

Welcome to the SGM Project Panel



Program Overview

1. Introduction by Christina Buck, Assistant Director, Butte County

2. Panelist Presentations:

Joel Kimmelshue, Land IQ – Overview of Demand Reduction Strategies for the Vina Subbasin which includes evaluation of two programs: Extend Orchard Replacement and Precision Irrigation

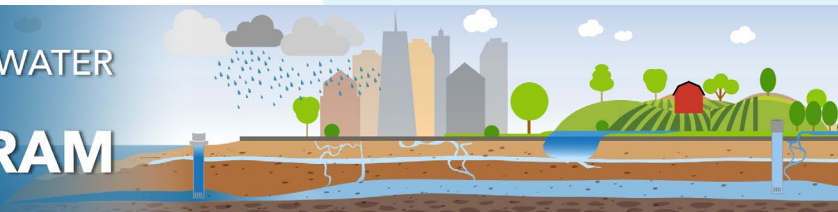
Jenny Scheer, Water and Land Solutions, LLC - Description of water supply projects under consideration to expand the use of surface water for irrigation in the Vina Subbasin

Joe Turner, Geosyntec – Description of Recharge Investigation and Feasibility- Level Analysis to increase direct recharge in the Vina S Subbasin

3. Panel Discussion and Questions/Answers

SUSTAINABLE GROUNDWATER
MANAGEMENT (SGM)

GRANT PROGRAM



Introduction to the Portfolio Approach to Groundwater Sustainability

Christina Buck, Ph.D.

