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

San Joaquin Valley Land Use (2016) (8.4 million acres)

- Urban areas (6%)
- Agriculture (60%)
- Managed wetlands (3%)
- Other open space (31%)

Source: DWR land use layer.
Groundwater reliance is a matter of scale

Groundwater reliance (2015)

Urban water suppliers
Total population served (2015)
- Large (>100k)
- Medium (50k-100k)
- Small (10k-50k)

- Critically overdrawn basins
- Other basins subject to SGMA

Groundwater share (% total supplies, 2015)

Source: 2015 UWMPs.
Groundwater reliance is a matter of scale

Groundwater reliance (2015)

Future trends in groundwater use

Urban water suppliers
- Total population served (2015)
- Large (>171k)
- Medium (75k-171k)
- Small (10k-75k)

Groundwater share (% total supplies, 2015)

Expected future trends in groundwater portfolio share
- Weaning
- Same or increasing

Source: 2015 UWMPs.
Groundwater reliance is a matter of scale

Groundwater reliance (2015)

- Urban water suppliers
  - Total population served (2015)
  - Large (>171k)
  - Medium (75k-171k)
  - Small (10k-75k)

- Critically overdrafted basins
- Other basins subject to SGMA

Future trends in groundwater use

- Expected future trends in groundwater portfolio share
- Weaning
- Same or increasing

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

Source: George Hostetter, SJV Sun.

Fresno’s “Leaky Acres”
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:

Andrew Ayres (ayres@ppic.org; 415-291-4461)

Thank you for your interest in this work.