



AUGUST/SEPTEMBER 2010 NEWSLETTER

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VIEWPOINT: FIELD AND STREAM

Dryland hydrology is not solely concerned with scarcity.

Last week a very wet air mass hung above Arizona, and the rains fell. Flash flood watches and reports of flooding damage were common on the Arizona channels. And as I drove over the Verde River near Camp Verde, I could see that the water had risen. The sour smell of wet and decaying vegetation let me know that the river once again was exercising its hydrologic prerogative to rework the sediments, deposit debris, and redefine

the floodplain.

The power of water was also visible lately near Flagstaff, where the Schultz Pass fire left 15,000 blackened acres along the eastern flanks of the San Francisco Mountains. Deprived of their vegetative cover and battered by immense thunderstorms, the steep slopes allowed runoff in prodigious amounts. Ash and mud flowed, and were deposited by the waters in homes whose residents never expected the flood.

At the AHS Annual Symposium coming up September 1-4 in Tucson, one of our field trips will explore ancient and modern debris flows in the Catalina Mountains. Led by Ann Youberg and Phil Pearthree of the Arizona Geological Survey and Bob Webb of USGS, this field trip will explore deposits from the 2006 as compared to more ancient Pleistocene-Holocene deposits. Discussions about changing depositional environments and hazard identification and mitigation—very relevant this summer—will be of great benefit to every hydrologist.

Another major Symposium field trip will be to Cienega Creek, where organizers Claire Zucker and Mead Mier will lead us in an exploration of head cutting in a semi-arid environment. Cienega Creek has experienced significant erosion (head cutting) associated with declining groundwater levels, changing vegetative patterns, changes in habitat and sediment load variations. Environmentally oriented hydrologists can't afford to miss the discussions of what is happening and why.

It's a hard choice to make between two great field trips. Definitely they make the Annual Symposium worth attending. Register as soon as you can, at www.eventinterface.com/hydrosymposium, and grab a place in the van. It's not too late.

Alan Dulaney,

AHS Corporate Board President, 2010

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GOVERNMENT GOINGS-ON

House Bill 2661 passed in the last session of the Arizona Legislature. This bill created a Water Resources Development Commission, composed of 15 members selected by the Director of the Department of Water Resources (ADWR), who will chair the group. Interest groups such as agriculture, mining, and real estate will be represented, along with power generators and municipal/private providers. Members are now being selected, and the usual suspects are being rounded up—not necessarily a bad thing. Some of the names that have been bandied about as members are well known to anyone who has been in the water world over the last few decades. Water managers and attorneys appear to dominate the lists—think of a herd of water buffalos thundering to another meeting.

This bill was first proposed by rural water interests, and might have set up a competition for water and money between urban and rural areas. Fortunately the chances for that have been reduced by selecting geographically diverse members. Ex officio members (who don't vote and presumably don't actually get to sit at the table) including almost every state and federal agency with some tie to water: BOR, BLM, ADEQ, ACC, Game and Fish, Land and others. Meetings will be public, and hopefully a few hydrologists will be in the audience to ask pointed technical questions about water supply during the demand discussions. The first meeting will occur 10:00 AM August 13, 2010 at ADWR, with monthly meetings thereafter.

The Commission is supposed to wrap up its work within one year, and report to the Legislature by October 2011. The stated goal of the Commission is to study water needs in each county out to 2035 and also look at obligations to deliver water by SRP, CAP, CAGR, and the Water Bank. Acquisition of new water supplies and development of needed infrastructure are on the table. A Statewide Water Augmentation Authority may be created, potentially supplanting existing agencies. Legislation would be recommended, as well as changes in existing agencies and authorities.

A sweeping mandate of this type carries all sorts of potential unintended consequences. Technical support from ADWR is supposed to help the group, but I don't see how ADWR can provide much technical support for a new activity after all the cuts they have endured.

Alan Dulaney,

AHS Corporate Board President, 2010

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2010 AHS ANNUAL HYDRO SYMPOSIUM UPDATE

Another top-notch AHS Annual Symposium is only a few weeks away!!! Workshops, field trips, and two days of technical presentations offering plenty of chances to re-connect with colleagues, network with new potential contacts, and visit with sponsors and exhibitors.

PROGRAM INFORMATION:

Over 85 presentations in our Technical Sessions!

Government Responses to Changing Hydrologic Conditions

Climate change, growing water resource demands, and changing utilization of reclaimed water are causing local, state and federal governments to re-evaluate how they can meet current and future water needs. Understanding our governments' responses is critical information for the involved and active water professional.

