NGO GROUNDWATER COLLABORATIVE

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

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Zoom Meeting
Technical Orientation

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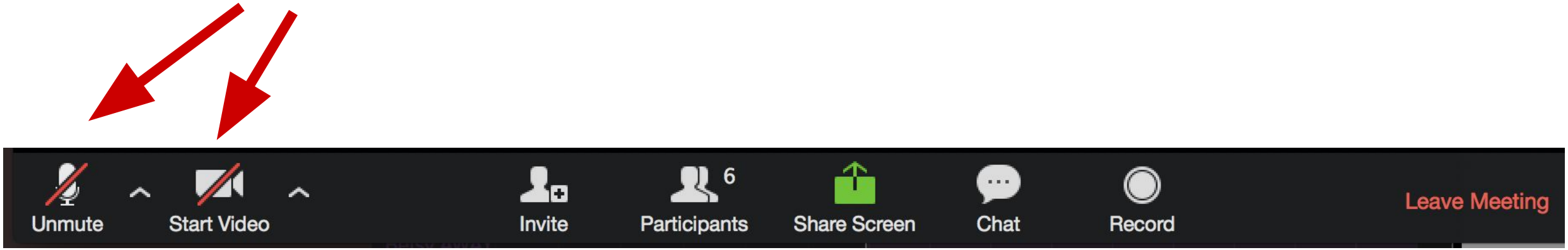
Click Unmute and Start Video



Click Participants
and Chat menu buttons

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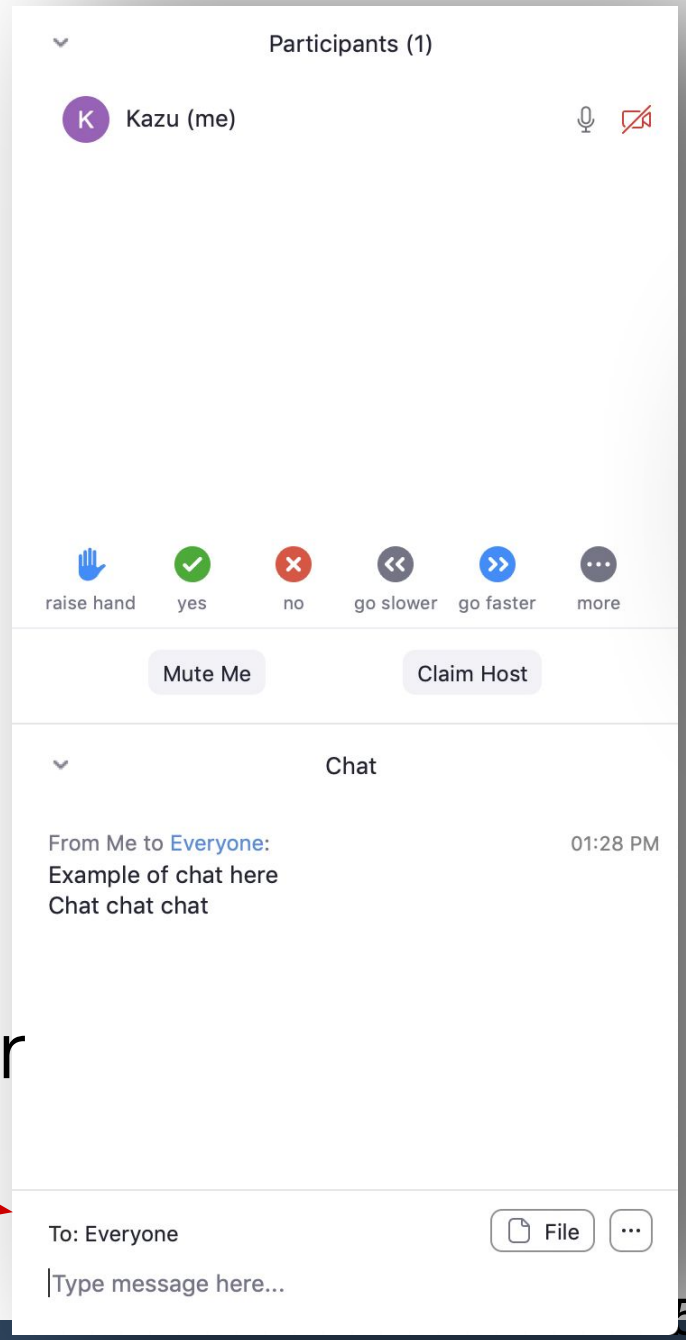
List of participants

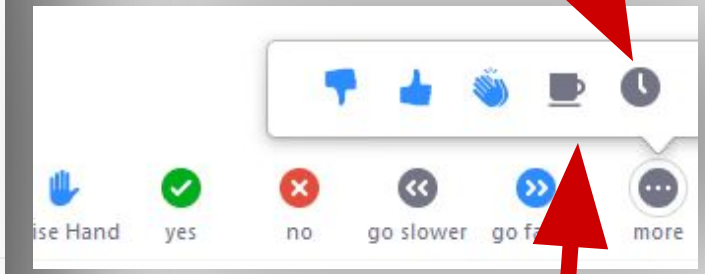
Raise hand button

Chat Box

Write to everyone or another individual



Stepped away



Need a break

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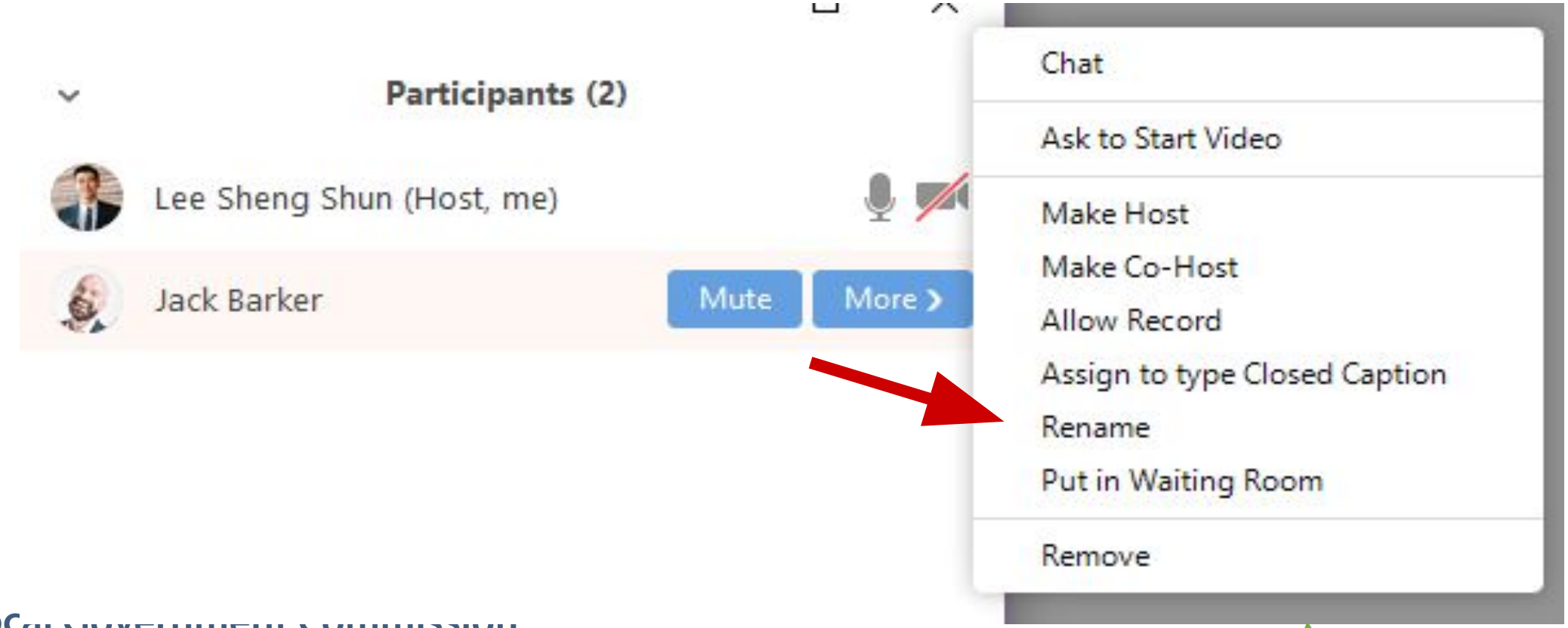
Rename yourself by hovering on your name and clicking “Rename”.



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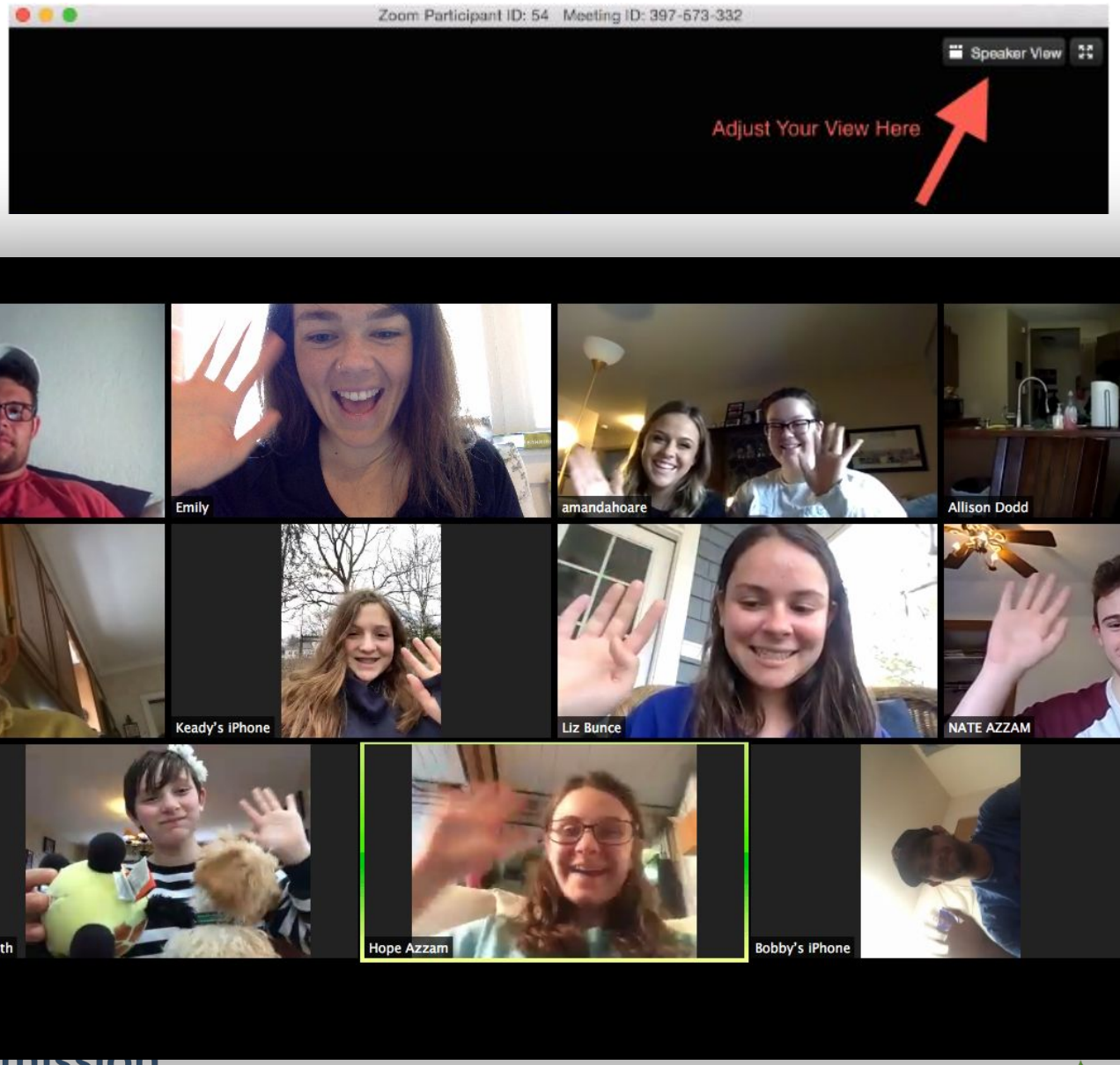

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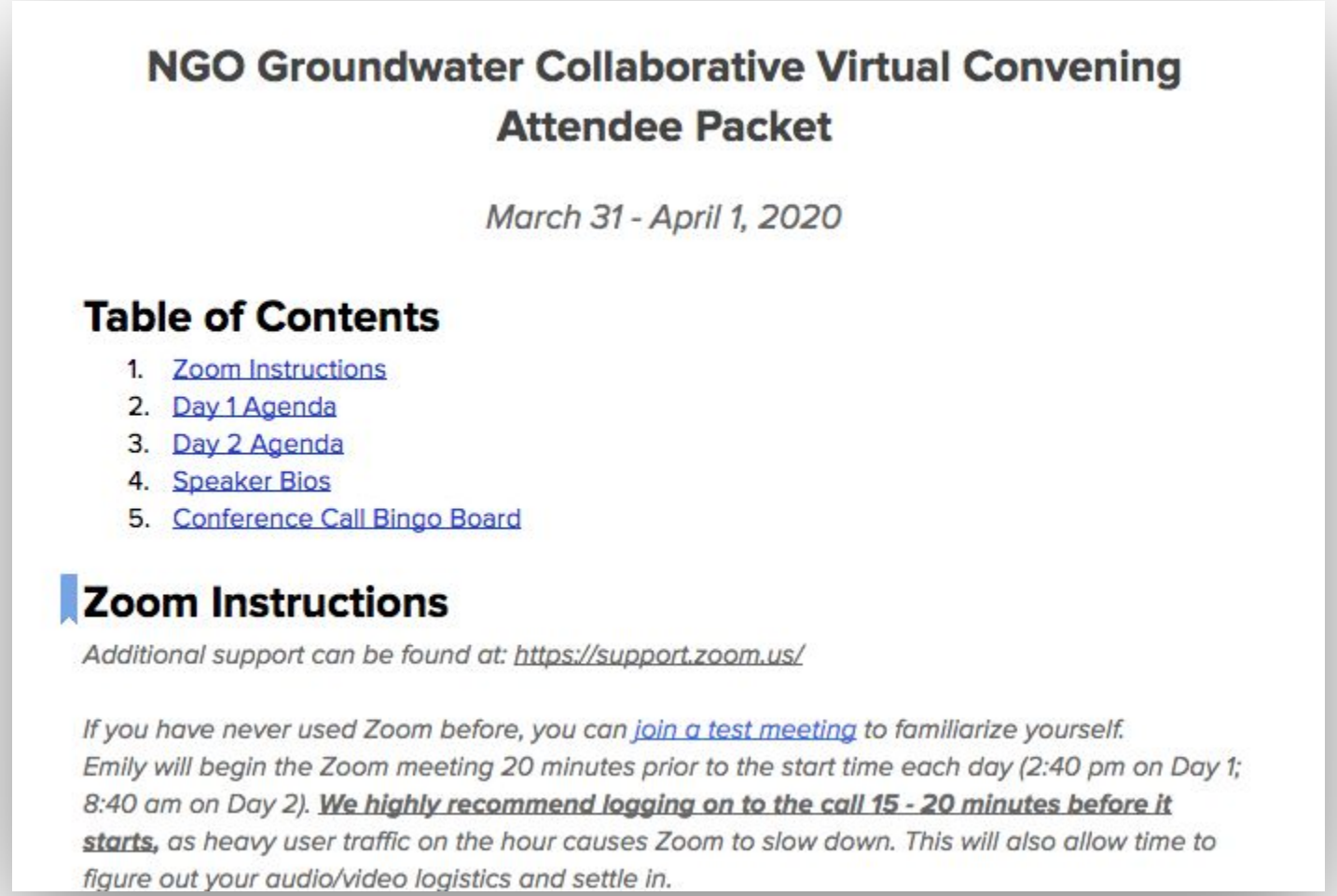
Additional Guidance



NGO Groundwater Collaborative Virtual Convening
Attendee Packet

March 31 - April 1, 2020

Table of Contents

Zoom Instructions

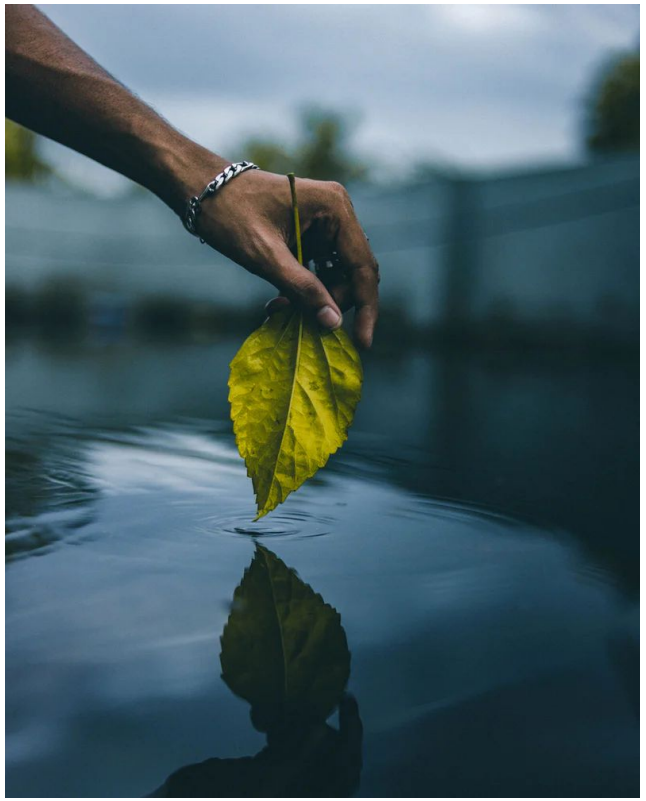
Additional support can be found at: https://support.zoom.us/

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?



