



**Stanislaus & Tuolumne Rivers Groundwater Basin Association**  
**Groundwater Sustainability Agency**  
1231 11<sup>th</sup> Street | Modesto, CA 95354  
Email: [strgba@mid.org](mailto:strgba@mid.org)

**STRGBA GSA AGENDA**  
**October 12, 2022 (1:30 p.m. – 3:00 p.m.)**  
**Webinar Digital Platform or Phone Meeting**  
<https://us02web.zoom.us/j/82844864384>

By phone: 1-669-900-9128  
Webinar ID: 828 4486 4384

This meeting is being conducted via webinar for all seven member agencies, pursuant to Executive Orders signed by Governor Gavin Newsom related to the ongoing COVID-19 pandemic, including provisions regarding the Brown Act. Members of the public and member agency staff may join the meeting utilizing Zoom's webinar feature if desired, or a phone number as provided in this Agenda. Members of the public will continue to have the opportunity to provide public input via the webinar or phone features. Members of the public may also email public comments by 3:00 p.m. on the day preceding the GSA meeting to: [strgba.org](http://strgba.org). If public comments are timely submitted by email, then those comments will be identified during the public input section of the Agenda or during a specific agenda item if the agenda item is identified in the email. The Brown Act does not require a member of the public to state her or his name; please indicate in your email if you would like your name stated or if you want to remain anonymous.

**PUBLIC PARTICIPATION**

**The public may participate in this meeting in the two ways described below.**

Instructions for Participating in STRGBA GSA & Technical Advisory Meeting via Zoom Webinar or Phone

**On your desktop/iPad or tablet/laptop:**

1. To join the webinar, click the link published in the Agenda for the current meeting about 5 minutes before webinar begins.
2. Follow the on-screen instructions to install and/or launch the Zoom application.
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4. If you wish to speak under Business from the Public, or after the Chairman calls for Public Comment, press \*9 on your phone to "Raise Hand" or simply request to speak.



1. Call to Order/Welcome and Introductions  
(Four agencies needed for a quorum)
2. Business from the Public  
Who: Public  
Expected Outcome: Interested persons are welcome to introduce any topic within the Agency's jurisdiction. Matters presented under this heading may be discussed but no action will be taken by the Agency at this meeting.
3. Topic: Remote Teleconferencing Participation [Action Item]  
Who: Gordon Enas, Committee  
Expected Outcome: Approval
4. Topic: Approve 8/10/22 Meeting Minutes [Action Item]  
Who: Eric Thorburn, Committee  
Expected Outcome: Approval
5. Topic: 2022 Annual Report [Action Item]  
Who: Todd Groundwater, Committee  
Expected Outcome: Approval
6. Topic: Fall 2022 Monitoring Event  
Who: Todd Groundwater, Committee  
Expected Outcome: Discussion
7. Topic: Dry Well Update  
Who: Todd Groundwater, Committee  
Expected Outcome: Discussion
8. Topic: Oakdale Irrigation District Grant Application  
Who: Eric Thorburn, Committee  
Expected Outcome: Discussion



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9. Next Meeting

November 9, 2022 at 1:30 p.m. via Zoom

10. Items too late for the agenda



## AGENDA REPORT

**GSA Meeting Date:** October 12, 2022

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<b>Subject:</b>	Brown Act Provisions for Remote Teleconferencing Participation in Meetings during a Declared State of Emergency.
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<b>Recommended Action:</b>	Resolution Approving and Confirming a Continuing State of Emergency Arising from the STRGBA GSA's Emergency Declaration During March 2020 (and Subsequent State and County Orders) due to the COVID-19 Pandemic and Further Authorizing Remote Conference Meetings of the STRGBA GSA's Governing Body Pursuant to the Provisions of the Brown Act and Duly Issued Laws and Orders from the State Related to the Pandemic and Operations for Governing Body Meetings
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<b>Background and Discussion:</b>	<p>All meetings of the STRGBA GSA are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963) and related state laws and orders, so that any member of the public may attend either virtually or in-person as the case may be to participate and watch the GSA's governing body conduct GSA business.</p> <p>The Brown Act makes provisions for remote teleconferencing participation in meetings by members of a governing body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions, such as when a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558. It is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the governing body meeting in person would present imminent risks to the health and safety of attendees.</p> <p>Such conditions now exist in the STRGBA GSA, specifically, a State of Emergency has been proclaimed pursuant to Government Code Section 8625 that the COVID-19 Pandemic has strained the State's healthcare system and workforce and that state and local health departments must use all available preventative measures to combat the spread of COVID-19. As a consequence of the declared emergency, the STRGBA GSA does hereby find that the governing body of the STRGBA GSA shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such governing bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953.</p>
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## AGENDA REPORT

