

# Spreading stories of water one exhibit at a time

## ASU cohort engages Arizona tribes in water conversations through exhibits tailored to rural communities

By Megan Neely, ASU News  
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The state of Arizona is home to 22 tribal nations — and all of them have a deep connection to water. However, many tribes are being left out of conversations surrounding the topic.

Liliana Caughman, an assistant professor in the [American Indian Studies program](#) at Arizona State University, is working to change that.

Through her lab, [the Relate Lab](#), eight Indigenous scholars are working alongside the [Arizona Water Innovation Initiative](#) at ASU and their WaterSimmers project to create water-related exhibits in rural communities throughout Arizona.

“A sentiment that I've heard a lot from my students and community partners is that tribes and their water struggles are not often brought into the conversation until the water is wanted because they have rights over it and somebody wants to utilize it,” said [Caughman](#), who is mixed heritage/Puerto Rican. “We have so many tribes here, and excluding them from water conversations until something's wanted from them is pretty wrong. This is an opportunity to try and rewrite that.”

The Indigenous Water Stories Research Cohort is working with tribes like the White Mountain Apache Tribe, Colorado River Indian Tribes and Navajo Nation to relay the stories and history of water that come from each.

“It's really cool to have Indigenous students participate in research and community engagement opportunities that are aligned with their identity and that they are able to work with communities either that they come from, or that are similar to where they come from, to do this work,” Caughman said.

Their place-based exhibits focus on a particular tribe's water situation, including their goals and interests that surround water. It also factors in reflections on their water rights and traditions.

The exhibits combine spiritual connections, holistic learning, language and cultural revitalization with technology to make them more interactive for those who pass by — examples include an

[artificial intelligence water chatbot](#) as well as a virtual-reality game.

The multimedia experiences debuted at “Agua es Vida,” an exhibition led by [Gilberto Lopez](#) and [Francisco Lara-Valencia](#) of the [School of Transborder Studies](#) and [JoAnna Reyes](#) of the [Herberger Institute for Design and the Arts](#) working alongside [many collaborators](#) and [partners](#). The project is supported by [Impact Water – Arizona](#), a pillar of ASU’s [Arizona Water Innovation Initiative](#), with additional programming support funded by a Herberger Institute Research-Building Investment grant and an NSF STEM Day supplemental award.

The cohort will create new exhibitions for each tribe they work with.

In interviewing tribal members for the exhibits, the cohort found several recurring themes.

Stories surrounding water often come from the person’s memories of their childhood, including playing around or in local bodies of water, or lessons from their parents and elders about its meaning. Play and intergenerational knowledge are the foundation for how people learn of water’s importance.

Interviewees also noted that the visible presence of water could foster deeper connections between land and the community. The fundamental need for water in order to nurture a community’s growth was the reason for settling near rivers; however, those natural relationships were disrupted by colonization.

“We’re not just trying to take (the tribes’) water data and say, ‘Here’s an exhibit,’” Caughman said. “We’re trying to engage with them and use this as a process to help them think about water, tell their stories and uplift their communities.”

**My relationship to water expands upon the original thought of community to a more Indigenous meaning; we extend those bounds of relationships to more than human entities, even elements of the Earth, including water. So when I see water, I find it as an essential part of our communities and as an essential part of life. It's one of our elder spirits.**

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**Diné tribal member**

Recent ASU graduate Sanjiv Thompson (White Mountain Apache) caught wind of the new project that would involve her reservation in the midst of her master’s degree program in [Indigenous education](#). She reflected on her mother’s teaching, speaking about the peacefulness of water and acknowledging it.

“Our daily life incorporates water — we cook, drink, eat — everything involves water, and it’s a big component in our lives. As a STEM teacher, I feel like we’ve lost these connections,” said

Thompson. “We're hoping to develop a STEM curriculum or a camp to bring these teachings back to the children. We're losing our Indigenous knowledge and our sacredness as we advance with technology, and as an educator, I want to bring that knowledge back into the classroom.”

Caughman and Thompson, alongside the tribe’s water expert Cheryl Pailzot and tribal museum staff, plan to increase STEM-related education that will further support the White Mountain Apache’s infrastructure projects, including the construction of a dam.

The cohort also collaborated with Colorado River Indian Tribes on their Water Rights Day celebration, leading to a partnership with their Head Start program and a local children's book author to create a book that mimics the museum experience.

By sharing these exhibits, the cohort hopes they will have uplifted and empowered tribal voices and their stories so that they are better understood. They are working to continue spreading the message that tribes do hold power when it comes to their water rights and building the capacity to manage their own water.

