



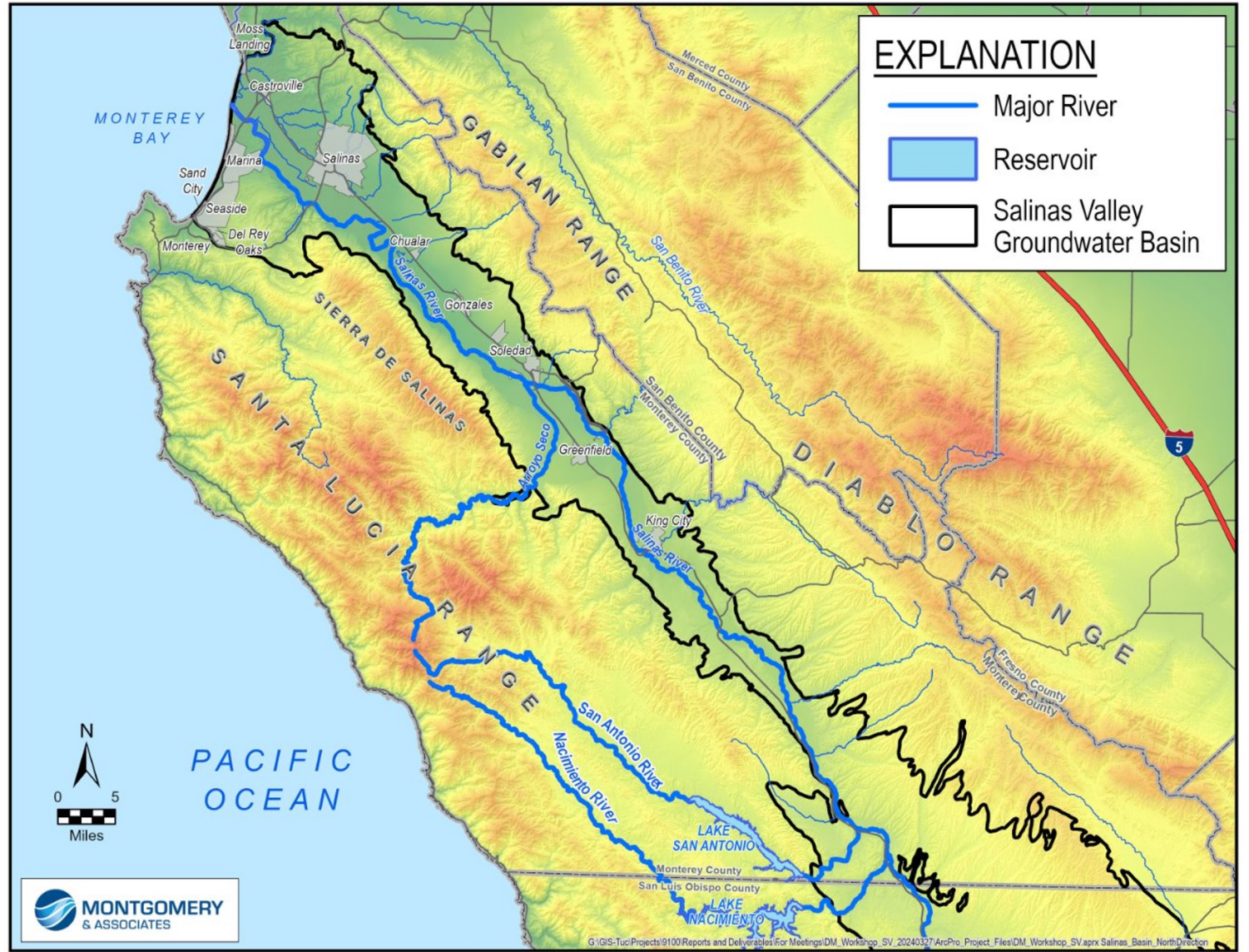
Our Water Future in the Salinas Valley

PLANNING FOR UNCERTAINTY

Overview of the Salinas Valley Groundwater Basin



Salinas Valley Basin
Groundwater Sustainability Agency



Water Use Underpins Economy

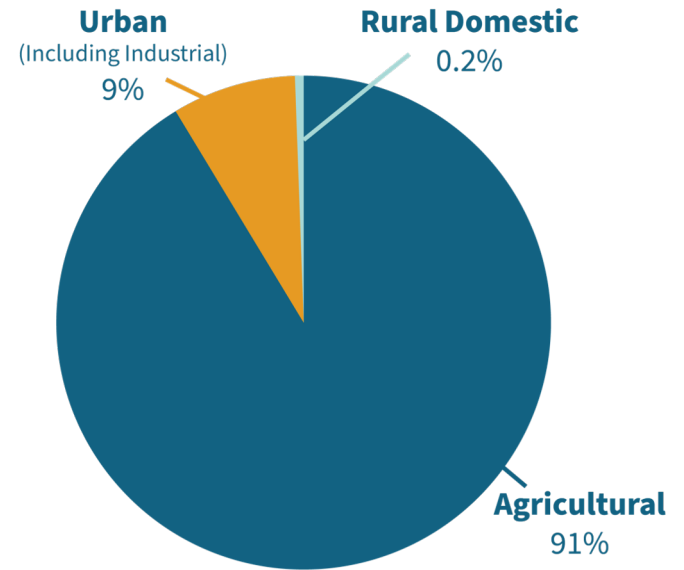
- Almost \$5 billion in direct economic outputs from Agriculture (2018)
- With ripple effect of what is re-spent in the County, Agriculture contributes about \$11.7 billion to the County's economy
- Agriculture accounts for 1 in 5 jobs in the County



