UNIVERSITY OF ARIZONA
Water & Energy Sustainable Technology Center

Building Water Resource Resilience by Strengthening Academic-Water Utility Partnerships

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The University of Arizona

UArizona - Local Water Utility Collaborations

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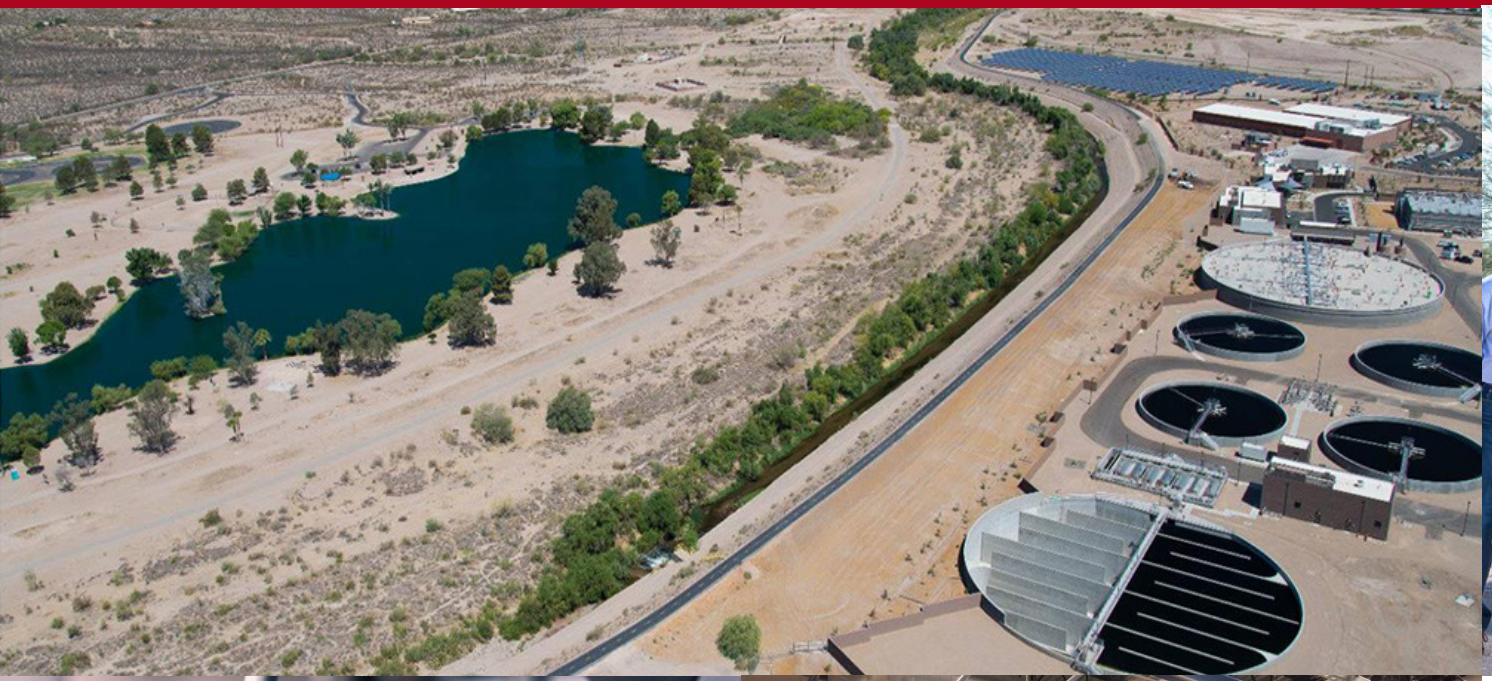
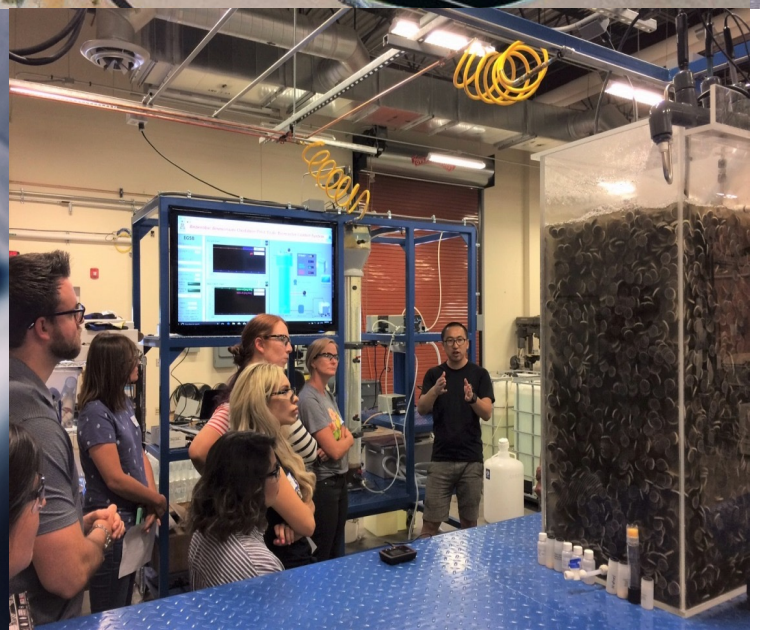




- Public health
- Community engagement
- Water infrastructure
- Water quality & reuse
- Workforce development

UArizona - Local Water Utility Collaborations

ARIZONA

Research gaps exist between academia and local water utilities.

Can these gaps be defined, addressed, and filled effectively?

