface water is a result that causes significant and unreasonable adverse effects on Beneficial Uses and Users of interconnected surface water within the Colusa Subbasin over the planning and implementation horizon of this GSP.

Colusa Subbasin Well Monitoring Pilot Program Participant Information Form

Background

The Colusa and Glenn Groundwater Sustainability Agencies (GSAs) are implementing an incentive-based pilot program to work with interested growers and landowners to continuously monitor groundwater use and water levels at participating wells. This voluntary, non-regulatory program is intended to support the GSAs in gathering information regarding groundwater use in the subbasin while providing participants with near-real time access to information on well production and groundwater levels at their wells to support irrigation management. This program is being funded through a Proposition 68 Sustainable Groundwater Management grant from the California Department of Water Resources (DWR).

Program Description

Activities

Interested parties are invited to submit a brief application describing contact information, location, cropping, and other information related to the proposed groundwater well. Following the receipt of applications, participants will be selected considering location within the subbasin (it is desired to enroll participants in both Glenn and Colusa counties), water source (fields relying primarily on groundwater preferred), and presence of an existing flow meter installed per manufacturer specifications (preferred). Participants agree that the well location and information collected may be made publicly available. Participants also agree that GSA representatives may make site visits to inspect wells, verify installation, and collect manual measurements as needed.

Incentives

The program will cover the purchase cost of a flowmeter or upgrades to an existing flow meter (up to \$2,500), if needed, purchase and installation of a pressure transducer (to monitor groundwater levels), datalogger, solar panel, cellular modem, and a 3-year subscription for web and mobile access to data gathered. Program participation may be extended beyond 3 years, as mutually agreed.

Participants will be responsible for:

- Installation of flow meter per manufacturer specifications
- Installation of access tube for pressure transducer in well casing
- Monthly cellular modem costs (approximately \$15 per month)
- Manual reporting of pumping data, in the event of device failure during the 3-year program duration

Equipment Providers

- Flow Meters
 - McCrometer (<https://www.mccrometer.com/Agricultural-Turf>)
 - SeaMetrics (<https://www.seametrics.com/applications/agriculture/>)
 - Others as approved

- Datalogger, Solar Power, and Telemetry
 - Ranch Systems (www.ranchsystems.com)
 - Others as approved

Timeline

- January 2021: Applications Accepted
- February – March 2021: Participants Selected, Wells Inspected, and Equipment Installed
- April 2021 – October 2023: Wells Monitored (3 growing seasons)

Questions?

For more information, please contact:

Colusa Groundwater Authority
 Mary Fahey
 CGA Program Manager
 530-458-0719
mfahey@countyofcolusa.com

Glenn Groundwater Authority
 Lisa Hunter
 GGA Program Manager
 530-934-6540
lhunter@countyofglenn.net

Funding

Funding for this project has been provided in full or in part from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 and the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68), and through an agreement with the State Department of Water Resources.



Colusa Subbasin Well Monitoring Pilot Program Application

Thank you for your interest in the Colusa Subbasin Well Monitoring Pilot Program. Please provide the following information. Note that landowner must be up to date with their GSA operations fee.

Owner/Company: _____

Address:

Contact Name: _____

Contact Phone: _____

Contact Email: _____

Location Description, including parcel number (please also provide a map showing well location and field(s) served):

Acreage Served by the Well: _____

Crop(s) Grown: _____

Irrigation Method (drip, microspray, sprinkler, etc.):

Is the well currently equipped with a flow meter (circle one)? Yes / No.

If so, is it installed per manufacturer specifications (circle one)? Yes / No.

(Please provide photographs of meter, upstream conditions, and downstream conditions.)

Is surface water available for the area served by the well (circle one)? Yes / No

If surface water is available, what is the percent of crop irrigation needs met by groundwater? _____

Do you agree to allow information collected to be shared by the GSAs (circle one)? Yes / No

Colusa Subbasin GSP Projects and Management Actions (PMAs) Submittal Form

Overview

The purpose of this form is to gather ideas for potential projects and management actions (PMAs) that could be evaluated and ultimately included in the Colusa Subbasin GSP. Once ideas are gathered, an initial screening and evaluation process will be conducted, followed by ranking of potential PMAs for more detailed evaluation and inclusion in the initial GSP.

Potential PMAs may fall under several categories, including but not limited to the following:

- Recharge projects
- Supply augmentation projects
- Water conservation projects
- Projects to reduce non-beneficial consumptive use
- Groundwater pumping allocations
- Monitoring programs (groundwater pumping, water levels, stream flows, etc.)

Please provide supporting documentation and/or links to that documentation for each question, if available. **NOTE: It is recognized that much of the requested information may not be available at this time. Please provide as much information as you can.**

Project Name and Contact

Project or Management Action Name:

Contact Person:

Organization/Affiliation (Project Proponent):

Contact Phone:

Contact Email:

Project or Management Action Description and Status

Project or Management Action Description:

Project or Management Action Location (please provide a map if available):

Which Sustainability Indicator(s) does this Project or Management Action address:

1. Groundwater levels
2. Groundwater Storage
3. Groundwater Quality

4. Land Subsidence
5. Surface Water Interaction

Brief Project Description (1-2 short paragraphs):

Project or Management Action Status (Conceptual, In Design, Ready for Implementation):

Has a feasibility assessment been conducted? If so, please list the agency and provide the documentation (or provide web link to download).

Estimated Project or Management Action Start and End Dates:

Estimated Cost:

Potential Funding Sources:

Management Action or Project Yield (e.g. water contributed to the groundwater system, acre-feet per year):

Please describe any required Permitting and Regulatory Process and status of permitting and CEQA/NEPA compliance:

Does this Management Action or Project serve a disadvantaged community? If so, which one(s)?

Additional Information Sources:

Other Information:

9. PUBLIC OUTREACH

- a. *Consider GGA Executive Committee recommendation to approve the Colusa Subbasin Logo Design.
- b. Discuss December 9 and December 10 public outreach events.

As part of the Colusa Subbasin outreach effort, a logo for the Colusa Subbasin SGMA efforts has been created. The logo will appear on all outreach materials related to Colusa Subbasin SGMA planning and implementation. These materials may include, among others, flyers, social media accounts, press releases, and the GSP itself. This logo is separate from any GGA (or CGA) logo that might be developed in the future. Two slightly different designs are expected to be utilized depending on the layout of the materials. The difference is the placement of the wording either below or to the right of the logo. The GGA Executive Committee reviewed and discussed the Colusa Subbasin logo design and has recommended approval of the design.

The Colusa Subbasin SGMA-Series public meetings were held December 9 and December 10. The presentation slides will be made available on the CGA and GGA websites in the near future. The meetings are available for viewing on the Colusa Subbasin SGMA Facebook page at: <https://www.facebook.com/ColusaSubbasin>

Staff and board members may provide additional updates.

Attachments

- Colusa Subbasin Logo Design



COLUSA SUBBASIN



**COLUSA
SUBBASIN**

10. TECHNICAL ADVISORY COMMITTEE VACANCY

- a. Discuss proposed approach to fill TAC vacancy.
- b. *Accept nominations to fill TAC member vacancy from GGA Directors.

On November 13, 2020 Ron Stillwell provided a verbal notification to resign from the GGA TAC. He mentioned he appreciated the opportunity, but does not have the time to fully participate in the process. The GGA Executive Committee discussed the TAC vacancy at the December 3 meeting and proposes that GGA Directors provide a list of nominees. Staff and/or Directors will follow up to determine if the nominees have interest in participating as a TAC member. Interested nominees will be brought back to a future GGA Board meeting for selection.

Nominees will be accepted during this Board meeting and Directors are encouraged to come prepared to provide nominations. Desired qualifications are included in the attached Technical Advisory Committee Composition and Selection Process developed in January 2019.

