



Shasta Valley Groundwater Advisory Committee Meeting

Thursday August 31, 2023

Call to Order, Introductions

Tristan Allen, Montague Water Conservation District

Lisa Faris, Big Springs Irrigation District

Blair Hart, Private Pumper - East of I-5

Justin Holmes, Edson-Foulke Ditch Company

Grant Johnson (Vice-Chair), Tribal Representative

Steve Mains, Grenada Irrigation District

Robert Moser, Municipal/City (Lake Shastina Community District)

Justin Sandahl, Shasta River Water Users Association

John Tannaci (Chair), Residential

Gregg Werner, Environmental/Conservation

VACANT, Private Pumper - West of I-5

Agenda

- 3:05 Approval of Past Meeting Summary
- 3:10 Public Comment Period – Non-Agenda Items
- 3:15 DWR Updates
- 3:20 District Staff Updates
- 3:30 Committee Discussion on the State Water Board’s Process for Establishing Minimum Instream Flows for the Scott and Shasta Rivers
- 3:55 Committee Discussion on Updated Draft Well Permitting Process
- 4:30 Break
- 4:40 Presentation on Basin Conditions and the DWR SGM Round 2 Grant Award
- 5:05 Updates on Groundwater Related Projects
- 5:30 Open Committee Member Discussion
- 5:55 Closing, Action Items, and Future Agenda Items
- 6:00 Adjourn, Form Ad Hoc Groups

Public Comment on Non-Agenda Items and Updates from Other Agencies

This time is to receive public comments on items not on the consent agenda. If your comment concerns an agenda item, please address the Committee after that item is covered.

This time is also reserved for staff from other agencies to provide updates to the Committee on activities related to groundwater, which may include the State or Regional Water Board, CDFW, and others.

DWR Updates

District Staff Updates

Committee Discussion on the State Water Board's Process for Establishing Minimum Instream Flows for the Scott and Shasta Rivers

- District staff to share information
- Committee Members to discuss the State Water Board's process and possibly generate recommendations to the GSA Board on the role of the GSA through the process.

Siskiyou County Groundwater Well Application Process Guidelines

GSA Butte, Scott and Shasta Valley Groundwater Advisory Committee
meetings

August 29-31st, 2023

Why we're here – Executive Order

N-3-23 - Paragraph 9 of Executive Order N-7-22 is withdrawn and replaced with the following text:

- To protect health, safety, and the environment during this drought emergency, a county, city, or other public agency shall not:
 - a) Approve a permit for a new groundwater well or for alteration of an existing well in a basin subject to the Sustainable Groundwater Management Act and classified as medium- or high-priority without first obtaining written verification from a Groundwater Sustainability Agency managing the basin or area of the basin where the well is proposed to be located that groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability Plan adopted by that Groundwater Sustainability Agency and would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan; or
 - b) Issue a permit for a new groundwater well or for alteration of an existing well without first determining that extraction of groundwater from the proposed well is **(1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure.**
- This Paragraph shall not apply to permits for wells (i) that will provide less than two acre-feet per year of groundwater for individual domestic users, (ii) that will exclusively provide groundwater to public water supply systems as defined in section 116275 of the Health and Safety Code, or (iii) that are replacing existing, currently permitted wells with new wells that will produce an equivalent quantity of water as the well being replaced when the existing well is being replaced because it has been acquired by eminent domain or acquired while under threat of condemnation.

Why we're here – Public Trust/CEQA

- Public Trust Doctrine
- CEQA

- *Eventual State Legislation?*

Staff updates

- Language referencing SWRCB Emergency Regulations will be updated as situation changes
- Provide more detail description and clarification for “de minimis” domestic and/or stockwater wells
- Update definitions and also text to clarify replacement, emergency, deepening terms that constitute approval or not
- Evaluation Matrix’s
 - Table for evaluating impacts to “nearby” wells that correlates GPM to Distance from nearby well
 - Scott/Shasta Public Trust – Mapping to show transmittal times

Staff updates

- Scott Valley - new adjudicated wells not subject to GSA review
- Discussion of potential recommendation for production all well applications Countywide seek professional to begin evaluation process under 9(b)
- Indemnifications under discussion to include or not
- Ministerial (exempt) wells
 - Domestic or stockwater for use under 2 acre-ft per year
 - Municipal/Public (per water code)
 - Monitoring
 - Injection
- In the future, the County will be exploring a streamlined programmatic approach

Timeline

- First Draft presented to the Board of Supervisors on February 7, 2023
- Discussion item at Tulelake GSA Core Team meeting on March 24, 2023
- Discussion item at Butte, Scott and Shasta Valley groundwater advisory committee meetings on April 25-27
- County staff with assistance from Stantec summarized feedback to the Board of Supervisors on June 20.
 - BOS directed staff to update the document
- 2nd Discussion at August AC meetings, and with Tulelake GSA
- Intentions to bring final document to BOS in October
 - Public will have opportunity to review and comment

