

Summer Groundwater Level Conditions - 2018



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Groundwater Pumpers Advisory Committee
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Summer Groundwater Level Conditions 2018

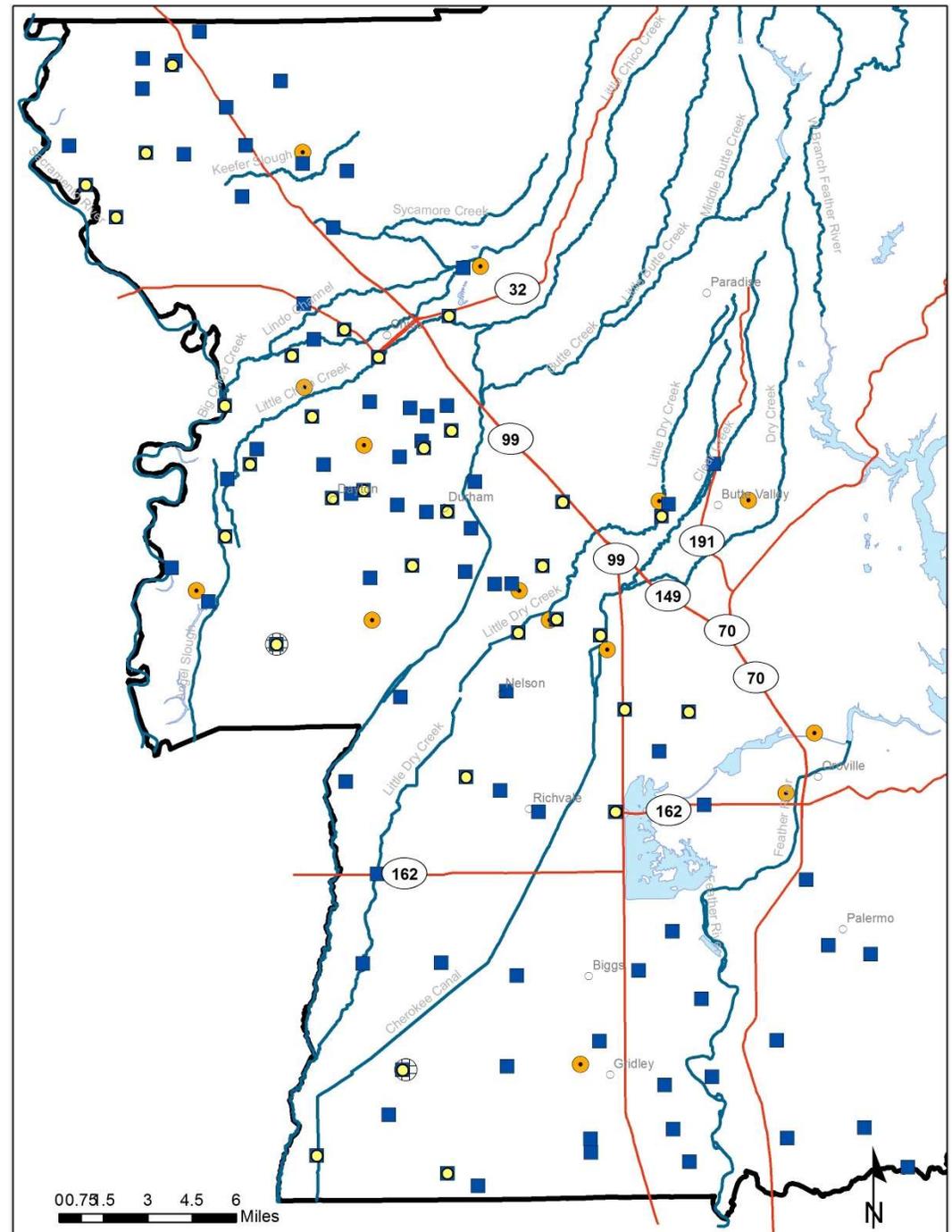
Topics:

1. Brief Overview of Monitoring
2. New Revised Subinventory Units
3. Summer 2018 Depth to Water Conditions
4. Spring 2018 – Summer 2018 Changes
5. Summer 2017 – Summer 2018 Changes



Groundwater Level Monitoring

- ~125 wells Manually 4x/year: Mar., Jul., Aug., Oct. w/ DWR
- Hourly data (~60 wells)
- 69 additional wells since 2000
- Data available online: [Water Data Library](#)



New Revised Subinventory Units (SIUs)

Original SIUs

- 16

Revisions:

- Same data, new groupings

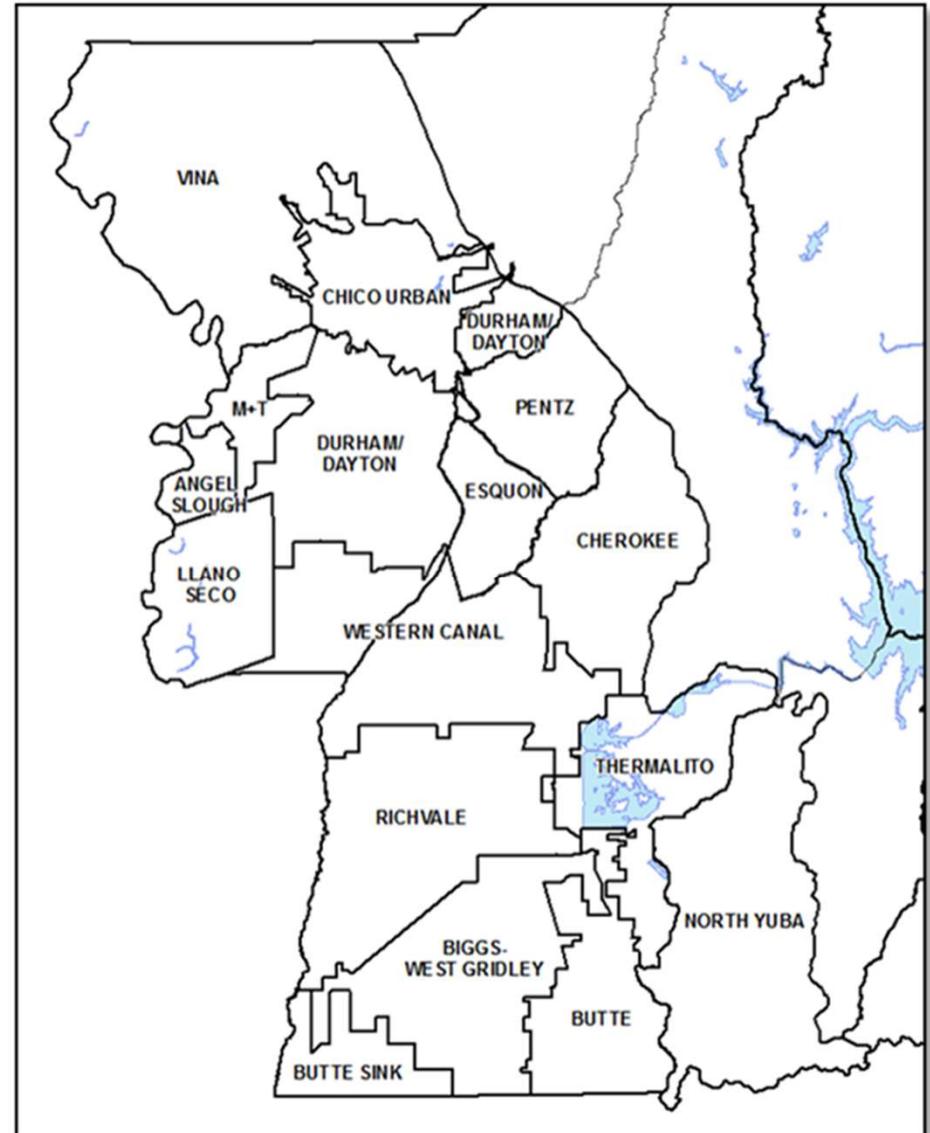
- SGMA Transition

- BBMs

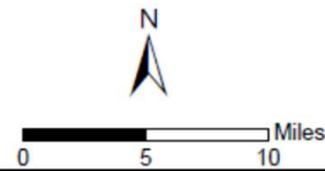
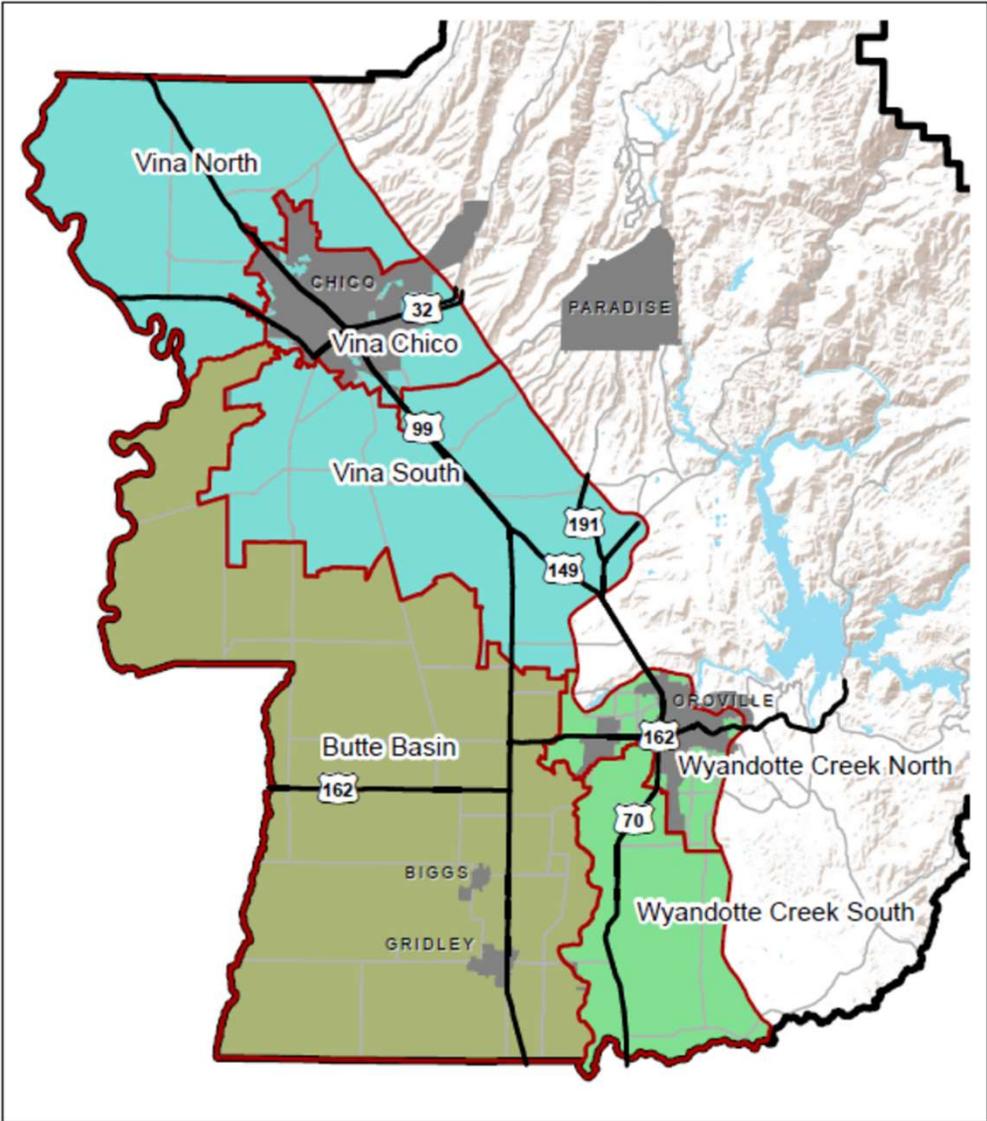
- IHM

