

Fox Canyon Water Market

California Water Commission - Panel Discussion

August 18, 2021



Introduction



Executive Director, CERF
California Lutheran University

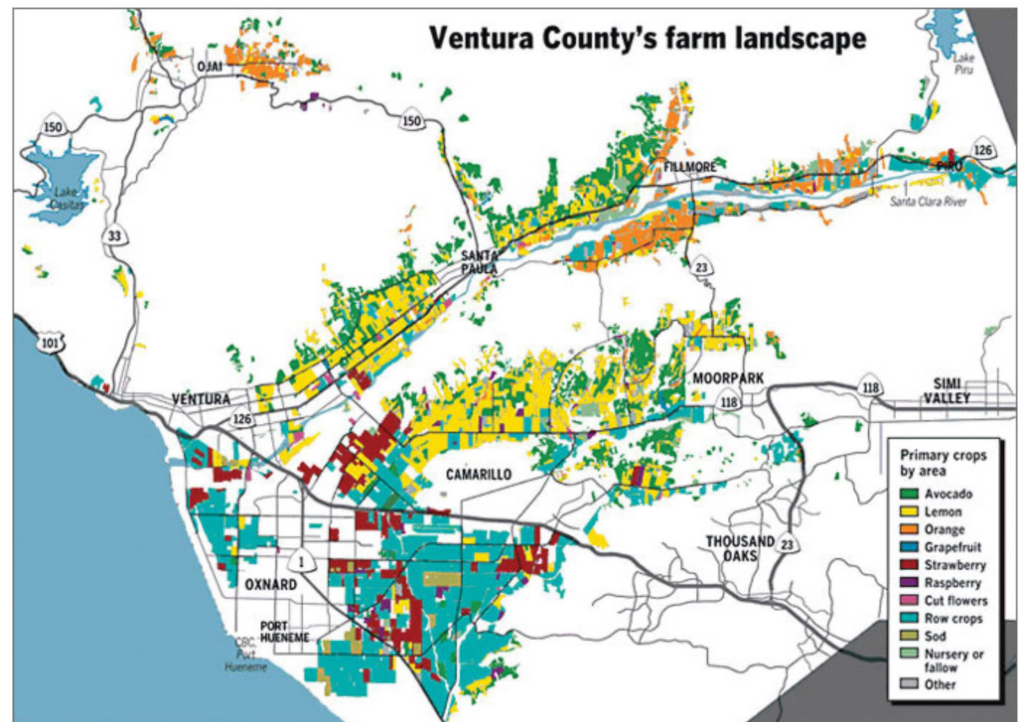
Exchange Administrator
Fox Canyon Water Market

Founder
Environmental Market Specialists

Fox Canyon Groundwater Management Agency

Special Act District created in 1982

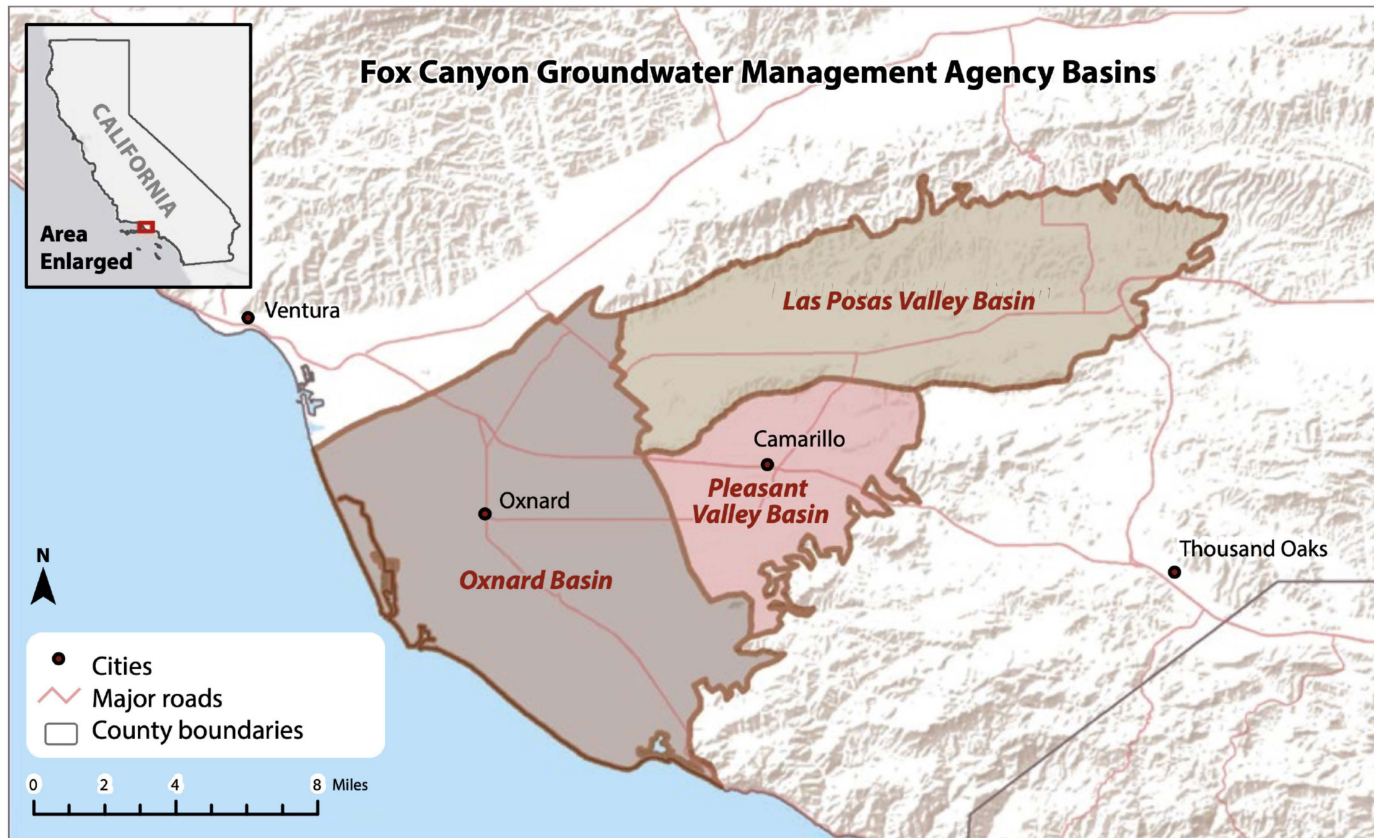
- Jurisdiction over 55,000 acres of prime agricultural land (300+ active ag. wells)
- Required metering (1987)
- Established *Safe Yield* and quantified allocations (1990)