A Binational River - Watershed Hydrology of the Santa Cruz River and Transboundary Issues

Uniquely positioned to address bi-national waters issues, this Tucson AHS conference draws on local and international experts to explore the concerns and opportunities posed by a transboundary shared water resource.

Rainwater Harvesting and Green Infrastructure

As we face tough economic times, rising energy costs, and growing water scarcity, hydrologists, water managers, and citizens are looking outside the box for new ideas and opportunities. Specific examples of successful endeavors will be presented complimented by a panel discussion addressing the "real world" value in pursuing these options.

Colorado River Management

Learn the latest on Colorado River shortages, management decisions and likely hydrological and management ramifications for various parts of the state.

Dryland Hydrology - International Studies

Gain perspective on our own water shortage by learning about other parts of the world. What "lessons learned" can we bring home, giving us new and refreshed perspectives.

Plenary Presentations that are both practical & provocative

Future of Drylands

Charles F. Hutchinson, Professor of Arid Lands Resource Sciences and Director, Arizona Remote Sensing Center, will help us gain a world perspective on rich and unique dryland ecosystems in addition to exploring the impacts of, and remedies for, desertification.

Sustainability Consensus Building for our Water Future

Rodney Glassman, Tucson Council Member and U.S. Senate Candidate also holds a PhD in Arid Land Resource Sciences. He will discuss the City of Tucson's landmark rainwater harvesting ordinance and the consensus building efforts that contributed to its success.

High caliber Workshops

Advanced Techniques for Aquifer Test Analysis, an 8-hour AQTESOLV intensive taught by Glenn M. Duffield of HydroSOLVE Inc.

Well Rehabilitation and Evaluation - Cost-Effective Methods and Considerations for Water Purveyors taught by Marvin F. Glotfelty, R.G

Unique Field Trips

Lower Cienega Creek: learn about the geomorphic, hydrologic and habitat effects of catastrophic headcut erosion and discuss restoration techniques employed in similar arid drainages.

Biosphere 2: Learn about water and climate experiments with tours personally led by project scientists. (full description coming soon)

Debris Flows in the Santa Catalina Mountains: Visit debris flow deposits and discuss processes contributing to their occurrence. (full description coming soon)

Networking and Fun

Wednesday night icebreaker and **Thursday night mixer** with music by hydrologists extraordinaire... jazz on Wednesday and blues/rock by the "Vadose Zone" on Thursday

Movie Night Thursday at 8. **A River Reborn: The Restoration of Fossil Creek** with a personal introduction by executive producer Stefan Sommer. [Click here](#) for movie information.

The next AHS Symposium Planning Committee meeting is August 4 at 6:00 PM at the offices of SAHRA located on campus, 845 North Park Avenue Tucson, AZ 85719-4871. Please contact [Shane Clark](#) or [Al Wynant](#) for additional details.

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AHS SCHOLARSHIP WINNERS

The AHS Scholarship Committee wishes to congratulate the three 2010 AHS Scholarship

Winners (from a pool of 21 applications)! The winners are:

- **Laila A El-Ashmawy**, Senior Undergraduate starting Fall 2010, Arizona State University (ASU) School of Sustainable Engineering and the Built Environment
- **Brittany Choate**, University of Arizona, May 2010: BS in Environmental Science Policy and a minor in Agricultural Technology Management and Education
- **Nathan Dunkin**, Senior Undergraduate starting Fall 2010, ASU School of Sustainable Engineering and the Built Environment

Each award is for \$2000.00 and the criteria includes strength of academic record, the student's interests, background and career goals in hydrology and water resources, their letters of support, and financial need. The three students will receive the awards at the 2010 Symposium in Tucson on Friday, September 3, at the Awards Luncheon.

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AHS FOUNDATION NEWS

The AHS Foundation is pleased to announce that it received an \$800 donation from Rosemont Copper, designated for the scholarship fund. Rosemont Copper has been a consistent supporter of the Foundation and the scholarship program, and we thank them for their generosity.

The Foundation has two meetings planned during the upcoming symposium at the Westin La Paloma in Tucson. The board of directors will meet Wednesday afternoon, September 1; all are welcome to attend. Also, we will present the annual report at the AHS annual meeting (also open to all), Thursday evening, September 2.

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AHS CORPORATE BOARD JULY 2010 MEETING

The AHS Corporate Board met in conjunction with the Flagstaff Chapter field trip at the Mormon Lake AHS campsite on July 10 at 4:00. Numerous housekeeping items were discussed not the least of which was the idea of developing a five year plan for the society focusing on monetary and member needs goals.

Please join us for the AHS annual meeting held in conjunction with the annual symposium at the Westin La Paloma in Tucson on Thursday, September 2, at 5:00 pm.

