



DECEMBER 2013 NEWSLETTER

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GOVERNMENT GOINGS-ON

Everyone is wondering where the next bucket of water is going to come from. In truth it's already here.

One of the good things that came out of the Governor's Blue-Ribbon Panel back in 2010 was a consensus that reclaimed water should be considered as a water resource. Accordingly the

Steering Committee for Arizona Potable Reuse was formed, with the goals of identifying and mitigating real or perceived impediments to the potable reuse of reclaimed water within industry standards. The SCAPR has been busy, identifying best practices, defining terminology, and looking at treatment technologies suitable for Arizona. They have been tracking developments in California and Texas, because direct potable reuse is already a reality for those two states. California has developed a regulatory structure that binds any provider into a narrow set of technologies regardless of circumstances. Texas is just doing it without significant planning of regulatory underpinnings. Right now, the mix is 70% of rapidly declining lake water to 30% reclaimed water simply based on the lack of water for Big Springs (the irony of the name is lost on the citizens). Tim Thomure, the chairman of SCAPR, has often said the situation reminds him of the lyrics of an old song: “Clowns to the left of me, jokers to the right—stuck in the middle again.”

SCAPR is trying to draw a reasonable roadmap for Arizona to do direct potable reuse. The iron cage of over-regulation by technology that has been developed by California won't fly in Arizona (maybe not in California either; time will tell). But blundering into a program without a well-conceived set of regulations, like Texas has done, won't work either. SCAPR is attempting to develop a framework that is technologically flexible yet has sound rules that ADEQ and ADWR can enforce.

Next steps include assembly of water quality data, risk analyses, economic analyses of direct potable reuse as a supply, and unregulated contaminants. The really big hurdle is public acceptance. “Is it safe?” they will ask. Yet in truth we are already using reclaimed water indirectly for potable supply. We store reclaimed water underground, and then recover it. We take water off the Colorado River, downstream from the point where Las Vegas discharges its reclaimed water as return flow. Indeed a sizeable percentage of Americans live downstream from someone else's discharge point. And no one thinks twice about it. When we are looking at the future of water resources, it isn't really such a big step.

Alan Dulaney

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AHS FOUNDATION ANNOUNCES NEW CORPORATE SPONSORSHIP LEVELS

Corporate donors to the AHS Foundation will now receive a variety of recognition options for their donations. The recognition is designed to encourage corporate donations to cover the annual expenses of the AHS scholarships, internships, science fairs, and teachers' workshops and to grow the AHSF endowments.

Corporate donors in all categories will receive recognition in the following ways:

- Press release, poster board and rolling logo displays, and oral acknowledgment coordinated with AHS annual symposium acknowledging all AHSF corporate sponsors supporting scholarships and internships for that year.
- Acknowledgment in the AHS newsletter, which is circulated electronically to more than 250 water professionals across the Southwest.
- Acknowledgment on the AHSF webpage, with logo placement.
- Acknowledgment in AHSF periodic and annual public financial reports.
- Placement of sponsor's name on permanent list of AHSF corporate sponsors displayed

online on an AHSF webpage dedicated to that purpose.

Additional benefits for the corporate sponsorship levels

Native Copper Level- \$1000-\$1999

- Voucher for free dinner at an AHS monthly meeting
- Introduction & acknowledgment of sponsorship at the dinner prior to program
- Presentation of AHS beer glass to corporate sponsor representative following introduction

Silver Level- \$2000-\$3999

- Vouchers for two free dinners at an AHS monthly meeting (or 1 free dinner at 2 meetings)
- Introduction and acknowledgment of corporate sponsorship at the dinner prior to program
- Presentation of an AHS beer glass to each of the two sponsor representatives at the meeting following introduction

Gold Level- \$4000-\$5999

- One free registration to the AHS Symposium

Platinum Level- \$6000 and above

- Two free registrations to the AHS Symposium

Corporate donors, please consider an end-of-year, tax-deductible donation to AHSF to support the AHS scholarships, internships, science fairs, and teachers' workshops and to grow the AHSF endowments. Donations can be made online at <http://www.azhydrosoc.org/> or mailed to:

**AHS Foundation
P.O. Box 65690
Tucson, AZ 85728**

TIME TO CONSIDER AN INDIVIDUAL DONATION TO AHSF

Holidays, good cheer, and crisp weather are all indicators that the end of the year is approaching. Now is a great time to consider a tax-deductible gift to the AHS Foundation. Your gift can be used to support the internships, scholarships, science fairs, teachers' workshops, and other educational opportunities the Foundation helps fund.

