

Advanced Water Education Workshop
July 18-19th, 2012

Contact Information for the Workshop Organizers:

Monica Elser

Education Manager, Global Institute of Sustainability
~ 480-965-6046 ~ mmelser@asu.edu

Kerry Schwartz

Director, Arizona Project WET
Associate Specialist, Dept. of Agricultural Education Water Resources Research Center
~ 520-621-1092 ~ kschwartz@cals.arizona.edu

Speakers (in order of their presentations):

Gretchen A. Hawkins

Graduate Student
ASU, School of Sustainable Engineering and the Built Environment

Gretchen Hawkins is currently a graduate student at Arizona State University in pursuit of her master's degree in the department of Sustainable Engineering and the Built Environment. Her concentration is in water resource engineering with a research focus on hydrologic modeling in Arizona and studying the impacts that global climate change may have on the region during the summer monsoon season. Gretchen has a B.S. Agricultural and Biosystems Engineering from the University of Arizona.

Chris Sanchez

REU student, CAP LTER project
csanchez792@gmail.com

I'm a third-year undergraduate student at the University of Miami, in Florida, who is double majoring in Ecosystem Science & Policy and Anthropology. I am a Miami native who has had a long history of involvement at the Florida Coastal Everglades Long Term Ecological Research (FCE LTER) site in Miami and had the wonderful opportunity to be a student in Dr. Dan Childers' Wetland Ecosystem Ecology (WEEL) lab during Summer 2011. My project at the Central Arizona Phoenix (CAP) LTER focused on the initial stages of developing a water budget for the Tres Rios Wastewater Treatment Wetland in Phoenix, Arizona. I used an infrared gas analyzer to derive the daily evapotranspiration volume for one of the treatment cells in the wetland. Moving into Summer 2012, I will be expanding on this research as well as mentoring several high school students who will be joining us in the WEEL lab.

My work at the FCE and CAP LTER sites as well as my studies have introduced me to and fueled my passion to study sustainability. At the intersection of the environment, society, and science I hope to find the answers that will help humans learn to better integrate our urban ecosystems with the natural ecosystems around us. Once I graduate, I want to continue on to graduate school to study urban ecology, sustainability science, and anthropology.

Robert Upham

Civil Engineer/Project Manager

City of Phoenix

robert.upham@phoenix.gov.

Robert Upham came to the City of Phoenix five years ago to fill the position of Civil Engineer III and was assigned as the Project Engineer and Manager for the Tres Rios Environmental Restoration Project. Prior to coming to the City of Phoenix, Mr. Upham held the position of Resident Construction Engineer with the Arizona Department of Transportation and the position of Senior Civil Engineer with the City of Chandler, Arizona.

Mr. Upham has over 27 years of extensive experience in state and municipal government, managing large infrastructure projects. Mr. Upham holds a Bachelor of Science degree in Civil Engineering and a Master of Public Administration degree from Arizona State University. Mr. Upham is a licensed professional civil engineer in the State of Arizona.

Erika Liliana Gallo

UA Postdoctoral Researcher,

Dept. of Hydrology and Water Resources

I received my M.S. in Hydrology with an emphasis in hydrobiology from the University of California, Davis. My spouse's job prompted a move to Tucson in late 2004. I quickly realized that surface water in the southwest can be abundant but extremely ephemeral. Given my training as a hydrobiologist, I was interested in finding out 1) where water goes after it rains, 2) how organisms respond to the short-lived availability of water, and 3) how urbanization alters catchment hydrologic responses to rainfall. I started my PhD in Hydrology and Water Resources at the U of A in 2006, where I worked with Dr. Paul Brooks and Dr. Kathleen Lohse. The focus of my dissertation was on identifying how urbanization in the southwest alters runoff quantity and quality. I finished my PhD in 2011 and was a postdoctoral researcher at Idaho State University for one year. During that year I focused mainly on identifying how the physical characteristics of ephemeral streams alter biogeochemical responses to stream channel wetting due to either rainfall or runoff. I am currently working as a Postdoctoral Researcher at the University of Arizona looking more closely at urban water balances, and finishing up my work from ISU. I have two little boys ages 5 and 7 and 2 crazy dogs.

Daniel Paul Bunting

PhD 2012

University of Arizona

A true desert rat, I was born and raised in Lake Havasu City, Arizona where the highs reach in the 120s every summer. I quickly learned during my undergraduate career that I had a keen interest in wildlife and the outdoors. Through seasonal positions and a five-year stretch as a contracted biologist monitoring and researching the endangered Sonoran pronghorn, I have surveyed everything from vegetation, to large and small mammals, to birds, to invertebrates. During my Masters program, I assisted in a riparian restoration study seeding cottonwood and willow trees along the Colorado River. This position opened my eyes to the challenges we face to protect our riparian corridors while sustaining our water resources in the future. Water is a valuable commodity in the arid Southwest, one we often

take for granted. I realized that if I could focus my graduate studies on how to protect this resource and the riparian ecosystems that depend on it, I could make a difference as we move forward with growing human populations and greater challenges in the future. My graduate studies have prepared me with the knowledge base to protect and restore our waterways, but a growing personal interest of mine is to share what I have learned to the broader community through public education and outreach.

Jeanmarie Haney

State Hydrologist

The Nature Conservancy in Arizona

Jeanmarie is an Arizona native and has spent her life exploring the southwest. She has an MS and BS in geology and has worked as a hydrologist in Arizona for 26 years, the past 11 with The Nature Conservancy. Prior to the Conservancy, Jeanmarie worked in private consulting and for ADEQ. She provides technical expertise to support the Conservancy's goal of water for people and nature. In that capacity, she works to quantify the water needs and water sources for rivers and wetlands and interpret that information for decision makers. Jeanmarie now lives on irrigated land on the banks of the Verde River in Cottonwood and attends a lot of water meetings!