

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Water Current Newsletter

Water Center, The

10-1998

Water Current, Volume 30, No. 5, October 1998

Follow this and additional works at: https://digitalcommons.unl.edu/water_currentnews



Part of the [Water Resource Management Commons](#)

"Water Current, Volume 30, No. 5, October 1998" (1998). *Water Current Newsletter*. 219.
https://digitalcommons.unl.edu/water_currentnews/219

This Article is brought to you for free and open access by the Water Center, The at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Water Current Newsletter by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Water Current

Interstate Compact Opinions Vary on Summer Tour

by Steve Ress

Results of a recent lawsuit between Kansas and Colorado and how a pending lawsuit between Kansas and Nebraska may unfold generated no end of opinions on the effects interstate water compacts have on us all.

These controversial topics were the main focus of this summer's Kearney Area Chamber of Commerce and Nebraska Water Conference Council summer water tour. The tour attracted 80 legislators, congressional staff members, public and private sector water professionals, media members, producers and a variety of business interests.

All seemed interested in listening to perspectives on results of the Arkansas River dispute between Colorado and Kansas, and Kansas' recent lawsuit with Nebraska over the Republican River compact.

A highlight of the three-day August tour was Kansas Attorney General Carla Stovall's appearance on the final night of the tour at Goodland, KS.

"The door is not closed for settlement of this lawsuit, which will probably take 10 to 15 years at the cost of \$1 million a year," Stovall told Kearney Hub staff writer Lori Potter, who participated in the tour and filed a series of articles about it.

It is up to Nebraska to "Bring to the table a concrete proposal for resolving the dispute - and it hasn't done that," she continued.

The following day, at Harlan County Reservoir, Nebraska Assistant Attorney General Marie C. Pawol said it was Kansas, not Nebraska, who withdrew from compact negotiations and who has since refused to provide reports for review by the compact committee.

Pawol and Stovall's figures showing water deliveries from Nebraska to Kansas didn't exactly match, either.

Pawol argued that Kansas has received all the water the compact specifies in every year but one. Stovall disputed this and further said deliveries aren't always timely.

Earlier, in Colorado's LaJunta Valley farming region, producer Colin Thompson and Lower Arkansas Water Management Association Manager Don Higbee said

(Continued on page 5)



Tim Anderson of Central Nebraska Public Power and Irrigation District (center) and Kearney Hub reporter Lori Potter (right) listen to Kansas Attorney General Carla Stovall at a tour stop in Goodland, KS (photo: Steve Ress).

INSIDE

- 3 VOLUNTEERS HELP WITH ELM CREEK HUA
- 4 MONITORING WORKSHOP TARGETS EDUCATORS

- 5 SNRS DEBUTS SEMINAR SERIES
- 8 STRATEGIES FOR PESTICIDE MONITORING

Unit Staff Travel to September Events; Promoting a National Water Research Initiative; State Funding Review

from the DIRECTOR



Bob G. Volk

It was good to see so many of you at last month's Husker Harvest Days in Grand Island and to talk about our Nebraska water resources and what our groundwater levels are doing. The most commonly asked questions dealt with drinking water and is it safe and where one can go to have their drinking water tested. To determine where your drinking water can be tested, contact Nebraska Department of Health and Human Services System at (402)471-3121 or your local Natural Resources District office. At

Husker Harvest Days there was also considerable interest and comment on the controversial livestock confinement issue and how such mega-facilities could effect our ground and surface water. Earlier in September, we were again part of the sixth annual Festival of Color at the NU Agricultural Research and Development Center, near Mead. Later in the month we participated in the annual Nebraska Association of Resources Districts (NARD) conference in Kearney. We look forward to speaking with many more of you at the annual combined Nebraska Water Resources Association/Nebraska State Irrigation Association meetings in Kearney Nov. 30 and Dec. 1st. This meeting always conveys important information on our water resources.