A gift to any of the three AHS Internship Endowments--Bouwer, Halpenny, or Avery-- will be matched with money from the AHSF general endowment fund. Growing these specific endowments will eventually allow the internships to be self-sustaining. Your gift to any of the internship endowments, regardless of size, will be doubled if you donate before January 1, 2014.

Donations can be made online at http://www.azhydrosoc.org/Foundation_main_pg.html or mailed to:

AHS Foundation
P.O. Box 65690
Tucson, AZ 85728

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AHS MEMBERSHIP 2014 RENEWAL REMINDER

2014 is almost upon us, so it's time to renew your AHS membership if you were not able to attend this year's annual symposium! 2014 Membership was included for both full registration and a one day registration fees. Membership dues can to be renewed online at:

http://www.azhydrosoc.org/join_ahs.html

Or by mail to:

Arizona Hydrological Society
P.O. Box 1882
Higley, AZ 85236

Thank you for your continued support of the Arizona Hydrological Society!

PHOENIX CHAPTER NEWS

Phoenix Chapter December Dinner Meeting

The next Phoenix chapter dinner meeting will be held **on Tuesday, December 10, 2013**, at SunUp Brewing Co., in midtown Phoenix (on the north side of Camelback Road, just east of Central Avenue). Greg Ghidotti & Heather Gluski, Resolution Copper Mining, Superior, Arizona, will give a presentation on "Hydrologic Studies and Water Strategy: Preparing a Mega Project for NEPA". Please join us for a beverage, to share business cards, and talk water!

Location:	SunUp Brewery 322 E. Camelback Road Phoenix, AZ 85012
Event:	Hydrologic Studies and Water Strategy: Preparing a Mega Project for NEPA Greg Ghidotti & Heather Gluski, Resolution Copper Mining, Superior, Arizona
Chapter Board Meeting:	5:00 PM – 5:30 PM
Happy Hour & Dinner:	5:30 PM – 7:00 PM
Program:	7:00 PM – 8:00 PM
Cost:	\$15 member, \$20 non-member, \$5 student

RSVP with Michele Robertson at <mailto:mirobertson3@gmail.com> or

480-332-7417.

Hope to see you there!

Abstract:

A modern engineering marvel is taking shape deep below the surface of Southeast Arizona, three miles east of Superior. A mile underground, where rock temperatures reach 175 degrees, Resolution Copper Mining is preparing to mine one of the largest copper ore bodies ever found. Current analysis indicates that at full production, the Resolution Copper Project will produce more than 1 billion pounds of copper per year, which is enough to meet 25 percent or more of the US annual demand for copper, based on present levels of use.

Currently in its pre-feasibility stage, the project has many studies under way to support what has been identified as the best possible mining plan based on sound science, and socially and environmentally responsible mining practices. The General Plan of Operations has been submitted to the US Forest Service for what is expected to be a lengthy and critical review of all aspects of the project as we move one step closer to the initiation of the National Environmental Policy Act (NEPA) process. Ongoing studies include a massive hydrological characterization and baseline data collection effort which to date has required an investment of over \$46 million. A primary focus of the team's efforts over the past 18 months has been to balance the technical needs of project engineers with the NEPA process requirement for easy-to-understand explanations of complex hydraulic concepts and impacts assessments. Heather and Greg will discuss some of the results of their work and some of the challenges they've faced while trying to communicate with the broader audience of stakeholders.

Bios:

Greg Ghidotti is from Tucson, and is a US Army veteran. He studied at the University of Arizona, focusing on hydrothermal geochemistry, fluid flow and structural geology. Greg started his career as an exploration geologist in the Carlin gold systems in Nevada. Later he worked on several mine to tails projects at Kennecott Utah Copper. Greg has been at Resolution Copper Mining since 2005. He started the current hydrology program in 2006 and has been leading it since then.

Heather Gluskire returned to school for a degree in Hydrology and Water Resources from the University of Arizona, after working in consulting as an auditor of aircraft maintenance records. After graduation, she rejoined the consulting world, working for Montgomery & Associates on a wide range of projects, including hydrogeological investigations at Resolution Copper. Heather officially joined Rio Tinto and the Resolution Copper team in January of 2012. She and Greg Ghidotti lead a team of five in developing a thorough understanding of the complex groundwater and surface water systems.

