



NOVEMBER 2012 NEWSLETTER

CONTENTS

[Government Goings-On](#)

[2013 AHS Water Symposium](#)

[Phoenix chapter news](#)

[Phoenix Chapter Officer Elections](#)

[Tucson chapter news](#)

[Tucson Chapter Officer Elections](#)

[WRRRC Brown Bag Seminars – November 2012](#)

[Biofuel Production and Water in the Southwest](#)

[2012 Summer Extern Update: County Sustainability Projects that Improve the Lives of Arizonans](#)

[Searching for Water Solutions: Experiences from My Sabbatical and Other Travels](#)

[Flagstaff chapter news](#)

[Flagstaff Chapter Officer Elections](#)

[Charles C. Avery Intern Scholarship Summary](#)

[Hydro-news](#)

[WRRRC 2012 Photo Contest](#)

[WRRRC's 2013 Annual Conference Takes on "Water Security from the Ground Up"](#)

[AIPG Arizona Section "Golden Anniversary" Trip to Chihuahua, Mexico](#)

[Practical Stats Fall 2012 Course](#)

[Scottsdale water-treatment facility construction begins](#)

[Hopefuls would set policy for Ariz. canal](#)

[Ariz. officials seek limits on drilling](#)

[Arizona hammers water utility over handling of E. coli in San Tan Valley area](#)

[Change in Rosemont's plans may slow AZ permit process](#)

[Catalinas' rock: Life's foundation](#)

[AP Interview: Japan nuke plant water worries rise](#)

[Waterblogged by Shaun McKinnon, Arizona Republic](#)

[Job Board](#)

[Additional Information](#)

GOVERNMENT GOINGS-ON

This year the Clean Water Act turned 40. It has done a lot over the years to clean up the navigable waters of the United States, even though that term is now subject to debate as to how it should be changed and what it should actually mean. The Clean Water Act was one of the triumphs of 1970's environmentalism, and deserves to be celebrated. Rivers don't burn anymore.

Environmentalism is not yet dead, despite the lack of attention paid to the subject and candidates' stances on topics related to the environment during the current political season. There seems to be a serious stirring of environmental concern on the Navajo and Hopi Indian Reservations. Most recently a major piece of water rights legislation that would have settled surface water claims on the Little Colorado River was defeated by both Tribal Councils in response to objections to including an extended lease to the Navajo Generating Station. Tribal representatives have been invited to Washington to begin negotiations anew, but it seems likely they will take with them sensitivity to environmental issues that cannot be ignored.

Also recently considerable Navajo opposition has been expressed against the proposed Grand Canyon Escalade project. Shouting matches have broken out at Reservation chapter meetings. Protestors have walked to Window Rock. In this project, the area above confluence of the Little Colorado and Colorado Rivers would become the site of a major resort, apparently with an industrial tramway to be constructed to the floor of the canyon to increase tourist traffic. Many Hopis and Navajos see the potential for significant degradation of the environmental and cultural setting inherent in the confluence. Having visited the confluence during the June raft trip down the Colorado River organized by our AHS Flagstaff Chapter, I can appreciate their concern for the incredible beauty of the area.

In both instances environmental concerns are trumping the standard promises of more jobs and development. Jobs and economic opportunity would be welcomed by many residents, but not at the expense of environmental damage. For the Hopis and Navajos this is an environmentalism that does not come from the flames of the Cuyahoga River in Ohio, but from a deeper and more ancient source in their culture. The confluence of the Little Colorado and Colorado Rivers is inextricably bound with how they emerged onto this earth and who they see themselves as. This view of the land and water as more important than dollars confounds developers and politicians alike. It is a mindset that is awakening anew in northeastern Arizona. How governments at all levels—tribal, state, and national—deal with this growing environmental consciousness will be interesting to observe.

[Alan Dulaney](#)

City of Peoria

[Top of the Document](#)

2013 AHS WATER SYMPOSIUM

November meeting announcement for the Tucson 2013 AHS Symposium Planning Committee:

The Tucson Chapter of the Arizona Hydrological Society (AHS) will be hosting the annual AHS symposium in Tucson in the fall of 2013. The symposium planning committee was officially formed in April and will be holding its next meeting as follows:

When: Wednesday, November 28th at **6:00 p.m.**

Where: Offices of Montgomery & Associates

1550 E. Prince Road

(520) 881-4912

Please RSVP to ensure accurate food count. And please contact Marla Odom (see contact information below) with any dietary needs prior to the meeting.

Benefits: Volunteering to serve on the symposium planning committee allows you to get to know others in the Tucson hydrology community in a creative atmosphere. Revenue generated by the AHS annual symposia is the primary source for funding AHS activities, including our intern and scholarship programs. This revenue also provides the means to reach out to our membership through monthly meetings and educational workshops. **All AHS members are welcome to join us for food, drink, and fun at our planning meeting!**

If you are interested in joining the symposium planning committee, please contact Marla Odom, the Symposium Chair, at (520) 881-4912 or modom@elmontgomery.com with any questions.

