# Northern Sacramento Valley Integrated Regional Water Management
# Technical Advisory Committee Meeting

## Wednesday, June 21, 2023
## 9:00-11:00 a.m.

## Location: Willows City Hall
**201 N. Lassen Street, Willows, CA**

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## Agenda

1. Open meeting/roll call/introductions (Lisa Hunter, Chair)

2. *Approval of minutes for the January 18, 2023 NSV IRWM TAC meeting**.**

3. Presentation and discussion of Spring 2023 Groundwater Conditions (Michael Parker, Department of Water Resources Northern Region)

4. County Well Construction Permitting Updates (Grant Carmon, Glenn County and Matt Hansen, Tehama County)

5. *Receive an update on Proposition 1, Round 2 grant
    a. Mountain Counties Funding Area (Christina Buck)
    b. Sacramento River Funding Area (Guadalupe Rivera)

6. TAC representatives reports regarding Drought and SGMA implementation and SGM Round 2 grant status:
    a. Butte (Christina Buck, TAC Representative)
    b. Colusa (Steve Geiger, TAC Representative)
    c. Glenn (Lisa Hunter, TAC Representative)
    d. Shasta (Charleen Beard, TAC Representative)
    e. Sutter (Guadalupe Rivera, TAC Representative)
    f. Tehama (Justin Jenson, TAC Representative)
    g. Tribal (Patrick Spielman, Tribal Representative-Mechoopda Tribe)

7. DWR Update

8. TAC member comments and updates – (All)
    a. General comments and updates
    b. Suggested future agenda items
    c. Suggested future presentations/speakers
    d. Upcoming meeting reminders

9. Public wishing to address the TAC on items not listed on the agenda. (The NSV IRWM TAC is prohibited by State law from taking action on any item presented if it is not listed on the agenda). Comments will be limited to three minutes per person.

10. *Correspondence

11. Next Meetings:
    NSV IRWM TAC: July 19, 2023 at 9:00 a.m.
    NSV IRWM Board: August 7, 2023 at 9:00 a.m.

12. Adjourn

* Indicates attachment.

Public Comments: The public comment period is a time set aside for members of the public to address the TAC on matters not included on the Regular Agenda. Each speaker is limited to three (3) minutes to speak. Speakers may not cede their time. Speakers must address the TAC, not the audience. Comments should be limited to matters within the jurisdiction of the TAC. If members of the audience have documents to present to the TAC to review, they should provide a minimum of twenty (20) copies. Public comments on agendized items will be permitted during consideration of each item.

## NSV IRWM TAC Agenda Item #2

2. *Approval of minutes for the January 18, 2023 NSV IRWM TAC meeting**.**

The minutes from the January 18, 2023 NSV IRWM TAC meeting are not yet available. The minutes may be provided under separate cover prior to the meeting, or the item will be tabled until the next NSV IRWM TAC meeting.

**Attachments:**

None

# NSV IRWM TAC Agenda Item #5

5. *Receive an update on Proposition 1, Round 2 grant
    *a.* Mountain Counties Funding Area (Christina Buck)
    *b.* Sacramento River Funding Area (Guadalupe Rivera)

***Action Item:*** *For information only*

**STAFF REPORT**

The deadline to submit an application to the Department of Water Resources Prop 1 IRWM Round 2 grant program was February 1, 2023, and projects must be completed by December 31, 2027. Two applications were submitted by the deadline. One for the Mountain Counties Funding Area and the other for the Sacramento River Funding Area. The following describes what was included in the applications.

## Mountain Counties Funding Area

The IRWM regions in the Mountain Counties Funding Area (MCFA) agreed to split their allocation of Prop 1 IRWM Implementation funds equally between the nine regions. The NSV IRWM region was allocated $1,146,232.67. No projects were submitted for funding during Round 1 so the full allocation was available for Round 2.

On November 7, 2022, the NSV Board directed staff to prepare the application with the inclusion of two projects:

1. Berry Creek Forest Health and Watershed Protection Project
2. Lake Madrone Replacement of the Potable Water Distribution System

The Berry Creek Forest Health and Watershed Protection Project will reduce wildfire risk and provide needed water conservation by improving forest health through thinning and fuels reduction and increase in water release on 60 acres of forest land. The project is located in and would provide benefits to the Feather River watershed in Butte County and will take place around the residential portions of Berry Creek, adjacent to US Forest Service lands, along key ingress and evacuation routes as well as ridge lines for wildfire defense. A variety of fuels treatments have been successful in Butte County historically and will be used for this project including hand cut and pile burn, mastication, prescribed fire, grazing, lop and scatter, as well as hand cut and chip. Berry Creek Fire Safe Council (BCFSC) formed over a decade ago and received Firewise USA recognition. The area burned severely in the North Complex and has a high probability of future catastrophic wildfire due to the high fire return interval. The project will provide wildfire safety and water conservation to enhance reliability of groundwater supplies for the Berry Creek Community.

The Lake Madrone Water District (LMWD) supplies potable water to residential and community properties surrounding Madrone Lake in Butte County, California located 8 miles north of Lake Oroville. The North Complex Fire started by lightening on August 17, 2020, and caused significant damage to LMWD's system infrastructure either by heat damage to system components, damage by personnel during fire-fighting efforts, or falling debris. LMWD's source water is pumped from 3 groundwater wells

to 4 above ground storage tanks. Potable water is distributed to 125 service connections through a network of 19,044-feet of mostly buried polyvinyl chloride (PVC) and transit piping ranging from 2- inch to 6-inch in diameter. For complete buildout for the community, the project will be upgrading the necessary backbone potable water infrastructure to serve 147 residents. In addition to serving the potable water needs of the community, the water supply supports fire suppression and County public works activities in the area. The principal benefit of this project is water supply/water supply reliability and water quality. Once completed, the system will be able to deliver 7 million gallons per year (GPY) of potable water to residents. LMWD is seeking funding from the Federal Emergency Management Agency (FEMA) for the majority of projects costs but the IRWM grant will help the district meet cost share requirements of the federal grant and will enable the project to get an earlier start.

As the application was prepared, the budget and project scopes were refined. The table below shows the budget submitted for each project and grant administration.

**Application Budget Table:**

| PROJECTS | Grant Amount | Required Cost Share: Non-State Fund Source | Other Cost Share | Total Cost | Cost Share Waiver Received |
|---|---|---|---|---|---|
| **Grant Administration** | $50,000 | $25,000 | $0 | $75,000 | **N/A** |
| **Berry Creek Forest Health and Watershed Protection Project** | $296,232 | $0 | $30,000 | $326,232 | **100%** |
| **Lake Madrone Replacement of Potable Water Distribution System** | $800,000 | $0 | $7,003,000 | $7,803,000 | **100%** |
| **GRAND TOTAL** | **$1,146,232** | **$25,000** | **$7,033,000** | **$8,204,232** | |

DWR released recommended awards for funded projects in May 2023 and Butte County received the Notification of Award letter from DWR regarding the two submitted projects. Butte County has responded with the required materials. The uncertainty of FEMA funding for the Lake Madrone project is a concern for project eligibility, but DWR is allowing for additional time before establishing a grant agreement.

## Sacramento River Funding Area

According to the Implementation Grant Program webpage, the Sacramento River Funding Area (SRFA) has $1,677,458 available in implementation funds. Based on negotiations between the six regions in the SRFA in 2019, $1.2 million of the available funds are designated to the NSV IRWM region. The Upper Sac IRWM region pursued the remaining funds. The other IRWM regions in the SRFA did not submit projects for Round 2 funding.

On November 7, 2022, the NSV Board directed staff to prepare the application with the inclusion of four projects:

1. Spiva Avenue Water Main Replacement - Clark Ave to Cooper Avenue
2. Clear Creek NIS Plant Control
3. Northern Sacramento Valley Mobile Irrigation Lab (NSV MIL)
4. Arbuckle Area Groundwater Recharge Demonstration and Pilot Project

Direction was provided that as the Clear Creek NIS Plant Control project scope and budget was further developed, any excess funding available from this project budget be transferred to the Arbuckle Area Groundwater Recharge Demonstration and Pilot Project.

During the preparation of the grant application, staff was notified by the project proponent that the Clear Creek NIS Plant Control project would not be able to be included in this funding opportunity, therefore staff transferred available project funding to the Arbuckle Area Groundwater Recharge Demonstration and Pilot Project, as directed.

The Spiva Avenue Water Main Replacement project will provide a new and upsized water main with the required capacity to provide potable water efficiently to the affected water services, while also being less likely of leaks and other contaminants generally found with aged water mains greater than 75 years old. The project will increase water service by 1.56 cfs and fire flow capacity for an area of a disadvantage community.

The RCD of Tehama County's (RCDTC) Mobile Irrigation Lab (MIL) program will cover 4 counties in the Northern Sacramento Valley, providing free access to all interested growers for irrigation system evaluations. This proposed MIL project will address two main program objectives by first, performing a minimum of 60 irrigation evaluations each year (current average is 82) of which all collected information will be summarized in detailed reports and discussed in a one-on-one technical assistance setting. Second, by providing irrigation water management training that will involve either presenting, leading, or participating in workshops, seminars, or agriculture related events.