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<b>Alternatives, Pros and Cons of Each Alternative:</b>	<p>Pros: Allow GSA meetings to continue to meet while taking all available preventative measures to combat the spread of COVID-19.</p> <p>Cons: Requiring GSA meetings to be held in-person would violate the proclaimed State of Emergency and potentially expose meeting attendees to COVID-19.</p>
<b>Concurrence:</b>	<p>The actions proposed by this resolution have already been adopted by several of the GSA member agencies.</p>
<b>Fiscal Impact:</b>	<p>Since GSA is currently holding all meetings by remote conferencing, the resolution will create no new or additional fiscal impact.</p>
<b>Recommendation:</b>	<p>Resolution making the following determination:</p> <p>Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.</p> <p>Section 2. Proclamation of Local Emergency. The Governing Body hereby proclaims that a local emergency exists throughout the GSA, and that the governing body meeting in person could present imminent risks to the health and safety of attendees due to the prevalence of the COVID-19 Pandemic in Stanislaus County and the state, such that the GSA reserves the right to continue virtual meetings and/or conduct in-person meetings consistent with local health guidance or duly issued orders.</p> <p>Section 3. Remote Teleconference Meetings. The Governing Body and its Chairman and designees of the GSA are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.</p> <p>Section 4. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) November 9, 2022, or (ii) such time the Governing Body adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the governing bodies of the GSA may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.</p>

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**AGENDA REPORT**

**Attachments:**

Supporting documents attached:

Resolution  Presentation  Other supporting docs  None attached

*Note: Original contracts and agreements are housed in the GSA Secretary's Office, phone (209) 526-7360.*

Presenter

Gordon Enas, P.E. 10/8/2022
Date Signed

GSA Chairman

Eric Thorburn, P.E. 10/8/2022
Date Signed

**D R A F T**

**RESOLUTION NO. 2022-08**

**RESOLUTION CONFIRMING A CONTINUING STATE OF EMERGENCY ARISING FROM THE STATE OF CALIFORNIA AND STANISLAUS COUNTY ORDERS DUE TO THE COVID-19 PANDEMIC AND FURTHER AUTHORIZING REMOTE CONFERENCE MEETINGS OF THE STRGBA GSA'S GOVERNING BODY PURSUANT TO THE PROVISIONS OF THE BROWN ACT AND DULY ISSUED LAWS AND ORDERS FROM THE STATE RELATED TO THE PANDEMIC AND OPERATIONS FOR GOVERNING BODY MEETINGS.**

WHEREAS, the STRGBA GSA is committed to preserving and nurturing public access and participation in meetings of its governing body; and

WHEREAS, all meetings of the STRGBA GSA are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963) and related state laws and orders, so that any member of the public may attend either virtually or in-person as the case may be to participate and watch the GSA's governing body conduct GSA business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the GSA's boundaries, caused by natural, technological, or human-caused disasters; and

## AGENDA REPORT

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist in the GSA, specifically, a State of Emergency has been proclaimed pursuant to Government Code Section 8625 that the COVID-19 Pandemic has strained the State's healthcare system and workforce and that state and local health departments must use all available preventative measures to combat the spread of COVID-19; and

WHEREAS, as a consequence of the declared emergency, the STRGBA GSA does hereby find that the governing body of the GSA shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, the GSA reserves the option to attend in-person meetings consistent with local health officer directives or to continue a practice of remote meetings that still allow multiple options for public participation.

NOW, THEREFORE, THE GOVERNING BODY OF THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY DOES HEREBY RESOLVE AS FOLLOWS,

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Proclamation of Local Emergency. The Governing Body hereby proclaims that a local emergency exists throughout the GSA, and that the governing body meeting in person could present imminent risks to the health and safety of attendees due to the prevalence of the COVID-19 Pandemic in Stanislaus County and the state, such that the GSA reserves the right to continue virtual meetings and/or conduct in-person meetings consistent with local health guidance or duly issued orders.

## **AGENDA REPORT**

Section 3. Remote Teleconference Meetings. The Governing Body and its Chairman and designees of the GSA are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 4. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) November 9, 2022, or (ii) such time the Governing Body adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the governing bodies of the GSA may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.