[Top of the Document](#)

PHOENIX CHAPTER NEWS

Phoenix Chapter November Dinner Meeting

The next Phoenix chapter dinner meeting will be held on **Tuesday, November 13, 2012**, at Monti's La Casa Vieja, in downtown Tempe. The address is 100 South Mill Avenue, at the southwest corner of Rio Salado Parkway & Mill Avenue. Please join us for a beverage, to share business cards, and talk water!

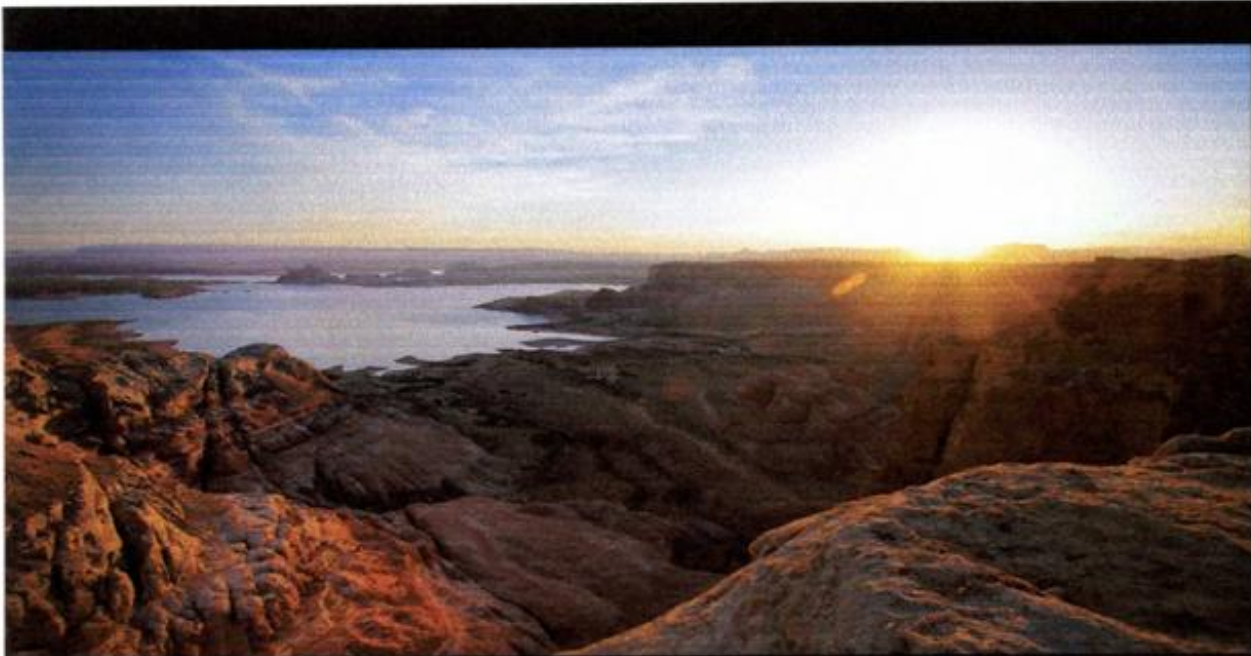
Location:	Monti's La Casa Vieja 100 South Mill Avenue Tempe, Arizona 85281
Event:	A Special Screening of the Movie <i>Watershed</i> , Produced By the Redford Center & Kontent Films, Narrated & Executive Produced by Robert Redford!
Chapter Board Meeting:	4:30 PM – 5:30 PM
Happy Hour & Dinner:	5:30 PM – 7:00 PM
Program:	6:30 PM – 8:00 PM
Cost:	\$20 member, \$25 non-member, \$5 student

RSVP with Kirk Creswick at kcreswick@eecphx.com or 602-248-7702.

Hope to see you there!

Please note that, because of higher food costs associated with this venue, for this meeting only, the meal charge will be \$20 for members, \$25 for non-members, & \$5 for students.

Also, because of the length of the program, we're planning to start the presentation at 6:30, not our usual 7:00. Please be on time – we'll start dinner at 6:00 PM. And please RSVP – we need to provide an estimated body count to the restaurant on Friday, November 9.



WATERSHED

As the most dammed, dibbed, and diverted river in the world struggles to support thirty million people and the peace-keeping agreement known as the Colorado River Pact reaches its limits, **WATERSHED** introduces hope.

Can we meet the needs of a growing population in the face of rising temperatures and lower rainfall in an already arid land? Can we find harmony amongst the competing interests of cities, agriculture, industry, recreation, wildlife, and indigenous communities with rights to the water?

Sweeping through seven U.S. and two Mexican states, the Colorado River is a lifeline to expanding populations and booming urban centers that demand water for drinking, sanitation and energy generation. And with 70% of the rivers' water supporting agriculture, the river already runs dry before it reaches its natural end at the Gulf of California. Unless action is taken, the river will continue its retreat – a potentially catastrophic scenario for the millions who depend on it.

