

## WRRC, Part of a 50-Year Legacy of Meeting Arizona Water Needs

In some ways the University of Arizona's Water Resources Research Center is one among many, one of the 54 water institutes established by the Water Resources Research Act of 1964. The federal act authorized establishing water institutes in each state and in four U.S. territories.

In other ways the WRRC is unique, outstanding among its institutional peers since its roots were established before passage of the 1964 law. Its origins trace back to 1957 when Sol Resnick was asked to organize a UA Institute of Water Utilization. Sol took on the job, and his labors mark the beginning of what is now the 50-year water institute legacy at the UA. With the passage of the 1964 law, the IWU evolved into the WRRC.

A 50-year anniversary is a distinction not shared by other U.S. water institutes whose origins are the 1964 law. This is an an-

niversary that should not go unnoticed: thus this abbreviated edition of the *Arizona Water Resource* to express pride in the WRRC's 50th anniversary. The newsletter covers a span of time — as much as a four-page spread allows — from the beginning, when the IWU was launched, to current affairs of today's WRRC.

### Special Double Issue

This publication is a "twofer" containing a shortened version of the *Arizona Water Resource* newsletter along with the most recent edition of *Arroyo* focusing on river restoration projects in the state. The *AWR* notes the 50th anniversary of the Water Resources Research Center.

## Institute Lays Groundwork for WRRC



*Sol Resnick, founder and director of the Institution of Water Utilization, sits at his desk in this 1957 photo. Sol, who died in 2005, provided a first-person account of the founding of the IWU. He related his experiences to his wife Elaine who transcribed the statement that follows. Like the WRRC, the IWU provided services to the state, including research along with hands-on, in-the-field assistance. The field work accounts for some of the colorful details Sol provides in his narrative.*

Tucson in 1957 had about 75,000 people. The University of Arizona had around 9000 students. The School of Agriculture turned a tiny lab on the first floor into an office for me and I set off to learn everything I could about water in Arizona. The aim of my new Institute was to provide help for other agencies in Arizona. I asked Dean Meyers why

the Ag Engineering Department wasn't doing that. His response, "They don't." I asked around to get a better answer and learned that Harold Schwallen, head of the Ag Engineering Department, didn't believe state money should be spent to help federal projects and refused to do so. Dr. Schwallen was on

## Fifty Years Later, WRRC Still Going, Growing

*Fifty years later the WRRC continues on the course set half a century ago. WRRC achievements and activities noted on page 3 and 4 show that the program continues to gain recognition, break new ground and provide statewide services. See pages 3 and 4 for information about the following WRRC current events:*

- WRRC Director Sharon Megdal is first recipient of the C.W. and Modene Neely Endowed Professorship for Excellence in Agriculture and Life Sciences.
- WRRC is planning a June 24 statewide conference on importance of Colorado River to Arizona's Future.
- WRRC takes on international task with Transboundary Aquifer Assessment Program.
- WRRC offers student internship to write on water issue.

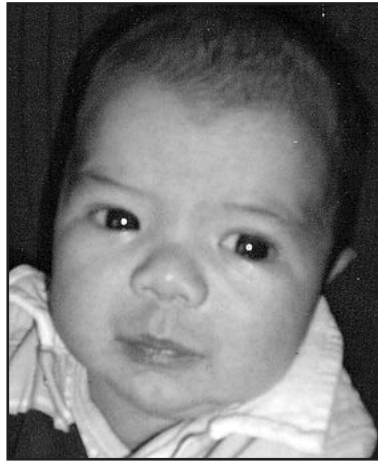
sabbatical in 1957, and I began to understand just why I was hired.