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## MEETING MINUTES

**August 10, 2022 (1:30 p.m. – 2:30 p.m.)**

The meeting was called to order at 1:31 p.m.

### 1. Welcome and Introductions

The following members of the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) attended via Zoom:

Modesto Irrigation District (MID): Gordon Enas  
City of Waterford: Mike Pitcock  
Stanislaus County: Christy McKinnon  
Oakdale Irrigation District: Eric Thorburn  
City of Modesto: Jim Alves  
City of Oakdale: Michael Renfrow  
City of Riverbank: Michael Riddell

#### Other Attendees:

Phyllis Stanin, Todd Groundwater	Samantha Wookey, MID
Liz Elliott, Todd Groundwater	Hilary Reinhard
Stacy Henderson	John Mauterer
Alexis Stevens	Doug Maner
Dana Ferreira	Allison Boucher
Emily Sheldon	

### 2. Business from the Public

Stevens submitted comments for the GSA's consideration on groundwater well permits and asked if they would be posted to the STRGBA website? Thorburn advised they would not be posted, only comments on the GSP are posted.

### 3. Remote Teleconferencing Participation [\[Action item\]](#)

Renfrow moved, 2<sup>nd</sup> by Riddell, to approve remote teleconferencing participation. Motion carried.

### 4. Approve Meeting Minutes for 6/8/22

Enas moved, 2<sup>nd</sup> by Riddell, to approve 6/8/22 meeting minutes. Motion carried.

[City of Modesto](#) | [City of Oakdale](#) | [City of Riverbank](#) | [City of Waterford](#)  
[Modesto Irrigation District](#) | [Oakdale Irrigation District](#) | [Stanislaus County](#)



## 5. Public Outreach Update

Wookey gave an update on new content added to the STRGBA GSA website. The new content can be found at: <https://www.strgba.org/Home/Resources>.

## 6. Tracking Impacts to Domestic Wells, Spring 2022 GSP Monitoring Event, and GSP Implementation Project

Stanin gave a summary of implementation activities and DWR tools that can be accessed online.

- DWR Well Reporting: Stanin advised of a website that homeowners can report water supply issues from a failed well.
- California Groundwater Live: Interactive maps with groundwater levels including seasonal and long-term trends.
- Dry Well Susceptibility tool: Interactive map to identify high percentage of vulnerable wells.

Thorburn gave an update on OID's out-of-district project.

- Stevens asked to clarify the boundaries for the participants eligible for OID's out-of-district project. Thorburn responded that they don't have a map yet, but the boundaries would be identified in the CEQA document. Stevens asked for an update on other projects identified in the GSP. Thorburn stated no updates are available at this time.

## 7. Next meeting

September 14, 2022 at 1:30 p.m. via Zoom.



October 6, 2022

## PROPOSAL

**To:** Stanislaus and Tuolumne Rivers Groundwater Basin Authority Groundwater Sustainability Agency (STRGBA GSA)

**From:** Liz Elliott, Senior Hydrogeologist, Todd Groundwater  
Phyllis Stanin, Vice President/Principal Geologist, Todd Groundwater  
Dominick Amador, Water Resources Engineer, Woodard & Curran  
Ali Taghavi, Senior Technical Practice Leader, Woodard & Curran

**Re:** Proposal – Preparation of Second Annual Report  
Modesto Subbasin Groundwater Sustainability Plan (GSP)

At the request of the STRGBA GSA, Todd Groundwater and Woodard & Curran are pleased to provide this proposal to prepare the Second Annual Report for the Modesto Subbasin GSP.

The reporting period for GSP Annual Reports is the preceding water year. The Second Annual Report will cover Water Year (WY) 2022, which is from October 2021 through September 2022. The WY 2022 Annual Report is due to DWR by April 1, 2023.

### 1 APPROACH

The Second Annual Report builds on the First Annual Report by addressing groundwater and surface water conditions during WY 2022. This water year includes groundwater levels measured during Fall 2021 and Spring 2022. The Spring 2022 monitoring event was the first GSP monitoring event following submittal of the GSP in January 2022. Preparation of the Second Annual Report will follow regulatory guidance as provided in Article 7 of the GSP regulations (§356). Reporting standards for annual report data are provided in Article 3 (§352.4) and reporting provisions can be found in Article 4 (§353.4).

