

Collaboration for Change: Using WaterSim in Local and Rural Water Education Efforts in Arizona

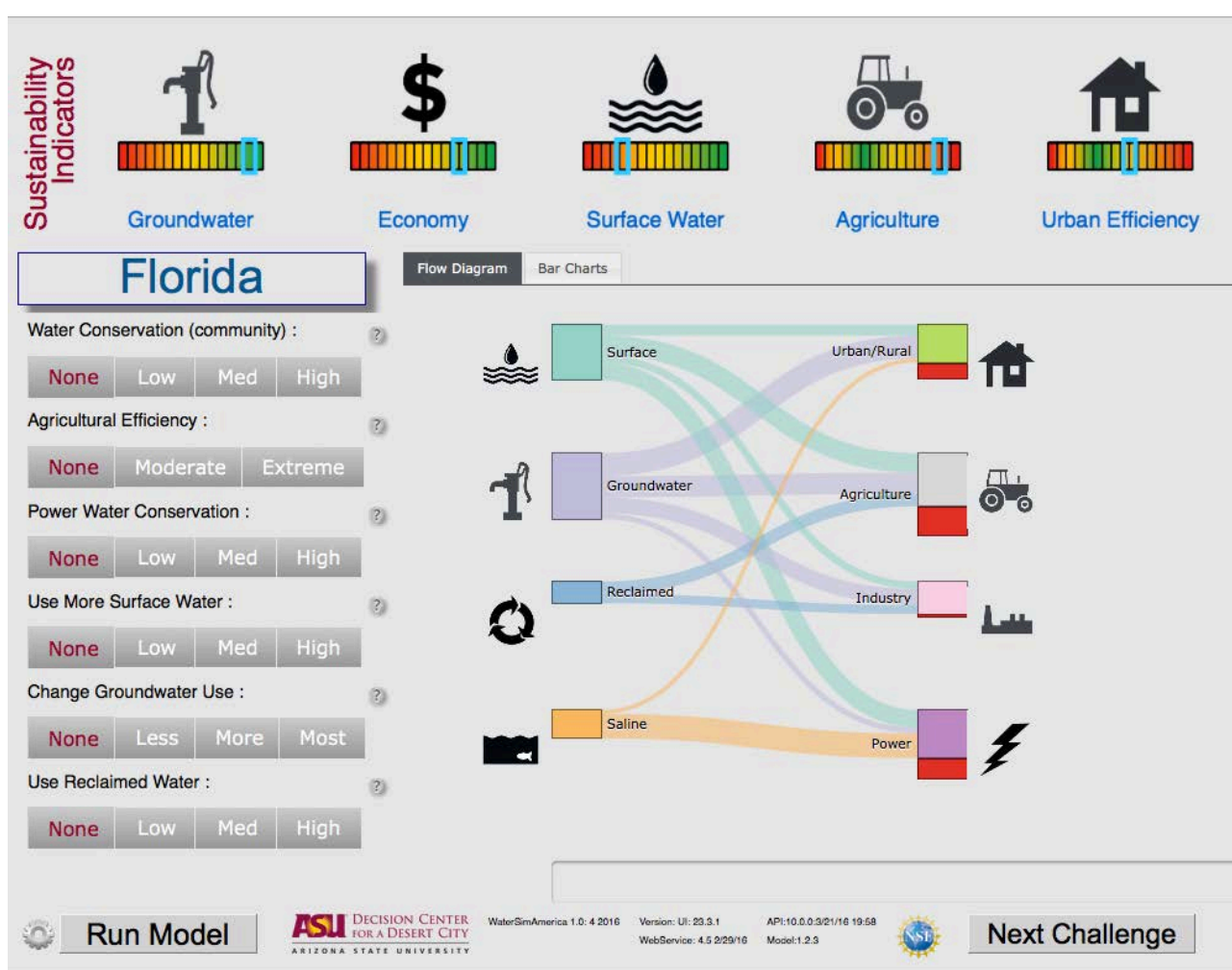
Colbert, J.K. (Student), E. Grunspan, and R. Quay – Decision Center for a Desert City

Who are we?

Decision for a Desert City (DCDC) is a water, climate, and decision research center within the Julie Ann Wrigley Global Institute of Sustainability at Arizona State University. DCDC was established in 2004 with an investment from the National Science Foundation (NSF) through the Decision Making Under Uncertainty (DMUU) program. Our mission is to advance knowledge about decision making under uncertainty in the context of water sustainability and urban climate-change adaptation.



WaterSim America Kiosk



WaterSim America Interface

DCDC first created the WaterSim Phoenix model to estimate water supply and demand for the Phoenix Metropolitan area. Users can explore how water sustainability is influenced by various scenarios of regional growth, drought, climate change impacts and water management policies. WaterSim America is a new tool that expands on the modeling effort of WaterSim Phoenix to a state level.

What have we done?

