2019 Report: Submitted by UC Davis to Siskiyou County, March 27, 2019 - differs fr

		Water Year 2018 ----
A - Groundwater Level		
	Is water level data submitted to the CASGEM Program?	Yes
	Does this watermaster collect or receive additional groundwater levels	No
	Comments	A statistical summary of water level data from an extensive private monitoring program is available at http://groundwater.ucdavis.edu/Research/ScottValley/
B - Groundwater Use		
	Reporting year	From 10/1/2017 To 09/30/2018
	Total Groundwater Extraction (acre-feet)	43000
	Method used to determine extraction:	**Volume**
	groundwater model	43000
	other method	
	Groundwater extraction by water use sector (if available)	
	urban	1000
	agricultural	42000

C- Surface Water Use

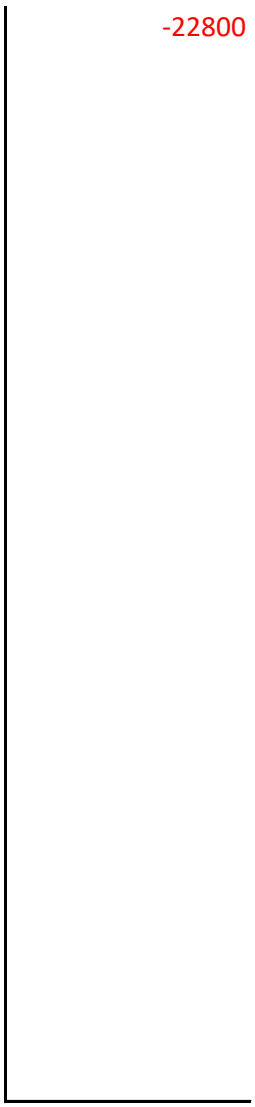
Reporting year	From 10/1/2017 To 09/30/2018
Surface water supply (acre-feet)	**Volume**
Method used to determine	26000
Water available for recharge or in-liey use by source type	**Volume**
local surface deliveries	unknown

D- Total Water Use

Reporting year	From 10/1/2017 To 09/30/2018
Total water use (acre-feet)	69000
Methods used to determine / explanation	sum of groundwater use and surface water use described in B and C (above)

E - Change in GW Storage

Reporting year	From 10/1/2017 To 09/30/2018
Change in storage (acre-feet)	**Volume**


-22800

rom the 2018 report only in the numbers indicated in red

Explanation	Uncertainty
Groundwater pumping in the range of 39,000 - 45,000 af represent the entire Scott Valley groundwater basin (DWR Basin 1-5). These values are based on the estimated average annual pumping in 1991-2011, including approximately 1,000 acft of groundwater pumping for urban/domestic water use. The lower number is based on the current soil water budget model used by the UC Davis Scott Valley Intergrated Hydrologic Model, and the high number is based on the soil water budget model published by Foglia et al., 2013a,b, available at http://groundwater.ucdavis.edu/Research/ScottValley/.	medium
estimated based on population	medium
estimated based on model (see comment above)	medium

Explanation / Methods used	Uncertainty
Surface water use of 24,000 - 28,000 af represent the entire Scott Valley groundwater basin (DWR Basin 1-5). These values are based on the estimated average annual surface water irrigation amount in 1991-2011. The range is based on the current calibration of the soil water budget model used by the UC Davis Scott Valley Intergrated Hydrologic Model, and includes the estimtate from the soil water budget model published by Foglia et al., 2013a,b, available at http://groundwater.ucdavis.edu/Research/ScottValley/.	low

Explanation / Methods used	Uncertainty

sum of groundwater use and surface water use described in B and C (above)	medium

Explanation / Methods used	Uncertainty

In the private monitoring well network (34 wells), water levels measured in January, February, and March of 2018 were, on average, 5.7 feet lower than during the same period in 2017 indicating an overall deccrease in groundwater storage (see water level report at http://groundwater.ucdavis.edu/Research/ScottValley/). In DWR's Water Data Library, nine wells have water levels documented. Between spring 2017 and spring 2018, water levels in these nine wells decreased by 5.2 feet, on average, with 8 wells having lower water levels in 2018 and 1 well having higher water level in 2018, when compared to 2017 (https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer). The current UC Davis Scott Valley Integrated Hydrologic Model was used to determine the relationship between water levels at the 34 locations of the private monitoring well network and total groundwater storage in the Scott Valley aquifer, which extends over approximately 50,000 acres of alluvium, for the period from 10/1/1990 to 9/30/2011. Based on simulated annual change in storage and simulated water levels at the location of the 32 private monitoring wells, it was estimated that the average total annual groundwater storage change is between 3 thousand and 5 thousand acre-feet for each one foot change in average water levels in the monitoring well network during January through March. The statistical uncertainty of the estimated storage change is +/- 6 thousand acre-feet.	medium