Attachments

- The Technical Advisory Committee Composition and Selection Process (1/14/19)

Glenn Groundwater Authority

Groundwater Sustainability Agency

PO Box 351, Willows, CA 95988 | 530.934.6501

Technical Advisory Committee Composition and Selection Process

- Five members
 - Technical background that knows and works in the area.
 - Members would likely be member agency managers and/or member agency technical staff
 - Members will represent diverse geographic areas and types of groundwater users
- Selection process
 - Recommendations/nominations by member agencies
 - **Appointment** by GGA Board
 - The GGA Board **can** request the Executive Committee to review nominations and bring a recommendation to the Board if desired
 - The Board or Executive Committee **can** request additional information from applicants if desired

11. DISCUSSION ON DIRECTOR TRANSITION(S) AND DEVELOPMENT OF ON-BOARDING MATERIALS

At the December 3, 2020 GGA Executive Committee meeting, the committee discussed potential Director transitions and the desire to develop on-boarding materials. Direction was provided to staff to begin developing on-boarding materials to include SGMA 101, details on the JPA, and what discussions are occurring now and in the near future. The purpose of this discussion is to gain Director feedback on the development of materials for new Director(s) and suggestions on what materials would be helpful to include. Staff and Executive Committee members may provide additional updates.

12. 2021 GGA BOARD MEETING SCHEDULE

- a. *Approve revised 2021 GGA Board Meeting Schedule.

The GGA Board approved the 2021 meeting schedule on November 9, 2020. Since that time, it was pointed out that there is a conflict with the Orland-Artois Water District regular Board meeting on June 15, 2021. The attached draft revised 2021 meeting schedule eliminates that conflict by moving the meeting to Wednesday, June 16, 2021.

Attachments

- Draft Revised 2021 Meeting Schedule

Glenn Groundwater Authority Board of Directors 2021 Meeting Schedule

*The GGA Board of Directors will meet generally on the 2nd **Monday** of each month at 1:30 PM. Pursuant to Governor Newsom's Executive Order N-29-20, meetings will be conducted by teleconference. When in-person meetings resume, meetings will be held at a location to be determined. Exceptions are noted below.*

- January 11, 2021
- February 8, 2021
- March 9, 2021 (March 8 meeting conflict)
- April 12, 2021
- May 10, 2021
- ~~June 15, 2021~~ June 16, 2021 (June 14 meeting conflict)
- July 12, 2021
- August 9, 2021
- September 14, 2021 (September 13 meeting conflict)
- October 11, 2021
- November 8, 2021
- December 14, 2021 (December 13 meeting conflict)

Approved 11/9/20, Draft Revision 12/15/20

13. COMMITTEE UPDATES

- a. Executive Committee
 - i. CGA/GGA Joint Executive Committee

The GGA Executive Committee met December 3, 2020. Recommendations and discussions from that meeting were considered under separate items. The 2021 meeting schedule was also approved maintaining meeting generally on the 4th Wednesdays every other month at 1:30 pm. The next meeting is scheduled for January 27, 2021. The CGA/GGA Joint Executive Committee has not met.

- b. Stakeholder Engagement Committee

The Stakeholder Engagement Committee has not met and has nothing new to report.

- c. Technical Advisory Committee

The Technical Advisory Committee met jointly with the Colusa Groundwater Authority (CGA) Technical Advisory Committee on November 13, 2020 and December 11, 2020. Recommendations from those meetings were included in previous items. Additional topics included continued discussion on initial approaches to Sustainable Management Criteria, public outreach, setting a monthly meeting schedule on the second Friday of each month at 1:00 pm, interbasin coordination efforts, initial discussion on management areas, initial overview of funding mechanisms, and updates on the hydrogeologic investigation project.

The TAC member representative and staff may provide additional updates.

Attachments

- CGA/GGA Joint TAC meeting minutes (11/13/20)
- CGA/GGA Joint TAC meeting presentation (11/13/20)
- CGA/GGA Joint TAC meeting presentation (12/3/20)

CGA/GGA Joint Technical Advisory Committee Meeting

MEETING MINUTES

November 13, 2020 | 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.

* Indicates an Action Item

1. Call to Order, Roll Call, and Introductions

The meeting was called to order at approximately 1:00 p.m.

Dave Ceppos with the Census and Collaboration Program started the meeting and went over some housekeeping and logistical items.

In Attendance:

Committee Members:

GGA: Emil Cavagnolo, Mark Lohse, Zac Dickens, David Kehn

CGA: Darrin Williams, Thad Bettner, Bill Vanderwaal, Jim Wallace, Brandon Davison (ex-officio)

Others in Attendance: Lisa Hunter (GGA Staff), Mary Fahey (CGA Staff), David Ceppos (Facilitator, Consensus and Collaboration Program [CCP]), Danaka DeBow (CCP), Byron Clark (Davids Engineering, Inc.), Ken Loy (West Yost Associates), John Ayers (Woodard and Curran), John Amaro (GGA) Jaime Lely, Holly Dawley (GCID), Denise Carter (CGA)

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

a. * August 14, 2020 CGA/GGA TAC meeting (GGA TAC only)

(The meeting minutes were previously approved by the CGA TAC). For the GGA, Zac Dickens made a motion to approve the minutes from the August 14, 2020 CGA/GGA TAC meeting. Emil Cavagnolo seconded the motion, which passed unanimously.

Roll Call Vote

Glenn Groundwater Authority

Zac Dickens: AYE

David Kehn: AYE

Emil Cavagnolo: AYE

Mark Lohse: AYE

b. * October 16, 2020 CGA/GGA TAC meeting

For the CGA, Darrin Williams made a motion to approve the minutes from the October 16, 2020 CGA/GGA TAC meeting. Thad Bettner seconded the motion, which passed unanimously.

Roll Call Vote

Colusa Groundwater Authority

Thad Bettner: AYE

Bill Vanderwaal: AYE

Darrin Williams: AYE

Jim Wallace: AYE

For the GGA, Emil Cavagnolo made a motion to approve the minutes from the October 16, 2020 CGA/GGA TAC meeting. Mark Lohse seconded the motion, which passed 2-0, 2 abstentions.

Roll Call Vote

Glenn Groundwater Authority

Zac Dickens: Abstain

David Kehn: Abstain

Emil Cavagnolo: AYE

Mark Lohse: AYE

3. Period of Public Comment

Darrin Williams commented that he is frustrated with the online meeting format during GSP development. He noted that there is a lack of public participation and lack of robust discussion. He feels that the remote platform has disenfranchised the public from participating in important work that is going to affect them. Mr. Williams said that if the GSAs are stuck in this situation for the duration of the GSP development process, he feels that DWR should delay the GSP deadline.

Dave Ceppos mentioned that the public outreach plan for the Colusa Subbasin is on the agenda today. He said that CGA Staff had sent the question about meeting protocols during COVID to Colusa County Counsel. The County has adopted State guidelines. In-person meetings are not an option at this point.

Brandon Davison from DWR said that the CGA is not the only GSA that has made this statement, and the concerns are being heard by DWR.

4. Colusa Subbasin Groundwater Sustainability Plan Development:

- a. * Review/refine and consider a recommendation to the GSA Boards to adopt the Sustainability Goal and Undesirable Results Statements
- b. Review/discuss proposed approaches to develop initial Minimum Thresholds and Measurable Objectives
- c. Review/discuss proposed materials for Well Monitoring Pilot Program
- d. Review/discuss Projects and Management Actions solicitation form

Byron Clark began the discussion with a summary of the topics for this agenda item. He explained that the Sustainability Goal is the overarching goal of the Groundwater Sustainability Plan. It is a qualitative description of objectives and desired conditions in the Subbasin. Mr. Clark presented the draft Sustainability Goal for the Colusa Subbasin:

The sustainability goal for the Colusa Subbasin GSP is to maintain, through a cooperative and partnered approach, locally managed sustainable groundwater resources to preserve, and enhance the economic viability, social well-being and culture of all Beneficial Uses and Users, including domestic, agricultural, municipal, environmental, tribal, and industrial, without experiencing undesirable results by managing use within the sustainable yield.