- GSPs

- Draft



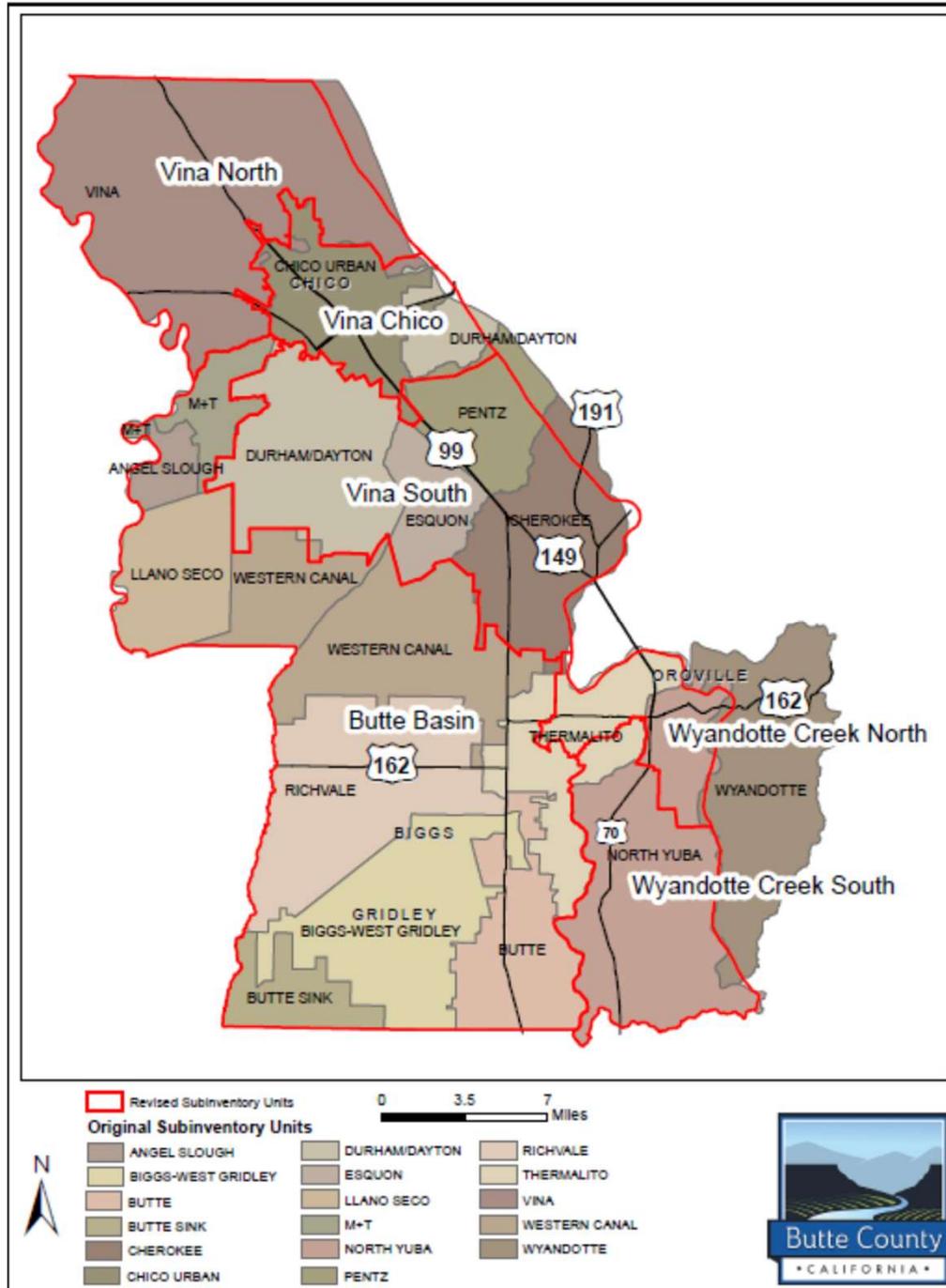
Revised Subinventory Units



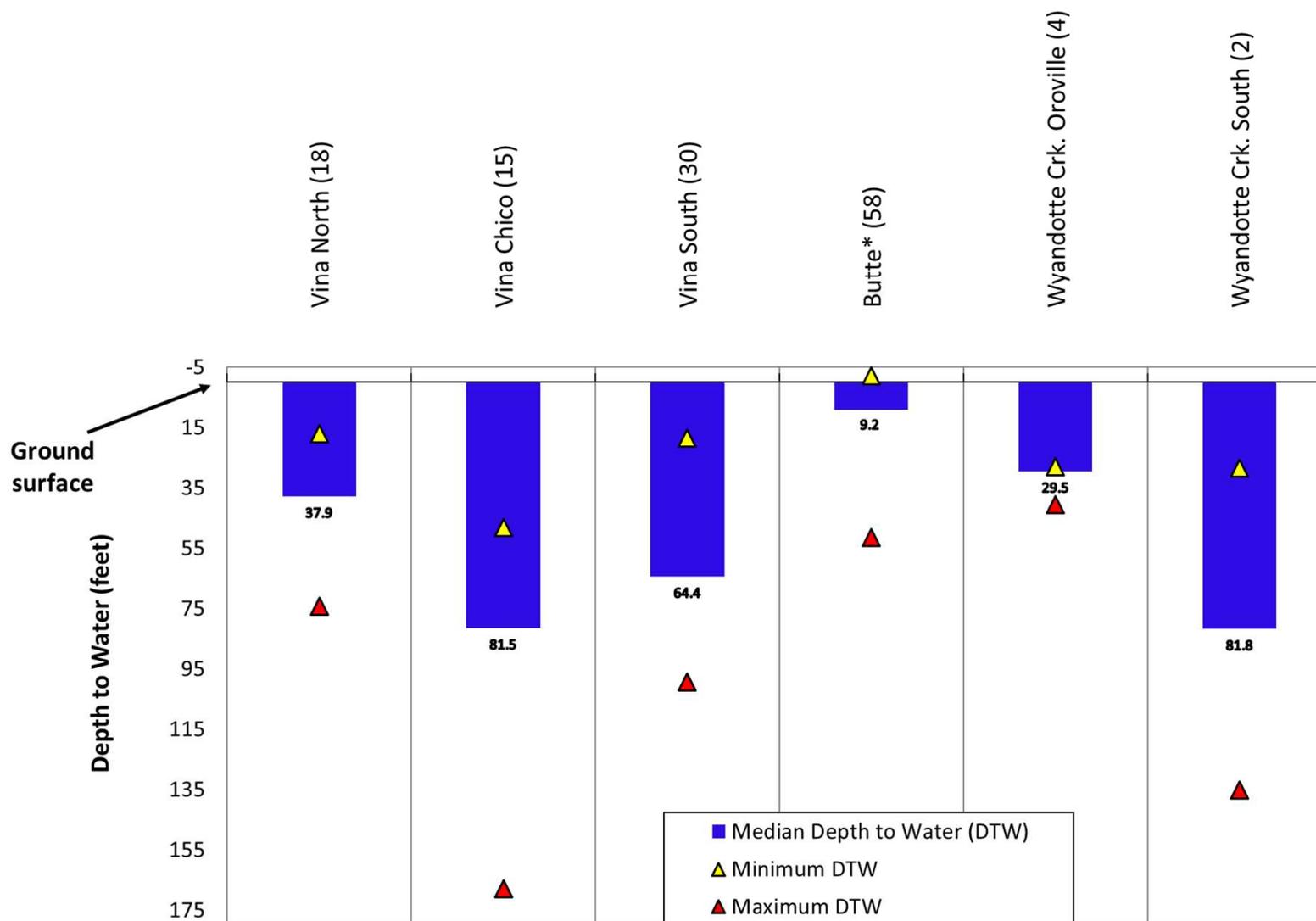
	Revised Subinventory Units		City/Town Limits
Subbasins			County Boundary
	Butte		Major Roads
	Vina		State Highways
	Wyandotte Creek		



