

October 21, 2024

Sierra Valley GSP Determination by DWR



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ASSOCIATES

science | policy | solutions

Approach to Addressing Corrective Actions

Investigating the basin fill and bedrock units and identifying the appropriate principal aquifer(s)

- Add wells to inventory based on data collected from aerial imagery and stakeholder outreach.
- Incorporate well characteristics into DMS and update the existing hydrologic model.
- **Geophysical data collected for the recharge project characterization** may also be used.

Providing more information about how data from the adjacent Chilcoot Subbasin will be utilized by the GSA during plan implementation

- Review well data for the Chilcoot subbasin including wells already included in the existing monitoring network located in the Chilcoot subbasin
- **Evaluate other hydrologic data collected for the GSP to further characterize the geology and hydrological connection to the Sierra Valley subbasin**

Amending the definition of undesirable results for the chronic lowering of groundwater levels

- Additional data on groundwater levels will be collected from existing wells along with wells that will be added to the monitoring network
- Use data to better characterize groundwater levels
- **Develop an inventory of domestic and agricultural wells to better assess the potential for an undesirable result.**

Amending the definition of undesirable results for land subsidence and establishing sustainable management criteria based on groundwater surface elevation changes

- More recent data will be evaluated to the extent it is available.
- **Use data from recently installed monuments to measure subsidence in the north eastern area of the basin** where greater subsidence has been identified.
- InSAR monitoring is being used in conjunction with monuments and monitoring wells through out the Basin. (Board update august 2024)

Approach to Addressing Corrective Actions

Providing a rationale for why water quality conditions in 2021 were selected

- A comparison of 2015 and 2021 water quality data will be included in the GSP update to better demonstrate which year provides the most representative baseline.
- General climate conditions for the 2 years will also be considered since drought or other conditions may also impact water quality

Continuing to fill data gaps, collecting additional monitoring data, coordinating with resources agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping,

- Work to better characterize ISWs is planned for 2025-2026.
- Use data from shallow wells in wetlands area and available from CDFW to update ISW/GDE understanding
- Identify additional monitoring needs

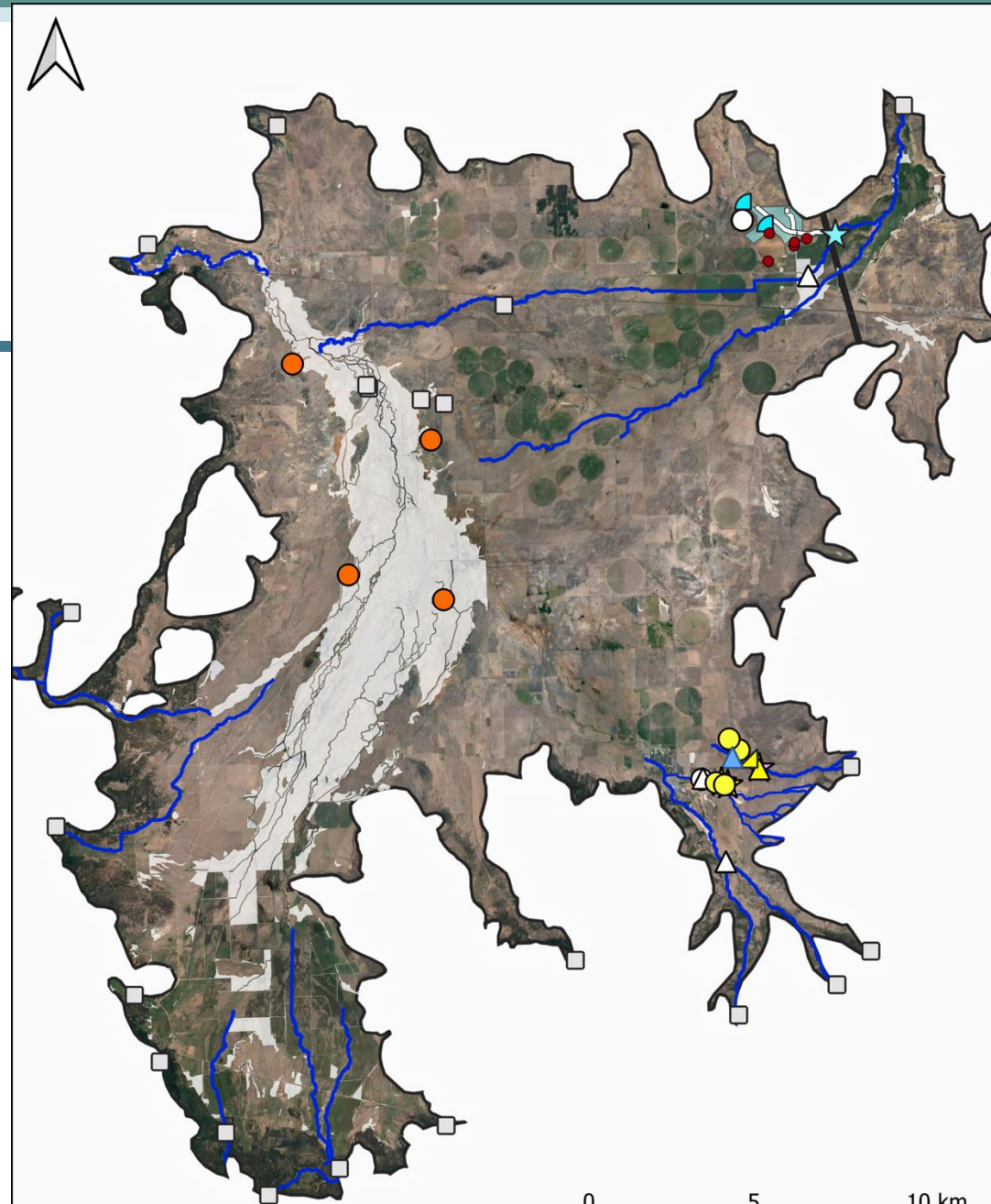
Providing updates to the monitoring network

