

Groundwater and Urban Growth in the San Joaquin Valley

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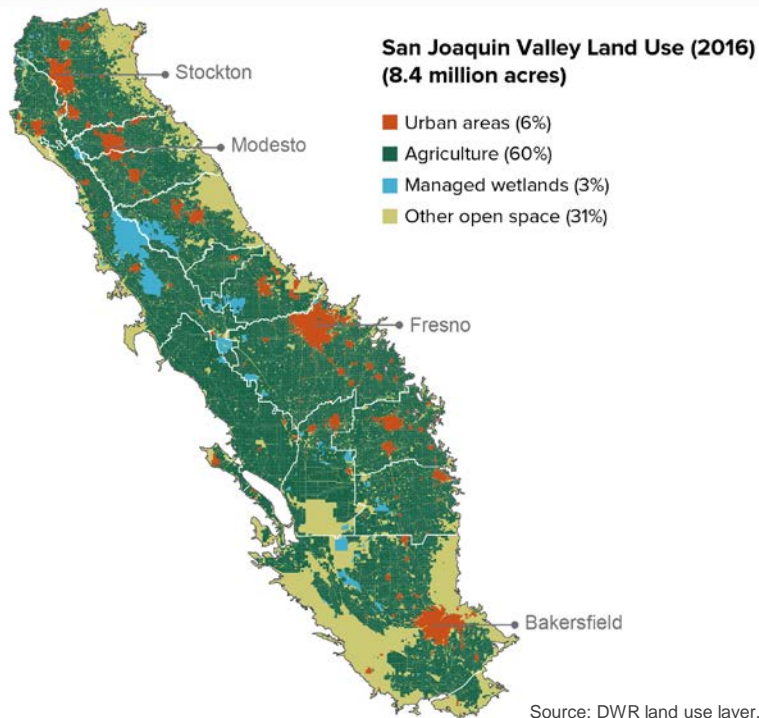


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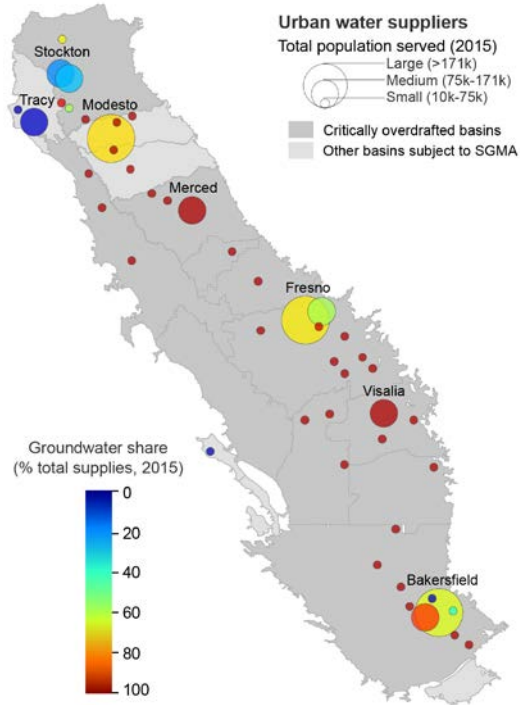
Urban islands in a sea of agriculture



- Agriculture is a key player in SGMA implementation
- Urban areas: small fraction of water use, but highly groundwater reliant
- What is different:
 - Reliable long-term supplies are essential
 - Basin-wide management is more urgent
- Despite tensions, opportunities for partnerships

Groundwater reliance is a matter of scale

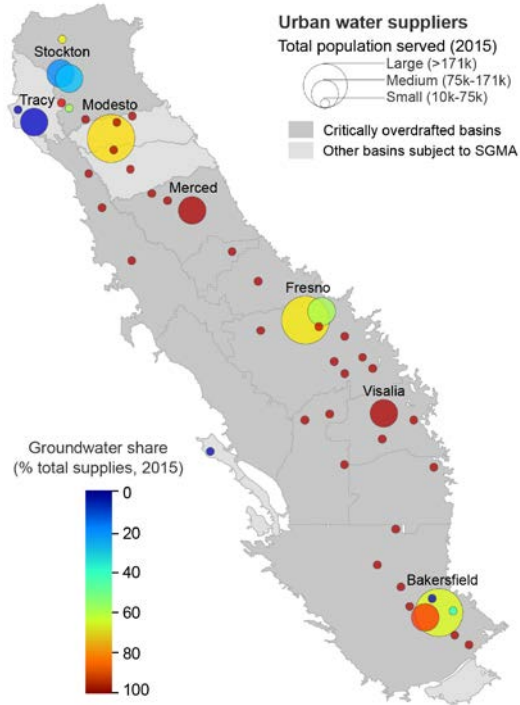
Groundwater reliance (2015)



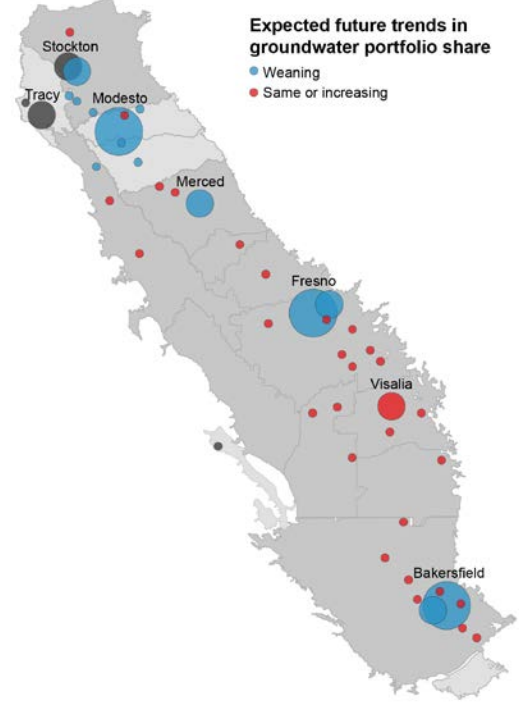
Source: 2015 UWMPs.