The Arbuckle Area Groundwater Recharge Demonstration and Pilot Project's aim is to demonstrate and pilot a multi-benefit groundwater recharge project to assist in meeting the sustainability goals under the Sustainable Groundwater Management Act, as addressed in detail in the Colusa Subbasin Groundwater Sustainability Plan (GSP). The project will build drought resiliency and advance local conjunctive use practices through groundwater recharge according to the State's prioritization of groundwater recharge projects. The project will implement multi-benefit, direct and in-lieu groundwater recharge projects in a unified approach and demonstrate that groundwater recharge is a viable tool to immediately alleviate critical drought conditions. This project will benefit the disadvantaged community surrounding Arbuckle, provide habitat for migratory shorebirds, and enhance groundwater dependent ecosystems supporting the region's objective to implement multi-benefit projects.

As the application was prepared, the budget and project scopes were refined. The table below shows the budget submitted for each project and grant administration.

**Application Budget Table:**

| PROJECTS | Grant Amount | Required Cost Share: Non-State Fund Source | Other Cost Share | Total Cost | Cost Share Wavier Received |
|---|---|---|---|---|---|
| **Grant Administration** | $80,000 | $0 | $0 | $80,000 | **N/A** |
| **Project 1: Spiva Ave Water Main - City of Yuba City** | $375,000 | $0 | $25,000 | $400,000 | **100%** |
| **Project 2: Northern Sacramento Valley Mobile Irrigation Lab** | $200,000 | $28,572 | $0 | $228,572 | **75%** |
| **Project 3: Arbuckle Area Groundwater Recharge Demonstration and Pilot Project** | $545,000 | $0 | $19,665 | $564,665 | **100%** |
| **GRAND TOTAL** | **$1,200,000** | **$28,572** | **$44,665** | **$1,273,237** | |

DWR released recommended awards for funded projects in May 2023 and Sutter County received the Notification of Award letter from DWR regarding the three submitted projects. Sutter County has responded with the required materials.

## NSV IRWM TAC Agenda Item #10

10. *Correspondence

**Attachments:**

1. Follow up from NSV TAC Meeting
2. NSV IRWM Funding Recommendation Announcement

## Lisa Hunter

**From:** BCWater <BCWaterFrontDeskHG@buttecounty.net>
**Sent:** Friday, January 20, 2023 10:16 AM
**To:** Buck, Christina
**Subject:** Follow up from NSV TAC Meeting
**Attachments:** GRA | Northern Sacramento Valley Branch Meeting; NSV TAC Fall 2022 GWLs_ PMV.pdf; 2022-12 DWR Update_12-22_final.docx

Good morning TAC members,

As follow up from this week's NSV IRWM TAC meeting, please find attached the DWR Update document, Pat Velline's slides from the Groundwater Conditions update item, and an email regarding an upcoming GRA webcast on AEM by Dr. Todd Greene.

All the best,
Christina

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

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

## Lisa Hunter

**From:** GRA's Northern Sacramento Valley Branch <staff@grac.org>
**Sent:** Thursday, January 19, 2023 10:59 AM
**To:** Buck, Christina
**Subject:** GRA | Northern Sacramento Valley Branch Meeting




# JOIN US FOR OUR NORTHERN SACRAMENTO VALLEY BRANCH MEETING

*This meeting will be held virtually*

**Tuesday January 31st, 2023 | 12:00 p.m. - 1:00 p.m. (GMT-0730) US/Pacific**

## Presentation:

Flying through Aquifers - AEM

## Presentation Information:

Visualization of calibrated Airborne Electromagnetic (AEM) data from the Butte and Glenn counties pilot study. Presented by Todd J. Greene Professor and Chair Department of Earth and Environmental Sciences California State University, Chico

Presenter is Dr. Todd J. Greene of California State University, Chico who mainly focuses on basin scale paleogeographic and tectonic histories. Dr. Greene was a collaborator on The Stanford Groundwater Architecture Project with Dr. Rosemary Knight. The full report is available at https://www2.mst.dk/Udgiv/ publications/2021/09/978-87- 7038-346-2.pdf.

## Speaker:

Dr. Todd Greene

## Speaker Bio:

Dr. Greene's broad areas of research interests include tectonics and sedimentation, sequence stratigraphy and depositional systems. I focus mainly on basin scale questions using a variety of technologies to address paleogeographic and tectonic histories of basins. I mainly work with core, outcrop, shallow 3-D seismic data, and modern analogs to piece together depositional facies models for volcanic-derived deposits (eg. the Tuscan Formation, the main aquifer for the town of Chico), shallow marine clastic sequences, as well as deep-water sediment gravity flows and related bioturbation (eg. Eel River basin and the Great Valley Group of northern California).

## Registration:

Member Price: 0.00

Student Price: 0.00

Non-Member Price: 10.00

**Register Today!**

## Contact Information:

If you have any questions, please contact

Anjanette Shadley
anjanette@westerncanal.com
530-342-5083

**Sponsor:** MONTGOMERY & ASSOCIATES Water Resource Consultants

Montgomery & Associates (M&A) provides a range of hydrogeological services to address evolving client challenges throughout the western United States and South America.

## OUR EXPERTISE

M&A specializes in groundwater, which is an essential resource in today's world. It is used to supply water and power to our communities, grow our food, sustain ecosystems, and support mining and industry, which are vital to our future. Groundwater is also a complex, shared, and limited resource, subject to hydrogeologic uncertainty, everchanging regulatory policies, debated legal

doctrines, and socioeconomic forces that mandate its sustainable use. Understanding and complying with these conflicting rules of use requires diverse expertise.



**Our mailing address is:**
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CALIFORNIA DEPARTMENT OF WATER RESOURCES

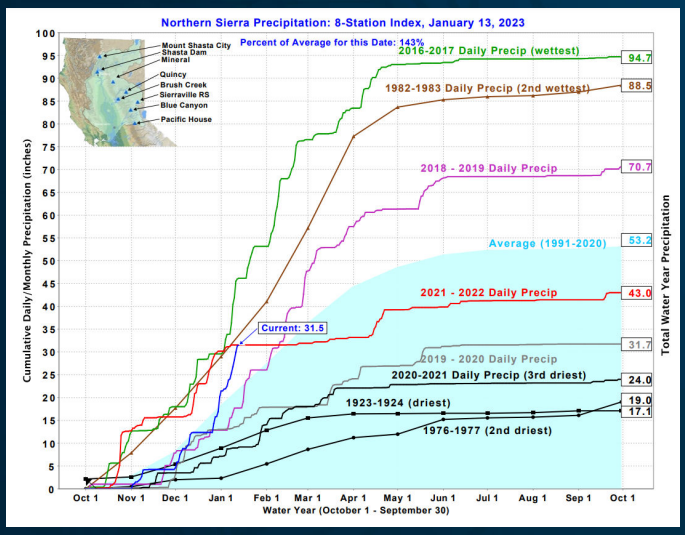
# NSV IRWM Board

## 2022 Fall Groundwater Level Update

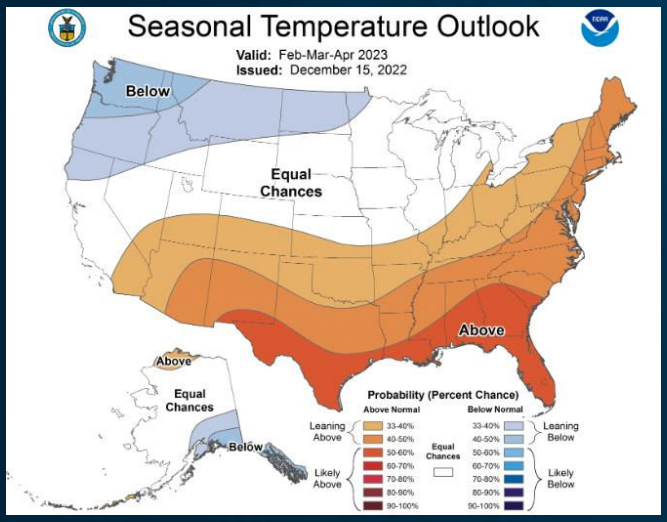
Pat Vellines
Regional Coordinator
DWR Northern Region

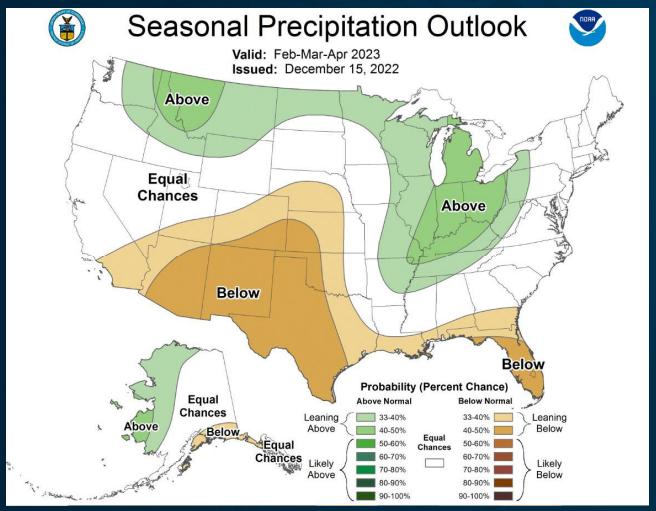
## Outline

- Water Year and Precipitation Index
- NOAA Climate Prediction
- Groundwater Live
  - Groundwater Change Maps
  - Groundwater Trend Maps
- Land Subsidence (SGMA Dataviewer)