Revised and Original SubInventory Units



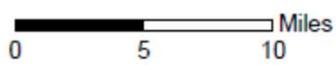
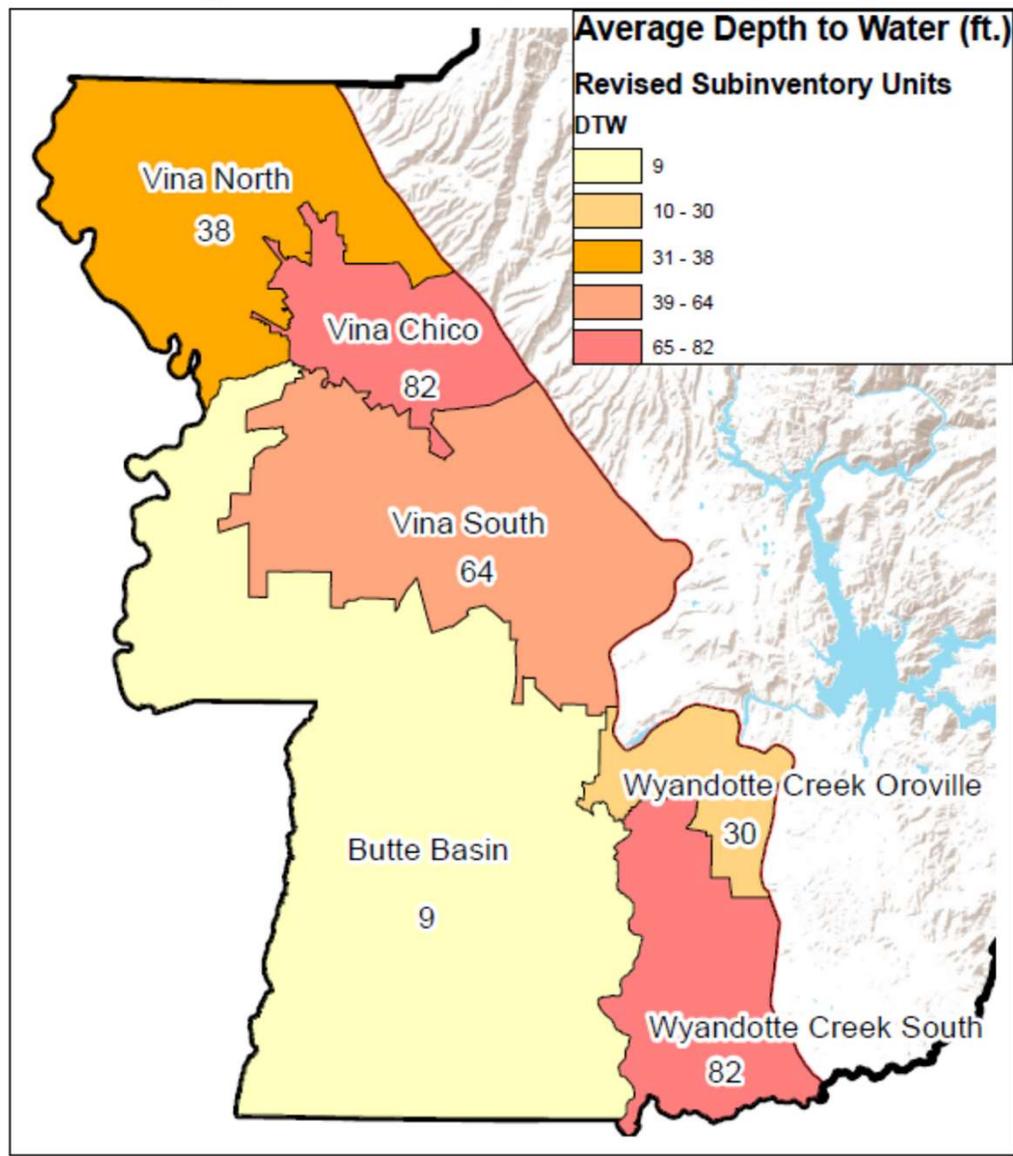
Summer 2018 Average Depth to Water (DTW) Conditions



Note: Bars show median DTW and are labeled, triangles show range. Questionable measurements are included in data. Number after subbasin area name indicates number of wells measured

* Indicates areas primarily served by surface water

2018 Average Summer Depth to Water (DTW) Levels



Questionable measurements are included in data

Bars = median DTW (labeled)

