

Expanding Water Reuse: Public Trust in the Next Water Frontier

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The next water frontier

- Local solution to the water scarcity
- Targets urban users
 - where supply meets demand
- Legally and physically available
- Renewable and sustainable
 - supply that grows in tandem to population
- Public opposition the limiting factor

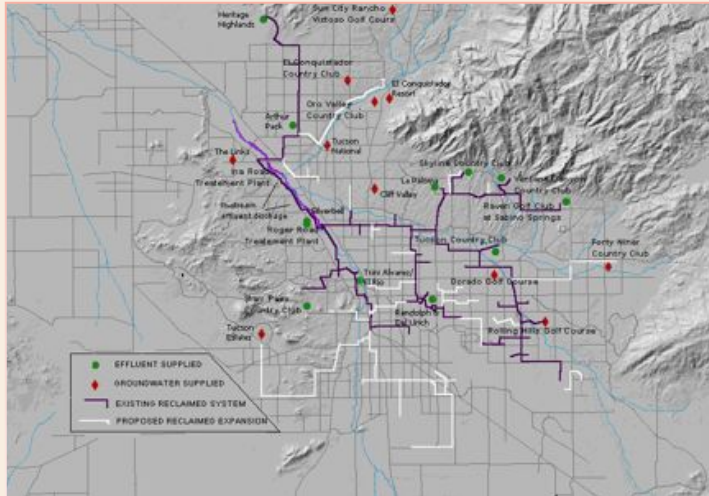
Risk perception

- Psychometric
 - individual perceptions
- Sociological
 - institutional context
- Technological risks
 - are manufactured
 - involve *choices*