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PHOENIX CHAPTER NEWS

Our next dinner meeting will be **October 12th**, 2010, location to be determined. Please

check the web page and the October newsletter for details as they develop and join us in Fall to have a beverage, share business cards, and talk water.

July Dinner Meeting Summary

-- Provided by Christie O'Day

The AHS Phoenix Chapter wishes to thank Mike Fulton, Arizona Department of Environmental Quality (ADEQ) Water Quality Division Director, for his informative presentation to the Phoenix Chapter on July 13, 2010 at Sun Up Brewing Co. in central Phoenix. Mike's presentation was an overview of not only the Water Quality Division but the whole of ADEQ titled "What's new at ADEQ."

Governor Jan Brewer formed a "Blue Ribbon Panel on Water Sustainability" August 2009 co-chaired by Ben Grumbles, Director, Arizona Department of Environmental Quality, Herb Guenther, Director, Arizona Department of Water Resources, and Kris Mayes, Chair, Arizona Corporation Commission. The panel's 40 members represents the Arizona Legislature, state universities, municipalities, private utilities, federal government, tribes, industry, and environmental associations/organizations.

The panel's ultimate goals are to:

- Increase the volume of reclaimed water reused for beneficial purposes in place of raw or potable water
- Advance water conservation, increase the efficiency of water use by existing users, and increase the use of recycled water for beneficial purposes in place of raw or potable water
- Reduce the amount of energy needed to produce, deliver, treat, reclaim and recycle water by the municipal, industrial, and agricultural sectors
- Reduce the amount of water required to produce and provide energy by Arizona power generators

The panel's working groups are currently in the final phase and are working toward putting a final report out by the end of the year.

ADEQ's Emerging Areas of Focus include Regulations/Permitting; Infrastructure/Retrofit; and Conserve/Recycle/Energy

State Budget impacts include a series of bills passed that permanently reduce state budget by \$2.2 billion; Eliminated ADEQ's remaining General Fund allocation of \$5.7 million; state employees taking equivalent 5% pay cut; eliminates 2.75% performance pay; 6 mandatory unpaid furlough days in both FY11 & FY12 (valued at 2.3%); Layoffs and reductions in force resulted in loss of 60+ positions agency-wide.

2010 Legislature Budget Remedies

- HB 2007 grants ADEQ immediate authority (exempt rulemaking) to raise existing fees for FY11 to transition off General Fund (capped@ \$5.7 m)
- Proposed HB 2586 amends HB 2007 adding a 30-day public notice requirement and establishes a *10-member state agency fee commission*. A proposed amendment would require that fees be fairly and equally assessed to all parties receiving services and not discriminate between public and private entities
- Proposed HB 2767 grants ADEQ authority for regular rulemaking to raise APP program fees and establish fees for AZPDES program. Allows for collection of total program costs (currently limited to direct costs)

Other important agency legislation enacted this session:

- SB 1276 - continuation of the Monitoring Assistance Program (MAP) to 2020. Established in 1998, MAP provides water quality monitoring assistance to small public water systems
- SB 1277 - continuation of the Total Maximum Daily Load (TMDL) Program to 2020.

Established in 2000, the TMDL program works to restore water quality in impaired lakes and streams. Once TMDL established, ADEQ works with stakeholders to develop projects to improve water quality

- HB 2617 – requires state law be no more stringent than corresponding federal law; increases penalty for LTF exceedances from 1% to 2.5% of permit fee; eliminates “point source discharges to navigable waters” as a categorical APP discharging facility [ARS 49-241(B)(9)]; and Creates a *7-member mining advisory committee* to review mining policies, assist agencies in developing rules and budgets, and review proposed rules affecting mining.

What's New?

- Deminimus General Permit. Required for discharges from potable water systems; hydrostatic testing; dewatering; well development; aquifer testing; charitable, noncommercial car washes...
- Pesticide General Permit – due April, 2011. Required of aerial applicators, parks & recreation departments, land management agencies, municipalities for pesticide use “in or over, including near” waters of the U.S.
- Multi-Sector General Permit. Stormwater from industrial facilities being drafted with Arizona-centric modifications in mind.
 - EPA’s “climates with irregular stormwater runoff” adopted as a statewide condition for AZ
 - Sampling & monitoring tied to wet seasons rather than calendar quarters
 - Summer wet season – June 1 to October 31
 - Winter wet season – November 1 to May 31
 - Monitoring expanded for discharges to impaired and outstanding Arizona waters
 - Construction permit requirements included for mining Sectors G & J
 - Submittal of annual reports limited to facilities that discharge to impaired waters & outstanding Arizona waters (OAW)

