2020 (Virtual) Convening

Day 1: Skills Training  
Tuesday, March 31, 3:00 PM - 5:30 PM, PDT

Day 2: Reflecting & Looking Ahead  
Wednesday, April 1, 9:00 AM - 2:00 PM, PDT
Zoom Meeting
Technical Orientation
Click Unmute and Start Video

Click Participants and Chat menu buttons
Rename yourself by hovering on your name and clicking “Rename”.
Additional Guidance

NGO Groundwater Collaborative Virtual Convening Attendee Packet

March 31 - April 1, 2020

Table of Contents
1. Zoom Instructions
2. Day 1 Agenda
3. Day 2 Agenda
4. Speaker Bios
5. Conference Call Bingo Board

Zoom Instructions
Additional support can be found at: https://support.zoom.us/

If you have never used Zoom before, you can join a test meeting to familiarize yourself. Emily will begin the Zoom meeting 20 minutes prior to the start time each day (2:40 pm on Day 1; 8:40 am on Day 2). We highly recommend logging on to the call 15 - 20 minutes before it starts, as heavy user traffic on the hour causes Zoom to slow down. This will also allow time to figure out your audio/video logistics and settle in.
Reflections from Day 1?

Share verbally during sound-check, or via the chat box

- Something you learned?
- Something that surprised you?
- What you can take back to your community / organization?
- What you shared in your break-out group?
Morning Mad Libs!

Fill in the blanks... type your responses into the “everyone” chat box!

1. SGMA is the ________ legislation that _______ because it ______ and _______.

2. The _______ thing about my basin is that _______ while _______ without _______.

3. The GW Collaborative _______ because _______ and _______.

Local Government Commission
Leaders for Livable Communities

CLEAN WATER ACTION
Day 2
Reflecting & Looking Ahead

April 1, 9:00 AM - 2:00 PM, PDT
Welcome & Introductions
## Day 2: Reflecting & Looking Ahead

### April 1, 9:00 AM - 2:00 PM, PDT

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM</td>
<td>Welcome &amp; Introductions</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>Panel Discussion: 2020 Plan Review Lessons Learned</td>
</tr>
<tr>
<td>10:20 AM</td>
<td>Stretch Break</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>Break-Out Groups: Taking a Deep Dive - Lessons Learned &amp; Looking Forward &amp; Report Back</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Transition to Brown Bag Lunch Panel</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Transition to Brown Bag Lunch Panel</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Lunch panel</td>
</tr>
<tr>
<td>1:10 pM</td>
<td>Summary &amp; Next Steps</td>
</tr>
<tr>
<td>1:45 PM</td>
<td>Resource Fair</td>
</tr>
</tbody>
</table>
Objectives for the Convening

- Gain new skills and resources to aid in engagement moving forward.
- Share primary lessons learned from the first round of GSP development.
- Strategize plan review & collaborative engagement for the next 1-2 years.
Rules of Engagement

- Mute when not speaking.
- Remain actively engaged.
- Mutual respect - suspend judgement/assume best intentions
- Use the Chat box & Participant Features.
- Step up/Step back.
- Be gracious to the facilitator(s).
Morning Warm-up

1. Find someone you don’t know on the chat; message them privately:
2. Describe to that person your mood this morning as a weather forecast
   ○ (e.g., sunny skies, foggy, etc.).
Better Know a Basin!

- Provide three clues that describe (but don’t identify) your basin; e.g.,
  - # of GSAs or Plans
  - Priority status
  - Biggest issue or concern
  - Most influential stakeholders
  - Other defining characteristics (demographics, hydro/geology, critical habitat, major industries, etc.)

- **Winner (3 Points):** First person to correctly identify the basin
  - (only one guess per participant)
Name That Tune (er, challenge)!