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

Ø **January 14, 2014: Phoenix Chapter Annual Kickoff Meeting**, venue to be announced.

We're now planning for presentations at meetings starting in February 2014. Please contact [Summer Waters](#), Phoenix Chapter Vice-President-Elect, if you would like to do a presentation for a future Phoenix Chapter meeting, or if you know someone else who could use an audience.

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PHOENIX CHAPTER OFFICER ELECTIONS

Here are the winning candidates for the Phoenix Chapter 2014 board. Thank you to all the Phoenix Members who cast their ballots – we really appreciate your participation.

- President: **Dave Sampson**, ASU Global Institute of Sustainability
- Vice-President: **Summer Waters**, Maricopa County Extension Office
- Treasurer: **Michele Robertson**, APS
- Secretary: **Matt Minjares**, Gateway CC Student

Phoenix Chapter Board Members

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

Phoenix Chapter Corporate Board Member, two-year term

- **Beth Proffitt**, Accutest

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TUCSON CHAPTER NEWS

For the Tucson chapter meeting on Tuesday, December 10, Kerry Schwartz will present "**Engaging the Community in Wise and Purposeful Use of Water.**"

Location: **Montgomery and Associates**
1550 East Prince Road
Tucson, AZ

Social half hour: **6:00 PM**

Program: **6:30 PM**

Engaging the Community in Wise and Purposeful Use of Water

Water is vital to all life, as well as human ingenuity and industry. Using the relevant topic of water, The UA's Arizona Project WET works with teachers to adopt and strengthen instructional practices that encourage students to apply their learning to develop ideas, design solutions, and act to create positive change in their communities and the world. We conduct direct student outreach that delivers or extends classroom learning through engagement with volunteers from Universities, the community, government agencies, businesses and industries. Effective STEM learning is a multigenerational endeavor that will sustain Arizona's social, environmental and economic prosperity.

At this session, learn how to engage people of all ages in caring about water resources and understanding complex multidimensional issues related to water use. As water professionals, we know the economic and social importance of equipping citizens to make wise decisions

about natural resources in an ever-changing system. Using a learner centered approach that fosters critical and creative thinking; we can begin to interest community members and incentivize them to action. Effective communication is the key to broad-based learning, collaboration and innovation. Working together, we can develop a community of practice around the work that we do; to ensure water literacy, stewardship and responsible use.

Kerry Schwartz is an associate Specialist with Arizona Cooperative Extension at the University of Arizona and the Director of the Arizona Project WET (APW) water education program.

Schwartz develops programs that teach science and STEM literacy and 21st Century learning to teachers, educators, K-12 students and community members. She works statewide delivering water resource programming to Arizonans through the supervision of 22 personnel located in three extension offices. Degrees in Geology and geohydrology and eight years of experience in environmental consulting enable her to deepen teachers' content knowledge about water resources through applied learning with real world examples and relevancy. Schwartz has raised over 3 million dollars to support APW programming over her tenure at the UA and has sustained partnerships with corporations, foundations and governmental agencies, even as economic realities became challenging. Currently, she is working to develop and evaluate STEM focused education programs and teacher professional development that incorporate real-world science and engineering practices and foster critical and creative thinking skill building. In the last three years, she has received awards for Individual Program Leadership, Innovative Programs, Long Publication – Water Scene Investigations and Outstanding Team.

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TUCSON CHAPTER OFFICER ELECTIONS

Here are the winning candidates for the 2014 Tucson Chapter board. Thank you to the members who casts their ballots – we really appreciate your participation. We had a great Tucson symposium this year and would like to see all our chapter members at our monthly meetings and getting involved in AHS.

President: **Damien Gosch**, Hargis + Associates, Inc.

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

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

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

Tucson Chapter Board Member (1): **Yeliz Cevik**, Montgomery & Associates

Tucson Chapter Corporate Board Member (1 two-year term): **Marla Odom**, Montgomery & Associates

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UPCOMING WRRRC SPONSORED EVENTS

[Brown Bag Seminar - Tres Rios: Wetland Ecology in an Arid Environment](#)

Date: Monday, December 9, 2013

Time: 12:00 pm - 1:30 pm

Location: WRRRC Sol Resnick Conference Room (350 N. Campbell Ave.)