Mr. Clark went on to describe how the draft Undesirable Results (UR) Statements were developed and what they mean. He referred to the six Sustainability Indicators (SI) and stated that Seawater Intrusion is not applicable in the Colusa Subbasin due to the location of the subbasin and guidance from DWR.

Mr. Clark explained that the water quality SI is limited to what the GSAs have authority to manage.

The UR Statements for subsidence, groundwater storage and depletion of interconnected surface water are similar to groundwater levels.

Jim Wallace commented that he is okay with the UR Statements, but the Sustainability Goal is a long sentence. It specifies a number of beneficial users and he questioned if this a complete list. Mr. Wallace said that it is better to not list these entities than to provide a list that might be incomplete. Similarly, regarding the last sentence, he is not sure managing within sustainable yield is the only way to manage groundwater. Mr. Wallace suggested a period after “Beneficial Users and Users,” and to end the sentence with “without experiencing undesirable results.”

The modified Sustainability Goal reads:

The sustainability goal for the Colusa Subbasin GSP is to maintain, through a cooperative and partnered approach, locally managed sustainable groundwater resources to preserve, and enhance the economic viability, social well-being and culture of all Beneficial Uses and Users, without experiencing undesirable results.

For the CGA, Bill Vanderwaal made a motion to recommend the modified Sustainability Goal to the CGA and GGA Boards for approval. Jim Wallace seconded the motion, which passed unanimously.

Roll Call Vote

Colusa Groundwater Authority

Thad Bettner: AYE

Bill Vanderwaal: AYE

Darrin Williams: AYE

Jim Wallace: AYE

For the GGA, David Kehn made a motion to recommend the modified Sustainability Goal to the CGA and GGA Boards for approval. Zac Dickens seconded the motion, which passed unanimously.

Roll Call Vote

Glenn Groundwater Authority

Zac Dickens: AYE

David Kehn: AYE

Emil Cavagnolo: AYE

Mark Lohse: AYE

For the GGA, David Kehn made a motion to recommend the Undesirable Results Statements to the CGA and GGA Boards for approval. Emil Cavagnolo seconded the motion, which passed unanimously.

Roll Call Vote

Glenn Groundwater Authority

Zac Dickens: AYE

David Kehn: AYE

Emil Cavagnolo: AYE

Mark Lohse: AYE

For the CGA, Bill Vanderwaal made a motion to recommend the Undesirable Results Statements to the CGA and GGA Boards for approval. Jim Wallace seconded the motion, which passed unanimously.

Roll Call Vote

Colusa Groundwater Authority

Thad Bettner: AYE

Bill Vanderwaal: AYE

Darrin Williams: AYE

Jim Wallace: AYE

Mr. Ceppos congratulated the Joint TAC and said, that although this item felt very procedural, it is an important milestone.

Mr. Clark introduced John Ayres to present information about Minimum Thresholds (MT) and Measurable Objectives (MO).

Mr. Ayres began by stating the objective of his presentation is not to have the TAC accept the approaches to setting MTs and MOs, but rather to present and receive feedback to further develop approaches for future discussion.

He said that the current monitoring network is adequate. In setting MTs we address which Sustainability Indicators are going to be affected first. Then we look at how we can set these in a procedural manner based on how the monitoring well is behaving, recognizing regional differences.

The current proposal is to monitor for **Groundwater Levels** using levels but also use groundwater levels as a proxy for groundwater storage and surface water depletions. The GSAs may consider setting up a water quality monitoring network. Monitoring for subsidence is straightforward, utilizing DWR's network.

Mr. Ayres described that when considering groundwater levels, they first looked at the monitoring network to ensure there is adequate well density. Groundwater levels tie into several Sustainability Indicators. The GSAs clearly need to manage groundwater levels so we start with levels in a way that works for the entire basin. They examined wells near each monitoring well, considering well

infrastructure and avoiding dewatering nearby wells. They also considered the period of record on each monitoring well. GSAs are not required to improve conditions beyond what they were on January 1, 2015. He mentioned that there should be flexibility in setting thresholds to reflect varying conditions in different areas of the subbasin.

Mr. Ayres presented a diagram on how to calculate well depth percentages utilizing geometry. He displayed a map showing a polygon surrounding each monitoring well. Each polygon contains all of the wells that are closest to the monitoring well in that polygon. Next, they calculate the depths of the wells in each polygon and compare conditions at that monitoring well with the wells around it. He explained that this is a planning level methodology. It is more reliable on flat parts of the basin. This method has been used in other GSPs, specifically Yuba, and Cuyama basins. The Colusa Subbasin has a robust data set for this type of scenario.

Mr. Ayres described another type of calculation, percent of range of the highest historical groundwater level reading to the lowest reading. He illustrated this method with hydrographs from select wells in the monitoring network.

Mr. Ayres said that the Consultant team will need feedback from the GSAs as to what are considered significant and unreasonable conditions in the subbasin related to the Sustainability Indicators.

Mr. Vanderwaal commented that he would like to see some numbers run in the model. The Tehama Colusa Canal and the settlement contractors are looking at potential State Water Resources Control Board actions that could greatly cut back surface water supplies. If that happens, there will be a large switch from surface water use to groundwater pumping. He would like to see some kind of model run with projections of different scenarios that could show, for example, how low groundwater levels would be with 2 or 3 years of surface water cut backs.

Mr. Bettner agreed and said he would like to see some sort of projection of what is going to happen in the Subbasin with more groundwater development and cropping changes. Maybe stakeholder input on future cropping plans would help us better set targets and identify future issues.

Mr. Ayres said he thinks they can do this. They did something similar in the Yuba GSP, looking at the scenario of surface water curtailments. He will need to talk with the modeling team.

Mr. Williams mentioned that it was previously decided the unimpaired flows scenario should not be considered in the water budget calculations. He also asked how and when will we address domestic wells, especially on west side.

Mr. Bettner replied that we don't know what the impacts are going to be, it's uncertain so it's hard to put in a plan.

Mr. Clark said that this issue was addressed in the Yuba GSP. Similar to discussions that the Joint TAC has had in the past, Yuba decided to steer clear of including this scenario in their projected water budgets at this time, however, using the model as a tool we can look at potential impacts.

Mr. Vanderwaal said that he is going through this process in the Yolo Subbasin. Their baseline is going to be the lowest historical groundwater level. The 2015 level is lowest, or if you want to divert from that, you go through the calculations. But if surface water cutbacks happen, landowners are going to have to pump.

Continuing his presentation, Mr. Ayres said that for the **Groundwater Storage** Sustainability Indicator it is recommended to use groundwater levels as a proxy. This is standard practice as most 2020 GSPs used this method.

For **Groundwater Quality** the current recommendation is to consider setting up a monitoring network for total dissolved solids (TDS) only. The GSAs can only manage what they have authority over. He recommends that the GSA fill any data gap with a new groundwater quality monitoring network which could include approximately 20 wells. Thresholds would not be set immediately because it will be a new network, but thresholds could be set at the first 5-year update.

Mr. Williams asked how domestic wells will be considered when setting thresholds, realizing that they are de minimis, but it is an important consideration.

Mr. Ayres said they will consider all well depths to determine percentages and could look at just percentages of domestic well depths.

Mr. Wallace commented that the fact that a well is de minimis does not exclude the GSA's responsibility. He asked what is the GSA's legal obligation under SGMA?

Mr. Ayres said de minimis well owners are not required by law to report pumping. The GSA still has to consider them in their plans.

Mr. Ayres continued. For **Land Subsidence** the recommendation is to utilize the DWR GPS monitoring network. The GSAs will need to consider what is significant and unreasonable related to infrastructure. The current focus is on water conveyance. Other infrastructure will be considered, but the initial focus is on conveyance infrastructure because the canals are easy to identify and display and water infrastructure covers most of the basin.

