

Water Resources Research Center



College of Agriculture and Life Sciences

Arizona Water Festivals Board Presentation

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The University of Arizona



Arizona Project WET (APW)

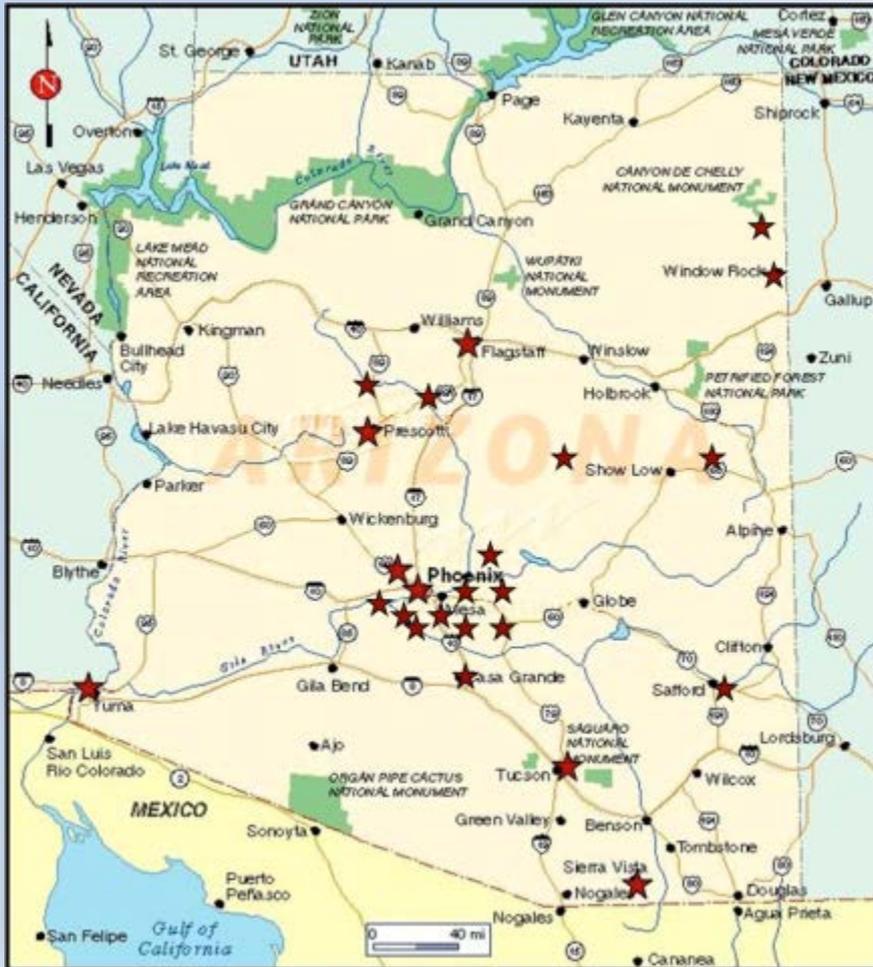


Arizona Project WET (APW) promotes water stewardship and builds STEM literacy through:

- Professional development for teachers focused on 21st century instructional practice
- Direct student outreach that delivers or extends in classroom instruction
- Engagement that connects community members with K-12 schools and students



APW Program since 2000: Arizona Water Festival (AWF)



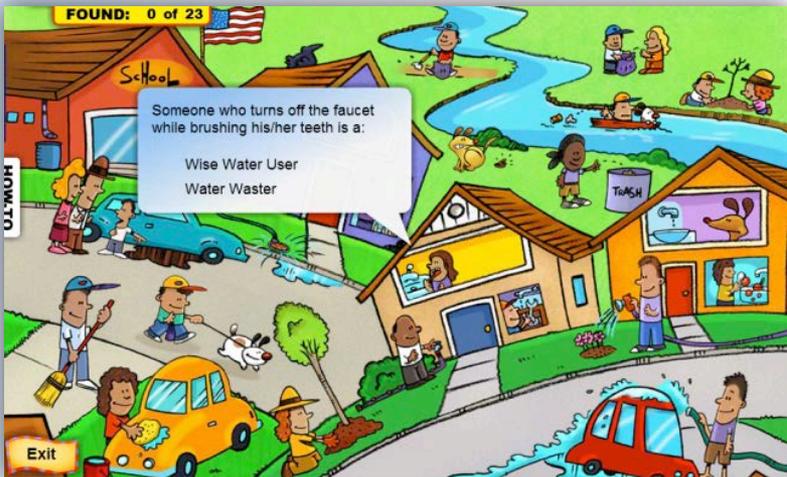
Arizona Water Festivals instill a deeper understanding of water in the earth system and Arizona's water resources through:

- teacher professional development on a standards-based unit
- water festival event that provides students with a day of exploration and investigation
- volunteer involvement
- sponsorship of effective education from collaboration with local businesses and organizations

24 communities • 63,227 students • 2,324 teachers



The Water Festival Model: Professional Development Workshop



- Helps teachers prepare students for the 21st century workplace
- Model the inquiry process and science note-booking
- Integrate technology into classroom instruction
- Deepens teacher's knowledge about water science
- Provide a unit of pre- and post-festival lessons

The Water Festival Model: Community Water Festival

The Water Cycle



Water Conservation



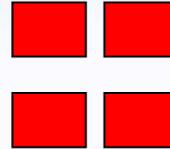
Groundwater



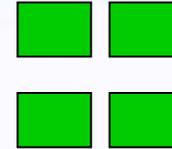
Watersheds



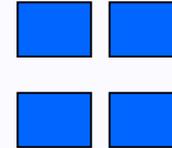
Red Area



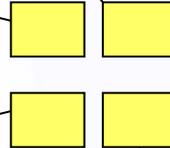
Green Area



Blue Area



Yellow Area



Staging
Crew

Parking
and
Bus
Drop-off



Groundwater Lesson



Groundwater Lesson



Groundwater Lesson



Water Cycle Lesson



Water Conservation Lesson



Watershed Lesson

Evaluation

- Formative evaluation has been conducted every year since 2001 improving festival lessons and process.
- In 2009, APW received a BOR grant to conduct a summative evaluation of the water festival model. This evaluation helped shape teaching practice.
- Grounding Water on the use of multimodal assessment was published in the August 2011 issue of the Journal of Geoscience Education.



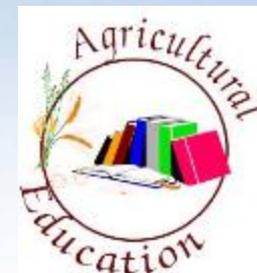
What do students learn?

Sample	Mean	N	Std. Deviation	P-value
Pre-Test Knowledge	3.84	1156	1.601	<0.0001 *
Post-Test Knowledge	5.02	1156	1.699	
Pre-Test Conservation	2.45	1121	1.348	<0.0001 *
Post-Test Conservation	3.04	1121	1.139	
Pre-Test Enthusiasm	8.82	1155	3.427	<0.0001 *
Post-Test Enthusiasm	9.52	1155	2.654	

Student understandings are not only established, but deepened! (Even high scoring students score higher on the post-test.)

Contact Information

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