Our team recommends that the C2VSim™ model be updated and applied for analyses required in the Second Annual Report. The model is the best tool for estimating water budgets in the Modesto Subbasin and the most reliable method for determining subsurface flows and stream-aquifer interaction. During preparation of the First Annual Report for WY 2021, the C2VSim™ model was updated from WY 2016 through WY 2021 – an analysis that was appended onto the historical GSP analysis of WY 1991 through WY 2015. For the Second Annual Report, the model will be updated for WY 2022 to allow for a continuous and consistent methodology from WY 1991 to WY 2022. This approach meets regulatory requirements for providing annual and cumulative change in groundwater in storage “based

on historical data to the greatest extent available,” including the current reporting year (§356.2 (b)(5)(B)). The model also provides the best available tool for other regulatory-required analyses including maps showing the spatial change in groundwater in storage and locations of groundwater extractions.

Regulations also require historical and updated data to be presented on hydrographs from wells in the GSP monitoring network (§356.2 (b)(1)(B)). Additional data, including volumes of groundwater extraction, surface water supplies, and total water use, are required for WY 2022. To ensure statewide consistency, DWR has provided templates for GSAs to report their basin-wide groundwater extraction, surface water supplies, and total water use, including methods of measurement, levels of accuracy, and water source type and sector of use.

Todd Groundwater and Woodard & Curran prepared the First Annual Report and will build on this experience for the Second Annual Report.

## **2 SCOPE OF SERVICES**

We have developed ten proposed tasks as summarized below.

### **Task 1: Compile Data**

Todd Groundwater will develop a data request memorandum that lists data requirements from the member agencies of the GSA. Woodard & Curran will contribute to the data request list for data and information needed for the model update (Task 2). Assuming authorization to proceed by late October / early November, the data request memorandum and templates can be ready for distribution in early November. Data will need to be received in appropriate formats by December 31, 2022, for incorporation into the model update and Annual Report.

A draft outline of data to be requested for WY 2022 (October 1, 2021, to September 30, 2022) is summarized below:

- Modesto Irrigation District surface water operations
  - Tuolumne River inflow (at La Grange)
  - Surface water diversions
  - Surface water deliveries
  - Modesto Reservoir seepage
  - Canal seepage losses
  - Operational spills and return flow
- Oakdale Irrigation District surface water operations
  - Stanislaus River inflow
  - Surface water diversions
  - Surface water deliveries
  - Canal seepage losses
  - Operational spills and return flow

- Construction information of any new agency-operated production wells
- Groundwater level data since the Spring 2022 monitoring event and production data for WY 2022
  - Modesto Irrigation District
  - Oakdale Irrigation District
  - City of Modesto
  - City of Riverbank
  - City of Oakdale
  - City of Waterford

Todd Groundwater will compile and format the data from the member agencies. It is assumed that data will be provided in electronic format (e.g., in spreadsheet or database software), rather than pdf files and/or paper copies. Templates will be included with the data request.

Woodard & Curran will obtain other data sets for the model from publicly available sources, including reference evapotranspiration, hydrology (precipitation and streamflow), and statewide land use surveys.

We request that agencies adhere to our proposed December 2022 deadline. Any data received after December may be too late to incorporate into the model update and/or the analyses required for the Annual Report.

### **Task 2: Update Local C2VSim<sup>TM</sup>**

Woodard & Curran will update the C2VSim<sup>TM</sup> to reflect the newly compiled data sets and extend the historical simulation period through WY 2022. This update task assumes the following:

1. The model will updated to include data for the WY 2022 in the Modesto Subbasin.
2. Additional coordination will be made with neighboring Subbasins (Eastern San Joaquin, Turlock, and Delta Mendota) to ensure that the model assumptions for the adjacent areas are appropriate to reflect the interbasin flows with the Modesto Subbasin.
3. A verification of the model performance relative to the updated groundwater levels will be performed. However, no changes to the model parameters will be made as part of this scope of work.

### **Task 3: Prepare Hydrographs**

Todd Groundwater will develop groundwater elevation hydrographs for the representative monitoring wells (RMWs) in the GSP monitoring network with measured water level data provided by member agencies of the GSA. Hydrographs will be formatted to adhere with the *Data and Reporting Standards* as prescribed in §352.4(e) of the GSP regulations. In brief,

each hydrograph will include a unique site identification number, ground surface elevation, and use the same scale to the greatest extent practical.

We will ensure similar hydrograph formats, including the same horizontal scale of October 1, 1990, through September 30, 2022 (WY 1991 – WY 2022), and the same vertical scale to the extent practicable in adherence with GSP regulations. Hydrographs will also include sustainable management criteria, including minimum thresholds, measurable objectives, and interim milestones, as provided in the GSP. Hydrographs may also include annotations to allow for easy well identification by DWR and other reviewers.

