

## LIVING LANDS: Cultivating river stewardship through gameplay & storytelling

Gentry, Zoe1,2, Savage Cree Hess2,3, Michele Clark4, Lilliana Caughmon5, Michelle Hale6, and Nancy Grimm7.

1New College of Interdisciplinary Arts and Sciences, Arizona State University - West campus P.O. Box 3710, Phoenix, AZ 85065-7100; 2School of Life Sciences, Arizona State University, PO Box 874501, Tempe, AZ 85287-4501; 3School of Social Transformation, Arizona State University, PO Box 874501, Tempe, AZ 85287-4501; 4Undergraduate Student; 5Graduate Student

### Background

The Onk Akimel (or Salt River) once flowed through what we currently call the greater Phoenix Metro. These lands are the homelands of the Akimel O’odham, Piipaash, Yavapai, and Ndée peoples, among others. Though the Onk Akimel holds great significance to these communities, colonization has left deep wounds on the river and its people. Example:

- Diversion of Lower Salt River into maze of dams, canals, and urban sprawl1,2
- O’odham and Piipaash farms divested of water1,2
- Degradation of riparian habitat3,4
- Erosion of ability to maintain relations with the river5

Despite these injustices, the communities of the river are alive and well. Victories such as the fight against Orme Dam and the Arizona Water Settlement Act tell vibrant counter-stories6 in the face of dominant narratives that erase and marginalize them. Still, the wounds of colonization remain, many of which are shouldered by indigenous youth.

To address the interlinked issues of cultural erasure, environmental degradation, and language loss, we are co-developing a game called Living Lands with native teens and community advisors to strengthen relationships with the Onk Akimel.

### Impacts

Within the community, Living Lands:

- Tells stories that challenge dominant narratives about the river and its people.
- Is a cheap, accessible teaching tool that can be used to teach fundamental ecology concepts, local history.
- May be used as a language-learning tool, fostering new opportunities for O’odham language learners to gather and practice speaking the language.

But it may grow into something bigger. By providing the framework of Living Lands as a free resource and development tool, other communities could transform the game to teach about their own, local ecosystems.

### Looking Forward

There is still so much more to accomplish. With the aid of ‘Seize the Moment,’ an initiative of the Humanities Lab, ASU-Leonardo, and the Global Futures Laboratory, we are in the process of hiring a board of indigenous collaborators and O’odham-language consultants. With their help, we will finish developing the game.

In the meantime, we continue to share Living Lands with communities and classrooms along the Onk Akimel. We hope to share it with you, too!

**Play Living Lands** bit.ly/3Qhd4zD (or scan that QR Code!)

Living Lands is only possible through collaboration, and it belongs to everyone who plays it. We welcome your feedback!

### Acknowledgements

Central Arizona-Phoenix Long-Term Ecological Research, Phoenix Indian Center, Labriola National American Indian Data Center, Earth Systems Science for the Anthropocene, Humanities Lab, ASU-Leonardo, Global Futures Laboratory, our playwrights, the Onk Akimel, and all her people.

### References


### Process + Methodology

Games and stories are among the oldest and most powerful ways to learn.

**Example:** Inuit children play games to learn Inuit qaujimajatatuqangit (or wisdom gained through life experiences, contextualized within the Inuit community).7

But only in recent years have games been explored in the context of science communication...

### Accessibility

Navigating the ability to participate is another challenge of Living Lands. The game is designed with two major forms of accessibility in mind:

- **Access Across Ability**
  - Large reading font, designed for low vision readers
  - High contrast, black-and-white design
  - Easy to assemble
  - Simple vocabulary

- **Access Across Setting**
  - Print-and-play format
  - Available for free
  - <45 minute playtime
  - Context-specific game versions
  - Spanish and O’odham language translations*

### Impact

Within the community, Living Lands:

- Tells stories that challenge dominant narratives about the river and its people.
- Is a cheap, accessible teaching tool that can be used to teach fundamental ecology concepts, local history.
- May be used as a language-learning tool, fostering new opportunities for O’odham language learners to gather and practice speaking the language.

But it may grow into something bigger. By providing the framework of Living Lands as a free resource and development tool, other communities could transform the game to teach about their own, local ecosystems.

### Acknowledgements

Central Arizona-Phoenix Long-Term Ecological Research, Phoenix Indian Center, Labriola National American Indian Data Center, Earth Systems Science for the Anthropocene, Humanities Lab, ASU-Leonardo, Global Futures Laboratory, our playwrights, the Onk Akimel, and all her people.

### References