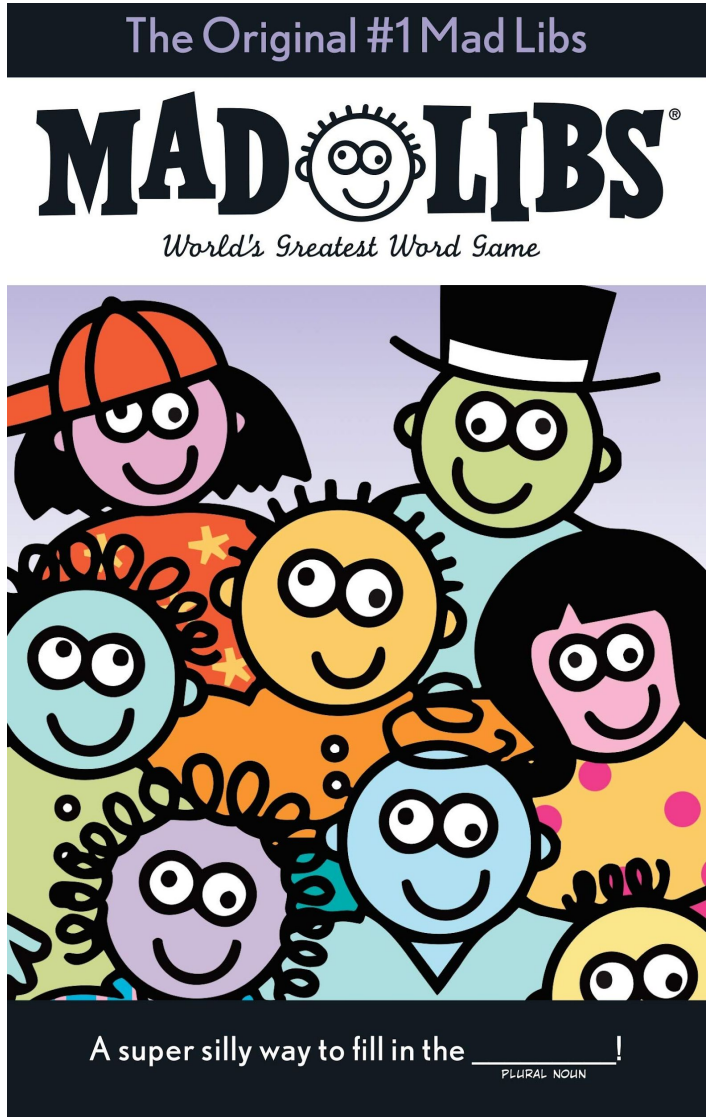
Morning Mad Libs!

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 _____.



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Day 2
Reflecting & Looking Ahead

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

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Welcome & Introductions

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Day 2: Reflecting & Looking Ahead

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

9:00 AM	**Welcome & Introductions**
9:30 AM	**Panel Discussion: 2020 Plan Review Lessons Learned**
10:20 AM	**Stretch Break**
10:30 AM	**Break-Out Groups: Taking a Deep Dive - Lessons Learned & Looking Forward & Report Back**
11:30 AM	**Transition to Brown Bag Lunch Panel**
11:30 AM	**Transition to Brown Bag Lunch Panel**
12:00 PM	**Lunch panel**
1:10 pM	**Summary & Next Steps**
1:45 PM	**Resource Fair**

Objectives for the Convening

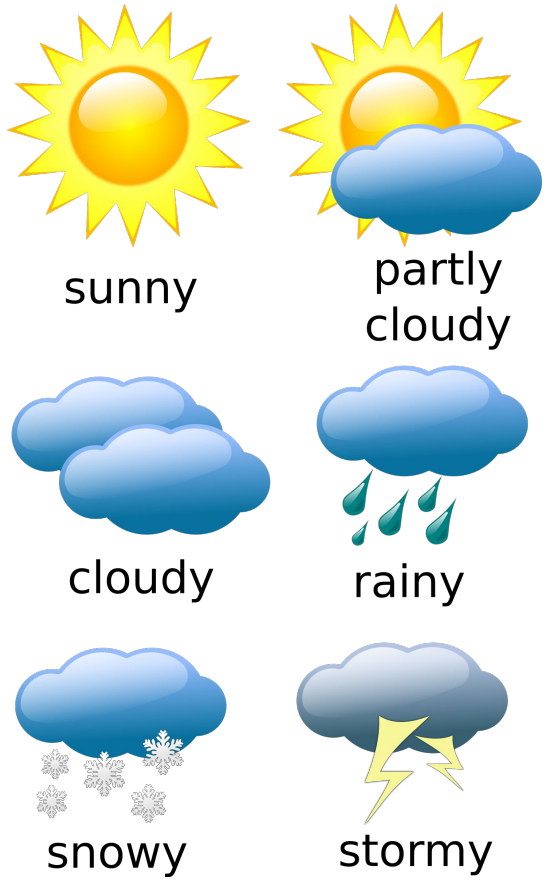
- Gain new skills and resources to aid in engagement moving forward.
- **Share primary lessons learned from the first round of GSP development.**
- **Strategize plan review & collaborative engagement for the next 1-2 years.**

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.

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2020 GSP Review

Lessons Learned

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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

Audubon

2020 Plan Review Lessons Learned

Hosted by the NGO Groundwater Collaborative

Audubon

Groundwater Leadership Forum

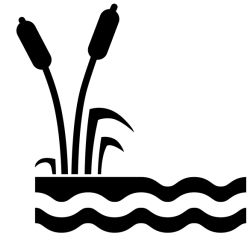
Environmental Justice NGOs

Natural Resource NGOs

Academic Institutions

WATER FOUNDATION

Created by ProSymbols
from Noun Project



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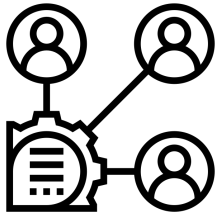

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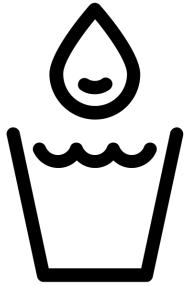

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Created by sarah
from Noun Project

Climate

Groundwater dependent ecosystems

Interconnected surface waters

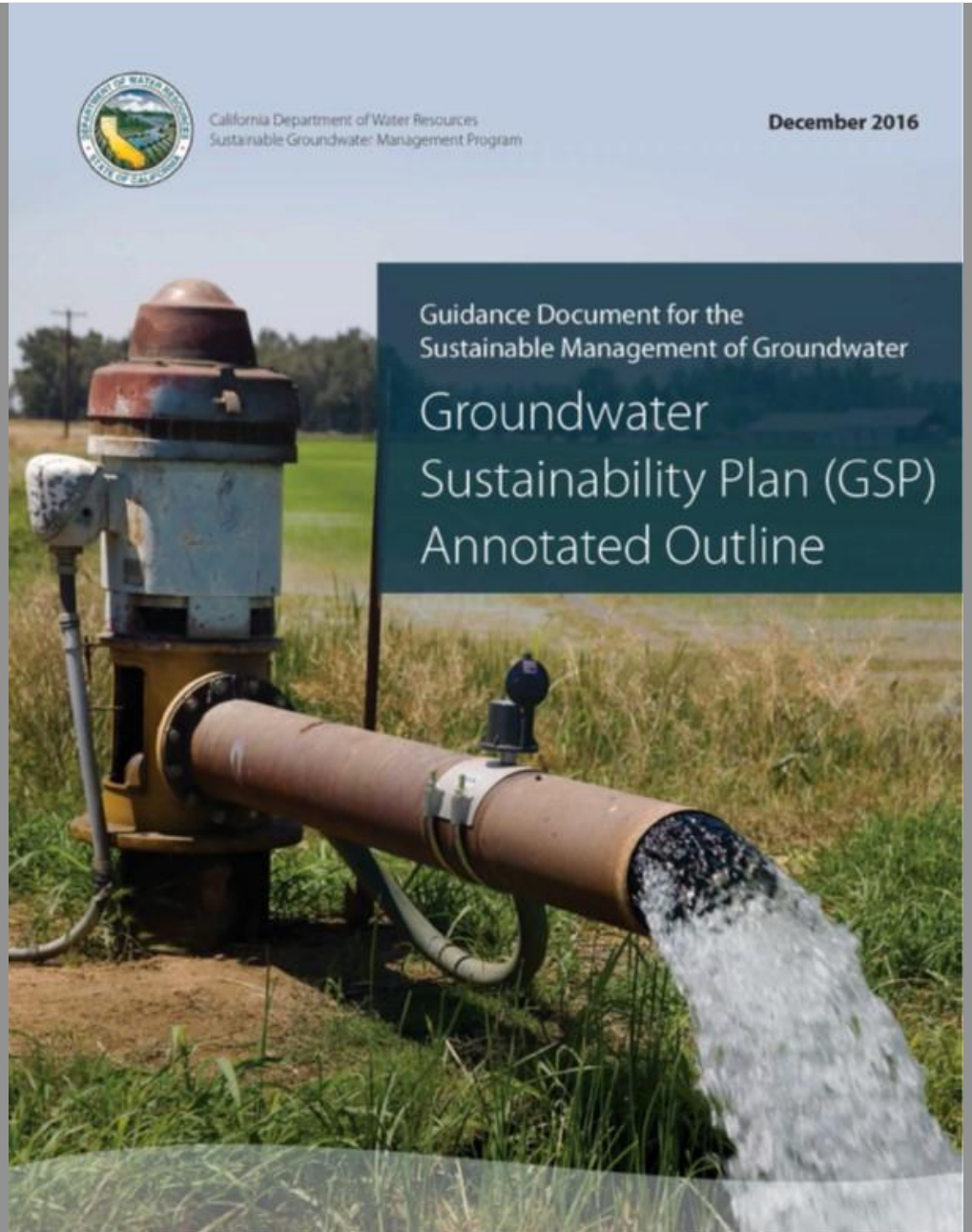
Drinking water

Stakeholder engagement

Audubon

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?

Selected relevant requirements and guidance:
GSP Element 2.1.5, "Notice & Communication" (§354.10):
(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.
GSP Element 2.2.2, "Groundwater Conditions" (§354.16):
(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.
(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.
(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.
GSP Element 3.3, "Minimum Thresholds" (§354.28):
(4) How minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.

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

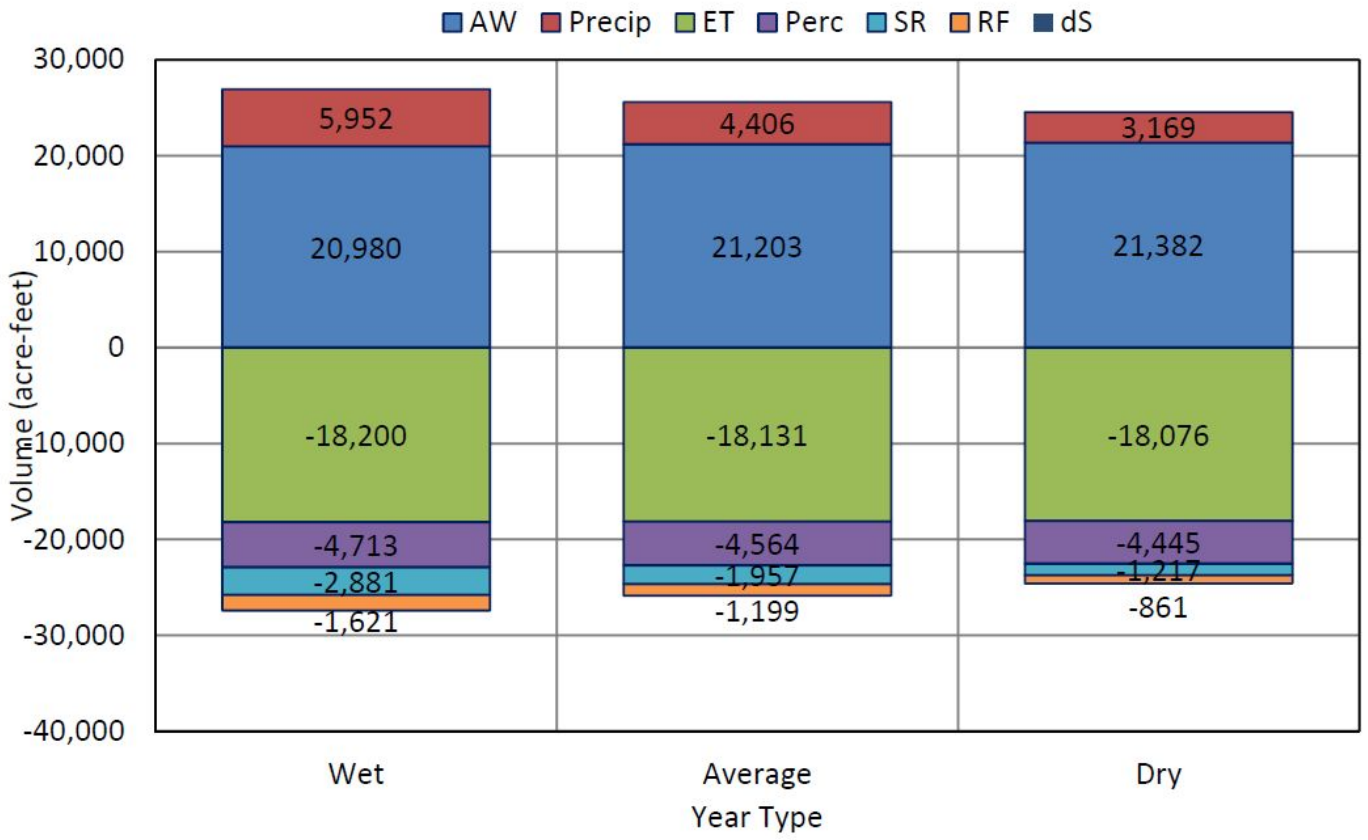


Figure 5. Annual Water Budget, 1991 – 2017 (acre-feet).

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

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10-min Stretch Break

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Deep Dive

Lessons Learned - Looking Forward

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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)

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Breakout Groups 1 - 2

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

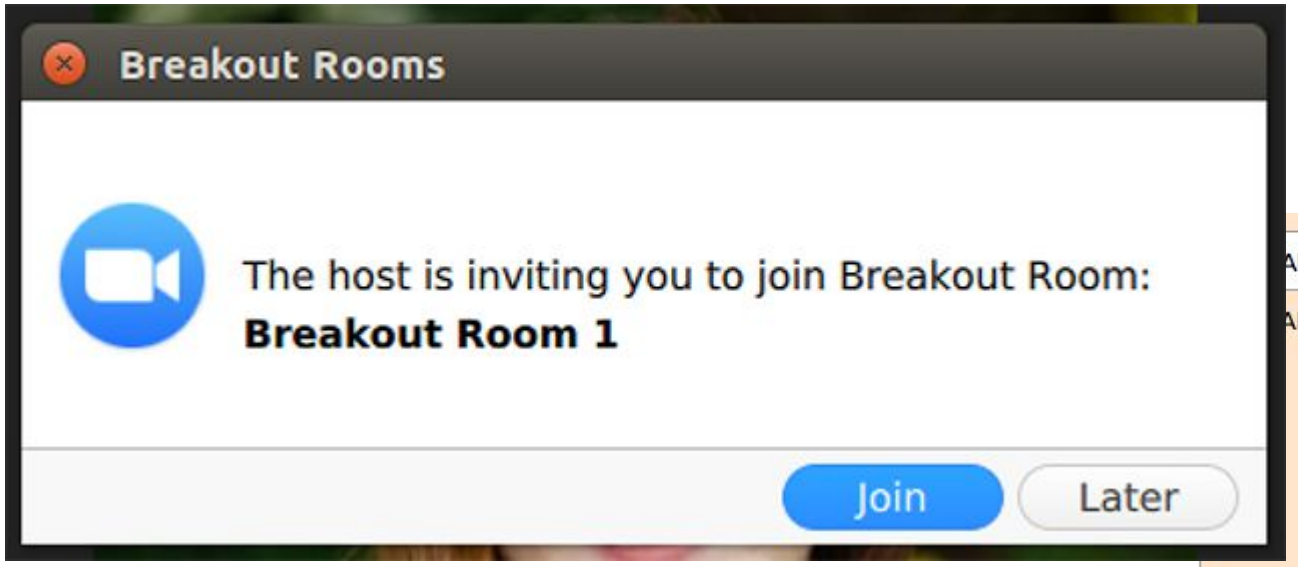
4) Water Markets & Fallowing

Equity & Coordination

Christina Babbitt

Danielle Dolan

Breakout Group Guidance



AM	Stretch Break		
AM	Deep Dive: Lessons Learned - Looking Forward • Equity & Env Justice • Climate Predictions • Env Flows & Recharge • Water Markets & Fallowing	*Breakout Room Session* 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 Guides Day 2 Session • Group 1 (Equity & EJ) • Group 2 (Climate Predictions) • Group 3 (Environmental Flows & Recharge) • Group 4 (Water Markets & Fallowing)

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Break-Out Group Reports

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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?