The hydrographs have already been updated to include the Spring 2022 monitoring event. Water level data measured between the Spring 2022 monitoring event and the end of WY 2022 (September 30, 2022), will be added to the RMW hydrographs, if available.

Overall trends and fluctuations illustrated by the hydrographs for WY 2022 will be described briefly in the context of water year type and the groundwater elevation contour maps. Water levels will be compared to the sustainable management criteria and discussed in the report. The Annual Report will also include a map showing the locations of the hydrographs and an appendix with each hydrograph.

#### **Task 4: Prepare Groundwater Elevation Contour Maps**

Todd Groundwater will prepare four groundwater elevation contour maps using water level data measured in Fall 2021 and Spring 2022 (WY 2022). For each period, one map will be developed for water levels measured in the Western Upper Principal Aquifer and the Eastern Principal Aquifer and a second map for water levels measured in the Western Lower Principal Aquifer. The groundwater elevation contour maps will be based on water level data from the GSP monitoring network and will include both data from the RMWs and other SGMA wells.

#### **Task 5: Develop Model Water Budgets in Standard C2VSim™ Template**

Woodard & Curran will prepare the following information to report Subbasin water use and groundwater conditions from the model for the Annual Report:

- 1- Land and Water Use Budget Tables
- 2- Groundwater Budget Tables
- 3- DWR Water Use Templates
- 4- Groundwater contour maps for up to two (2) selected dates
- 5- Subbasin map showing groundwater extractions and storage for WY 2022

For the purposes of the Annual Report preparation, the water budgets from C2VSim™ will be prepared in the standard IWFM templates.

### **Task 6: Analyze Change in Groundwater in Storage**

Using the data from the water budget analysis in Task 5, graphs and maps of the change in groundwater in storage will be prepared for the Subbasin. GSP regulations (§ 356.2 (b)(5)(B)) require both a map and graph of changes in groundwater in storage be developed over the entire Subbasin that meet the following requirements:

- Graphs depicting the annual and cumulative change in groundwater in storage “based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year,” and
- “Change in groundwater in storage maps for each principal aquifer in the basin.”

Woodard & Curran will develop maps of change in groundwater in storage for WY 2022 for each principal aquifer. In addition, a graph of annual change in groundwater in storage will be prepared for WY 2022 and appended onto the historical water budget data as developed for the GSP and the First Annual Report to provide the cumulative change from WY 1991 through WY 2022.

### **Task 7: Water Quality Analysis**

In compliance with the Modesto Subbasin GSP, Todd Groundwater will download water quality data collected in WY 2022 from the State GeoTracker website for seven constituents of concern (COC): arsenic, nitrate, total dissolved solids (TDS), uranium, 1,2,3-trichloropropane (1,2,3-TCP), dibromochloropropane (DBCP), and tetrachloroethene (PCE). Todd Groundwater will analyze and map water quality data collected for these COCs during WY 2022.

The WY 2022 water quality data will be compared to the baseline water quality database that was developed for the First Annual Report. Any WY 2022 exceedances of the COC-respective MCL will be compared to the baseline WY 2021 dataset to evaluate if this is a new exceedance of the MCL, or an increase of a previous exceedance of the MCL. These exceedances will be evaluated with respect to GSA management activities.

### **Task 8: Prepare Draft and Final Annual Report and Submit to DWR**

Todd Groundwater will prepare a Draft Annual Report for review by the GSA. Woodard & Curran will provide applicable work products to support Todd Groundwater in preparation of the report. For scheduling purposes, it is assumed that the Draft will be provided by February 24, 2023, to allow agency input into the development process. Assuming this schedule occurs, comments from the GSA will need to be provided by March 17, 2023.

After comments are incorporated, the Final Annual Report will be provided by March 24, 2023, for final review prior to submittal by the April 1<sup>st</sup> deadline. Stakeholder outreach is coordinated with the timing of the draft and final Annual Report as summarized in Task 10.

### **Task 9: Analysis of Fall 2022 and Spring 2023 Water Level Data**

At the request of the GSA, the scope of work in this proposal also includes review and analysis of the Fall 2022 and Spring 2023 water level data by Todd Groundwater. Although these data will not be included in the Second Annual Report, this task will examine the ongoing results of the GSP groundwater elevation monitoring program for early information on groundwater conditions and compliance with sustainable management criteria.