Program Improvements

Process improvements to improving communication during permitting process by identifying potential agency concerns early in process and communicate regularly – meetings, site visits, informal comments. Also managing timeframes within WQD by working to establish internal timeframe expectations for various types of projects and tracking application’s progress against these predicted processing times to identify any issues. Overall timeframes are dependent on variables such as type of application, complexity of permit, technical review needed and response of applicant or consultant

Developing training for staff and permittees to better understand program, rules, requirements. This includes APP Workshops with the goal of applicants providing better applications which lead to a faster, streamlined permit process and to assist applicants & consultants in understanding the rules & requirements of the program. To date ADEQ has held several “APP 101” workshops totaling over 200 attendees. Future sessions will focus on program specifics – e.g, BADCT, POC, PMA, DIA, contingency plans, monitoring, SMRFs. More information: <http://www.azdeq.gov/environ/water/permits/app.html>

ADEQ is looking to expand the use of general permits and possible permits being explored include discharges from:

- Potable water treatment plants (including arsenic treatment plants)
- Smaller WWTP permits
 - AZPDES: new and renewal permits for WWTP < than 1 MGD
 - APP: aerobic WWTP < 24,000 gpd with nit/denit + disinfection
- Groundwater to surface water or riparian habitat development
- Splash parks
- Dust control with industrial wastewater

- Reuse classification for WWTP < 24,000 gpd
- Graywater for other than residential irrigation (Type 2)

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2012 Symposium Planning Underway

The Desert Willow Conference Center at the Cotton Center in Phoenix has tentatively been selected as the venue for the 2012 Symposium. Details will be provided as they develop. If you have any strong opinions on locations or are interested in helping out with the early stages of the planning for 2012, please contact 2012 symposium planning chair, Ted Lehman, at ted@jefuller.com or 480-222-5709.

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

- September – No regular dinner meeting. Please join us September 1-4 at the Tucson Westin La Paloma for the AHS/IAH annual symposium!
- Oct-Dec Dinner meetings – How ‘bout you? Contact [Keith Ross](#) if you’re interested in speaking!

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WSP WATER SPEAKER SERIES IN MARICOPA COUNTY

On Wednesday, August 18, Ardeth Barnhart, Co-Director, AzRISE (The Arizona Research Institute for Solar Energy), will present “**Solar Energy's Future in Arizona and the Impacts on Water Use**” noon – 1:30 at The University of Arizona Cooperative Extension, Maricopa County, Palo Verde Room at 4341 E. Broadway, Phoenix. Free and open to the public. Bring your lunch. There will be time for questions and answers. Please RSVP to Nancy Crocker at 602-827-8200 ext. 335 or NCrocker@cals.arizona.edu.

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TUCSON CHAPTER NEWS

August Meeting Announcement

The next Tucson chapter meeting will be held on Tuesday, August 10th.

Location: Offices of Montgomery & Associates
1550 E Prince Rd
Tucson, AZ 85719

Event: Cienega Creek Headcut - the story of a catastrophic erosional feature in our own back yard

Claire Zucker, Watershed Planning Manager
Mead Mier, Senior Watershed Planner
both of the Pima Association of Governments

Time: 6:00 PM

Lower Cienega Creek is one of the few low-elevation perennial streams in southern Arizona. A rare gem in the desert, it provides habitat for native species, connection between sky island retreats and water to the Tucson metropolitan area. Pima County has long recognized the value of this resource and after creating a County Natural Preserve around the creek, along with Pima Association of Governments (PAG), successfully nominated the creek as an Arizona Outstanding Water. After more than 15 years of monitoring groundwater levels and surface water flows along the creek, PAG noted an erosional headcut developing in 2001. Since that time, the headcut has deepened and widened, lowering the creek more than 12 feet near the bottom of the headcut and spreading more than 4000 feet up the creek since its inception. In 2007, PAG received an AZ Water Protection Fund grant to study the geomorphic, hydrologic and habitat changes as the erosion progressed over a two year period. Claire Zucker, Watershed Planning Manager and Mead Mier, Senior Watershed Planner, both from Pima Association of Governments, will provide an overview of the research findings and take you on a virtual field trip down the creek.

The next Tucson Chapter meeting will be **October 12th**, 2010, at a location to be determined. Please check the web page and the October newsletter for details as they develop.

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FLAGSTAFF CHAPTER NEWS

The next Flagstaff Chapter meeting will be on **Wednesday, August 18, 2010**, 6pm, at Peabody Energy, 3001 W. Shamrell Blvd., Suite 110 (west side of Pulliam airport). On the agenda: report on the July 10 field trip, report on the 2011 Annual Symposium, treasurer's report. Please come with ideas for keynote speaker, entertainment, field trips, workshops, etc.!