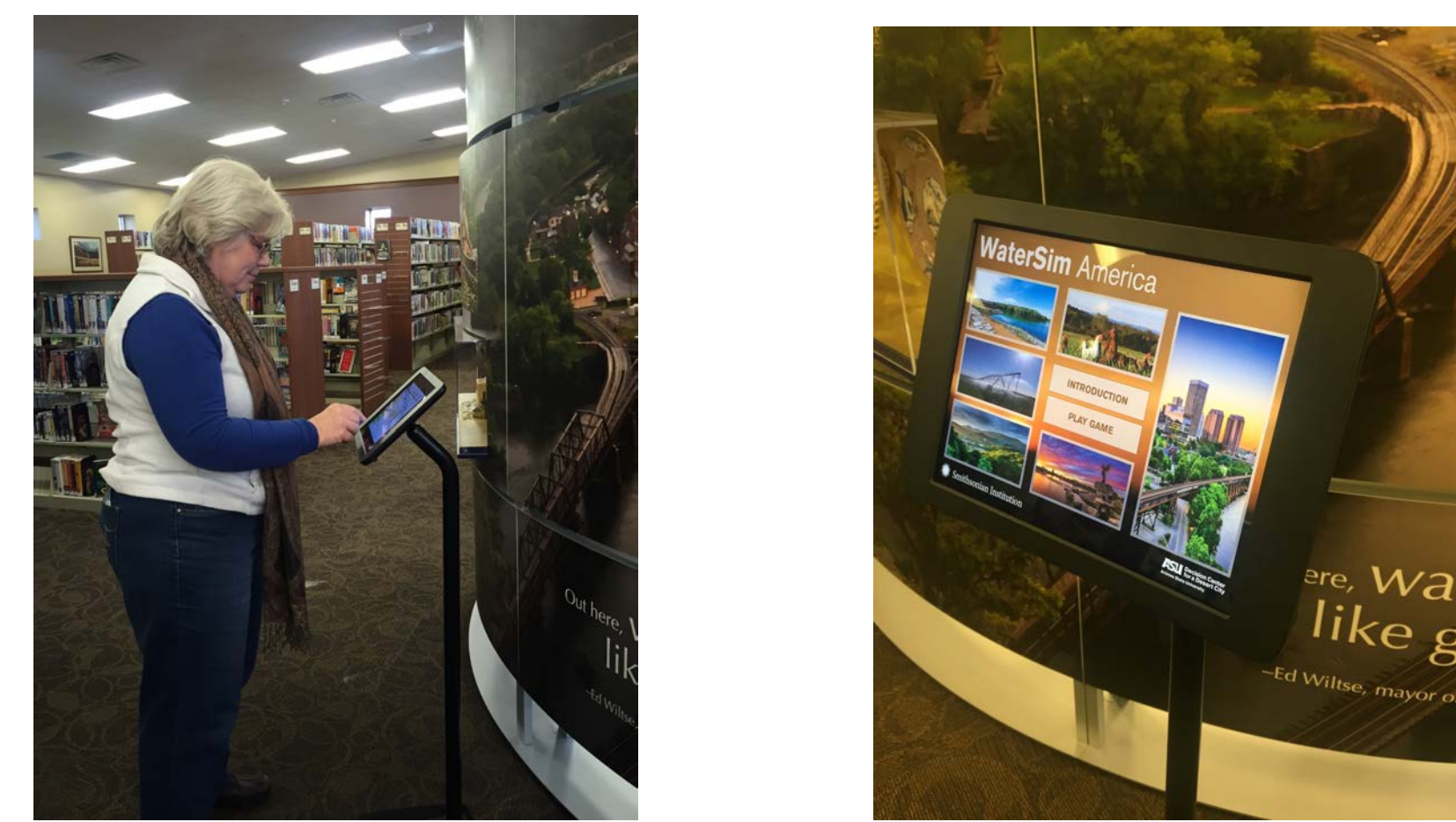
In 2016, the **Arizona Community Foundation** awarded DCDC with a \$100,000 grant to engage with community leaders to make a positive impact in Arizona. For over a decade, DCDC has been using a dynamic, interactive tool called WaterSim to help with decision making under uncertainty. Now, DCDC is using this web-based tool in classrooms throughout Central Arizona to educate students in grades 7-12 about water supply and demand, as well as the potential impacts of policy choices and climate change in the Phoenix metropolitan area. DCDC has trained 37 teachers to use WaterSim Phoenix in their classrooms, impacting thousands of students in the state. In addition, we plan to train 20 more teachers and community college faculty members by spring of 2018.

What are we doing?

With the support of **Arizona Humanities**, the **Smithsonian Institution**, and the **Arizona Community Foundation**, we are inspiring Arizona's future young community leaders to become more aware of water issues, how the economy, quality of life, and natural environment are dependent on water, and what tradeoffs are needed to sustain the future of their communities. We do this by engaging with students utilizing state-of-the-art science and humanities tools, WaterSim America and *WaterStories*. DCDC's WaterSim America model is a unique hands-on, immersive visualization tool which explores the complexity of water supply and demand. Smithsonian Institution's *WaterStories*, engages rural youth in telling the cultural stories about the deeper meaning of water to their communities.



Water/Ways exhibition at Hesston Public Library in Hesston, Kansas



Who should you contact for more information?

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Where are we going?

The Smithsonian exhibition *Water/Ways* will travel to twelve rural Arizona community host sites beginning in June 2018. Check this map to see when the exhibition is coming to a location near you, and which Arizona Community Foundation Regional Affiliate or Affiliate Partner you can contact for support.