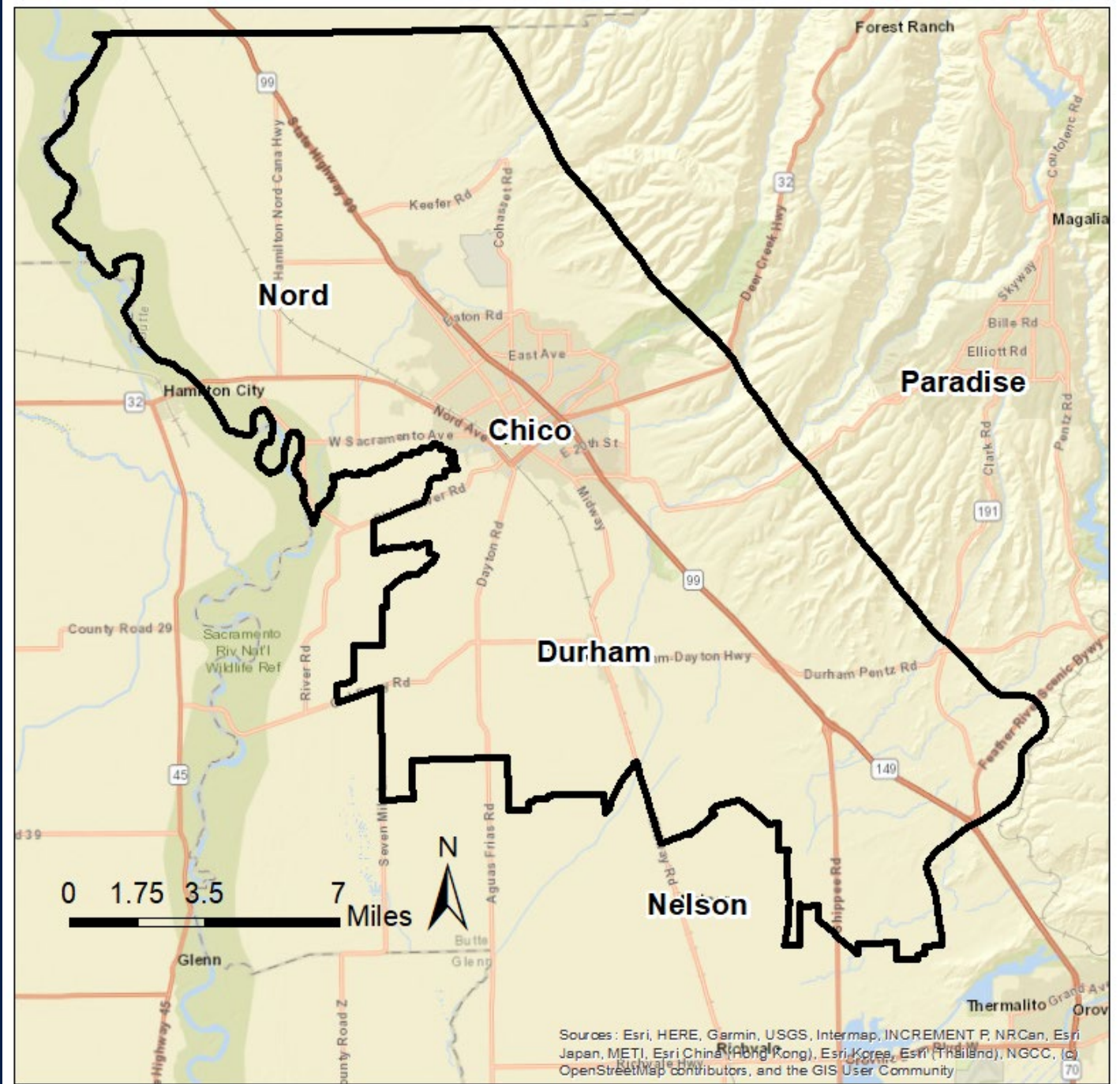
Assistant Director

Butte County Department of Water and