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Transition to Brown-Bag Lunch Panel

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Brown-Bag Lunch with State Agencies

Commitment, Coordination, & Policy Direction

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Panelists

Craig Altare

Supervising Engineering Geologist

California Department of Water Resources

Natalie Stork

Chief of Groundwater Management Program

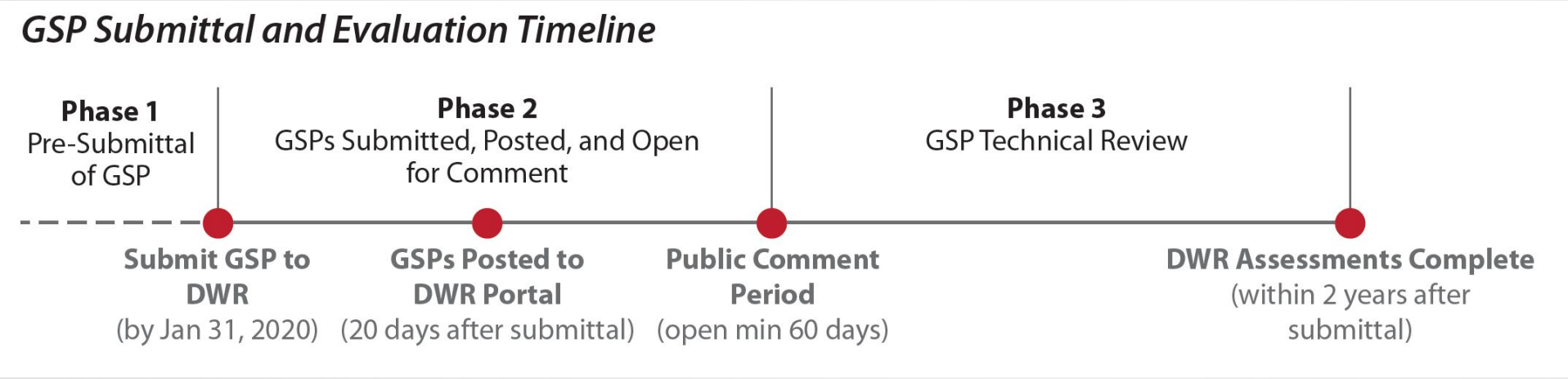
State Water Resources Control Board

Catherine Freeman

Chief Consultant

California State Assembly Committee on Water, Parks, and Wildlife

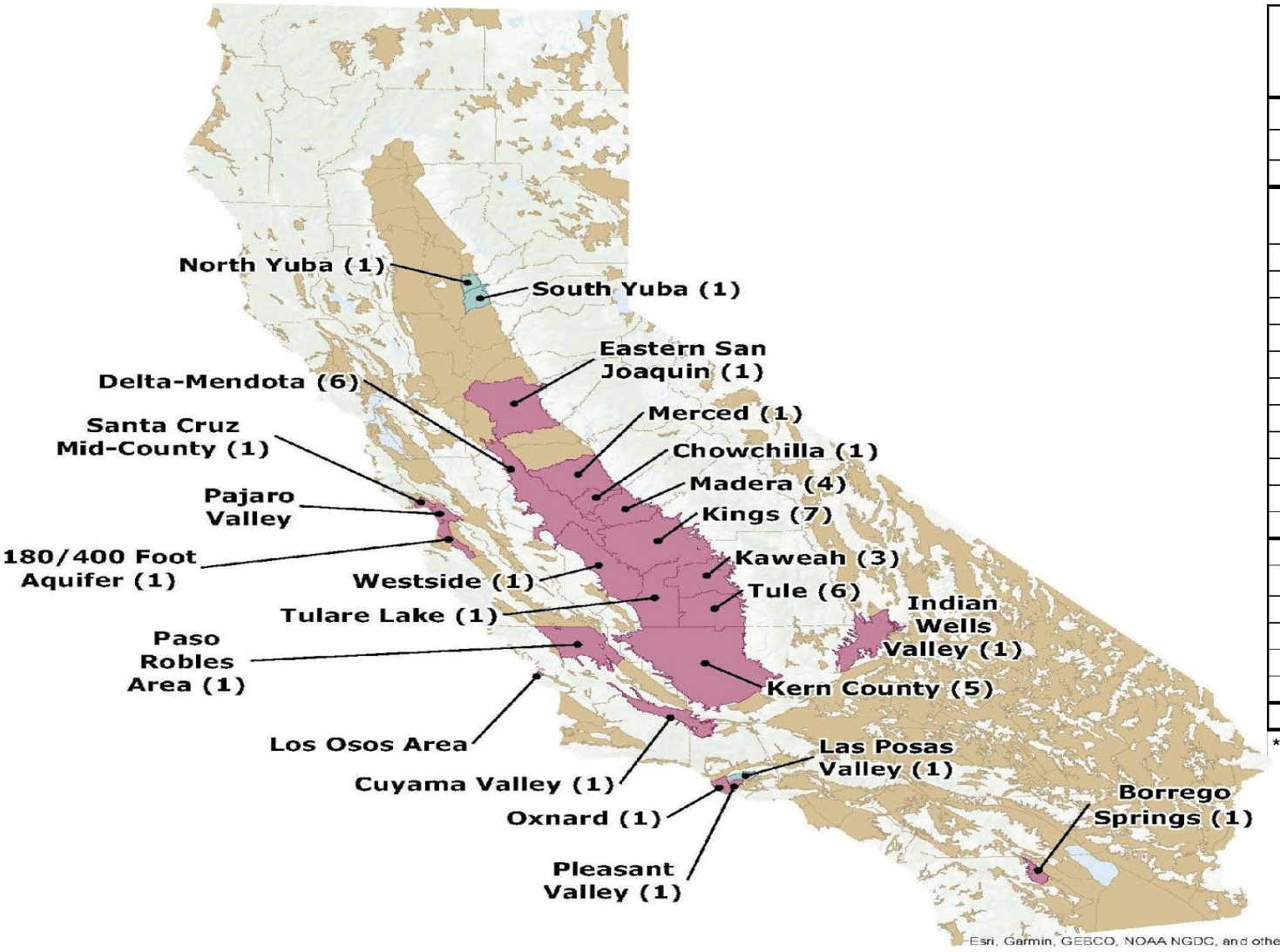
GSP Submittal and Evaluation



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

Basins with Submitted Groundwater Sustainability Plans



Map created from B118 Groundwater Basin Boundaries Published 02/11/2019. This map published 02/20/2020

Basin Name	# of GSPs	# of GSAs	Comment Period Closing Date
NORTH YUBA*	1	3	6/3/2020
SOUTH YUBA*	1	1	6/3/2020
EASTERN SAN JOAQUIN	1	17	5/15/2020
SANTA CRUZ MID-COUNTY	1	1	6/3/2020
180/400 FOOT AQUIFER	1	3	5/15/2020
PASO ROBLES AREA	1	4	5/15/2020
MERCED	1	3	5/15/2020
CHOWCHILLA	1	4	5/15/2020
DELTA-MENDOTA	6	23	5/15/2020
KINGS	7	7	5/15/2020
WESTSIDE	1	1	5/15/2020
KAWEAH	3	4	6/3/2020
TULARE LAKE	1	5	5/15/2020
TULE	6	7	6/3/2020
KERN COUNTY	5	11	6/3/2020
CUYAMA VALLEY	1	1	5/15/2020
LAS POSAS*	1		5/15/2020
OXNARD	1	3	5/15/2020
PLEASANT VALLEY	1	3	5/15/2020
INDIAN WELLS VALLEY	1	1	6/3/2020
BORREGO SPRINGS	1 (Alternative to a GSP)	1	5/15/2020
MADERA	4	7	N/A

* = not a critically-overdrafted basin

GSP Submitted Early for Non-COD Basin
Critically Overdrafted Basin/Subbasin
Groundwater Basin/Subbasin
County line

CALIFORNIA DEPARTMENT OF WATER RESOURCES

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

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


Corrective Actions
Enforcement
Interim
PLAN
Monitoring
Plan
Schedule

SGMA Fact Sheets

- 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

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California State Assembly Committee on Water, Parks, and Wildlife

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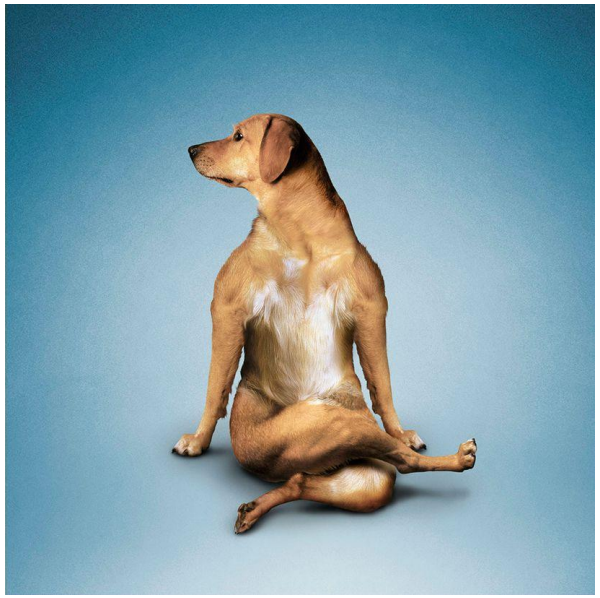
10-min Stretch Break



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Summary & Next Steps

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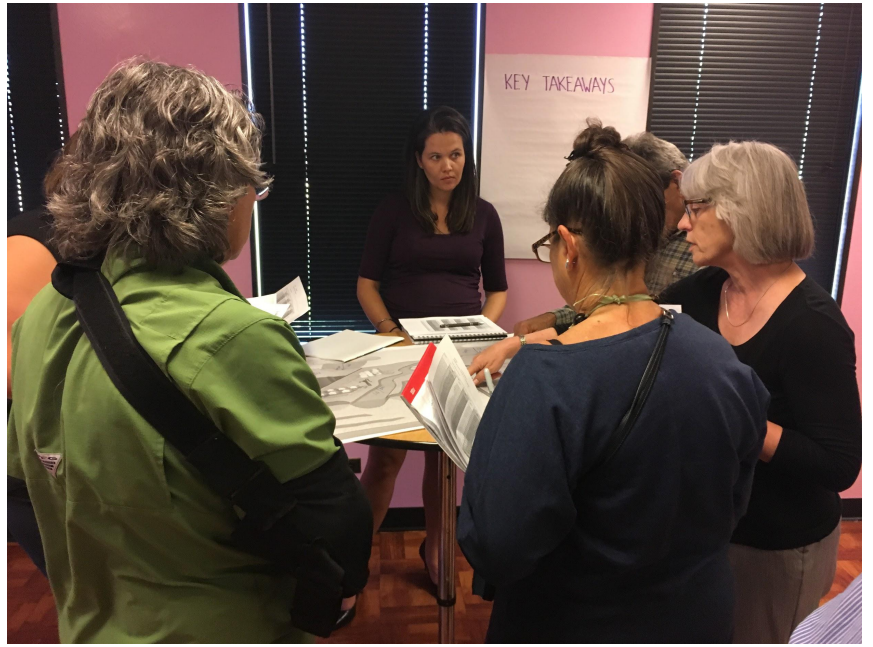
Lessons Learned

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



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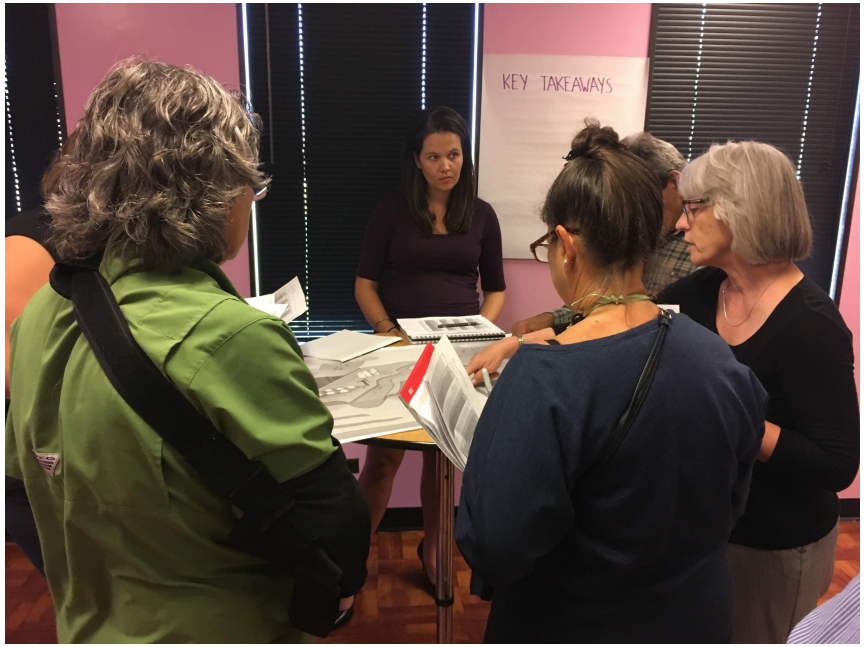
Lessons Learned

Management Actions

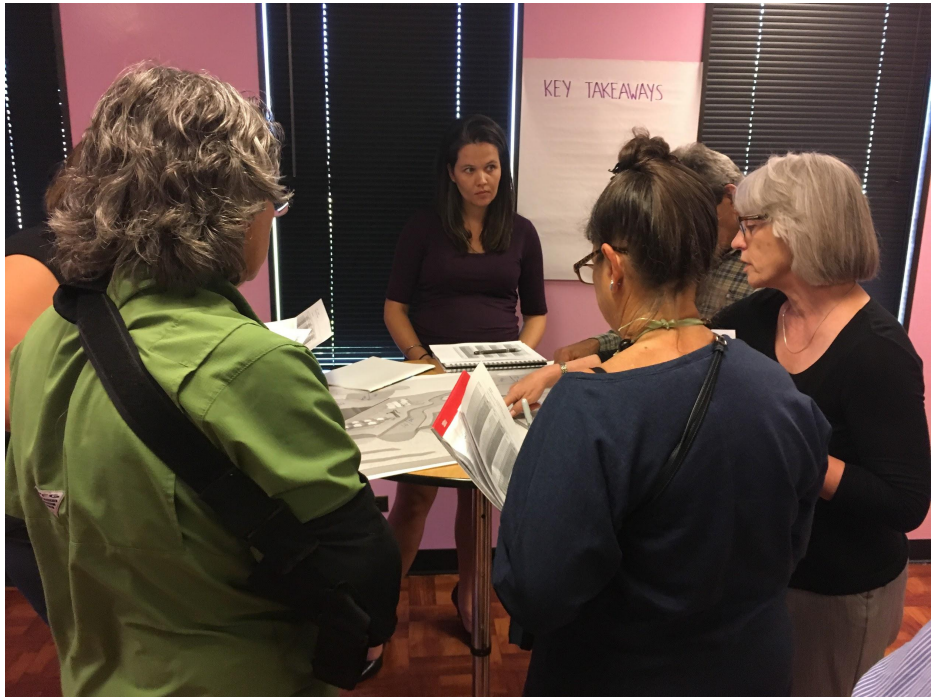
- Difficulty placing economic cost on priceless values; but need to try - otherwise they won't be valued at all;
- need to make the economic counter-argument for immediate rather than deferred action
- Monitoring networks - need to advocate that GSAs monitor for all relevant SIs, and that data gaps are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



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



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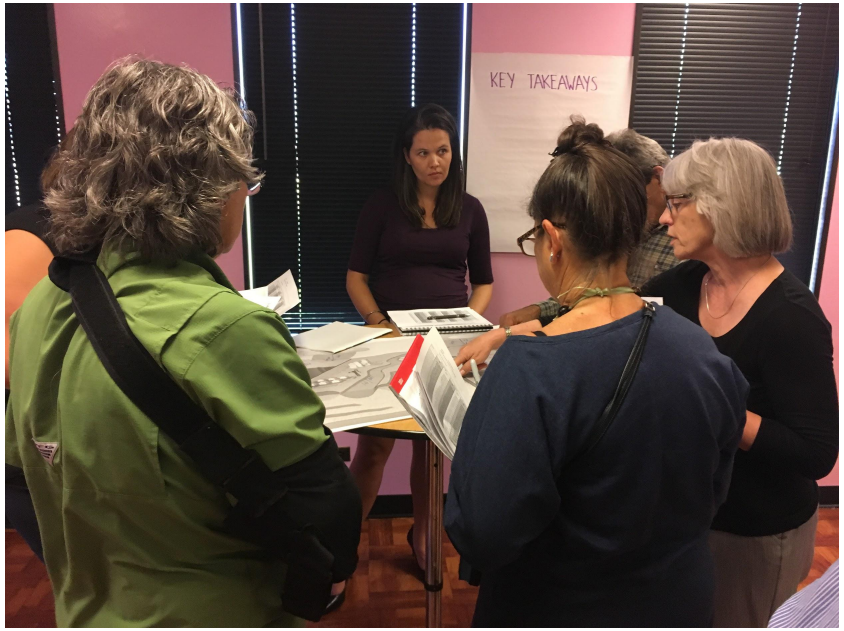
Lessons Learned

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



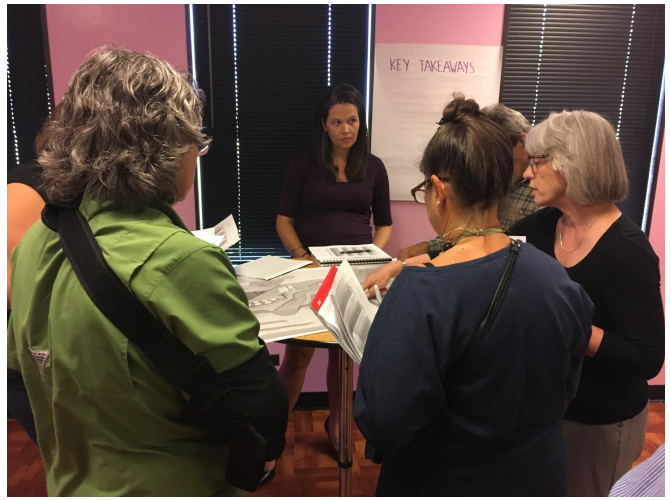
Plan Review

- *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.