My first step was to find out just what was happening at the university. I set up appointments and visited every department in the School of Agriculture. I met with professors from ag engineer-

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*Roots of WRRRC...continued from page 1*

ing, watershed management, soils, ag economics, ag education, and even animal husbandry. I met with professors of departments in other schools which had any bearing on water such as atmospheric



*Fifty years ago Sol Resnick established the Institute of Water Utilization that later became the Water Resources Research Center. Sol's presence was felt during most of those 50 years, first as director of the IWU and then in leadership positions within the WRRRC. Hopefully those of us associated with the WRRRC will not be thought out of bounds if we consider the birth of Sol's great-great nephew and namesake, Sol Resnick, on our 50th anniversary year as adding further significance to an already auspicious occasion. Sol Resnick the younger was born on Dec. 11, 2007, exactly two years from the date of the elder Sol's death. He the son of Josh and Ai Resnick*

control dam on Trilby Wash in the White Tank Mountains located in the MSIDD district. The dam created a small reservoir trapping floodwaters. In time silt covered the bottom of the reservoir pre-

venting the water from filtrating down into the aquifer below. The water simply evaporated not doing anyone much good. Hank had his eye on that disappearing water. The farmers in his district pumped water from wells to irrigate their land. The more they pumped, the more the water table dropped and higher their expenses climbed. When I arrived, Hank told me his farmers were complaining about the high cost of pumping and asked about the water in the reservoir that was just going to waste. We ran a pipe from the reservoir to the wells in the irrigation district and dropped the water into idle wells allowing the water to recharge down into the aquifer. The water would cause the water level in the aquifer to rise so the farmers wouldn't have to spend as much to pump the water to irrigate their fields. Hank and the farmers were delighted. This was the first recharge project in Arizona. Hank entertained us at night by taking us to his favorite watering holes. As it only took a few nights to cover the nightclubs in Phoenix, we moved on to Prescott where more than forty bars surrounded the town square. It wasn't easy keeping up with Hank and after a beer or two everything turned hazy. George Shipley of the Salt River Project was another early contact. Ship and I became good friends and he was of invaluable assistance to me to begin and make the institute a success. Ship wanted us to find a way to cover the SRP irrigation canals. Evaporation was a major problem during the summer, but that wasn't the worst problem. The irrigation canals presented an open invitation to children who just wanted to take a little swim and cool off. In time the walls of the canals had become very slippery with accumulations of moss and the children often drowned because they couldn't climb out. Together we began a project to cover the canals. Things were going well at the new Institute. We were beginning to make a good name for ourselves in the state. I was sitting at my desk one day when a man I had never seen before barged into my tiny office and began to yell at me. "Start packing your bags" and "You're out of here" were some of his milder remarks. I guessed, and I was right, that the man was Dr. Harold Schwallen. Naturally, I told Dean Meyers about my visitor. He told me not to worry and I went back to work. I made sure that the ag engineering department received credit for any and everything they did, credit that reflected back on Harold. In time Harold realized that I was not out to undercut him and we worked well together.

My next step was to visit the rest of Arizona especially the many irrigation districts in the state established by the federal government. I visited Hank Raymond at the Maricopa-Stanfield Irrigation and Drainage District at Beardsley, a tiny dot on the map about twenty-five miles west of a then little town called Phoenix. Hank was one of the first to request help from the new Institute. As he was a member of all the state water committees, I knew I had to do a good job.

The Army Corps of Engineers had built a flood

## Still a Work in Progress, WRRRC Looks to Next 50 Years

The 50-year view of WRRRC is the historical perspective, and it is useful for understanding and appreciating the center's roots or beginnings and its progress over time. The WRRRC, however, is a work or program in progress. Whatever its legacy, however credible its past achievements, the WRRRC is mostly now known by present commitments and activities. What research is done? What outreach activities conducted? What instructional activities provided? What publications developed? What awards or special recognitions received? Answers to such questions not only define today's WRRRC but provide the stuff that will show up later in a future historical perspective.

Following are descriptions of a few WRRRC events and activities. Now current affairs, these events and activities, along with many other ongoing WRRRC commitments, are contributing to a historical perspective in the making:

### WRRRC Offers Writing Internship

Committed to providing varied instructional services, from community outreach to classroom teaching, the WRRRC is offering a summer internship to a student interested in gaining experience in writing about a water issue. The selected intern will contribute to

the researching and writing of an issue of *Arroyo*, the annual WRRRC publication that focuses on a critical Arizona water issue (The most recent *Arroyo* is attached to this newsletter).