At the National level, I am part of a team working to promote the concept of a National Water Research Initiative. We believe that far too few resources are being put into water research and that a special initiative is needed focusing on water as a critical resource for the future. The concept is to provide more funding to existing federal agencies dealing with water research issues to distribute to states and/or university researchers to help find solutions to our complex water problems through sound research. So far, the federal agencies we have visited are very receptive to the concept and are looking forward to moving it forward. This effort will take several years to

gain full acceptance and hopefully additional federal resources.

On yet another note, I was recently notified by University administration that our Water Sciences Laboratory (WSL), founded and directed by Dr. Roy Spalding, will undergo a review to see if state funding for the facility should continue. The WSL receives funds from the Nebraska Research Initiative and has been designated a core facility. The laboratory and the research it conducts, are very important to the state's water resources and important assets to all Nebraskans. WSL research and programming have gained worldwide recognition. I would think that state funding to such a facility should be increased, rather than examining whether it should be trimmed or eliminated. Look forward to a future article on the many projects in which the laboratory is involved.

Please call or write if you have questions on Nebraska's water resources. We continue to have a wide variety of water resources and pesticide education materials available. Lists of publications and available services can be found on the World Wide Web at <http://www.ianr.unl.edu/ianr/waterctr/wchome.html> (Water Center) and <http://www.ianr.unl.edu/ianr/pat/ephome.htm> (Pesticide Education Resources), or by phoning (402) 472-3305/1632. I and my faculty and staff are eager to assist you.

Water Current

Water Center/
Environmental Programs
School of Natural Resource Sciences
103 Natural Resources Hall
Lincoln, NE 68583-0844
Phone: (402) 472-3305
Fax: (402) 472-3574
E-mail: sress@unlinfo.unl.edu
World Wide Web
<http://ianrwww.unl.edu/ianr/waterctr/wchome.html>

Bob G. Volk — Director
Roy F. Spalding — Associate Director,
Water Sciences Laboratory Director
Edward F. Vitzthum — Coordinator of
Environmental Programs
Robert D. Kuzelka — Assistant to the
Director
Steven W. Ress — Editor

This newsletter is published with partial financial support from the Department of the Interior; U.S. Geological Survey. The content does not necessarily reflect the views and policies of the Department of the Interior, nor does mention of trade names or commercial products constitute endorsement by the U.S. Government.

Volunteers Help Improve Water Quality in Elm Creek Watershed Project

by Ed Vitzthum and Steve Ress

Youth and other volunteers played integral roles in a seven-year, multi-agency project to improve water quality in Webster County's Elm Creek Watershed, one of the many Hydrologic Unit Area (HUA) projects nationwide.

Project Coordinator Chuck Burr, University of Nebraska extension educator in Clay and Webster counties, said project success was due in part to the involvement of two area FFA chapters and two area 4-H clubs.

The Blue Hill FFA chapter planted a cedar tree revetment to reduce streambank erosion and provide habitat for fish. Elm Creek is one of only two cold water streams in Nebraska that can support trout populations.

"The chapter received a state award in part for their involvement with the

Elm Creek project," Burr continued.

4-H clubs participated in a tree planting project helping to plant more than 370 shrubs and trees. Another 320 machine-planted trees were cared for by the 4-H clubs and the Red Cloud FFA chapter, Burr said.

While FFA and 4-H youths learned by doing, the project also provided informal learning opportunities for other youths. Each year the Elm Creek project helped sponsor an Earth Jamboree or Water Jamboree for area fifth and sixth graders. About 1,000 participate in the jamborees each year.