Feedback

Break

We'll reconvene in 10 minutes, at approximately 4:45

AUGUST ADVISORY COMMITTEE MEETINGS

Shasta Valley Groundwater Advisory Committee Meeting



LARRY WALKER
ASSOCIATES
science | policy | solutions



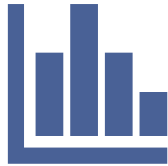
Topics

- GSP Determination and DWR Comments Received
- Sustainable Groundwater Management (SGM) Grant Program's SGMA Implementation Round 2 Funding- Grant Awards
- Implementation project recap
- Small work group formation
- Monitoring update
- Model Updates

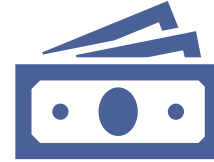
Overview of Implementation



Addressing DWR Comments
on GSP Determination



Routine Monitoring, Data
Evaluation and Annual
Reporting



Funding Awards and
Implementation of Project and
Management Actions



Model Updates

GSP Determination and DWR Comments

- Shasta Valley's GSP was approved on April 27th, 2023
- Findings from DWR included recommended actions:
 - Provide current water budget
 - Fill data gaps
 - Water quality
 - Interconnected surface water
 - Sustainable Management Criteria Definition
 - Water quality
 - Interconnected surface water sustainable management criteria
 - Coordinate and collaborate with other agencies to understand beneficial users

GSP Determination and DWR Comments

- Sustainable Management Criteria Definition
 - Water Quality
 - Redefine undesirable results- based on quantitative description of minimum threshold exceedances
 - Refine minimum thresholds to be based on number of supply wells, volume of water, or location of isocontour
 - Interconnected Surface Water
 - Consider revising undesirable result definition with quantitative minimum threshold exceedances
 - Consider using a numeric value for minimum thresholds
 - Hydrogeological Model Data Gaps
 - Define extent and bottom of the basin
 - Identify principal aquifers, more investigation for water-bearing formations

Implementation Grant Funded Projects (from Draft Awards)

SGMA Compliance and GSP Updates

Fee Study and Economic Analysis

Well Inventory

GW/SW Connectivity Study

Recharge Feasibility Study

Grenada Irrigation District

Upland Management

Implementation Approach



Work group formation



Work groups will oversee project design, progress, and evaluation of results



Updates for each project will be provided to the larger group at quarterly advisory committee meetings

Timeline

2023 Q3

- Formation of work groups in August AC Meetings
- Work groups approve draft project scope and schedule
- Final grant awards expected in September

2023 Q4

- October AC Meetings- review of final funding awards
- Detailed scope and schedule for funded projects provided to Advisory Committee

2024 Q1

- February AC Meetings- updates from project work groups, updates depend on individual project schedules
- SGMA Compliance- Annual Report for WY 2023

SGMA Compliance and GSP Updates

GOAL: Ensure that the Shasta Valley Basin Groundwater Sustainability Plan continues to meet requirements of SGMA and continues to build on monitoring, hydrologic modelling, and outreach efforts.

1. GSA administration
2. Data management
3. GSP updates- comments from DWR with determination
4. Reporting
5. Model updates and scenario evaluation
6. Data gap analysis and monitoring network expansion
7. Outreach & engagement

Fee Study and Economic Analysis

GOAL: Establish a fee program to fund GSP implementation and conduct a comprehensive economic analysis to evaluate baseline conditions and impact of project and management actions.

1. Evaluation of Fee/Rate Options
2. Update and Future Development of Parcel Specific Database of Groundwater Use and Supply
3. Analyze baseline economic conditions
4. Analyze economic conditions for project and management actions

Recharge and Upland Management

- **Groundwater- Surface Water Connectivity Study** – study to help better identify Groundwater Dependent Ecosystems (GDEs), and Interconnected Surface Waters (ISW)
- **Recharge Feasibility Study** – pilot project to study to study feasibility and impact of winter recharge using water diverted from Shasta River and its tributaries
- **Grenada Irrigation District** – evaluate use of groundwater recharge to augment Shasta River flows and raise groundwater levels for domestic wells in the study area.
- **Upland management** – partner with existing upland management projects to study effects on groundwater and/or surface water.

