

## EXPLORATION IDEA PROFILE: Freshwater Mapping in Native American Communities

### EXPLORATION IDEA

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Citizen Science participation tends to not involve underserved populations despite its huge egalitarian approach to science. This project invites participants to photograph bodies of freshwater, springs, wells, or cisterns that are found in their generally arid communities, and upload this information to a GIS project site at [anecdata.org](http://anecdata.org). The resulting map will be of use to this community for monitoring this life-saving resource.

### TARGET AUDIENCE(S)

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This project develops a Citizen Explorer project of use to Native American populations and introduces participants to the process of being a Citizen Science and data-collector. The project is chosen for its utility to the community rather than its initial value to science, but can eventually partner with a valid scientific research project once it establishes a data base of scientific interest.

### POTENTIAL IMPACT

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This project intends to be a resource for the Native American community and educators who are looking for a project that supports collaborative scientific investigation and data-gathering. The data can be analyzed by students and the general public to further their interests.



### RELATED IDEAS/INNOVATIONS

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- Develop a mobile interface for Android and iPhone cell phones: StandingWater Mapper

### MATERIALS/EQUIPMENT

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- Various smartphone models to test mobile app functionality in the field

### EXPLORATION IDEA TEAM

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- **Team Lead:** Dr. Sten Odenwald (NSSEC)
- **Affiliated Contributors:** Dr. Nancy Maryboy (IEI), Dr. David Begay (IEI), Cait Bailey (Anecdata)

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*Exploration Idea Profiles* are developed through a guided process involving a step-by-step guide/worksheet where participants are invited to consider additional topics that include:

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- Connections to other technologies
- Connections to existing information/research
- Connections to educational standards
- Connections to existing activities/projects
- Universal design
- Next steps

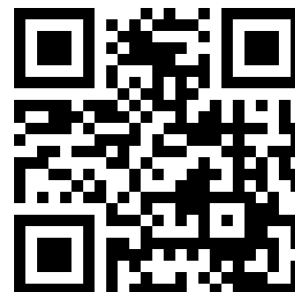
## ***HOW TO CONNECT***

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