FLAGSTAFF CHAPTER SUMMER FIELD TRIP REVIEW

Hops, Stops and Rocks: Hydrology, Geology, and Volcanology of the Mormon Lake area – Saturday July 10, 2010

We would like to thank everyone for making this field trip a success! A great time was had by all. We visited amazing volcanic geology locations, got the skinny on the City of Flagstaff's water resources, and luxuriated in the pines with lots of great friends, colleagues, and beer. What more could a water/rock geek want! Oh yeah, camping under the stars with great food trucked in for everyone and more beer!

A special thank you to Dr. Richard Holm, USFS, Dr. Abe Springer, NAU, and Brad Hill,

City of Flagstaff, for sharing such interesting science and information, and to Margot Truini, USGS, for assembling and printing the field trip guides. Thank you to Dana Downs-Heimes, CH2M Hill, for getting the vans secured – and to Dana, Paul Whitefield, NPS, and Ken Robinson, NAU, for driving. Also, Paul was responsible for most of the tables and cookware, and getting the camping permit. Mike Tomlinson, University of Hawaii - SOEST, helped with some essential campsite necessities, and took many photos and videos. Doug Toy came through with the megaphone from the City of Chandler. And Brad marked our camping spot (and toasted our bagels) with his large RV, and served as the keg captain. And a big, extra special, thank you to Erin Young, Fluid Solutions, who orchestrated all the logistics, food, communications, etc. So – there you have it! The Flagstaff Chapter team.



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HYDRO-NEWS

FLAGSTAFF SNOWBOWL WATER DISPUTE BACK IN COURT

by **Michael Kiefer and Michelle Ye Hee Lee** - Jul. 20, 2010 08:50 PM
The Arizona Republic

A federal judge Tuesday postponed a request for an injunction against the Arizona Snowbowl to keep the Flagstaff ski area from starting construction on a pipeline that would carry reclaimed wastewater 15 miles from town to produce artificial snow.

Judge Mary Murguia asked the [resort](#) and the Native Americans who brought suit to discuss whether they can reach agreement on when land clearing can begin.

Injunctions are imposed only in emergency situations, and Snowbowl argued that there was hardly an emergency if there was no chance of actually making snow until November 2011.

If necessary, Murguia will reconsider the issue Thursday.

Snowbowl and its landlord, the U.S. [Forest Service](#), have been locked in litigation with several tribes and environmental groups since 2006 over whether the resort can make snow at all, let alone from reclaimed wastewater.

Read more: <http://www.azcentral.com/news/articles/2010/07/20/20100720flagstaff-snowbowl-water-battle.html#ixzz0vE0bTAQs>

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CLIMATE SHIFT POSES THREAT TO WATER SUPPLY

Ariz. needs to prepare now for severe shortages projected by 2050, private researchers say

by **Shaun McKinnon** - Jul. 21, 2010 12:00 AM
The Arizona Republic

Higher temperatures caused by global warming could create water shortages across wide areas of the country by 2050, including most of Arizona, a new study predicted Tuesday.

All but two of Arizona's 15 counties could face high or extreme risks of shortages if temperatures rise as projected, the study said. The only areas with similarly widespread threats are Texas and [Southern California](#).

The high risks in Arizona are based on a confluence of factors, such as dwindling water supplies, growing water demand, overuse of groundwater and the state's frequent droughts. The addition of warmer weather could exacerbate those conditions.

The study, released by the Natural Resources Defense Council, an environmental-advocacy group, used long-range climate-change forecasts and other water-use data to assess risks down to the county level. The group said the findings point to a need to prepare now to avoid shortages that could force homes, businesses and farmers to reduce water use.

Read more: <http://www.azcentral.com/arizonarepublic/news/articles/2010/07/21/20100721climate-shift-to-hurt-water-supply.html#ixzz0vDyroKID>

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MUDFLOWS BELOW THE SCHULTZ FIRE INUNDATE HOUSES, BLOCK ROADS, CLOG CULVERTS

CYNDY COLE and JOE FERGUSON Sun Staff Reporters, Wednesday, July 21, 2010 5:15 am
Arizona Daily Sun

A 12-year-old girl died and dozens of homes were damaged Tuesday in a flash flood that sent residents of Timberline, Fernwood and even parts of Doney Park fleeing.

A cloudburst over the San Francisco Peaks fell on the area burned last month in the 15,000-acre Schultz fire, moving boulders into roads and pushing sheds across yards.

Residents said the approaching water and ash sounded like an avalanche, a jet engine, or a loud

truck as it came off the mountains into Timberline, flooding some homes and leaving many others with mostly mud in the yard.