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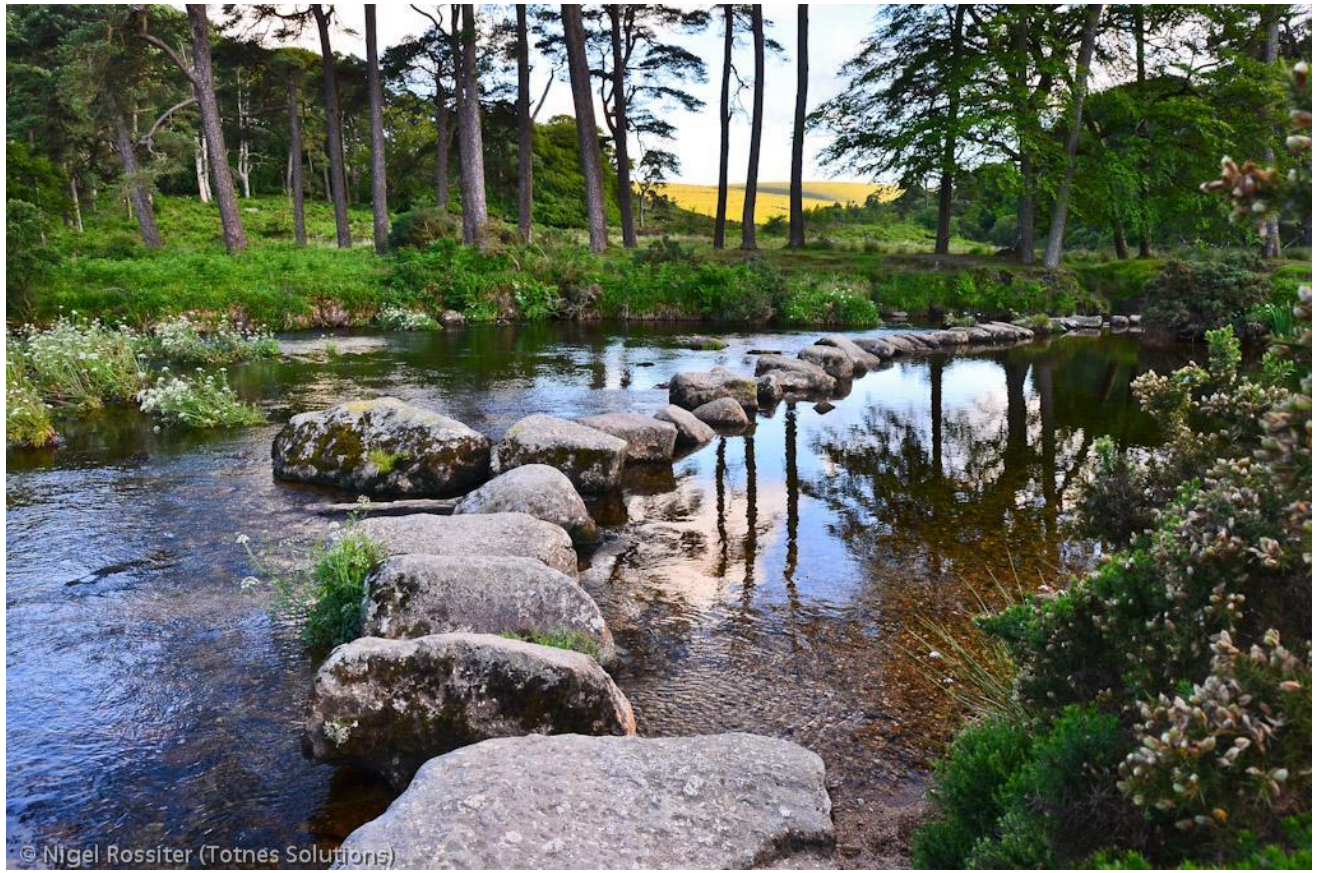
Next Steps

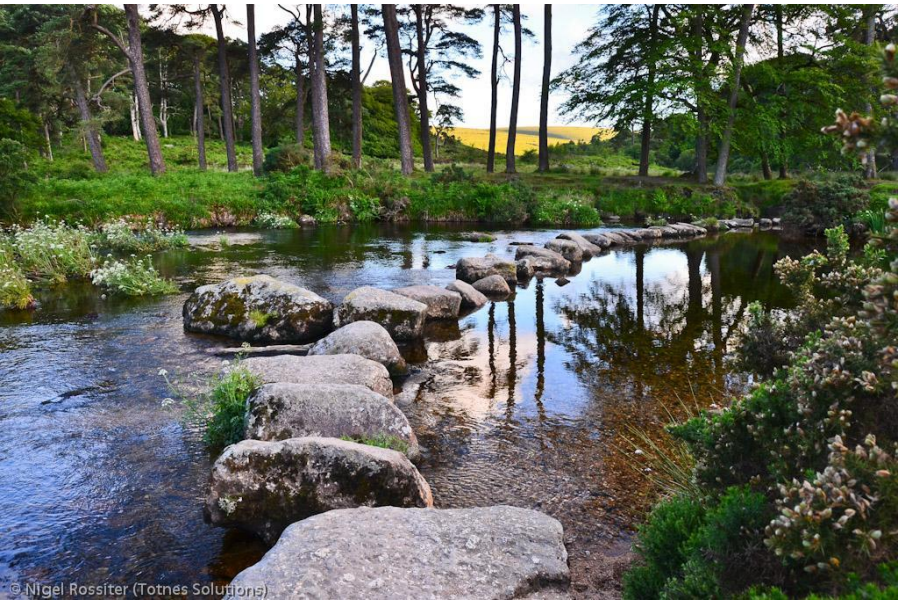


- for Plan Review
- for the Collaborative

Local Government Commission
Leaders for Livable Communities

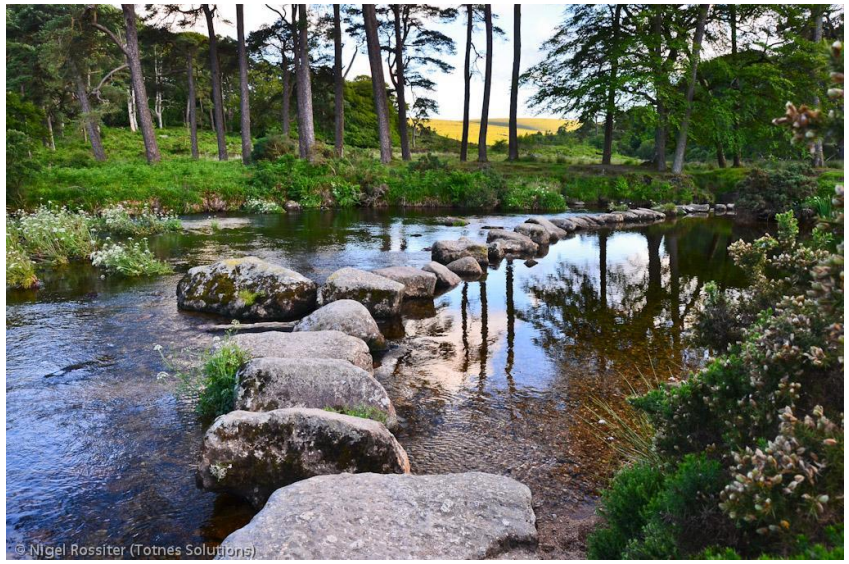
CLEAN WATER ACTION

Next Steps



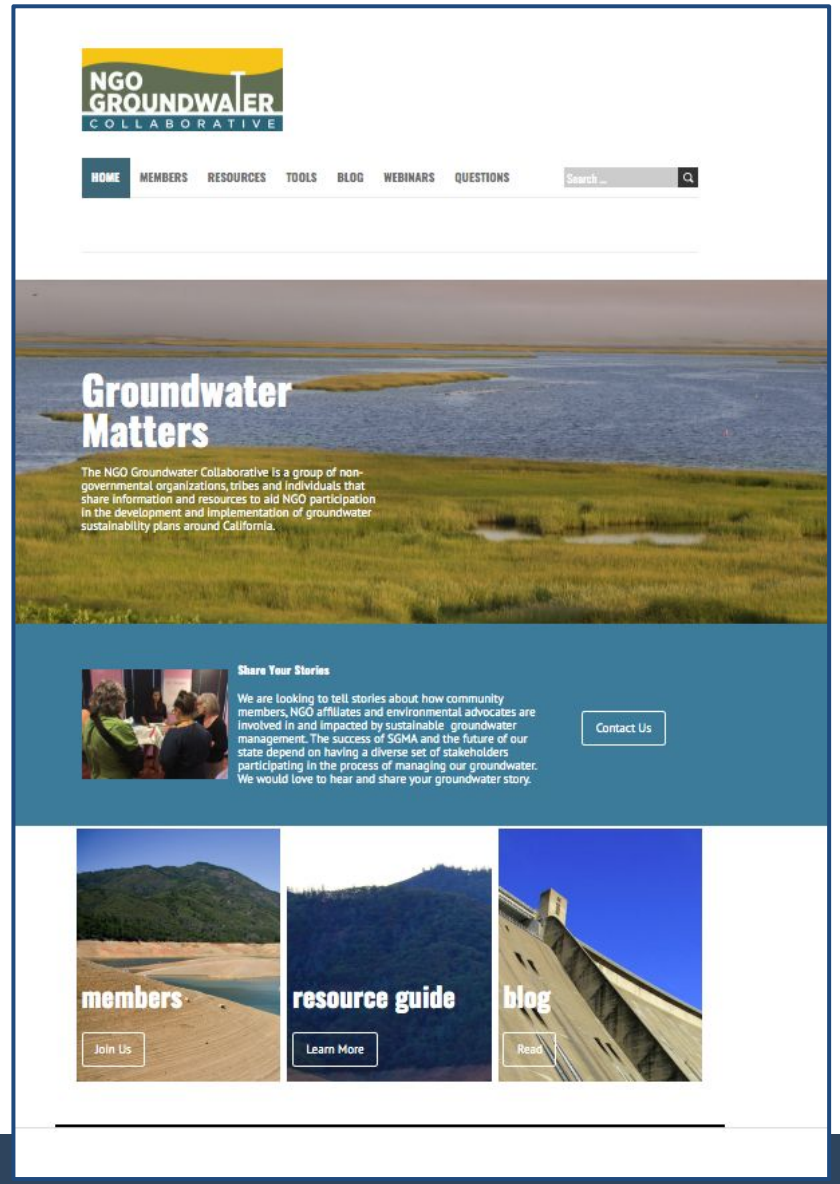
- for Plan Review
  - For economic argument: Consider an economic study of the benefit of restoring or protecting ecosystems (to combat SJV Blueprint Econ Analysis)
  - Strategize which 2022 plans to review; streamlining review process based on lessons learned

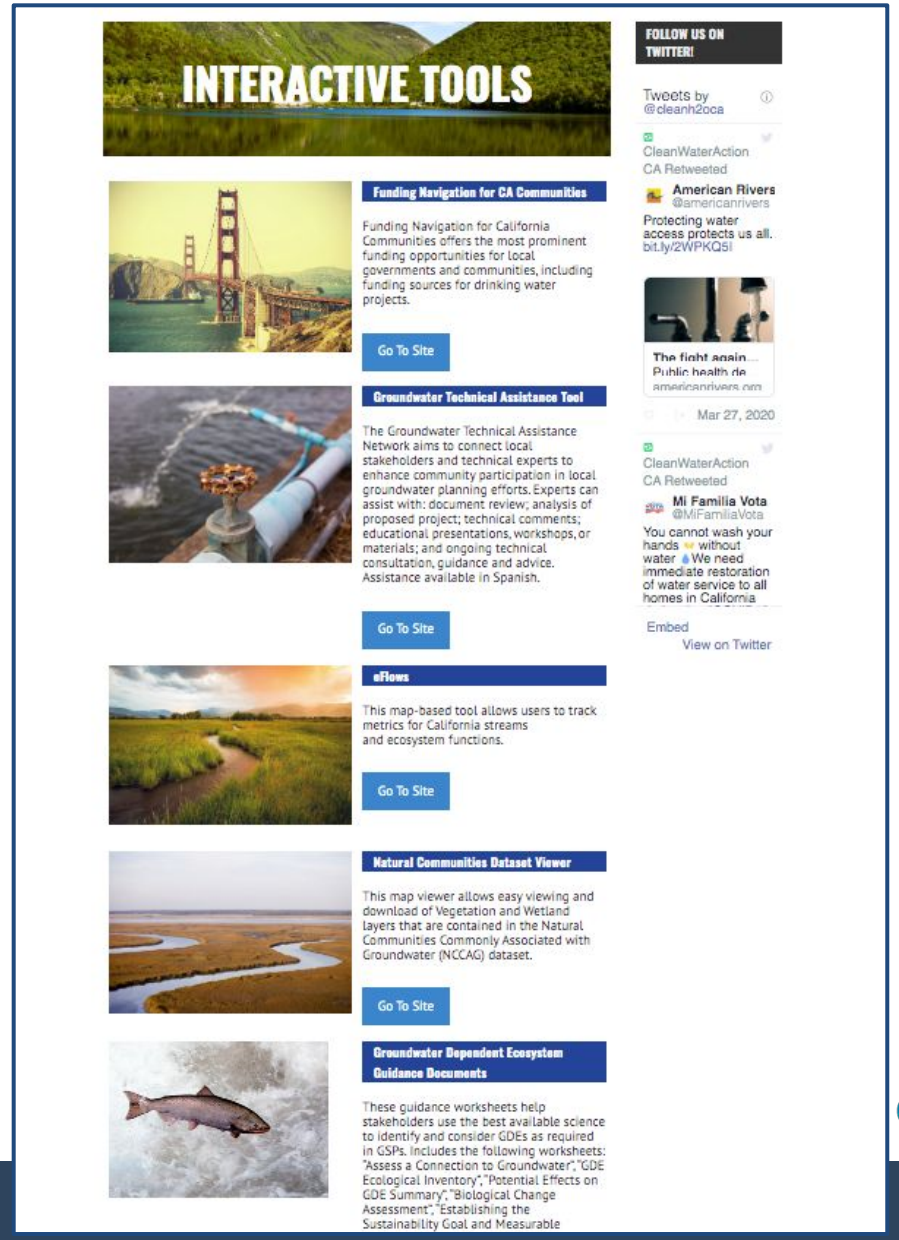
Next Steps



- 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:

cagroundwater.org

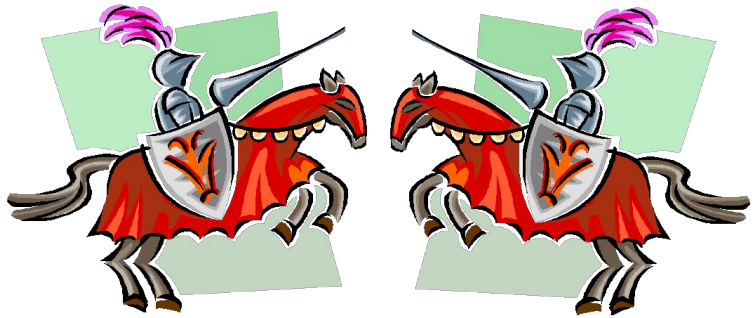




CLEAN WATER ACTION

NGO GROUNDWATER COLLABORATIVE

Tools & Resources Fair



Local Government Commission
Leaders for Livable Communities

CLEAN WATER ACTION

Coreen Weintraub

Union of Concerned Scientists

Local Government Commission
Leaders for Livable Communities

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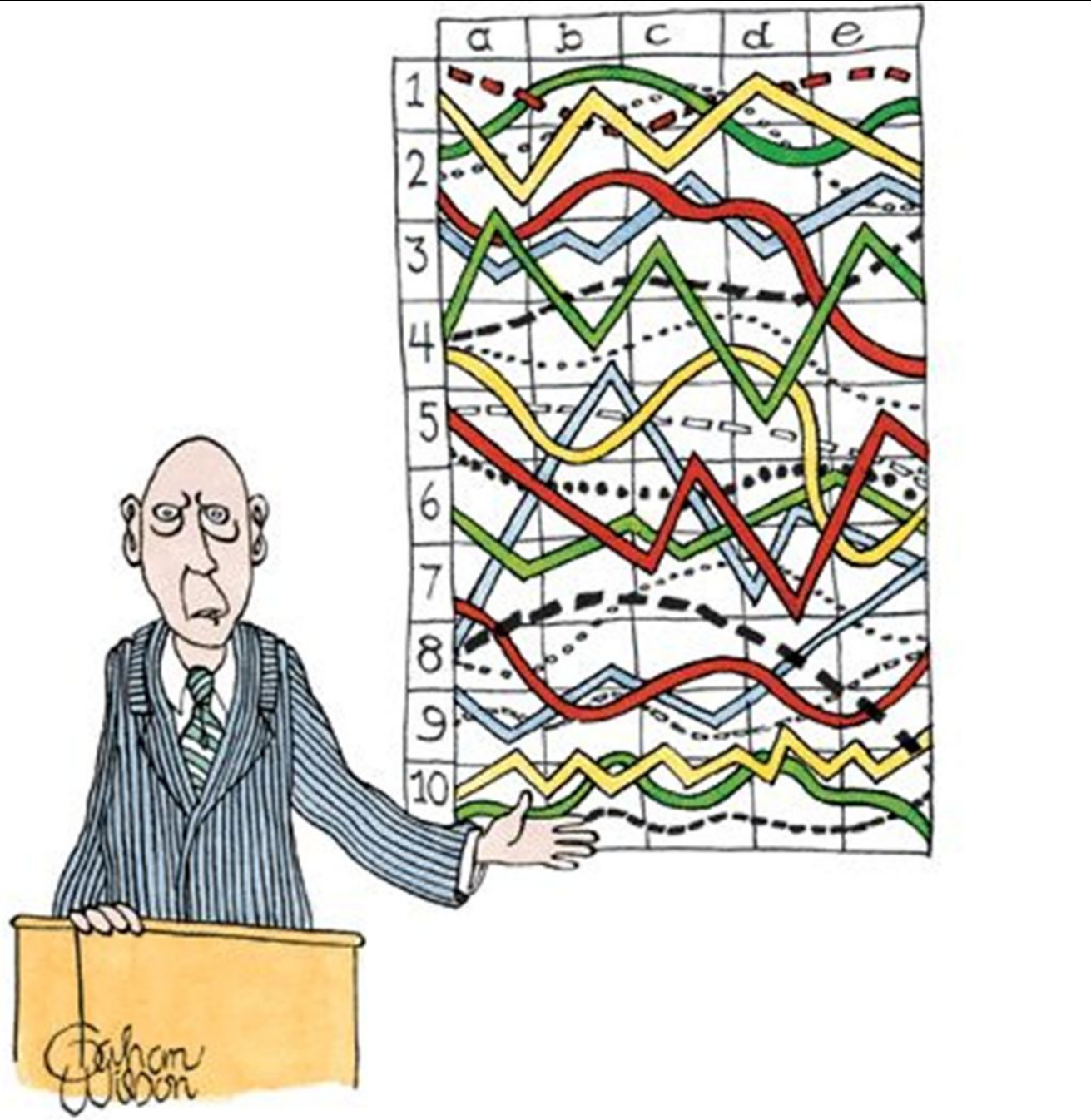
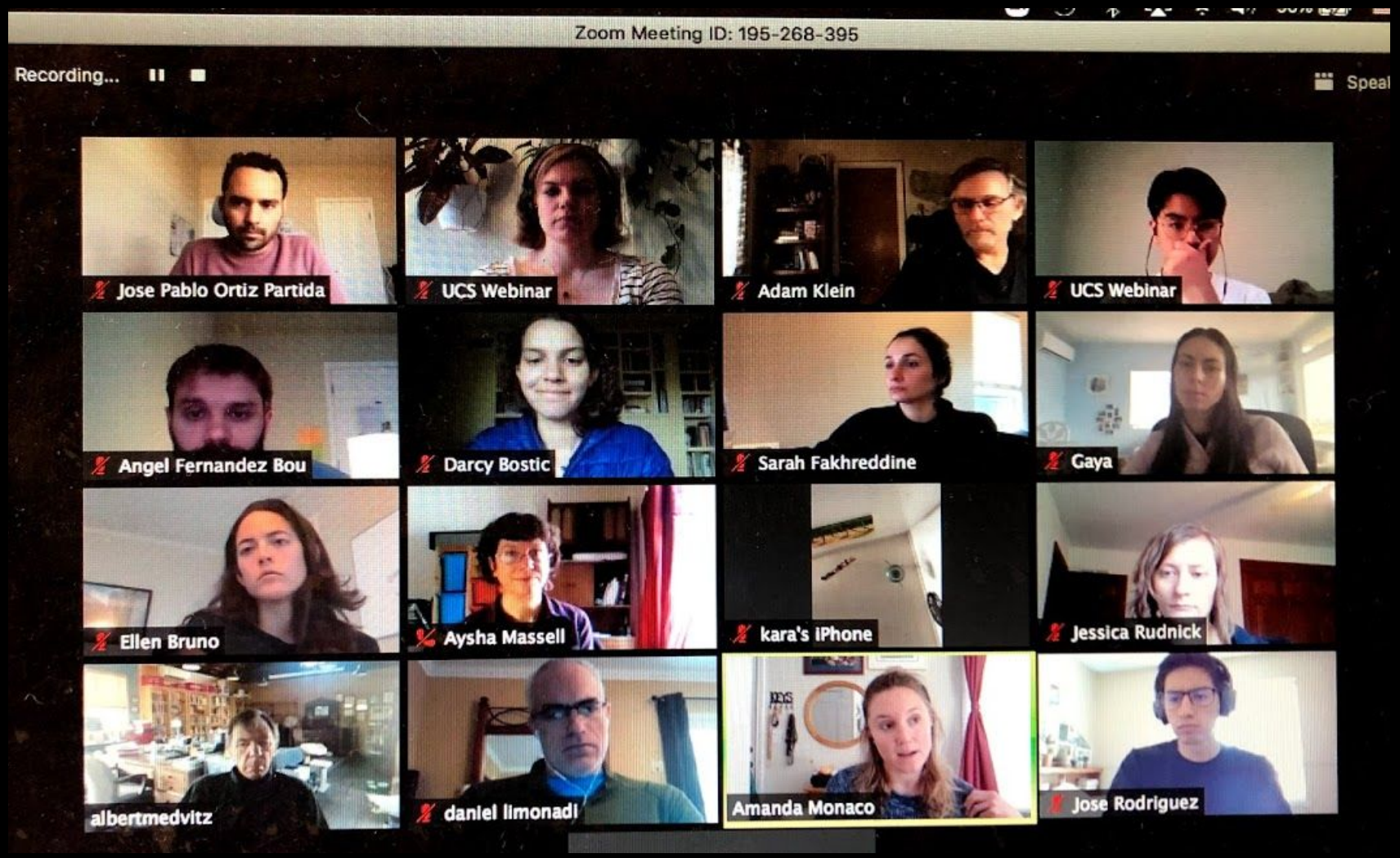


"I'll pause for a moment so you can let this information sink in."

Groundwater Technical Assistance Network



Union of Concerned Scientists

Groundwater Technical Assistance Network

Contact:

Coreen Weintraub

Email: cweintraub@ucsusa.org

Phone: (510) 809-1566

www.ucsusa.org/groundwater-technical-assistance-tool

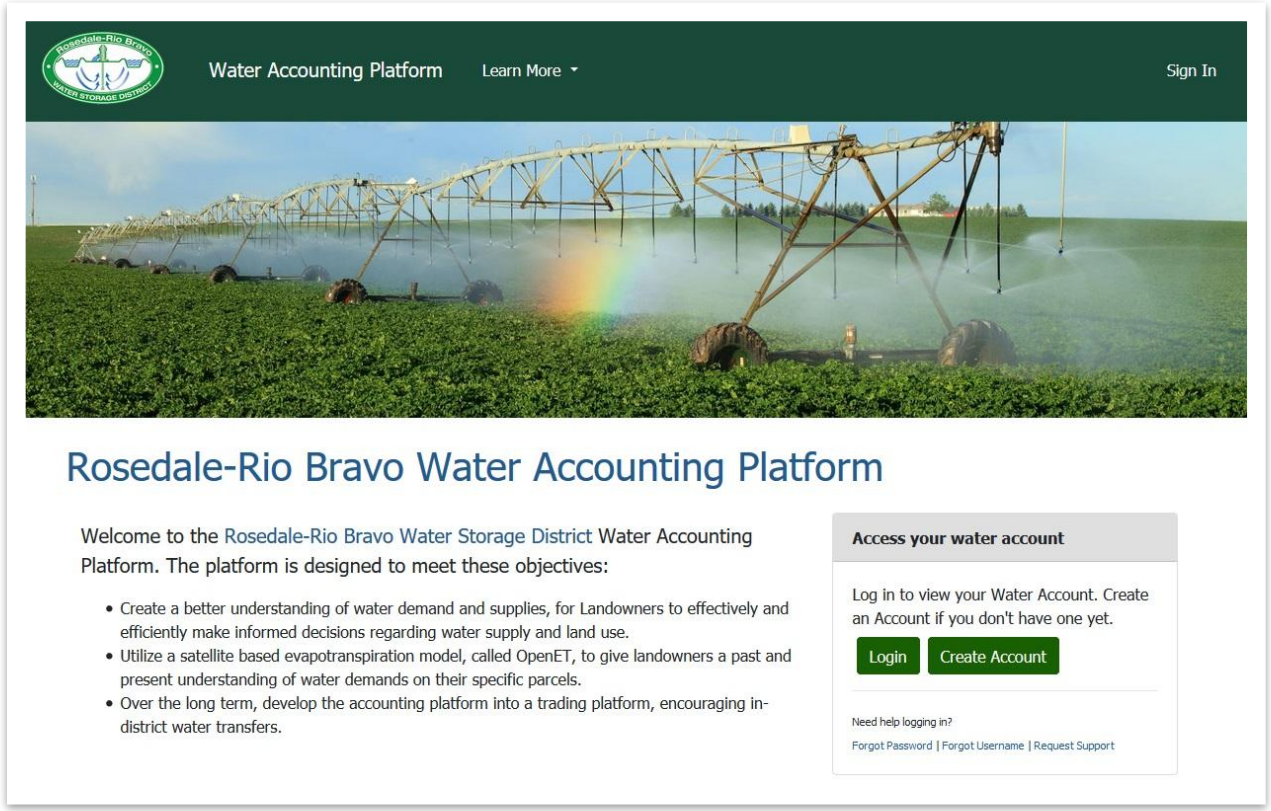
Christina Babbitt

Water Accounting and Trading Platform

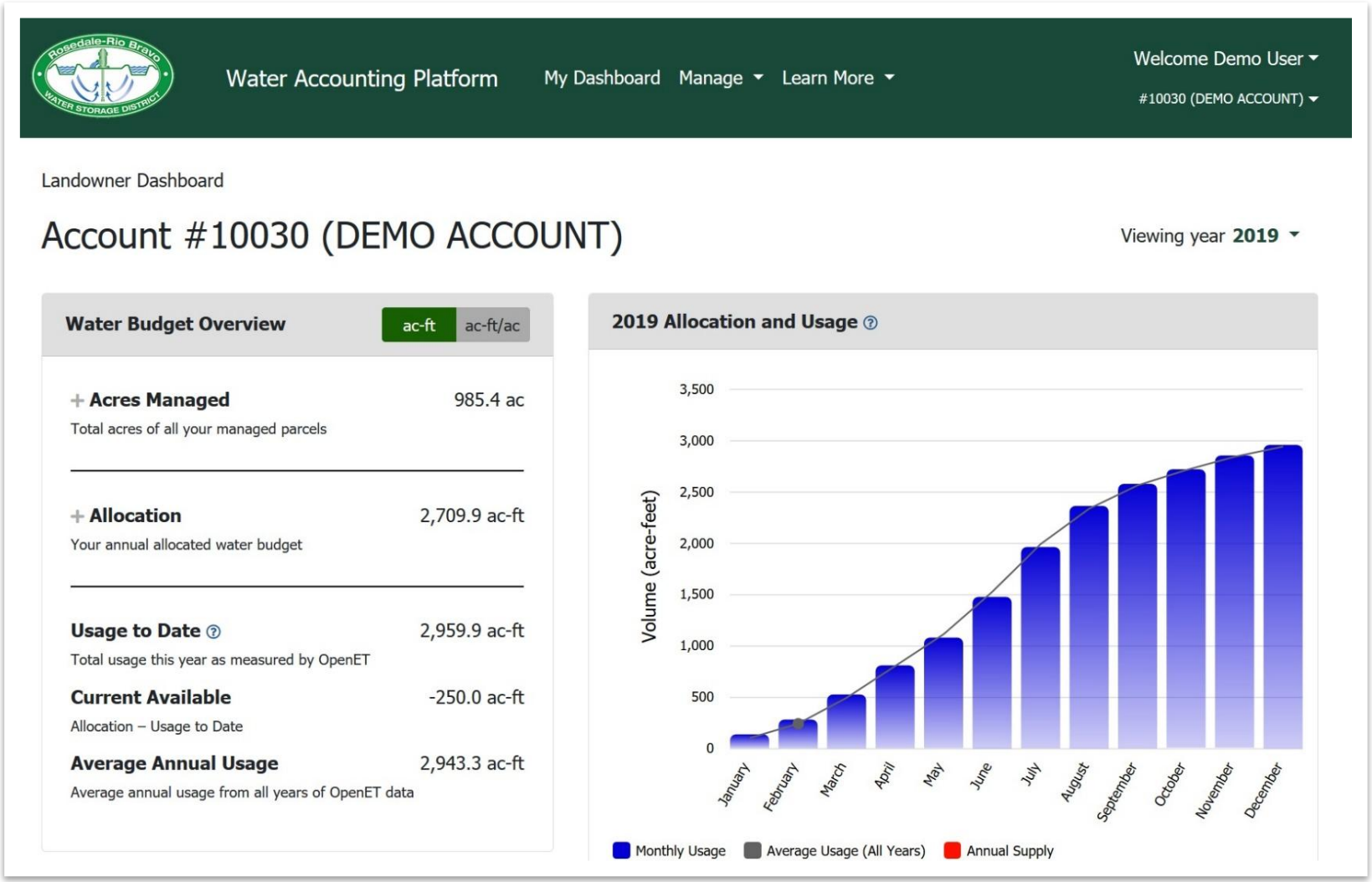
Christina Babbitt, Ph.D. – Senior Manager, California Groundwater Program, Environmental Defense Fund

April 1, 2020

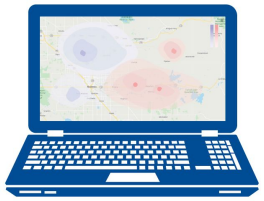
Water Accounting and Trading Plat



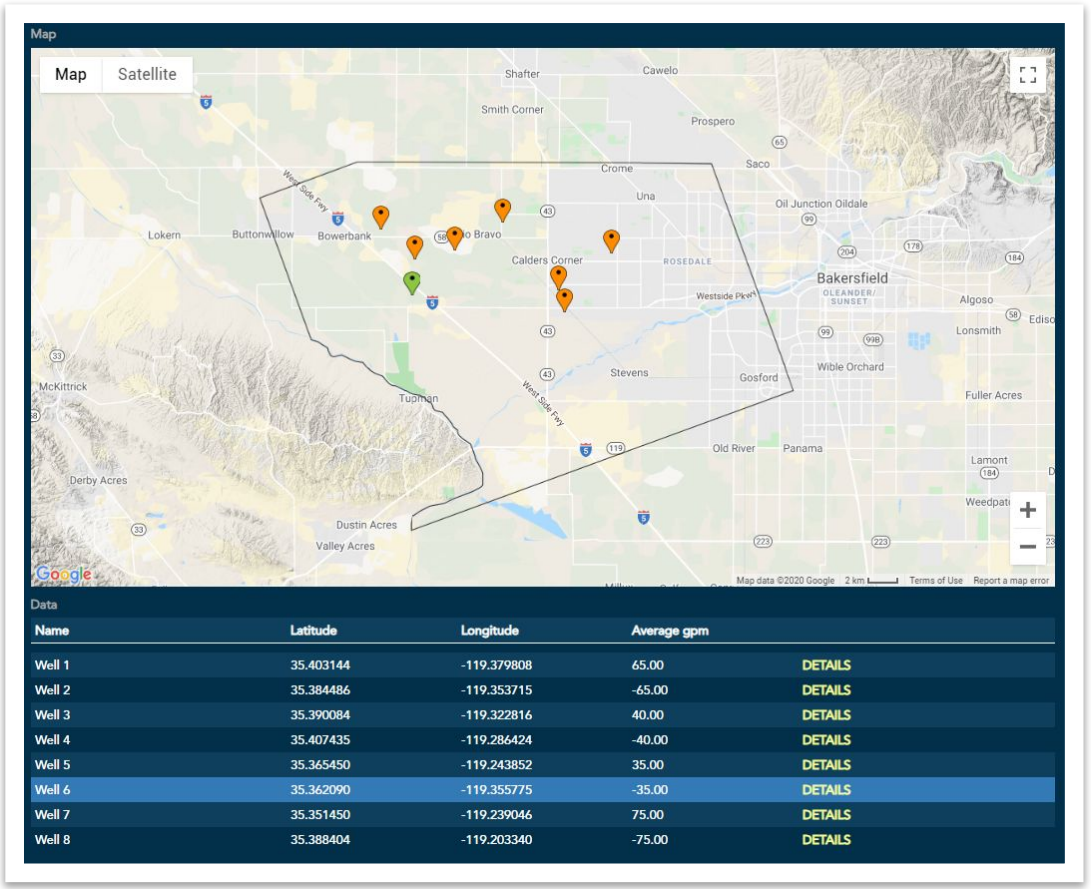
Water Accounting and Trading Platform



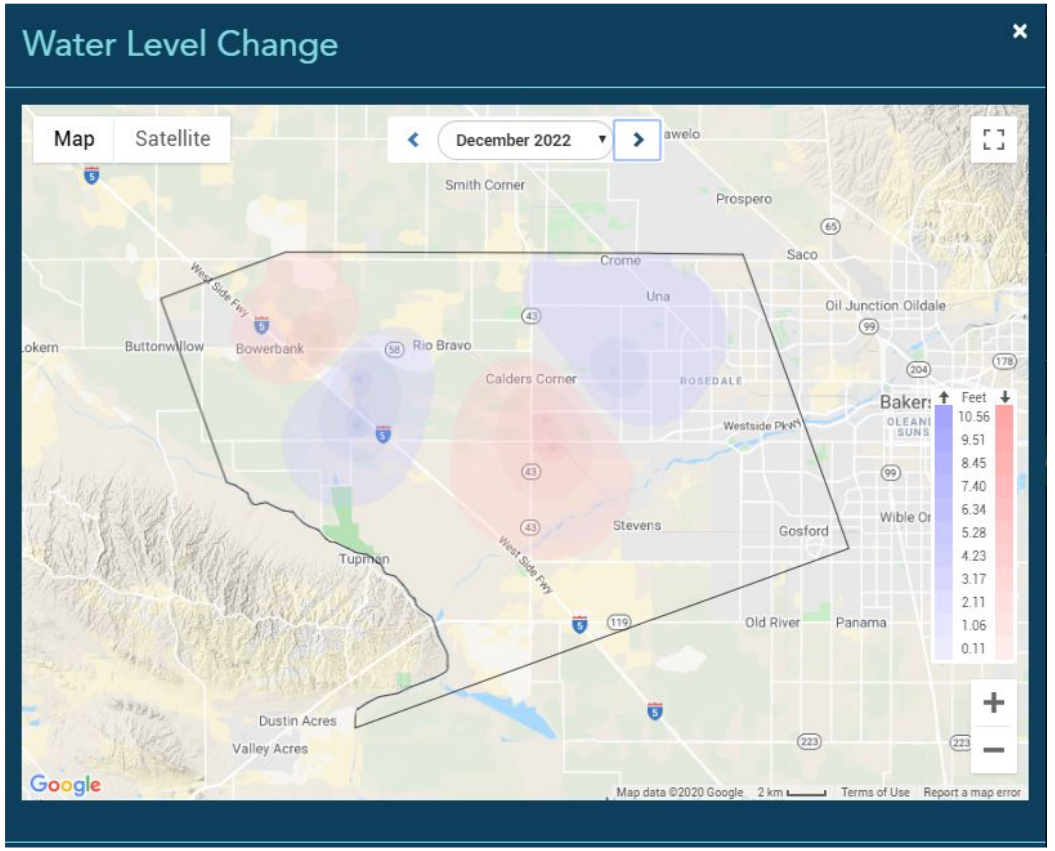
Water Accounting and Trading Platform



Modeling scenarios



Name	Latitude	Longitude	Average gpm	
Well 1	35.403144	-119.379808	65.00	DETAILS
Well 2	35.384486	-119.353715	-65.00	DETAILS
Well 3	35.390084	-119.322816	40.00	DETAILS
Well 4	35.407435	-119.286424	-40.00	DETAILS
Well 5	35.365450	-119.243852	35.00	DETAILS
Well 6	35.362090	-119.355775	-35.00	DETAILS
Well 7	35.351450	-119.239046	75.00	DETAILS
Well 8	35.388404	-119.203340	-75.00	DETAILS



