THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT’S FIRST GROUNDWATER MARKET

A CASE STUDY OF FOX CANYON

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CALIFORNIA’S HISTORY OF GROUNDWATER OVERPUMPING

GROUNDWATER LEVEL CHANGE, SPRING 2014-2015

SOURCE: CALIFORNIA DEPARTMENT OF WATER RESOURCES
LANDMARK GROUNDWATER LAW PASSES 2014

127 BASINS REQUIRE SUSTAINABILITY PLANS

21 CRITICALLY OVERDRAFTEO BASINS PRIORITIZED

SOURCE: CALIFORNIA DEPARTMENT OF WATER RESOURCES
VENTURA COUNTY, CALIFORNIA

HIGH-VALUE AGRICULTURE + HABITAT ON THE FRINGE OF LOS ANGELES

SOURCE: VENTURA COUNTY FARM BUREAU
WHY A GROUNDWATER MARKET IN VENTURA COUNTY?

ENABLING CONDITIONS

- **Water scarcity**: cuts of up to 40%
- **Governance**: Fox Canyon GMA established 1982; automatic GSA
- **Majority support**: grower-led initiative
- **Technical expertise**: Economist at California Lutheran University, Matthew Fienup
- **Funding & capacity**: $1M+ Conservation Innovation Grant
FOX CANYON GROUNDWATER MARKET DESIGN

Market Formation

• Open group of ~50 diverse stakeholders
• CLU as facilitator + exchange administrator

Elements + Rules

• AMI required for agricultural wells
• Agricultural water users + 3\textsuperscript{rd} parties
• Temporary trades only
• Restricted trading in 2 Special Management Areas
• Blind algorithmic matching
TESTING THE FOX CANYON GROUNDWATER MARKET

2 PILOT PHASES

Phase 1 Pilot: 47 wells
• Market eligibility tested
• First AMI units installed
• Exchange data portal created

Phase 2 Pilot: 96 wells
• Full AMI rollout
• Incentive program created
• Goal to test trading for 1 year
FOX CANYON GROUNDWATER MARKET: LESSONS LEARNED

- **Complexity** requires subject-matter expertise
- Significant **capacity** needed for implementation + participation
- Agency + stakeholder **support** essential
- **Allocations** a significant challenge
- Must be **transparent, fair** and **low-cost**
QUESTIONS?