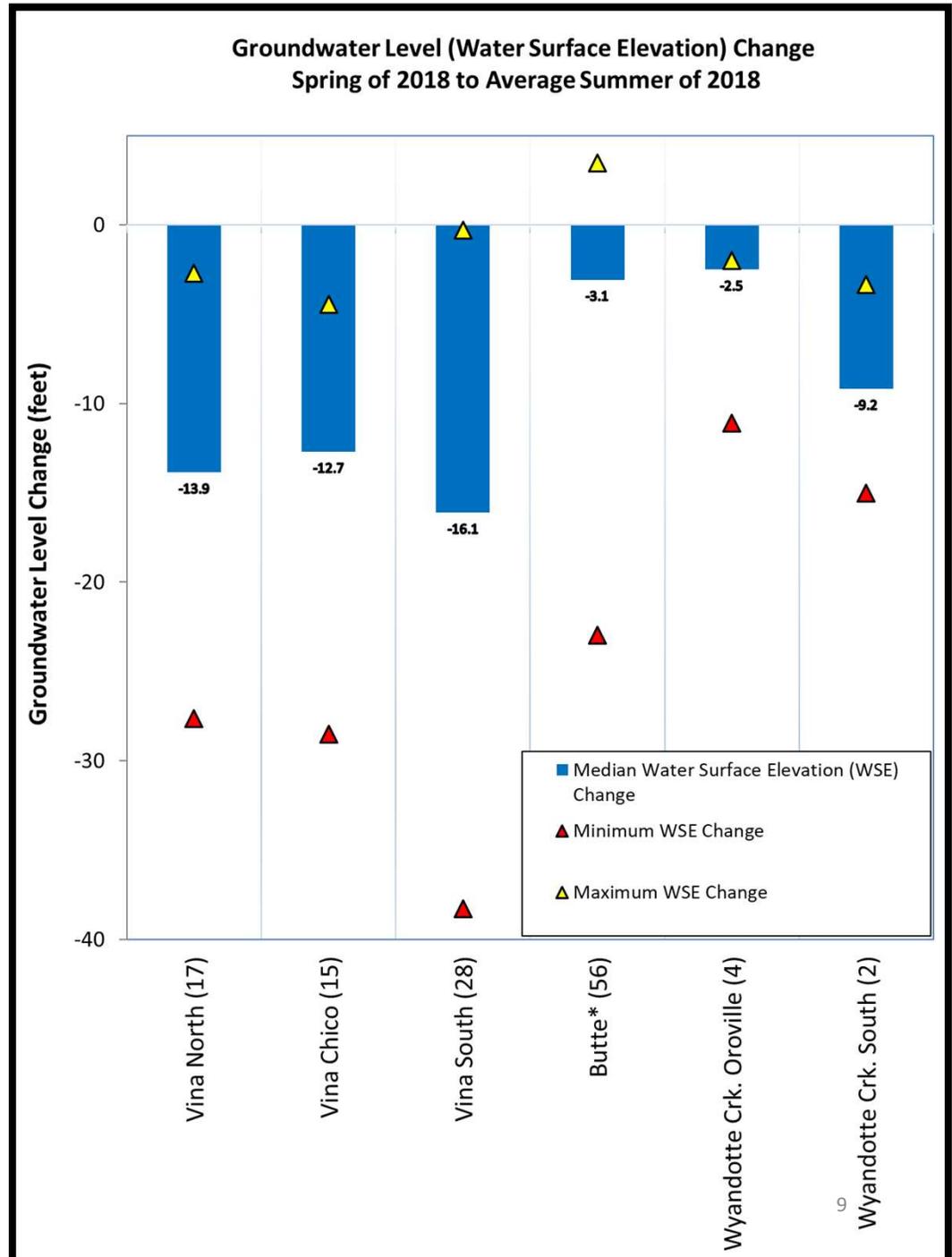
Triangles = range

() = Number of wells measured

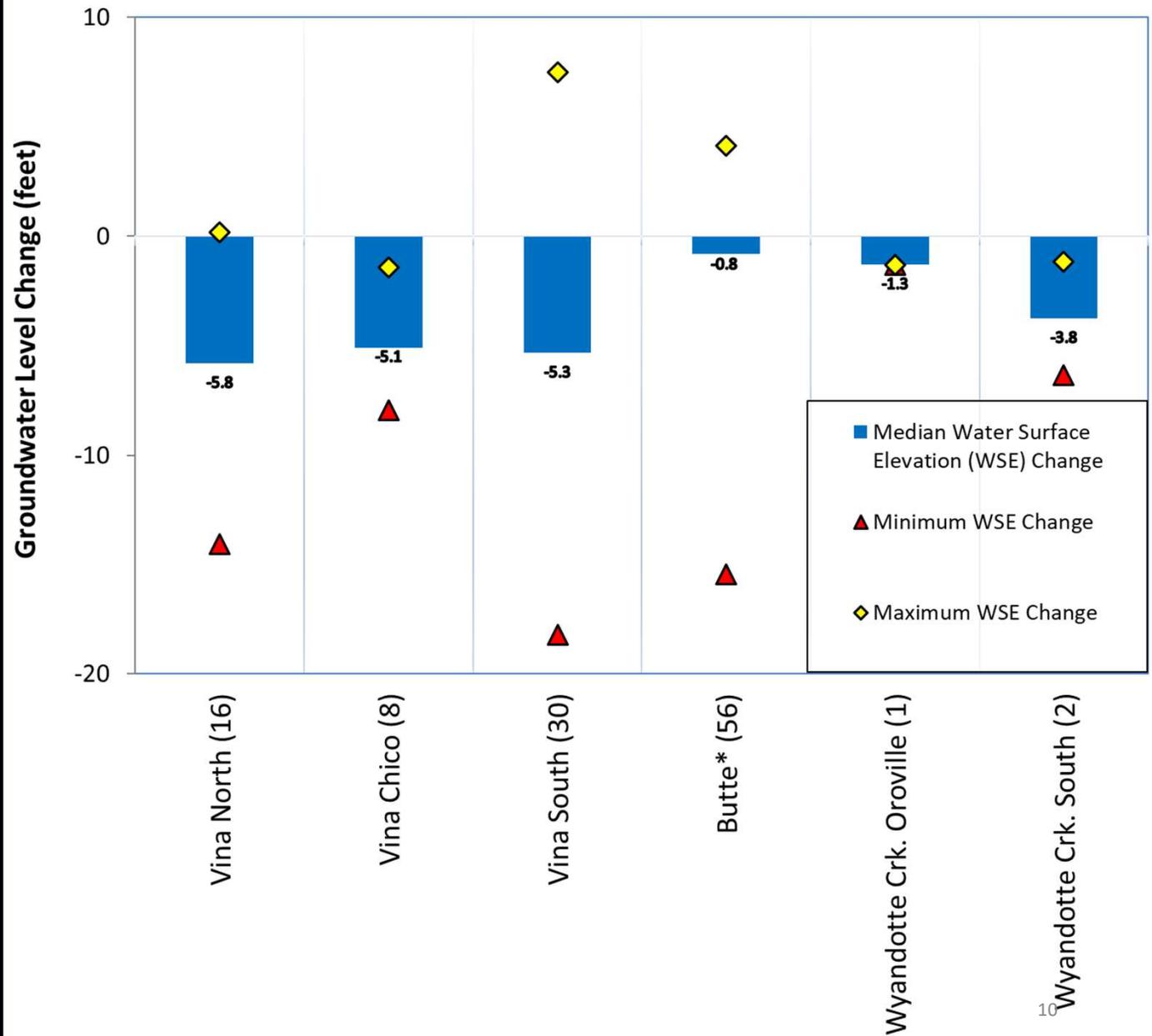
Positive values = increased WSEs

Negative values = decreased WSEs

* = Areas primarily served by surface water



**Groundwater Level (Water Surface Elevation) Change
Summer 2017 to Summer 2018**



