

Utah Watershed Review

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2009 NPS Conference a Success

Price Location Provided Backdrop for Salinity Program Showcase

Held a month earlier than usual, in late August, the 2009 edition of the Utah Nonpoint Source Water Quality Conference had a smaller-than-usual turnout in a compressed format, but still provided a wealth of great information to water quality professionals and program cooperators from throughout the state.

The two-day conference was held in Price, Utah this year, and featured a lot of discussion about the Colorado River salinity Control Forum and its programs and projects within Utah.

Jack Barnett, Executive Director Colorado River Basin Salinity Control Forum, explained that the Colorado River Basin covers portions of seven states. The Basin is divided into the Upper Basin states of Utah, Wyoming, Colorado and New Mexico; as well as the Lower Basin states of Arizona, Nevada and California. The agreements in place put a fair amount of responsibility on the Upper Basin States to control the amount of salt traveling down stream to the three remaining states, which tend to have the larger City

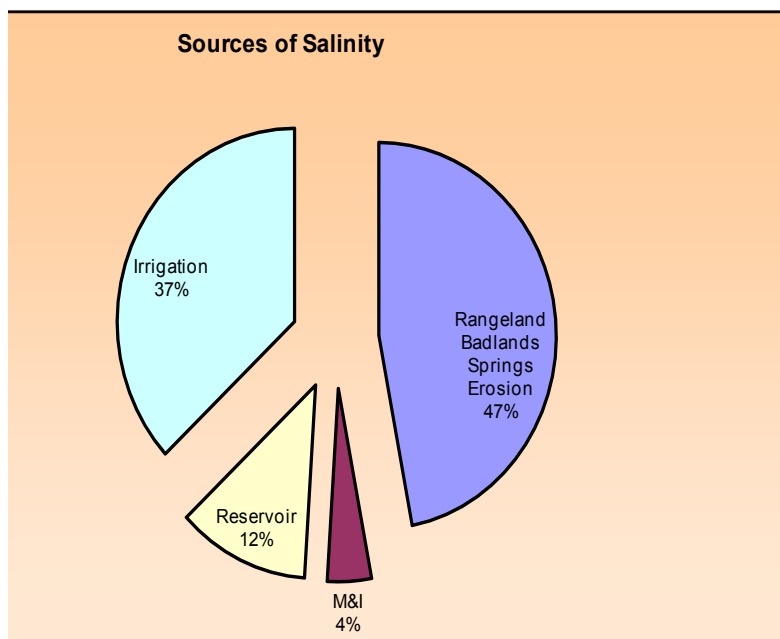


populations within the watershed.

Irrigation projects have been a large part of the focus of the upper basing projects to this point. Rangeland runoff and natural erosion sources of salinity are also a large source of the problems.

While there is a great deal of work to be done still, Barnett said that a lot has been accomplished thus far.

- Reduced salt load by 1.3 million tons – 15%
- Reduced salinity concentrations in Lower Basin by more than 120 mg/l
- Reduced damages by \$169 Million per year from what would have been \$545 Million per year.
- Always met numeric criteria
- Always met commitment to Mexico
- Always the most cost effective control available



2010 NPS Conference Scheduled

Annual Conference to be Held in Richfield in Early October

Now in its third decade, the Utah Nonpoint Source Water Quality Conference will do something in 2010 that hasn't been done before: it will be held in October.

Tentatively scheduled for October 5-7, 2010, with related meetings held on Monday October 4th, the 2010 version of the annual information sharing gathering and tour will be held in Richfield at the Sevier Valley Center.

The theme of the 2010 conference will be "Landscape Approach to Diagnosing Watershed Health," said conference planning committee chair, Roy Gunnell, Utah Department of Agriculture and Food. "We will focus on examples of using the watershed approach to manage Utah's varied landscapes," he added.

Some rural and public lands examples of watershed approach initiatives include the Watershed Restoration Initiative, lead by the Utah Department of

Natural Resources, and the Invasive Species Mitigation Fund, lead by the Utah Department of Agriculture and Food. The committee is also interested in examples of the watershed approach used in mainly urban watersheds.

As usual, the conference will be a mix of general sessions and break-out concurrent technical sessions. Look for a call for presentations announcement early in 2010, and check the conference website early in the year for periodic updates. In the meantime, presentations from the 2009 conference are still available on the website: <http://ag.utah.gov/divisions/conservation/npsconferencepubs.html>.

Anyone who would like to participate on the planning committee, or if you have any ideas for subject matter or tour stops, please contact Roy Gunnell, rgunnell@utah.gov, or Jack Wilbur, jackwilbur@utah.gov.

Gov. Herbert Creates Balanced Resource Council, Brings Together Diverse Viewpoints

Former Salt Lake City Mayor and gubernatorial candidate Ted Wilson has accepted Governor Gary R. Herbert's invitation to join the Governor's staff as a senior advisor on environmental matters.

Wilson will be head the newly created Governor's Balanced Resource Council, which will prioritize and recommend action on a number of issues, such as public lands policy, water and air quality issues, and other areas impacting Utah's natural resources.

"We are bringing people together from diverse backgrounds and points of view to find solutions to the issues facing Utah," Governor Herbert said. "It is time to put an end to the paralysis that comes from constant bickering and to make substantial policy decisions on these important matters."