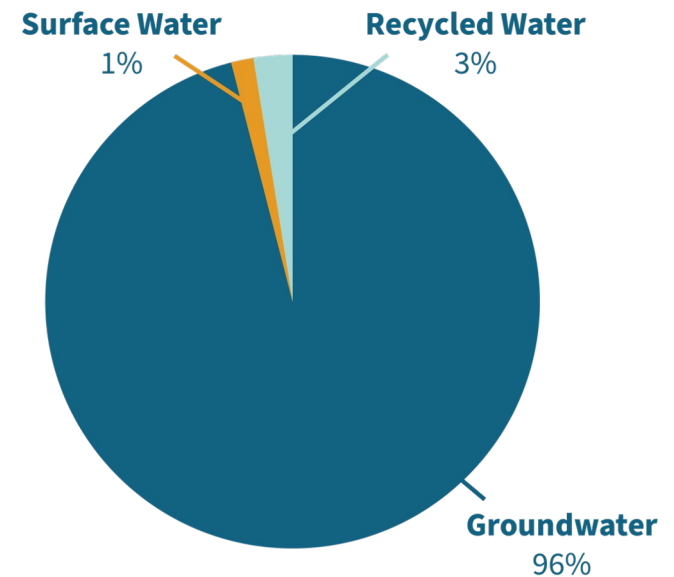
Agriculture Uses 91% of Water

***Environmental water
has not been quantified*

Water Use



Water Type



High Dependence on Groundwater

Urban



Groundwater
96%

Rural Residential



Groundwater
100%

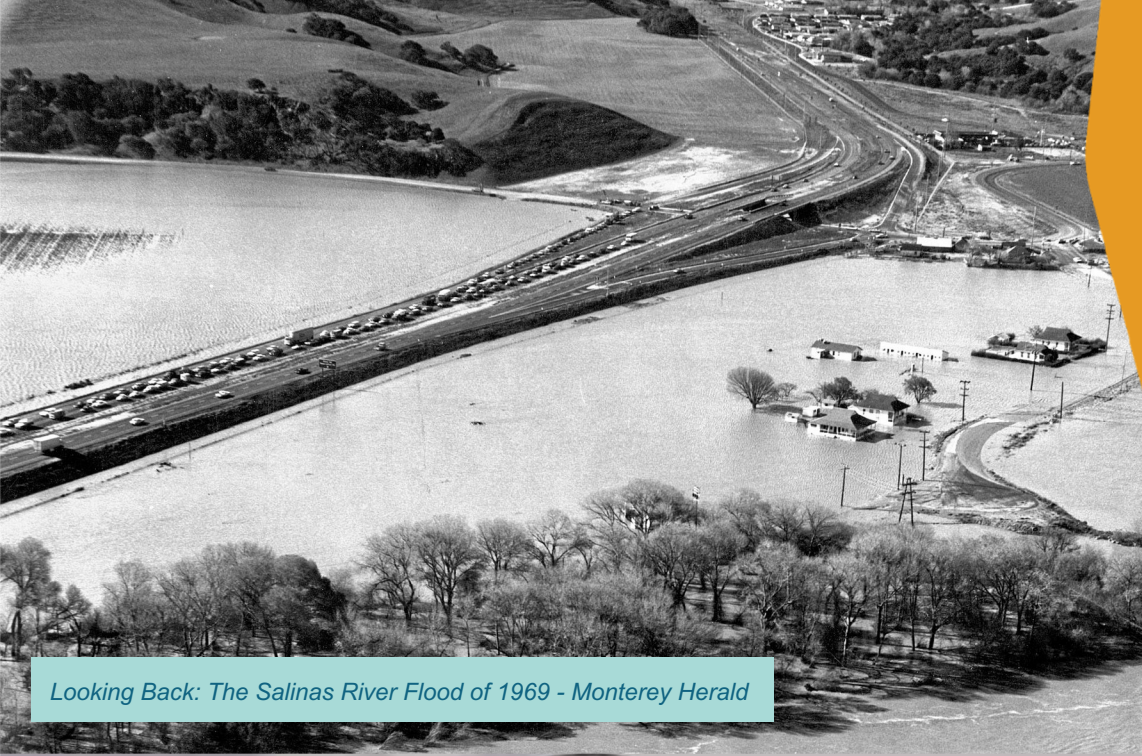
Agriculture



Groundwater
96%

Environmental





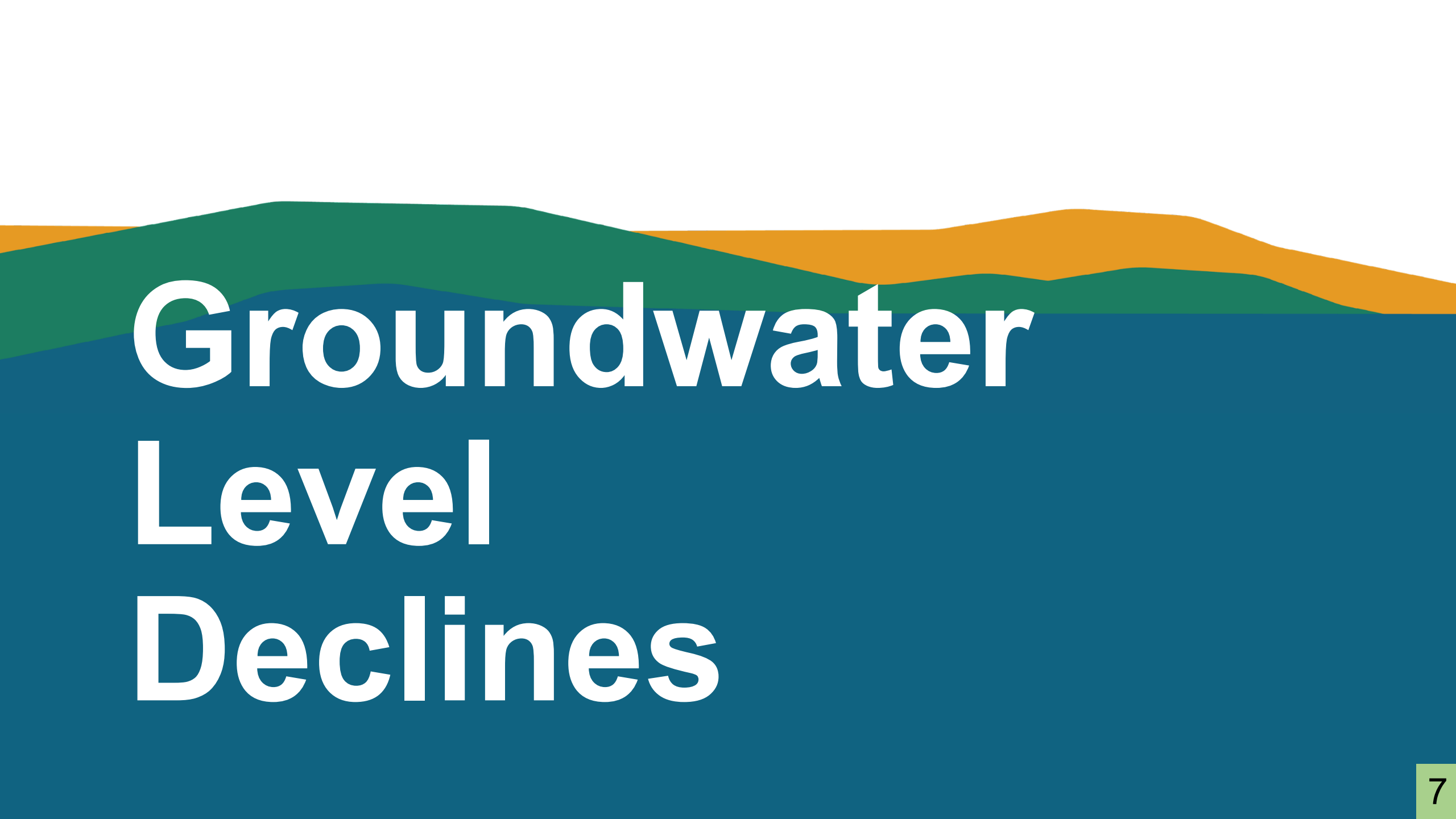
Looking Back: The Salinas River Flood of 1969 - Monterey Herald