Questionable

measurements are

included in data

**Bars = median DTW
(labeled)**

Triangles = range

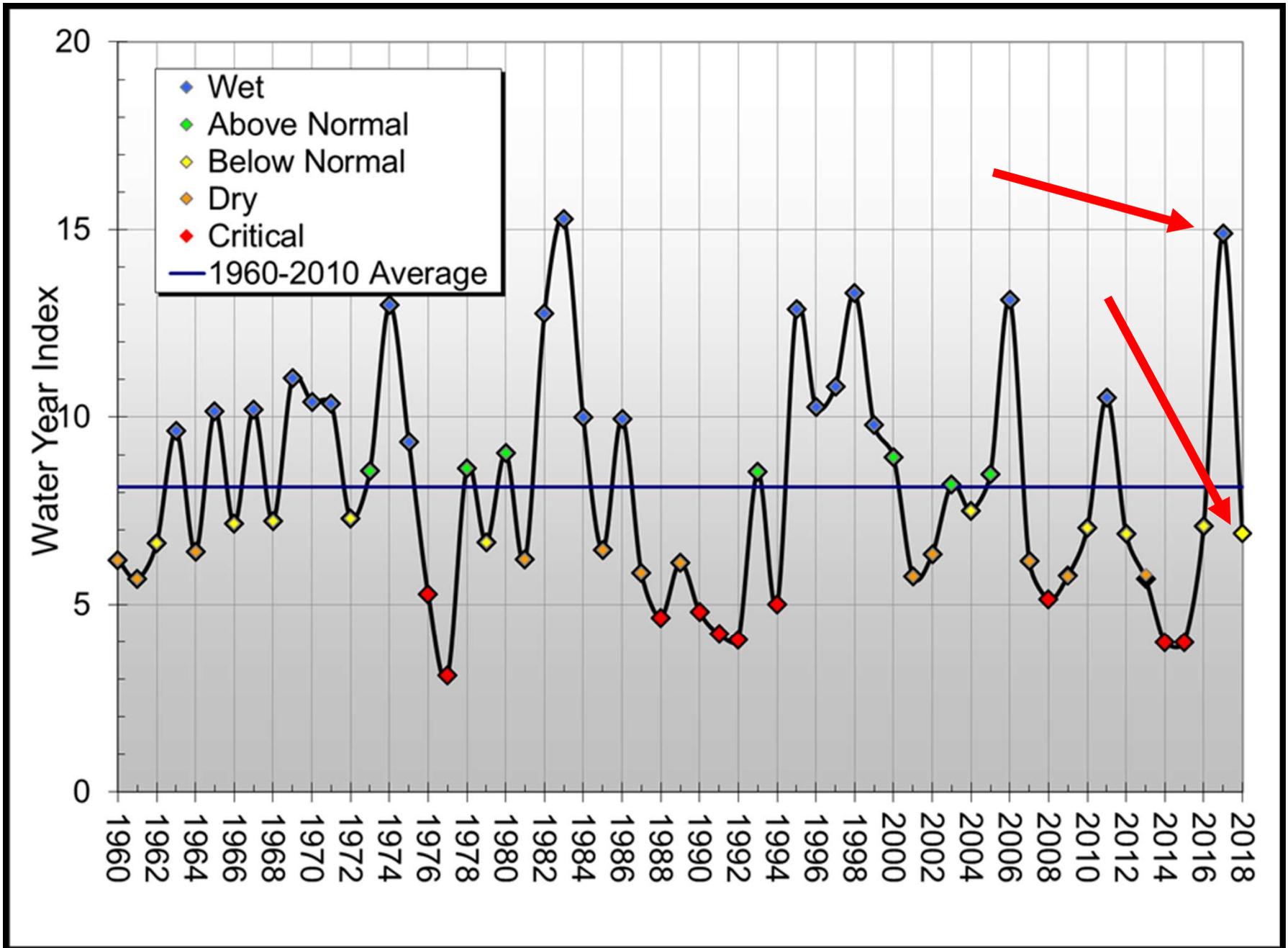
**() = Number of wells
measured**

**Positive values =
increased WSEs**

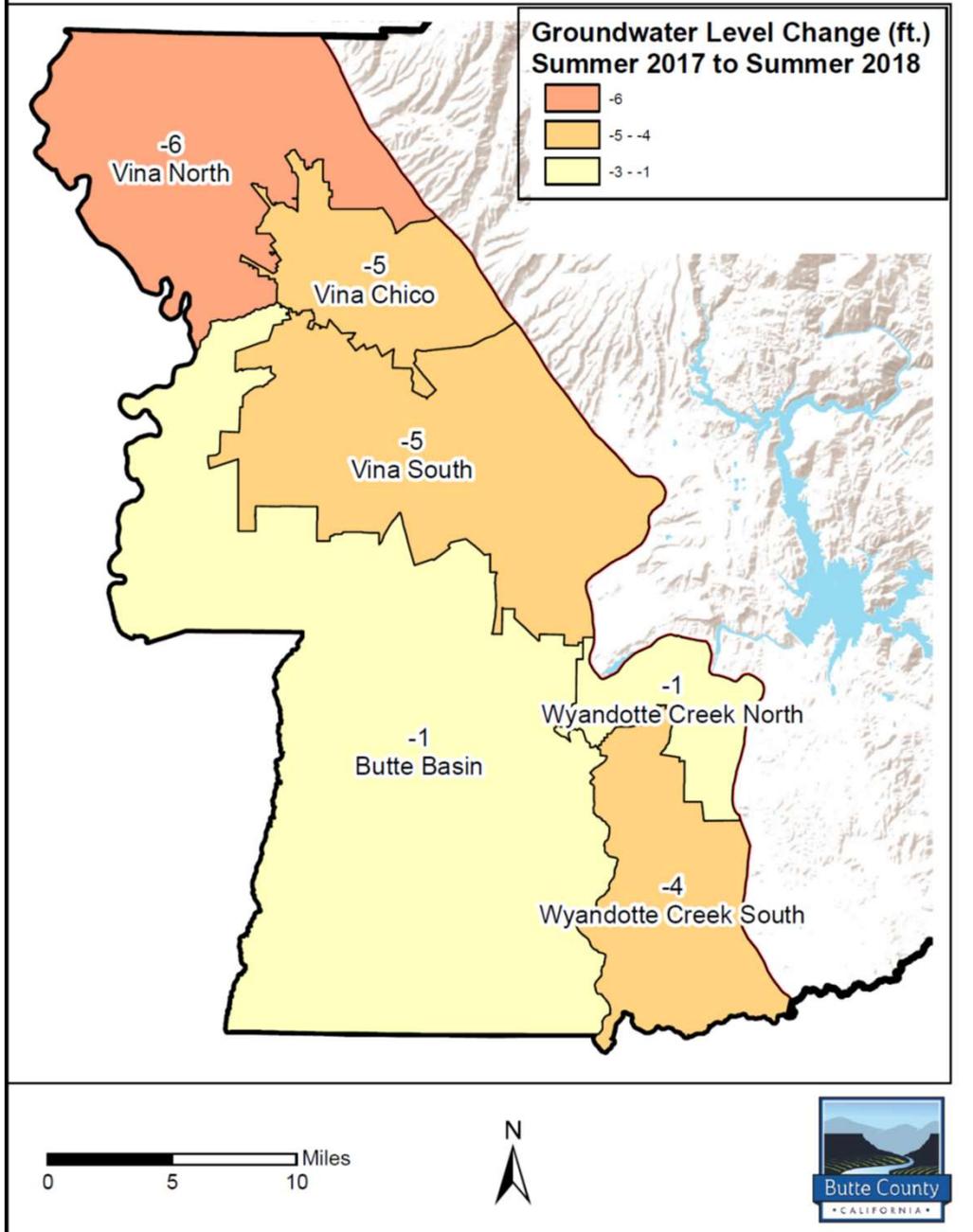