TUCSON WATER

PIMA COUNTY
WASTEWATER RECLAMATION

MARANA water

ORO VALLEY ARIZONA FOUNDED 1974

Oro Valley Water Utility

Study Objectives & Goals

1. *Characterize and address* the **barriers and accelerators** to academic-water utility research collaboration.

2. *Identify* the **most pressing needs of local water utilities** anticipated during the next 5 to 50 years ⇢ assess alignment with academic research interests.

GOALS:

- **Generate further insights to advance more successful partnerships.**
- **Increase water utility capacity to address future challenges.**

Methods: A Qualitative Approach

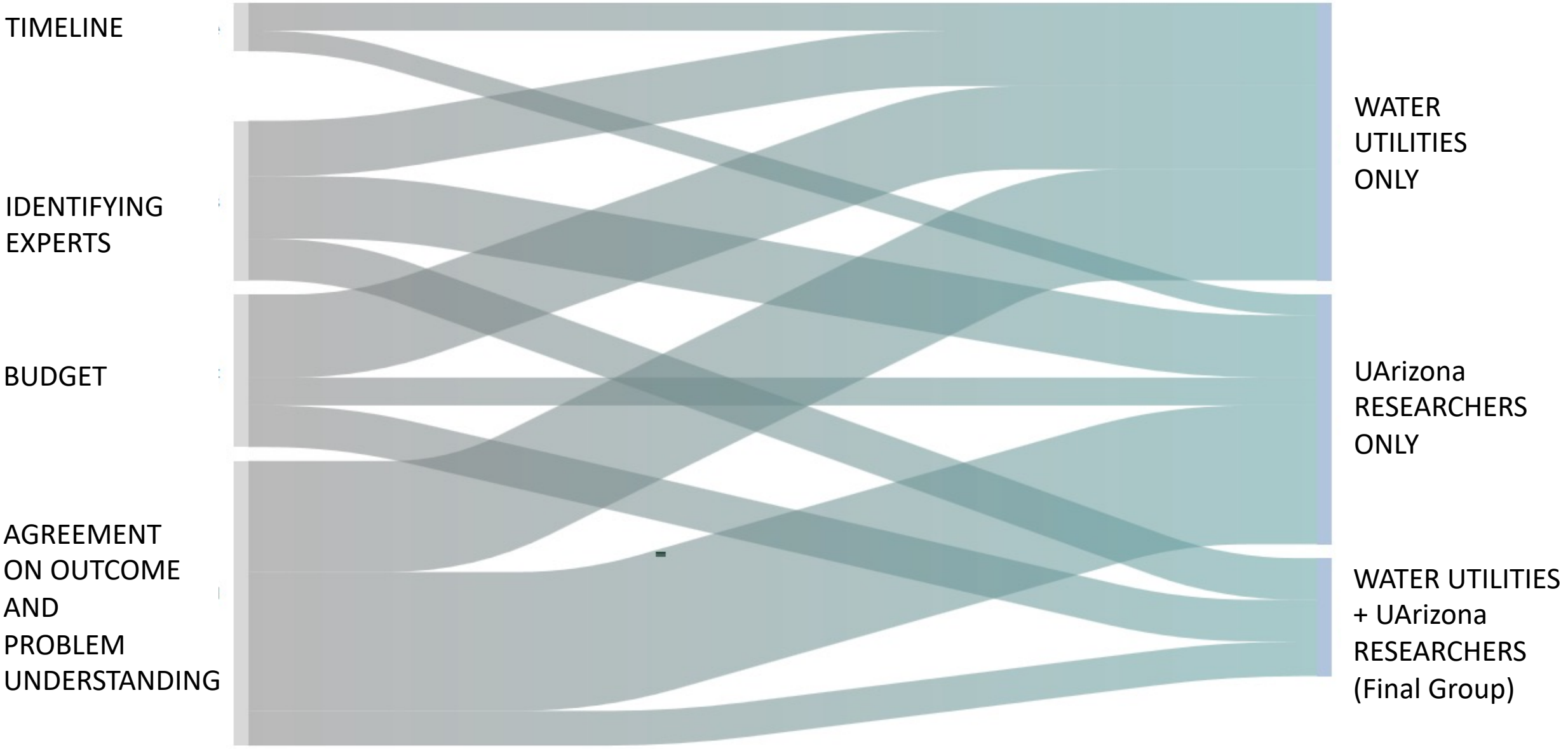
Focus groups formed (conducted via Zoom):

- Local water utility personnel only (4 utilities)
- Academic research faculty (UArizona) only
  - Public health, microbiology
  - Engineering
  - Community engagement
- Combined water utility personnel and UArizona faculty

Focus Group Meeting	Participants	Number of Participants
1*	Combined UArizona Faculty Only	9
2	Water Utilities Only	5
3	Water Utilities + UArizona Engineering Faculty	8
4	Water Utilities + UArizona Public Health and Environmental Microbiology Faculty	7
5*	Water Utilities + Combined UArizona Faculty	12

- Focus group conversations transcribed verbatim
- Transcripts coded
- Analyzed using ATLAS.ti
- Sankey Plots generated

Sankey Plot: Collaboration Mechanisms



Key Takeaways

- Academia and water utilities are influenced by different drivers including accountability, funding, and timeline structures.
- Expectations for institutional roles (academic and government) and anticipated goals must be stated and early.
- Frequency of communication is critical.

More frequent interactions desired by both entities →
annual meetings to stay informed on latest research needs, methods, and findings.

Thank you all for your time today!

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