

# WRRC Annual Conference

## Water at the Crossroads: The Next 40 Years

19 June 2020

# Water and Agriculture

Jeffrey C. Silvertooth

Associate Dean

Director of Extension & Economic Development



THE UNIVERSITY OF ARIZONA  
Cooperative Extension

# Arizona Agriculture - Future



# Arizona farms and urbanized areas

As Arizona's urban areas gobble up more land, many farmers are getting offers they can't refuse and selling.



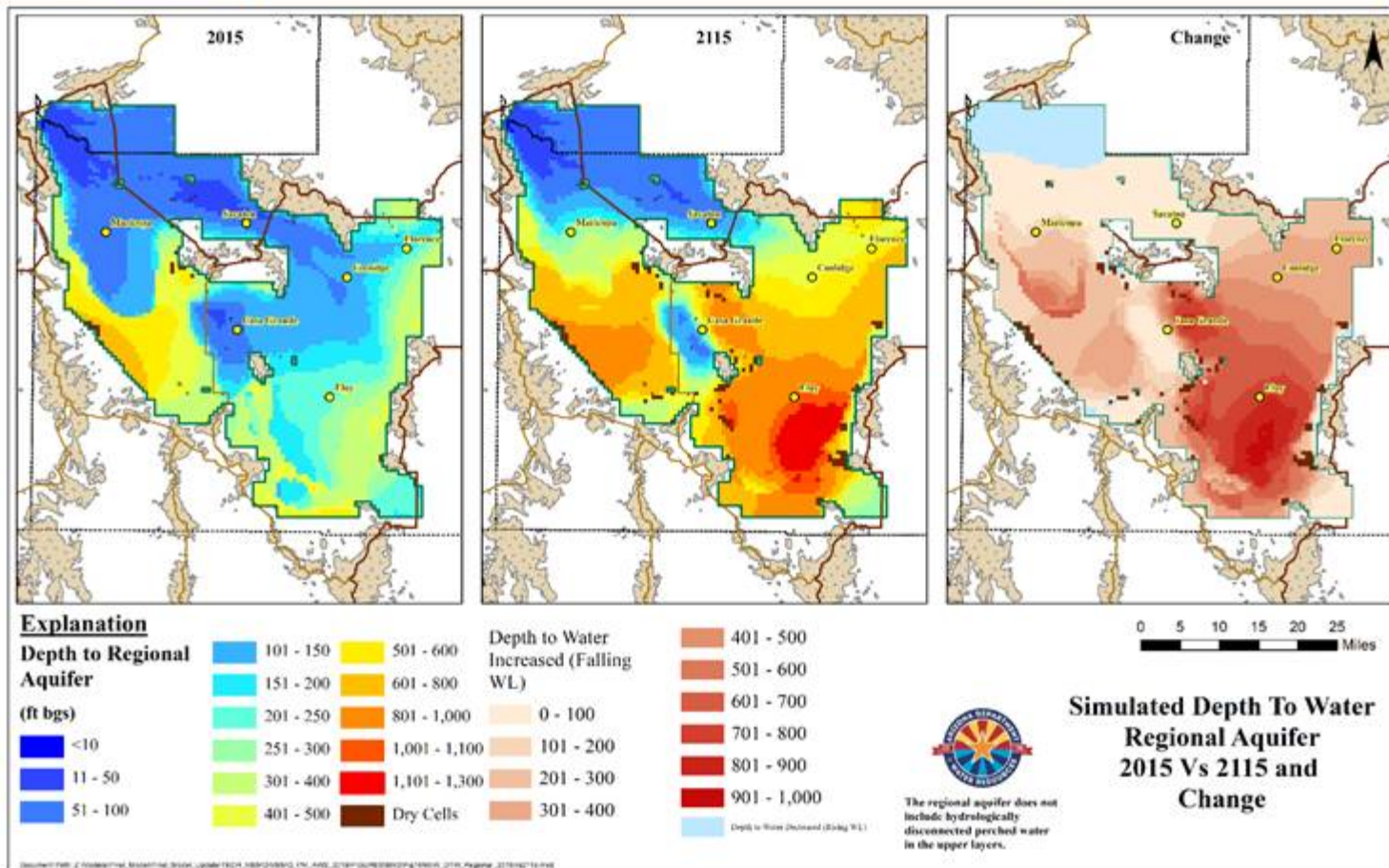
SOURCE: Arizona Gap Analysis Project

Dave Castelan / Staff



# Pinal Co. 2015 vs. 2115

## Simulated Depth To Water Before & After 100 Years of Pumping



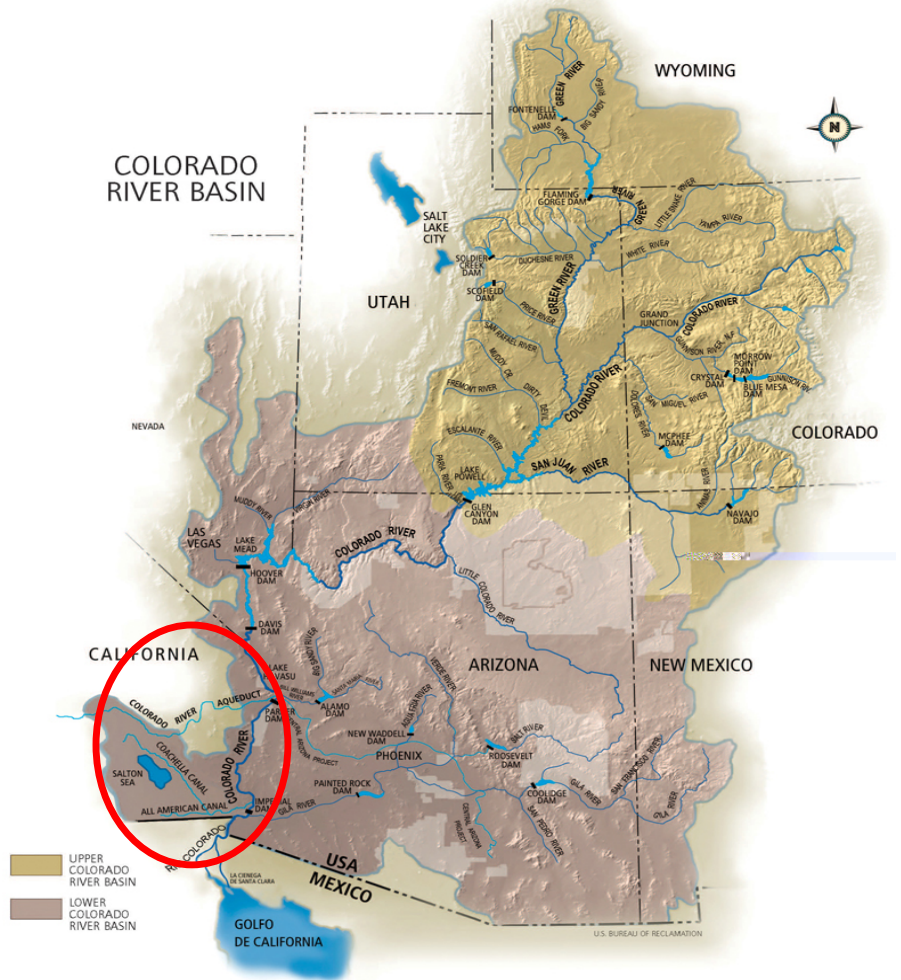
# Arizona Ag – Future\*

- Range/cattle production
  - Potentially stable on existing lands
  - Year to year variations: climate and markets
- Crop production systems
  - Northern Arizona – some surface & groundwater irrigation
    - New areas of production, e.g. NW Arizona with groundwater dependence
    - Sensitive to climate and level of demand
  - Central & SE Arizona
    - Increasing urban development
    - Increasing pressure on limited groundwater
    - Decreasing ag water availability
    - American Indian Nations
      - Stable production capacity & access to water
  - Lower Colorado River Valley
    - Best options for long-term production systems

\*JCS projections

# Lower Colorado River Valley

- Access to water
- Excellent soil resources
- Climate
  - broad crop production potential
- Existing infrastructure
- Expertise



# Excellent Soil & Water Resources

- Irrigation
  - Crop demand
  - Salinity mgt.
  - Efficiency
- Tremendous production potential for a diverse cropping system





THE UNIVERSITY OF ARIZONA  
Cooperative Extension



# Winter Vegetable Production

- Southwest Arizona
  - Yuma Valley, Lower Colorado River Valley
- Principle winter vegetable production center for the U.S.
  - November to March
  - approx. 150,000 acres
  - Total econ. Impact ~ 1/3 of \$23.3B Ag. economy In Arizona