**Negative values =
decreased WSEs**

*** = Areas primarily
served by surface
water**

Water Year Hydrologic Classification Indices 1960 - 2018



Average Summer Groundwater Level Change 2017 to 2018



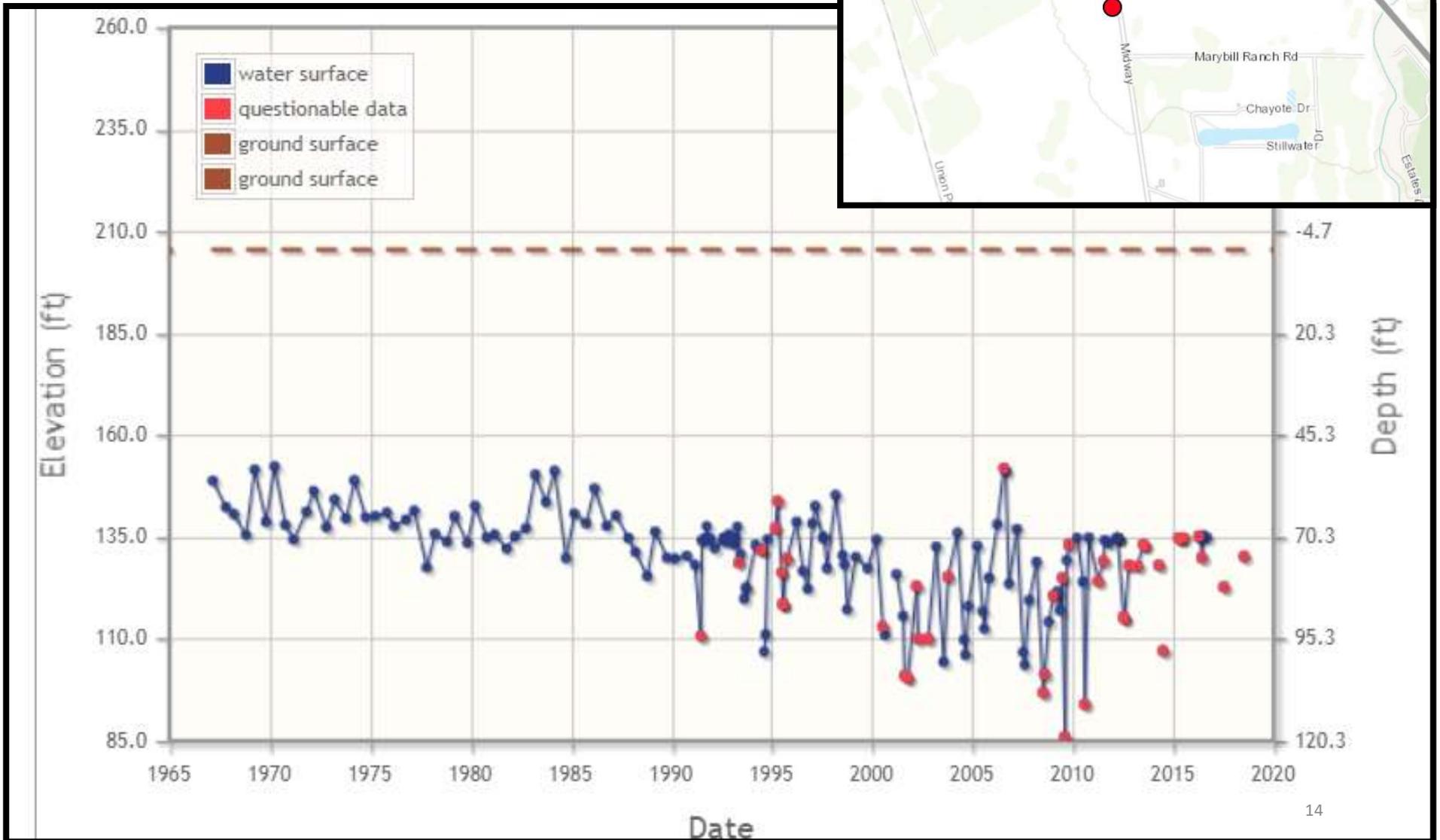
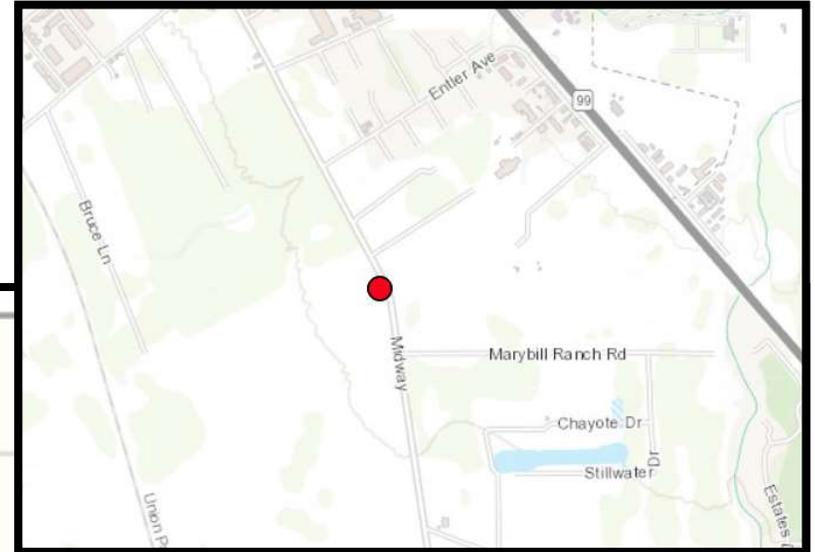
Summer Monitoring Data