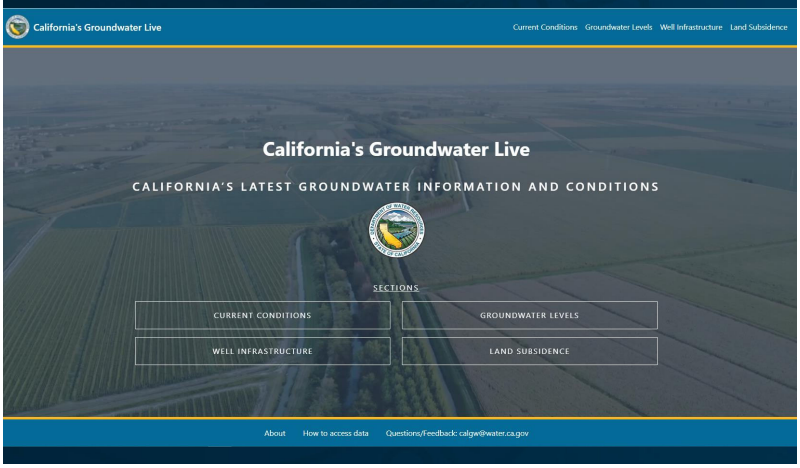



DWR staff conduct the first media snow survey of the 2023 season at Phillips Station in the Sierra Nevada on Jan. 3, 2023.

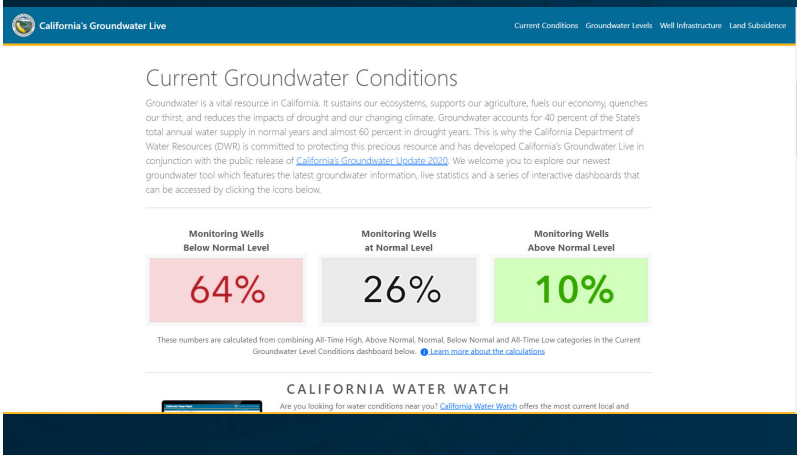


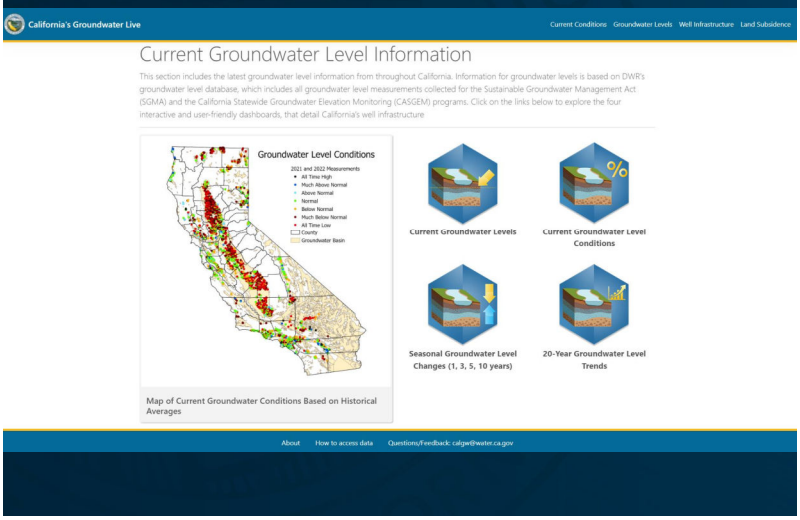



# Groundwater Live Website Overview and Examples

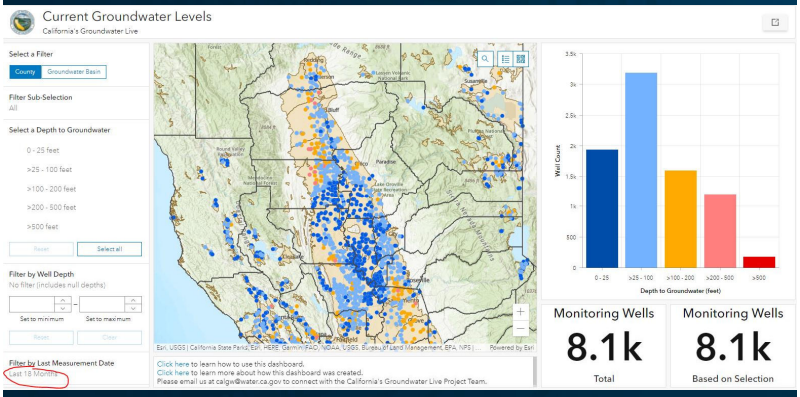



# Statewide – Statistics based over the last 10 years

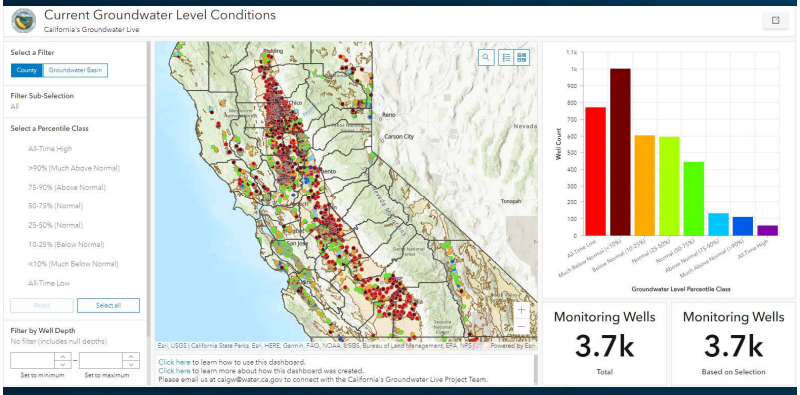


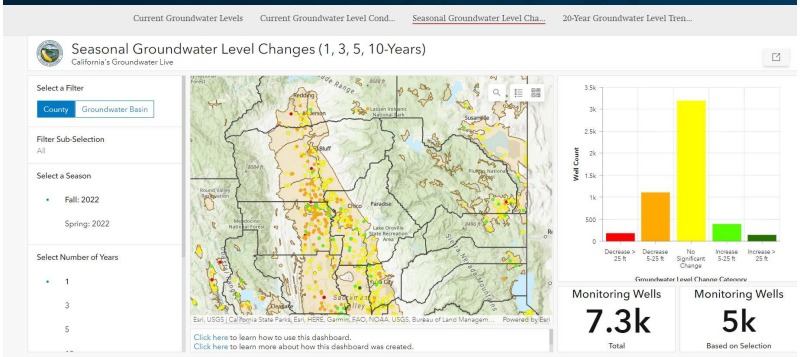

# Statewide – Depths to groundwater




# Statewide – Statistics based over the last 10 Years




# Seasonal Groundwater Level Changes

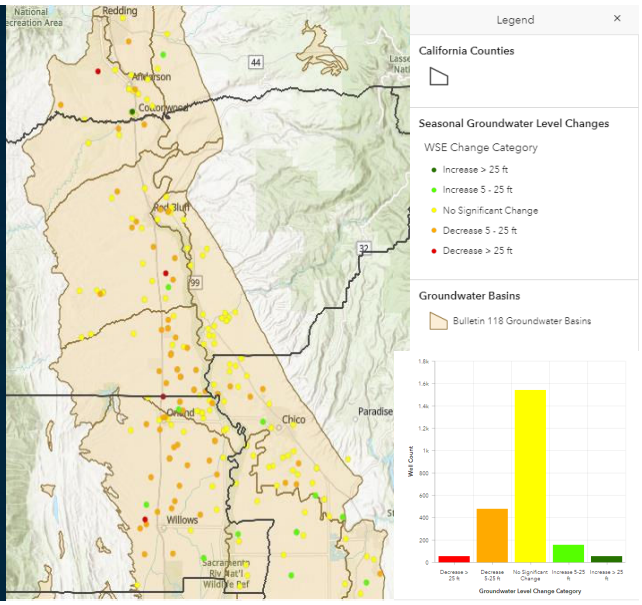


## Change Maps of the NSV using California's Groundwater Live

- By well depth:
  - 100-450 ft. deep
  - > 600 ft. deep
- By 1,3,5,10 years
- Fall-Fall
  - 2022 - 2021
  - 2022 - 2019
  - 2022 - 2017
  - 2022 - 2012