Well Inventory

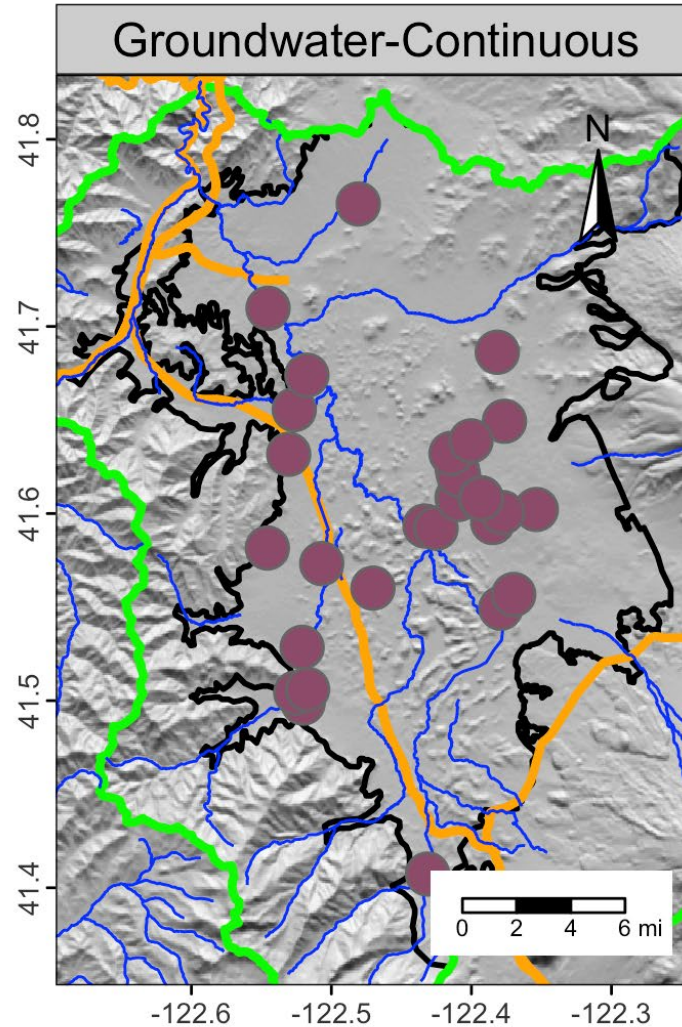
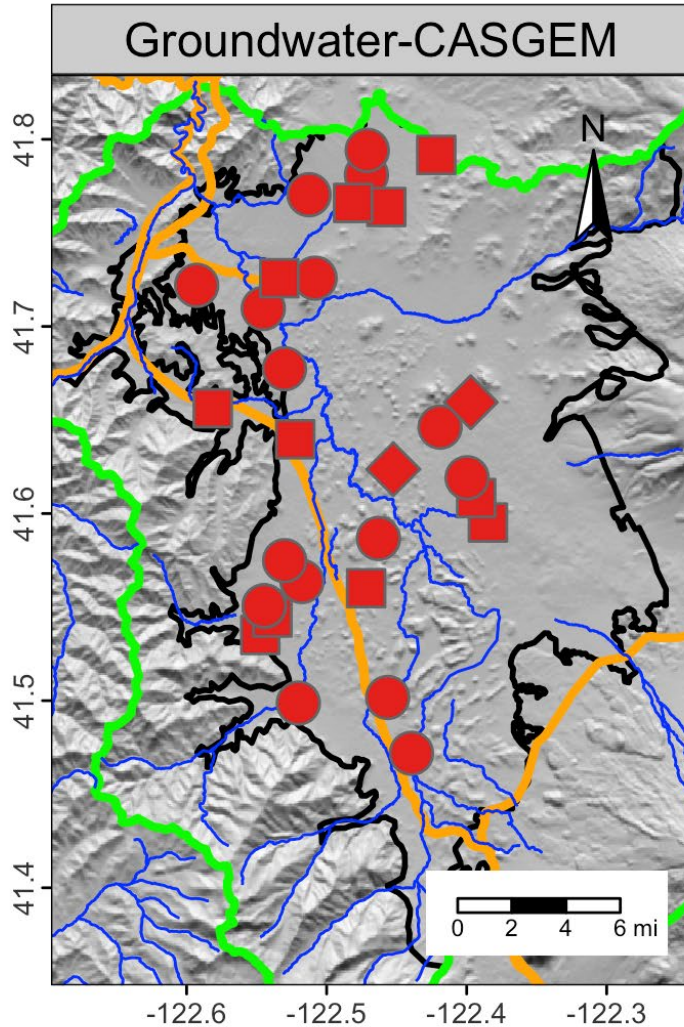
GOAL: Develop well inventory and a well risk assessment and mitigation program.