Groundwater Level (GWL) Change in Water Surface Elevations Summer 2017 to 2018

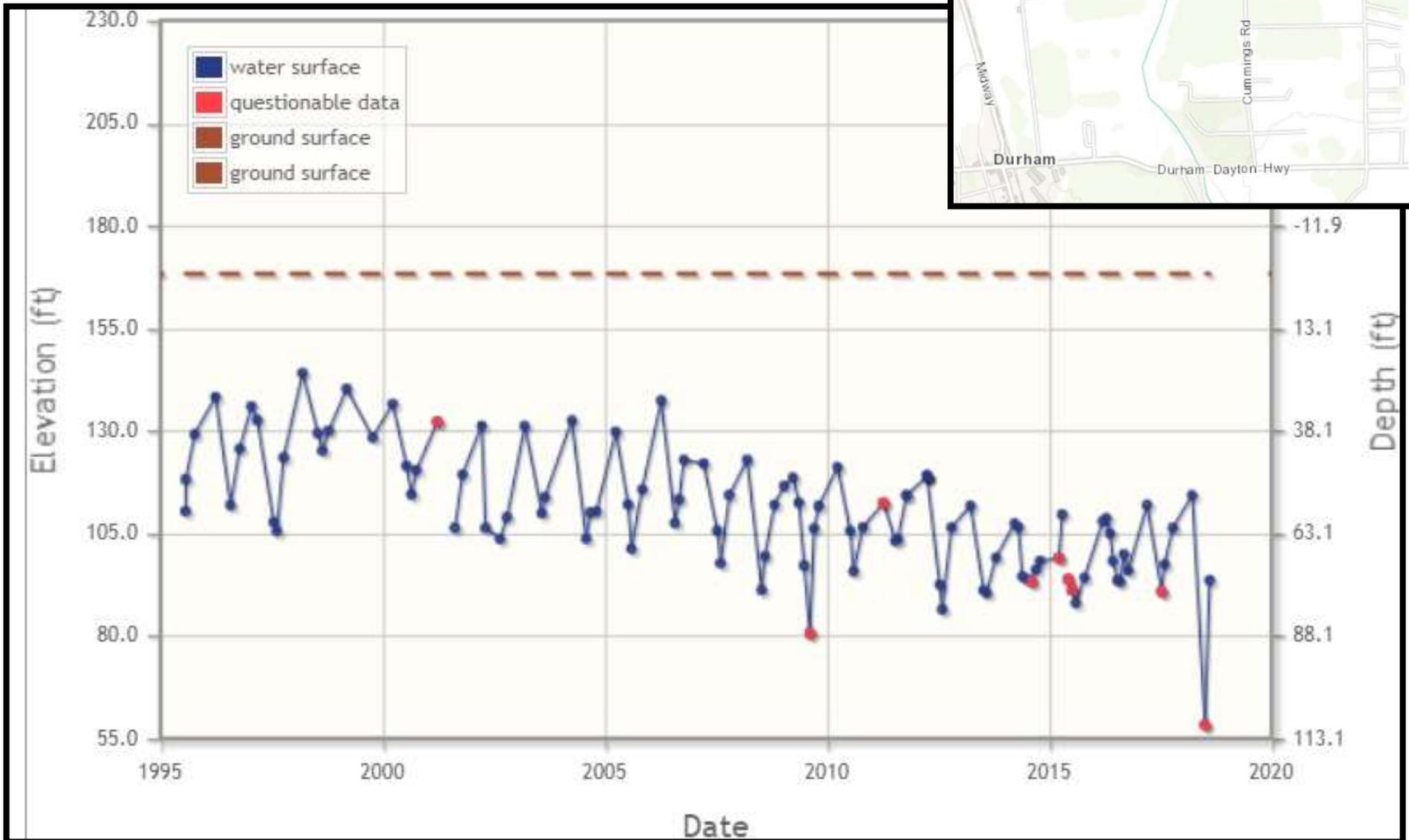
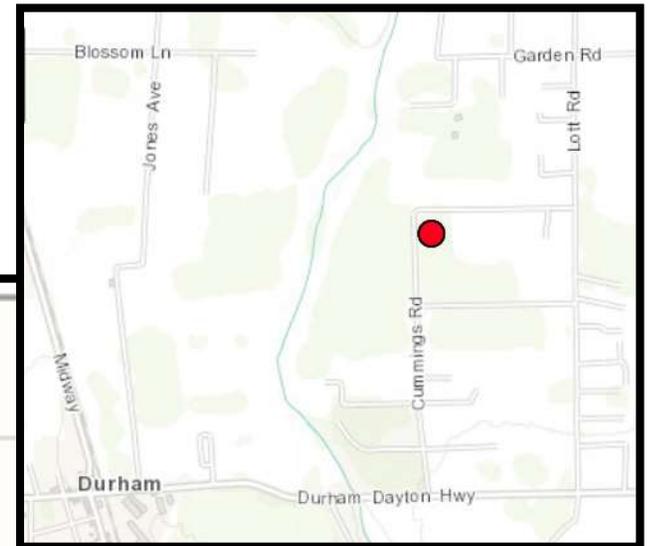
Number of wells		Change (ft.)	Area
113	Average GWL Change	-3.7	
	Median GWL Change	-3.7	
18	Average Increase	1.2	
	Median Increase	0.5	
	Max Increase	7.5	Vina South
94	Average Decrease	-4.7	
	Median Decrease	-4.4	
	Max Decrease	-18.2	Vina South

Note: Questionable measurements were included and 1 wells measured did not change in GWL between Summer of 2017 and Summer of 2018

Max. Increase, Vina South 21N02E07C001M Irr. ~700' deep



Max. Decrease, Vina South 21N02E20P001M Irr. ~240' deep



Questions/Discussion