Resource Conservation

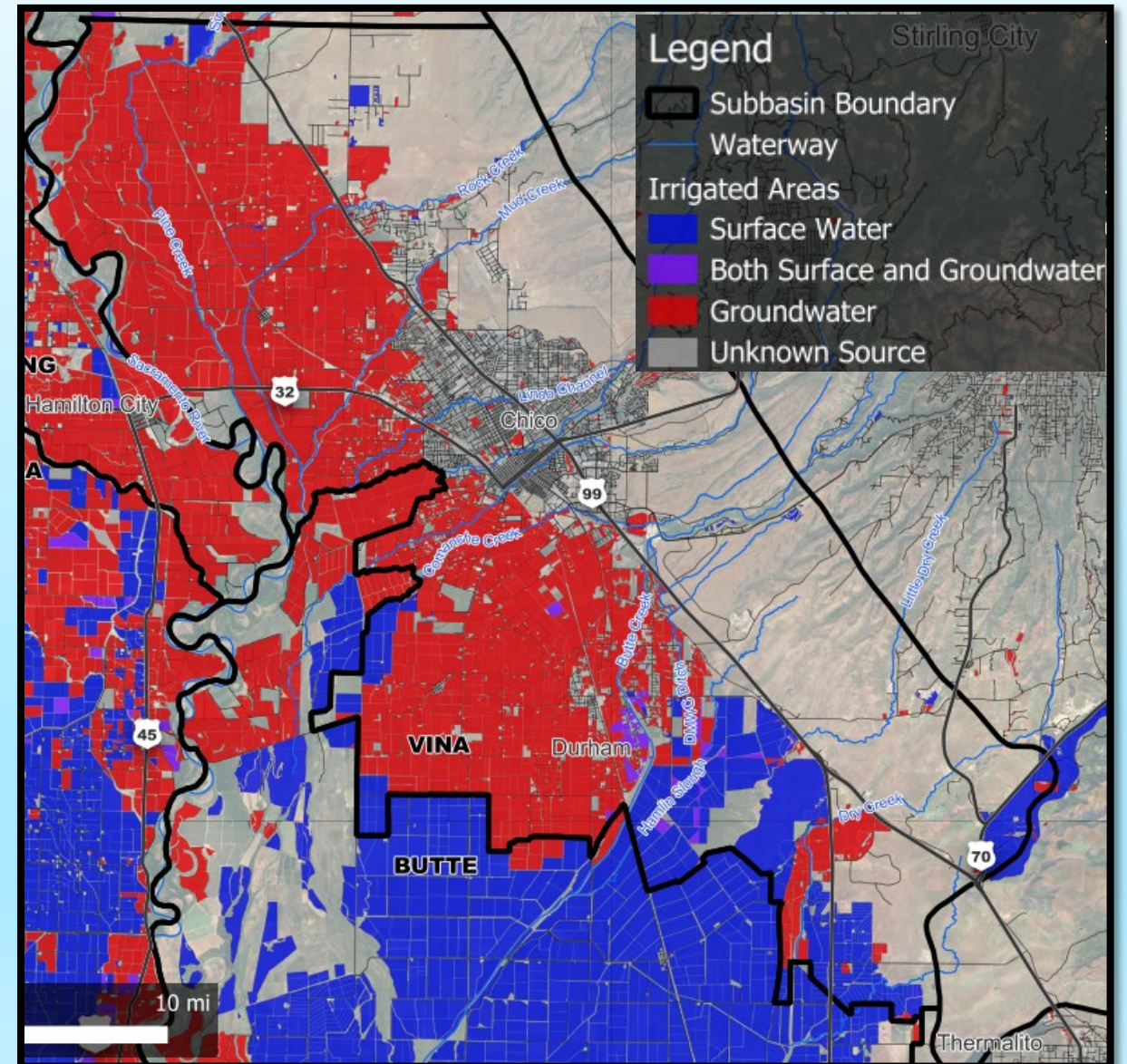
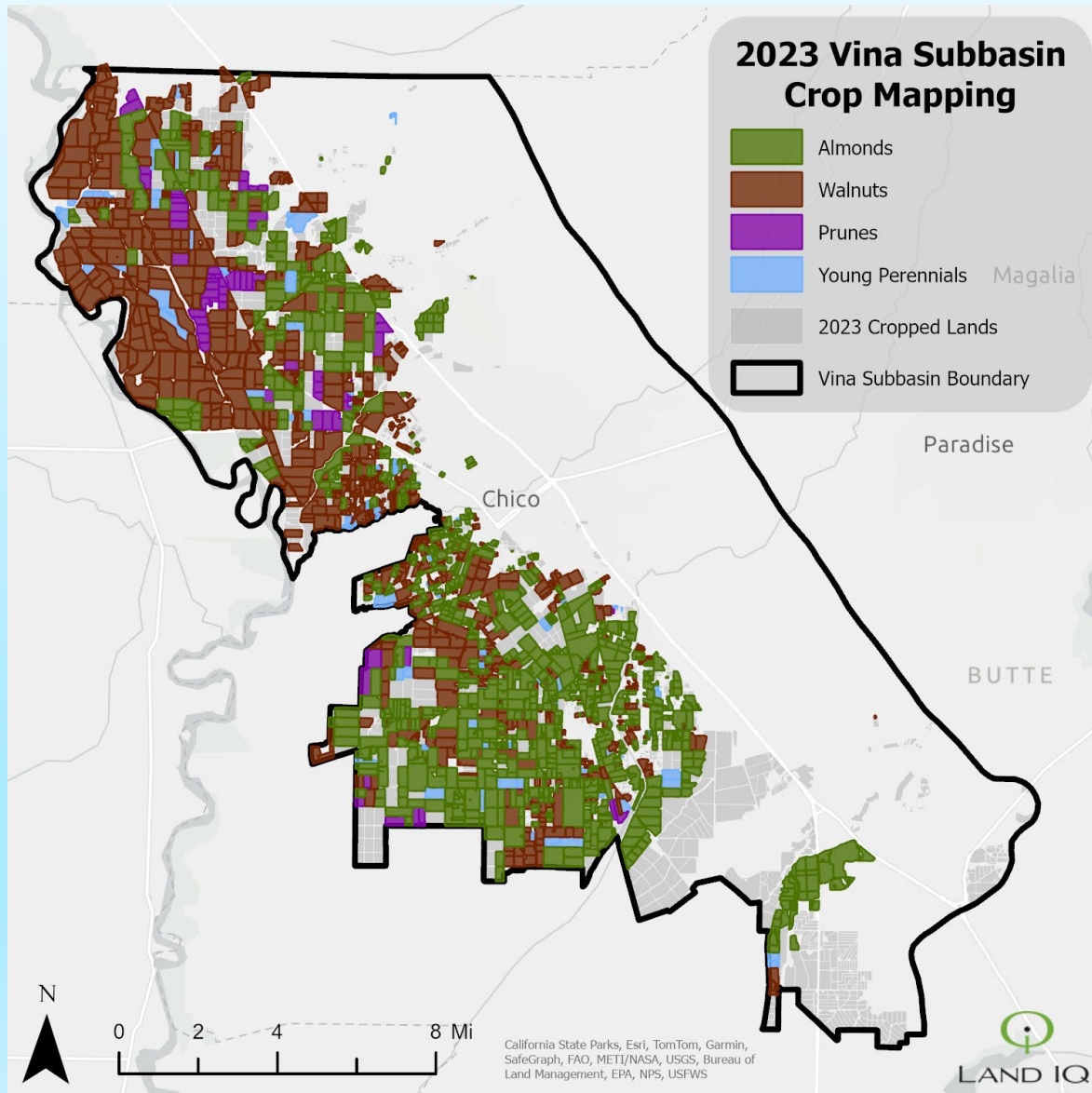