In **WATERSHED**, we meet Jeff Ehlert, a fly fishing guide in Rocky Mountain National Park, Colorado rancher Dan James, Delta restoration worker Edith Santiago, Navajo Council member Glojean Todacheene, Rifle Colorado Mayor Keith Lambert, Los Angeles native Jimmy Lizama and a group of Outward Bound teens rafting down the Colorado River as they all reflect a compelling new water ethic—one that illuminates how letting go of the ways of old can lead to a path of coexisting with enough for all.

Future Event Calendar (see also calendar on www.azhydrosoc.org)

- Ø **December 11, 2012:** Brian Conway, ADWR, & Joe Cook, Arizona Geological Survey, *Monitoring Evaporite Karst Activity and Land Subsidence in the Holbrook Basin, Arizona using Interferometric Synthetic Aperture Radar (InSAR)*, at the SunUp Brewery, Phoenix
- Ø **January 8, 2013:** Annual kick-off meeting, location to be announced
- Ø **February and beyond** – maybe you or a colleague? Please contact [Tom Walker](#), Phoenix Chapter Vice President, if you would like to give us a presentation or if you know anyone else who could use an audience.

[Top of the Document](#)

PHOENIX CHAPTER OFFICER ELECTIONS

Here are the current candidates for the Phoenix Chapter 2012 board. Anyone who would like to run for a board position please contact [Keith Ross](#), Phoenix Chapter President, or [Christie O'Day](#), AHS Executive Director. Please watch for the ballot coming in an email on November 15th. All ballots will be due by November 30th. Election results will be posted on the website and in the December newsletter.

- President: **vacant**
- Vice-President: **Tom Walker**, Fleet-Fisher Engineering, Inc
- Treasurer: **vacant**
- Secretary: **vacant**

Phoenix Chapter Board Member (2)

- **Rich Siegel**, Salt River Project
- **Kirk Creswick**, Engineering and Environmental Consultants, Inc.

Phoenix Chapter Corporate Board Member (1), two-year term

- **Beth Proffitt**, Accutest Laboratories

[Top of the Document](#)

TUCSON CHAPTER NEWS

Tucson Chapter's November 2012 meeting announcement

The next meeting of the Tucson Chapter will be held on **Tuesday November 13th at the offices of Errol Montgomery and Associates, 1550 E. Prince Road. A social half hour will begin at 6:00 PM, followed by the regular meeting at 6:30 PM.** Our featured speaker is Fred Tillman of the U.S. Geological Survey, who will be discussing Groundwater Discharge by Plants in Arizona's Basin & Range.

As a bonus to the November AHS meeting, Montgomery & Associates will be hosting an open house to provide a "show-and-tell" for the solar energy system that was installed at their office a year ago. The solar energy contractor, Technicians For Sustainability, will be present to display information, conduct "tours" of the solar array components, and provide light snacks. **The solar open house starts at 4:30 pm and extends to the start of the AHS meeting at 6:30**, so plan to arrive at the meeting early and take advantage of the opportunity to learn about a commercial solar energy installation!

Bio:

Fred Tillman is a research hydrologist with the USGS Arizona Water Science Center. He joined USGS in 2006 after two-plus years as a National Research Council (NRC) fellow with the USEPA Office of Research and Development (ORD) in Athens, Georgia. Fred's graduate degrees are in Environmental Engineering from the University of Virginia. His current projects include monitoring the extent of 1,4-dioxane contamination in groundwater at the Tucson Airport Remediation Project (TARP) Superfund Site; developing a groundwater flow model for the Detrital, Hualapai, and Sacramento Valley basins in northwestern Arizona; and investigating the use of geochemical tracers to differentiate groundwater on the Kona coast in Hawaii.

Abstract:

Groundwater is a vital water resource in Arizona. Accurate accounting of inflows to and outflows from the groundwater system is necessary to effectively manage this shared resource, including the important outflow component of groundwater discharge by vegetation. A simple method for estimating basin-scale groundwater discharge by vegetation will be presented that uses remote sensing data from satellites (MODIS EVI), geographic information systems (GIS) land cover and stream location information, and a regression equation developed within the Southern Arizona study area relating the Enhanced Vegetation Index from the MODIS sensors on the Terra satellite to measured evapotranspiration. Results computed for 16-day composited satellite passes over the study area during the 2000 through 2007 time period demonstrate a sinusoidal pattern of annual groundwater discharge by vegetation with median values ranging from around 0.3 mm per day in the cooler winter months to around 1.5 mm per day during summer. Maximum estimated annual volume of groundwater discharge by vegetation was between 1.4 and 1.9 billion m³ per year with an annual average of 1.6 billion m³. A simplified accounting of the contribution of precipitation to vegetation greenness was developed whereby monthly precipitation data were subtracted from

computed vegetation discharge values, resulting in estimates of minimum groundwater discharge by vegetation. Basin-scale estimates of minimum and maximum groundwater discharge by vegetation produced by this simple method are useful bounding values for groundwater budgets and groundwater flow models, and the method may be applicable to other areas with similar vegetation types.