- Describe a challenge or difficulty you’re currently facing.
- Participants can ask up to 3 clarifying questions.
- 1 Point: Anyone from a different region struggling/ed with the same or similar issue.
- 2 Points: Anyone who suggests a viable solution.
- 3 Points: Anyone who identifies a specific, relevant resource.
2020 GSP Review

Lessons Learned
Panelists

Samantha Arthur
Working Lands Program Director
California Audubon

Sandi Matsumoto
Associate Director, California Water Program
The Nature Conservancy

Debi Ores
Senior Attorney
Community Water Center
2020 Plan Review Lessons Learned

Hosted by the NGO Groundwater Collaborative
Groundwater Leadership Forum

Environmental Justice NGOs
Natural Resource NGOs
Academic Institutions
Climate
Groundwater dependent ecosystems
Interconnected surface waters
Drinking water
Stakeholder engagement
Prioritization of GSPs

Small drinking water systems

Groundwater dependent ecosystems

Disadvantaged communities

Coverage by organizations

One GSP per critically overdrafted basin

~30 GSPs total
GSP Indicators

1. Identification of beneficial users
2. Communications plan
3. Maps
4. Water budgets
5. Management areas and monitoring network
6. Measurable objectives, minimum thresholds, and undesirable results
7. Management actions and costs
Appendix A
Review of Public Draft GSP

Groundwater Basin/Subbasin: Paso Robles Subbasin (DWR No. 3-004.06)
GSA: Paso Robles GSAs
GSP Date: August 2019 Public Review Draft

1. **Identification of Beneficial Users**

Were key beneficial users identified and engaged?

<table>
<thead>
<tr>
<th>Selected relevant requirements and guidance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSP Element 2.1.5, “Notice &amp; Communication” (§354.10):</td>
</tr>
<tr>
<td>(a) A description of the beneficial uses and users of groundwater in the basin, including the land uses and property interests potentially affected by the use of groundwater in the basin, the types of parties representing those interests, and the nature of consultation with those parties.</td>
</tr>
<tr>
<td>GSP Element 2.2.2, “Groundwater Conditions” (§354.16):</td>
</tr>
<tr>
<td>(d) Groundwater quality issues that may affect the supply and beneficial uses of groundwater, including a description and map of the location of known groundwater contamination sites and plumes.</td>
</tr>
<tr>
<td>(f) Identification of interconnected surface water systems within the basin and an estimate of the quantity and timing of depletions of those systems, utilizing data available from the Department, as specified in Section 353.2, or the best available information.</td>
</tr>
<tr>
<td>(g) Identification of groundwater dependent ecosystems within the basin, utilizing data available from the Department, as specified in Section 353.2, or the best available information.</td>
</tr>
<tr>
<td>GSP Element 3.3, “Minimum Thresholds” (§354.28):</td>
</tr>
<tr>
<td>(4) How minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.</td>
</tr>
</tbody>
</table>
1. Engagement

Environmental and DAC beneficial users

Responsiveness of GSAs to “comments that raise credible technical or policy issues with the Plan.”
2. Impacts

Wells and DACs

Groundwater dependent ecosystems

Water sectors - native vegetation and managed wetlands

Climate change

Figure 5. Annual Water Budget, 1991 – 2017 (acre-feet).
3. Outcomes

Sustainability

Projects and management actions

Undesirable results
Final Groundwater Sustainability Plan Review

- Pass/ Fail
- 180-day fix
- Annual report
- Five-year update
- Comments to DWR
- Adaptive management
Panelists

Samantha Arthur
Working Lands Program Director
California Audubon

Sandi Matsumoto
Associate Director, California Water Program
The Nature Conservancy

Debi Ores
Senior Attorney
Community Water Center
Discussion / Q&A
Panelists

Samantha Arthur
Working Lands Program Director
California Audubon

Sandi Matsumoto
Associate Director, California Water Program
The Nature Conservancy

Debi Ores
Senior Attorney
Community Water Center
10-min Stretch Break
Deep Dive
Lessons Learned - Looking Forward
Deep Dive: Lessons Learned & Looking Forward

Break-out Group Discussions

1. Equity & Env Justice
   (Community Engagement, Drinking Water Safety)
2. Climate Predictions
   (Impacts, Monitoring, Modeling, & Uncertainty)
3. Env Flows & Recharge
   (Protections, Incentives, Multiple Benefits)
4. Water Markets & Fallowing
   (Equity & Coordination)
1) Equity & Environmental Justice
   Community Engagement, Drinking Water Safety
   Amanda Monaco
   Emily Finnegan

2) Climate Predictions
   Impacts, Monitoring, Modeling & Uncertainty
   Pablo Ortiz
   Jennifer Clary
Breakout Groups 3 - 4

3) Environmental Flows & Recharge
   *Protections, Incentives, Multiple Benefits*
   - Pablo Garza
   - Cristal Gonzalez