The HUA project focused on non-point source runoff and sedimentation as factors negatively impacting the watershed's water quality. Elm Creek had also been identified by the U.S. Army Corps of Engineers as a

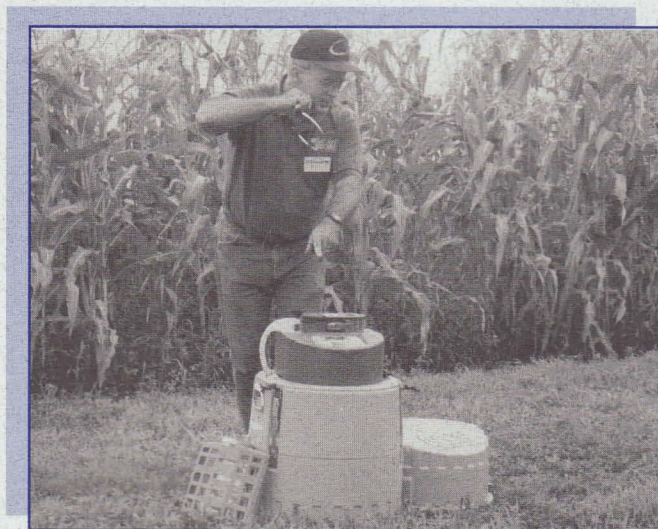
contributor to sedimentation and flooding problems on south central Nebraska's Republican River.

The project was jointly conducted by University of Nebraska-Lincoln Cooperative Extension, USDA Natural Resources Conservation Service and Farm Service Agency, U.S. Environmental Protection Agency Region VII, and U.S. Geological Survey in cooperation with the Lower Republican Natural Resources District, Nebraska Department of Environmental Quality and the Nebraska Game and Parks Commission.

Copies of the final report are available from Webster County Extension, Red Cloud, NE 68970 or phone (402)746-3345.

Cooperation Highlights Water Quality Tour

Surface water quality concerns prompted a tour of the Blue River Basins in south central Nebraska and northeast Kansas this summer.



Kansas State University's Phil Barnes shows an automatic water sampler used to collect runoff water from corn fields. The water can then be tested for herbicide and sediment loading. The demonstration was part of a Blue River Basin tour this summer. (photo: Tom Franti).

"Herbicides are used extensively to control weeds in this area, and the practice has led to the appearance of atrazine in the surface waters of the basin," said University of Nebraska surface water management specialist and project co-principal investigator Tom Franti.

Organized by the University of Nebraska-Lincoln and Kansas State University, the tour provided participants with new information on surface water quality and work being done in the basin.

Representatives from these and other

sponsoring entities attended the July 29-30 tour, which began at NU's South Central Research and Extension Center and ended in Washington County, Kansas.

Tour participants saw research efforts that included an atrazine management modeling study, vegetative filter strip demonstration site, best management practices (BMP) and a field demonstration of alternatives to atrazine.

Between stops, information was provided on stream monitoring and mass loading discussions. Three stops were made in Kansas with presentations from KSU faculty and local producers highlighting watershed management and monitoring, long-term runoff studies and BMPs in grain sorghum.

Sponsors included the Nebraska Corn Growers Association, DuPont Agricultural Products, Nebraska Farm Bureau, Bettger Brothers, Fairmont, NE, and the Upper Big Blue Natural Resources District.

Water Quality Monitoring Workshop Targets Nebraska and Iowa Educators

by Steve Ress and Karen Burbach

Science teachers from a dozen Iowa and Omaha-area middle schools attended a two-day University of Nebraska Volunteer Water Quality Monitoring Workshop at Chalco Hills Recreation Area this summer.

The workshop offered training and field experience in watershed mapping, water chemistry, aquatic plants, and aquatic insect identification.

"It was aimed at getting students and teachers out

to local bodies of water to help create a sense of stewardship (and) it was important that the concepts presented could be used to enhance established curriculum," said Douglas County extension educator Karen Burbach.

Participants said knowledge gained will be used in the classroom and that the training will help them be more effective in teaching concepts like connecting to real world events, observing, questioning, interpreting data, problem solving and environmental stewardship.

"Two teachers said they'll take their science students, divide them into three teams and do volunteer monitoring at Glenn Cunningham Lake, Wehrspann Lake and Walnut Creek Lake in the spring semester of 1999," Burbach said. An Iowa teacher also planned to begin a student monitoring project involving two local river systems.

Workshop team members included Marian Langan, education coordinator for the Nebraska State Museum; Mary Schroer, UNL School of Natural Resource Sciences graduate student; and Douglas County extension educator Dennis Ferraro.