[Top of the Document](#)

TUCSON CHAPTER OFFICER ELECTIONS

Here are the current candidates for the 2012 Tucson Chapter board. Anyone who would like to run for a board position please contact [Damien Gosch](#), Tucson Chapter President, or [Christie O'Day](#), AHS Executive Director. Please watch for the ballot coming via email on November 15th. All ballots will be due by November 30th. Election results will be posted on the website and in the December newsletter.

President: **Damien Gosch**, Masters Student, Department of Hydrology

Vice-President **Greg Hess**, Clear Creek Associates

Treasurer: **Dan Guido**, Montgomery & Associates

Secretary: **Brittany Bates**, Montgomery & Associates

Tucson Chapter Board Member (1): **Shane Clark**, Student, Watershed Hydrology and Management

Tucson Chapter Corporate Board Member (1 two-year term): **Vacant**

[Top of the Document](#)

WRRC BROWN BAG SEMINARS – NOVEMBER 2012



Biofuel Production and Water in the Southwest

Wednesday November 14 2012 - 12:00 pm

Speaker: Dr. Kim Ogden, Professor, UA Department of Chemical & Environmental Engineering

The Southwest is under consideration for production of fuel from plants and algae due to the long days and ample sunlight. However, water is an issue for sustainable production. This presentation will focus on the potential for using algae and sweet sorghum as feedstocks for biofuels in the Southwest. Strategies for reducing water usage, recycling water and using wastewater for cultivation will be highlighted.

2012 Summer Extern Update: County Sustainability Projects that Improve the Lives of Arizonans

Tuesday November 20 2012 - 12:00 pm

Speakers: Arizona Cooperative Extension 2012 Summer Externs (Jessica Ackley, Jill Hamilton, Madalyn Hemminghaus, Erika LaPlante, Bakbergen Turibekov)

[Searching for Water Solutions: Experiences from My Sabbatical and Other Travels](#)

Thursday November 29 2012 - 12:00 pm

Speaker: Sharon Megdal, Director, Water Resources Research Center, Specialist and Professor, Department of Soil, Water and Environmental Science, The University of Arizona

[Top of the Document](#)

FLAGSTAFF CHAPTER NEWS

The Flagstaff Chapter will **not** hold a meeting in November. Instead, we are tentatively planning on holding a meeting on December 6, 2012, at a location to be determined. If all goes according to plan, we will have our annual holiday dinner accompanied by a presentation by Brad Hill (City of Flagstaff) on the *Flagstaff Inner Basin Restoration* following the Schultz Fire. An e-mail will be sent to members when the details are finalized.

[FLAGSTAFF CHAPTER OFFICER ELECTIONS](#)

Here are the current candidates for the 2013 Flagstaff Chapter board. Please watch for the ballot coming via email on November 15th. All ballots will be due by November 30th. Election results will be posted on the website and in the December newsletter.

President: **Mike Tomlinson**, UHM Oceanography

Vice-President: **Paul Whitefield**, National Park Service

Treasurer: **Dana Downs-Heimes**, CH2M Hill

Secretary: **John Cochran**, Peabody Investments Corporation

Flagstaff Chapter Board Member (1): **Erin Young**, City of Flagstaff

Flagstaff Corporate Board Member (1): **Charlie Ester**, SRP

[Top of the Document](#)

[CHARLES C. AVERY INTERN SCHOLARSHIP SUMMARY](#)

I want to express my gratitude to the Arizona Hydrological Society (AHS) for this amazing opportunity. I have gained a wide range of experiences through the Charles C. Avery Intern Scholarship and I have been able to refine both my personal and career goals.

This summer, I was able to work with three entities: The Grand Canyon Trust, Rocky Mountain Research Station, and Arizona Game and Fish Department.

I worked with the Grand Canyon Trust to synthesize existing data and write a proposal to restore a spring ecosystem in the House Rock Valley. This spring restoration project has the potential to serve as a pilot study to demonstrate the viability of spring restoration in the greater Arizona Strip

region north of the Grand Canyon. I also compiled a progress report for an ongoing project in collaboration with the Grand Canyon National Park and Grand Canyon Youth to assess and monitor springs and tributaries in the lower reaches of the Colorado River in the Grand Canyon.

I participated in the Arizona Game and Fish Department's ongoing monitoring research of the endangered Kanab Ambersnail in Vasey's Paradise in the Grand Canyon. This research consisted of conducting timed presence/absence sampling of snails in identified habitats (either distinct vegetation patches or springheads and springruns), identifying basic habitat associations (dominant plant species, substrate, etc) and other mollusks or macroinvertebrate species present in the areas sampled, and measuring basic water quality parameters of springflow associated with the snail habitat. I conducted similar field research on the Three-Forks Spring snail outside of Alpine, AZ. Additionally, I researched select springs and gained experience with the wonderful world of water rights in Arizona.