Christina Babbitt
cbabbitt@edf.org

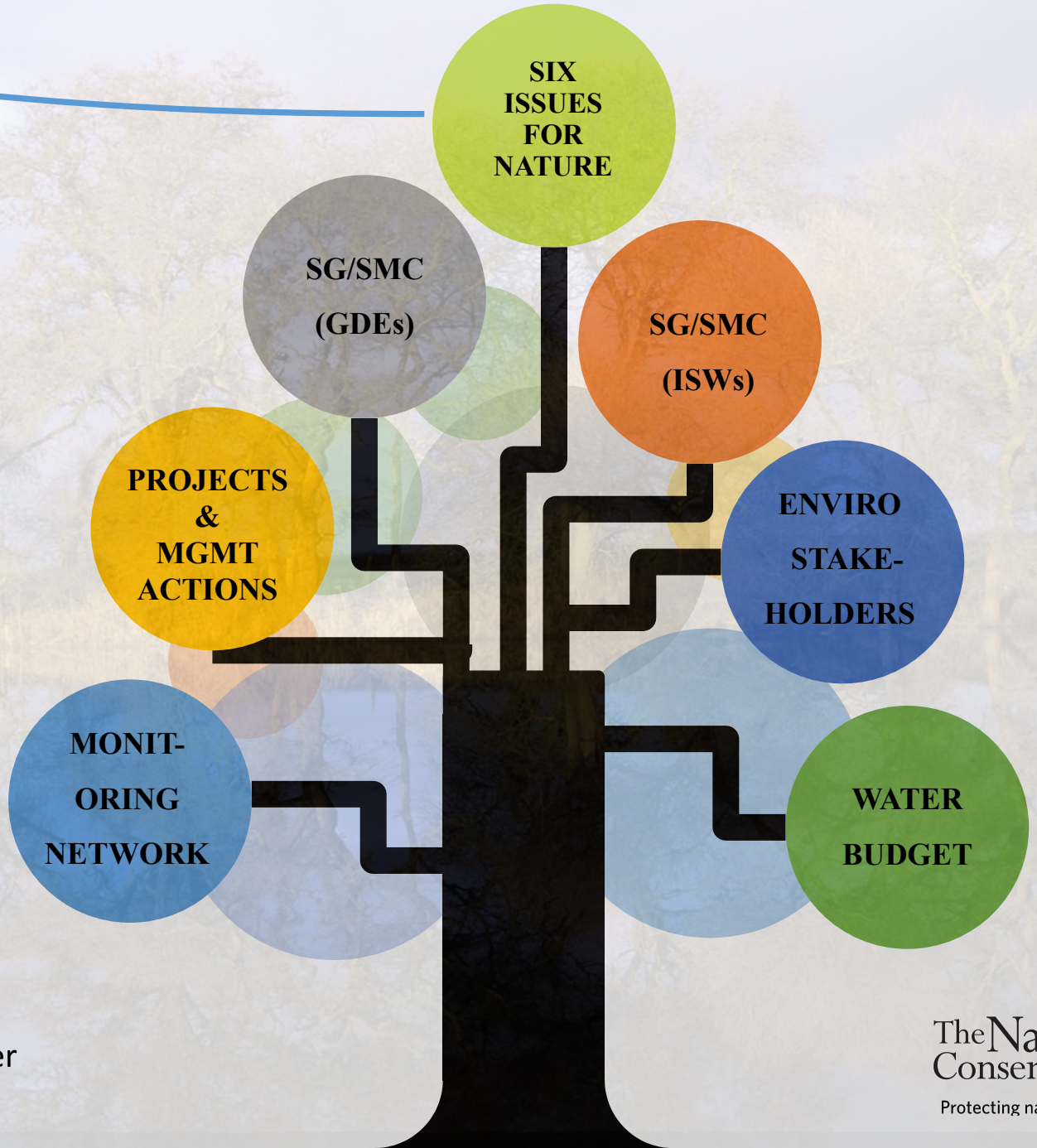
Ruthie Redmond

The Nature Conservancy

Local Government Commission
Leaders for Livable Communities

CLEAN WATER ACTION

SGMA Snapshot: Groundwater for Nature



Ruthie Redmond, Sustainable Water Project Manager
ruthie.redmond@tnc.org

The Nature Conservancy
Protecting nature. Preserving life.

The Nature Conservancy

Protecting nature. Preserving life.

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

Ruthie Redmond, Sustainable Water Project Manager
ruthie.redmond@tnc.org

Eight Sustainability Indicators determine how well Groundwater Sustainability Plans address Nature

How well are GDEs identified and mapped?
How well are ISWs identified and mapped?
How well does the water budget account for the water use of nature (EBUs = GDEs, ISWs, native vegetation, managed wetlands, etc.)?
How well do the SG/SMCs consider GDEs and avoid undesirable results?
How well do the SG/SMCs for ISWs analyze the impact to surface water EBUs?
How well are Environmental Stakeholders (ES) engaged with?
How well are EBUs incorporated in Projects & Mgmt. Actions?
How well are EBUs identified and addressed within the monitoring network?

The Nature Conservancy
Protecting nature. Preserving life.

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

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zoom to your address

Select from the boundary types below, then search for a specific location or click on the map for area stats.

- Groundwater Sustainability Agencies
- Counties
- Community Water Systems

Reference Layers

− Groundwater Users

Community Water Systems

- ✓ Community Water System Boundary
  - Boundary
- ☐ Public Supply Well Location

Private Domestic Wells

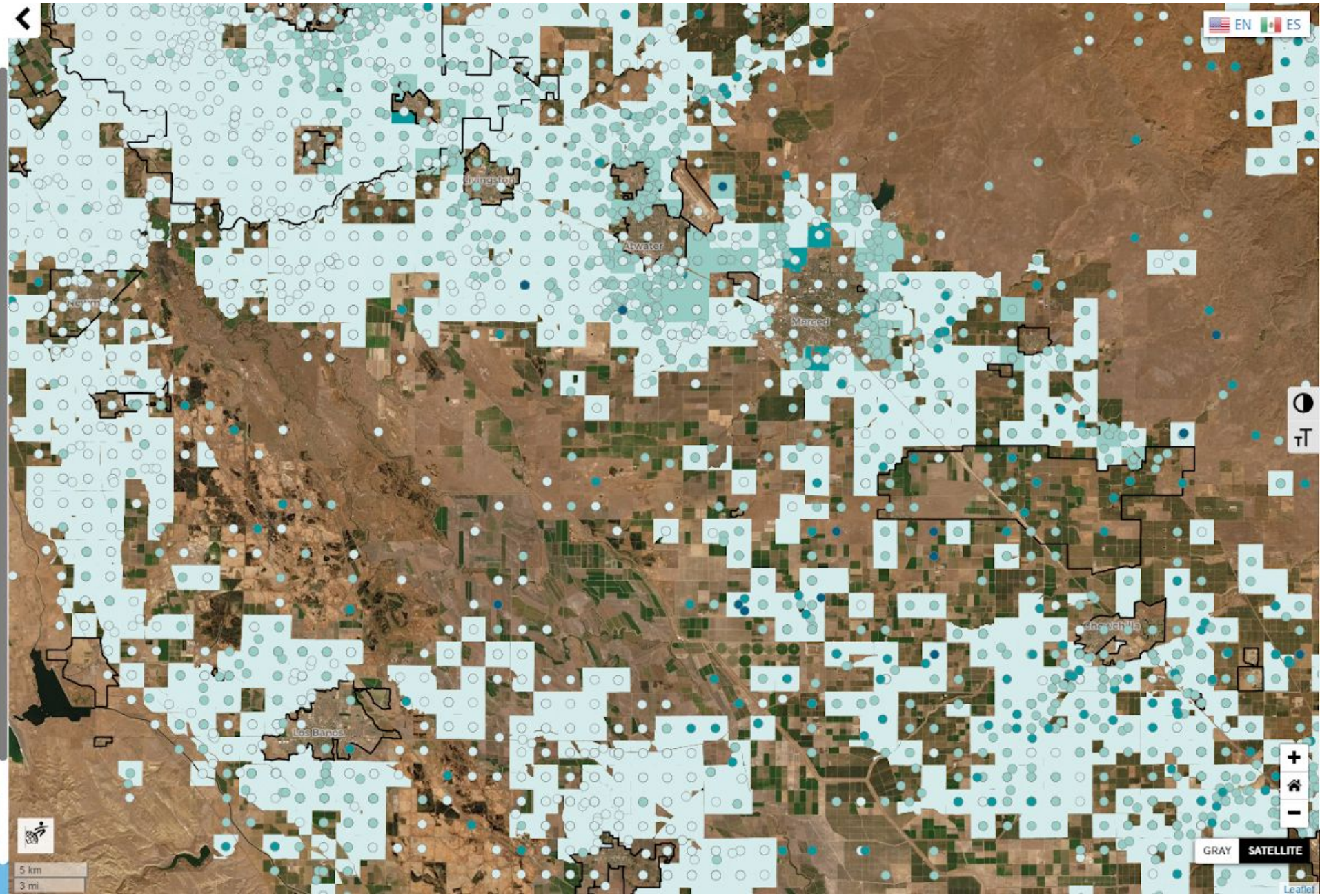
- ✓ Private Domestic Well Location
  - 1 - 200 Wells
  - 201 - 400 Wells
  - 401 - 700 Wells
  - 700+ Wells

Likely Domestic Well Communities

- Domestic Well Population
  - Up to 250
  - 251 - 1,500
  - 1,500 - 4,250
  - More than 4,250
- Domestic Well Housing
- Domestic Well Count

+ Water Quality

+ Groundwater Supply - Drought Scenarios



COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA

zoom to your address

Select from the boundary types below, then search for a specific location or click on the map for area stats.

- Groundwater Sustainability Agencies
- Counties
- Community Water Systems

Reference Layers

+ Groundwater Users
+ Water Quality
− Groundwater Supply - Drought Scenarios

Select Drought Scenario

50% 75% 100%

Small Community Water System

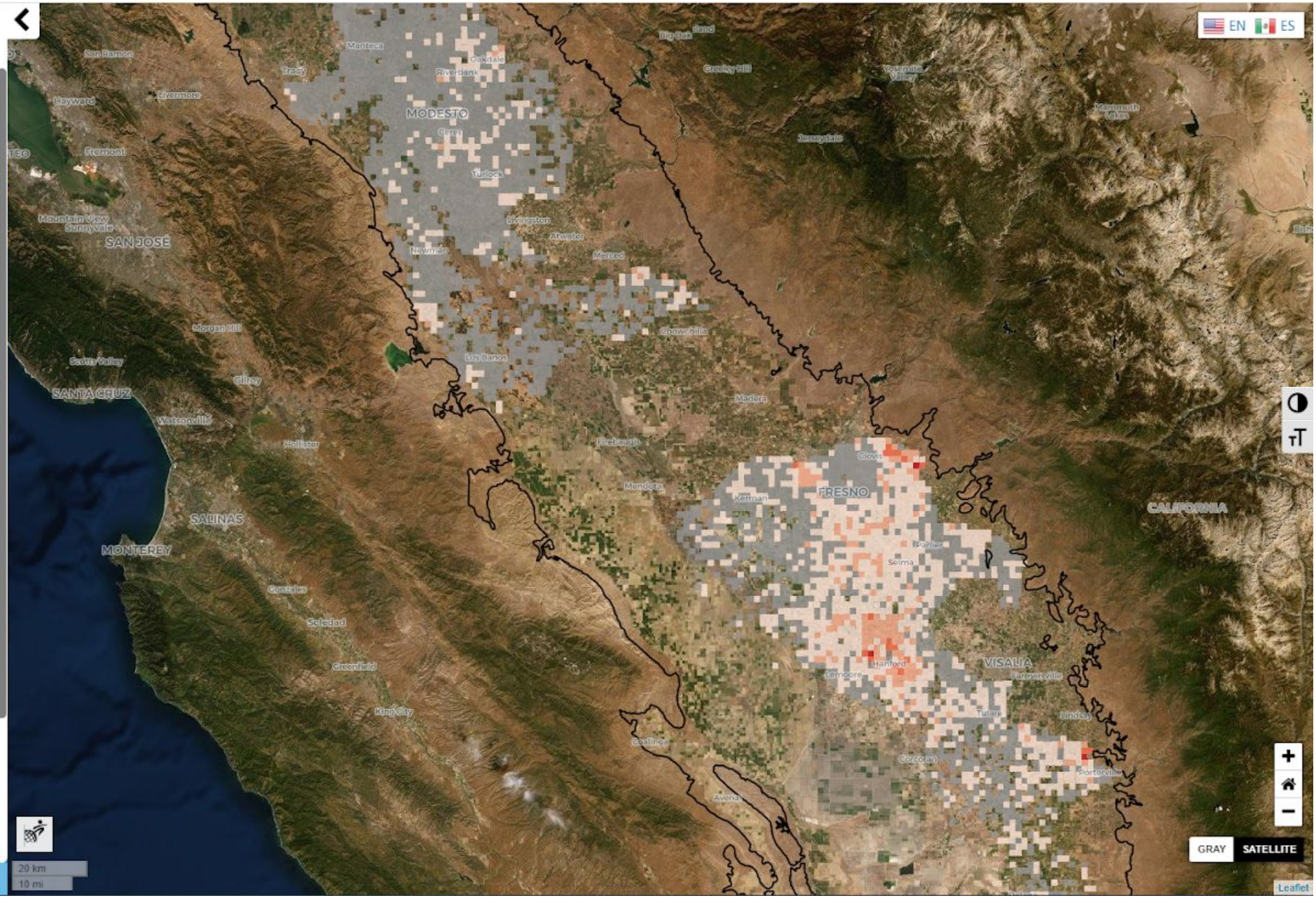
- Number of Impacted Public Supply Wells
- Cost to Remediate Impacted Public Supply Wells

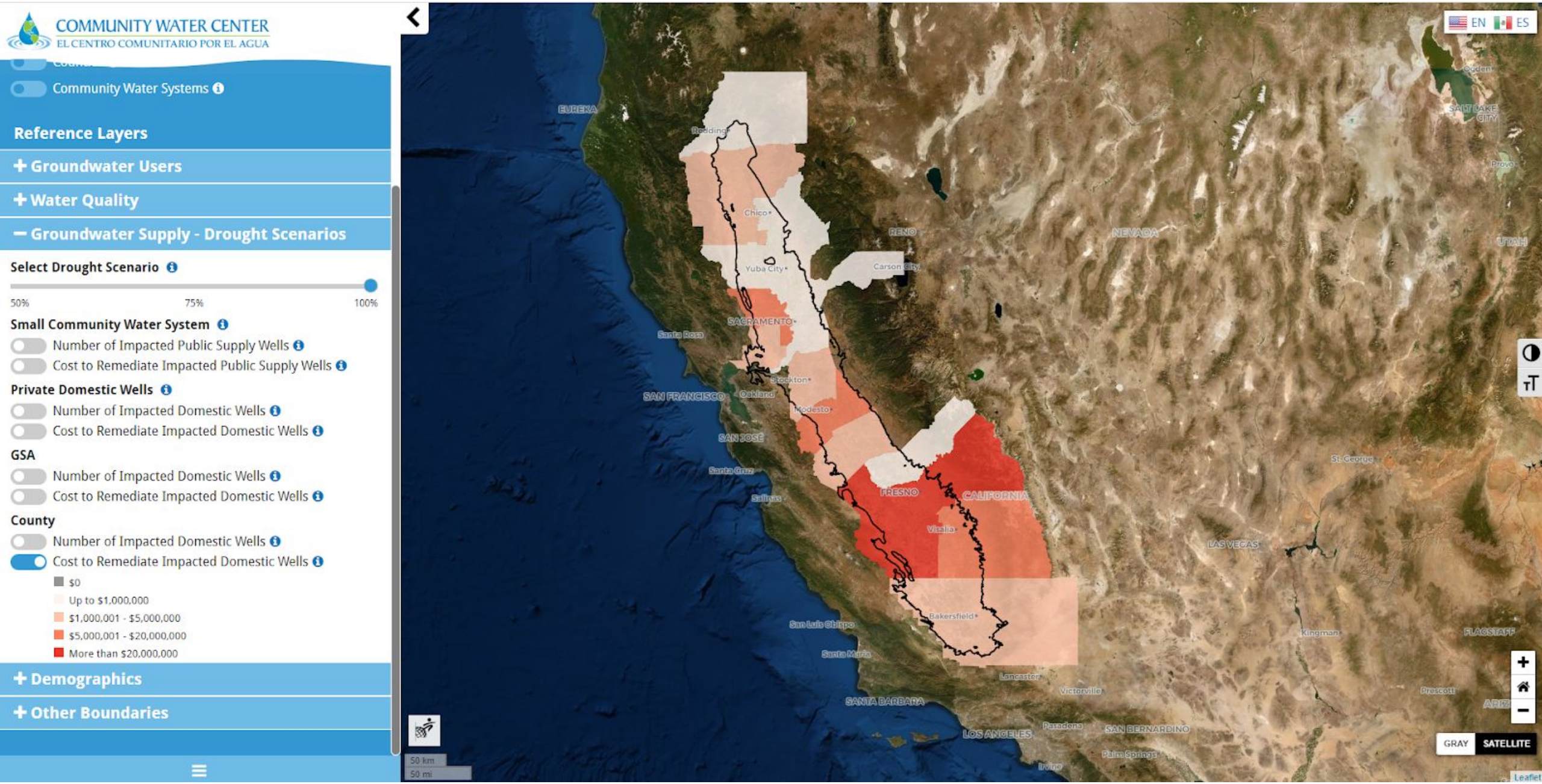
Private Domestic Wells

- Number of Impacted Domestic Wells
  - 0
  - 1 - 4
  - 5 - 12
  - 13 - 26
  - More than 26
- Cost to Remediate Impacted Domestic Wells