Photo: Rick Peace moves a log out of a drainage during massive floods that hit neighborhoods that were in the shadow of the Schultz Fire on Tuesday. Drainage ditches were plugged with boulders and other debris during the floods. (Josh Biggs/Arizona Daily Sun)

Read more at

http://www.azdailysun.com/news/local/article_320591b2-b939-5865-aa4d-f33cd801bb6a.html

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UP AGAINST THE WALL

CYNDY COLE Sun Staff Reporter, Friday, July 23, 2010 5:15 am

Arizona Daily Sun

Timberline residents saw flooding again Thursday, as heavy rain fell on the Schultz fire burn area above their homes and local streets again turned to roiling creeks.

Thursday's afternoon flooding was not as severe as Tuesday's, but rain continued falling later in the day, and floodwaters re-entered some homes.



One longtime resident said the flooding likely was compounded because new subdivisions have rerouted old washes.

"All these washes ran three to six months a year," said Bob Adams, owner of Bill's Welding.

Adams and friends were still mucking out his shop on Thursday, where he was unable to work because he uses electricity to weld and the floor was wet and muddy from Tuesday's flood.

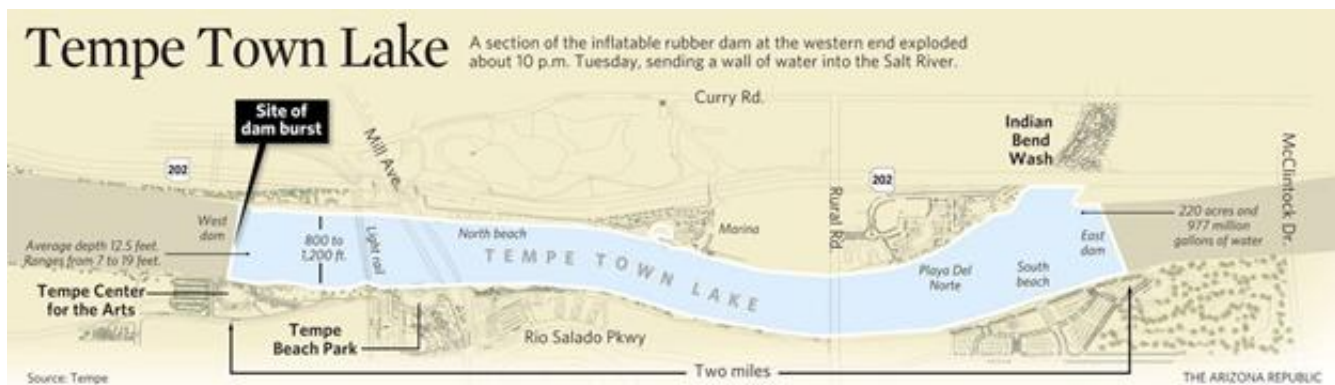
Photo: Roiling waters rolled into the Timberline neighborhood Thursday, flooding out homes and washing large rocks into the roads. The floods are a result of the 15,000-acre Schultz fire, which burned much of the vegetation uphill from the area earlier this summer. (Josh Biggs/Arizona Daily Sun)

Read more at http://www.azdailysun.com/news/local/article_c4947e92-b0b7-5a38-9779-14a9f1e1041e.html

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TEMPE TOWN LAKE: DAM BURST BEFORE IT COULD BE REPLACED

by Karina Bland and William Hermann - Jul. 21, 2010 09:30 AM



Tempe Town Lake overnight became a bog after one of the four inflatable bladders at the west end of the lake exploded around 9:44 p.m., sending a wall of water into the Salt River bed.

On Wednesday morning swampy patches of earth could be seen in many parts of the lake bed, with standing water in the center.

Tempe spokeswoman Kris Baxter estimated that at least three-quarters of the about 1 billion gallons of water had drained overnight. Officials say the dam breach left some areas of the lake with three feet of water or less; the average lake depth is about 16 feet.

Related: [February: Tempe delays replacing four dams](#) | [Dam tore in 2002, but no water leaked](#) | [Tempe Town Lake timeline](#)

Read more: <http://www.azcentral.com/news/articles/2010/07/21/20100721tempe-town-lake-dam-break-brk21-ON.html#ixzz0vVO7bVAY>

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PHOENIX AREA BRACES FOR MORE RAIN AS N. ARIZONA HIT WITH FLOODING

by **Brittany Williams, Glen Creno and Colin Lecher** - Jul. 30, 2010 03:51 PM
The Arizona Republic

As storms cause flooding throughout northern Arizona, the Phoenix area braced for another wet afternoon on Friday, a day after powerful thunderstorms roiled the Valley.