The intern will gain valuable experiences of benefit in future academic and professional work relating to water. For example, the

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intern will have the opportunity to work one-on-one with WRRRC staff members responsible for WRRRC publication projects. Also the intern will acquire a thorough understanding of an assigned water issue by conducting research and interviews and working on a rough draft of an article.

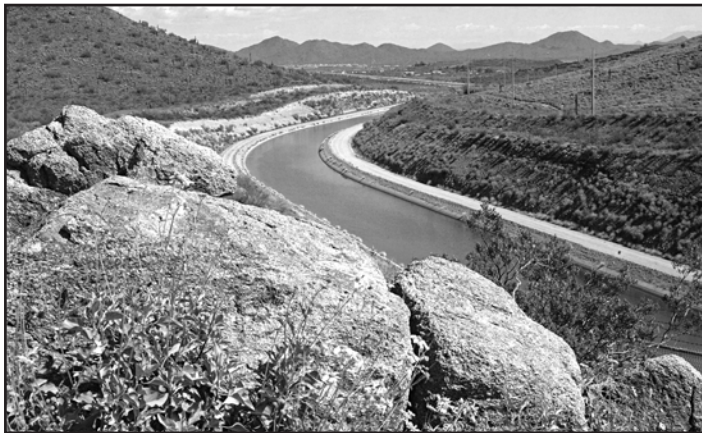
The intern also will become acquainted with the makeup and workings of Arizona water community — i.e. the agencies and individuals involved in state water affairs. These will be among the sources the intern will tap for information. And finally the intern will receive author credit on the published article.

Only enrolled students at the University of Arizona, Arizona State University, and Northern Arizona University are eligible. The intern will work 20-25 hours per week at the WRRRC during June and July, at a rate of \$10 to \$14 per hour depending on experience.

Additional information and application are at <http://cals.arizona.edu/AZWATER/> Applications are due no later than 5:00 p.m., Friday, April 25.

## Keep in Mind: WRRC's June 24 Colorado River Conference

The WRRRC annual conference is an important event, one attracting statewide interest and support. Work in underway on two conferences, the relatively close-at-hand 2008 conference and also the down-the-road 2009 conference.



*The Central Arizona Project canal delivers Colorado River Water to the interior of the state. Photo: Central Arizona Project.*

First the 2008 conference: the theme of this year's conference is the "Importance of the Colorado River for Arizona's Future" and will be held June 24 at the Arizona Biltmore Resort and Spa in Phoenix. The conference agenda, being prepared in collaboration with the Central Arizona Project, is taking shape. The conference is looking both at the past and the future: 80 years after the Boulder Canyon Project Act authorized Arizona's 2.8 million acre-foot allocation of Colorado River water and 40 years after the Colorado River Basin Project Act authorized construction of the Central Arizona Project, Arizonans will gather at the conference to consider the important issues relating to the future role of Colorado River water.

Casting an eye 40 years into the future, this one-day conference will consider several important questions. How much Colorado River water will be apportioned to each user? Where and for what purposes will it be used? How reliable will the water supplies be? What are some of the environmental considerations?

The agenda and registration information will be posted on the WRRRC web site (<http://cals.arizona.edu/AZWATER>) on or before April 1. Scholarships will be available. Conferences sponsorships are always appreciated. Please contact WRRRC Director, Sharon Megdal, at [smegdal@cals.arizona.edu](mailto:smegdal@cals.arizona.edu).

The 2009 conference also is on the drawing board, with a date, location and topic identified. The one-day conference will be conducted on March 17, 2009 at the University of Arizona's Student Union; the topic is "Best Practices in Community/Stakeholder Engagement in Water Planning." The event will be an opportunity to learn from experiences throughout the West. More information will be provided in the WRRRC newsletter.

Your name on our mailing list ensures you will be kept up to date with conference information. Please contact [wrrc@cals.arizona.edu](mailto:wrrc@cals.arizona.edu) to be included on our conference email list.