Marian Langan of the Nebraska State Museum, UNL School of Natural Resource Sciences graduate student Mary Schroer and Douglas County extension educator Dennis Ferraro (right) talk with one of a dozen educators that attended a water quality monitoring workshop at Chalco Hills Recreation Area this summer (photo: Karen Burbach).

Bringing Groundwater to Life

Registration deadline is approaching for "Bringing Groundwater to Life," Priming the Pump and Groundwater Guardian National Conference. Sponsored by The Groundwater Foundation, the conference is Nov. 12-15 at the Hyatt Alicante Hotel, Anaheim, CA.

There will be lots to do, including a pre-conference source water protection workshop and mini water festival.

Friday and Saturday's sessions are organized around the themes of motivation through education and community action, Technical information and public policy impacts will be explored on Sunday. Concurrent tracks address subjects such as tools for success, hands-on activities that work, wonderful water festivals, coalition building, protecting the source and many others.

Friday's keynote speaker is W. Kym Murphy, environmental policy, The Walt Disney Co.

Registrations must be made by Oct. 30. For information, contact The Groundwater Foundation at (800)858-4844, (402)434-2740 or info@groundwater.org.

AWRA Call for Abstracts

The American Water Resources Association (AWRA) is calling for 250-word abstracts for their spring specialty conference that will be held in Atlanta, GA in May, 1999.

The conference will address "Potential consequences of climate variability and change to water resources in the United States." AWRA is dedicating its spring conference to the topic of water resources and climate to assist in the National Assessment of the Potential Consequences of Climate Variability and Change (NACC) review process and to provide an opportunity for presentation of other technical papers relevant to this subject.

Abstracts may be considered for oral or poster presentation.

A variety of climate-related water resource topic abstracts are being solicited. Abstracts must be received by the AWRA by Dec. 18. For more information, phone (703)904-1225 or e-mail awrahq@aol.com.

Interstate Compact Opinions Vary on Summer Tour

Kansas' recent court win over Colorado over the 1948 Arkansas River compact had cost local producers not just water, but money too.

Thompson said his family paid \$10,000 more this year to operate their 5,000 acre irrigated alfalfa, corn and wheat farm near the Kansas border. The increase is due to Colorado farmers now having to buy water or water rights as compensation for the effect their wells have on the Arkansas River.

The court's decision also has the Colorado Division of Water Resources scrambling to comply with the compact, division engineer Steve Witte told the group.

"We have quite a long history of being in a confrontational state with Kansas," Witte told Potter, noting that the first water case between the two states was filed in 1901.

Along the way, the tour visited the Cambridge Diversion Dam and heard about strategies for success using limited irrigation by NUs Joel Schneekloth near McCook.

The first day's lunch stop included a tour of the Nebraska Game and Parks Commission's Rock Creek Fish Hatchery at Park and an overview of the Ogallala Aquifer by NU geologist Jim Goeke.

Colorado water officials hosted a first night barbecue at the Pueblo Reservoir. The following day included stops in Rocky Ford and at the Arkansas River's John Martin Reservoir.

Rolling commentary focused on local water-use projects, the history of interstate water compacts and the effects of the Arkansas River dispute from several points of view.

The tour was Aug. 11-13. Among those attending were State Senator Ed Schrock, a representative from U.S. Senator Bob Kerrey's office, Nebraska Natural Resources Commission Director Dayle Williamson, Nebraska Department of Water Resources Director Mike Jess, NU School of Natural Resource Sciences Director Blaine Blad and many others.

In addition to the Kearney Chamber and Nebraska Water Conference Council, the tour was co-sponsored by Central Nebraska Public Power and Irrigation District, Nebraska Public Power District, Gateway Farm Expo and UNL Water Center/Environmental Programs.

SNRS Debuts Seminar Series

by Steve Ress

Natural resource and environmental topics are being explored in 14 public seminars at the University of Nebraska-Lincoln this fall.