Roads are being closed north of Flagstaff as the Schultz Fire burn area is again swamped with heavy rainfall.

The Coconino County Sheriff's Office is closing Campbell Avenue, Brandis Way, Kevin's Way and Henry's Way where the roads intersect with U.S. 89. The county says the water is driving debris and large rocks, and water is running curb to curb on Campbell, a main roadway into forest subdivisions west of 89 near the base of the burned slopes. The Schultz Fire burned more than 15,000 acres in June east of the San Francisco Peaks, and the soil is unstable with the loss of trees and vegetation, producing flooding during heavy rain.

The Sheriff's Office also is closing U.S. 89 from Silver Saddle Road to the Sunset Crater Monument.

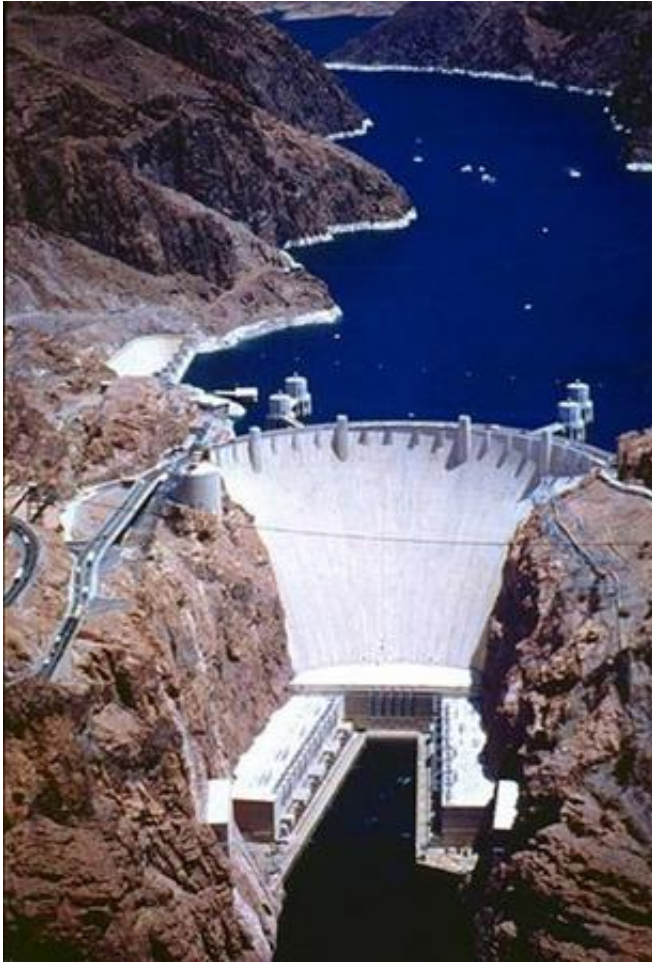
Read more: <http://www.azcentral.com/community/swvalley/articles/2010/07/30/20100730phoenix-weather-forecast-abrk-0730.html#ixzz0vE2OKwVa>

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WATERBLOGGED BY SHAUN MCKINNON, ARIZONA REPUBLIC

[Friday notebook, dam edition](#)

Friday, July 23, 2010 at 04:33 PM



You can ask all the dam questions you want on this dam Friday edition of the dam notebook:

>>One of the books that landed on my desk while I was on project duty recently was "[Colossus: Hoover Dam and the Making of the American Century](#)," by Pulitzer Prize-winning journalist **Michael Hiltzik**. The book traces not just the story of the dam's construction, but the broader drama unfolding at the same time as the country struggled through and climbed out of the Great Depression.

Hiltzik goes into some depth about how the dam guided the transformation of the West and he poked at that issue in an [op-ed piece](#) that ran recently in the *Los Angeles Times*, his home newspaper, and other papers. He talks about the "false promises" of Hoover Dam:

"The promise of abundant water and power took the brakes off the growth of Los Angeles, San Diego and many other western cities; it encouraged farmers to complacently plant the most water-thirsty crops; and it gave us city dwellers the impression that we can water our lawns every day without worrying about waste and runoff."

His column, which you can read [here](#), will not be popular with water managers on the Colorado River, who prefer to see Hoover as a fulfillment of promise, particularly after a decade of drought during which water continued to flow to users.

>>Hiltzik didn't include "...build big fake lakes..." among the sins of the over-promised water users, but the toldjaso chorus weighed in quickly this week when one of the rubber dams on **Tempe Town Lake** failed.