4) Water Markets & Fallowing
   *Equity & Coordination*
   - Christina Babbitt
   - Danielle Dolan
Breakout Group Guidance

The host is inviting you to join Breakout Room: Breakout Room 1

Join Later

Breakout Room Session

- Equity & Env Justice
- Climate Predictions
- Env Flows & Recharge
- Water Markets & Fallowing

Facilitators:
- Equity & EJ: Amanda Monaco, Leadership Council for Justice and Accountability
- Climate: Pablo Ortiz, Union of Concerned Scientists
- Env Flows and Recharge: Pablo Garza, Environmental Defense Fund
- Water Markets and Fallowing: Christina Babbitt, Environmental Defense Fund

Facilitators Groups Day 2 Session
- Group 1 (Equity & EJ)
- Group 2 (Climate Predictions)
- Group 3 (Environmental Flows & Recharge)
- Group 4 (Water Markets & Fallowing)
Break-Out Group Reports
Report Out

- What can we do to improve implementation of:
  - 2020 plans in their first five years, and/or
  - ensure 2022 plans are more effective?

- How can we better collaborate to do so?
Transition to Brown-Bag Lunch Panel
Brown-Bag Lunch with State Agencies
Commitment, Coordination, & Policy Direction
Panelists

Craig Altare
Supervising Engineering Geologist
California Department of Water Resources

Natalie Stork
Chief of Groundwater Management Program
State Water Resources Control Board

Catherine Freeman
Chief Consultant
California State Assembly Committee on Water, Parks, and Wildlife
GSP Submittal and Evaluation

GSP Submittal and Evaluation Timeline

Phase 1
Pre-Submittal of GSP
Submit GSP to DWR (by Jan 31, 2020)

Phase 2
GSPs Submitted, Posted, and Open for Comment
GSPs Posted to DWR Portal (20 days after submittal)

Phase 3
GSP Technical Review
Public Comment Period (open min 60 days)
DWR Assessments Complete (within 2 years after submittal)

Joint DWR and State Water Board Fact Sheet

https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Groundwater-Sustainability-Plans/Files/GSP/SGMO_GSP-Overview_v12_FactSheet-a-y19
Next Steps

• Annual reports for water year 2019 due April 1
• GSP public comment periods end May 15 and June 3 [https://sgma.water.ca.gov/portal/gsp/all](https://sgma.water.ca.gov/portal/gsp/all)
DWR SGMA Resources

• Email questions to: sgmps@water.ca.gov
• DWR SGMA listserv: https://listservice.cnra.ca.gov/scripts/wa.exe?SUBED1=DWR_SGMP&A=1
• DWR SGMA Portal: https://sgma.water.ca.gov/portal/#intro
• DWR SGMA Data Viewer: https://sgma.water.ca.gov/webgis/?appid=SGMADATAVIEWER
January 2020
Critically Overdrafted Basins
Probationary groundwater BASIN

State Water Board makes decisions
Opportunity to fix issues
Board gathers data
May require meters
Probationary Basin

TIMELINE

90-day notice to cities, counties, GSAs
Public meetings in county
60-day notice to all pumpers
Probation hearing
After 90 days, start recording pumping data
Dec 15, 2021 first reports due & fees soon after
Interim PLAN

Corrective Actions

Enforcement

Monitoring Plan

Schedule
Probationary designation and groundwater regulation

Stakeholder inclusion

State and regional boards basics

Water Quality FAQ

Overview of Submittal and Evaluation of GSPs in Critically Overdrafted Basins
Catherine Freeman

Chief Consultant

California State Assembly Committee on Water, Parks, and Wildlife
Questions?