Speaker: Ron Elkins, Wetlands Process Control Specialist for City Of Phoenix Tres Rios Flow Regulating Wetlands

Presentation: Tres Rios - Wetland Ecology in an Arid Environment

This presentation will explore the key facets concerning the City of Phoenix Tres Rios Wetlands. Multiple events led the City of Phoenix to the development of a tertiary wetland treatment system at the 91st Avenue Waste Water Treatment Facility. Ron Elkins will give an overview of the history and events of the as-built project, as well as a review of the operation of the project, which has shown interesting results in many areas, such as water quality and habitat restoration.

Ron Elkins is a third-generation native of Arizona and was raised in the agricultural arena of Southeast Arizona. He has worked with the City of Phoenix Water Services Department for 19 years with a concentrated effort in the Tres Rios Wetlands Project for the past 16 years as the Operations and Maintenance Manager. His efforts in the wetlands have centered around habitat restoration, ecosystem development, vector control and public outreach. During his tenure, he has created unique propagation methods for native plant species of riparian corridors in Sonoran Desert settings and helped develop integrated pest management techniques specific to vector management of constructed wetlands. He received the Environmental Stewardship award from AWPCA in 2008 and has been a Qualifying Party License holder for aquatic pesticide application for more than 15 years.

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FLAGSTAFF CHAPTER NEWS

The AHS-Flagstaff Chapter will be holding its December combined monthly meeting/holiday party at 06:30 PM on Wednesday (11-December-2013) at Salsa Brava (Flagstaff) in their heated patio room. Because the Chapter will cover the cost of the room, appetizers, dinner and non-spirited beverages, we are asking everyone to be extra generous in contributing to the 2014 AHS-Flagstaff Charles C. Avery Intern. For every \$10 you donate, you will receive a raffle ticket for a chance to win this year's holiday basket chock full of goodies, valued at more than \$150 (see list of basket contents below). The more you donate, the better your chances of winning this basket and better our chances of supporting our intern in the coming year. So please remember to tuck a few extra bills in your wallet for this important cause.

Please RSVP Dana Downs-Heimes (Dana.Downs-Heimes@CH2M.com) by 5:00 PM, December 9, Dec-2013.

We hope to see you there and share some AHS holiday cheer!

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FLAGSTAFF CHAPTER 2014 OFFICER ELECTIONS

Here are the winning candidates for the 2014 Flagstaff Chapter board. Thank you to the Flagstaff Members who casts their ballots – you rock! The “Small but Mighty” Flagstaff chapter can boast nearly 50% participation in electing their board members!

Chapter President – Michael Tomlinson
Chapter Vice President – Paul Whitefield
Chapter Secretary – John Cochran

Chapter Treasurer – Dana Downs-Heimes

The Chapter Board Member-at-Large member will be selected shortly.

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HYDRO-NEWS

NATIONAL COUNCIL FOR SCIENCE AND THE ENVIRONMENT 14TH ANNUAL CONFERENCE

Building Climate Solutions

14th National Conference and Global Forum
on Science, Policy and the Environment

January 28 - 30, 2014 | near Washington, D.C.



National Council for Science and the Environment
Improving the scientific basis for environmental decisionmaking

Please note the

NEW VENUE:

[Hyatt Regency Crystal City](#)
at Washington, D.C.
National Airport

HYATT VIP WELCOME CONTEST

What can make the soothing décor of a Hyatt Regency Crystal City guestroom more inviting? What about a plate of Chocolate Truffles or an Artisanal Meats and Cheese platter when you arrive? Each month a lucky conference attendee will randomly be selected to receive a complementary Hyatt VIP Welcome Amenity.

You must be [registered for the conference](#) and [book at least one night stay at the host hotel](#) to be eligible. A winner will be announce each month between now and January!

Gina McCarthy, Administrator of the U.S. Environmental Protection Agency (EPA), will give a keynote address at the Building Climate Solutions Conference on January 30th, 2014.

McCarthy is one of the most influential people implementing President Obama's new Climate Change Policy. As part of this policy, the President directed the EPA to "complete new pollution standards for both new and existing power plants." McCarthy leads this directive, which rests on legal authority granted by Congress to EPA under the Clean Air Act and confirmed by the Supreme Court.



Gina McCarthy has previously served as Assistant Administrator for EPA's Office of Air and Radiation as the point person on climate change. Her 30 year career includes working at both state and local levels on critical environmental issues and coordinating policies on economic growth, energy, transportation, and the environment.