## WRRC Enters the Interstate, International Arenas

Once mainly concerned with Arizona water affairs, the Water Resource Research Center is breaking new ground by collaborating with two out-of-state water institutes to undertake a study of transboundary aquifers. Work is being undertaken in response to Public Law 109-448 passed in 2006 that authorized the U.S.-Mexico Transboundary Aquifer Assessment Program and directed the U.S. Geological Survey to collaborate with the states of Arizona, New Mexico and Texas and the country of Mexico and others to conduct hydrological characterization, mapping, and assessments of priority transboundary aquifers.

The aquifers of concern to Arizona per the legislation are the Santa Cruz and San Pedro aquifers, both underlying Arizona and Sonora, Mexico.

In testifying in support of the bill before a congressional subcommittee, WRRRC Director Sharon Megdal said that the program will assist federal, state and local officials address critical water resource challenges in the U.S.-Mexico border region. Further the act will build the scientific foundation for addressing daunting and acute water resource issues. She also testified that the bill would meet a critical need by establishing a partnership of federal, state and local governments, university researchers and others to provide scientific information on transboundary aquifers.

The program recently got a green light to proceed with the passage of the FY 08 omnibus appropriations bill that will enable the WRRRC, along with the water institutes in New Mexico and Texas, to begin work. The bill includes \$500,000 in the U. S. Geological Survey budget for start-up funding for the program.

The program is authorized for a total of 10 years and \$50 million. To ensure effective use of the federal dollars, the WRRRC is coordinating bi-national discussions to plan an integrated scientific approach to assess the priority aquifers.

## WRRC Director Megdal Awarded Endowed Professorship

Water Resources Research Center Director Sharon Megdal has been named the first recipient of the new C.W. and Modene Neely Endowed Professorship for Excellence in Agriculture and Life Sciences.

The endowed professorship honors the late C.W. Buck Neely, a prominent cotton farmer and rancher in Gilbert, Arizona, and his wife Modene. A gift from the charitable foundation created in their names enables the University of Arizona's College of Agriculture and Life Sciences to recruit or retain a distinguished scholar in an endowed professorship to further critical research, teaching and extension in areas relating to water.

In naming Megdal as a distinguished scholar and recipient of the award, Colin Kaltenbach, dean of CALS and director of the Arizona Agricultural Experiment Station, recognized her broad involvement and work in UA water programs. Along with serving as WRRC director, Megdal holds appointments in the Departments of Agricultural and Resource Economics and Soil and Water and Environmental Science, both within CALS and is director of the Water Sustainability Program.

"Megdal has been a leading force and advocate in the area of water policy for many years in Arizona," says Kaltenbach, "The appointment as an endowed professor will allow Megdal to further her many contributions to the overall water program in the College of Agriculture and Life Sciences."

Megdal's work at the WRRC encompasses local, statewide, national and international programs, and includes academic, research and extension activities. Her long-term research interest is Arizona's artificial recharge program. Among her academic activities, she teaches a graduate course in Arizona Water Policy, which is part of the new Graduate Certificate in Water Policy program.

"My work has focused on understanding, evaluating and formulating water management policy options and practice, with a particular focus on Arizona," Megdal says. "My teaching, applied research and extension programs are highly integrated. It is my hope that the work will contribute to better understanding of water policy and it is a key factor shaping our future."

In remarks made during the award ceremony, Megdal described the current

status of the WRRC and its role in water affairs. She said, "We are a small center within a large college within a very large university. ...The WRRC has established a niche in water policy research, water education for K-12 teachers and water outreach. We serve as a bridge between the academic and non-academic communities, collaborating actively with many."

"This professorship will strengthen our ability to continue our very important work: understanding our water resources management challenges; training our future water policy leaders; and working with the academic and non-academic communities to develop and implement solutions."



*University of Arizona Provost Eugene Sander congratulates Sharon Megdal on being awarded the C.W. and Modene Neely Endowed Professorship during a reception at the Water Resources Research Center. Photo: Joe Gelt*