Vina Subbasin

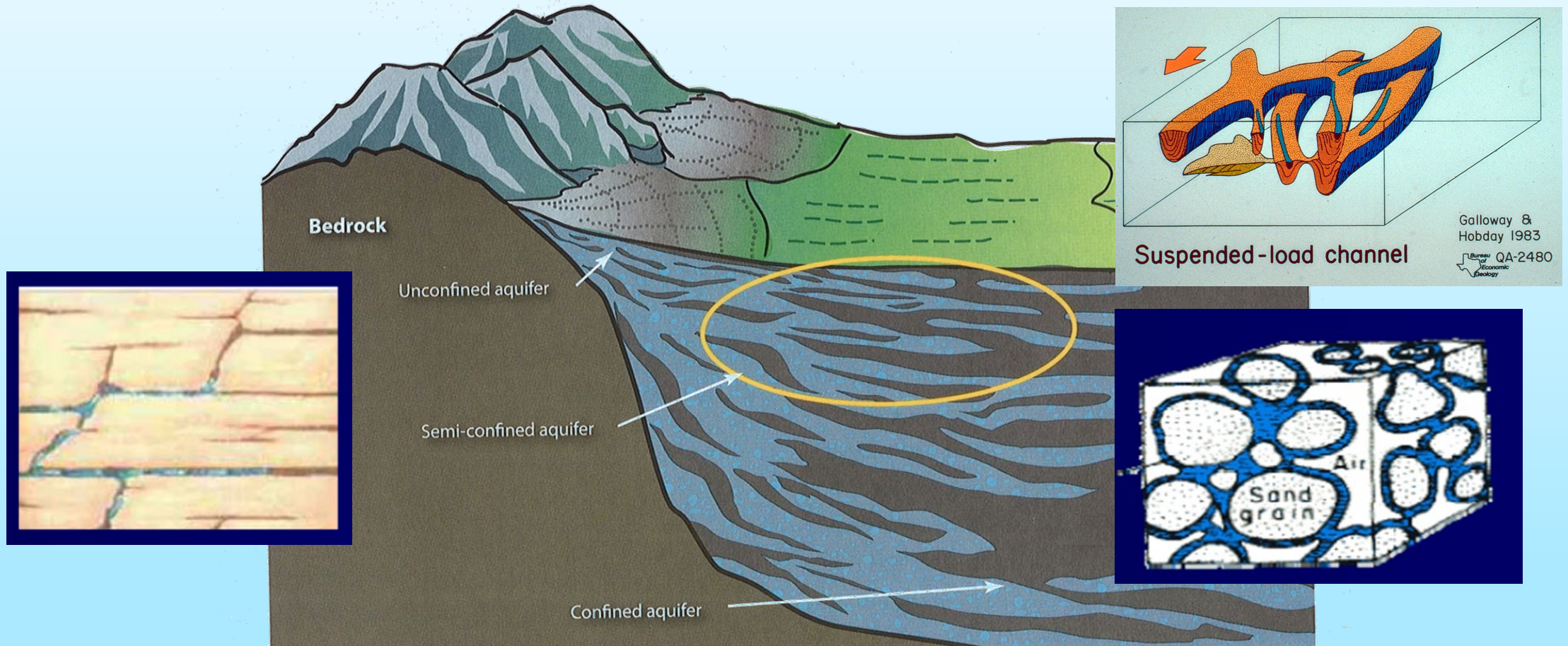
Two Agencies Responsible for Groundwater Management:



Land Use and Water Source



Groundwater Basics

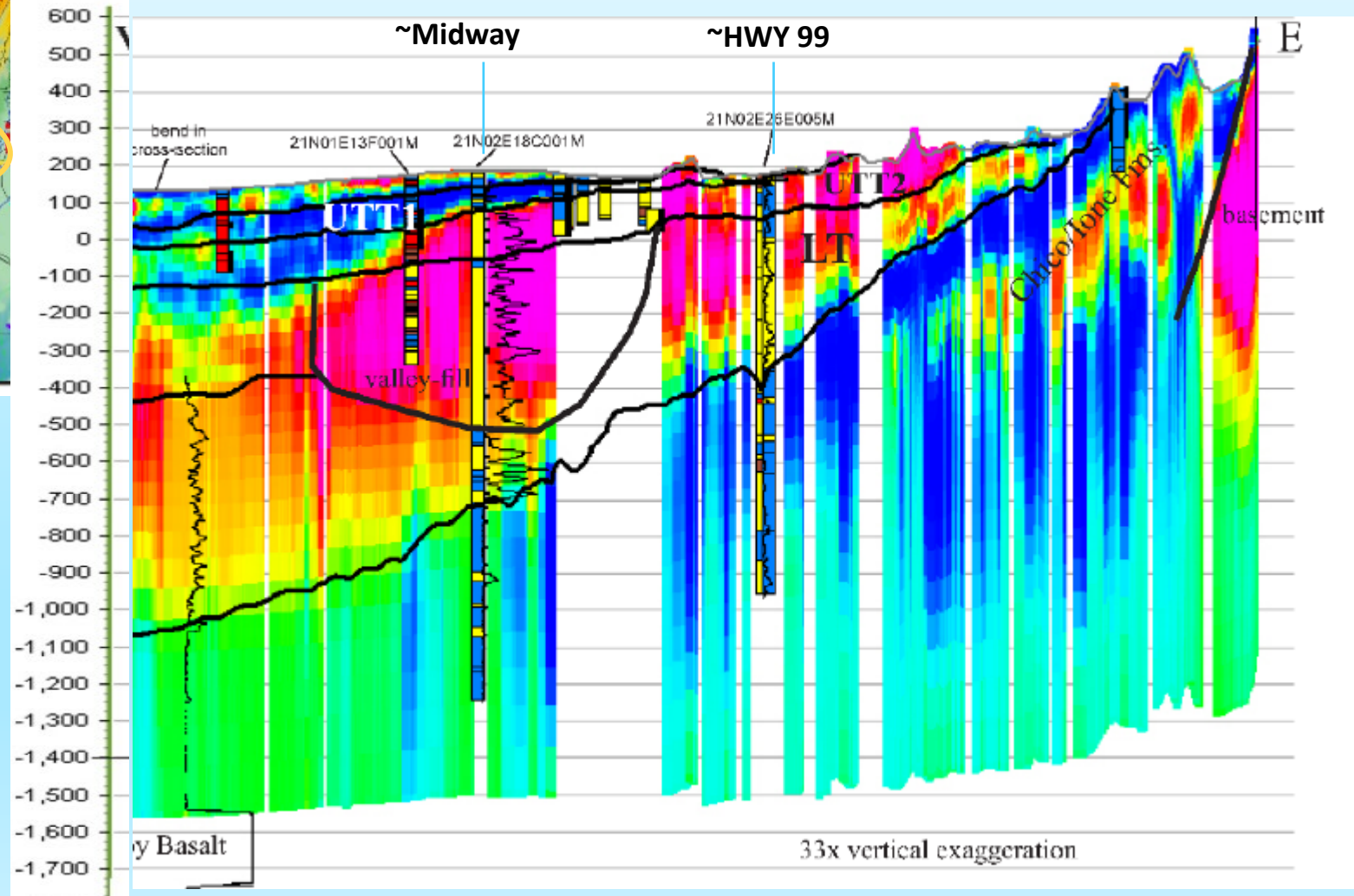
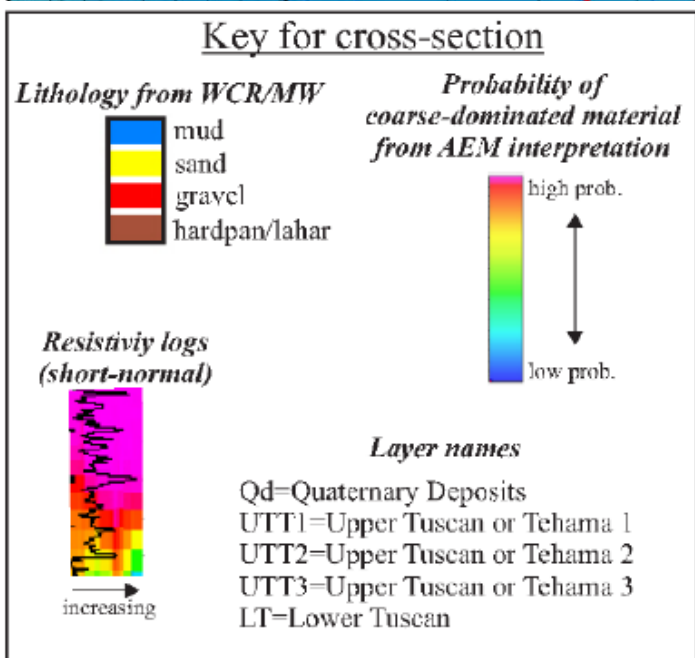
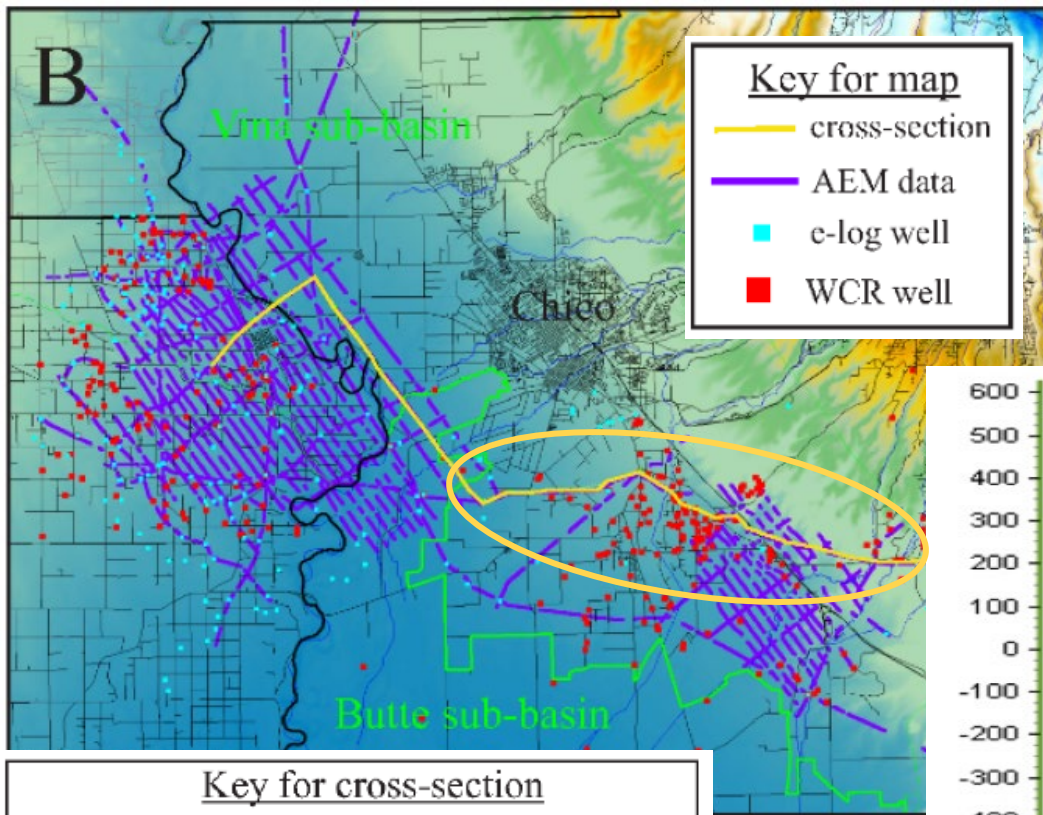