Craig Altare
Supervising Engineering Geologist
California Department of Water Resources

Natalie Stork
Chief of Groundwater Management Program
State Water Resources Control Board

Catherine Freeman
Chief Consultant
California State Assembly Committee on Water, Parks, and Wildlife
10-min Stretch Break
Summary & Next Steps
Lessons Learned

- Management Actions
- EJ/Enviro Shared Priorities
- Local Challenges & Resources
- Plan Review
- State Agency Coordination
Lessons Learned

Management Actions

● Difficulty placing economic cost on priceless values; but need to try - otherwise they won’t be valued at all;
● need to make the economic counter-argument for immediate rather than deferred action
● Monitoring networks - need to advocate that GSAs monitor for all relevant SIs, and that data gaps are filled

Local Government Commission
Leaders for Livable Communities

CLEAN WATER ACTION
Lessons Learned

EJ / Enviro Shared Priorities

- Need to bridge the gap to better align, *then* integrate our efforts
- Increase communication across our sectors
- Leverage shared history of land use & water mgmt practices that impact both EJ and enviro communities
- Greatest current challenge is *representation*; neither of us are “in the room” - need to co-advocate for “both/and” representation
- Alliance between our efforts will shift the power dynamic
Lessons Learned

Local Challenges & Resources

● GTAN - follow up with Coreen, or click the link in your packet for more info
● Had too much fun during happy hour to talk serious business;
  ○ Did share some local challenges during discussions & break-outs today,
● Will highlight great resources immediately following this session
Plan Review

- **Equity / EJ**
  - Funding to help NGOs AND community members actively participate in GSAs or advisory groups
  - Policy interventions at the state level
  - Sharing best practices for low-tech solutions in the time of COVID

- **Climate**
  - Better inter-agency alignment, and regional climate modeling (like IRWM)
  - Link guidance to management actions; consider leg to require climate analysis for MAs
  - Fact sheets & guidance on climate nexus w/ other issue areas

- **Flows & Recharge**
  - Recognize there’s a lot of interest in recharge to comply w/ SGMA; BUT different perspectives on HOW to approach recharge e
  - Not enough info in GSPs abt recharge
  - If change water rights for recharge; SWB should judge projects on case by case basis to ensure local needs.

- **Water Markets & Fallowing**
  - Partner on filling data gaps; commissioning academic or technical studies
  - Collectively advocate for stronger community / stakeholder representation, so we actually have influence on the rules
  - Prioritize individual Management Areas; set specific rules for those MAs.
Lessons Learned

State Agency Coordination

● DWR & SWB working hard; reviewing plans & coordinating
● DWR Expediting “good” or “simple” plans
● DWR corrective actions even for “approved” plans; SWB “probationary” status is discretionary
● Leg is upholding intent of SGMA; no changes unless absolute emergency
● Concerned about funding for SGMA implementation; some concern of efforts to delay or undermine.
Next Steps

● for Plan Review
● for the Collaborative
Next Steps

● for Plan Review
  ○ For economic argument: Consider an economic study of the benefit of restoring or protecting ecosystems (to combat SJV Blueprint Econ Analysis)
  ○ Strategize which 2022 plans to review; streamlining review process based on lessons learned
Next Steps

● for the Collaborative
  ○ Continue convening, communicating, sharing resources
  ○ Prioritize topics to develop shared talking points on (across our memberships’ interests) or case studies to develop
  ○ Topics for future webinars:
Tools & Resources Fair
“I’ll pause for a moment so you can let this information sink in.”
Groundwater Technical Assistance Network
Groundwater Technical Assistance Network

Contact:
Coreen Weintraub
Email: cweintraub@ucsusa.org
Phone: (510) 809-1566
www.ucsusa.org/groundwater-technical-assistance-tool
Water Accounting and Trading Platform

Christina Babbitt, Ph.D. – Senior Manager, California Groundwater Program, Environmental Defense Fund

April 1, 2020
Water Accounting and Trading Platform

Welcome to the Rosedale-Rio Bravo Water Storage District Water Accounting Platform. The platform is designed to meet these objectives:

- Create a better understanding of water demand and supplies, for landowners to effectively and efficiently make informed decisions regarding water supply and land use.
- Utilize a satellite-based evapotranspiration model, called OpenET, to give landowners a past and present understanding of water demands on their specific parcels.
- Over the long term, develop the accounting platform into a trading platform, encouraging inter-district water transfers.

Access your water account:

Log in to view your Water Account. Create an Account if you don’t have one yet.