George Rose, 2013

Water Use has Led to Challenges




- Groundwater Level Decline
- Loss of Groundwater in Storage
- Seawater Intrusion

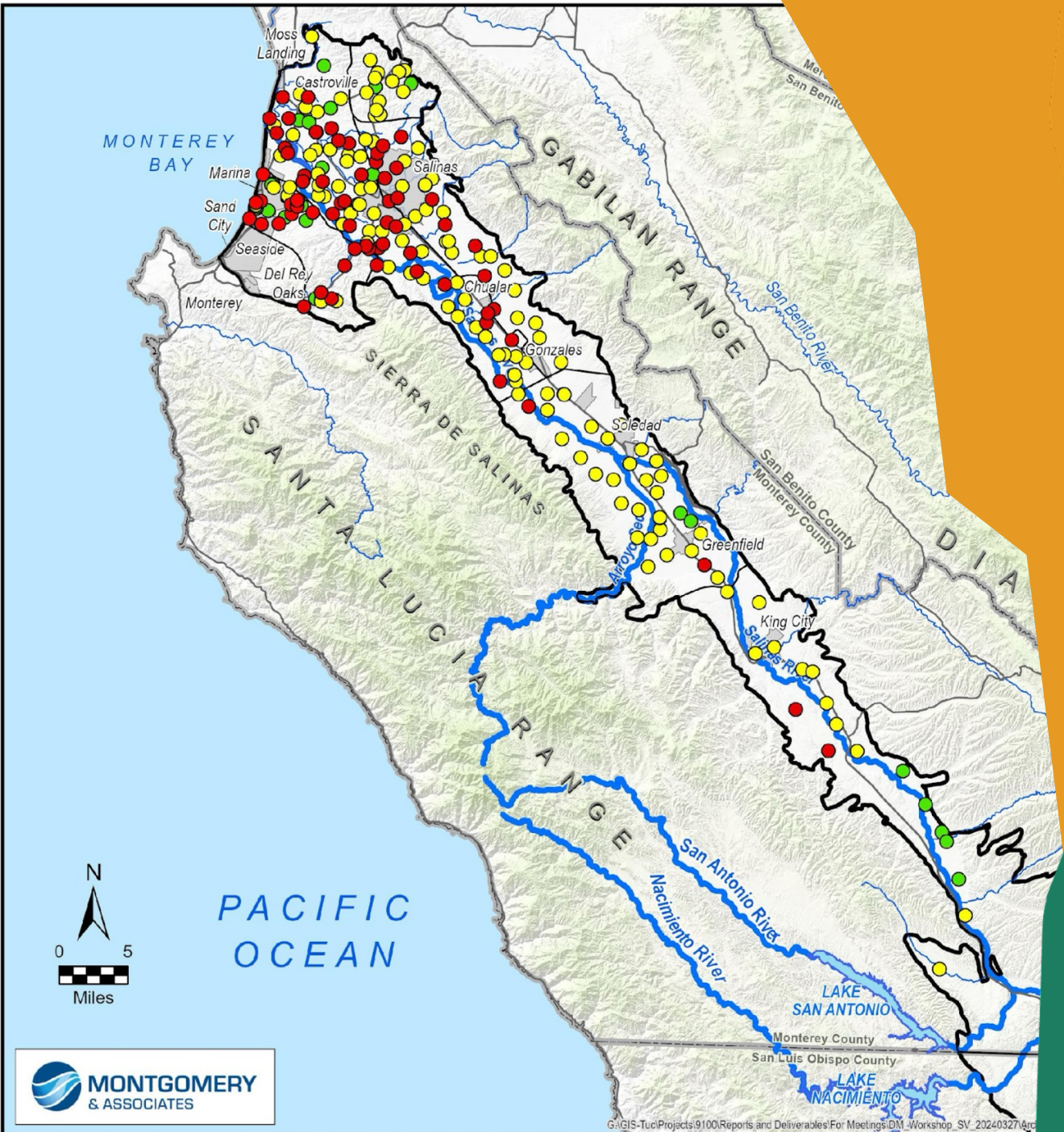


Groundwater Level Declines

2022

DRY CONDITIONS LED TO CRITICALLY LOW GROUNDWATER LEVELS

-  Critically low groundwater level
-  Low groundwater level
-  Sustainable groundwater level



An aerial photograph showing a large, muddy-brown reservoir in the center. To the left, a large, flat, brown field is partially submerged. To the right, a smaller reservoir is visible, surrounded by brown, flooded fields. The background shows green hills and a road. The image is overlaid with a dark blue, green, and orange abstract graphic on the left side.

