Building Water Resource Resilience by Strengthening Academic-Water Utility Partnerships

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UArizona - Local Water Utility Collaborations

- Public health
- Community engagement
- Water infrastructure
- Water quality & reuse
- Workforce development
Research gaps exist between academia and local water utilities. Can these gaps be defined, addressed, and filled effectively?
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.
Focus groups formed (conducted via Zoom):

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

<table>
<thead>
<tr>
<th>Focus Group Meeting</th>
<th>Participants</th>
<th>Number of Participants</th>
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<tbody>
<tr>
<td>1*</td>
<td>Combined UA Faculty Only</td>
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<td>Water Utilities Only</td>
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<td>5*</td>
<td>Water Utilities + Combined UA Faculty</td>
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- Focus group conversations transcribed verbatim
- Transcripts coded
- Analyzed using ATLAS.ti
- Sankey Plots generated
Sankey Plot: Collaboration Mechanisms

TIMELINE

IDENTIFYING EXPERTS

BUDGET

AGREEMENT ON OUTCOME AND PROBLEM UNDERSTANDING

WATER UTILITIES ONLY

UArizona RESEARCHERS ONLY

WATER UTILITIES + UArizona RESEARCHERS (Final Group)
• 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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