This task involves updating hydrographs with the Fall 2022 and Spring 2023 water level data and analyzing the groundwater trends and fluctuations throughout the Subbasin. Data will be compared to sustainable management criteria developed for each of the applicable sustainability indicators and documented for compliance across the Subbasin.

This task includes virtual attendance at one STRGBA TAC Planning Group meeting and one STRGBA GSA meeting to discuss the water levels from the Fall 2022 and Spring 2023 monitoring events. It is anticipated that these meetings will be held in July 2023, after the Spring 2023 data is uploaded to DWR.

### **Task 10: Project Management and Meetings**

Todd Groundwater will manage the project and subcontract Woodard & Curran for the tasks described above. Project management will include preparation of monthly invoices, scheduling, and communication with the TAC Planning Group and member agencies.

Todd Groundwater and Woodard & Curran will present and discuss the draft and final Annual report at meetings with the STRGBA TAC Planning Group, the STRGBA GSA, and the public. For budget and planning purposes, three STRGBA TAC Planning Group meetings and two STRGBA GSA meetings are proposed. The primary objectives and tentative dates for the meetings are summarized as follows:

- STRGBA TAC Planning Group Meeting No. 1: Finalize technical approach for change in groundwater in storage and other technical analyses; tentatively scheduled for January 30, 2023.
- STRGBA TAC Planning Group Meeting No. 2: Review Draft Annual Report, tentatively scheduled for February 27, 2023.
- STRBGA GSA Meeting No. 1: Review Draft Annual Report, tentatively scheduled for March 8, 2023. The Draft Annual Report will be posted to the STRGBA GSA website following this meeting.
- STRGBA TAC Planning Group Meeting No. 3: Review Final Annual Report and comments from the public, tentatively scheduled for March 20, 2023.
- STRGBA GSA Meeting No. 2: GSA approval of the Final Annual Report and how comments from the public were addressed, tentatively scheduled for March 29, 2023.

The budget assumes that we will attend the meetings virtually.

### Task 11: Meeting Attendance in 2023

Todd Groundwater will attend STRGBA TAC Planning Group meetings and STRGBA GSA meetings throughout 2023. It is assumed that one TAC Planning Group meeting and one GSA meeting will occur each month. This task does not include the meetings that are related to the Annual Report and included in Task 9.

### 3 BUDGET AND SCHEDULE

Execution of the scope of work described herein is estimated to cost \$152,380. This cost allows for a variety of technical methods to be considered and employed to meet regulatory requirements and the schedule for Annual Report development. Table 1 shows costs by task.

A proposed schedule is provided below.

TASK	DATES	2022		2023							
		Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	
Project Begins	11/1/22	●									
1 Complete Data	11/1/22 - 12/31/22	■	■								
2 Update Local C2VSimTM	12/1/22 - 2/28/23		■	■	■						
3 Prepare Hydrographs	2/1/23 - 2/28/23			■	■						
4 Prepare Groundwater Elevation Contour Maps	1/1/23 - 2/28/23			■	■						
5 Develop Model Water Budgets in Standard C2VSimTM Template	1/1/23 - 2/28/23			■	■						
6 Analyze Change in Groundwater in Storage	2/1/23 - 2/28/23			■	■						
7 Water Quality Analysis	1/1/23 - 2/28/23			■	■						
8 Prepare Draft and Final Annual Report and Submit to DWR	1/1/23 - 3/31/23			■	■	■	★				
9 Analysis of Fall 2022 and Spring 2023 Water Level Data	6/1/23 - 7/31/23								■	■	
10 Project Management and Meetings	11/1/22 - 7/31/23			▲	▲	▲	▲				
11 Meeting Attendance in 2023 (not shown graphically)	1/1/2023 - 12/31/2023										

- Project begins
- ▲ Annual Report Meetings (3 meetings: 2 TAC Planning Group, 1 STRGBA GSA)
- ★ Annual Report Submittal to DWR
- ▲ Task 9 Meetings (2 meetings: 1 TAC Planning Group, 1 STRGBA GSA)

Please let us know if you have questions about this proposal. We stand ready to move the effort forward as soon as possible.