Login | Create Account

Water use (satellite data) → Water trading platform → Accounting Platform → Modeling scenarios → Water supply (district information) → Billing
**Water Accounting and Trading Platform**

**Landowner Dashboard**

**Account #10030 (DEMO ACCOUNT)**

**Water Budget Overview**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres Managed</td>
<td>985.4 ac</td>
</tr>
<tr>
<td>Allocation</td>
<td>2,709.9 ac-ft</td>
</tr>
<tr>
<td>Usage to Date</td>
<td>2,959.9 ac-ft</td>
</tr>
<tr>
<td>Current Available</td>
<td>-250.0 ac-ft</td>
</tr>
<tr>
<td>Average Annual Usage</td>
<td>2,943.3 ac-ft</td>
</tr>
</tbody>
</table>

**2019 Allocation and Usage**

- **Volumetric Representation**
- **Monthly Usage**
- **Average Usage (All Years)**
- **Annual Supply**

**Data Source**
- Water use (satellite data)
- Water supply (district information)

**System Functionality**
- Accounting Platform
- Billing
Water Accounting and Trading Platform
Christina Babbitt
cbabbitt@edf.org
SGMA Snapshot: Groundwater for Nature

- SIX ISSUES FOR NATURE
  - SG/SMC (GDEs)
  - SG/SMC (ISWs)
- PROJECTS & MGMT ACTIONS
- MONITORING NETWORK
- ENVIRO STAKE-HOLDERS
- WATER BUDGET

Ruthie Redmond, Sustainable Water Project Manager
ruthie.redmond@tnc.org
We envision the Snapshot as a resource for stakeholders and local communities to understand how Environmental Beneficial Users (EBUs) of groundwater are being managed in their GSA.

The Snapshot will evaluate and provide insight into how the management of groundwater will impact EBUs.

Recommendations and Resources will be provided for each issue area impacting EBUs.

<table>
<thead>
<tr>
<th>Eight Sustainability Indicators determine how well Groundwater Sustainability Plans address Nature</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well are GDEs identified and mapped?</td>
</tr>
<tr>
<td>How well are ISWs identified and mapped?</td>
</tr>
<tr>
<td>How well does the water budget account for the water use of nature (EBUs = GDEs, ISWs, native vegetation, managed wetlands, etc.)?</td>
</tr>
<tr>
<td>How well do the SG/SMCs consider GDEs and avoid undesirable results?</td>
</tr>
<tr>
<td>How well do the SG/SMCs for ISWs analyze the impact to surface water EBUs?</td>
</tr>
<tr>
<td>How well are Environmental Stakeholders (ES) engaged with?</td>
</tr>
<tr>
<td>How well are EBUs incorporated in Projects &amp; Mgmt. Actions?</td>
</tr>
<tr>
<td>How well are EBUs identified and addressed within the monitoring network?</td>
</tr>
</tbody>
</table>
Available Fall 2020 at groundwaterresourcehub.org

Ruthie Redmond, Sustainable Water Project Manager
The Nature Conservancy
ruthie.redmond@tnc.org
Debi Ores

COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA

Local Government Commission
Leaders for Livable Communities

CLEAN WATER ACTION
Drinking Water Tool

• This tool tells you:
  • Who manages or makes decisions about your water supply;
  • Groundwater quality in the area where you live;
  • Potential impacts to groundwater supply from future droughts;
  • How to get involved in local groundwater management decisions.

• You can either enter in a specific address or look at general information about the state
Who Manages My Water?

There are several levels of water management in California, from the community water system who may supply the drinking water to your home, to the local, regional, and state agencies who regulate water availability and quality in wells and streams. This tool identifies different local agencies that may be making decisions about groundwater in your area.

Community water systems are typically overseen by the State’s Division of Drinking Water and typically manage their own groundwater wells. For private domestic wells, local agencies will have the authority over any new groundwater well construction or changes to existing wells. Often this will be your County Department of Environmental Health.

Groundwater Sustainability Agencies (GSA) are public entities that manage how groundwater is used locally in certain parts of the state. GSAs have the power to regulate how much groundwater is pumped and by whom. GSAs are developing policies that will impact available supply for both community water system wells and private domestic wells.

According to the information you provided, your drinking water is supplied from a community water system (CWS). CWSS are publicly regulated water suppliers that serve piped, treated water to at least 25 residents or 15 connections year-round. CWS providers can include private companies, mobile home parks, city water systems, and water districts.

Some important jurisdictions in your area include:

- Community Water System: **WOODVILLE PUBLIC UTILITY DIST**
- Groundwater Sustainability Agency: **Lower Tule River Irrigation District**
- County: **Tulare**

This map shows community water system boundaries in black. “Explore the Map” to learn more about your area.
What About Water Supply?

