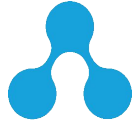


# AISL Awardee Meeting 2026

Collecting and analyzing data to identify, understand, and honor community perspectives



# Today's presenters



**Claire Lauer**  
Professor  
Senior Global Futures Scientist



**Amber Hedquist**  
Research Specialist  
Faculty Associate

# Agenda



**Background & Goals**

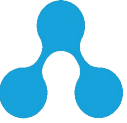
**Methodological Overview**

**Pivoting our Data Analysis**

**Discussion**



# Background and Goals



# About

**Overview:** WaterSIMmersive is a traveling museum exhibit designed with several localized, interactive components (MR, VR, AI) to help Desert Southwest communities understand water sustainability.

**Mission:** Empower Arizona communities to navigate their water situation to support community resilience.

# Upcoming Museum Locations

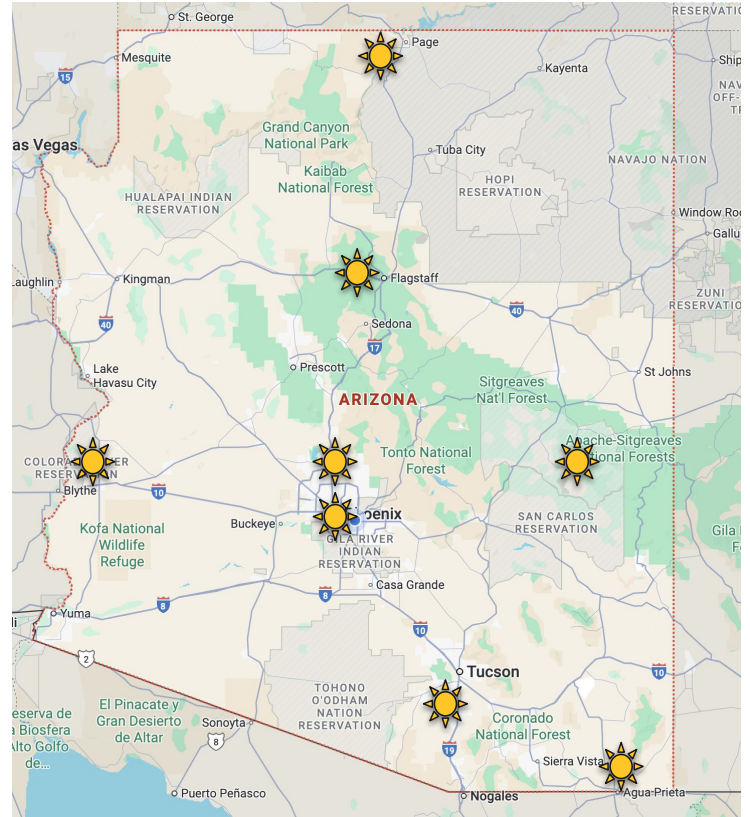
## Past Locations:

- South Phoenix, Black Canyon City, Tempe (ASU)

## Spring 2026:

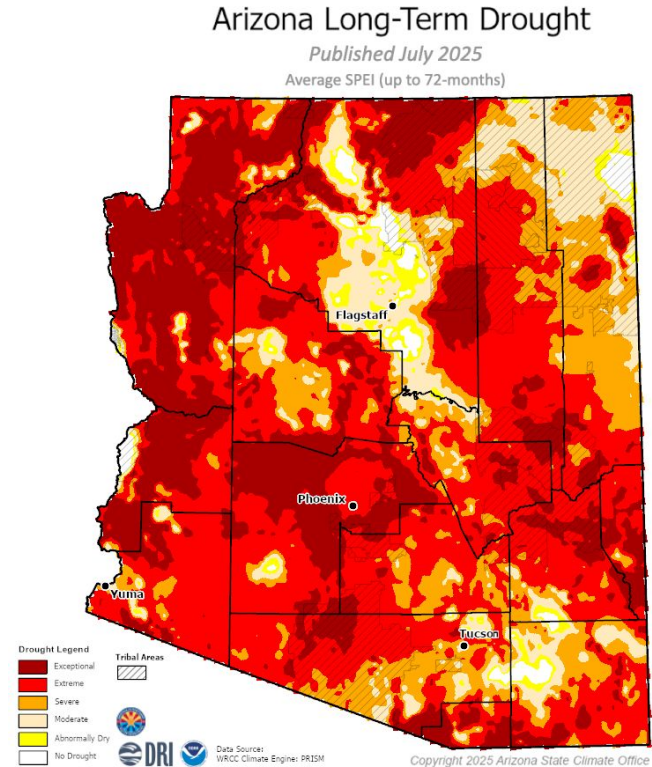
- Hopi Community, Bisbee, Tucson (U of A)