Read more: <http://www.azcentral.com/members/Blog/ShawnMcKinnon/91082>

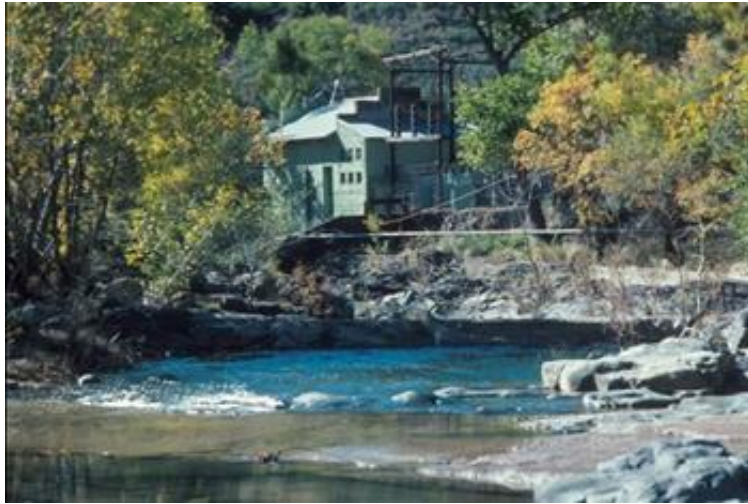
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[Fossil Creek power plants now fully shuttered](#)

Monday, July 26, 2010 at 03:15 PM

Five years after **Fossil Creek** was given back its water, **APS** has removed the last pieces of an old hydroelectric power plant and is ready to turn the site over to the **U.S. Forest Service**.

The utility decided in 1999 to decommission the **Childs** and **Irving** power plants and restore the natural flow to Fossil Creek, a tributary of the **Verde River** that had been diverted through 11 miles of flumes for nearly a century.



APS has now removed the flumes, the turbines and **Fossil Creek Dam**, which blocked the flow of the creek not far below **Fossil Springs**, which bubbles up from the edge of Arizona's **Mogollon Rim** country not far from **Strawberry**.

The power plants once provided 4 megawatts of power, first for mining operations in **Jerome** and the **Bradshaw Mountains** and later for growing towns and cities. But they also took water from

Fossil Creek, one of Arizona's true riparian gems and a rare year-round stream.

Read more: <http://www.azcentral.com/members/Blog/ShawnMcKinnon/91235>

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[Money flowing to water quality projects](#)

Tuesday, July 27, 2010 at 11:39 AM

The **Arizona Department of Environmental Quality** has announced a series of grants in recent weeks for water quality work around the state. Here's a list with links to details (note that most of the links take you to a pdf file):

>>\$123,604 water quality improvement grant to the **Little Colorado Plateau Resource Conservation and Development Area Inc.** for work on the **Coyote Creek** area in **Apache County**. The money will be used to create a watershed improvement council and establish best management practices in the Coyote Creek sub-watershed. The aim is to reduce sediment flow into the creek. More [here](#).

>>\$44,200 grant to the **Gila Watershed Partnership** to continue work on the upper Gila stewardship program. The money will be used in part to help train people to monitor and control sediment on the **Gila River** and to seek additional grant money to address sediment issues. More [here](#).

>>\$550,000 grant to the **Lake Havasu City** public works department to allow the city to continue replacing septic tanks with new connections to the municipal sewer system. The money will help close off 3,100 septic tanks in the southeast part of the city. [Nitrates](#) and other pollution have seeped from septic tanks into **Lake Havasu** over the years. More [here](#).

Read more: <http://www.azcentral.com/members/Blog/ShawnMcKinnon/91299>

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[White House didn't help Western climate plan](#)

Tuesday, July 27, 2010 at 03:06 PM

The **Western Climate Initiative** released its most detailed blueprint yet for a regional cap and trade plan to reduce greenhouse gases across the region, but for this dance, there are more

people holding up the walls than there are heating up the floorboards.

You can read the full plan [here](#) if you want. All the particulars are spelled out, along with a good [FAQ here](#). AP writes about it [here](#).

The system is set to launch in 2012 and if it does, it will likely emerge as a barely recognizable shadow of what was intended. Only **California** has adopted the legislation needed to start capping and trading (and there are moves afoot there to undo that legislation). **New Mexico** has promised to be ready, but isn't so far. **Quebec**, **Ontario** and **British Columbia** are working on the needed regs.

Read more: <http://www.azcentral.com/members/Blog/ShawnMcKinnon/91310>

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

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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, c/o Christie O'Day, 3317 S. Higley Road, Suite #114, Box 120, Gilbert, Arizona 85297. Dues remain at \$45.00 year for regular membership and \$15.00 for students. Hope to see you at 2010 AHS Symposium! Your 2011 membership is included in the registration fee.