While groundwater is a resource that can be replenished, supplies can be threatened. For example, drought, climate change, and high levels of pumping can mean groundwater levels go down, causing drinking water supplies to decrease. Anticipating whether the area where you live could be impacted by future droughts and other drivers of groundwater level change is complicated. One factor that influences possible threats to your water supply is whether your drinking water comes from groundwater and/or surface water. This section can help you learn more about your water supply and whether it could be impacted by changes in groundwater levels, like what often happens during a drought.

Your community water system's primary water source is groundwater.

Even if your community water system's primary source type is surface water, it could also have access to groundwater. If so, its public supply wells may be affected by changing groundwater levels. According to annual reports submitted to the state between 2013 and 2016, by WOODVILLE PUBLIC UTILITY DIST, your system only has groundwater.

This tool includes an assessment of wells in the Central Valley that could be at risk to supply issues based on different scenarios of drought-related changes in groundwater levels. The analysis includes both private domestic wells and public supply wells for community water systems that serve less than 10,000 people. To learn more about this analysis visit the Methodology. If you are served by a larger community water system and/or live outside of the Central Valley, please contact your water system, Groundwater Sustainability Agency or county with concerns about supply risks in your area.

The estimated number of impacted community water system public supply wells within 1-mile of the community water system’s service area for each drought scenario are:

- 0 wells in 50% Drought Scenario
- 6 wells in 75% Drought Scenario
- 8 wells in 100% Drought Scenario
What About Water Quality?

The federal Safe Drinking Water Act requires CWSs to regularly monitor for drinking water contaminants to determine if and when they are found above a Maximum Contaminant Level (MCL). If contaminant levels are above and in violation of the MCL, the highest level of a contaminant allowed in drinking water – the CWS must notify customers and correct the problem. All CWSs are also required to provide an annual water quality report to customers, called a Consumer Confidence Report (CCR). Private domestic wells are not regulated and thus are not required to monitor their water quality. Thus a homeowner of a house (or group of homes) reliant on a private domestic well is responsible for testing and treating their own well water.

This section of the Drinking Water tool can help you learn more about water quality concerns in your area. This tool currently provides water quality data for four key drinking water contaminants: Arsenic, Nitrate, 1,2,3-Trichloropropane, and Chromium VI. The MCL for each contaminant is shown in milligrams (mg) or micrograms (µg) per liter (L).

According to the California State Board's Human Right to Water Portal, WOODVILLE PUBLIC UTILITY DIST had 0 MCL violations between 2012- Aug. 30, 2019. The Human Right to Water Portal currently serves as the state’s primary location information on water system performance measures, like compliance with the Safe Drinking Water Act.

The contaminant levels displayed for your CWS are based on a nine-year average from 2005-2013, for four contaminants. The data was developed and shared by Cal/PA's Office of Environmental Health Hazard Assessment for its CalEnviroScreen 3.0 tool. As such, the data presented in this tool is not necessarily the most up-to-date and may over or underestimate current contaminant concentrations in your water. To learn more about your system's water quality, contact your water system and ask for a copy of the most recent Consumer Confidence Report.

A zero value indicates that contaminant levels were below the detectable limit at which they can be reliably measured, and a missing value (•) indicates that the contaminant was not measured in the community water system. The 9-year average estimated value for contaminants found in the groundwater are:

- **0.8 µg/L Arsenic (As)**, the MCL is 10µg/L.
- **7.3 mg/L Nitrate as Nitrogen (N)**, the MCL is 10mg/L.
- **0.000 µg/L 1,2,3-Trichloropropane (1,2,3-TCP)**, the MCL is 0.005 µg/L.
- **0.0 µg/L Chromium VI (CrVI)**, the previous MCL is 10 µg/L and California is in the process of establishing a revised one.