Working with the Rocky Mountain Research Station, I participated in fieldwork in the Sierra Anchas involving crown condition surveys and downloading flow data on Workman's Creek. I also aided in fieldwork in the Cascabel paired watershed study that is looking at the effects of seasonal prescribed fire on multiple ecosystem processes, including physical and biological response in a southwestern oak-savanna ecotype. Additionally, I gained experience in manually measuring total rainfall using standard cans and downloading climatic data from weather stations (RH, precip, wind speed & direction) at several mesquite plots circumnavigating the Peloncillo Mountains, a Sky Island Mountain Range on the AZ, NM, Mexican border. Then in the Chiricahua Mountains, I completed a tutorial on GPS base station and rover set-up, and proceeded to re-survey and collect aerial targets (6 of 8 that were originally placed) that were recently captured (visible) in aerial photography. The continuous data from the base station is used to calibrate the surveys of the aerial targets during post-processing.

This diversity of experiences not only helped me to have quite the adventurous summer, but also helped to strengthen my field research skills and substantially focus my previously broad career goals. I am motivated to work to bridge the gap between science and policy within water resources in Arizona. I am continuing to gain experience in the sciences by working as a field technician for the Grand Canyon Monitoring and Research Center. I am also working on several projects on the Verde River that involve education, outreach, and policy. Receiving the Charles C. Avery Intern Scholarship from the Arizona Hydrological Society has been a critical stepping stone towards achieving my career goals and I am looking forward to giving back to the AHS through active participation.

Thank you again for such an amazing opportunity,

Mariah Giardina

[Top of the Document](#)

HYDRO-NEWS

WRRC 2012 PHOTO CONTEST



Calling all photographers

WRRRC is pleased to announce our Arizona WRRRC 2012 Photo Contest.

Submission deadline: Saturday, December 15, 2012

This year's theme is, **Water - The Human Element**

Arizona is a region of extremes when it comes to water sources and resources. Water, in one form or another, can be found everywhere and affects everything: environment, communities, people, etc.

What makes a winning photograph? Quality, clarity and composition are all important, but we are also looking for those special moments and unique interpretations that will capture emotions and evoke a response. This is your opportunity to show us what you see through the lens - standard, telephoto and/or macro. Remember: All photos must be taken within the state of Arizona.

The top 5 winning photographs will be:

- Announced at the WRRRC 2013 Annual ChocolateFest, Friday, February 15, 2013.
- Incorporated into a slide show of the top 20 photographs to be shown at the ChocolateFest and featured on the WRRRC web site.

Fifteen (15) additional photographs will be selected as "finalists" to be incorporated into a WRRRC 2012 Photo Contest slide show. It will be on display at the WRRRC 2013 ChocolateFest and featured on the WRRRC web site.

A completed entry form and associated paperwork (model release, if applicable) must accompany all photo submissions. The Water Resources Research Center reserves the right to disqualify incomplete entries.

[For more information visit our website.](#)

WRRC'S 2013 ANNUAL CONFERENCE TAKES ON "WATER SECURITY FROM THE GROUND UP"



Water security is a large and complex issue encompassing the many efforts required to assure a safe, reliable, and sufficient water supply for people, the environment and the economy now and in the future.

The Arizona Water Resources Research Center's 2013 Annual Conference will tackle this important topic. On March 5, 2013, the conference, "Water Security from the Ground Up", organized in collaboration with the United States Geological Survey, Arizona Water Science Center, will take place at the University of Arizona, Student Union Memorial Center. To examine water security from multiple angles, the conference will present perspectives from scientists and water policy and management experts on sustainable use, augmentation and protection of water resources from over-exploitation, contamination and other hazards, including drought and climate variability. Speakers will discuss issues of water policy and the role sound governance plays in safeguarding human values and ecosystem functions. Experts will inform us on current trends and strategies for securing the supplies to support quality of life for future generations.

Please join us as we explore the path to water security.

[Top of the Document](#)

AIPG ARIZONA SECTION "GOLDEN ANNIVERSARY" TRIP TO CHIHUAHUA, MEXICO

To celebrate AIPG's 50th anniversary, the Arizona Section has prepared a geologic vacation to the State of Chihuahua, Mexico during **April 5 to April 11, 2013**. The Mexican state of Chihuahua is the birthplace of Pancho Villa and the Mexican Revolution, and has a diverse range of cultural and geologic attractions. This trip will have excursions to world-famous localities that can be appreciated by both the professional geologist and the general public.

Guests will be highly encouraged to join us so that this will truly be a vacation with a multi-cultural, geologic bent. The trip is open to others outside of the Arizona section.

Our trip will start at the capital of the state, Chihuahua City, with the first travel day on Friday, April 5, 2013. The trip itinerary is as follows (click here for full flyer):

Day	Description of Activities
Day 1 (Friday, April 5)	Participants travel to Chihuahua and check into hotel.
Day 2 (Saturday, April 6)	Day trip to Naica Mine and tour the Cave of Giant Crystals; Evening dinner in conjunction with local geologists (AIMMGM).
Day 3 (Sunday, April 7)	Visit to nearby historic mining district Santa Eulalia. Excursion to historic district of Chihuahua City and local museums.