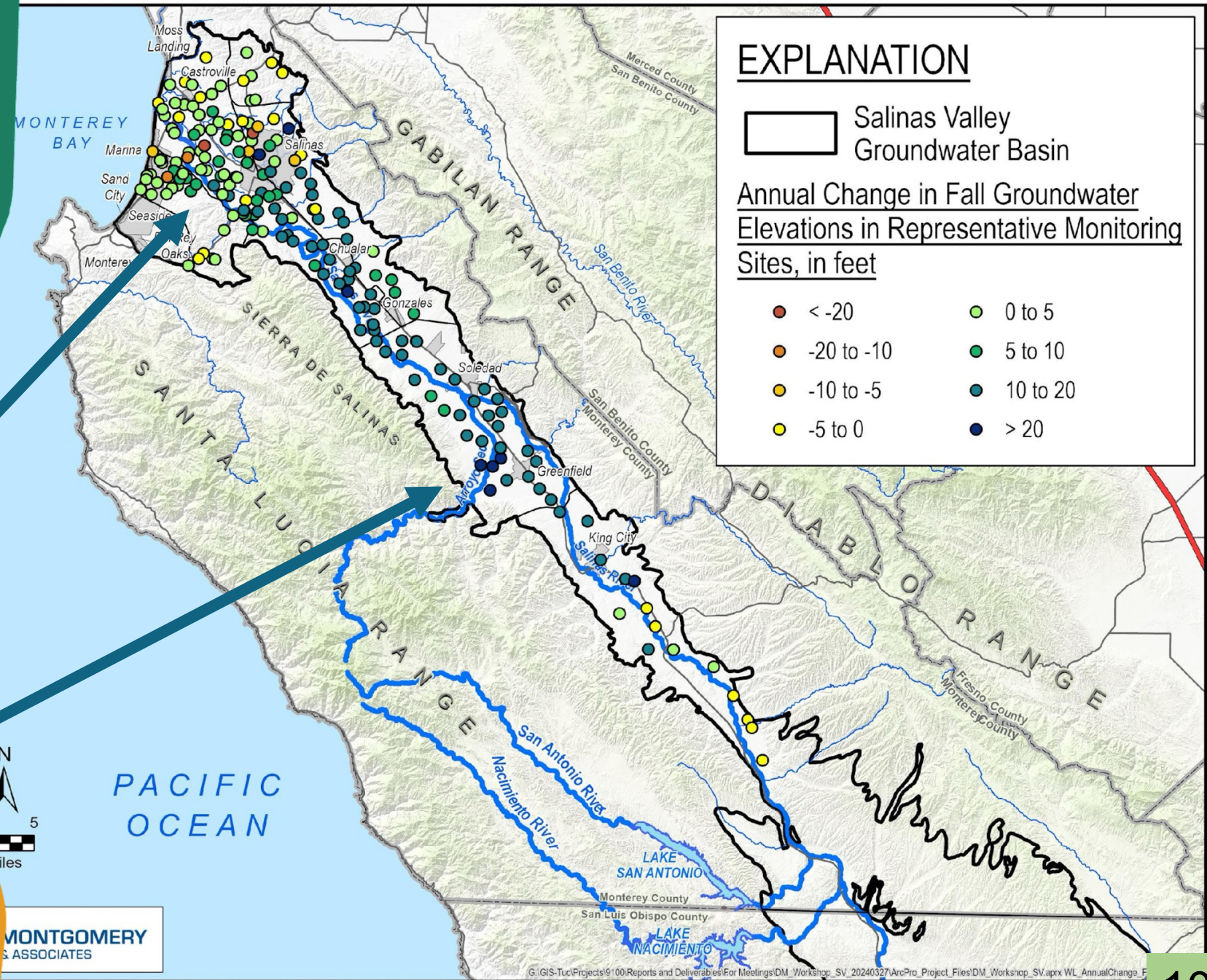
2023

WET CONDITIONS
LED TO FLOODING

Groundwater Level Change after Wet Year

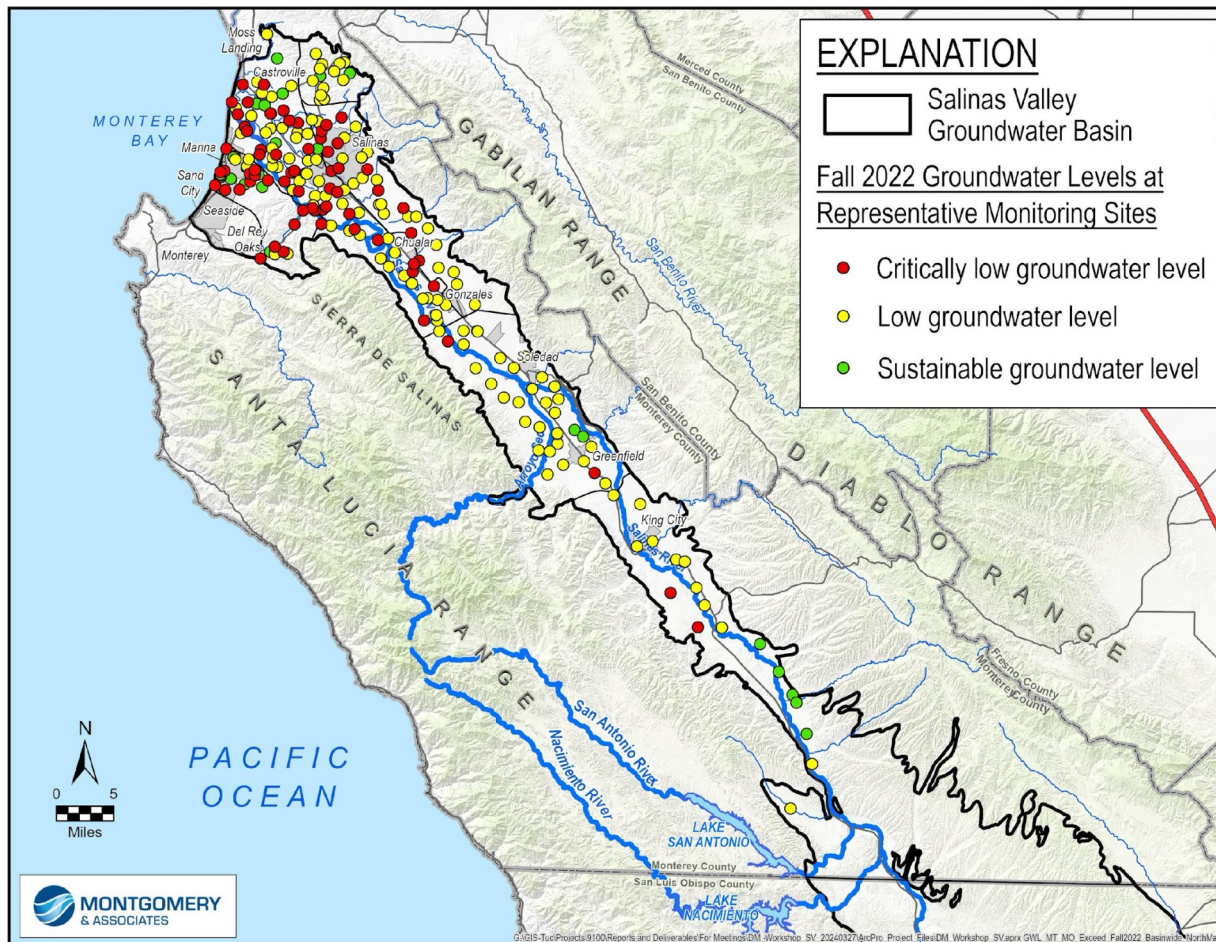
Declines in some wells

Increases in many wells