- A well inventory is being conducted to determine additional wells/locations that may be needed to better characterize the subbasin.
- This will include reconciling the difference in the wells listed in the RMP table and RMP figure.
 - Monitoring networks for groundwater level, water quality and subsidence are being evaluated and the monitoring network will be modified as needed.

Public Comments

- Comments received from CDFW, Feather River Land Trust, Trout Unlimited, CNSP, Org ID3, 13 individuals
- Overarching themes
 - Stakeholder outreach inadequate for domestic well users, tribes, DAC, environmental concerns; lack of public participation
 - Climate change not considered in water budget
 - GSP focuses on ag not domestic water users
 - Characterization and consideration of ISW/GDEs inadequate

Monitoring Locations



2024-10-17
1:160000

Sierra Valley Monitoring Network

Legend

Little Last Chance Creek

- Spring Monitoring Points
- Well Monitoring Point
- Old Flowing Wells
- Little Last Chance Creek POD
- DWR Little Last Chance Creek Stream Gage
- Little Last Chance Creek Recharge Zone
- Little Last Chance Creek Diversion Pipe

Griffin Drainage

- Goicoechea Monitoring Well
- Griffin Drainage Retention Structures
- Griffin Planned Monitoring Wells

Staverville Creek

- Staverville POD
- Staverville Recharge Zone

Monitoring Locations

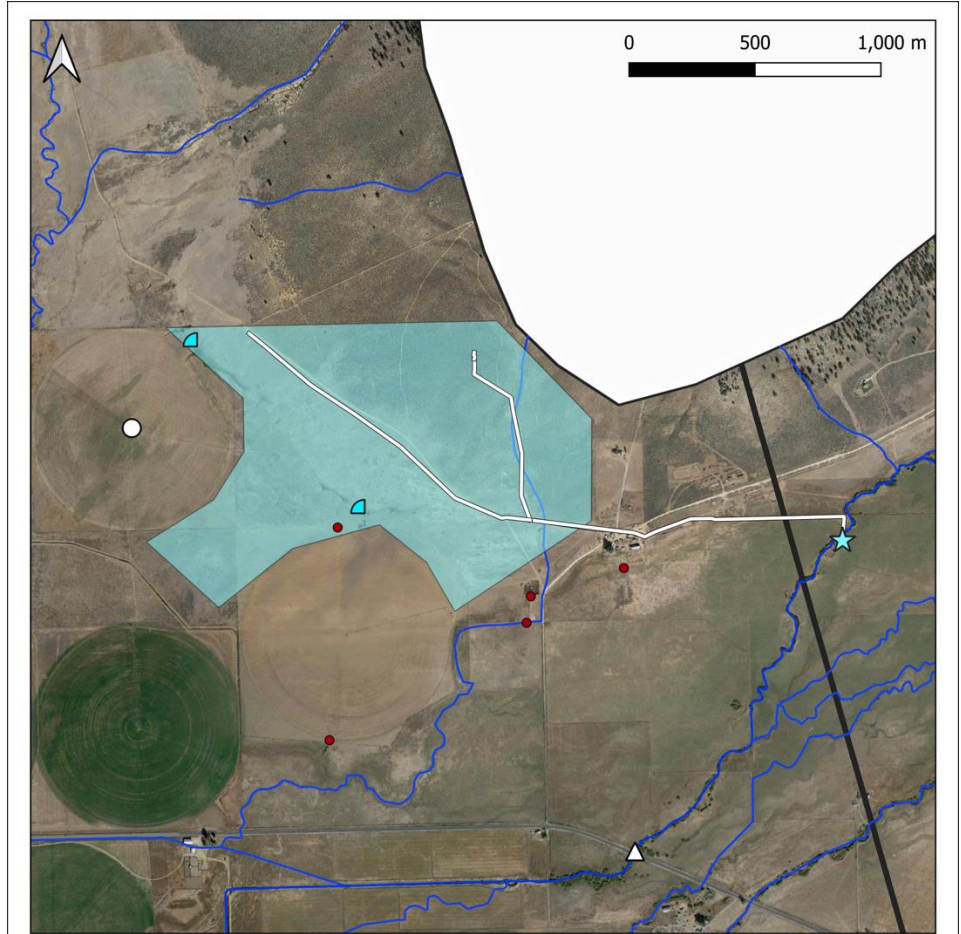
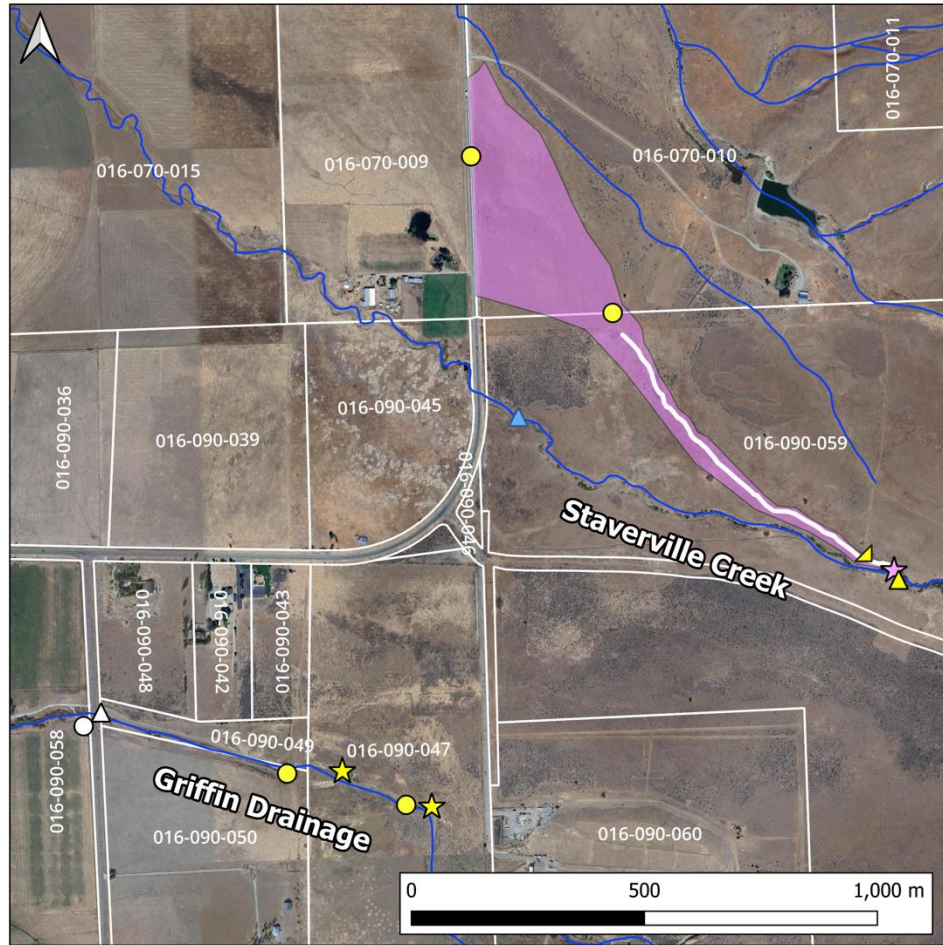
- Planned Flume
- Planned Monitoring Well 1
- Planned Monitoring Well 2
- Planned Streamgage

Other

- Likely GDE
- DWR Watermaster Locations
- Installed Stream Gages
- Wetland Monitoring Wells
- PRMS Model Gage Points
- Creeks



Recharge Project Monitoring



Legend

- Old Flowing Wells
- Well Monitoring Point
- ▲ Spring Monitoring Points
- ★ Little Last Chance Creek POD
- ▲ DWR Stream Gage
- Proposed Temporary Diversion Pipe
- Recharge Zone
- Streams**
- Intermittent Stream
- Perennial Stream
- Google Satellite





Thank You

Name, Title

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