Day 4 (Monday, April 8)	Check out of hotel in Chihuahua City and travel to Nuevo Casas Grandes with stop at exploration project (Terrazas). Check into hotel at Nuevo Casas Grandes/have lunch. Travel to Mata Ortiz to see pottery-making with visits to artists' studios and watching a firing of pottery.
Day 5 (Tuesday, April 9)	Drive to scenic outlook along flank of the Basin and Range to view regional geology. Tour of museum and archeological ruins at Paquimé. Visit the Mormon settlement of Colonia Juarez.
Day 6 (Wednesday, April 10)	Check out of hotel in Nuevo Casas Grandes and return to Chihuahua City. Group dinner at restaurant with regional specialty menu.
Day 7 (Thursday, April 11)	Return to USA or start optional excursion to Copper Canyon (the optional trip would be with a local tour company).

The localities listed in our itinerary each deserve their own detailed description, but at this time this is just a taste of the trip. A visit to the **Naica Mine** and the enormous selenite crystals is a one-in-a-lifetime experience in itself (dare I say "geologic pilgrimage"?). The Discovery Channel programs and National Geographic articles on Naica are great, but experiencing the cave yourself is unworldly. The geologic setting that we'll explore in Chihuahua includes a Cretaceous limestone sequence with the lower formation at Naica and the upper formation near our northern destination of **Nuevo Casas Grandes** with stops at **Santa Eulalia** and **Terrazas**.

Learning about local history will be a fascinating part of our trip. We'll cover history from millions of years (for the growth of the crystals at Naica), to the pre-Columbian time when **Paquimé** was occupied, to the Mexican Revolution in 1910.



Our trip is planned for early April 2013, when temperatures vary between 50 and 80 degrees F, and make for lovely days to enjoy **spring in the Chihuahuan Desert**. We'll be traveling on a comfortable 50-passenger tour bus, and the *registration will be limited to 40 participants*. We'll be staying in first-class hotels, the water is safe, and the food is fabulous.

Cueva de los Cristales (Naica)

We'll have a stop at the small village of **Mata Ortiz**, which is the artistic center for the world-class, modern pottery that is sold in fine galleries and museum shops in the U.S., Europe, and Japan. Ceramic artists produce hand-formed vessels that are painted with mineral pigments from the local soil and fired in the traditional method using local wood. We'll meet the artists and see how the pots are made and fired.

At this time we are only soliciting interest for the field trip. Later we will have the details available and interested parties can confirm their spots with a deposit. If you are interested in the field trip, please contact **Dawn Garcia** (trip coordinator) at dgarcia@srk.com or via cell 520-471-9387. Dawn is the President-Elect for the Arizona section, and has extensive travel experience in Mexico. The trip leader for the area of Nuevo Casas Grandes will be **John Bezy**, retired geologist and co-author of the book "The Artistry and History of Mata Ortiz". John has been traveling in Mexico for decades and has a wealth of knowledge not only on the geologic but on the culture and history of Chihuahua.

[Top of the Document](#)

PRACTICAL STATS FALL 2012 COURSE

Phoenix AZ

Our flagship in-person training course surveying the methods needed for interpreting environmental data.

What you will learn from this course:

- How to compute nonparametric, permutation and parametric tests, and when to use which type.
- How to build good regression equations (hint: r^2 isn't the best guide)
- Trend analysis methods
- not to be fooled by 'Urban Legends' in environmental statistics

For a detailed outline, go to our [AES outline page](#)

Dennis Helsel

[Top of the Document](#)

SCOTTSDALE WATER-TREATMENT FACILITY CONSTRUCTION BEGINS

*By Terrance Thornton
Independent Newsmedia*

Construction is under way of a water-treatment facility meant to ensure clean drinking water will be delivered to Scottsdale residents from a known contaminated well coined PCX-1.

Motorola Solutions officials say they are beginning work at the site, 5985 N. Cattletrack Road, Monday, Oct. 22.

The facility is expected to be constructed through a partnership of the city of Scottsdale and Motorola Solutions where only private dollars will be used for construction, according to *Scottsdale Independent* archives.

“We have accepted our portion of the responsibility of the clean-up effort,” Terry Lockwood, Motorola Solutions program manager for global environmental remediation, in an Oct. 16 phone interview. “This is just an additional piece of what we call the ‘environmental remediation effort.’”

The facility is planned to be 137,451-square feet with a north boundary of McDonald Road and east and west boundaries of Cattletrack Road to the west and the Arizona Canal to the east, a diagram of the proposed design illustrates.