GSA

- Number of Impacted Domestic Wells
- Cost to Remediate Impacted Domestic Wells




COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA
Community Water Systems
Reference Layers
+ Groundwater Users
+ Water Quality
− Groundwater Supply - Drought Scenarios
Select Drought Scenario
50%
75%
100%
Small Community Water System
Number of Impacted Public Supply Wells
Cost to Remediate Impacted Public Supply Wells
Private Domestic Wells
Number of Impacted Domestic Wells
Cost to Remediate Impacted Domestic Wells
GSA
Number of Impacted Domestic Wells
Cost to Remediate Impacted Domestic Wells
County
Number of Impacted Domestic Wells
Cost to Remediate Impacted Domestic Wells
$0
Up to $1,000,000
$1,000,001 - $5,000,000
$5,000,001 - $20,000,000
More than $20,000,000
+ Demographics
+ Other Boundaries
EN
ES
EUREKA
Redding
Chico
RENO
NEVADA
Yuba City
Carson City
SACRAMENTO
Santa Rosa
Stockton
SAN FRANCISCO
Oakland
Modesto
SAN JOSE
Santa Cruz
Salinas
FRESNO
CALIFORNIA
Visalia
Bakersfield
LAS VEGAS
San Luis Obispo
Santa Maria
Lancaster
Victorville
SANTA BARBARA
Pasadena
SAN BERNARDINO
LOS ANGELES
Palm Springs
Irvine
Kingman
FLAGSTAFF
Prescott
St. George
Provo
SALT LAKE CITY
Ogden
50 km
50 mi
GRAY
SATELLITE
Leaflet

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.**

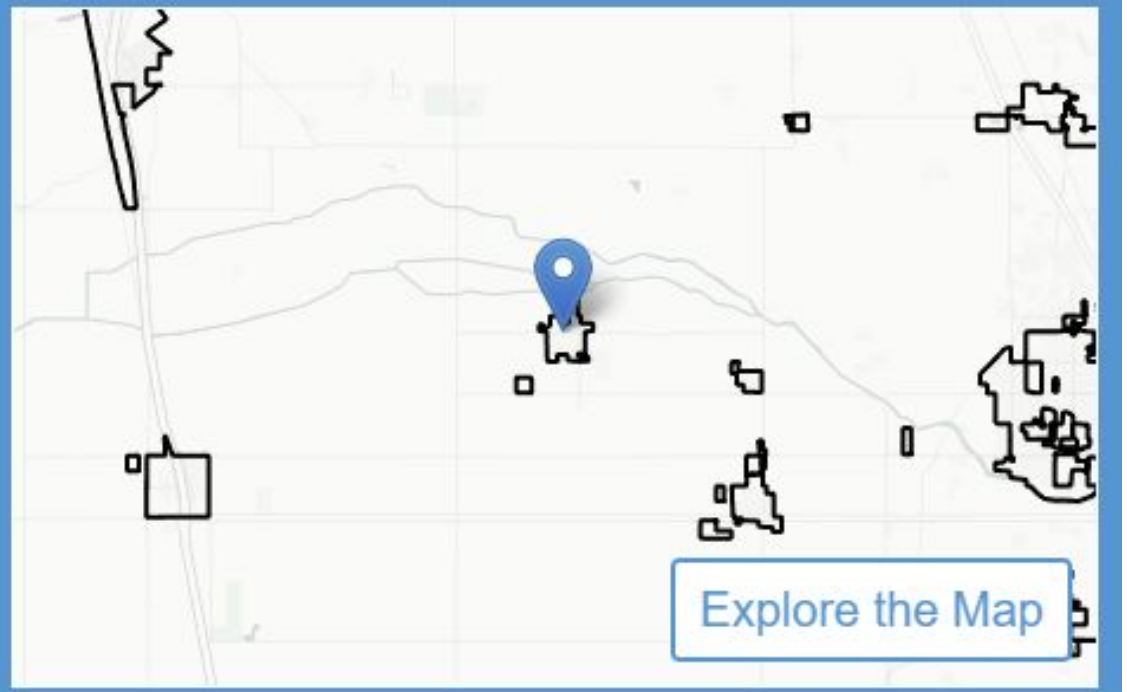
Community water systems are typically overseen by the State's Division of Drinking Water and typically manage their own groundwater wells. For private domestic wells, local agencies will have the authority over any new groundwater well construction or changes to existing wells. Often this will be your 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, 123-Trichloropropane, and Chromium VI. The MCL for each contaminant is shown in milligrams (mg) or micrograms (µg) per liter (L).

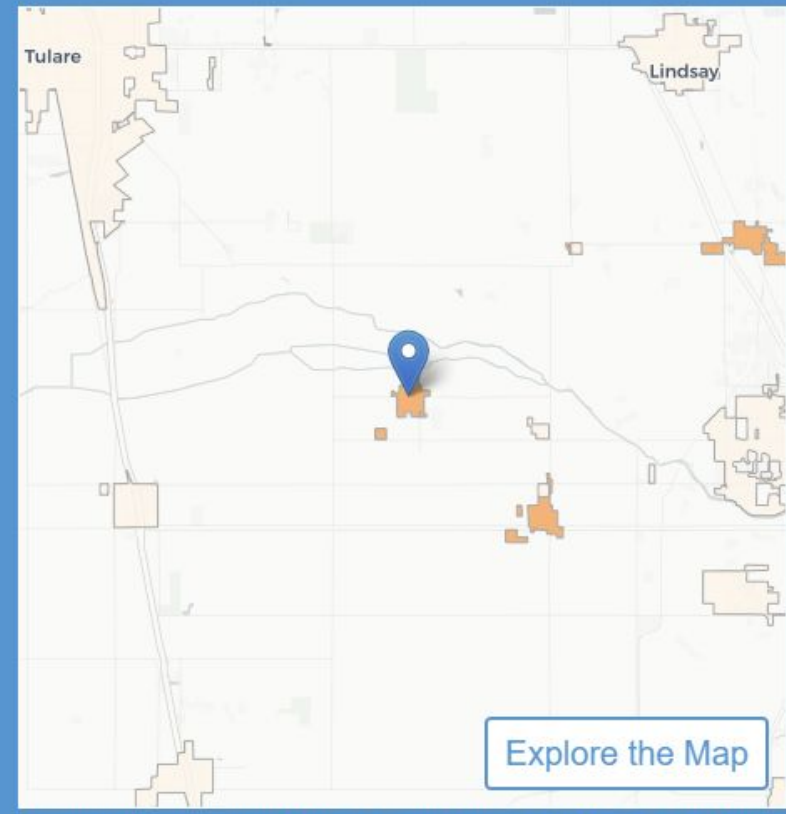
According to the California State Board's Human Right to Water Portal, **WOODVILLE PUBLIC UTILITY DIST had 0 MCL violations** between 2012- Aug. 30, 2019. The Human Right to Water Portal currently serves as the state's primary location information on water system performance measures, like compliance 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 CalEPA'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 ug/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 (Cr6)**, 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.



This map shows community water system boundaries in black, shaded by the estimated concentration of Nitrate as Nitrogen mg/L, where darker orange means higher concentration in relation to the MCL. "Explore the Map" to learn more about your area.

More info & video demonstration:
https://www.communitywatercenter.org/drinking_water_tool

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

Deborah.ores@communitywatercenter.org

Becky Rittenburg

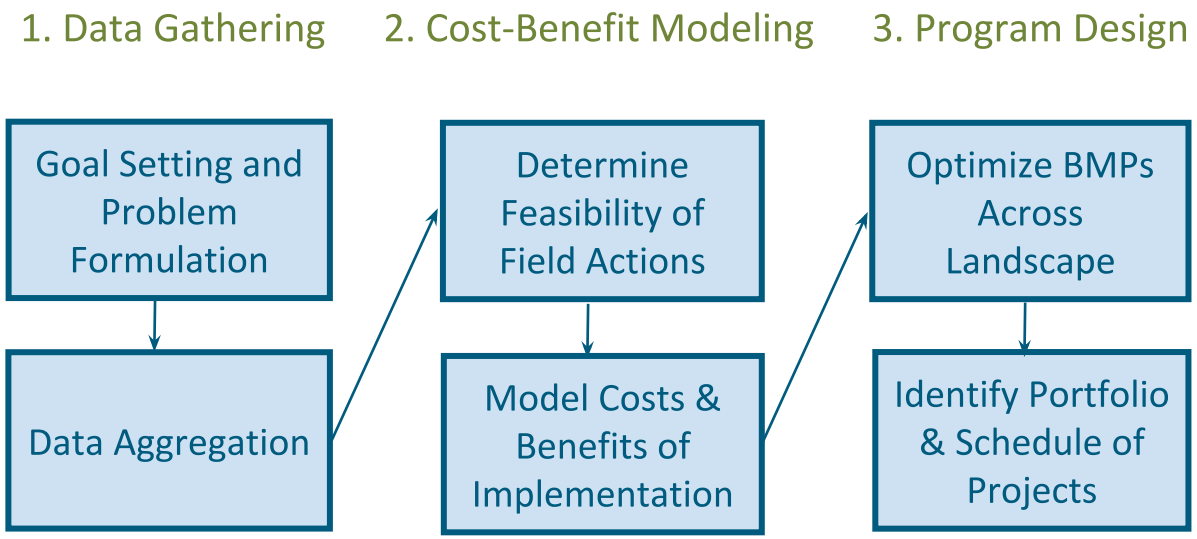
Local Government Commis
Leaders for Livable Communiti

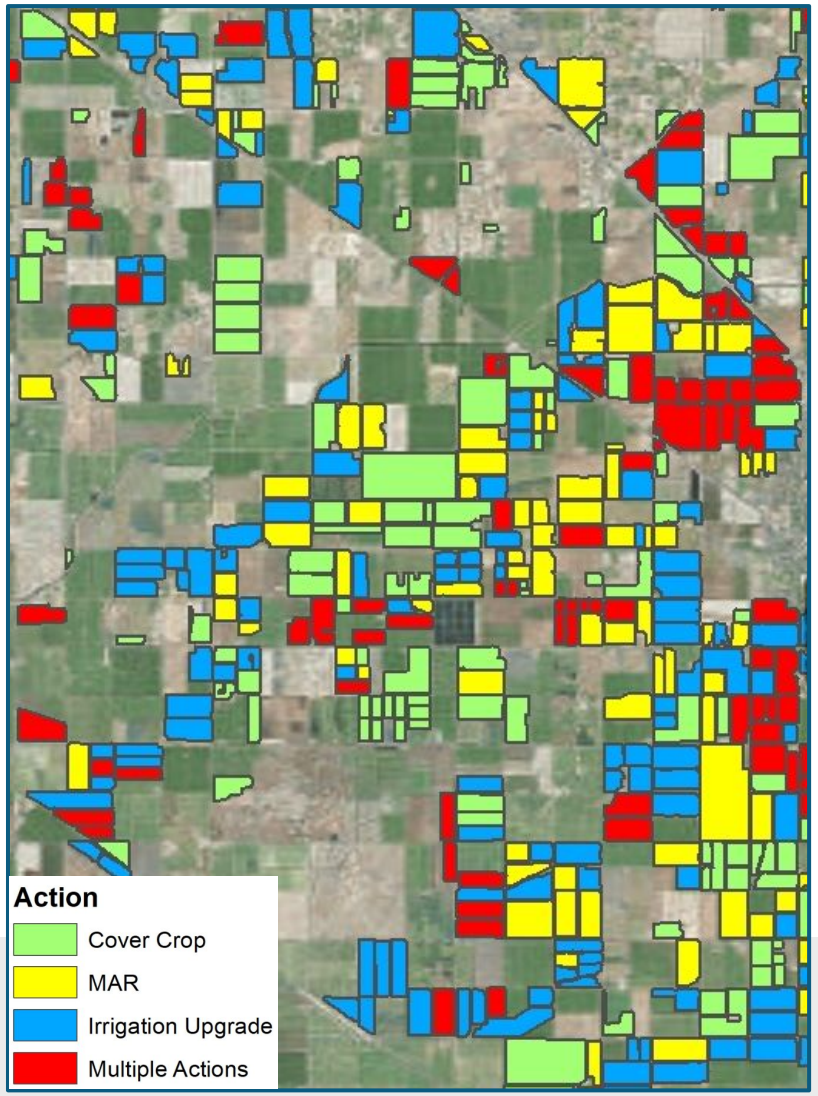
CLEAN WATER ACTION

Decision Support Tools for Groundwater Sustainability Plans

Becky Rittenburg
The Freshwater Trust
Conservation Programs Manager
4/1/2020 | NGO Convening

BasinScout – A Decision Support Tool





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

Basin status

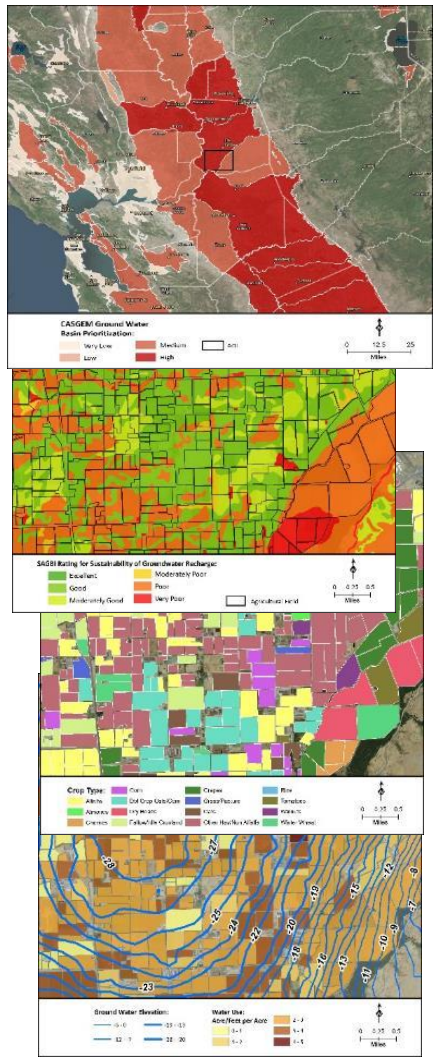
GSA Boundaries

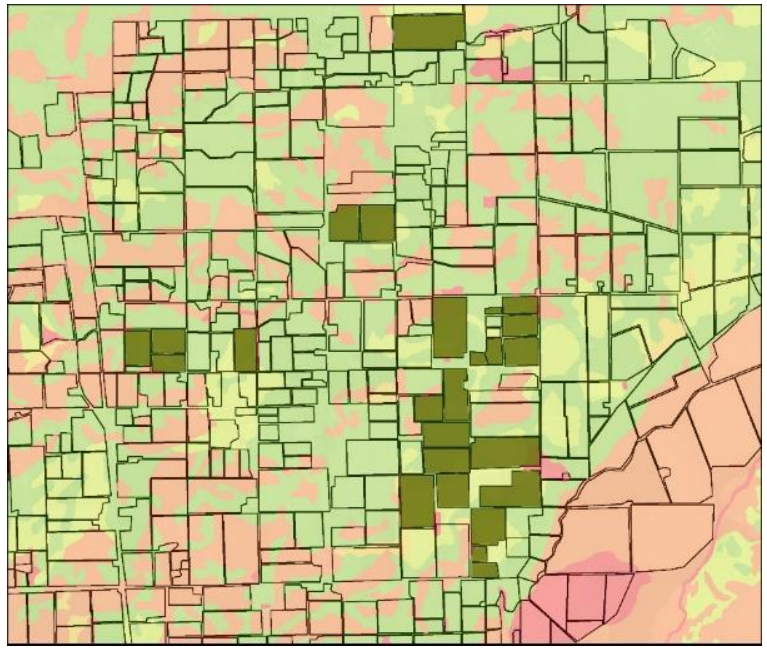
Disadvantaged Communities

Recharge Potential

Field Characteristics

Water Use





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

The Freshwater Trust®
Changing the course of conservation

Becky Rittenburg becky@thefreshwatertrust.org
Erik Ringelberg erik@thefreshwatertrust.org