**Upcoming locations:** Phoenix (Arizona Science Center), Flagstaff (NAU), Page, White Mountain Apache, Colorado River Indian Tribes, Douglas, Nogales, Tubac, Mayer, and Prescott



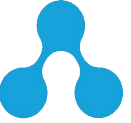
# Project Significance

- The U.S. Southwest is experiencing its **most severe megadrought in 1,200 years**
- Public understanding of complex water systems is critical for long-term resilience
- Museums are rarely able to provide localized access to dynamic locations
- Underserved rural and tribal communities are often excluded from water policy conversations





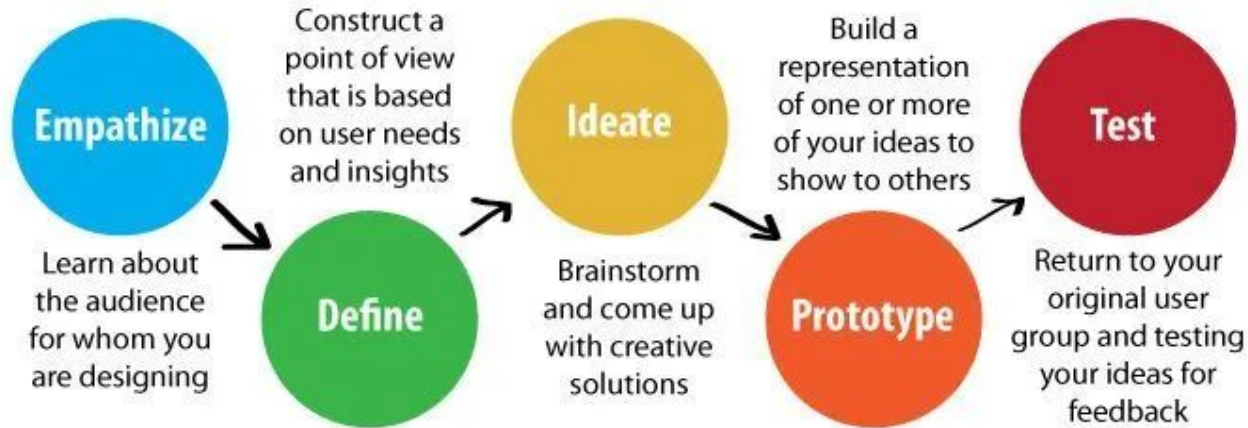
# Methodological Overview



# Our Methodology

1. **Adopting** a UX framework
2. **Co-designing** with communities
3. **Empowering** community researchers

# Utilizing a user experience (UX) framework



## Focusing on:

- **Interviews:** Understanding of water based on lived experiences
- **Field observations:** Live interaction, what they lingered on, and what didn't resonate
- **Iterative feedback:** Test ideas early, learn quickly, and refine

# Co-designing with communities

Co-design should inform **EVERYTHING**.

Including products such as...

1. **Games** we developed
2. **Exhibits** we designed
3. **Community stories** we emphasized

**HOWEVER**, The most important element of co-design is the **PROCESS** of continuous listening, localizing, and improving



# Empowering community researchers

Our goal was to recruit community members to hold interviews.