Tucson

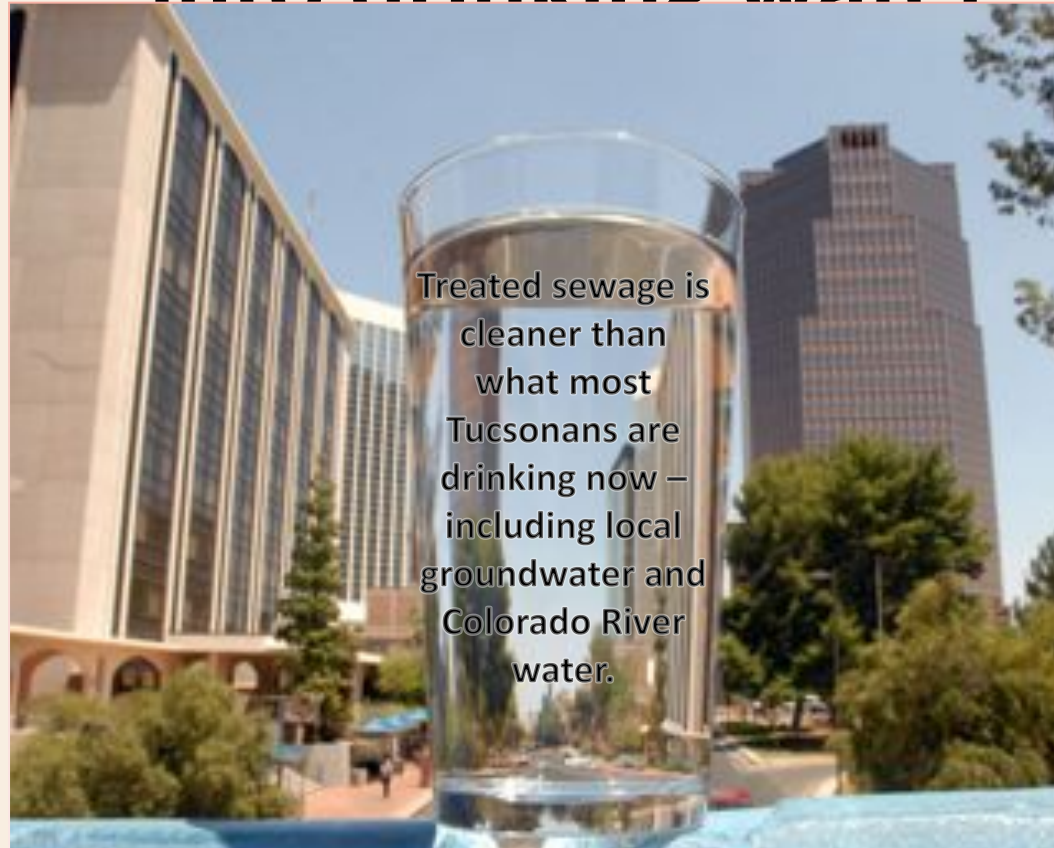


Reclaimed users in Tucson



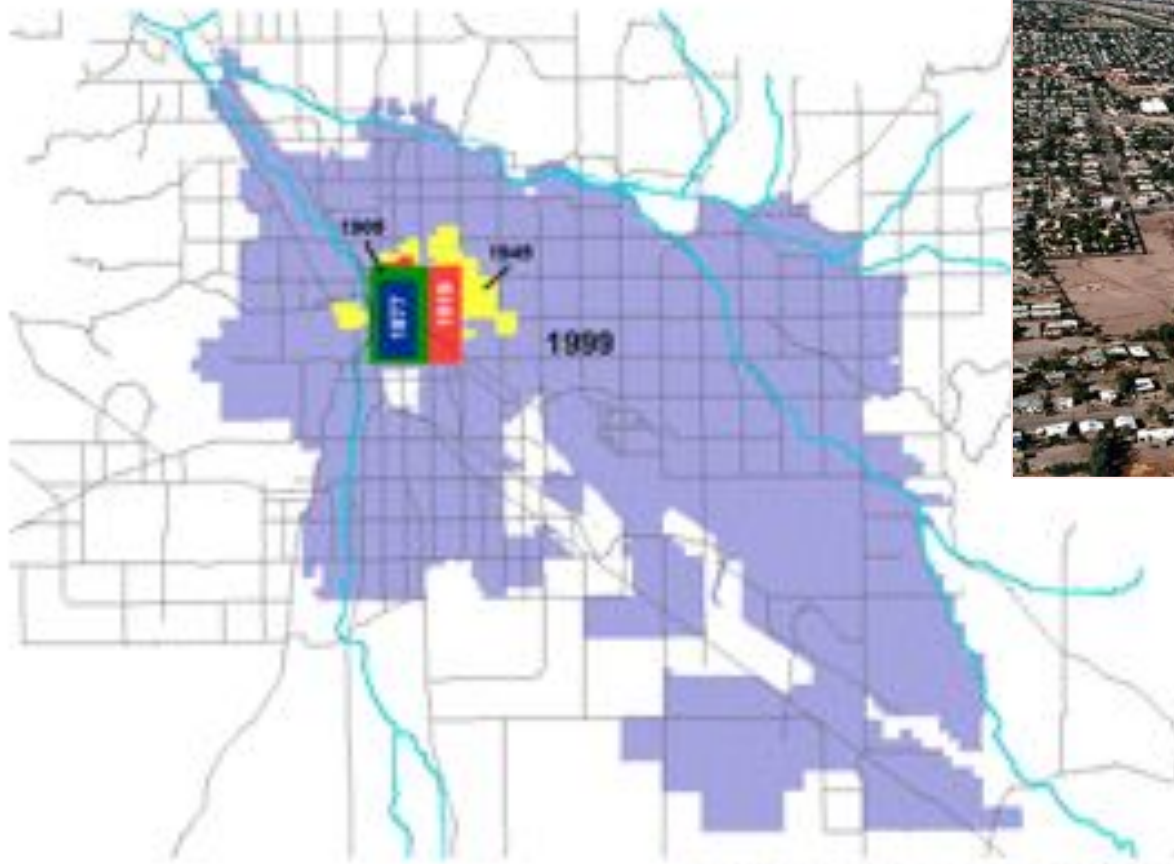
Front page headline Tucson Citizen 04/08/08:

Turning waste water into drinking water



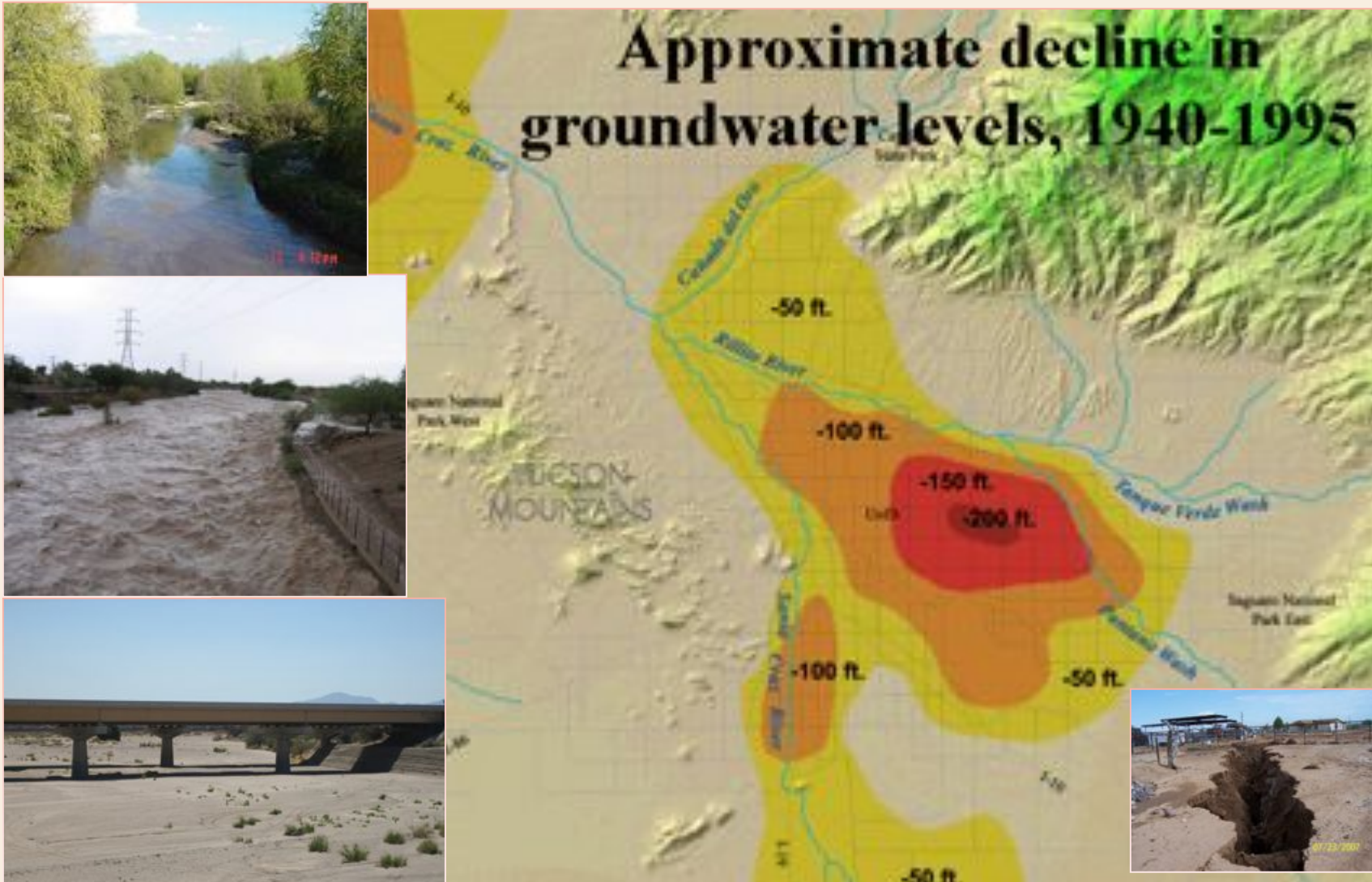
Toilet to tap could bridge supply-demand gap