Amanda Monaco

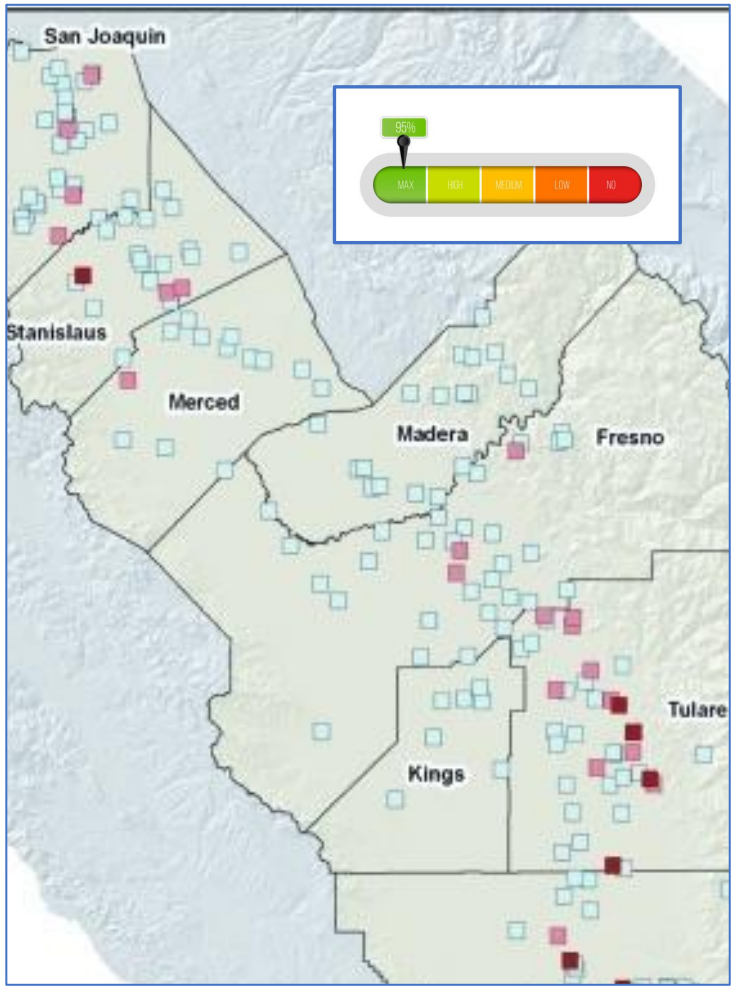
LEADERSHIP COUNSEL FOR JUSTICE & ACCOUNTABILITY

Local Government Commission
Leaders for Livable Communities

CLEAN WATER ACTION

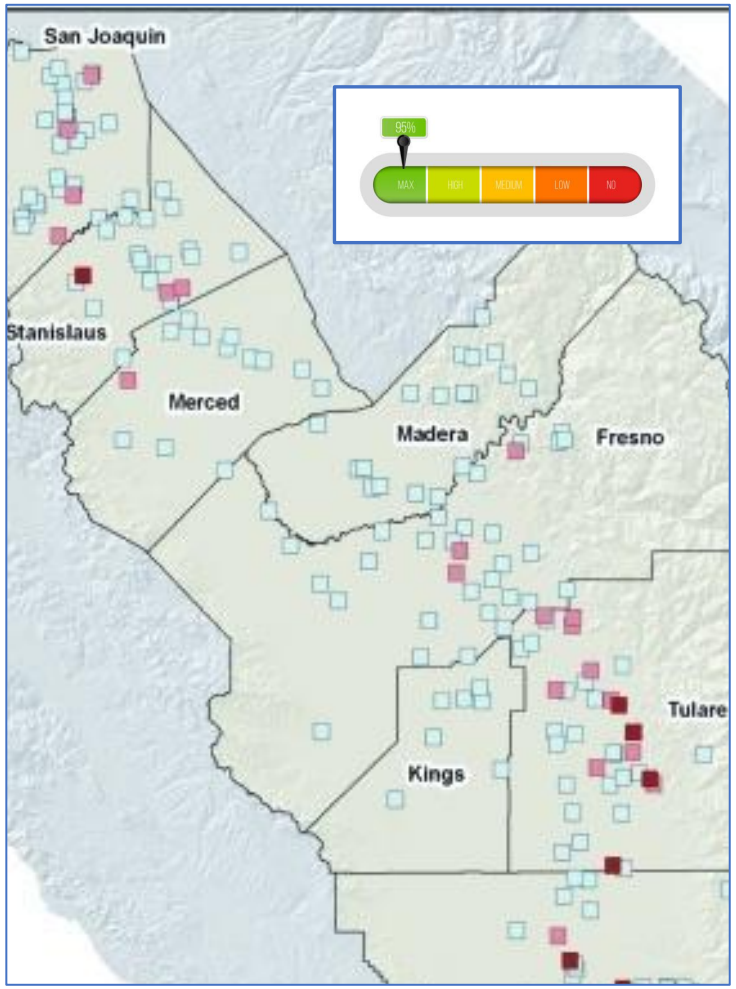
AI for Earth

- 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

Daniel Mountjoy

Sustainable Conservation

Local Government Commission
Leaders for Livable Communities

CLEAN WATER ACTION

Sustainable Conservation and Earth Genome

Daniel Mountjoy

Director of Resource Stewardship

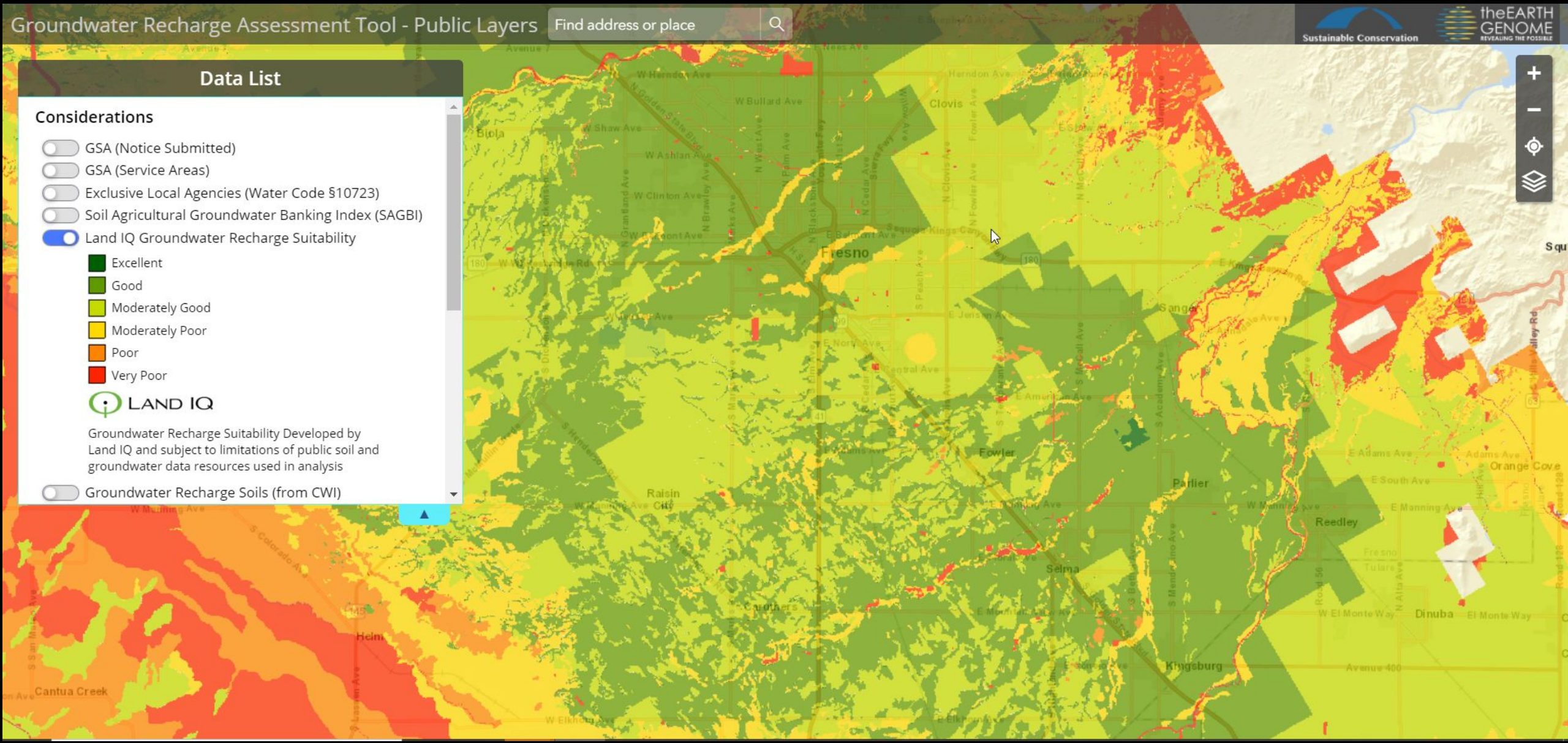
Groundwater Recharge Assessment Tool (GRAT) Public Viewer

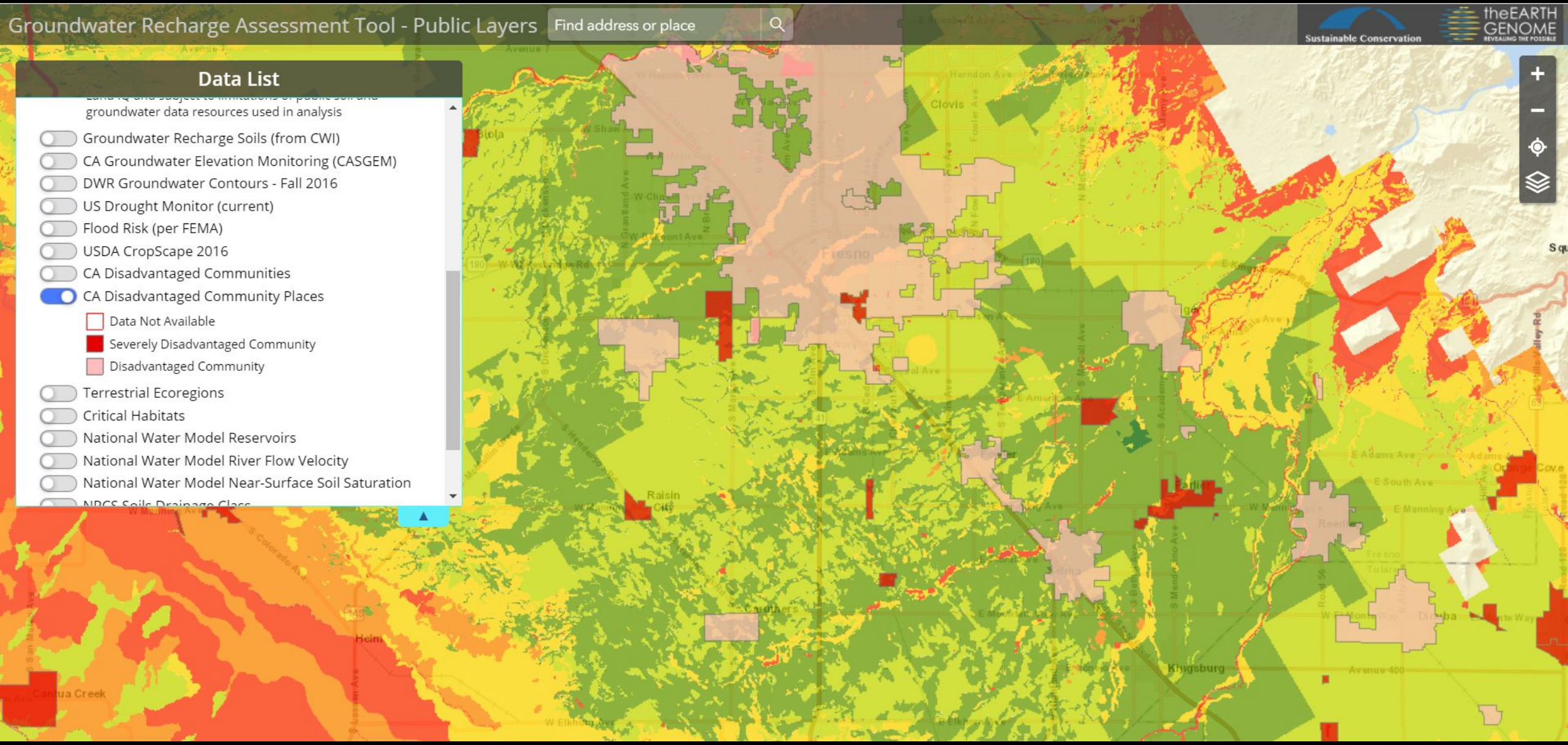
What it does:

- 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 - Public Layers
Find address or place
Sustainable Conservation
theEARTH GENOME
Data List
Considerations
GSA (Notice Submitted)
GSA (Service Areas)
Exclusive Local Agencies (Water Code §10723)
Soil Agricultural Groundwater Banking Index (SAGBI)
Land IQ Groundwater Recharge Suitability
Excellent
Good
Moderately Good
Moderately Poor
Poor
Very Poor
LAND IQ
Groundwater Recharge Suitability Developed by Land IQ and subject to limitations of public soil and groundwater data resources used in analysis
Groundwater Recharge Soils (from CWI)
Fresno
Clovis
Sanger
Fowler
Parlier
Reedley
Selma
Kingsburg
Dinuba
Orange Cove
Raisin City
Caruthers
Helm
Cantua Creek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Sustainable Conservation
theEARTH GENOME
Data List
groundwater data resources used in analysis
Groundwater Recharge Soils (from CWI)
CA Groundwater Elevation Monitoring (CASGEM)
DWR Groundwater Contours - Fall 2016
US Drought Monitor (current)
Flood Risk (per FEMA)
USDA CropScape 2016
CA Disadvantaged Communities
CA Disadvantaged Community Places
Data Not Available
Severely Disadvantaged Community
Disadvantaged Community
Terrestrial Ecoregions
Critical Habitats
National Water Model Reservoirs
National Water Model River Flow Velocity
National Water Model Near-Surface Soil Saturation
Clovis
Fresno
Raisin City
Caruthers
Kingsburg
Cantua Creek

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

Local Government Commis
Leaders for Livable Communities

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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/

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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.

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Thank you for joining our 2020 *(Virtual)* Convening

And let us know what you thought!

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

NGO GROUNDWATER COLLABORATIVE

Local Government Commission
Leaders for Livable Communities

http://cagroundwater.org/

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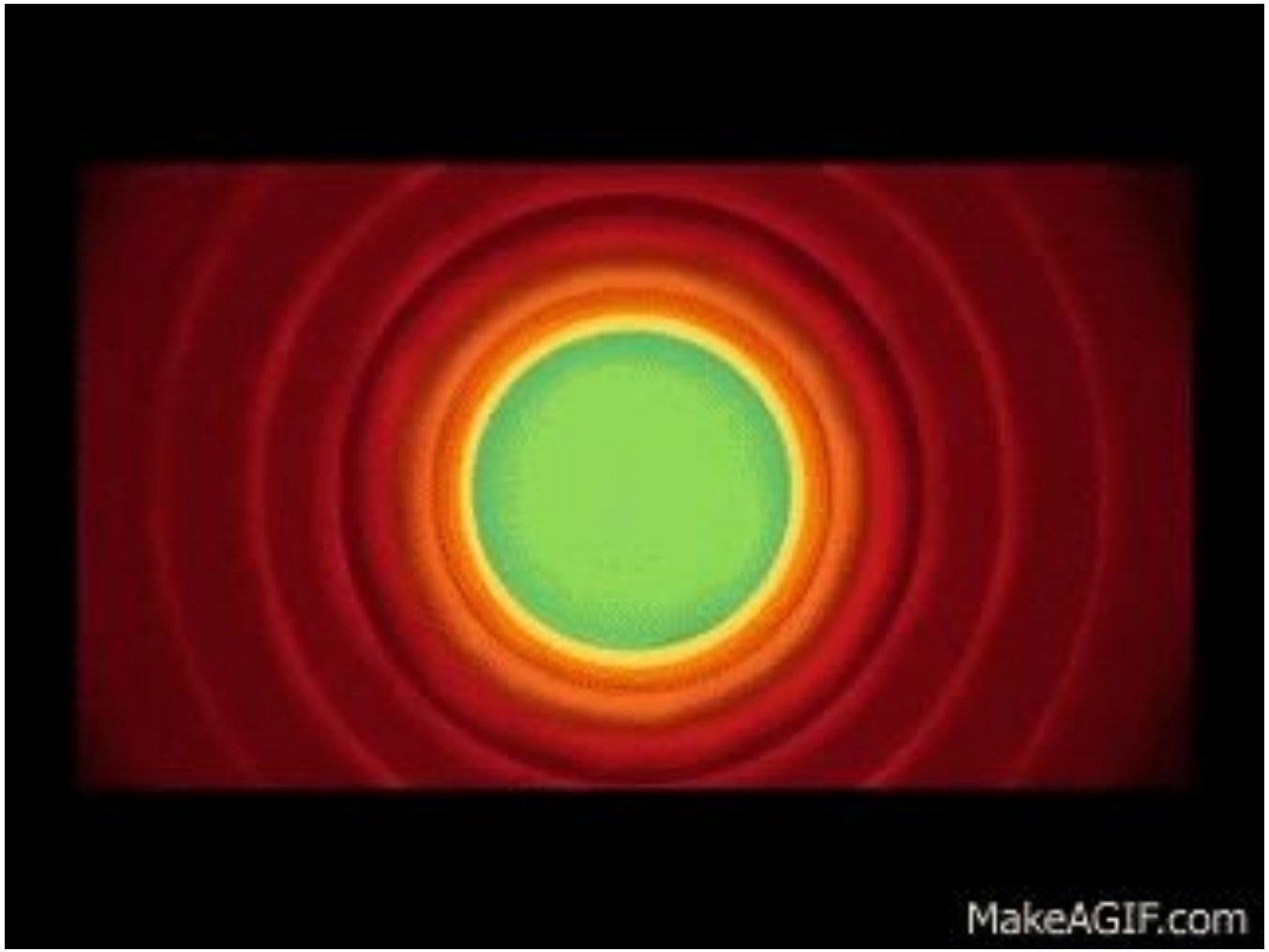
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