Learn more about the data and methods used to estimate groundwater quality for this tool.
More info & video demonstration:
https://www.communitywatercenter.org/drinking_water_tool

Tool: https://drinkingwatertool.communitywatercenter.org/

Deborah.ores@communitywatercenter.org
BasinScout – A Decision Support Tool

1. Data Gathering
   - Goal Setting and Problem Formulation
   - Data Aggregation

2. Cost-Benefit Modeling
   - Determine Feasibility of Field Actions
   - Model Costs & Benefits of Implementation

3. Program Design
   - Optimize BMPs Across Landscape
   - Identify Portfolio & Schedule of Projects

Project partners and stakeholders are involved in all steps to:
- provide and ground-truth data
- develop program goals, budgets, and define additional constraints
Assess available benefits and costs for Projects & Management Actions

Develop Portfolio of Management Actions to achieve set of objectives at lowest cost. For example, GSA can design program to:

- Maximize actions on farms within disadvantaged communities
- Increase shallow infiltration by 2,000 acre-feet annually within Groundwater Sustainability Agency boundary
- Prioritize MAR actions on fields with greatest potential benefit to groundwater dependent ecosystems

Becky Rittenburg becky@thefreshwatertrust.org
Erik Ringelberg erik@thefreshwatertrust.org
AI for Earth

• AI for Earth: Mapping the impact of GSAs’ activities on vulnerable domestic wells

• Uses a cleaned-up state well completion report dataset to show where wells are, and then uses artificial intelligence (AI) to estimate where other wells may be.

• Using a sliding scale and presets on the map, the user will be able to see what the impact will be on wells across the SJV or in a specific GSA area, based on:
  • Minimum thresholds set by GSAs
  • Other projections
  • Also have the ability to show impacts at any groundwater level selected by the user.
AI for Earth

• The goal: community residents, advocates, the public and GSA officials and staff will clearly be able to see the impact of GSAs’

  • The **public** can learn about groundwater impacts and exert pressure on GSAs

  • **GSAs** can be better able to visualize their impact on vulnerable users

  • **Communities** and **advocates** can use powerful visuals to advocate for policies, projects and management actions that protect drinking water
Stay tuned!

Amanda Monaco
Leadership Counsel for Justice and Accountability
amonaco@leadershipcounsel.org
Sustainable Conservation
and Earth Genome

Daniel Mountjoy
Director of Resource Stewardship
Groundwater Recharge Assessment Tool (GRAT) Public Viewer

What it does:
• Visualize recharge site suitability for prioritizing recharge projects and management actions
• Identify DAC locations for consideration of recharge effects

How it works:
• Available on line at https://gratviewer.earthgenome.org/
Groundwater Recharge Assessment Tool (GRAT) Public Viewer

What it will do soon:
• include groundwater quality layers to ensure that recharge projects consider existing conditions and evaluate benefit or risk of recharge method.
• Include habitat restoration potential for consideration of land use change.

Who is it useful for:
• The GRAT Public Viewer is available to everyone to see multiple map layers.
• GRAT™ is also available to water agencies and GSAs that want to upload their own recharge water availability and timing, infrastructure, crop maps and costs to run recharge scenarios over time to inform SGMA implementation.
Tara Moran
Coordination under SGMA

• **What:** NSF-funded research project to better understand factors influencing agencies decisions to work collaboratively or independently on their GSPs

• **Where:** Focuses on the 21 critically overdrafted basins

• **Progress:** We have conducted interviews and a survey with most GSAs
  • Currently developing a framework for coding collaboration in the GSPs

• **Why:** Results from this research will be used to support coordination efforts in the high- and medium-priority groundwater basins, as well as groundwater management more broadly
Additional project information

https://watergovernance.umasscreate.net/groundwater-sustainability/sgma/

Contact information

Anita Milman: amilman@umass.edu
Tara Moran: tamoran@stanford.edu
Integrating Climate Change into the GSPs

• **What:** Analysis of the range of treatments of climate change under the SGMA regulatory mandate to incorporate climate change into groundwater planning and the enabling factors for sound integration.

• **Where:** Focuses on the GSPs from the critically overdrafted basins

• **Progress:** We have created a framework for evaluating climate change integration into the GSPs based on the literature & reading draft GSPs
  • Currently finalizing to apply to all the critically overdraft GSPs this spring

• **Why:** This research seeks to identify best practices (in practice!) and how we can enable climate robust water resources planning through regulation and other avenues.

**Contacts:** Courtney Hammond Wagner: chamwag@Stanford.edu; Tara Moran: tamoran@stanford.edu
Thank you for joining our 2020 (Virtual) Convening

And let us know what you thought!

https://www.surveymonkey.com/r/CS675WC

http://cagroundwater.org/