Harter and Rollins 2008: ANR Publication 3497

Aquifer dynamics- How groundwater moves in, out, and through the system

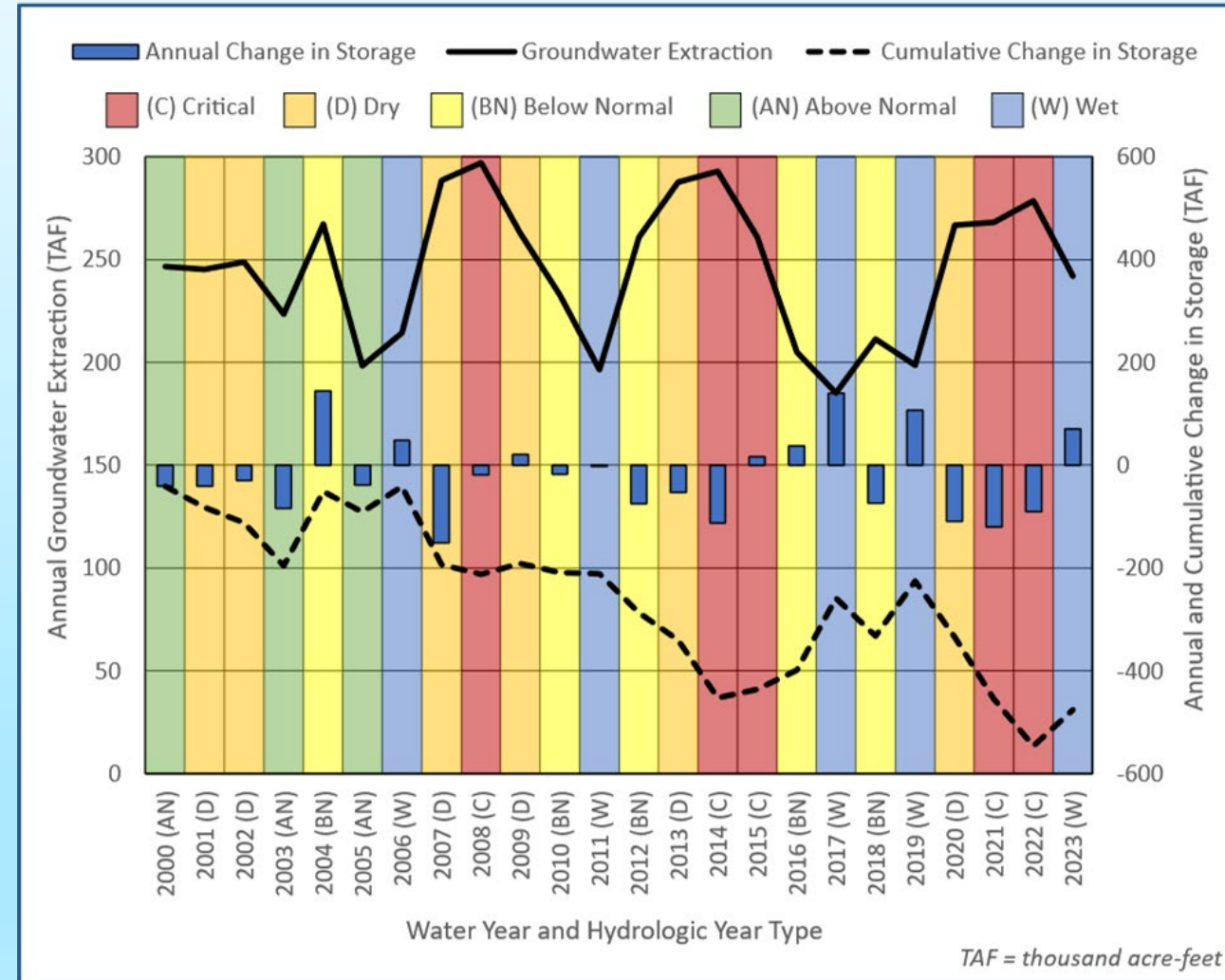
Wells and technology give us a view into the aquifer system structure

