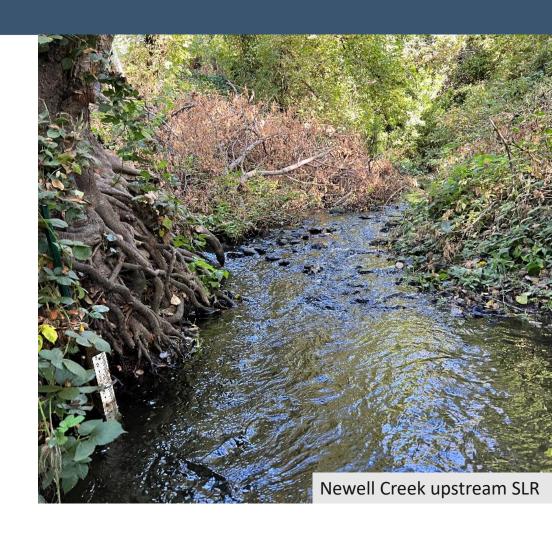


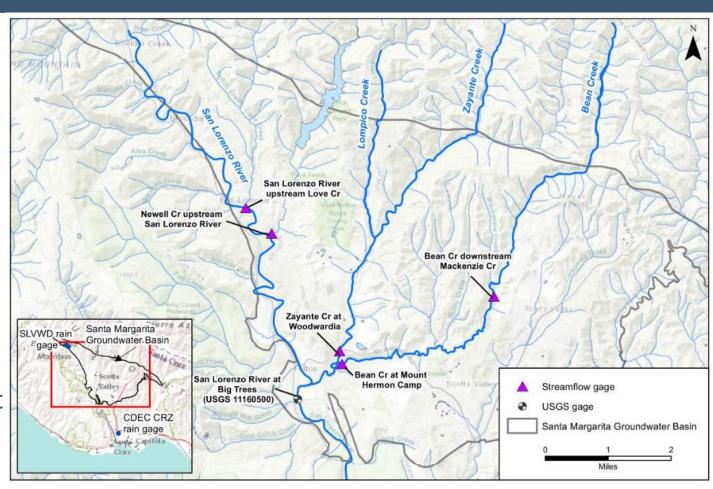
### Monitoring Goals

- Characterize conditions at the inception of the Santa Margarita GSP
- Part of monitoring network to evaluate connection between surface water and groundwater within the basin
- Provide quantitative baseline against which the projects and management actions can be assessed in future 5year assessments



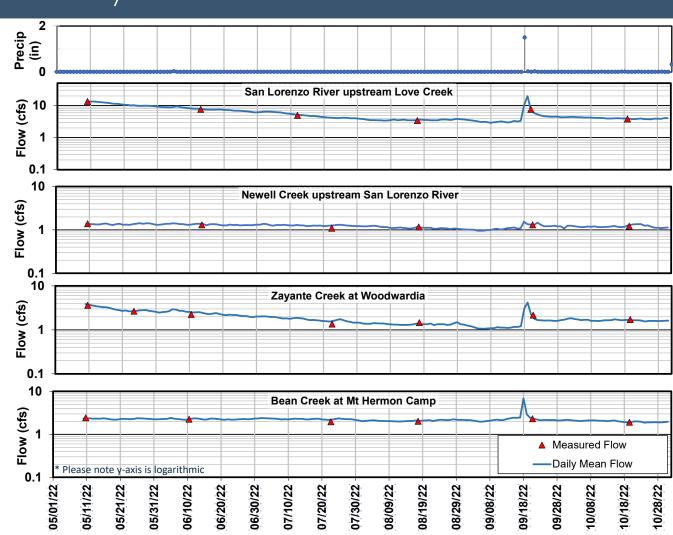
### Water Year 2022 Monitoring

- Installed Bean CreekDownstream MackenzieReal-time Gage
- Operated 5 Streamflow gages (dry season)
  - Flow
  - Temperature
  - Specific Conductance
- Observations at Groundwater Dependent Ecosystems



#### Water Year 2022 Summary of Streamflow

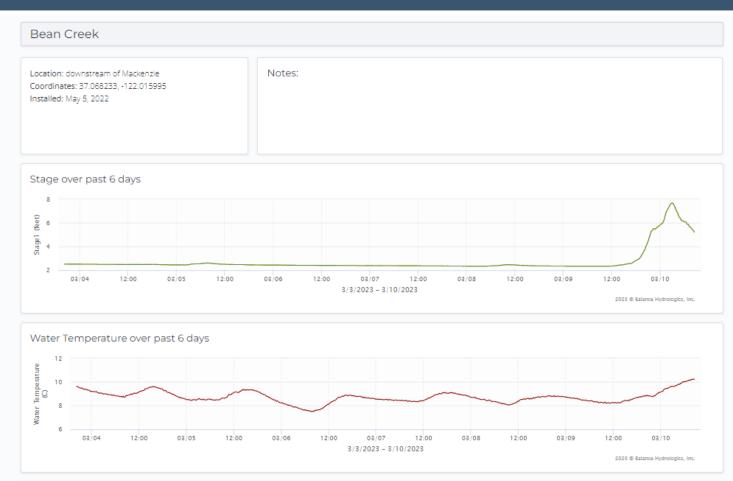
- Water year 2022 was a dry year:
  - Annual Rainfall was 37.08 inches at SLVWD Boulder Creek Rain Gage (74% of average)
  - Mean Annual Flow at USGS Big Trees gage was 68.7 cfs (54% of average)
  - Third consecutive dry year