Urban growth



WRRC (1999) *Water in the Tucson Area: Seeking Sustainability*

Groundwater depletion



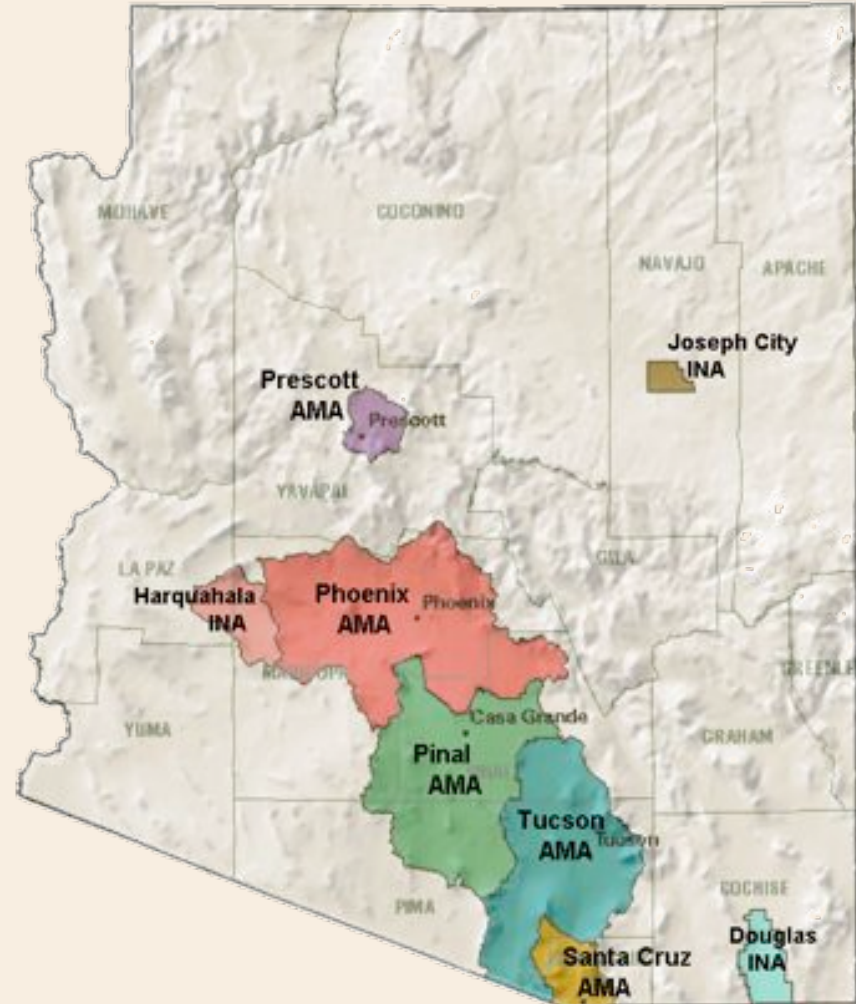
Growing scarcity of unallocated water resources