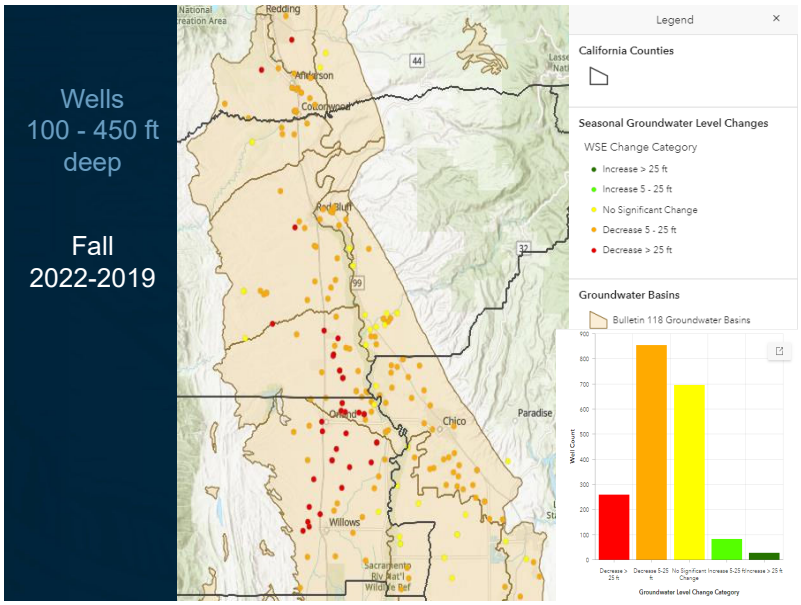
Wells 100 - 450 ft deep

Fall 2022-2021



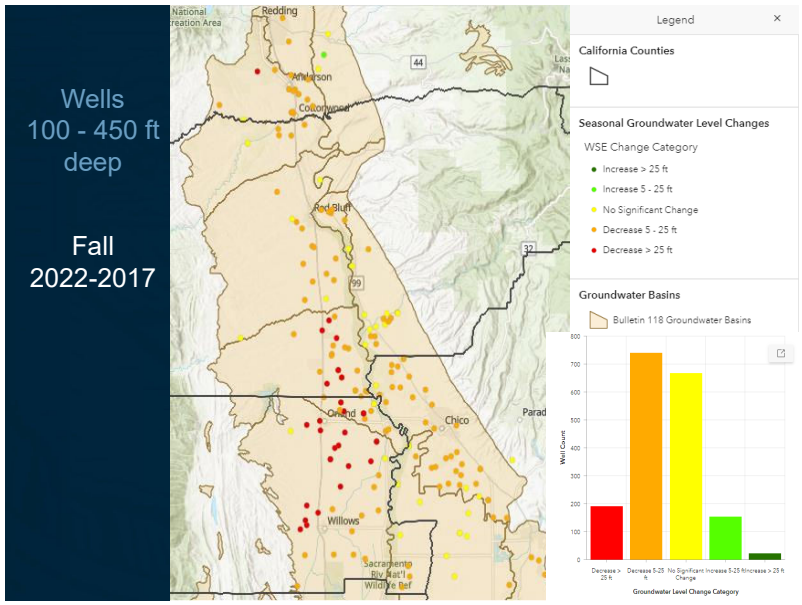

Wells 100 - 450 ft deep

Fall 2022-2019



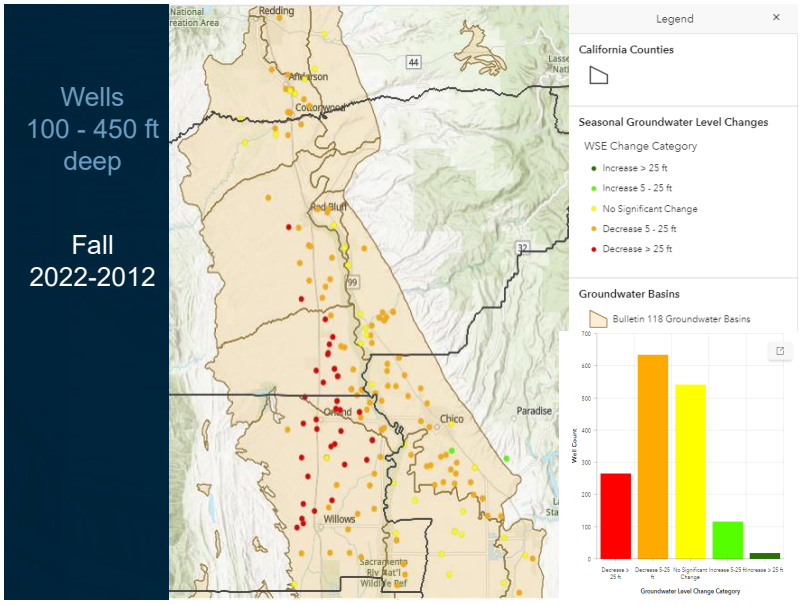

Wells 100 - 450 ft deep

Fall 2022-2017



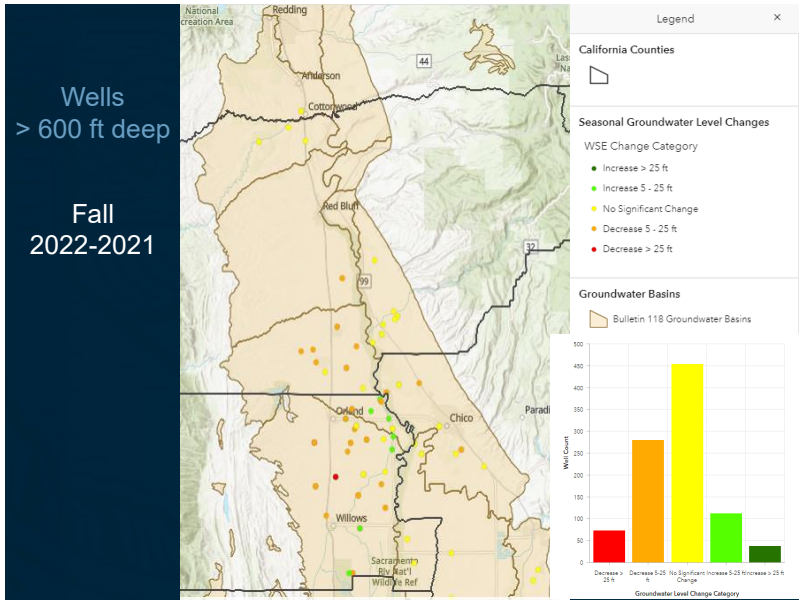

Wells 100 - 450 ft deep

Fall 2022-2012



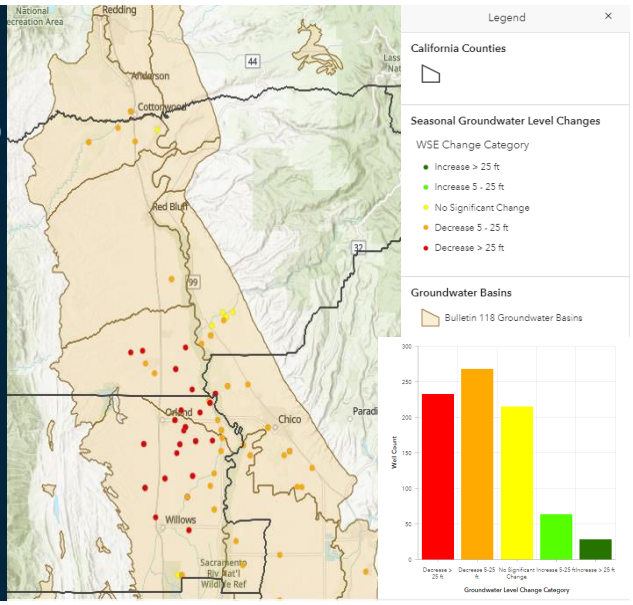

Wells > 600 ft deep

Fall 2022-2021



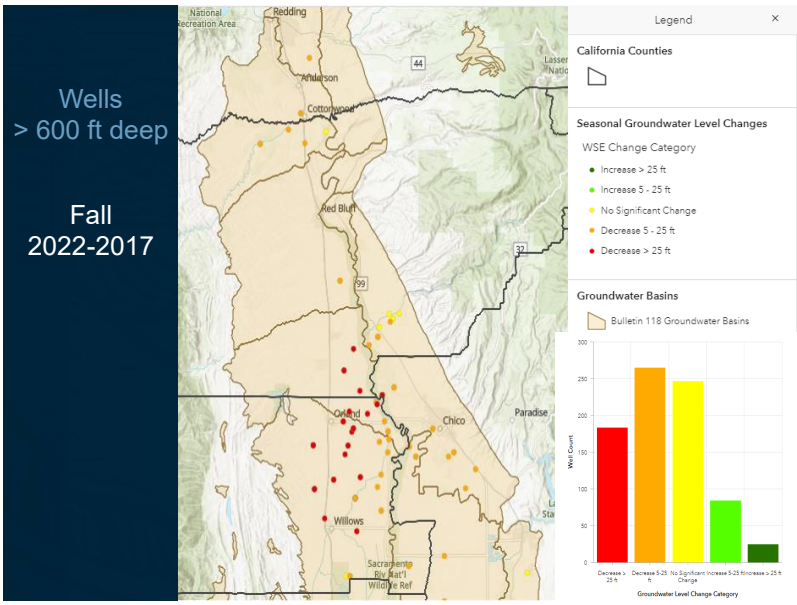
Wells
> 600 ft deep

Fall
2022-2019



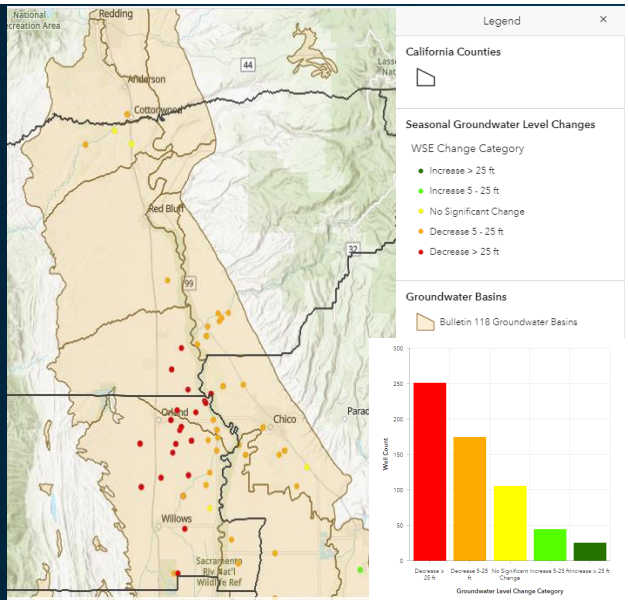

Wells
> 600 ft deep

Fall
2022-2017

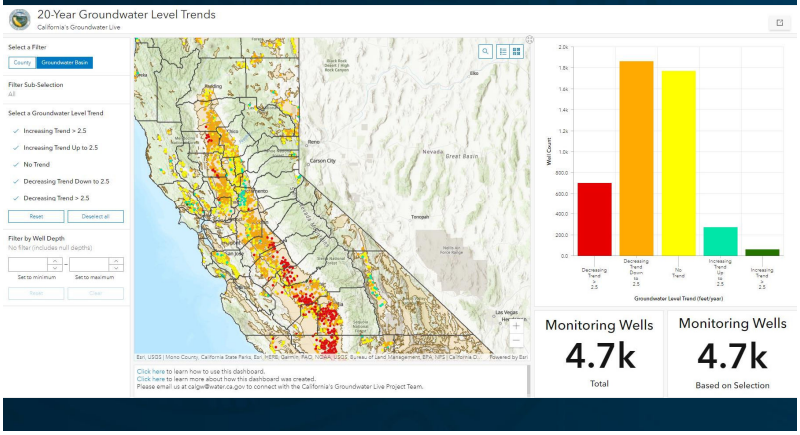



Wells