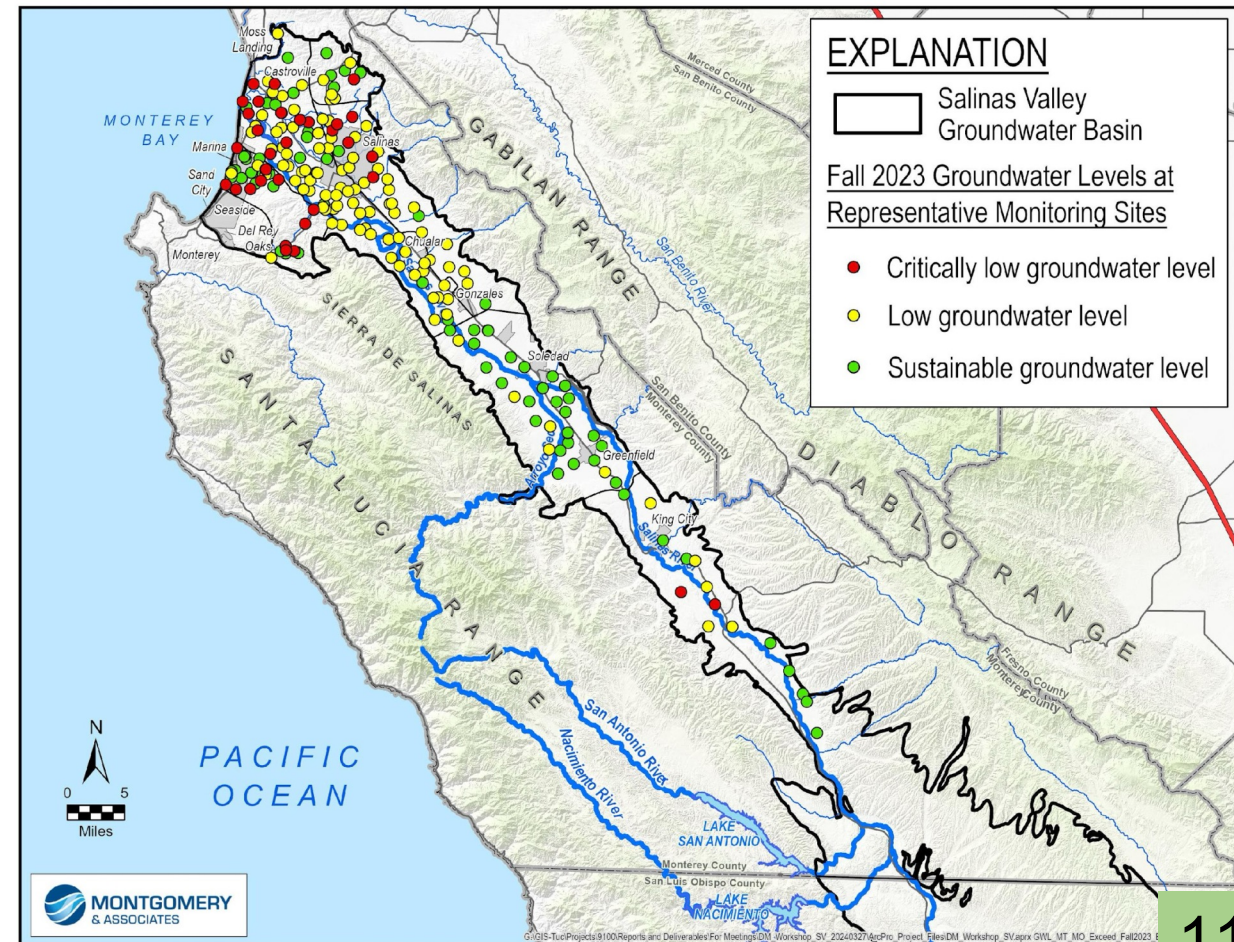


Still Wells with Critically Low Groundwater Levels

Dry-Normal 2022



Wet 2023

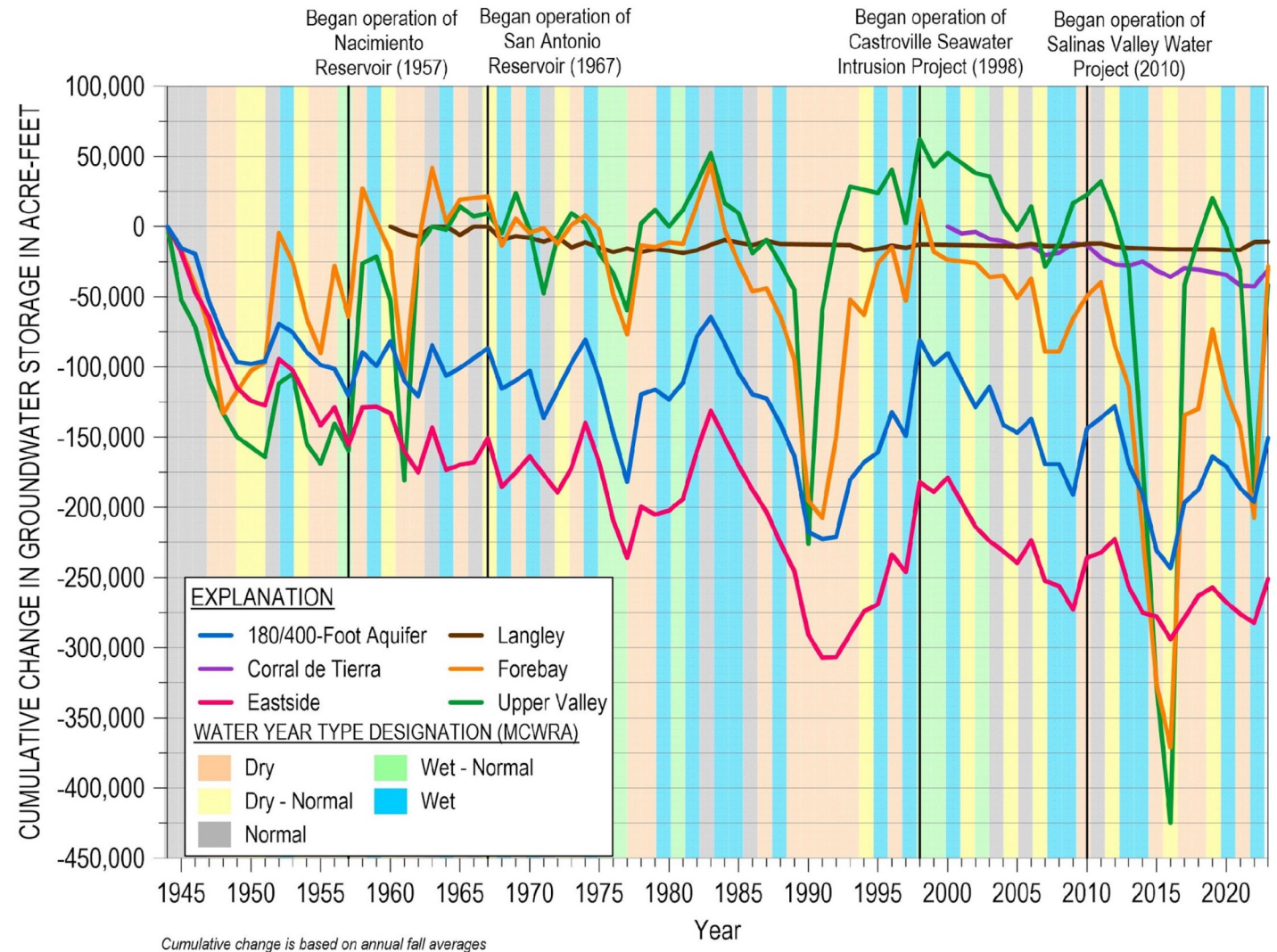




Loss of Groundwater in Storage