Inflexible Colorado River arrangements



Legal mandates for renewable supplies



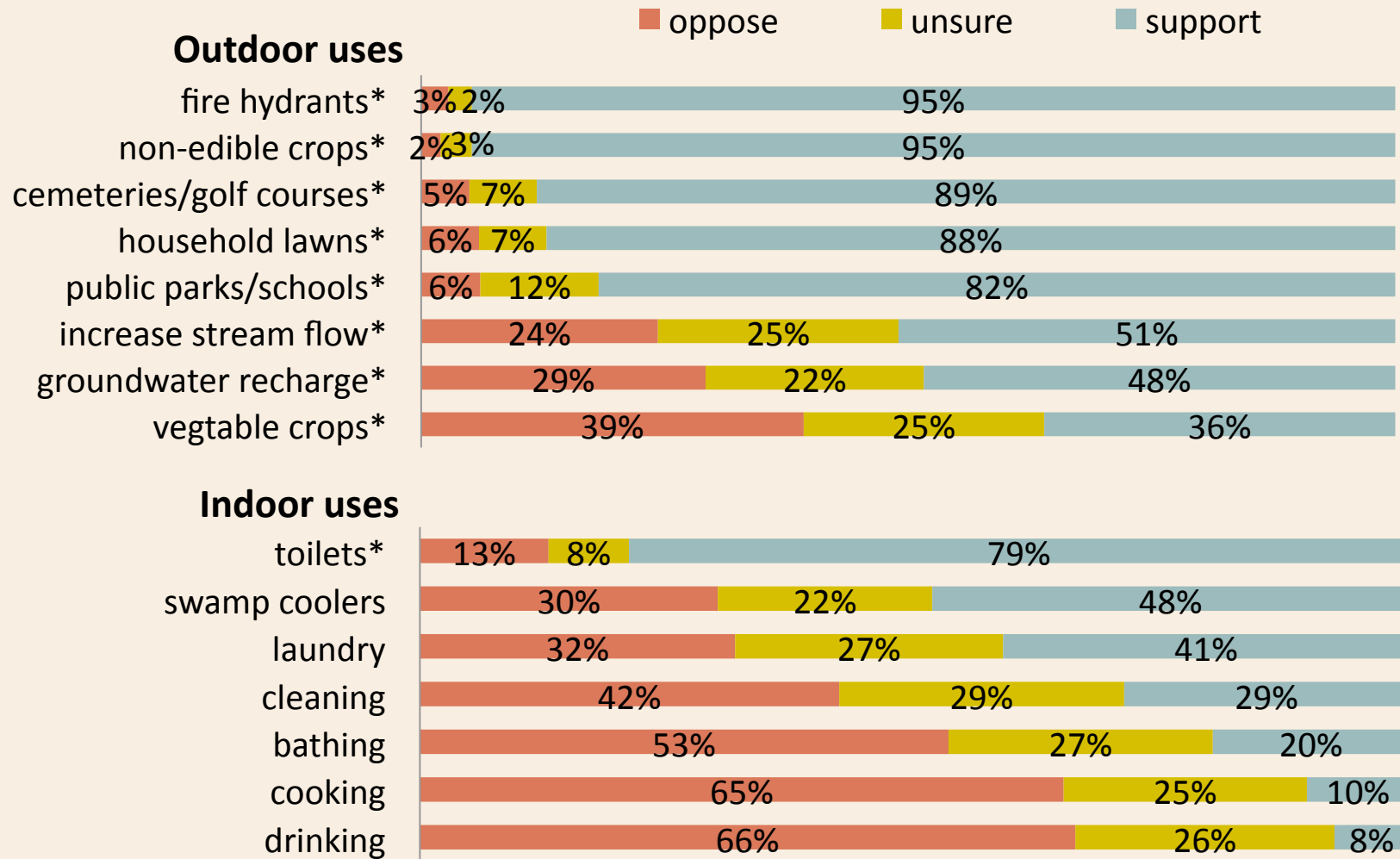
Methods

- Questionnaire mailed to a random sample of Tucson residents
 - **(n=253)**
- Types of answers included:
 - Likert scale ratings, multiple choice answers, open ended responses
- Sample biases:
 - English-only survey excluded non-English speakers
 - Respondents are older, more likely to be retired, and more likely to be home owners

Results

- Respondents are overwhelmingly concerned about future water supplies (96 %).
- Respondents see value in reclaimed water but have hesitations about it in practice.
- Water reuse is a highly politicized local issue.
- Strong support for alternatives low-tech alternatives, such as graywater systems and rainwater harvesting.