> 600 ft deep

Fall
2022-2012

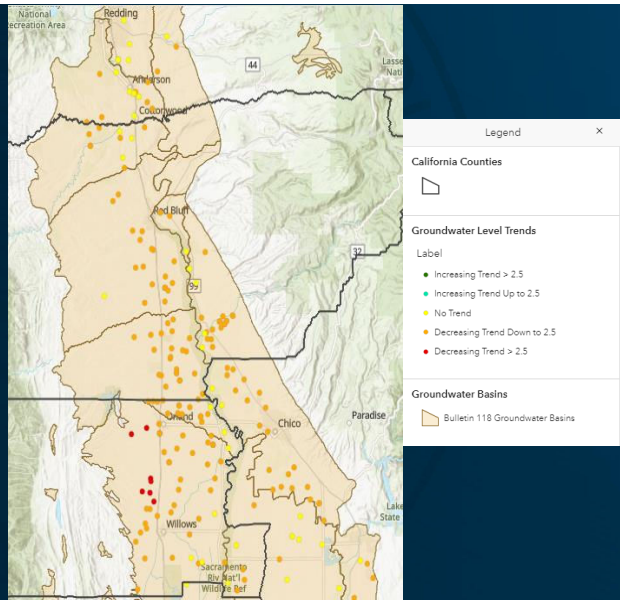



Statewide – 20-year GWL trends in feet per year using the Mann-Kendall statistical analysis



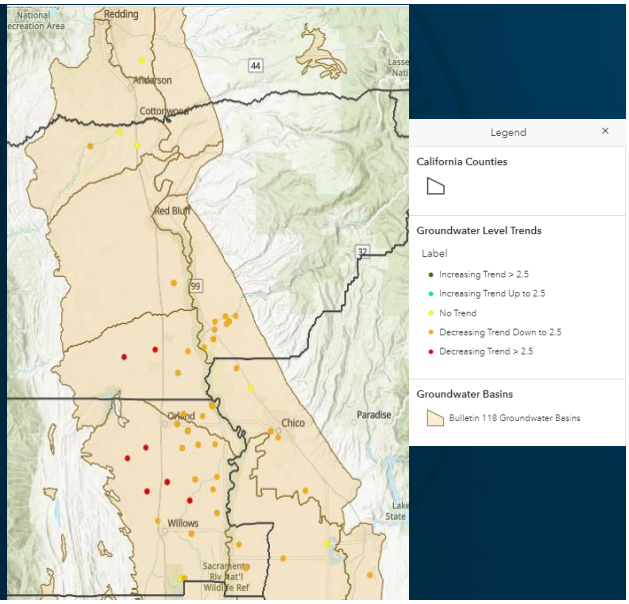

20-year
Groundwater
Level Trends

Wells
100-450 ft
deep




20-year
Groundwater
Level Trends

Wells
> 600 ft deep

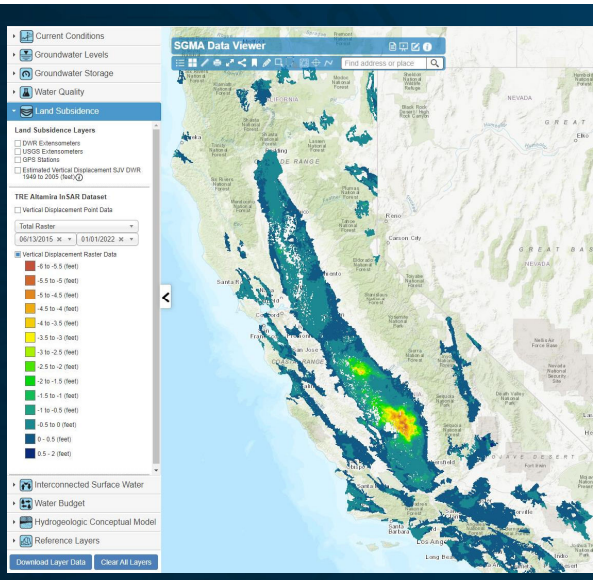


## Land Subsidence SGMA Data Viewer

- InSAR collected monthly since 2015 and updated monthly

- Additional continuous GPS stations will be added starting in areas of concern over the next several years

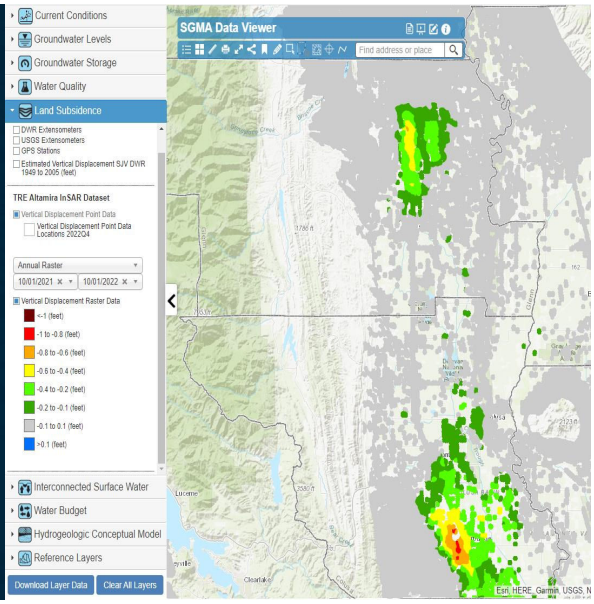
-NSV GPS survey network?