For **Interconnected Surface Water** the recommendation is to use groundwater levels as a proxy and use the numeric model to estimate depletions from key water bodies at minimum thresholds for groundwater levels. There aren't enough stream gages or monitoring wells in place currently to monitor directly. That seems to be the case state-wide. Additional monitoring could be implemented and integrated into the GSP in the future.

The next steps in this process include adjusting approaches, developing draft groundwater level MTs, looking at the surface water cutback scenario, and analyzing surface water depletions using the numerical model.

Mr. Williams asked, in areas where we are experiencing subsidence, could you gather well logs and look at geology to forecast potential subsidence events?

Mr. Ayres said it's not a simple answer. One large challenge with well logs is that the Sacramento Valley is a stream deposit, and geology is not the same throughout. There are general trends, but variations within the different formations. When we look at well logs, the log tells us conditions right at that site. It doesn't show conditions 500 feet from well site. In the future, during the implementation phase, we could look at logs across the basin and try to look for trends.

Mr. Cavagnolo mentioned that the groundwater recharge from Stony Creek is useful. Dam operations and invasive Arundo affect recharge. Will these things be taken into account?

Mr. Ayres answered that this is not really related to thresholds, but it is part of the water budget. Mr. Clark added that eradication of Arundo could be a project in the Plan.

Next, Mr. Clark presented information about the **Well Monitoring Pilot Program**. He presented a draft Informational Flyer about the program and a draft Application. He asked for feedback and a recommendation from the Joint TAC to take these items to the GSA Boards for approval.

Mr. Wallace asked for clarification about the priority for pressurized irrigation systems. He also expressed his opinion that as a public organization he does not think that anonymity is relevant or important for this program. He feels the well locations should be made available. Mr. Clark clarified that anonymity could just be to not share the participant's name. Mr. Clark also clarified that the preference for a pressurized system came from a previous TAC conversation, but it is not an important factor for data collection from the GSA perspective. It was determined to not consider irrigation method and to remove the word "anonymously". There was no opposition to the proposed changes.

Mr. Clark presented an updated draft **Projects and Management Actions** solicitation form and asked for any additional input. He said the next steps are to distribute the form to the public via various venues.

Mr. Williams asked if a landowner changed their operation to include Best Management Practices to enhance groundwater recharge, how would this be addressed? Mr. Clark said that could be included a project in the Plan. GSAs could provide incentives to adopt that practice. Mr. Williams asked if the boards would have to draft a list of BMPs. Mr. Clark said the Board or consultants could develop and capture these items in the GSP.

5. Public Outreach

- a. Discuss Social Media options
- b. Discuss December Public Outreach meetings

Dave Ceppos, Consensus and Collaboration Program, presented the Communications and Engagement strategy. He said that the recent effort has been minimal. This has been purposeful as they are trying to be cost effective and also not wanting to create "stakeholder fatigue." The strategy moving forward is to maximize public awareness and create and maintain a robust administrative record.

Upcoming plans include updating the Communications and Engagement (C&E) Plan and to develop a media and social media strategy. This will be called the “SGMA Series,” and include development of a media calendar and press releases. Press releases will include pull quotes from members of the GSA boards. They will strategize to avoid “media fatigue” or competition with other water-related news stories.

Mr. Ceppos described a new social media strategy, including a Colusa Subbasin Facebook and Twitter presence, and potentially other social media venues. They are building a posting calendar to ensure the content remains fresh, relevant and updated regularly. Also, a new logo for the Colusa Subbasin is currently under development.

Mr. Cavagnolo expressed his concerns about social media and about the amount of time involved for maintenance.

Mr. Ceppos said that content management is not hugely labor intensive. The social media presence will need further discussion from the GSA boards. He mentioned that, because of COVID, outreach opportunities are limited and social media is another platform to reach the public. We want to make sure the public outreach is beyond reproach.

6. * Consider Monthly Meeting Schedule on the Second Friday at 1:00 p.m.

Ms. Fahey presented a suggested monthly meeting schedule on the 2nd Friday at 1 p.m.

For the CGA, Jim Wallace made a motion to approve the monthly Joint TAC meeting schedule. Darrin Williams seconded the motion, which passed unanimously.

Roll Call Vote

Colusa Groundwater Authority

Thad Bettner: AYE
Bill Vanderwaal: AYE
Darrin Williams: AYE
Jim Wallace: AYE

For the GGA, Emil Cavagnolo made a motion to approve the monthly Joint TAC meeting schedule. David Kehn seconded the motion, which passed unanimously.

Roll Call Vote

Glenn Groundwater Authority

Zac Dickens: AYE
David Kehn: AYE
Emil Cavagnolo: AYE
Mark Lohse: AYE

7. Interbasin Coordination

Ms. Fahey noted that the technical consulting teams and staff are coordinating on the technical components of GSPs in the region. Mr. Clark said that the consultant teams are currently sharing Model

information. The next steps are to compile information on interbasin flow and stream aquifer interaction across basin lines.

Mr. Dickens asked if there was any further development on matrix of basin approaches. Mr. Clark said that effort is being led by Consensus Building Institute and Butte County. They have developed a workbook which is currently being populated and will be available soon. The Model information is completed. The next meeting of that group is December 1.

8. Topics for Next Meeting

Mr. Clark said that upcoming topics could include: management areas, funding mechanism for GSA operations, Projects and Management Actions, Sustainable Management Criteria, and the Hydrogeologic investigation.

9. Member Reports and Comments

Mr. Kehn reported that interbasin coordination is a hot topic in Butte County and that the Vina GSA submitted a GSP deadline extension request to the Governor.

Ms. Fahey reminded the group about the December public meetings. Mr. Ceppos added that TAC and Board members should attend if possible. Meeting times are December 9 at 5:30 p.m. and December 10 at 1:00 p.m.

10. Adjourn

The meeting was adjourned at approximately 4:00 p.m.



Discussion Topics

- Sustainability Goal and Undesirable Results Statements
 - Approach to Develop Minimum Thresholds and Measurable Objectives
 - Well Monitoring Pilot Program Development
 - Projects and Management Actions Solicitation
- 11/13/2020 Joint TAC 2

4.a. Sustainability Goal and Undesirable Results Statements

11/13/2020 Joint TAC 3

Sustainability Goal

- Overarching Goal of the Entire Groundwater Sustainability Plan (GSP)
 - Qualitative Description of Objectives and Desired Conditions in the Subbasin
 - Supported by Undesirable Results, Minimum Thresholds, Measurable Objectives and Interim Milestones
- 11/13/2020 Joint TAC 4

Draft Sustainability Goal

The sustainability goal for the Colusa Subbasin GSP is to maintain, through a cooperative and partnered approach, locally managed sustainable groundwater resources to preserve, and enhance the economic viability, social well-being and culture of all Beneficial Uses and Users, including domestic, agricultural, municipal, environmental, tribal, and industrial, without experiencing undesirable results by managing use within the sustainable yield.

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Undesirable Results Statements

- Considers Stakeholder Input
 - Describe Significant and Unreasonable Effects that Would Constitute an Undesirable Result
 - Not Required for Sustainability Indicators Where Undesirable Results are Not Present and Not Likely to Occur
 - Drive Monitoring Network, Minimum Thresholds, and Projects and Management Actions
 - Can Be Updated Adaptively over Time
- 11/13/2020 Joint TAC 6

Undesirable Results Statements

Draft Statements

- Levels
 - The undesirable result for the chronic lowering of groundwater levels is a result that would cause significant and unreasonable reduction in the long-term viability of beneficial uses and users over the planning and implementation horizon of this GSP.
- Storage
 - The undesirable result for the reduction of groundwater in storage is a result that would cause significant and unreasonable reduction in the long-term viability of Beneficial Uses and Users over the planning and implementation horizon of this GSP.