Long-Term Loss of Groundwater Throughout the Valley

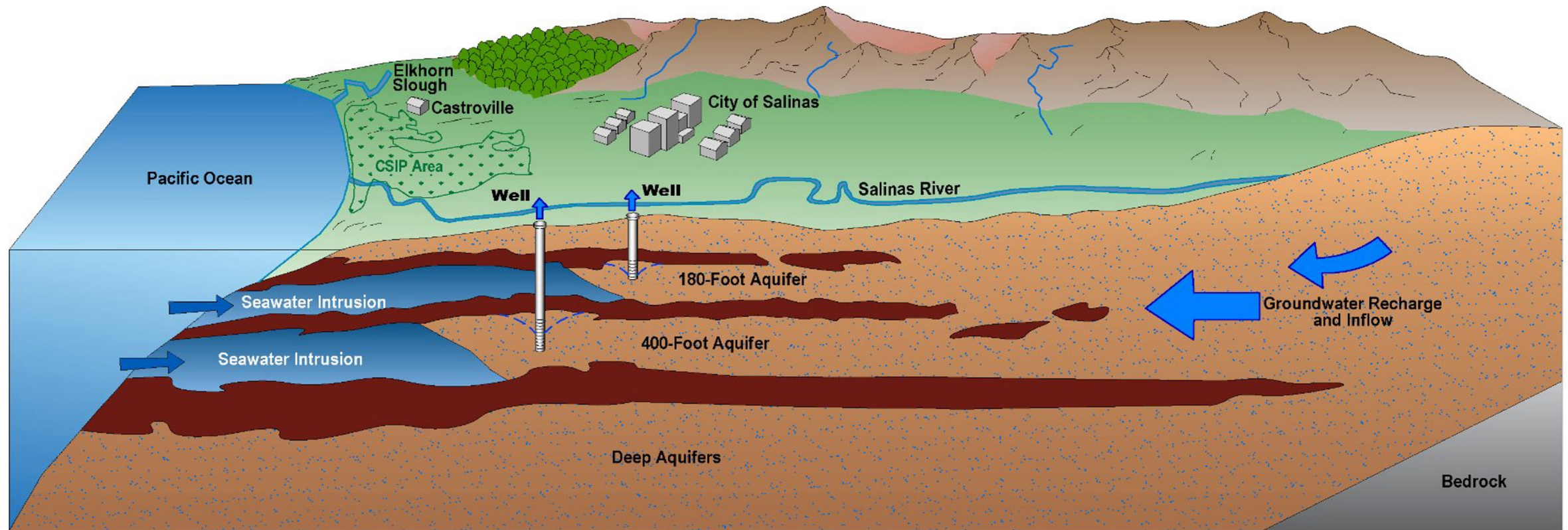
- Result of groundwater level declines
- Less water to supply agriculture and municipalities
- Exacerbated by droughts