Registration Rates:

Individual Attendee:

\$495 - three days

\$275 - single day



Full-time Student:

\$345 - three days

\$190 - single day

Federal Employee:

\$445 - three days

\$250 - single day

Non-profit
Organization:

\$395 - three days

\$220 - single day

University or
Community College
Affiliate Member:

Complimentary

Featured Speakers:

- **Richard Alley**, Pennsylvania State University
- **Marie-Helene Aubert**, Adviser to the President of France on international negotiations on climate and environment
- **Ann Bartuska***, Deputy Under Secretary for Research, Education and Economics
- **Michael Bloomberg***, Mayor, New York City
- **Molly Brown**, NASA Goddard Space Flight Center
- **Virginia Burkett**, U.S. Geological Survey; IPCC
- **Keya Chatterjee**, World Wildlife Fund
- **Juliet Eilperin**, The Washington Post
- **Yannick Glemarec**, UN Development Programme
- **John Gummer***, Lord Deben, Climate Change Committee, UK
- **David Hales**, Second Nature
- **James Hansen**, Columbia University and former NASA
- **Richard Harris**, National Public Radio
- **Bill Hohenstein**, Department of Agriculture
- **Kara Hurst**, Sustainability Consortium
- **Richard Jackson**, UCLA School of Public Health
- **Katharine Jacobs**, White House Office of Science and Technology Policy
- **Sylvie Joussaume**, French National Centre for Scientific Research
- **Rachel Kyte**, The World Bank
- **Jaime Lerner**, former Governor of the State of Prana, Brazil; former Mayor, Curitiba, Brazil
- **Edward Maibach**, Center for Climate Change Communication, George Mason University
- **Clay Nesler**, Johnson Controls
- **Robert Perkowitz**, EcoAmerica
- **Chris Pyke***, US Green Building Council
- **Andrew Revkin**, Pace University
- **Governor Bill Richardson**, former Ambassador to the United Nations and Secretary of Energy
- **Johan Rockström***, Stockholm Resilience Center
- **Cristina Rumbaitis del Rio**, Rockefeller Foundation
- **Harvey Ruvin**, Clerk of Courts, Miami-Dade County
- **Christopher Shore**, World Vision
- **Priya Shyamsundar**, South Asian Network for Development and Environmental Economics
- **Jack Sinclair**, Walmart
- **Kathryn Sullivan**, NOAA
- **Terry Tamminen**, 7th Generation Advisors
- **Alison Taylor***, Siemens
- **Tom Tidwell**, Chief, U.S. Forest Service
- **Petra Tschakert**, Pennsylvania State University; IPCC
- **Diana Urge-Vorsatz**, University of Central Europe; IPCC
- **Anthony Zolezzi**, Pegasus Capital Advisors and ZeroWaste Global



The Mountain States Ground Water Expo

February 6 – February 7, 2014

Aquarius Casino Resort

Laughlin, Nevada

For information, call (480) 609-3999; Fax (480) 609-3939

or email info@mountainstatesgroundwater.com

www.mountainstatesgroundwater.com

GRAND CANYON GEOLOGY RAFT TRIP, JULY 6-13, 2014

Long-time AHS member, Alison Jones is planning a Grand Canyon Geology Raft trip scheduled for July 6-13, 2014. This will be her 6th trip and you are invited! The outfitter will be Hatch River Expeditions.

Arizona Geological Society and Maine Geological Society are also announcing the trip, so we will have an interesting contingent of geologists and hydrogeologists.

Please contact Alison at ajones@clearcreekassociates.com if you are interested. [Click here for the flyer](#) that describes the trip!



DON'T LET ARIZONA'S WATER SUPPLY EVAPORATE

MacEachern: It's a daunting challenge, given so much uncertainty



One of the nation's greatest-ever feats of engineering, the Central Arizona Project, is a 335-mile system of canals and tunnels that pushes water uphill.

David Kadlubowski | The Republic

By Doug MacEachern

Thu Oct 31, 2013 1:49 PM

When it comes to water and water law, Arizona is an acknowledged national leader.

Yes, you read that right.

[Pay more, use less](#) | [Grow new leaders](#) | [Restore cuts](#)

The Arizona Groundwater Management Act of 1980 is widely viewed as one of the most effective and far-sighted state laws ever enacted. Nearly all the great federal events related to water policy over the generations were led to one degree or another by Arizonans, from Sen. Carl Hayden to Rep. John Rhodes to Sen. Jon Kyl, who despite his retirement from the Senate isn't done leading on water issues.