The series began Aug. 28 and is the first public lecture series sponsored by UNL's School of Natural Resource Sciences (SNRS). Seminars are each Friday through Dec. 4 from 2-3 p.m. in Room 203 Natural Resources Hall (unless otherwise noted) on UNL's East Campus.

The range of topics includes integrating research and management to conserve Platte River resources, how NU researchers map soils, effects of pesticides on aquatic ecosystems, hydrogeology of Peatland Fen wetlands in the Sand Hills and many others.

Remaining seminars in the series include:

Oct. 16 — Mike Blum, Department of Geosciences, "Geologic Record of Global Change from Low Earth Orbit."

Oct. 23 — Kyle Hoagland, SNRS, "Pesticides in Surface Waters: Effects on Non-target Aquatic Ecosystems."

Oct. 30 — Warren Fairchild, College of Agricultural Sciences and Natural Resources alumnus of the year, "Experiences in Working in Water Resources," Cottonwood Room, East Campus Union.

Nov. 3 — Special Lecture: Tom Sinclair USDA/ARS, "Reseeding the Green Revolution: Are There Limits to Crop Yields?" Room 327 Keim Hall, UNL East Campus, 1:30 to 3:00 p.m.

Nov. 4 — Special Lecture: Tom Sinclair USDA/ARS, "Improving Crop Performance Under Water Deficits," Room 327 Keim Hall, UNL East Campus, 1:30 to 3:00 p.m.

Nov. 6 — Franz Mora, CSD/CALMIT, "Developing a Methodology for the Analysis of Wildland Fires in Mexico, Using Multitemporal AVHRR Imagery."

Nov. 13 — Eugene Takle, Atmospheric Sciences, Iowa State University, "Modeling Shelterbelt Microclimate."

Nov. 20 — Abram Blum, Volcani Institute, Israel, "Crop Drought Resistance — Misconceptions, Myths and Reality."

Dec. 4 — Jennifer Schellpeper, SNRS, "Chemical and Isotopic Characterization of Ground and Surface Waters in the Republican River Basin of Nebraska as a Means to Access the Impact of Irrigation Practices" and Tina Kurtz, Department of Geosciences, "Hydrogeology of Peatland Fens in the Nebraska Sand Hills: The Role of Groundwater in the Development of Glacial Relict Wetland Ecosystems."



Water News Briefs

Elm Creek Project Wraps-Up

The Elm Creek Hydrologic Unit Water Quality Program team in south central Nebraska recently issued a final report. The educational program targeted a 35,800-acre watershed and did an extensive survey of best management practice use before (1990) and again after the program (1997). Project impacts include:

- Producers use conservation tillage on 75% of the spring planted crop acres. This is up from 40% in 1990, an increase of 3,850 acres.
- Producers increased no-till use from 17% to 37%.
- The number of tillage operations used to plant spring crops decreased an average of 1.2 operations, saving producers \$53,000 annually.
- The number of operations used to plant small grains decreased an average of 1.1 tillage operations, saving producers \$28,000 annually.
- Nutrient management including deep soil sampling has been adopted on 3,366 acres.
- Nutrient management resulted in savings of 17 pounds of nitrogen

and eight pounds of phosphorus per acre. Total savings of 57,222 pounds of nitrogen and 26,928 pounds of phosphorus accounted for \$19,000 annually.

- Irrigation management has been adopted on 2,448 acres. About 70% of the irrigators reported decreasing water applications resulted in a savings of 3,000 acre-inches or \$18,000 annually.

- Approximately 62% of the ranchers use rotational grazing, up from 43% seven years ago. The number of ranchers who use season-long grazing has declined by 22%.

- Thirty percent of the ranchers reported increased stocking rates of 5%. This amounted to 675 animal unit months which is worth \$13,500 annually.

The Elm Creek project was a joint effort between the Natural Resources Conservation Service and Cooperative Extension.