## NSV Land Subsidence

1 Year

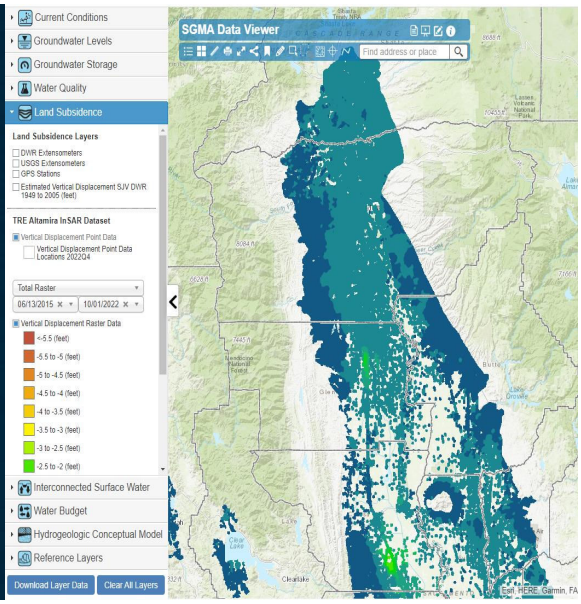
10/1/21 – 10/1/22




## NSV Land Subsidence

7 Years

6/13/15 – 10/1/22




*Groundwater is a renewable resource and CAN be managed sustainably*

DEPARTMENT OF WATER RESOURCES
STATE OF CALIFORNIA

Questions? Comments?
Thank You

http://water.ca.gov/groundwater/

DWR Northern Region Update – December 2022

## Groundwater & Sustainable Groundwater Management

The Sustainable Groundwater Management Act (SGMA) provides a framework for Groundwater Sustainability Agencies (GSAs) to create plans describing how they will manage groundwater for long term sustainability. The plans are reviewed by DWR once they are submitted and every five years thereafter to determine if they are likely to achieve the sustainability goals.

Get Involved with Groundwater Planning - Getting involved in groundwater planning today will help ensure that everyone has a voice in the planning process and that your water needs are considered. Be a part of groundwater planning by first finding your local groundwater sustainability agency – called a GSA – on the All Posted GSAs section on DWR's website. Then, you can contact your GSA or visit the GSA's website and sign up to receive information. Next, make sure to attend meetings and workshops, share ideas, and comment on plans, activities, and projects as they are being developed. Years of overpumping groundwater caused problems in many areas of California – such as drying up wells and contaminating water making it unsafe to drink.

DWR Groundwater Management Website – If you're like 30 million of your California neighbors, there is groundwater under your feet. Groundwater is a critical buffer against the impacts of drought and climate change, and plays a vital role in maintaining California's economic and environmental sustainability. Groundwater is accessed through wells that pump water from underground to the surface. For years, some regions have pumped more groundwater than can be replenished, causing historically low groundwater levels in those areas. The DWR Groundwater Management website has links to the SGMA Portal, Groundwater Data and Tools, and SGMA Assistance and Engagement. Also check out Explore and Discover Information about Groundwater with DWR Apps.

Connect with Your Groundwater Basin Point of Contact - DWR has designated basin points of contact to assist local agencies as they develop and implement their plans and to assist with applications for Technical Support Services and Facilitation Support Services. Northern Region Office Groundwater Basin Contacts can be found here: Northern Region Office SGMA Points of Contact (ca.gov)

California Environmental Quality Act Suspension Eligibility for Recharge Projects- On March 28, 2022 Governor Newsom signed Drought Executive Order N-7-22, in response to a third year of record drought conditions in California. Action 13 of the order includes the suspension of the California Environmental Quality Act (CEQA) for eligible groundwater recharge projects that mitigate drought impacts on groundwater conditions that take place on open or working lands. DWR Developed a fact sheet: Executive Order 13 Fact Sheet (ca.gov) and a Self-Certification Form: Self-Certification for Groundwater Recharge Project Eligibility, Executive Order N-7-22 (office.com) requesting DWR to review the eligibility of their groundwater recharge projects for CEQA suspension. The materials and information are posted on DWR's Drought Webpage, under the 'CEQA Suspension for Recharge Projects' accordion dropdown: Drought (ca.gov)

Executive Order N-7-22 Action 9 Drought Well Permitting Requirements - On March 28, 2022 Governor Newsom signed Drought Executive Order N-7-22, in response to a third year of record drought conditions in California. Action 9 of the order requires additional considerations before the approval and issuance of a well permit due to the increasing severity of the current drought conditions including consultation with the Groundwater Sustainability Agency if the proposed well is located in a high or medium basin. Frequently Asked Questions document can be found at this link:

https://water.ca.gov/-/media/DWR-Website/Web-Pages/Water-Basics/Drought/Files/Publications-And-Reports/FAQ-Document_Executive-Order-N-7-22-Action-9_ay11.pdf )

Bulletin 118 and Cal Groundwater Live – California's Groundwater (Bulletin 118) is the State's official publication on the occurrence and nature of groundwater in California (https://water.ca.gov/programs/groundwater-management/bulletin-118). The publication defines the groundwater basin boundaries and summarizes groundwater information for each of the State's 10 hydrologic regions. DWR has also developed California's Groundwater Live: (https://sgma.water.ca.gov/CalGWLive/) to improve the access and timeliness of groundwater data submitted by local agencies. California's Groundwater Live is a web-based dashboard that utilizes many of the same data sets from the California's Groundwater Update 2020 document and the California Natural Resources Agency Open Data Platform to improve the access and timeliness of groundwater data submitted by local agencies.

Airborne Electromagnetic (AEM Surveys – The Department of Water Resources is conducting airborne electromagnetic (AEM) surveys in California's high- and medium-priority groundwater basins, where data collection is feasible, to assist local water managers as they implement the Sustainable Groundwater Management Act (SGMA) to manage groundwater for long term sustainability. The AEM project (https://water.ca.gov/programs/sgma/aem) provides state and federal agencies, groundwater sustainability agencies (GSAs), stakeholders, and the public with basin-specific and cross-basin geophysical data, tools, and analyses. During an AEM survey, a helicopter tows electronic equipment that sends signals into the ground which bounce back. The process has been compared to taking an MRI of the ground's subsurface. The data collected is used to create continuous images that are interpreted for underground geology. Please visit the AEM Dataviewer here: (scroll down to see the dashboard) for flightlines and resistivity data.

Dry Domestic Well Susceptibility Tool Available – DWR and State Board developed a dry well susceptibility tool to identify areas within groundwater basins throughout the State that may be prone to water supply shortages in drinking water wells. Susceptibility is identified based on recent groundwater level measurements and potential 5-year water level decline. The Dry Well Susceptibility Tool is housed on the California's Groundwater Live web-based platform, which contains the latest information and data on groundwater conditions across the state. State and local agencies and well owners can use this tool to anticipate where wells may go dry based on historical conditions to inform drought preparedness decision-making. To use this tool, navigate to California's Groundwater Live website and click the Dry Domestic Well Susceptibility tab. A fact sheet on this tool, as well as DWR's Dry Well Reporting System, is available here.

Drought – California is no stranger to drought; it is a recurring feature of our climate. We recently experienced the 5-year event of 2012-2016, and other notable historical droughts included 2007-09, 1987-92, 1976-77, and off-and-on dry conditions spanning more than a decade in the 1920s and 1930s. Drought can be a gradual phenomenon, occurring slowly over a period of time. Storage, whether in surface water reservoirs or in groundwater basins, buffers drought impacts and influences the timing of when drought impacts occur. Drought impacts are felt first by people most dependent on annual rainfall – such as ranchers using dryland range or rural residents relying on wells in low-yield rock formations. Drought impacts increase with the length of a drought, as carry-over supplies in reservoirs are depleted and water levels in groundwater basins decline. For more information on DWR Drought Activities please see: https://water.ca.gov/drought . Visit https://drought.ca.gov/ for water shortage assistance and information. For drought funding please see: https://water.ca.gov/Water-Basics/Drought/Drought-Funding.

Groundwater Exchange Shares Information and Resources – Maven's Notebook's Groundwater Exchange is a central, collaborative and publicly accessible online resource center connecting water managers, water users, and community members with tools and resources to support the development and implementation of Groundwater Sustainability Plans (GSPs). While not a DWR website, DWR representatives have been on the Exchange's Advisory Board since its inception as it supports the sharing of information and resources for SGMA implementation.

Sustainable Groundwater Management, Round 2 Implementation Grant Solicitation Open until December 16, 2022 - Round 2 will provide over $200 million from the General Fund and Proposition 68 for eligible applicants located within high and medium priority groundwater basins, including critically overdrafted basins. For more information including the Guidelines, Proposal Solicitation Package, workshop recorded presentation, FAQ : https://water.ca.gov/work-with-us/grants-and-loans/sustainable-groundwater . For more information on document releases, new solicitations, upcoming workshops, and other grant-related announcements, subscribe to the SGM Grant Program mailing list.

SGMA Communication and Engagement – Implementation of the SGMA necessitates timely, forthright, and consistent communication among all partners and stakeholders. Proactive outreach to, and engagement of, partners and stakeholders is essential to achieving sustainable groundwater management at the local and regional level. Local and regional agencies in turn must reach out to keep local citizens, groundwater users, and stakeholders informed. Additional information on SGMA Communication and Engagement including Tribal Engagement can be found here. Tribal Point of Contacts at NRO include Tito Cervantes, Jessica Boyt, Pat Vellines, Tara George and Michelle Dooley.

Technical Support Services (TSS) for SGMA – This DWR program supports Groundwater Sustainability Agencies (GSAs) as they develop their Groundwater Sustainability Plans (GSPs). TSS's goal is to provide education, data, and tools to GSAs to build the capacity needed to achieve sustainability. TSS is available to GSAs through our regional offices or contractors pending funding availability. Critically overdrafted basins have initial priority for this funding. Additional information can be found here.