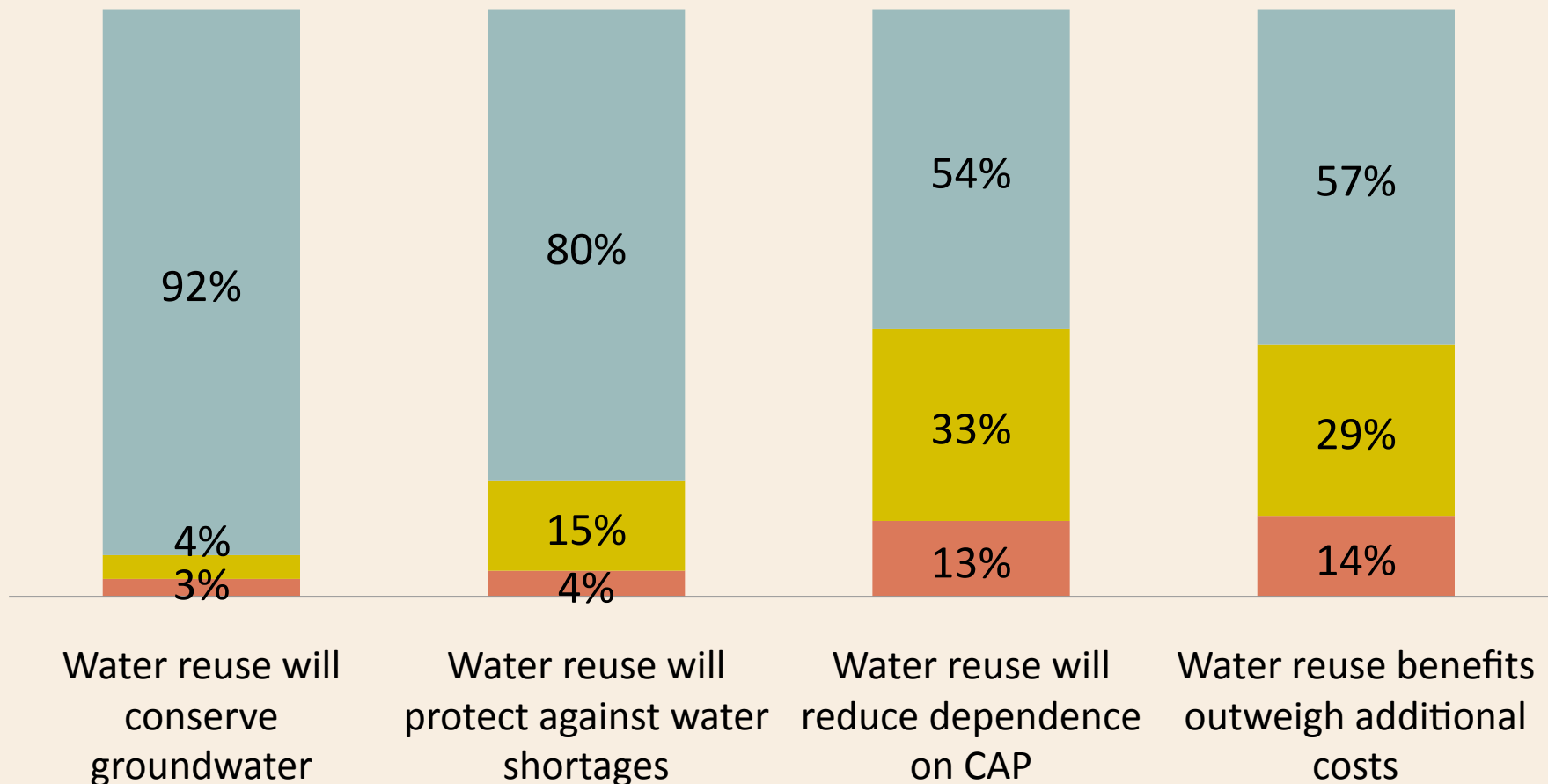
Acceptable uses



*Approved uses for reclaimed water per Arizona Administrative Code

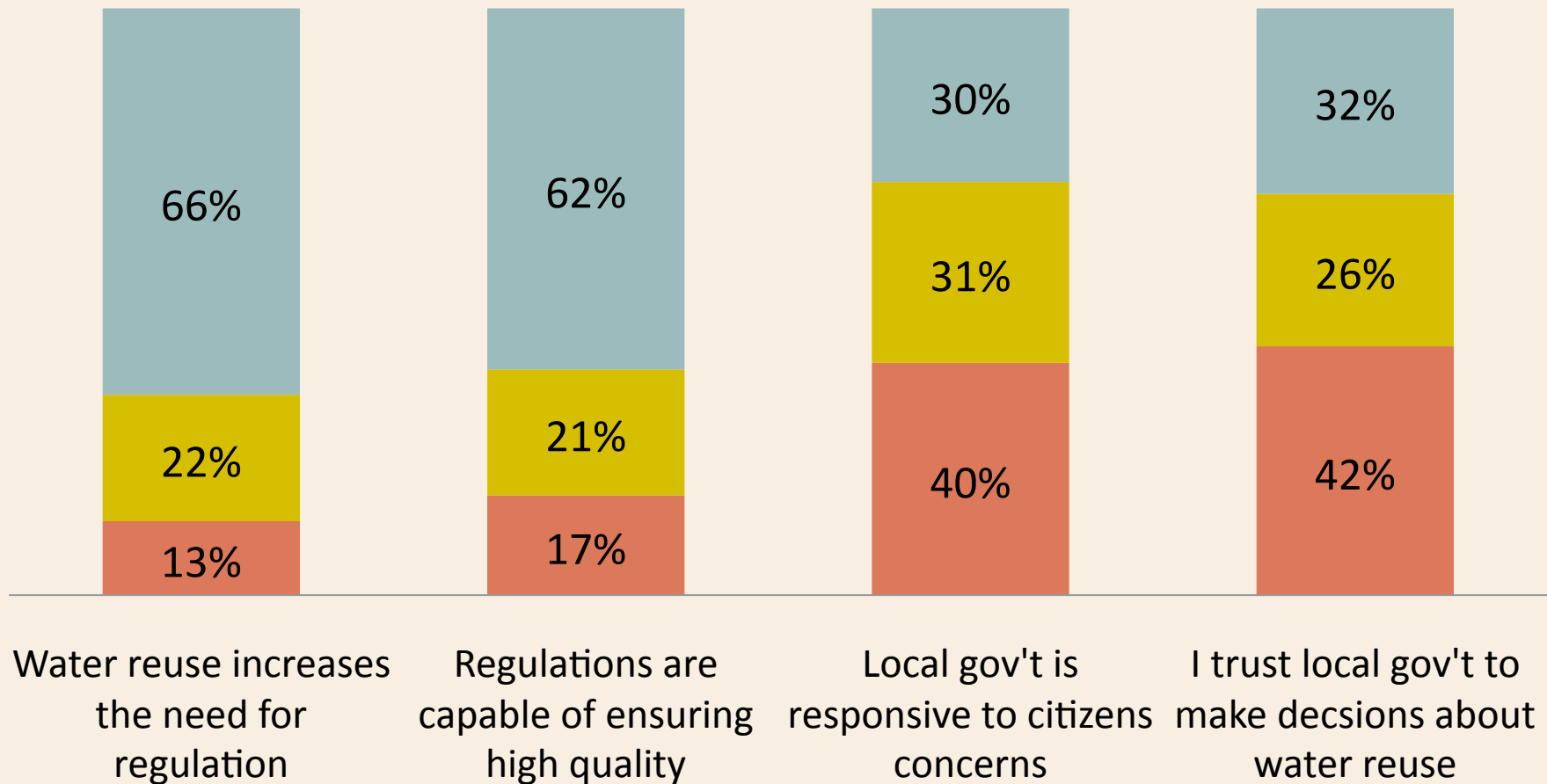
Water reuse and water security

disagree neutral agree



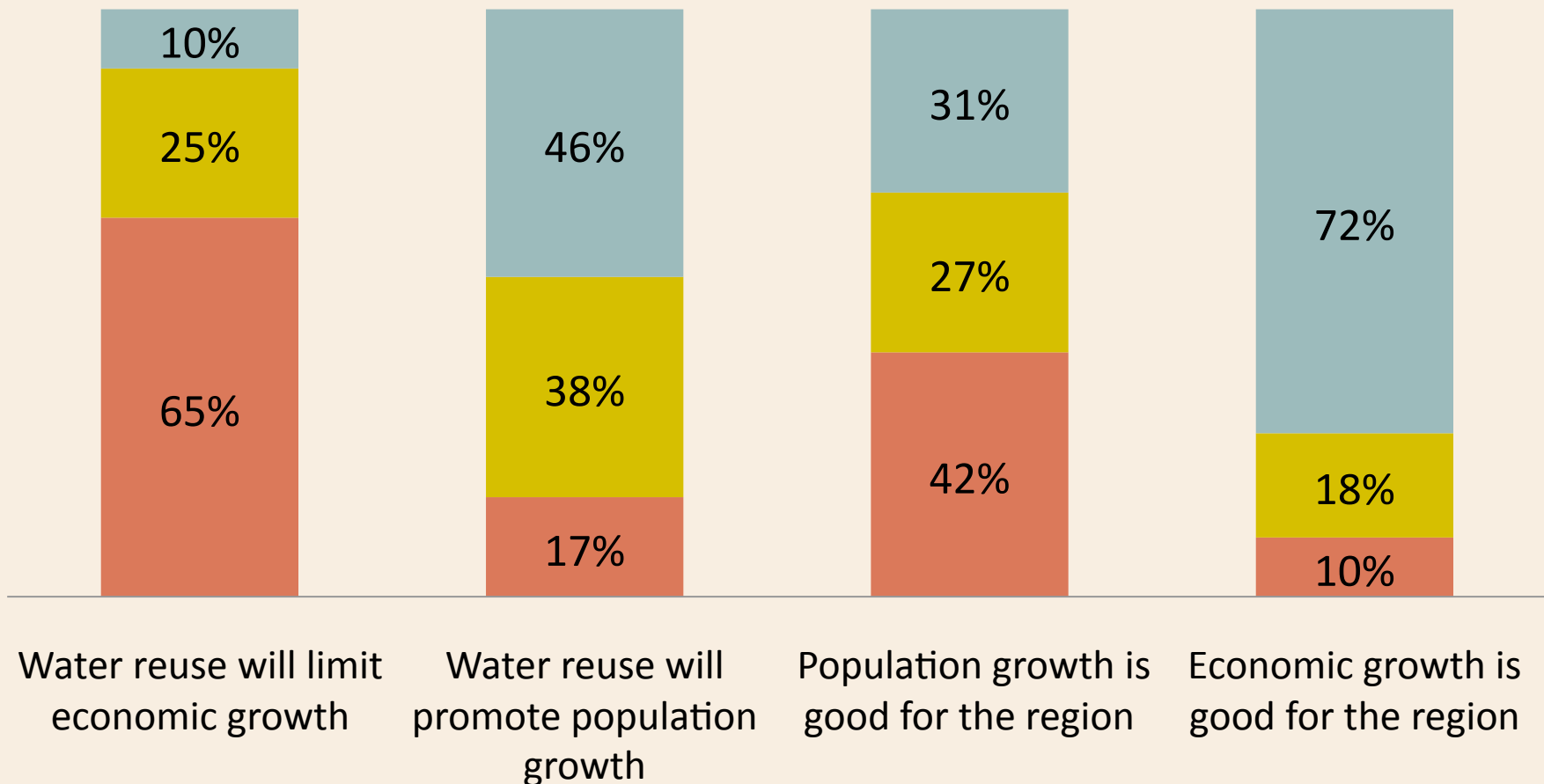
Regulations and governance