We were met by:

1. Excitement
2. Hesitation
3. Disinterest





# Pivoting our Data Analysis

# Case study: Working with Black Canyon City

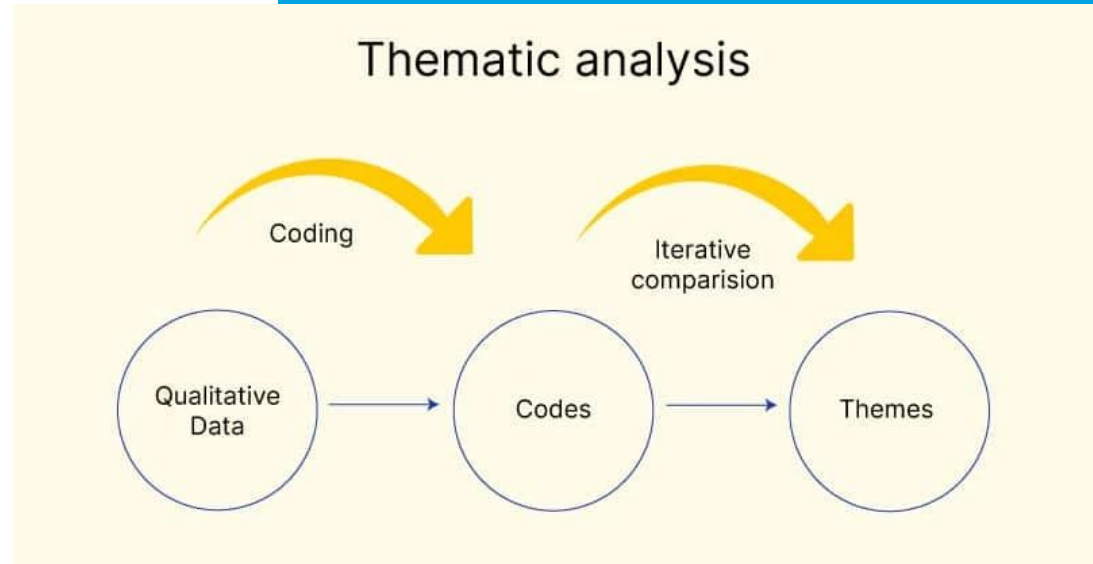
- We recruited two community researchers
- Each researcher conducted ~20 interviews
- We collected **40+ interviews** that we transcribed and prepared for coding.



# Why was thematic coding insufficient?

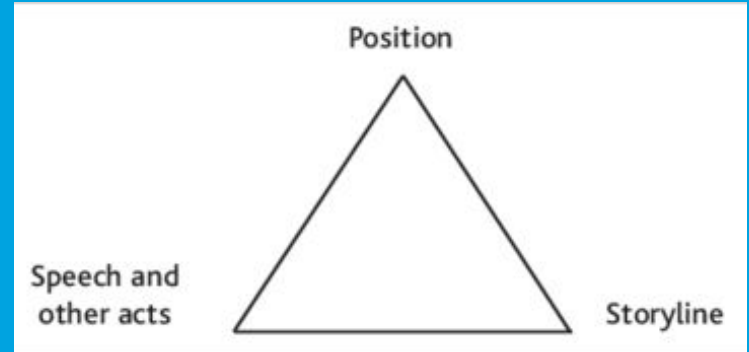
It was difficult to...

- Narrow down codes
- Translate insights
- Achieve IRR



# How can we effectively analyze community narratives to meet their needs?

We pivoted to **positioning theory** to understand prominent narratives and self/other positionings in the community.



# Positioning Theory (Harré & van Langenhove)

A framework for analyzing how people use discourse to locate themselves and others within unfolding storylines.