Read more: <http://arizona.newspaper.com/northvalley/117361-114/scottsdale-water-treatment-facility-construction>

[Top of the Document](#)

HOPEFULS WOULD SET POLICY FOR ARIZ. CANAL

13 candidates seek 5 open spots on board

*by Lisa Kennell - Oct. 22, 2012 09:48 PM
The Republic | azcentral.com*

Amid the presidential candidates, state lawmakers, county officials and myriad propositions on the Nov. 6 ballot are 13 candidates running for a lesser-known office: a seat on the Central Arizona Project Water Conservation District board of directors.

Maricopa County voters will fill five nonpartisan open seats on the board. Members are elected for six-year

unpaid terms.

The board establishes the policy and budget concerning the canal that delivers Colorado River water from Lake Havasu City to Tucson. It is the state's largest single source of water.

Here are the candidates...

Read more: <http://www.azcentral.com/arizonarepublic/local/articles/2012/10/22/20121022hopefuls-would-set-policy-ariz-canal.html#ixzz2AcvFenYO>

[Top of the Document](#)

ARIZ. OFFICIALS SEEK LIMITS ON DRILLING

Other Western states join concerns over the effect on water supply

Associated Press | Oct. 29, 2012 09:22 PM

DENVER - Officials from Arizona and other Western states are demanding limits on oil-shale drilling along the Colorado River over concerns the thirst for oil could lead to polluted water supplies for millions of people.

The worries have prompted proposals to limit acreage available for leasing.

Arizona and Nevada officials sent letters to Interior Secretary Ken Salazar expressing concerns about protecting Colorado River water quality and quantity. Other officials back a Bureau of Land Management proposal to sharply reduce acreage available for possible leasing in Colorado, Wyoming and Utah.

Chris Treese, spokesman for the Colorado River Water Conservation District, said the concerns are overblown.

"They're not going to see any change in their water quality -- none," said Treese, whose group is in western Colorado.

The BLM said some of the potential effects will be analyzed as part of the individual leasing-authorization process.

Regulators believe the water supply can be protected and any pollution will be diluted by the time it reaches Las Vegas, the *Grand Junction Daily Sentinel* reported Monday.

Yet those reassurances have not placated elected officials.

"We believe that a comprehensive study of the cumulative impacts of oil shale development to the Colorado River basin should be conducted before the BLM considers commercial leasing of public lands," said a letter signed by Nevada state lawmakers Peggy Pierce and Tick Segerblom, Arizona House Minority Whip Anna Tovar and Arizona Corporation Commission member Paul Newman. The commission oversees utility and transportation matters.

Read more: <http://www.azcentral.com/arizonarepublic/local/articles/2012/10/29/20121029ariz-officials-seek-limits-drilling.html#ixzz2AqrOOG4X>

[Top of the Document](#)

ARIZONA HAMMERS WATER UTILITY OVER HANDLING OF E. COLI IN SAN TAN VALLEY AREA

by **Chris Cole and Lindsey Collom** - Oct. 10, 2012 05:42 PM
The Arizona Republic-12 News Breaking News Team

The Arizona Department of Environmental Quality has accused Johnson Utilities of failing to notify all of its customers of an E. coli outbreak in the water supply for the San Tan Valley area, authorities said.

The department has alleged seven violations for the way the utility handled the problem in the water system beginning Aug. 16. The violations include failing to properly notify the public and media of the situation, according to the ADEQ's notice of violation.

Three of the violations accuse Johnson Utilities of failing to implement the standard emergency operations plan for public notifications, the notice said.

Johnson Utilities has a chance to respond to the allegations before ADEQ could seek civic penalties based on state law, according to Mindi Cross, ADEQ's manager of water compliance section.

Civic penalties Johnson Utilities could face include a \$1,000 per day per violation fine with a \$10,000 maximum or a \$500 per day per violation fine with no maximum, Cross said.

Johnson Utilities on Wednesday issued a statement saying they worked closely with ADEQ on the approval of the proper notification and notified customers through the media.

"We are confident that after we further explain the course of events to ADEQ, the agency will agree that no sanctions are appropriate," the statement said.

Read more: <http://www.azcentral.com/news/articles/20121010state-hammers-water-utility-over-handling-e-coli.html#ixzz2AqtOjPCC>

[Top of the Document](#)

CHANGE IN ROSEMONT'S PLANS MAY SLOW AZ PERMIT PROCESS

October 21, 2012 12:00 am • [Tony Davis Arizona Daily Star](#)

The protracted debate over a proposed air quality permit for the Rosemont Mine could get longer.

Rosemont Copper might need to revise its request for the permit, an Arizona Department of Environmental Quality official said.

That's because of changes to the mine plans recently announced by the company, said Trevor Baggione, deputy director of ADEQ's air quality division. Those changes would boost copper production by 25 percent compared to what Rosemont officials predicted when they filed their state air-quality permit application last year.

Baggione made the comment after a recent public hearing in Tucson on the permit. He was responding to comments from mine opponents, in the group Save the Scenic Santa Ritas, that the proposed permit is a "bait and switch" because it doesn't reflect the company's current plans.