1. Well Inventory
 1. Well Records Survey
 2. Well Verification
2. Well Risk Assessment
3. Database Development
4. Monitoring well construction and/or instrumentation

Work Group Formation- Discussion

- Work Groups proposed for
 - **Data gap and monitoring work group-** SGMA Compliance and GSP Updates
 - **Well inventory**
 - County-wide, representatives from each basin
 - **Groundwater recharge opportunities**
 - **Upland management**
 - **Others?**

Shasta Groundwater Level Monitoring



Type

- Groundwater-CASGEM
- Groundwater-Continuous
- Other-CIMIS
- Other-Rain
- Other-Soil Moisture

Status

- Active
- Active RMP
- ◆ Inactive RMP

— Highway

— Watershed

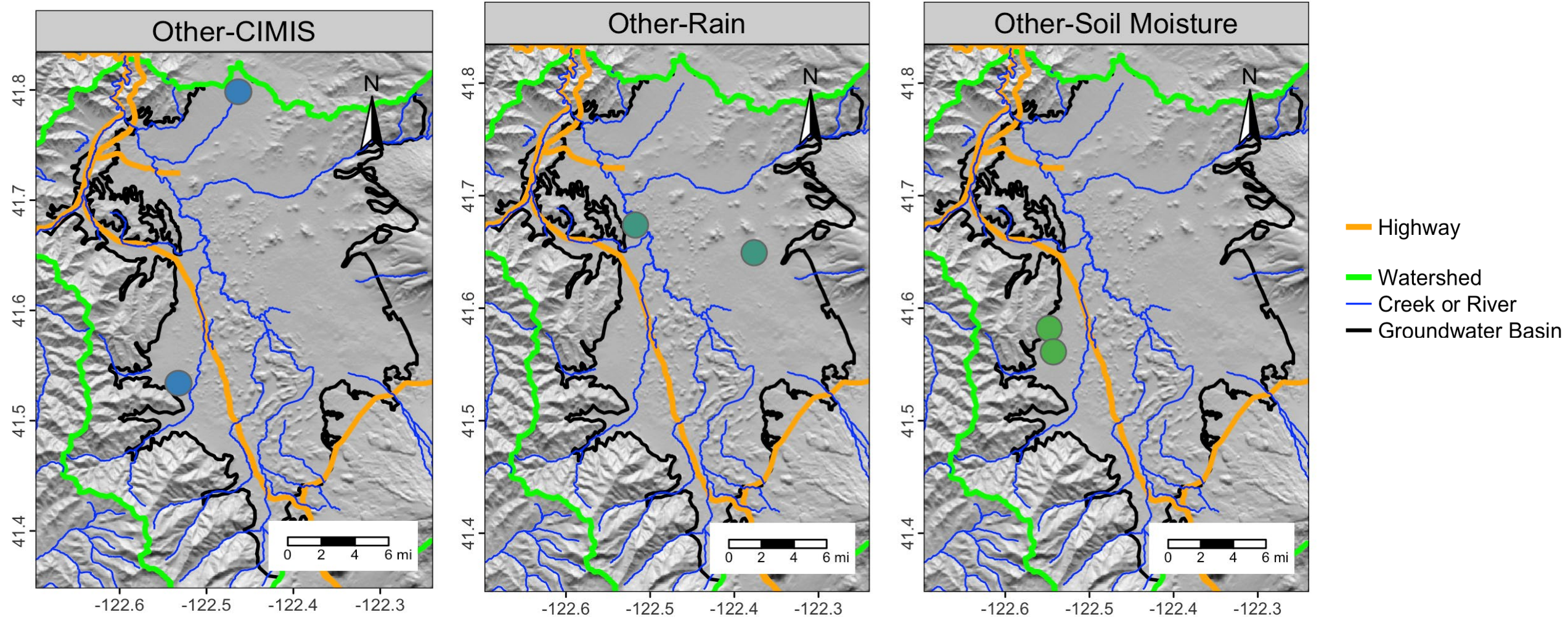
— Creek or River

— Groundwater Basin

Shasta Groundwater Level Monitoring

Monitoring Program	Number of Active Monitoring Wells	Wells with Data Shared
LWA/ Continuous Measurements	27	9

Additional Monitoring



Shasta Model Updates

- Update to the rainfall-runoff model PRMS for the entire watershed
- Update the geology using new available data (AEM from DWR)
- Use MODFLOW FARM or equivalent tool to estimate water use (this will take place of the previous estimate based on satellite data)
- Incorporate LIDAR data for better representation of surface water
- Improve representation of ditches and canals
- Update simulation period (get to current days)
- Coordination with USGS/USBR



Thank You

Updates on Groundwater Related Projects

Big Springs Complex

Legend



BIG SPRINGS

Google Earth

Image © 2023 Maxar Technologies



2000 ft

Open Committee Member Discussion

Chair to facilitate discussion among Committee Members to remark on the updates provided during today's meeting and provide any recommendations on next steps or actions to GSA staff or Board as appropriate.

Closing, Next Steps, Future Agenda Items

The next Advisory Committee meeting is scheduled for October 26.

Anticipated topics include:

- Update on Strategy Document and new facilitation support activities
- Fee study
- Updated information on water use for 2023

Adjournment & Forming Ad Hoc Groups

Thanks for your participation! We'll see you in October.