Facilitation Support Services for SGMA – This DWR program helps local agencies work through challenging water management situations. Under SGMA, Groundwater Sustainability Agencies (GSAs) must encourage the active involvement of diverse social, cultural, and economic interests. All beneficial uses and users of groundwater have to be considered, as GSAs develop SGMA mandated Groundwater Sustainability Plans (GSPs). Sometimes GSAs need the help of professional facilitators to foster discussions among diverse water management interests and local agencies. The FSS will help with development, and now, implementation of GSPs. Additional information can be found here.

Well Owner Information – As many as two million water wells tap California's groundwater, with approximately 7,000 to 15,000 new wells constructed each year. Groundwater supplies approximately 40 percent of California's total water supply in average water years, and in some regions of the state, up to 60 percent in dry years. To protect this invaluable resource, we must ensure that wells are properly constructed and destroyed at the end of their useful lives, so they do not serve as a pathway for contaminants. DWR is responsible for developing minimum well standards for four types of wells, published as DWR Bulletin 74 and for serving as the state clearinghouse for Well Completion Reports. DWR is currently in the process of updating Bulletin 74, California Well Standards, last updated in 1991. Upon completion of the updated Bulletin 74, DWR will submit it to the State Water Resources Control Board for adoption into a Statewide Model Well Ordinance.

## Integrated Regional Water Management (IRWM)

Integrated Regional Water Management (IRWM) is a voluntary, collaborative effort to manage all aspects of water resources in a region. IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions. For the IRWM regions map click here: IRWM Region Map | RoundTableofRegions. This approach delivers higher value for investments by considering all interests, providing multiple benefits, and working across jurisdictional boundaries. Examples of multiple benefits include improved water quality, better flood management, restored and enhanced ecosystems, and more reliable surface and groundwater supplies.

IRWM Implementation Grant - The IRWM Implementation Grant Program provides funding for implementation projects that meet the intent of Proposition 1, Chapter 7. Approximately $403 million in grant funding is being made available for implementation projects with at least $51 million being made available for projects that provide benefits to Disadvantaged Communities. DWR is awarding grants on a competitive basis in two funding rounds. To apply for grants through this program, project proponents must coordinate through their established IRWM Regional Water Management Group, and the Regional Group must in turn coordinate with other groups within the Proposition 1 IRWM Funding Area. In May 2022, DWR issued the final 2022 IRWM Grant Program Guidelines and the Round 2 Implementation Grant Proposal Solicitation Package, making approximately $193 million available and initiating the solicitation process. This solicitation consists of two application deadlines: Cycle 1 applications were due August 19, 2022, and Cycle 2 applications are due February 1, 2023. The 2022 Final Guidelines and Program Solicitation Package can be found here.

## Flood Management

California's geography and weather are the most diverse in the nation, resulting in a variety of natural hazards including flooding. DWR is committed to sustainable flood management. To use limited resources more effectively, we align our flood management efforts and leverage funding with other regional efforts, such as water supply, environmental enhancements, and transportation projects. When planning and executing projects, DWR considers a broad range of potential benefits to improve their value to Californians and their communities. Communities and citizens have to be proactive about flooding and mitigating flood risks. Additional information can be found here.

Wildfires Lead to Increased Flood Risks: Be Prepared, Stay Alert - California has experienced record-breaking wildfires in 2020 with more than 4 million acres burned, increasing the risk of flash flooding along with mud and debris flows to communities and homes downslope of burn areas. The impacts caused by wildfires can be drastic when it comes to flood risk. In normal conditions, trees, shrubs, grass, and other protective groundcover allow rainfall to infiltrate into the soil. After a wildfire, the extreme heat can bake the soil to the point that water is unable to penetrate and can cause excessive run off in a post-wildfire area. Due to these changes, even a small storm system occurring over burn areas can cause flash flooding. Mud and debris flows can occur up to five years after a wildfire. Debris flows can take homes off their foundations and carry away vegetation, trees, large boulders, and vehicles. Mudflows are a fast moving combination of water and soil. Both happen fast, so heed evacuation warnings. Stay alert and be prepared before flooding occurs. Being ready also means knowing when to evacuate. Additional information is available here.

Flood Frequently Asked Questions (FAQs) – DWR provides a list of answers to Flood FAQs.

Flood Risk Notification – Millions of Californians are at risk from flooding along thousands of miles of streams, rivers, lakes and coastline. Floods can bring devastating impacts to regions and no one can predict when and where floods will occur. But hydrologic engineers and other experts can estimate the likelihood of annual flood flows and stages that could occur in any particular location with collected data. Flood information can be used to estimate average annual damage. Flood Risk Notification information is available here. Dam Breach Inundation Interactive Map is located here: https://fmds.water.ca.gov/maps/damim/ .

Flood-Managed Aquifer Recharge (Flood-MAR) - "Flood-MAR" is an integrated and voluntary resource management strategy that uses flood water resulting from, or in anticipation of, rainfall or snow melt for managed aquifer recharge (MAR) on agricultural lands and working landscapes, including but not limited to refuges, floodplains, and flood bypasses. Flood-MAR can be implemented at multiple scales, from individual landowners diverting flood water with existing infrastructure, to using extensive detention/recharge areas and modernizing flood management infrastructure/operations. Additional information can be found here.

## California Water Plan

The California Water Plan is the State's strategic plan for sustainably managing and developing water resources for current and future generations. Required by Water Code Section 10005(a), it presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios.

California Water Plan Update - California Water Plan Update 2018 (next update 2023) provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers, planners, and decision-makers to overcome California's most pressing water resource challenges. It reaffirms State government's unique role and commitment to sustainable, equitable, long-term water resource management; it also introduces implementation tools to inform sound decision-making. The plan's broad and diverse portfolio of recommended actions address California's critical, systemic, and institutional challenges. Additional information is available here.

Tribal Water Summit - The next Tribal Water Summit will take place on April 11-13, 2023 in Sacramento (https://water.ca.gov/Programs/California-Water-Plan/Water-Plan-Participation/Tribal-Water-Summit) The Summit will convene Tribal, State, and Federal leaders to discuss water issues and strategies towards watershed resilience of California's sacred waters. Proceedings from this Summit will help inform State water policy and advance issues of equity, access and incorporation of Tribal Ecological Knowledge in the California Water Plan Update 2023.

## Other Information

Central Valley Flood Protection Plan (CVFPP) – The 2022 CVFPP Update evaluates progress made since passage of major State Bonds in 2007 and recommends future management actions led by State, Federal, and local partners to continue implementation of the CVFPP. The 2022 CVFPP Update focuses on 3 key themes: Climate Resilience, Performance Tracking and Alignment with other State Efforts. The 2022 Update (Central Valley Flood Protection Plan Update 2022 (ca.gov)) continues to build on the work completed over the last 15 years to better understand and develop priorities to improve flood risk management in the Central Valley. It recommens priority actions to address flood risk in the face of climate change.

Climate Change – Climate change is having a profound impact on California's water resources, as evidenced by greater weather extremes, reduced snowpack, higher sea level, and changes in river

flows. Models predict that more precipitation will fall as rain instead of snow, exacerbating flood risks and creating additional challenges for water supply reliability. These impacts are expected to intensify in the future. Managing climate change and its impact of water supply is one of DWR's core values. DWR's climate change program implements climate mitigation and adaptation measures to ensure that Californians have an adequate water supply, reliable flood control, and healthy ecosystems, now and in the future. Watch Elissa Lynn, DWR Climate Change Program Section Chief, give a presentation on YouTube, California Climate, Climate Change, and Atmospheric Rivers. Additional information is available here. Additionally DWR announces new Climate Change Team that will provide science-based leadership to help build resiliency and equity in water management (DWR Announces New Climate Change Team (ca.gov)).

Current Conditions – On average, 75 percent of California's annual statewide precipitation occurs from November through March. 50 percent occurs from December through February, coinciding with the timing of California's largest winter storms. Our average precipitation is dependent on a relatively small number of storms; a few storms more or less during the winter season can determine if the year will be wet or dry. A year will tend to be dry if a persistent Pacific high-pressure zone remains over California in midwinter and blocks storms that would otherwise reach us. Droughts occur when dry conditions persist long enough to create impacts. This link provides a quick overview of California's basic conditions at a regional or statewide scale.

State Water Project Allocation of 5 percent – The Department of Water Resources (DWR) announced an initial State Water Project (SWP) allocation of 5 percent of requested supplies for 2023. The SWP provides water to 29 public water agencies that serve 27 million Californians. As the state prepares for a fourth dry year and continued extreme drought conditions in California, DWR will also assess requests for additional water that may be necessary for health and safety including minimum domestic, sanitation, and fire suppression needs. For more information click here.

Questions? Please contact Pat Vellines at Patricia.Vellines@water.ca.gov.