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Undesirable Results Statements

Draft Statements

- Seawater Intrusion
 - Seawater intrusion is not an applicable sustainability indicator, because seawater intrusion is not present and is not likely to occur in the Colusa Subbasin due to the distance from the Pacific Ocean, bays, deltas, or inlets.
- Language used for seawater intrusion is from DWR's *Sustainable Management Criteria Best Management Practices* (November 2017)
- Subsurface salinity falls under the groundwater quality sustainability indicator

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Undesirable Results Statements

Draft Statements

- Quality
 - The undesirable result for degraded water quality is a result stemming from a causal nexus between groundwater quantity related activities, such as groundwater extraction or groundwater recharge, and groundwater quality that causes significant and unreasonable effects to Beneficial Uses and Users including reduction in the long-term viability of these uses over the planning and implementation horizon of this GSP.
- “Causal Nexus” is used to limit GSA’s responsibility where it overlaps with existing issues, is naturally occurring, or is being covered by other programs

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Undesirable Results Statements

Draft Statements

- Land Subsidence
 - The undesirable result for land subsidence is a result due to groundwater extraction that causes a significant and unreasonable reduction in the viability of the use of critical infrastructure over the planning and implementation horizon of this GSP.
- Depletion of Interconnected Surface Water
 - The undesirable result for depletions of interconnected surface water is a result that causes significant and unreasonable adverse effects on Beneficial Uses and Users of interconnected surface water within the Colusa Subbasin over the planning and implementation horizon of this GSP.

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Proposed Action

The Joint TAC recommends that the Colusa and Glenn groundwater authorities Boards adopt the draft Sustainability Goal and Undesirable Results statements.

OR

The Joint TAC recommends that the Colusa and Glenn groundwater authorities Boards adopt the draft Sustainability Goal and Undesirable Results statements, as revised.

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4.b. Approach to Develop Minimum Thresholds and Measurable Objectives

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Contents

- Sustainability Indicators (SI)s and Monitoring Metrics
- Groundwater Levels
 - Monitoring Networks
 - Potential Approaches to Set Minimum Threshold
- Groundwater Storage
 - Levels as proxy monitoring
- Groundwater Quality
 - Monitoring Network
- Subsidence
 - Monitoring Network
- Depletions of Interconnected Surface Water
 - Levels as proxy monitoring
 - Approach to analyze

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Sustainability Indicators and Monitoring Metrics

Sustainability Indicator	Monitoring Metric
Groundwater Levels	Groundwater Levels
Groundwater Storage	Groundwater Levels (proxy)
Groundwater Quality	Quality? Salinity only?
Seawater Intrusion	NA
Subsidence	Subsidence Monitoring
Surface Water Depletion	Groundwater Levels (proxy)

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Groundwater Levels Monitoring Network

- Monitoring network has adequate well density
- Colusa Subbasin: 1,131 square miles
- 108 monitoring wells
 - 108 wells/1,131 sq miles * 100 sq miles = 9.55 wells/100 sq miles
 - 24 multi-completion wells
 - 50 well locations = 4.42 locations/100 square miles

Table 1. Monitoring Well Density Considerations

Reference	Monitoring Well Density (wells per 100 miles ²)
Heath (1975)	0.2-3.0
Sophocles (1983)	4.3
Hopkins (1984)	4.0
Basins pumping more than 10,000 acres/year per 100 miles ²	
Basins pumping between 1,000 and 10,000 acres/year per 100 miles ²	2.0
Basins pumping between 250 and 1,000 acres/year per 100 miles ²	1.0
Basins pumping between 100 and 250 acres/year per 100 miles ²	0.7

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Monitoring Network Meets BMP Guidance

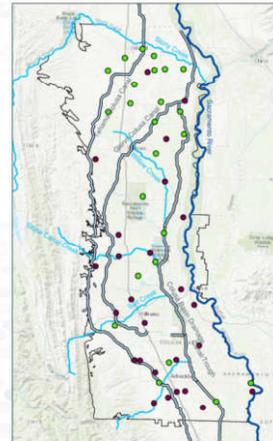


Groundwater Levels Threshold Considerations

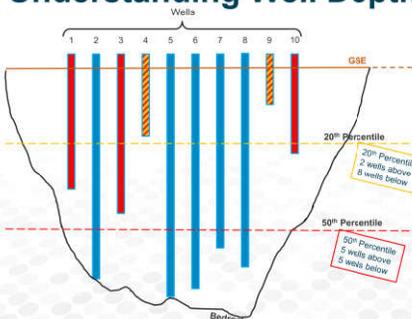
- Potential Approaches:
 - Well construction infrastructure
 - Shallowest nearby well
 - 5th, 10th, 20th, Percentile of nearby wells (95%, 90%, 80% of wells deeper than threshold)
 - Conditions at Jan 1, 2015
 - Historical low
 - Percent of range of measurements (20%, 50%)
- Can be adjusted and applied by management area if desired

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Groundwater Levels Understanding Well Depth Percentiles



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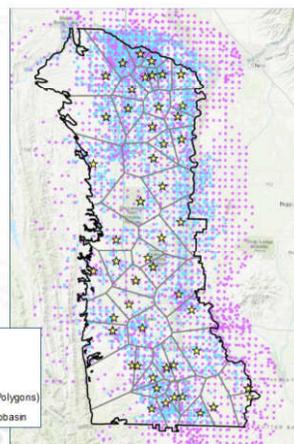
Thiessen Polygons and WCR database

- Shows area that is nearest to each monitoring well
- Can be used to select Well Completion Reports to identify which WCRs are closest to which monitoring point

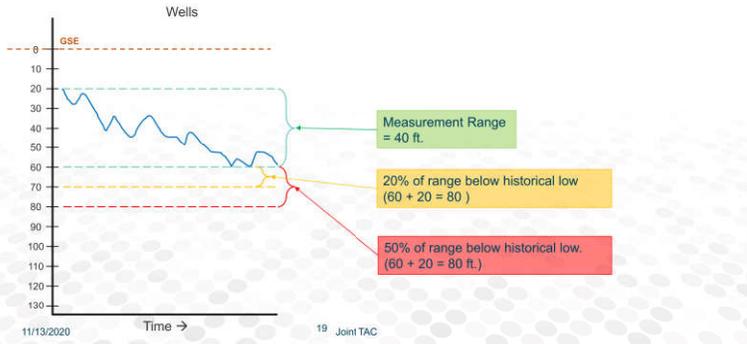


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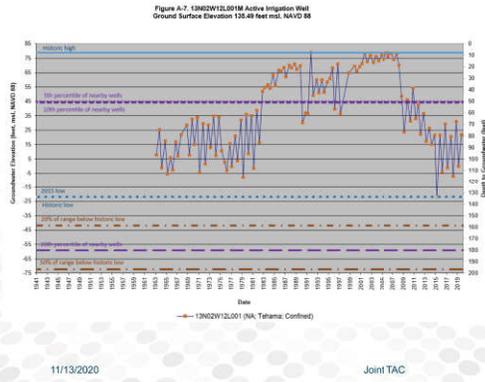
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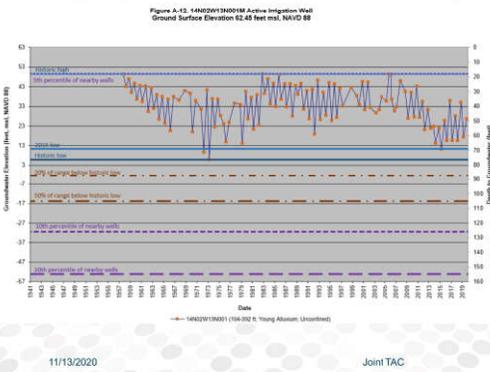
Groundwater Levels Percent of Range