Members of the Governor's Cabinet asked to join the council include: Leonard Blackham, Commissioner, Utah Department of Agriculture and Food; Amanda Smith, executive director of the Department

of Environmental Quality; Michael Styler, executive director of the Department of Natural Resources; Dianne Nielsen, the Governor's energy policy coordinator; and John Harja, the state's public lands policy coordinator.

Other council members include State Representative Mike Noel, San Juan County Commissioner Lynn Stevens, and Pat Shea and Kathleen Clarke, former directors of the U.S. Bureau of Land Management.

Wilson, as a member of the Governor's staff, will be the only paid member of the council.

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Chloride a Problem in Urban Streams

Not a major concern in agricultural area streams nationally

Reprinted from:
ScienceDaily (Sep. 17, 2009)

Levels of chloride, a component of salt, are elevated in many urban streams and groundwater across the northern U.S., according to a new government study.

Chloride levels above the recommended federal criteria set to protect aquatic life were found in more than 40 percent of urban streams tested. The study was released by the U.S. Geological Survey (USGS). Elevated chloride can inhibit plant growth, impair reproduction, and reduce the diversity of organisms in streams.

The effect of chloride on drinking-water wells was lower. Scientists found chloride levels greater than federal standards set for human consumption in fewer than 2 percent of drinking-water wells sampled in the USGS study.

Use of salt for deicing roads and parking lots in the winter is a major source of chloride. Other sources include wastewater treatment, septic systems, and farming operations.

“Safe transportation is a top priority of state and local officials when they use road salt. And clearly salt is an effective deicer that prevents accidents, saves lives, and reduces property losses,” said Matthew C. Larsen, USGS Associate Director for Water. “These findings are not surprising, but rather remind us of the unintended consequences that salt use for deicing may have on

our waters. Transportation officials continue to implement innovative alternatives that reduce salt use without compromising safety.”

This comprehensive study examines chloride concentrations in the northern U.S. covering parts of 19 States, including 1,329 wells and 100 streams.

Selected Highlights

Land use matters

Chloride yields (the amount of chloride delivered per square mile of drainage area) were substantially higher in cities than in farmlands and forests. Urban streams carried 88 tons of chloride per square mile of drainage area. Forest streams carried about 6 tons of chloride per square mile.

Only 4 percent of the streams in agricultural areas had chloride levels that exceeded the recommended federal criteria set to protect aquatic life (compared to more than 40 percent of urban streams). Overall, 15 percent of all streams had chloride levels exceeding the criteria.

Chloride concentrations in shallow groundwater (not used for drinking) were 16 times greater in urban areas than in forests, and 4 times greater in urban areas than in agricultural areas.

Highest levels in streams in the winter

In urban streams, the highest levels of chloride (as great as 4,000 parts per million, which is about 20 times higher than the recommended federal criteria) were

measured during winter months when salt and other chemicals are used for deicing.

Increases over time

Increases in chloride levels in streams during the last two decades are consistent with overall increases in salt use in the U.S. for deicing.

Increasing chloride yields are linked to the expansion of road networks and parking lots that require deicing, increases in the number of septic systems, increases in wastewater discharge, and increases in saline groundwater from landfills.

Sources can vary locally

Chloride in ground and surface waters comes from many sources including the use and storage of salt for deicing roads, septic systems, wastewater treatment facilities, water softening, animal waste, fertilizers, discharge from landfills, natural sources of salt and brine in geologic deposits, and from natural and human sources in precipitation.

2009 NPS Awards Highlight Long-term Stewardship, Service in Water Quality Efforts

A highlight of the annual Utah Nonpoint Source Water Quality Conference has become the evening barbecue and NPS Awards ceremony.

The barbecue and the people who provide it were a highlight of this year's award ceremony.

For more than a decade now, George Cook, Jim Brown, and their crew, representing the Utah Chapter of the Society of Range Management (SRM), have followed the conference around the state with their barbecue trailer, Dutch ovens and coolers in tow, providing the annual NPS Conference Awards Dinner. They have done it as a fund raiser for the SRM scholarship program, and in the process have become a fixture and highlight of the conference.

With George Cook's retirement this past year, it seemed like the right time to recognize George, Jim and the Utah Chapter, SRM for their support of the Utah NPS Conference with a special NPS Award.

Cook also received an award in the agency/professional category for his years of service with the Natural Resource Conservation Service managing rangeland and watershed protection projects.

One of the award categories recognizes farmers and ranchers for their contributions to water quality protection. Among this year's winners in that category was Cowley Farms, from Venice, Utah, in the Sevier River watershed.



From left to right: George Hopkin announces the award to SRM, Roy Gunnell distributes the certificates, and George Cook and Jim Brown accept the Utah NPS Award.

Huntington Cleveland Irrigation Company is sponsoring the largest salinity control irrigation project in the country at the present time. It includes over 16,000 acres of cropland being converted from flood irrigation to pressurized irrigation. Over 59,000 tons of salt will be removed annually from the Colorado River system as a result of this project. The Company Board of Directors are working with Federal

and State agencies as well as JUB Engineering, Rocky Mountain Power, San Rafael Conservation District and private landowners to accomplish this water quality project. Shareholders are supporting this board and will benefit by conserving water, increasing crop yields, improving soil conditions, at the same time improving water quality.

Sherrel Ward, president, Huntington Irrigation Co., accepts the award from Nancy Mesner, Utah State University.