(Editor's note: From an item in the University of Nebraska's Cooperative Extension Division newsletter "Keeping Up With Our Job" by Dean Kenneth R. Bolen)

Valuing Prairie Wetlands

If you're looking for information on the importance of prairie wetlands, you might want a copy of the Spring 1998 edition of "Great Plains

Research" published by the Center for Great Plains Studies, University of Nebraska-Lincoln.

In addition to a cover article on "Freshwater Functions and Values of Prairie Wetlands," there are articles on groundwater recharge functions of small wetlands, sedimentation of prairie wetlands, decision-making for prairie wetland restorations and an exploration of wetland policy in Canada as a research agenda for policy reform, among others.

For a copy of the spring edition (Volume 8, No. 1) or to subscribe to Great Plains Research (\$25 per year, per individual in the U.S.) phone (402)472-6970, FAX (402)472-0463, e-mail gpr@unlinfo.unl.edu or go to the GPR webpage at <http://www.unl.edu/plains/gpr.htm>. Additional articles on prairie wetlands can be found in Great Plains Research 6(1), Spring 1996.

Second Annual NOFEE Conference to Hastings

Nebraska Organizations For Environmental Education (NOFEE) hold their second annual conference Nov. 3-4 at the Holiday Inn in Hastings.

Charting "Environmental Education Future" is the theme and committees will concentrate on communications, curriculum/educational, non-formal education, pre-service and professional teacher development, and funding sources.

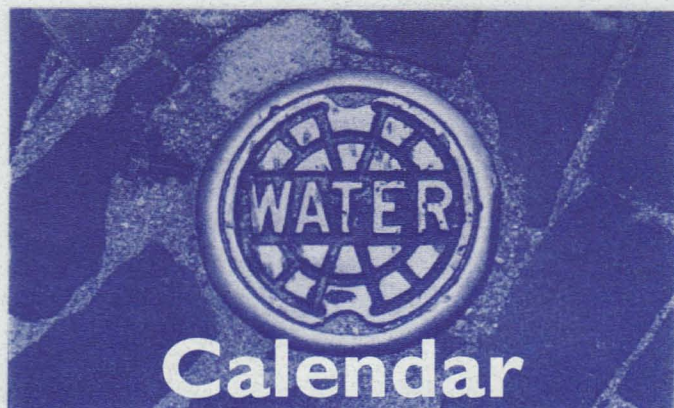
Concurrent sessions will look at marketing programs, examples of programs fit to standards, teaming with wildlife and NOFEE's new Internet web site.

Open and closing keynote speakers are Doug Christensen, commissioner of the Nebraska Department of Education; and Paul Tebbel, Rowe Sanctuary manager, and Mike Forsberg, NEBRASKAland photographer who will take attendees on a photographic safari of Nebraska's wilds.

Registration is \$45. Participants are responsible for making their own room arrangements at conference rates. For room reservations, phone (402) 463-6721. For registration information, contact Gary Heusel at (402)472-2805 or Ron Johnson at (402)472-6823.



Joel Schneekloth explains limited irrigation strategy research at the Claude Cappel farm, near McCook. The stop was part of the Kearney Area Chamber of Commerce's summer water tour (photo: Steve Ress).



OCTOBER

20-29: River Restoration and Natural Channel Design, Pagosa Springs, CO. One of eight short courses presented by Dave Rosgen with Wildland Hydrology. Contact Wildland Hydrology, 157649 US Hwy 160, Pagosa Springs, CO 81147, phone (970)264-7120, email wildlandhydrology@pagosasprings.net

23: SNRS Fall Seminar Series: Kyle Hoagland, SNRS, "Pesticides in Surface Waters: Effects on Non-target Aquatic Ecosystems," 2-3 p.m., Rm 203, NRH, UNL East Campus, Lincoln.

21-23: State of the Lakes Ecosystem Conference (SOLEC), Buffalo, NY. Contact Paul Bertran at (312)353-0153 or Nancy Stadler-Salt at (905)336-6271. On the web at www.cciw.ca/solec or www.epa.gov/glinindicator

22-23: "Water Challenges on the Lower Rio Grande." Sponsored by the New Mexico Water Resources Research Institute, New Mexico University, Las Cruces, NM. For information, contact Cynthia Rex at (505)646-1813 or access the WRRRI home page at <http://wrrri.nmsu.edu/>.