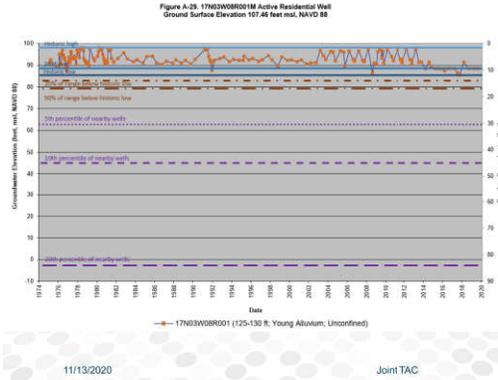
13N02W12L001M



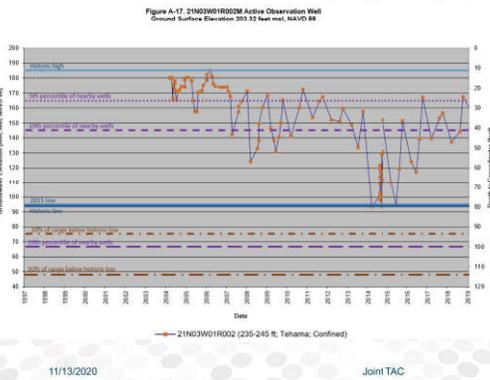
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17N03W08R001M

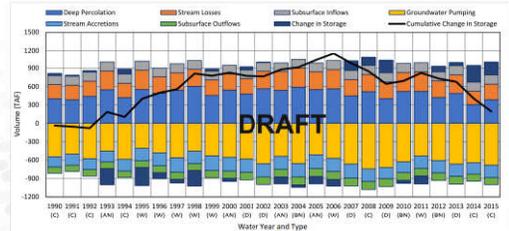


21N03W01R002M



Groundwater Storage

- Recommend using levels as a proxy
- Change in storage that has occurred is a small portion of available storage
- Limiting factor to storage use is existing well infrastructure and near surface conditions, not the amount of volume storage
- Therefore: levels thresholds are protective against significant and unreasonable changes in storage



Groundwater Quality

- Recommend monitoring for TDS only
- Justification for salinity vs other concerns
 - **TDS - upwelling of connate water – regional concern**
 - Arsenic – localized concerns, not regional
 - Nitrate – Land use driven, not directly under GSA authority
 - Anthropogenic – falls under RWQCB
- Some overlap with DWR GW substitution transfer program

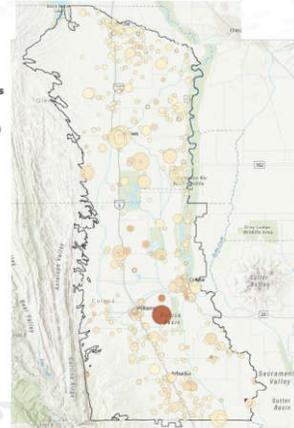
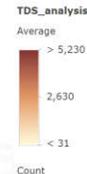
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Groundwater Quality TDS Conditions Summary

- Source: GeoTracker GAMA
- 702 wells with readings, 2,984 readings in total
- Earliest reading: 7/21/1941
- Most recent reading: 6/9/2020



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Groundwater Quality

- Consider filling monitoring data gap with a new network
 - Target 20% of the size of the Levels network (20 wells)
 - Develop 'new' groundwater quality monitoring network
 - Use existing wells where possible:
 - Subset of wells from levels monitoring network
 - Data loggers to collect salinity to avoid well purges
 - Wells and/or monitoring from Irrigated Lands Program
 - Wells from DWR water transfer program

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Groundwater Quality

- We are not able to set sustainable management criteria for quality on a new network, because the network does not have measurements to use to calculate thresholds
- Recommend setting Minimum Threshold/Measurable Objectives for the groundwater quality network at the 1st 5-year update (in 2027)
- Thresholds to consider:
 - Drinking water standards (500 – 1,500 TDS)
 - Agricultural quality requirements (450 – 1,500 TDS)
 - Measurements from 2022-2027

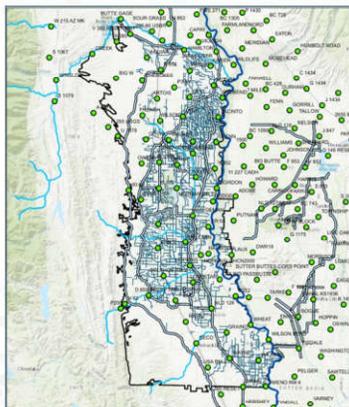
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Subsidence

- Recommend using DWR GPS subsidence network
 - 2017 GPS Survey of the Sacramento Valley Subsidence Network (DWR 2018)
- Monitoring Network has adequate density
- Consider adding one or more additional benchmarks as part of Prop 68 hydrogeologic investigation



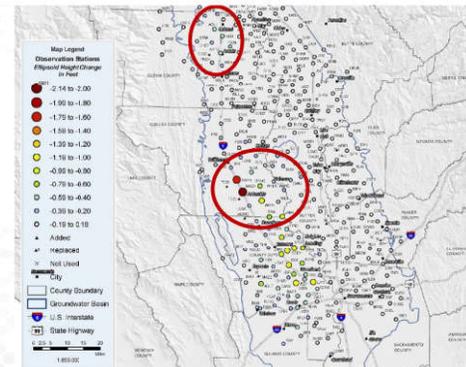
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Subsidence Historical Conditions

- Historical subsidence
 - Northwest of Arbuckle
 - Orland area



State of California
California Natural Resources Agency
DEPARTMENT OF WATER RESOURCES
Division of
Integrated Regional Water Management
Northern Region Office

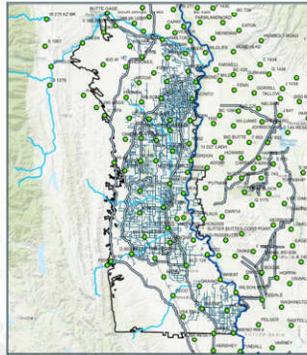
SACRAMENTO VALLEY
SUBSIDENCE NETWORK
Ellipsoid Height Change in Feet
2008-2017



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Subsidence Thresholds and Water Infrastructure

- Thresholds should consider location of water conveyance infrastructure
 - Conveyance infrastructure covers most of the Colusa Subbasin, therefore makes sense to apply subsidence thresholds to all in-subbasin stations
 - Other infrastructure considerations? (e.g. levees, bridges, wells, etc.)
- No published metrics for how much subsidence is reasonable
- Approaches to set thresholds under consideration:
 - Compare local area grades vs. potential subsidence rates
 - Estimate amount of change that would affect gravity flow in canals
 - Consider what neighboring subbasins are doing
 - Other considerations (TAC input)



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Depletion of Interconnected Surface Water

- Recommend monitoring for Depletions of Interconnected Surface Waters using levels as a proxy
 - Stream gages are not prevalent enough to use for monitoring at this time
 - Recommend adding stream gages to monitoring network for data compilation/modeling support even if not used for thresholds
- Proposed approach:
 - Use numerical model to estimate depletions from key water bodies at lowered groundwater levels (at Minimum Thresholds for levels)
- Focus on key water bodies:
 - Sacramento River
 - Stony Creek
 - TAC input

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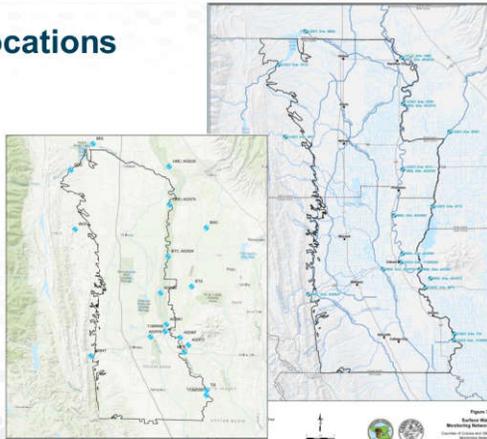
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Stream Gage Locations

- Monitoring Network Assessment Report (May 2018)

• https://www.countyofglenn.net/sites/default/files/Water_Resources/06_18_18%20-%20nm1%20-%20R%20-%20Monitoring%20Network%20-%20with%20apps.pdf