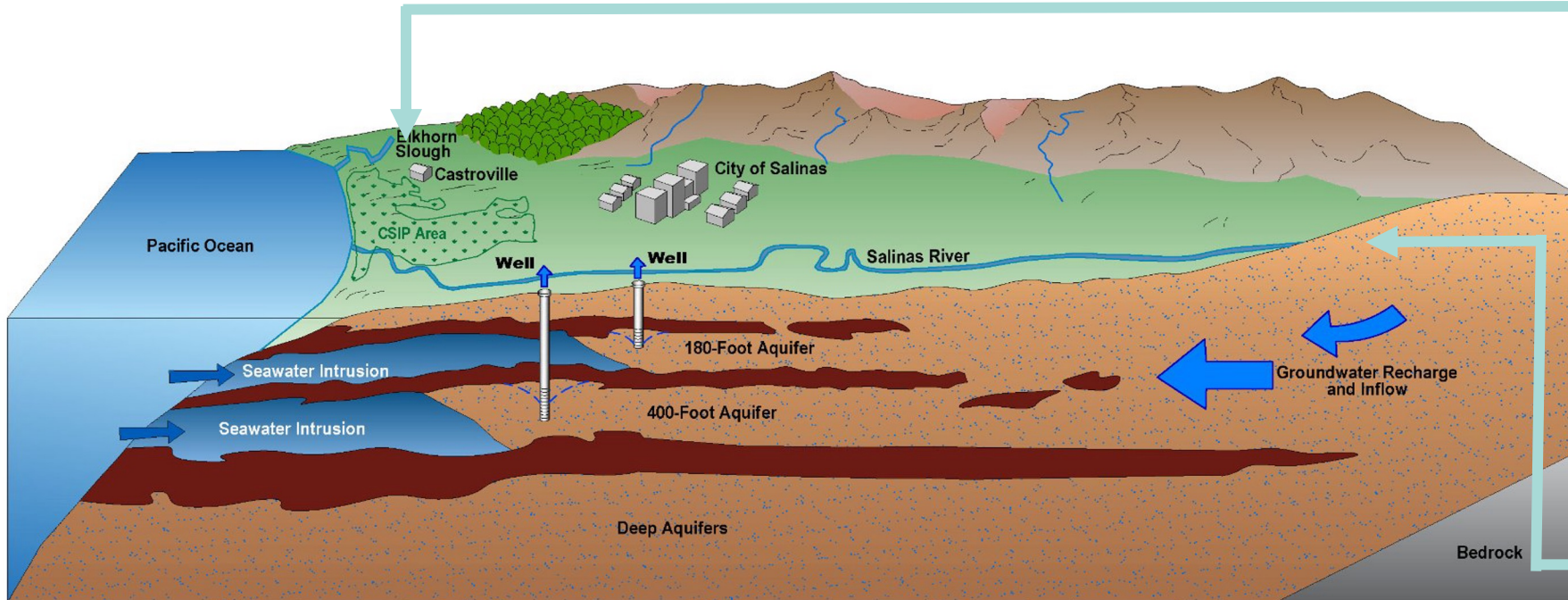
Seawater Intrusion

Decline in Groundwater Levels Contributes to Seawater Intrusion



Monterey County Water Resources Agency Developed

Water Infrastructure

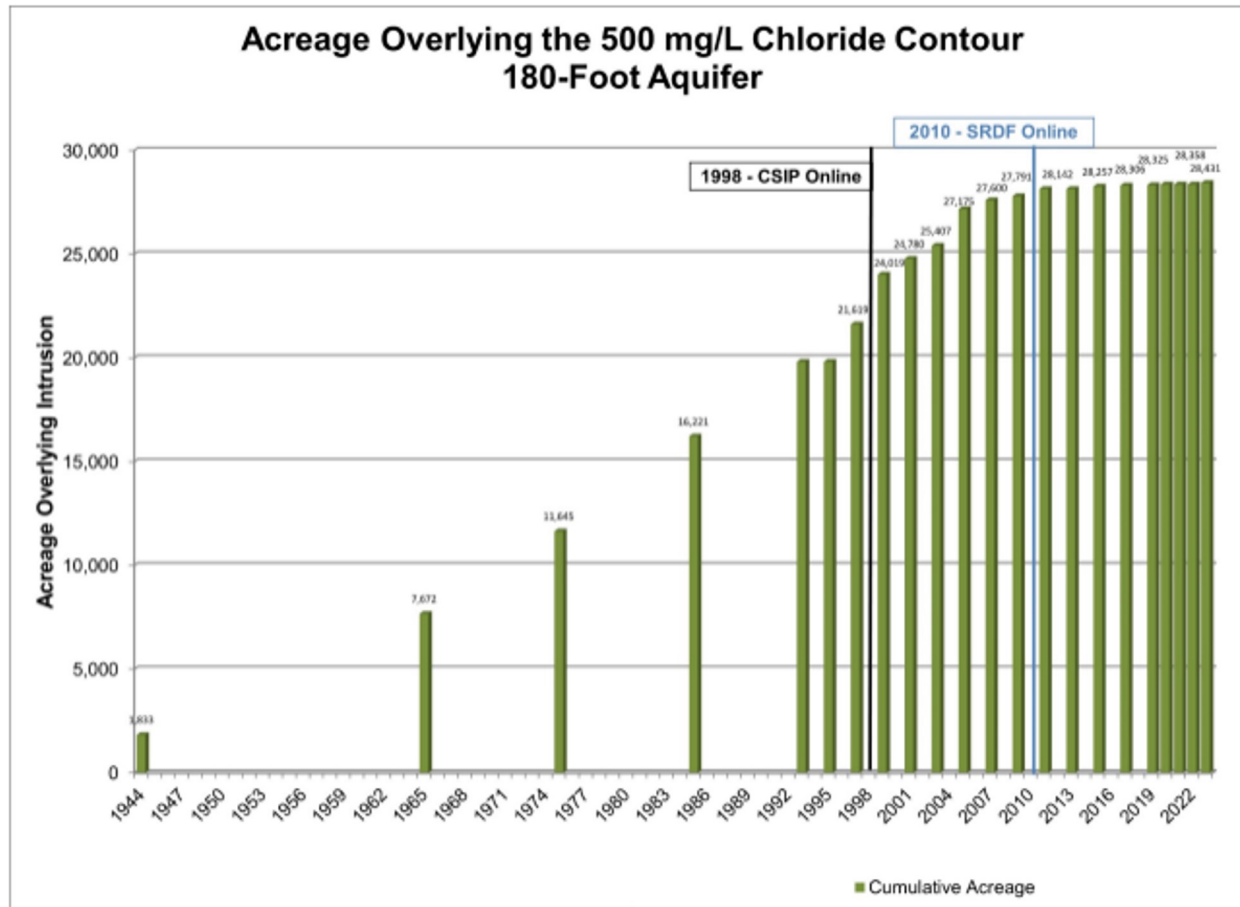


CASTROVILLE
SEAWATER
INTRUSION PROJECT



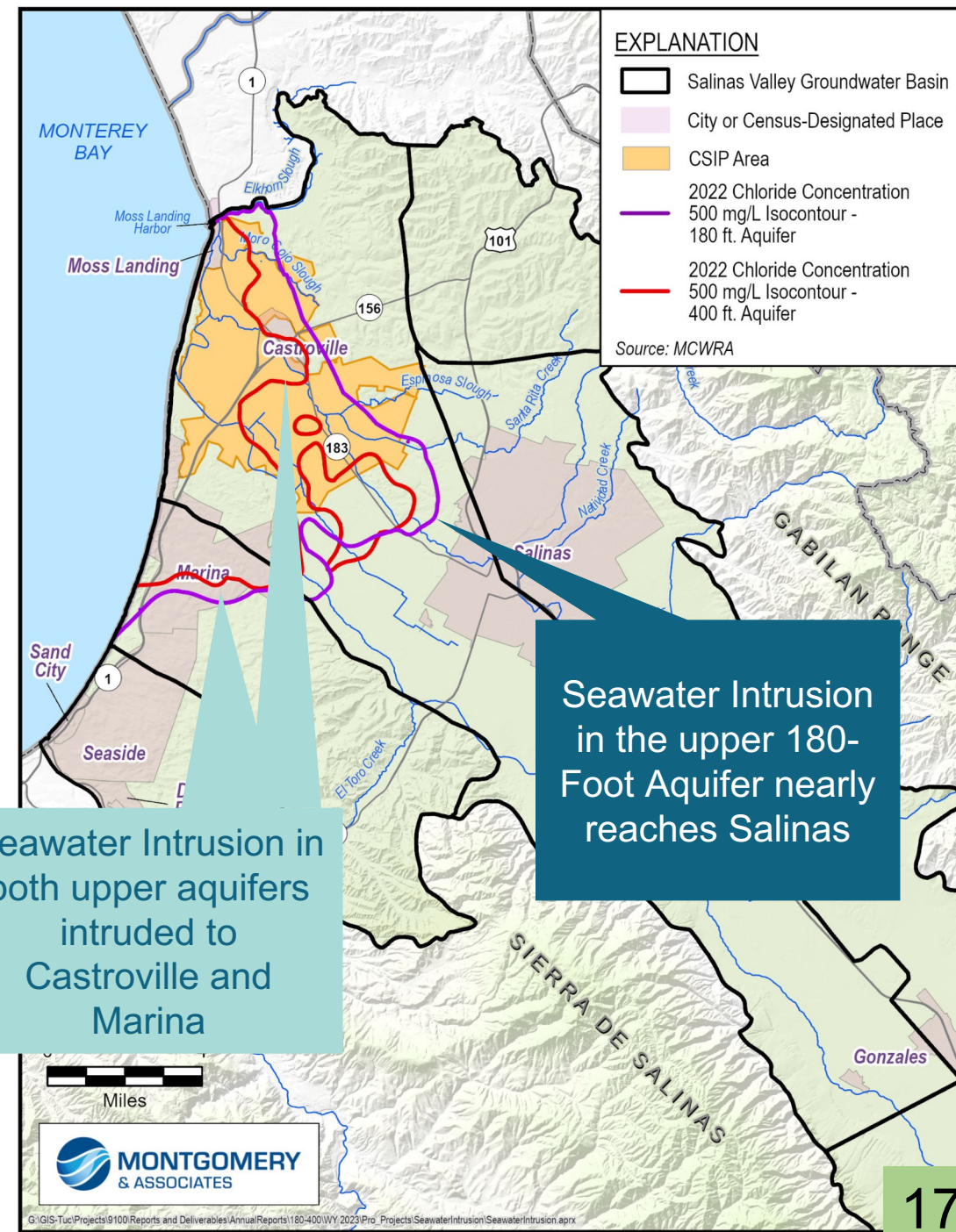
RESERVOIRS

Rate of Seawater Intrusion has Slowed but not Stopped



Seawater Intrusion in both upper aquifers intruded to Castroville and Marina

Seawater Intrusion in the upper 180-Foot Aquifer nearly reaches Salinas