## Lisa Hunter

**From:** BCWater <BCWaterFrontDeskHG@buttecounty.net>
**Sent:** Thursday, May 25, 2023 8:35 AM
**To:** BCWater
**Cc:** Lisa Hunter; Buck, Christina; 'grivera@co.sutter.ca.us'
**Subject:** FW: NSV IRWM Funding Recommendation Announcement
**Attachments:** Round 2 Final Funding Recommendations- Mountain Counties.pdf; Final Funding Recommendations- Sacramento River.pdf

This past week, the NSV IRWM received fantastic news. DWR has recommended funding for the NSV Region under the Prop 1, Round 2 IRWM Implementation Grant Program. The funding recommendations include the following:

**Mountain County Funding Area**
Project 1: Butte County Fire Safe Council – Berry Creek Forest Health and Watershed Protection Project, $296,232
Project 2: Lake Madrone Water District – Lake Madrone Replacement of the Potable Water Distribution System, $800,000
Grant Administration, $50,000
Total: $1,146.232

**Sacramento River Funding Area**
Project 1: Spiva Ave Water Main - City of Yuba City, $375,000
Project 2: Northern Sacramento Valley Mobile Irrigation Lab, $200,000
Project 3: Arbuckle Area Groundwater Recharge Demonstration and Pilot Project, $545,000
Grant Administration, $80,000
Total: 1,200,000

The DWR Funding Recommendation Summaries are attached.

Lisa Hunter
Glenn County
Water Resource Coordinator
(530) 934-6540
www.countyofglenn.net

# Final Funding Recommendations – Round 2 Integrated Regional Water Management (IRWM) Implementation Grant Solicitation

## Funding Area: Mountain Counties

Cycle 2 Award: $4,729,029

IRWM Region: Cosumnes, American, Bear, Yuba (CABY) Applicant: South Yuba River Citizens League

| Project Name | Project Implementing Agency | Primary Benefit | DAC Implementation Funds | | General Implementation Funds | |
|---|---|---|---|---|---|---|
| | | | Requested | Awarded | Requested | Awarded |
| Grant Administration | South Yuba River Citizens League | N/A | | | $177,582 | $177,582 |
| Memorial Park Magenta Drain Restoration Project | City of Grass Valley | Water Quality | | | $319,848 | $319,848 |
| Loney Meadow Long Term Analysis: Quantifying Impacts of Restoration on Hydrology | South Yuba River Citizens League | Water Supply (Surface) | | | $22,500 | $22,500 |
| Haskell Peak Meadows Restoration | South Yuba River Citizens League | Water Supply (Surface) | $267,315 | | | $267,315 |
| Access to Fuel Reduction Resources for DAC Communities | Sierra Fund | Water Quality | $358,986 | | | $358,986 |
| | | **Totals:** | **$626,301** | **$0** | **$519,930** | **$1,146,231** |
| | | | **Total Final Award** | | **$1,146,231** | |

IRWM Region: Madera Applicant: Madera County Public Works

| Project Name | Project Implementing Agency | Primary Benefit | DAC Implementation Funds | | General Implementation Funds | |
|---|---|---|---|---|---|---|
| | | | Requested | Awarded | Requested | Awarded |
| Grant Administration | Madera County | N/A | | | $50,000 | $50,000 |
| MD-58 Sierra Highlands Water Treatment Project | Madera County | Water Supply (groundwater) | $544,783 | | | $544,783 |
| | | **Totals:** | **$544,783** | **$0** | **$50,000** | **$594,783** |
| | | | **Total Final Award** | | **$594,783** | |

# Final Funding Recommendations – Round 2 Integrated Regional Water Management (IRWM) Implementation Grant Solicitation

| IRWM Region: North Sacramento Valley | Applicant: Butte County Department of Water and Resource Conservation District | | | | | |
|---|---|---|---|---|---|---|
| | | | DAC Implementation Funds | | General Implementation Funds | |
| **Project Name** | **Project Implementing Agency** | **Primary Benefit** | **Requested** | **Awarded** | **Requested** | **Awarded** |
| Grant Administration | Butte County Department of Water and Resource Conservation District | N/A | | | $50,000 | $50,000 |
| Berry Creek Forest Health and Watershed Protection Project | Butte County Fire Safe Council | Water Supply | $296,232 | | | $296,232 |
| Lake Madrone Replacement of the Potable Water Distribution System | Lake Madrone Water District | Water Supply Reliability | $800,000 | | | $800,000 |
| | | **Totals:** | **$1,096,232** | **$0** | **$50,000** | **$1,146,232** |
| | | | **Total Final Award** | | **$1,146,232*** | |

*This award is conditional based upon complete resolution of project eligibility issues prior to agreement execution with DWR.

| IRWM Region: Southern Sierra | Applicant: Sierra Resource Conservation District | | | | | |
|---|---|---|---|---|---|---|
| | | | DAC Implementation Funds | | General Implementation Funds | |
| **Project Name** | **Project Implementing Agency** | **Primary Benefit** | **Requested** | **Awarded** | **Requested** | **Awarded** |
| Grant Administration | Sierra Resource Conservation District | N/A | | | $65,667 | $65,667 |
| Post-Fire strategic analysis of critical watersheds for domestic/community groundwater systems and development of a Decision Support Tool (DST) for implementation | Sierra Resource Conservation District, CSU-East Bay, Lawrence Livermore National Laboratory | Water Quality | | | $130,000 | $130,000 |
| A decision-support tool for mapping climate change and wildfire effects on Southern Sierra Nevada streamflow and sediment yield | University of California, Merced | Water Supply Reliability | | | $275,000 | $275,000 |
| Post-Fire Headwaters Restoration -- Big Dry Creek and Jose Creek Watersheds of the upper San Joaquin River | Sierra Resource Conservation District | Water Quality | | | $500,000 | $500,000 |
| Alder Springs Community Water System Interconnection and Enhancement | Sierra Resource Conservation District | Water Supply (groundwater) | | | $125,000 | $125,000 |
| | | **Totals:** | **$0** | **$0** | **$1,095,667** | **$1,095,667** |
| | | | **Total Final Award** | | **$1,095,667** | |

# Final Funding Recommendations – Round 2 Integrated Regional Water Management (IRWM) Implementation Grant Solicitation

| IRWM Region: Tuolumne-Stanislaus | Applicant: Tuolumne Stanislaus Integrated Regional Water Management Authority | | | | | |
|---|---|---|---|---|---|---|
| | | | DAC Implementation Funds | | General Implementation Funds | |
| **Project Name** | **Project Implementing Agency** | **Primary Benefit** | **Requested** | **Awarded** | **Requested** | **Awarded** |
| Grant Administration | Tuolumne Stanislaus Integrated Regional Water Management Authority | N/A | | | $29,000 | $29,000 |
| ATCAA Low-Income Household Water Conservation | Amador Tuolumne Community Action Agency (ATCAA) | Water Conservation | $263,000 | | | $263,000 |
| | | **Totals:** | **$263,000** | **$0** | **$29,000** | **$292,000** |
| | | | **Total Final Award** | | **$292,000** | |

| IRWM Region: Yuba County | Applicant: Camptonville Community Services District | | | | | |
|---|---|---|---|---|---|---|
| | | | DAC Implementation Funds | | General Implementation Funds | |
| **Project Name** | **Project Implementing Agency** | **Primary Benefit** | **Requested** | **Awarded** | **Requested** | **Awarded** |
| Grant Administration | Camptonville Community Services District | N/A | | | $0 | $0 |
| Chlorine Contact Tank Replacement and Treatment Plant Upgrades | Camptonville Community Services District | Water Supply Reliability | $454,116 | $142,263 | | $311,853 |
| | | **Totals:** | **$454,116** | **$142,263** | **$0** | **$311,853** |
| | | | **Total Final Award** | | **$454,116** | |

# Final Funding Recommendations – Round 2 Integrated Regional Water Management (IRWM) Implementation Grant Solicitation

**Funding Area: Sacramento River**

Cycle 2 Award: $1,677,000

IRWM Region: North Sacramento Valley | Applicant: Sutter County Development Services

| Project Name | Project Implementing Agency | Primary Benefit | DAC Implementation Funds | | General Implementation Funds | |
|---|---|---|---|---|---|---|
| | | | Requested | Awarded | Requested | Awarded |
| Grant Administration | Sutter County Development Services | N/A | | | $80,000 | $80,000 |
| Spiva Avenue Water Main Replacement - Clark Avenue to Cooper Avenue | City of Yuba City | Water Supply (Surface) | $375,000 | | | $375,000 |
| Northern Sacramento Valley Mobile Irrigation Lab (MIL) | Resource Conservation District Tehama County | Water Conservation | | | $200,000 | $200,000 |
| Arbuckle Area Groundwater Recharge Demonstration and Pilot Project | Colusa County Water District | Groundwater Recharge | $545,000 | | | $545,000 |
| | | **Totals:** | **$920,000** | **$0** | **$280,000** | **$1,200,000** |
| | | | **Total Final Award** | | **$1,200,000** | |

IRWM Region: Upper Sacramento-McCloud | Applicant: Trout Unlimited- South Coast 923

| Project Name | Project Implementing Agency | Primary Benefit | DAC Implementation Funds | | General Implementation Funds | |
|---|---|---|---|---|---|---|
| | | | Requested | Awarded | Requested | Awarded |
| Grant Administration | Trout Unlimited- South Coast 923 | N/A | | | $21,250 | $21,250 |
| Improved Water Outcomes Through Nature Based Solutions | Trout Unlimited- South Coast 923 | Water Supply Reliability | $455,750 | | | $455,750 |
| | | **Totals:** | **$455,750** | **$0** | **$21,250** | **$477,000** |
| | | | **Total Final Award** | | **$477,000** | |