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Next Steps

- Adjust approaches as needed to consider management areas
- Levels:
 - Develop draft groundwater level Minimum Thresholds
 - Develop approach for Measurable Objectives and Interim Milestones
- Quality:
 - Develop draft monitoring network
- Subsidence:
 - Develop initial Minimum Thresholds and Measurable Objectives
- Depletions of Interconnected Surface Water:
 - Analyze depletions using numerical model

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4.c. Well Monitoring Pilot Program Development

Draft Informational Flyer

- Background
- Program Description
 - Activities
 - Incentives
 - Equipment Providers
 - Timeline
- Contact Info. for Questions
- Funding Acknowledgement

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Draft Participant Application

- Simple, 1-Page
- Information Requested
 - Applicant Contact
 - Location
 - Acreage, Crop(s) Served, Irrigation Method
 - Presence of Flow Meter
 - Relative Reliance on Groundwater vs. Surface Water
 - Willingness to Share Information Collected
- Participant agreement to be developed

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4.d. Projects and Management Actions Solicitation

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Approach

1. Conduct preliminary stakeholder engagement and develop an initial inventory of PMAs
2. Conduct hydrologic, engineering, and economic analysis to inform discussions and screen initial PMAs
3. Assess combinations of PMAs and evaluate likely impacts on groundwater conditions
4. Rank, select, and perform final assessment of PMAs for inclusion in GSP

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Initial Inventory

- Inclusive inventory of PMA ideas
- Categorization based on project type, management mechanism, supporting information, etc.
- Compilation of available information to support screening analysis
 - Location
 - Costs
 - Benefits
 - Status (reconnaissance, feasibility, 30% design, etc.)

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Updated Template to Gather PMA Ideas

- Requested Information
 - Project Name and Contact Information
 - Project Description and Status
 - Supporting Information
- Recognizes that not all requested information may be available
- Consider distribution through hardcopy, email, web download, online form, or other means

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Questions

- Revisions to template?
- Best way to distribute?

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End

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COLUSA AND GLENN GROUNDWATER AUTHORITIES

Colusa Subbasin

Joint Technical Advisory Committee
GSP Development

December 11, 2020

1

Discussion Topics

- Management Areas
- Funding Mechanisms
- Hydrogeologic Investigation
- Well Monitoring Pilot Program Screening Criteria

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4.a. Management Areas

Byron Clark
Davids Engineering

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Management Areas (MAs)

- Overview
- MAs in Other Basins
 - Basins with MAs
 - Basins without MAs
- Potential Pros and Cons of MAs
- Discussion of Colusa Subbasin MAs
- Identification of Next Steps

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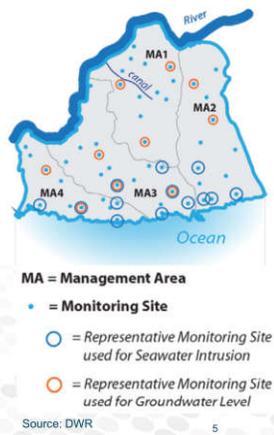
Management Areas (MAs)

§351(r) Definitions

“Management area” refers to an area within a basin for which the Plan may identify different minimum thresholds, measurable objectives, monitoring, or projects and management actions based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors.

(Underline – Emphasis Added)

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Management Area Overview

§354.20. Management Areas

“(a) Each Agency may define one or more management areas within a basin if the Agency has determined that creation of management areas will facilitate implementation of the Plan. Management areas may define different minimum thresholds and be operated to different measurable objectives than the basin at large, provided that undesirable results are defined consistently throughout the basin”

(Underline – Emphasis Added)

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Management Area Overview

§354.20. Management Areas

"(b) A basin that includes one or more management areas shall describe the following in the Plan:

- (1) The reason for the creation of each management area.
- (2) The minimum thresholds and measurable objectives established for each management area, and an explanation of the rationale for selecting those values, if different from the basin at large.
- (3) The level of monitoring and analysis appropriate for each management area.
- (4) An explanation of how the management area can operate under different minimum thresholds and measurable objectives without causing undesirable results outside the management area, if applicable.

(c) If a Plan includes one or more management areas, the Plan shall include descriptions, maps, and other information required by this Subarticle sufficient to describe conditions in those areas."
(Underline = Emphasis Added)

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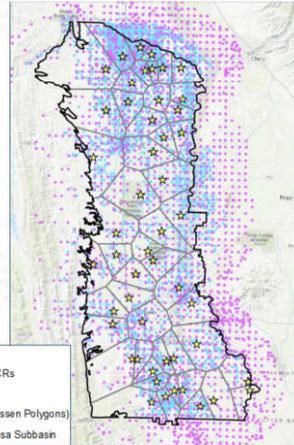
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Management Area Overview

§354.34. Monitoring Network

"(d) The monitoring network shall be designed to ensure adequate coverage of sustainability indicators. If management areas are established, the quantity and density of monitoring sites in those areas shall be sufficient to evaluate conditions of the basin setting and sustainable management criteria specific to that area."



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Management Area Summary

- May be defined based on physical characteristics or jurisdictional boundaries
- Other portions of the GSP (e.g., hydrogeologic conceptual model, water budget, notice and communication) must be consistent for the entire GSP area

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Example Basins with Management Areas

- Yolo – 6
- Chowchilla – 6
- North and Central Delta Mendota – 2
- Kern Groundwater Authority – 25

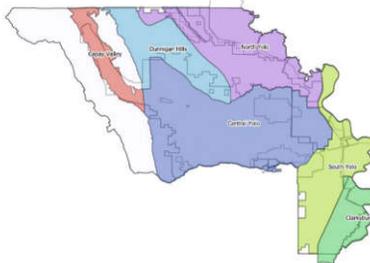
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Yolo Subbasin

- Single GSA (25 Members)
- 6 Management Areas
- Delineated Based on Physical Setting
- Purpose/Use
 - Allow for setting of unique thresholds



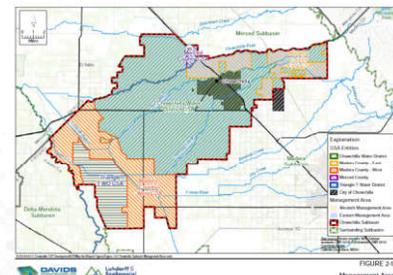
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Chowchilla Subbasin

- Four GSAs
- Six Management Areas
- Delineated Based on Jurisdictional Boundaries
- Purpose/Use
 - Set unique subsidence thresholds



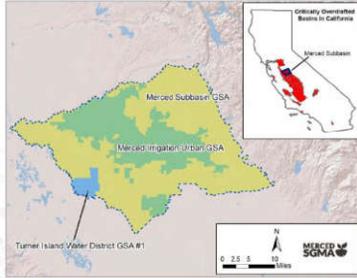
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Merced Subbasin

- Three GSAs
- Approach to Set Thresholds
 - Levels: Depth of shallowest well in 2-mile radius of each representative well
 - Quality: TDS < 1,000 mg/L
 - Subsidence < 0.75 ft/yr
 - Thresholds for other applicable sustainability indicators based on groundwater levels as proxy



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Management Area Pros and Cons

Source: Corning Subbasin Advisory Board, 7/1/2020 (Montgomery & Associates)

Pros	Cons
Identify areas that have unique characteristics and management challenges for focused groundwater management	May require additional time and resources to address separate management areas – also, the justification for developing management areas may be tricky; the GSP requires good justification on why they were chosen
Develop Minimum Thresholds/Measurable Objectives with a different methodology than the rest of the basin or other management areas, with potentially denser monitoring, if needed	Reality - can do this without a management area (SMC are developed at the Representative Monitoring Point, not at Management Area level)
Can set up separate projects and management actions and fees focused only on the management area	Fee base would be smaller if restricted to the management area - Can do this without a management area
Highlight specific management areas and their characteristics to the public and State	Can do this without a management area