Additional Water Challenges

- Dry wells
- Nitrate contamination
- Naturally occurring arsenic
- Environmental habitat degradation

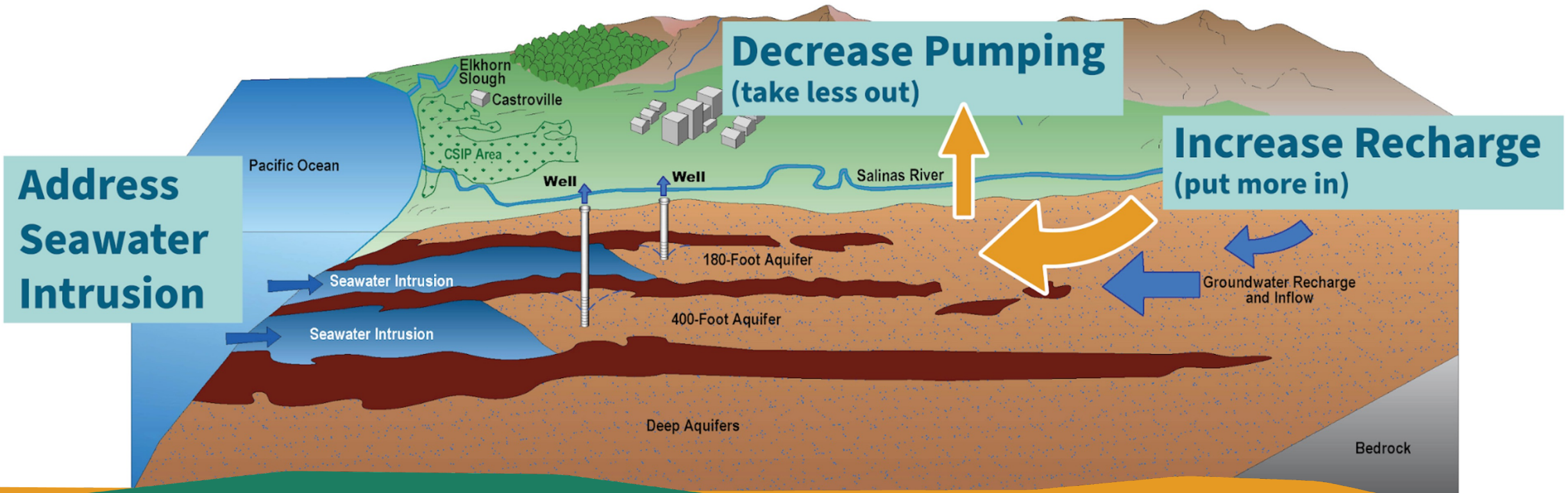
Need to Plan for Uncertainty

- Groundwater Levels have fluctuated over time
- Negative impacts from both floods and droughts
- Need to manage and plan for uncertainty and extremes
- Groundwater levels need to be raised in many areas



How Can Groundwater Levels

BE RAISED?





Questions

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