Positioning theory draws on a triadic framework:

1. **Positioning:** rights, duties, and moral responsibilities of self and others. Positionality influences how individuals behave, interpret, and interact in social contexts
2. **Storylines:** the unfolding narrative within which positions make sense
3. **Speech acts:** the communicative moves that enact or resist positions

# Positioning Theory (Harré & van Langenhove)

A framework for analyzing how people use discourse to locate themselves and others within unfolding storylines.

We developed a 15-actor codebook across four domains:

- **Moral** (Responsible, Irresponsible, Concerned, Indifferent)
- **Knowledge** (Informed, Uninformed, Misinformed, Educator)
- **Affective** (Grateful, Skeptical, Trusting)
- **Power** (Empowered, Disempowered, Victimized, Gatekeeper/Villain)

# Positioning Theory (Harré & van Langenhove)

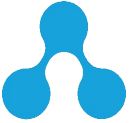
A framework for analyzing how people use discourse to locate themselves and others within unfolding storylines.

We **stopped** asking:

“What themes should the exhibit cover?”

And **started** asking:

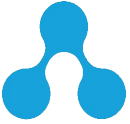
“What positions are visitors likely to bring into the space?”



# Pattern 1

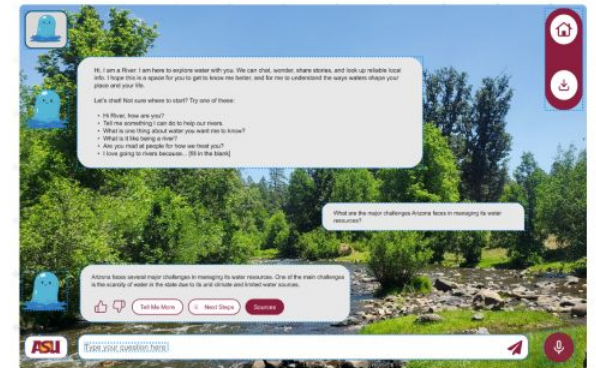
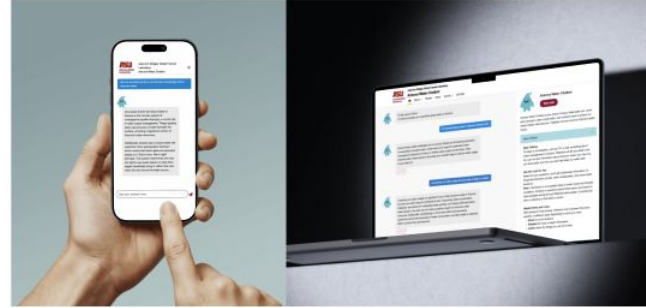
## The Uninformed and Concerned Self

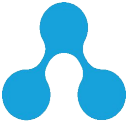
“Sometimes it’s clear and then sometimes it’s cloudy. Makes me wonder if there’s any chemicals in it. Worried about my kids.”



# Water Chatbot / River Bot

## Design 1





## Pattern 2

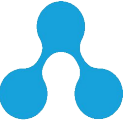
### Responsible at Home, Disempowered in Systems

“I try to be conscious of the water that I use here. When I take a shower, washing my hair. I turn water off and on with dishes.”

(P25)

“...go into [it] complaining or try to go to a meeting and get ushered out by the sheriff because [they] don't like you being there.”

(P41)



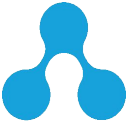
# Storymap

# Design 2



Meet Some of the Featured Voices From Black Canyon City!

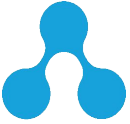




## Pattern 3

### Skepticism Without Solutions

“I don't even trust what I'm hearing when I go to a water improvement board meeting...” (P29)”



## Flow Forward Game

### Design 3





# Questions & Discussion

# Let's chat!

What methods help you be responsive to your partners?

What coding practices work well to best understand community needs?

What practices help you stay open to change and iteration?

How do we increase community engagement in the process?

How do you maintain relationships after the funding is over?