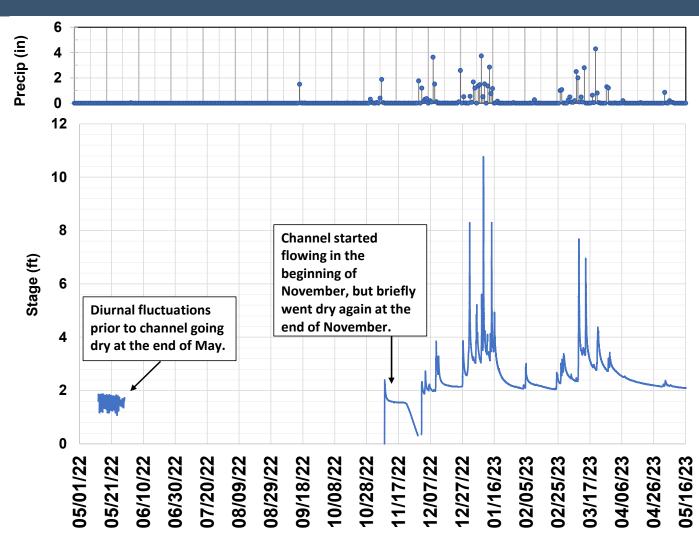
## Water Year 2022 Summary of Streamflow

- Bean Creek
  downstream of
  Mackenzie gage
  installed May 2022
- Bean Creek Real-Time publicly available:

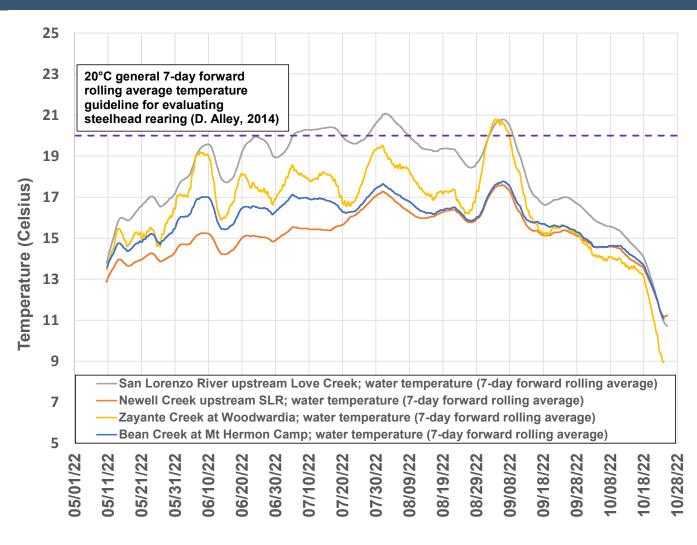
https://balancehydro.xioscada.com/public/pages/106



#### Bean Creek: WY2022 and Winter 2023



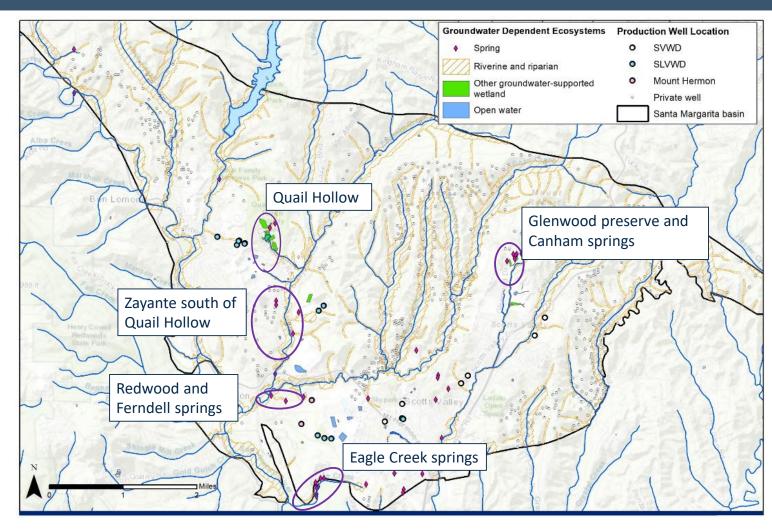
### Water Year 2022 Summary of Temperature



### Groundwater Dependent Ecosystem Monitoring

#### Goals

- Evaluate potential impacts to GDEs from groundwater use or projects or management actions
- Evaluate physical indicators of priority species' habitat



# Groundwater Dependent Ecosystem Monitoring

Covinc	Water Veer 2020	Motor Voor 2021	Woton Voor 2022
Spring	Water Year 2020	Water Year 2021	Water Year 2022
Eagle Creek (u/s of SLR)	Spring: 412 gpm	Spring: 144 gpm	Spring: 149 gpm
	Fall: 180 gpm	Fall: 103 gpm	Fall: 123 gpm
Ferndell Creek/Spring	Spring: 155 gpm	Spring: 81 gpm	Spring: 83 gpm
	Fall: 110 gpm	Fall: 67 gpm	Fall: 71 gpm
Redwood Spring	Spring: 45-65 gpm	Spring: 36 gpm	Spring: 52 gpm
	(visual est.)		
	Fall: 60 gpm	Fall: 34 gpm	Fall: 35 gpm

#### Water Year 2022 Findings

- Data collected from WY 2020 2022 establishes baseline surface water conditions during consecutive dry years
- Baseflows were generally slightly higher during 2022 than the two previous years- consistent with more precipitation in 2022
- Bean Creek downstream of Mackenzie real-time gage was installed and provides year-round reporting of site conditions
- Bean Creek downstream of Mackenzie went dry at the end of May
- San Lorenzo River upstream of Love Creek and Zayante Creek both exceeded the 20 °C temperature guideline, though for relatively short periods of time
- Flow at GDEs was slightly higher than in 2021, but still less than 2020