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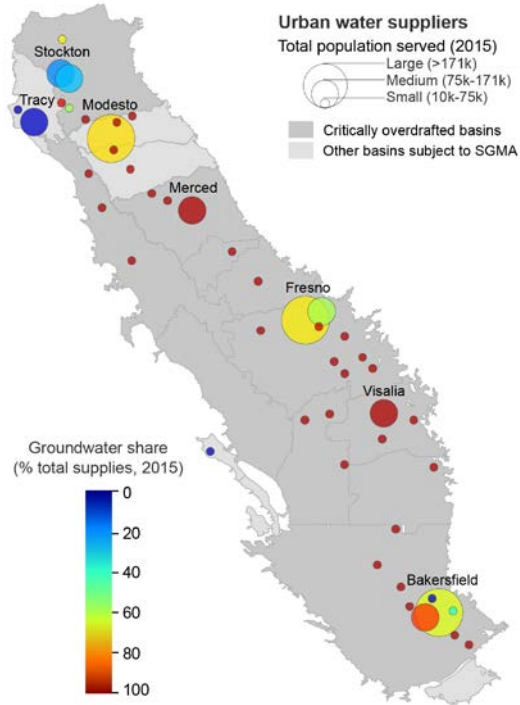


Future trends in groundwater use

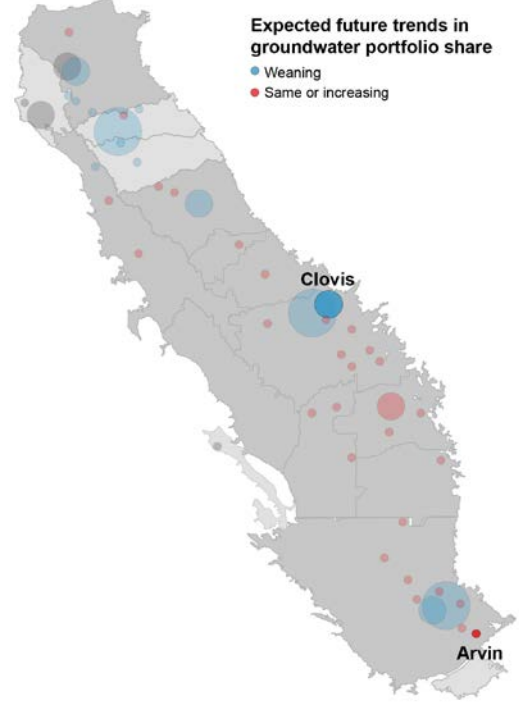


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Groundwater reliance (2015)



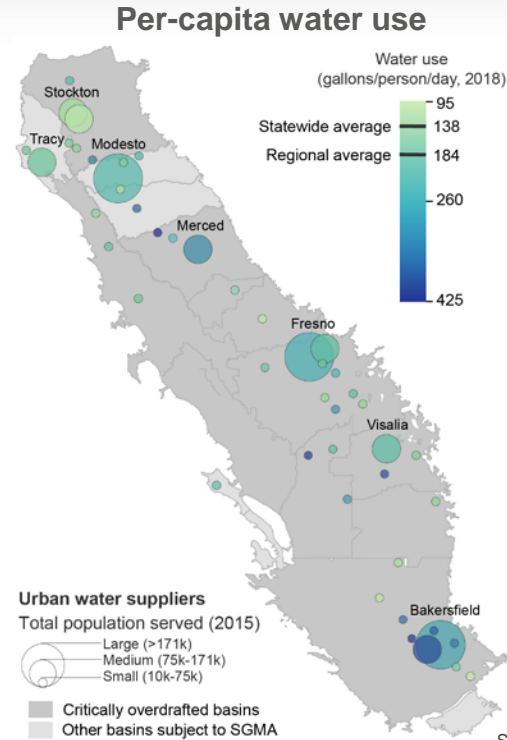
Future trends in groundwater use



Source: 2015 UWMPs.

Utilities will need to manage both demand and supply

- Water use outpaces the statewide average, but is declining
 - High outdoor use can be reduced
- Metering—relatively new in most areas—can drive progress
- Water prices generally low, yet low incomes drive affordability issues
- New 2020 UWMPs show some progress, but more is needed



Source: SWB Water Use Reporting.

Partnerships can help resolve supply challenges—and support SGMA implementation

- Recharge and land use
 - Agriculture, land use authorities
 - Models exist, more planned
- Water trading
 - Local agriculture
 - Build on historical successes
- Solutions for small communities
 - Critical for SGMA success
 - Admin, technical assistance

Fresno's "Leaky Acres"



Source: George Hostetter, SJV Sun.

Local actors should step up coordination—with targeted state support

- Urban utilities
 - Continue to emphasize water use efficiency
 - Advance allocations and ramp-down schedule (w/basin partners)
- Land use authorities
 - Promote water-smart planning processes (including basin-scale)
 - Identify areas to protect for recharge (w/ urban utilities)
- State agencies
 - Review 2020 UWMPs with an eye toward SGMA (DWR)
 - Address capacity constraints for smaller urbans (DWR/SWB)
 - Facilitate solutions for small communities (SWB/DWR)

About these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.