- Coarse grained material, coarse dominated= sands/gravels
- Fine grained material, fine-dominated= silt/clay



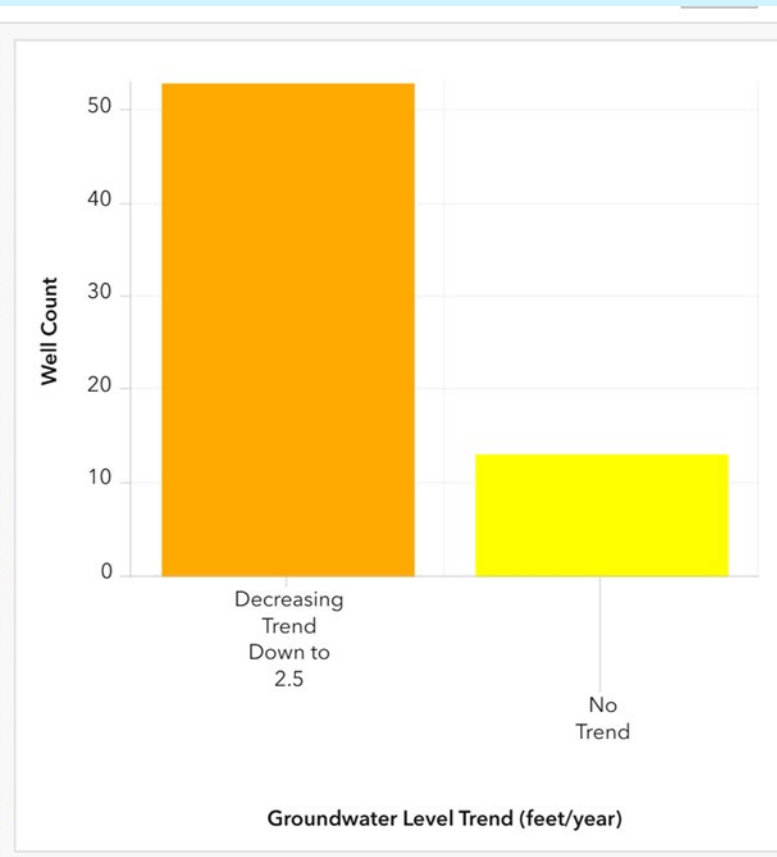
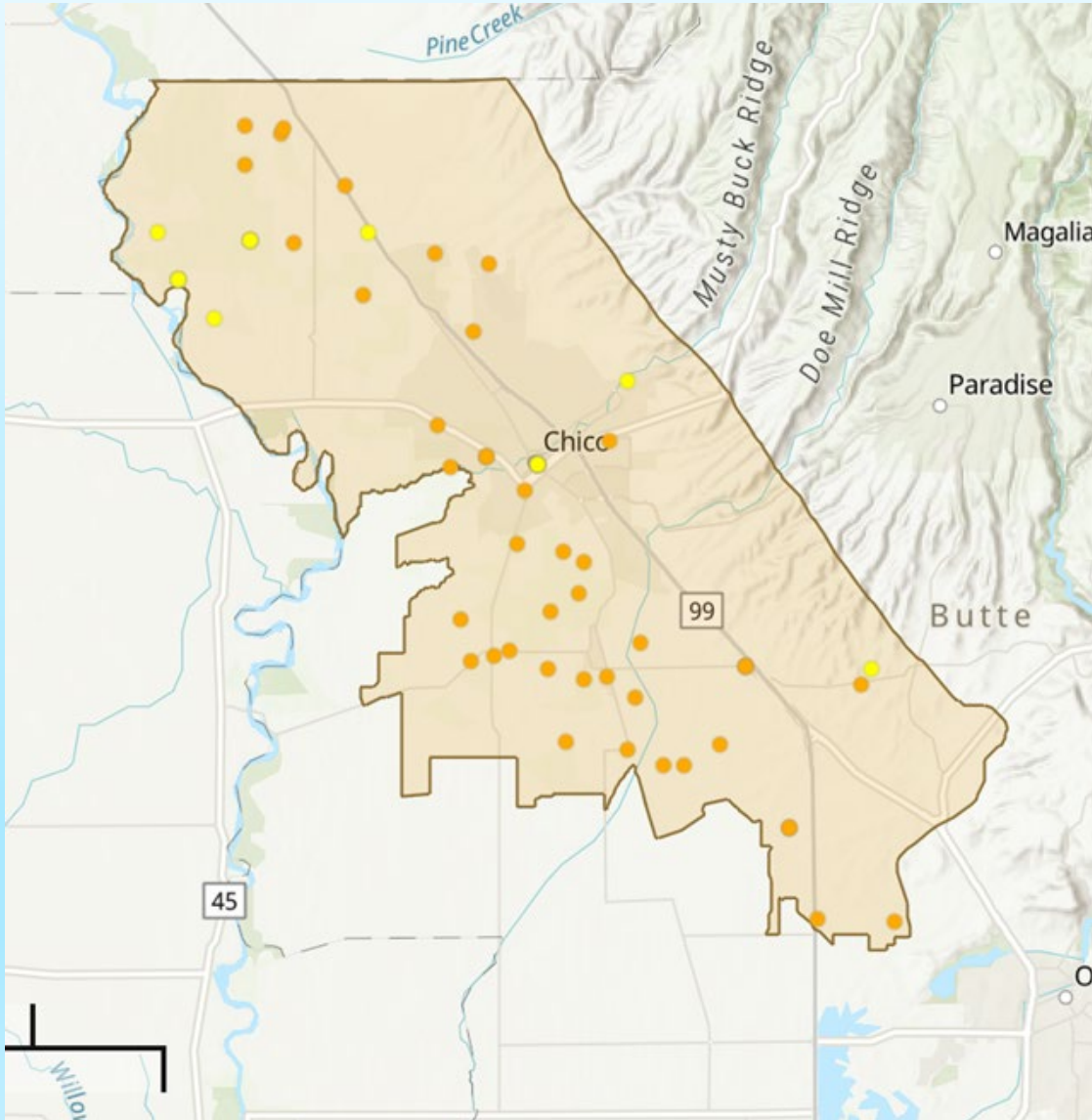
Vina Subbasin