Fox Canyon Groundwater Management Agency

SGMA-designated Groundwater Sustainability Agency (GSA)

- Two *critically overdrafted* basins (40-50% anticipated pumping reduction)

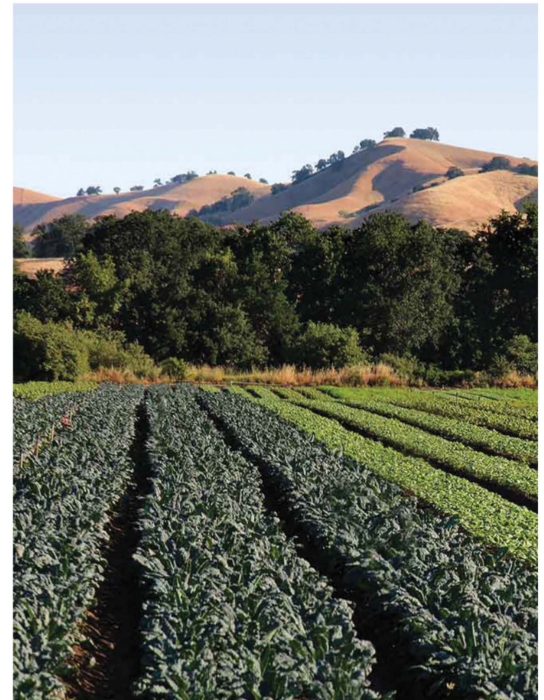


Implementing a *Water Market* as an element of GSP

Fox Canyon Water Market Group (WMG)

WMG Progress

- 50+ members, including Ag, Municipal & Environmental water users
- 14 biweekly meetings, totaling 40 hours of research & deliberation
 - Case Studies, adjudicated basin survey (Ayers 2016)
 - Presentations by water market operators
 - Online information portal
- Unanimously approved recommendations
 - Water Market Goals & Objectives
 - Rules, structures, operating mechanisms
 - Formal, centralized exchange
 - Universal telemetric monitoring (AMI)
 - Adaptive Approach (Pilot Markets)



Essential components of well designed markets

Clear objectives, rules to achieve those objectives and an effective governance system

- Water market goals and rules should be tailored to stakeholders' needs

A public and transparent process of market design

- Market will benefit from diverse input of growers, cities and environmental groups

An allocation system that is designed with the market in mind

- Not every allocation system is compatible with a market

Essential components of well designed markets

Accurate water use data

- You cannot monitor or buy & sell what you do not *measure*
 - There is a tradeoff between cost and accuracy

Market testing, evaluation and adaptation

- This requires a systematic approach to measuring progress

Rules and mechanisms that limit Market Power and mitigate adverse third-party impacts

- Markets can produce *positive* externalities but can also do harm

The Importance of Good Design

OUTLOOK

The first SGMA groundwater market is trading: The importance of good design and the risks of getting it wrong

Groundwater markets are a promising tool for basins implementing SGMA, but they are complex, and good design is essential.

Sarah Heard, Director, MarketLab, The Nature Conservancy

Matthew Fienup, Executive Director, Center for Economic Research and Forecasting, and Assistant Professor, California Lutheran University

E. J. Remson, Senior Project Director, California Water Program, The Nature Conservancy



The Fox Canyon groundwater market operates in a large area of Ventura County that includes over 55,000 acres of high-value agricultural land and 500 active agricultural wells. A primary driver of the market is the scarcity of water.

<http://calag.ucanr.edu> • Published online MARCH, 2021

Malinda Kelley

calag.ucanr.edu