### Attachments

Table 1 Cost Estimate

## Table 1: Cost Estimate

## Todd Groundwater

Job Name: Modesto Subbasin Second GSP Annual Report  
Job Description: Prepare and Submit the Second GSP Annual Report for the Modesto Subbasin  
Client: STRGBA GSA  
Date: 10/6/2022

Task	Todd Groundwater	Woodard & Curran	Total
Task 1: Compile Data	\$ 6,040	\$ 2,010	\$ 8,050
Task 2: Update Local C2VSimTM	\$ -	\$ 19,400	\$ 19,400
Task 3: Prepare Hydrographs	\$ 3,580	\$ -	\$ 3,580
Task 4: Prepare Groundwater Elevation Contour Maps	\$ 5,970	\$ -	\$ 5,970
Task 5: Develop Model Water Budgets in Standard C2VSimTM Template	\$ -	\$ 5,440	\$ 5,440
Task 6: Analyze Change in Groundwater in Storage	\$ -	\$ 7,320	\$ 7,320
Task 7: Water Quality Analysis	\$ 10,140	\$ -	\$ 10,140
Task 8: Prepare Draft and Final Annual Report and Submit to DWR	\$ 18,860	\$ 8,620	\$ 27,480
Task 9: Analysis of Fall 2022 and Spring 2023 Water Level Data	\$ 12,270	\$ -	\$ 12,270
Task 10: Project Management and Meetings	\$ 19,010	\$ 13,085	\$ 32,095
Task 11: Meeting Attendance in 2023	\$ 20,635	\$ -	\$ 20,635
<b>Total Estimated Project Cost</b>	<b>\$ 96,505</b>	<b>\$ 55,875</b>	<b>\$ 152,380</b>



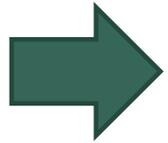
# SECOND ANNUAL REPORT & DRY WELL UPDATE MODESTO SUBBASIN GSP

STRGBA GSA MEETING

OCTOBER 12, 2022



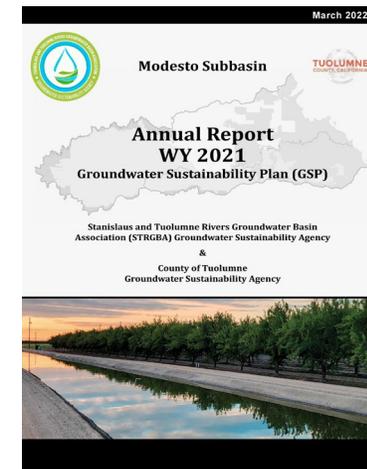
# PRESENTATION OUTLINE



Second Annual Report

Fall 2022 Monitoring Event

Dry Well Update



# SECOND ANNUAL REPORT

- Reporting period: Water Year 2022 (October 2021 through September 2022)
- Build on First Annual Report and will include:
  - Fall 2021 and Spring 2022 groundwater level monitoring. (Spring 2022 is the first monitoring event following GSP submittal in January 2022.)
  - Model update for WY 2022
  - Hydrographs for representative monitoring wells
  - Groundwater elevation contour maps (Fall 2021 and Spring 2022)
  - Water budgets for WY 2022
  - Change in Groundwater in Storage – cumulative and during WY 2022
  - Water Quality Analysis
  - Subsidence Supplemental Monitoring (InSAR data from DWR)

# ANNUAL REPORT DATA REQUEST

- Modesto Irrigation District and Oakdale Irrigation District surface water operations
  - Tuolumne River / Stanislaus River inflow
  - Surface water diversions
  - Surface water deliveries
  - Modesto Reservoir seepage
  - Canal seepage losses
  - Operational spills and return flow
- Construction information of any new agency-operated production wells
- Groundwater level data since the Spring 2022 monitoring event and groundwater production data for WY 2022
  - Modesto Irrigation District
  - Oakdale Irrigation District
  - City of Modesto
  - City of Riverbank
  - City of Oakdale
  - City of Waterford

**\* Requesting data by the end of December 2022**

# TENTATIVE ANNUAL REPORT SCHEDULE

Red: Annual Report Deliverable

Blue: STRGBA GSA Meeting

- February 24: Draft Annual Report to GSA
- March 8: presentation on Draft Report; post Draft to STRGBA website after meeting
- March 17: Comments due on Draft Annual Report
- March 24: Final Annual Report to GSA
- March 29: presentation on Final Report including how public comments were addressed; GSA approval of the Final Annual Report
- April 1: Annual Report due to DWR (submit after March 29<sup>th</sup> meeting)