- **State designated High Priority Basin**
- **90/10 groundwater/surface water**
- **Groundwater levels improved since 2020-2022 drought**
 - *Increased by 5 feet on average (2023 WY)*
- **Long-term trend shows declining levels since 2000**
- **Action is needed to level off or improve groundwater conditions**



20 Year Groundwater Level Trend

Most monitoring wells across the subbasin show long-term decreasing trend in water levels to some degree



Wells with the greatest declines in water levels are on the order of 25- 30 feet decrease

Approach to Groundwater Sustainability

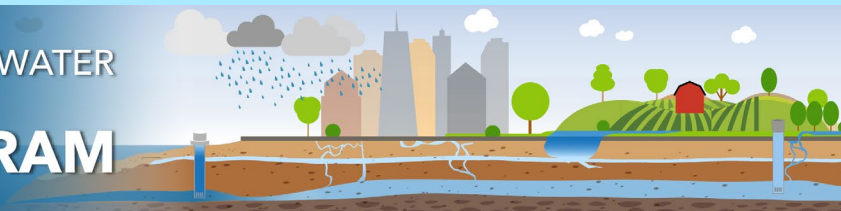


Background



- California Department of Water Resources Sustainable Groundwater Management (SGM) Implementation Grant
 - Vina Groundwater Sustainability Agency (GSA) awarded \$5.5M
- Vina GSA Board approved the approach to partner with Butte County Department of Water and Resource Conservation and Agricultural Groundwater Users of Butte County (AGUBC) to lead portions of the grant funded work.

SUSTAINABLE GROUNDWATER
MANAGEMENT (SGM)
GRANT PROGRAM



Grant Funded Projects




Funding End Date:
March 2026




Data Gap Identification
and Data Improvement



Water Supply and
Recharge Feasibility  Today!



Demand Reduction
Strategies  Today!



Inter-basin Coordination
Analysis and Modeling



Lindo Channel
Recharge Feasibility 



Outreach Program



Long-Term Fee Study



Grant Administration

<https://www.vinagsa.org/sustainable-groundwater-management-grant-funded-projects>