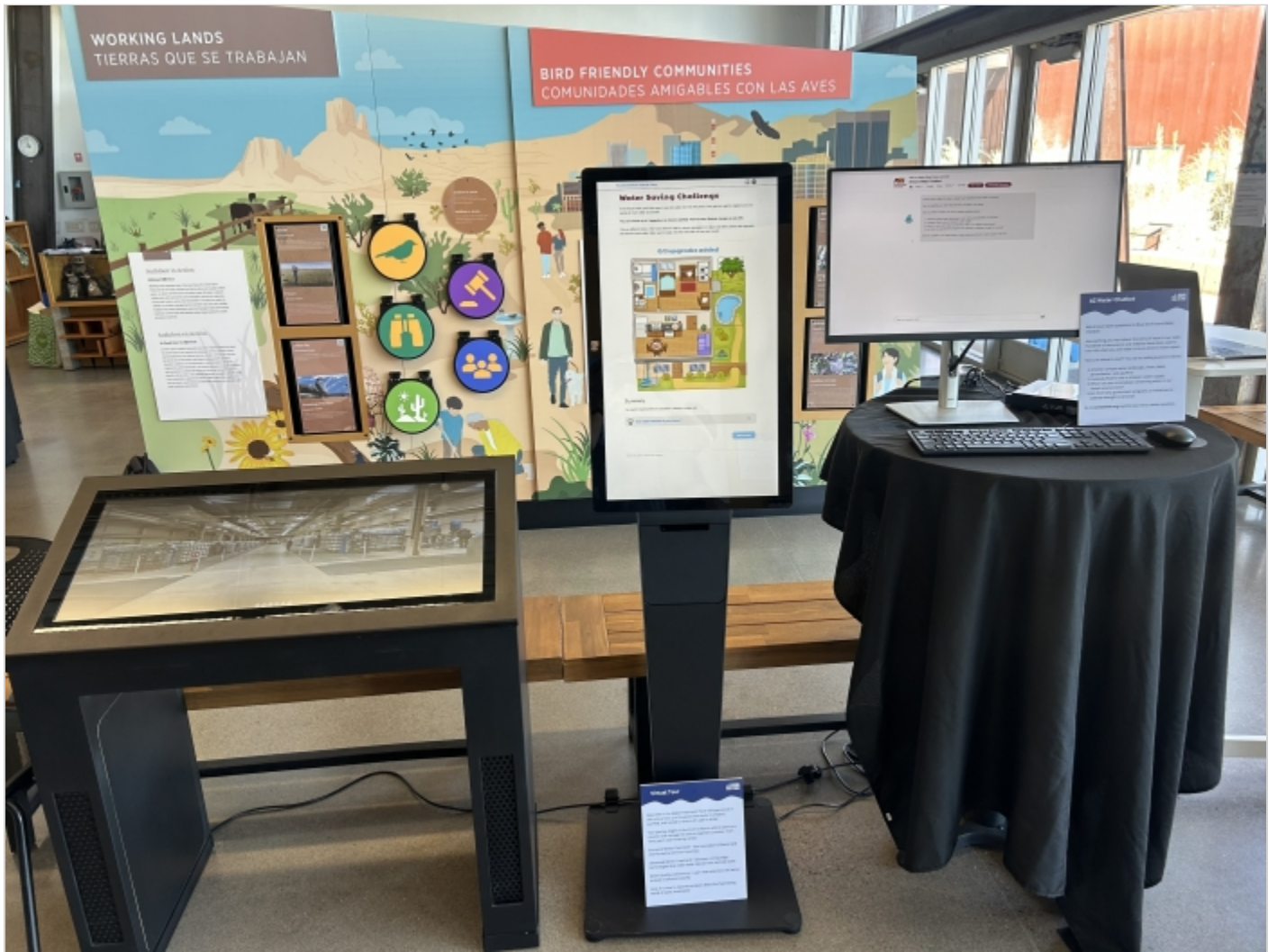
“What tribes have to say about water, how they relate to water, their challenges, approaches and solutions are important. It matters not only for them, but for all of us,” Caughman said. “Learning about it and engaging with it can build that capacity, build that connection within the tribes, and then maybe there's wisdom in that more holistic relationship to water that would help us all deal with these sorts of problems.”

*Note: An earlier version of this story incorrectly stated the team behind the “Agua es Vida” exhibit.*

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*This story originally appeared on [ASU News](#).*

## Main image



Displays in the “Agua es Vida” exhibition, on view at the Rio Salado Audubon Center in Phoenix, use video games and virtual learning tools to engage guests in multiple ways. Photo by Liliana Caughman

**Text image(s)**





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This water chatbot AI tool will integrate technology and be available to answer water questions by patrons at every exhibit location. Photo courtesy of Liliana Caughman

## Gallery



Participants listen to a DIY rainwater harvesting talk by Colectando Agua, Cosechando Vida (CACV) at the Agua es Vida STEM day event. The organization has a zine that will be turned into an exhibit for tribal museums.