The permit, one of many the company has had to obtain, has provoked a particularly contentious debate. The state took the permitting authority over from Pima County last summer at Rosemont Copper's request, after the county denied the permit and a judge overturned the denial on procedural grounds, calling it "arbitrary and capricious."

Read more: http://azstarnet.com/news/science/environment/change-in-rosemont-s-plans-may-slow-az-permit-process/article_7db5069f-158f-5e09-95ff-2d5a6bb857a7.html

[Top of the Document](#)

CATALINAS' ROCK: LIFE'S FOUNDATION

We owe our soil, our water - even our weather- to it

MAMTA POPAT / ARIZONA DAILY STAR

Nate Abramson is the research tech for the Critical Zone Observatory, which is measuring the movement of water, chemical composition, rainfall and other items on several slopes in the Santa Catalina Mountains. Here he collects data from one of the automated water samplers.

It all starts with the rock.

If you've ever sifted an arroyo bottom for "sand rubies" - tiny bits of pale-red garnet - you have uncovered the link between those towering granite cliffs above the Tucson Basin and all that lies below.

Our mountains, rising thousands of feet from the valley floor, are the source of life here in the desert. They create our soil and our weather. Their rubble created our aquifers, and their creeks continue to fill them.

They yield a child's treasure.

The sand rubies that wash into Tucson's north-side arroyos from the Santa Catalina Mountains were once encased in the wilderness granite that helps form our mountain skyline.

Those granite peaks and the other rocks atop the Catalinas and Rincons were once about seven miles beneath the surface and many miles to the west of where the mountains now stand, said geologist George Davis.

Read more: http://azstarnet.com/news/science/catalinas-rock-life-s-foundation/article_7b8c3009-5d7f-53d0-9f0b-724de5200eb8.html

[Top of the Document](#)

[AP INTERVIEW: JAPAN NUKE PLANT WATER WORRIES RISE](#)

Japan's crippled nuclear power plant is struggling to find space to store tens of thousands of tons of highly contaminated water used to cool the broken reactors, the manager of the water treatment team said.

About 200,000 tons of radioactive water -- enough to fill more than 50 Olympic-sized swimming pools -- are being stored in hundreds of gigantic tanks built around the Fukushima Dai-ichi plant. Operator Tokyo Electric Power Co. has already chopped down trees to make room for more tanks and predicts the volume of water will more than triple within three years.

"It's a pressing issue because our land is limited and we would eventually run out of storage space," the water-treatment manager, Yuichi Okamura, told The Associated Press in an exclusive interview this week.

TEPCO is close to running a new treatment system that could make the water safe enough to release into the ocean. But in the meantime its tanks are filling up _ mostly because leaks in reactor facilities are allowing ground water pour in.

Outside experts worry that if contaminated water is released, there will be lasting impact on the environment. And they fear that because of the reactor leaks and water flowing from one part of the plant to another, that may already be happening.

Nuclear engineer and college lecturer Masashi Goto said the contaminated water buildup poses a long-term health and environmental threat. He worries that the radioactive water in the basements may already be getting into the underground water system, where it could reach far beyond the plant, possibly the ocean or public water supplies.

"You never know where it's leaking out and once it's out you can never put it back in place," he said. "It's just outrageous and shows how big a disaster the accident is."

Read More: http://azstarnet.com/news/world/ap-interview-japan-nuke-plant-water-worries-rise/article_a5d45ebd-3a6d-59d7-a935-b66e549db2db.html

[Top of the Document](#)

WATERBLOGGED BY SHAUN MCKINNON, ARIZONA REPUBLIC

For associated links and other timely water and environmental blogs on Shaun McKinnon's Arizona Republic site – **Waterblogged** visit <http://www.azcentral.com/members/Blog/ShawnMcKinnon>.

[Top of the Document](#)

JOB BOARD

Check these jobs out on the [AHS Jobs web page](#):

- [Environmental Program Supervisor - ADEQ](#)
- [Hydrogeologist/Geologist - Haley & Aldrich](#)
- [Tribal Water Systems Environmental Specialist - ITCA](#)
- [HYDROLOGIST 4 - ADWR](#)
- [Senior Groundwater Modeler/Hydrogeologist - Montgomery & Associates](#)
- [Mid-level Hydrogeologist/Modeler - Montgomery & Associates](#)

[Top of the Document](#)

ADDITIONAL INFORMATION

For more information about the Arizona Hydrological Society, or to view current job listings and announcements, please visit our regularly updated web site at:

<http://www.azhydrosoc.org/>

Membership may be renewed by credit card through the AHS website or by mailing a check to the Arizona Hydrological Society, P.O. Box 1882, Higley, AZ 85236. Dues remain at \$45.00 year for regular membership and \$15.00 for students.

The AHS Newsletter is edited by [Christie O'Day](#), AHS Executive Director. THANK YOU TO OUR MEMBERS FOR SENDING ME INTERESTING CONTENT FOR THE MONTHLY NEWSLETTER!