28-29: The Ninth Annual South Platte Forum, Raintree Plaza Conference Center, Longmont, CO. For registration information, contact the South Platte Forum c/o Northern Colorado Water Conservancy District, P.O. Box 679, Loveland, CO 80539.

28-31: Conference on Shared Rivers: "River Basin Management to Meet Competing Needs," Park City, UT. Co-sponsored by U.S. Committee on Irrigation and Drainage and U.S. Bureau of Reclamation. For information, call (303)628-5430, e-mail stephens@uscid.org or go to www.uscid.org/uscid

30: SNRS Fall Seminar Series: Warren Fairchild, "Experiences in Working in Water Resources," 2-3 p.m., Rm 203 NRH, UNL East Campus, Lincoln.

NOVEMBER

3: SNRS Fall Seminar Series: Special Lecture, Dr. Tom Sinclair USDA/ARS, "Reseeding the Green Revolution: Are There Limits to Crop Yields?" 1:30 to 3 p.m., Room 327 Keim Hall.

4: SNRS Fall Seminar Series: Special Lecture, Dr. Tom Sinclair USDA/ARS, "Improving Crop Performance Under Water Deficits." 1:30 to 3 p.m., Room 327 Keim Hall

3-4: Nebraska Organization For Environmental Education (NOFEE) annual conference, Holiday Inn, Hastings, NE. Exploring

shared interests and a commitment to work together for environmental education in Nebraska. For information or registration details, contact Gary Heusel at (402)472-2805 or Steve Ress at (402)472-3305.

4-5: Animal Feeding Operations and Ground Water, A Conference for the Future. Holiday Inn Westport, St. Louis, MO. Presented by the National Ground Water Association. For information, contact Tom Cady at 800-551-7379 x 574 or e-mail tcady@ngwa.org

6: SNRS Fall Seminar Series: Franz Mora, CSD/CALMIT, "Developing a Methodology for the Analysis of Wildland Fires in Mexico, Using Multitemporal AVHRR Imagery," 2-3 p.m., Rm 203 NRH, UNL East Campus, Lincoln.

9-10: Agricultural Solutions for the Neuse River Basin, Sheraton Hotel, New Bern, NC. Focus on describing technical, financial, and educational options for meeting the water quality goals set for agriculture in the Neuse River Basin. Sponsored by North Carolina State University. Contact NCSU for information.

12-15: Combined Groundwater Guardian National Conference and Priming the Pump Water Educator Workshop, Hyatt Alicante Hotel, Anaheim, CA. Sponsored by The Groundwater Foundation, includes a mini-groundwater festival, hands-on activities and

displays. To register, or for information, phone (800)858-4844 or e-mail info@groundwater.org

13: SNRS Fall Seminar Series: Eugene Takle, Atmospheric Sciences, Iowa State University, "Modeling Shelterbelt Microclimate," 2-3 p.m., Rm 203 NRG, UNL East Campus, Lincoln.

17-19: Nebraska Cooperative Extension Association (NCEA) annual meeting, "Guide to the future - Monument to the Past." Scottsbluff-Gering. For information, contact Chuck Burr, 111 West Fairfield, Clay Center, NE 68933-1499.

19-20: "Biotechnology in Agriculture: The Bottom Line," Clifford Hardin Nebraska Center for Continuing Education, University of Nebraska-Lincoln. Contact UNL's Institute of Agriculture and Natural Resources for details.

19-21: Fish Expo Seattle, Washington State Convention and Trade Center, Seattle, WA. Contact Molly or Malanie at (207)842-5508 or write Diversified Expositions, P.O. Box 7437, Portland, ME 04112-7437.

20: SNRS Fall Seminar Series: Abram Blum, Volcani Institute, Israel, TBA.