One of the nation's greatest-ever feats of engineering, the Central Arizona Project, a 335-mile system of canals and tunnels that pushes water uphill, was shepherded by Arizonans, for Arizona.

And it was a group of mostly Arizona water experts who developed the ingenious practice of "water banking" — using underground storage as de facto reservoirs that allow water transactions between different regions of the state, and even between Arizona and other states.

But it is foolish to assume in the arid American Southwest that people have conquered nature.

Read more at: <http://www.azcentral.com/opinions/articles/20131103new-arizona-water-main.html>

ARIZONA'S WATER SUPPLY: WHY WE CAN'T WAIT YEARS TO PLAN

Kyl and Gammage: Time to change our conversation

The Republic | azcentral.com

Fri Nov 22, 2013 2:42 PM

Retired U.S. Sen. Jon Kyl and former Central Arizona Project board president Grady Gammage, with allies Richard Morrison and Sue Clark Johnson of the Morrison Institute, are promoting the need for a new conversation on water. These are excerpts from a visit to the Republic's editorial board.

Are you seeing a change in attitudes about water?

Gammage: Two recent surveys put water up the list of priorities much higher than I would have expected. Frankly, it was higher than I would put it.

So the people are ready. Are leaders catching up to them?

Gammage: People are ready and interested in the subject and want to talk about it, but like most political choices they think it can mostly be solved by somebody else getting more efficient.

The lifestyle we enjoy here is one that has been supported by abundant and relatively inexpensive water. I'm not necessarily an advocate for getting rid of that. But we have to recognize that there are costs to that lifestyle, and you may not be able to continue it with as many people as we think should be here. That's one of the tradeoffs.

What's the biggest challenge?

Kyl: If you look at the big picture long term, both inter- and intrastate, the demand will exceed the supply of water.

The ultimate recommendation is one of augmentation. That could include cloud seeding, desalination, lots of other ideas. That is such a big, high-cost proposition that some planning needs to begin soon. First, everyone is going to want to know who exactly has what amount of water and what can they do with it within Arizona.

Read more at: <http://www.azcentral.com/opinions/articles/20131123arizona-water-jon-kyl-grady-gammage-into-mind.html>

WATERS AT RISK

By Brandon Loomis

The Republic | azcentral.com

Fri Nov 29, 2013 9:24 AM

RUIDOSO, N.M. Catastrophic wildfires are broiling Southwestern watersheds and ruining reservoirs.

The charred mountains repel water instead of filtering it. Baked soils won't germinate pine seeds, casting doubt on forest revival. Post-monsoon rivulets become torrents that wash mud and debris into rivers and dams. Far from the flames, desert dwellers suffer the loss.

It happened here last summer.

Little Bear Fire in the mountains around Ruidoso burned more than 200 homes before a second hazard befell the resort town. Summer rains pelted the charred hills above Bonito Lake, a reservoir from which the desert city of Alamogordo draws a fifth of its water. Ash, muck and chunks of burnt wood flushed into the lake, where a bubbly sheen of toxic flotsam remains today, rippling against the alpine dam.

A U.S. Forest Service assessment found over a third of the 35,000 federal acres within the 44,000-acre fire were torched with such intensity that 3 inches of ash lay atop water-repellent soils. The agency predicted dirt and ash erosion **from those areas** would increase by 97 times.

"The first hard rain after the fire it looked like chocolate milk was running in here," Lincoln County emergency manager Joe Kenmore said.

The pollutants rendered the water undrinkable, and environmental consultants are testing sediments to see how much toxic heavy metal may have been carried down from abandoned mines. The trout have disappeared.

Read more at: <http://www.azcentral.com/news/politics/articles/20131126arizona-wildfire-water-impacts.html>

JOB POSTINGS

Advertise your company's open positions here and on the AHS web page! Contact Christie O'Day at azhydrosoc.dir@gmail.com. Click on the position below for additional details.

- [Environmental Supervisor - City of Peoria](#)
- [Hydrologist II - ADWR](#)

ADDITIONAL INFORMATION

For more information about the Arizona Hydrological Society, please visit our regularly updated web site at:

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

Membership may be renewed by credit or debit 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 a calendar year for regular membership and \$15.00 for students. And remember that your 2014 membership will be included in the 2013 Symposium registration fee!