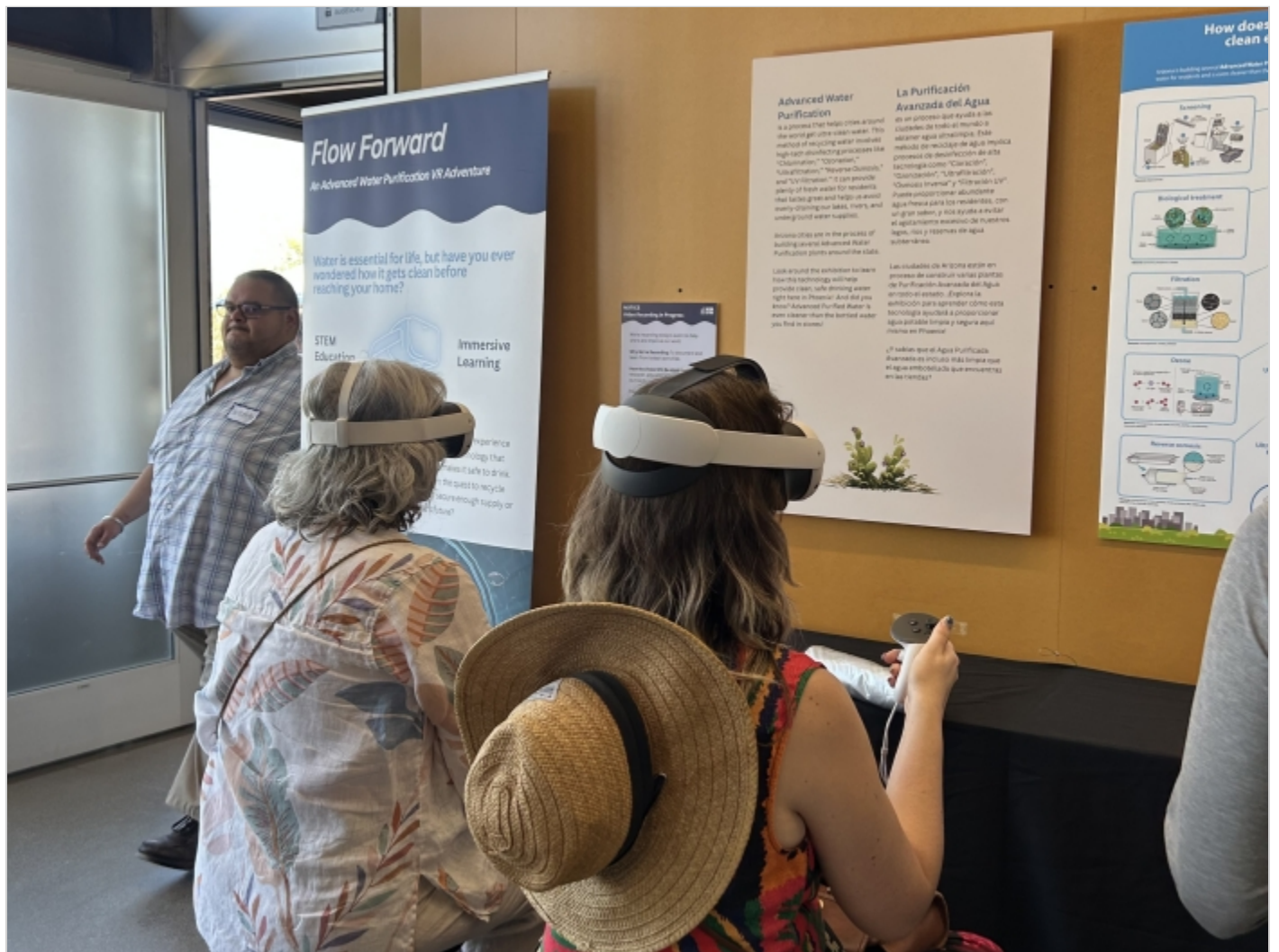


An "ofrenda" to water at an exhibit in south Phoenix.



Liliana Caughman and cohort student researchers celebrate the first museum exhibit opening in south Phoenix. From left: Erin Tapahe, Caughman, Lizzy Colon and Marrilyn Galvan.





A virtual-reality game that integrates technology and innovation into the museum exhibit experiences allows visitors to engage in hands-on learning about local water issues, topics and solutions. The game will be at all exhibits and tailored to each community.