DECEMBER

2-4: Groundwater In a Watershed Context, Canada Centre for Inland Waters, Burlington, Ontario. Sponsored by Environment Canada, Ontario Ministry of Environment, International Association of Hydrogeologists and Canadian Water Resources Association. For information or a registration brochure, contact watershed@cciw.ca or <http://gwrp.cciw.ca/watershed>.

4: SNRS Fall Seminar Series: Jennifer Schellpeper, SNRS, "Chemical and Isotopic Characterization of Ground and Surface Waters in the Republican River Basin of Nebraska as a Means to Access the Impact of Irrigation Practices" and Tina Kurtz, Department of Geosciences, "Hydrogeology of Peatland Fens in the Nebraska Sand Hills: The Role of Groundwater in the Development of Glacial Relict Wetland Ecosystems." 2-3 p.m., Rm 203 NRH, UNL East Campus, Lincoln.

Watch for Details
in the December
issue of the
Water Current

STOP!

The 1999 Water
Resources Seminar Series
& 1999 Nebraska Water
2000 Conference in
Kearney

Strategies for Coping With Pesticide Monitoring

Ways to help Nebraska deal with increasing, mandated monitoring of pesticides is the subject of a recent University of Nebraska and Nebraska Department of Agriculture paper that could have broad national implications.

"Nebraska's strategy for coping with increased mandated pesticide monitoring in state management

plans," by Mary Exner, Pat Larsen and Roy Spalding of UNL and Jamie Green, formerly of the Nebraska Department of Agriculture,

emphasizes creative and cost-effective plans for monitoring Nebraska's statewide management plan (SMP) for pesticides.

In delivering the paper at an invited presentation at August's American Chemical Society symposium in Boston, MA. UNL Water Sciences Laboratory (WSL) data manager Larsen said a generic SMP to address pesticide contamination of groundwater is recommended by the U.S. Environmental Protection Agency while pesticide-specific SMPs are mandated for the sale and

use of alachlor, atrazine, cyanazine, simazine, and metolachlor.

The paper outlines a Nebraska monitoring plan predicated on historical groundwater pesticide data from federal, state, and local agencies to delineate areas vulnerable to nonpoint-source pesticide contamination.

"Nebraska's pesticide monitoring strategy is a cost-conscious approach built on existing resources."

"In the clearinghouse at the WSL, pesticide data is compiled, filtered for quality, and entered into a comprehensive relational database designed to easily perform complex queries and to be easily imported into a geographic information system," said research chemist Exner. The clearinghouse contains pesticide data from more than 2500 wells distributed throughout Nebraska's 93 counties.

Use of historical groundwater data eliminates a need for an expen-

sive monitoring well network.

Monitoring is focused in areas deemed vulnerable to nonpoint-source pesticide contamination and lacking on-going monitoring.

"In the monitoring plan the costs of installing monitoring wells are greatly reduced by utilizing existing wells and wells installed for pesticide

registration efforts and by using, where possible, the direct-push method for monitoring well installation," said hydrochemist and WSL director Spalding.

Pesticide manufacturers conducting

groundwater monitoring for pesticide registration in Nebraska will collect split samples with one sample designated for analysis by the WSL. The WSL also installs approved monitoring wells using direct-push technology, a quick and simple technique, compared to traditional monitoring methods, that saves significant resources.

"Nebraska's pesticide monitoring strategy is a cost-conscious approach built on existing resources," Exner emphasized.

WATER CENTER/ENVIRONMENTAL PROGRAMS

103 Natural Resources Hall
University of Nebraska
P.O. Box 830844
Lincoln, NE 68583-0844

ADDRESS SERVICE REQUESTED



Printed with soy ink on
15% post-consumer recycled paper

Non Profit
U.S. Postage
PAID
Permit 46
Lincoln NE



It is the policy of the University of Nebraska-Lincoln not to discriminate based on gender, age, disability, race, color, religion, marital status, veteran's status, national or ethnic origin, or sexual orientation.