## February

2023

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

## March

2023

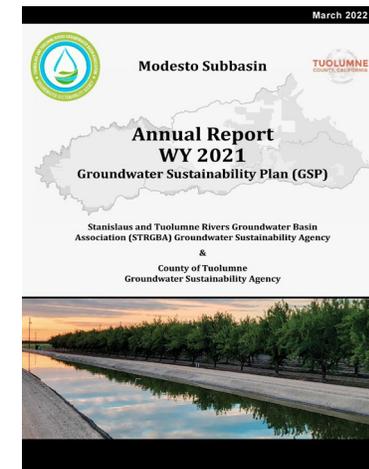
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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# PRESENTATION OUTLINE

Second Annual Report

→ Fall 2022 Monitoring Event

Dry Well Update

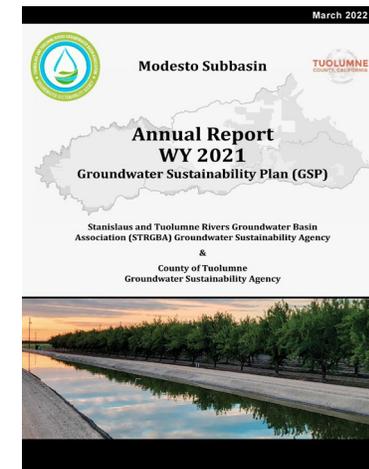


# PRESENTATION OUTLINE

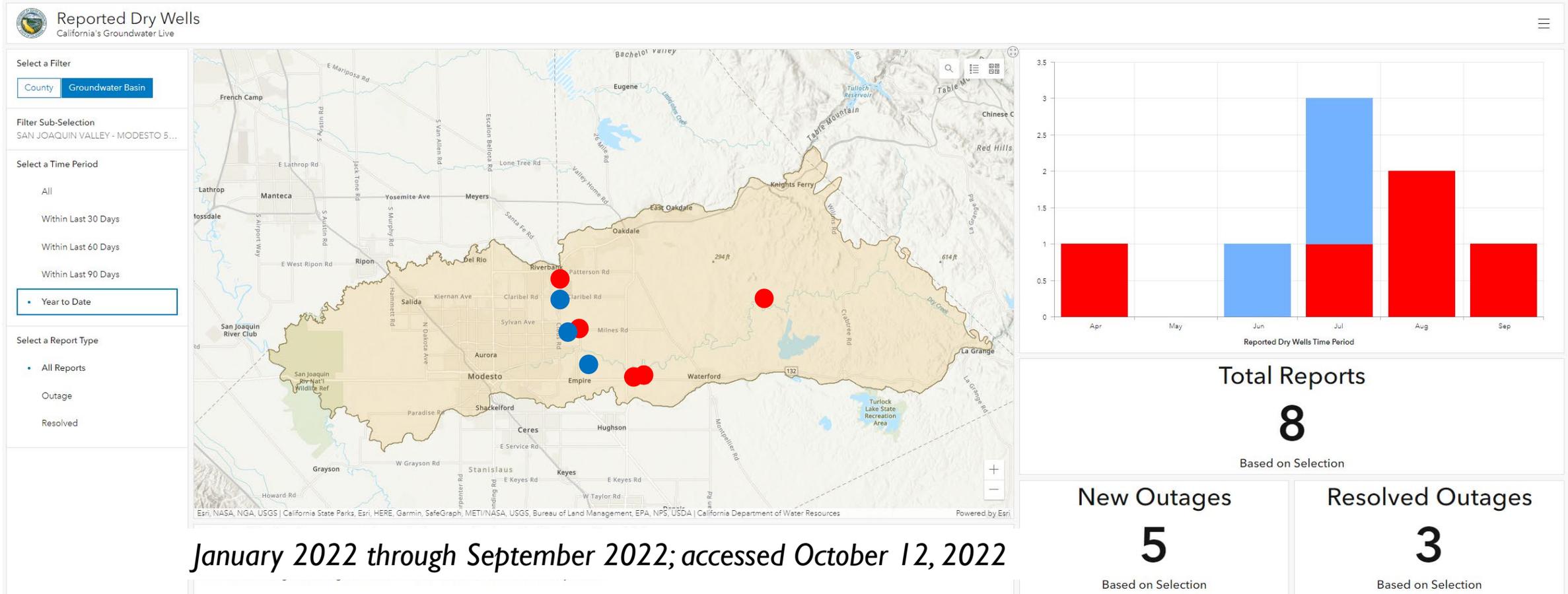
Second Annual Report

Fall 2022 Monitoring Event

→ Dry Well Update



# REPORTED DRY WELLS: JAN 2022 – SEP 2022



**DRAFT**

# QUESTIONS?