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Other Considerations

- Potential “us and them” dynamic between Beneficial Users
- Potential impacts of unique thresholds on neighboring areas
- New administrative layers of governance and implementation
- Accruing benefits from a project or management action in one Management Area when the benefits extend beyond its boundary
- Quantifying benefits that vary within a Management Area from a given PMA

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Discussion and Next Steps

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4.b. Funding Mechanisms

Duncan MacEwan and Steve Hatchett
ERA Economics

12/11/2020

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Topics

- Describe work to be completed in support of GSP development
 - Basin economic setting
 - Funding options overview
- Introduce preliminary concepts and an overview of options that will be evaluated further
- Next steps
 - Support of ongoing GSP development and engagement at future stages

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Basin Economic Setting

- Objective
 - Establish baseline economic conditions in the Subbasin, highlighting economically important water-dependent industries
- Approach
 - Establish baseline market conditions for major Subbasin crops
 - Variability in cropping, trends, and returns
 - Jobs, income, local economic activity that depends on farming and related industries

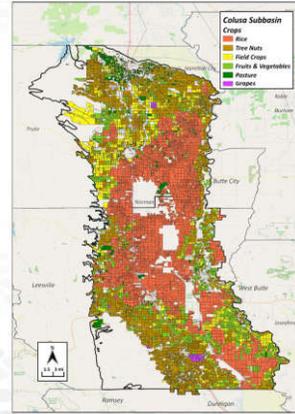
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Subbasin Overview

- 2016 crop map
- Economically important mix of crops
 - Around 35% of irrigated acreage is rice
 - Around 26% of irrigated acreage is nut crops
- Recent trends towards permanent plantings



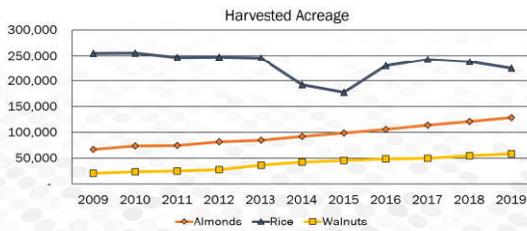
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Subbasin Economic Considerations

- Agriculture is an economically important industry in the Subbasin: jobs, income, supporting industries
 - ~\$1.7 billion gross farm-gate value



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GSP Funding Options

- Objective
 - Describe possible funding options and highlight costs and benefits of alternative approaches considering Subbasin local conditions
- Approach
 - Inventory funding options
 - Consider fairness, equity, and other factors and describe potential options in support of GSP development phases

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GSP Funding Methods

- Capital Projects and Planning Studies
 - Grants and loans
 - Department of Water Resources (DWR) grants including Prop. 68 and other future bonds.
 - US Bureau of Reclamation WaterSmart
- Local bond issuance
- Private funding including conservation easements
- Other local borrowing options
- Considerations
 - Helps fund capital and planning costs only

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GSP Funding Methods

- Ongoing operations and administrative costs
- Extraction and permit fees
 - Water Code 10730(a)
- Other funding sources
 - Water Code sections 10725, 10726.8(a), 10730.2(e), 10730.4, 10730.8, and 10754
 - Section 6 of Article XIII D of the CA Constitution
- Considerations
 - Funding for ongoing operations, monitoring, reporting, administration, and repayment of borrowed capital funds

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GSP Funding Methods

- Specific revenue methods
- Property-related taxes
 - Ad valorem tax
 - Parcel tax
- Charges and fees to cover provision of services
 - Per acre charge
 - Extraction fee
 - Permit fee
 - Other (combined)
- Benefit assessment
- Considerations
 - Equity considerations for allocation of costs and benefits

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Next Steps

- Assess cost and financing implications at upcoming stages in GSP development
 - SMC and PMA
- Develop options for funding, considering the potential distribution of costs and benefits
- Prepare short technical memorandum summarizing funding methods and allocation considerations

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4.c. Hydrogeologic Investigation

Ken Loy
West Yost Associates

12/11/2020

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Discussion Only (No Slides)

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4.d. Well Monitoring Pilot Program Screening Criteria

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Background

- Applications Open in January, Followed by Landowner Workshop
- Selection and Deployment in February – April
- Implementation for 2021 – 2023 Growing Seasons
- Today's Discussion: Development of Participant Selection Criteria

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Eligibility Requirements

- Potential Participants Agree to:
 - Allow GSAs to make information collected publicly available
 - Allow GSA representatives to make site visits
 - Participate for a period of three years
 - Install approved flow meter and access tube for pressure transducer in well casing, if not already present
 - Maintain cellular service for monitoring equipment telemetry during three-year enrollment period
 - Manually report pumping data during three-year enrollment period, in the event of device failure

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Selection Criteria

- Selection will Consider
 - Location within the subbasin (desire to enroll participants in both Glenn and Colusa counties)
 - Water source (fields relying primarily on groundwater preferred)
 - Presence of an existing flow meter installed per manufacturer specifications
- Other Possible Considerations
 - Number of wells per participant
 - First come – first served

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Ideas for Discussion

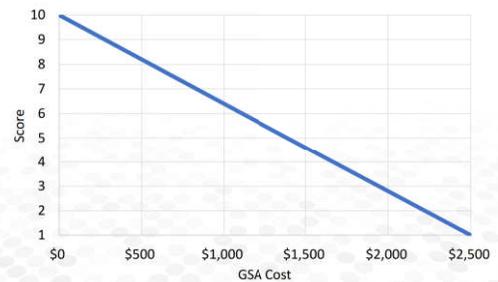
- Location within the subbasin (desire to enroll participants in both Glenn and Colusa counties)
 - Equal number of wells in each county
- Water source
 - Score from 1 to 10 based on percent of supply from groundwater vs. surface water
- Presence of an existing flow meter
 - Score from 1 to 10 based on flowmeter costs to GSA
 - \$2,500 = 1 → \$0 = 10

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Flowmeter Cost Score



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Other Considerations

- Number of Wells per Participant
 - Limit to one well per participant, unless funding remains after initial selection is complete
 - For participants submitting multiple applications, highest scoring well included in initial round of selection
- First Come – First Served
 - If more than one well has the same score, and only one can be funded, select first application submitted

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Hypothetical Example

Applications Received							Application Ranking and Selection							
Applicant	% Groundwater	Flow-meter Cost	Date	% Groundwater Score	Cost Score	Total Score	Round	Rank	Applicant	Total Score	GSA Cost ¹	Available Funding	Date	Selected
A	65%	\$2,000	1/31	6.5	2.8	9.3	1	1	B	12.8	\$6,250	\$42,000	1/28	Yes
B	100%	\$2,000	1/28	10.0	2.8	12.8		2	D	12.5	\$4,250	\$35,750	1/25	Yes
C	75%	\$1,500	1/16	7.5	4.6	12.1		3	C	12.1	\$5,750	\$31,500	1/16	Yes
C	100%	\$2,500	1/21	10.0	1.0	11.0		4	A	9.3	\$6,750	\$25,750	1/31	Yes
D	25%	\$0	1/25	2.5	10.0	12.5		5	F	9.0	\$6,750	\$19,000	1/30	Yes
E	25%	\$2,000	1/19	2.5	2.8	5.3		6	E	5.3	\$6,250	\$12,250	1/19	Yes
F	80%	\$2,500	1/30	8.0	1.0	9.0	2	1	D	11.0	\$6,000	\$6,000	1/19	Yes
								1	C	11.0	\$6,750	\$0	1/21	No

1. GSA Cost Includes Flow Meter, Pressure Transducer, and Telemetry

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14. MEMBER REPORTS AND COMMENTS

Members of the GGA Board are encouraged to share information, reports, comments, and suggest future agenda items. Action cannot be taken on items brought up under this item.

15. NEXT MEETING

The next regular meeting is scheduled for January 11, 2021 at 1:30 PM.

16. ADJOURN

The meeting will be adjourned.

*Indicates Action Item