disagree neutral agree

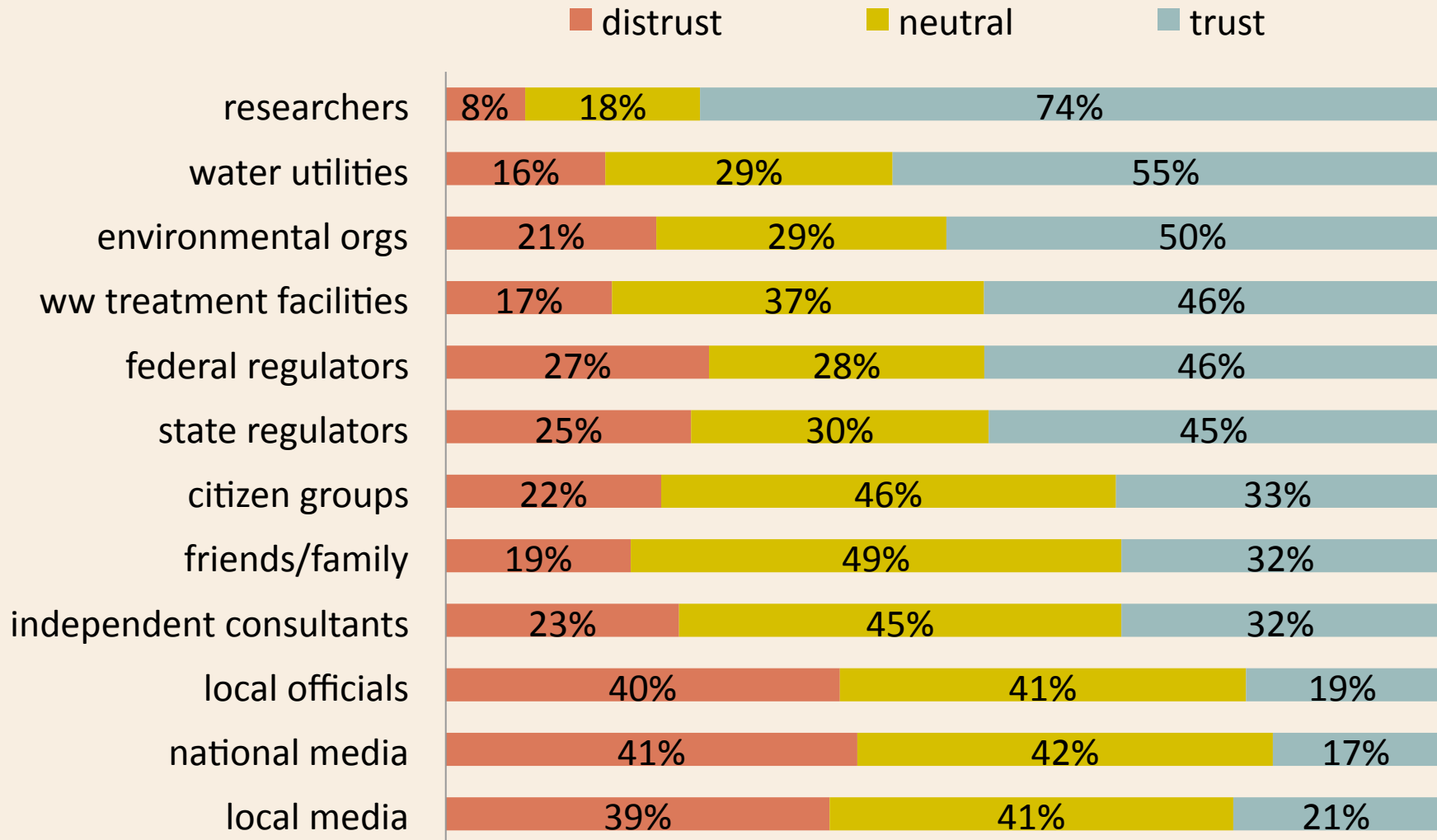


Water reuse and regional growth

disagree neutral agree



Who do you trust to provide accurate information about reclaimed water?



Conclusions

- Focusing on public “acceptance” is counter productive
- Public concerns are legitimate and rational
- Water planning and land use planning should be integrated
- Effective planning will be interactive, open to alternatives, and willing to address a wide variety of concerns



Thank you.

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