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Water Current

William Powers, Director
Volume 12, Number 5

Karen E. Stork, Editor
September/October, 1980

FROM THE DESK OF THE DIRECTOR

The Nebraska Water Resources Center has gained the reputation of being among the top in the nation. It is with some humbleness and pride that I became a member of this organization September 1 of this year. I hope that as Director I can help to maintain the fine record that the previous directors have established over the past 16 years.

We have some vacancies on the Water Center staff, and I feel that if we can fill these with the same caliber of people that we now have, we can develop a research program to begin solving more of the water problems facing Nebraska, the region and the nation. We have begun to develop descriptions for these positions and hope to advertise them soon. The first of these will be a Technology Transfer Specialist. The second position has not been completely defined as yet, but should be similar to those of Dr. Marvin Damm and Gary Lewis who recently left the Center. The combination of having a small permanent staff plus funding available for University faculty in many departments gives the Center a unique chance to develop a flexible yet somewhat continuous research program.

Upon my arrival at the Center, a five-year water resources research plan was being developed with the help of University faculty as well as many state and federal agencies. This has been reviewed by the Center's Executive and Advisory Committees and will be submitted shortly to the Office of Water Research and Technology (OWRT). This document has been a major effort of the Center over the past few months, and we think that over the next few years it will develop into a useful guide for our research program.

I am looking forward to the future with the Nebraska Water Resources Center. If we can be of help, if you have suggestions, or if you just want to get better acquainted, please give me a call or just stop by for a visit.

Bill

William L. Powers
Director



ON THE HOMEFRONT

RESEARCH PROPOSAL DEADLINES

The Nebraska Water Resources Center has just been notified by the Office of Water Research and Technology (OWRT) that matching grant research proposals for fiscal year 1982 must be received in OWRT by February 1, 1981. Proposals received in Washington, D. C. after that date will be returned.

In order that the Water Center can have time to prepare budgets and obtain the necessary signatures, final matching grant proposals must be submitted to the Water Center no later than December 15, 1980. Researchers are asked to first submit a pre-proposal with budgetary and time needs to the Director for his review and comments. They will then be contacted regarding the preparation of a final proposal.

Technical merit and relevance to research and development priorities guide OWRT's selection process in the matching grant program. Priorities have been developed which constitute a nationwide overview of states' priorities. Copies of these 1982 priorities as well as guidelines for preparing matching grant proposals are available in the Director's office, Water Resources Center, 310 Ag. Hall, University of Nebraska, Lincoln, Nebraska 68583. Telephone: (402) 472-3305.

"FOCUS AREA" R&D PROPOSALS SOLICITED

The Office of Water Research and Technology (OWRT) has invited research and development proposals for fiscal year 1981 funding in the following high priority subject areas: (1) saline and brackish water conversion; (2) water reuse; (3) water conservation; and (4) water problems of urbanizing areas. Specific research priorities and instructions for preparing proposals may be obtained from the Nebraska Water Resources Center Director's office.

Prior to submittal of a full proposal to OWRT, researchers are asked to submit a preproposal, summarizing the proposed research or development effort. The preproposals will be reviewed by OWRT and returned, normally within two weeks of receipt, expressing OWRT's interest in receiving a full proposal. An expression of non-interest by OWRT does not preclude submittal of a formal proposal.

Preproposals and full proposals may be submitted to OWRT at any time, and selections will be made and announced throughout the fiscal year. Full proposals submitted by members of the academic community be transmitted to OWRT through the Water Resources Center. Preproposals by the academic community may be submitted directly to OWRT, with an information copy to the Water Center office.

For additional information or copies of appropriate forms, contact the Director's office, Nebraska Water Resources Center.

NWRC RESEARCH PROGRAM

October 1 begins a new federal fiscal year. The Water Resources Center is involved in a variety of new water research projects as well as a continuation of many on-going efforts. The following is a listing of the Center's current water research program for fiscal year 1981.

Annual Cooperative Program - OWRT

<u>Project Title</u>	<u>Principal Investigator</u>
Ferrate Ion: Potential Uses in Advanced Wastewater Treatment	James D. Carr Chemistry
Variability in Crop Physiological and Morphological Characteristics Controlling Water Use Efficiency and Grain Yield	Jerry D. Eastin C.Y. Sullivan C.A. Francis Agronomy
Distribution of Mineral Nitrogen Under Native Range and Cultivated Fields in the Nebraska Sandhills	Gary W. Hergert North Platte Station
The Biological Regulation of Bloom-Causing Blue-Green Algae	Eugene L. Martin Life Sciences
Reduction in Development of Bloom-Forming Blue-Green Algae by Nutrient Enrichment to Maintain Desirable Pre-Bloom Dominants	James R. Rosowski Life Sciences
Automation of a Sprinkler Irrigation System by the Utilization of Real Time Weather Information	Albert Weiss Panhandle Station
Measurement of Actual Transpiration of Native Grass Stands as a Component of Nebraska Sandhills Groundwater Hydrology	A. Ty Harrison Life Sciences
Enhancement of Water Quality in Nebraska Farm Ponds by Control of Eutrophication Through Biomanipulation	Gary L. Hergenrader Life Sciences
Parasite Communities as Indicator Systems for Predicting the Effects of Surface Water Management Options on the Biota of Prairie Rivers	John Janovy, Jr. Life Sciences
Increased Water Conservation and Percolation Through Improved Tillage Practices	Howard Wittmuss Ag. Engineering
Applying Techniques for Irrigation Scheduling of Corn and Other Crops in Control Areas	Wayne Kroutil Paul Fischbach Ag. Engineering

Matching Grant Program - OWRT

<u>Project Title</u>	<u>Principal Investigator</u>
Water and Energy Conservation Using Center Pivot Irrigation and Reduced Tillage Systems	James R. Gilley Ag. Engineering
Conservation of Soil, Water and Energy Through Reduced Tillage Systems	Elbert C. Dickey Ag. Engineering
Water Conservation Through Limited Irrigation of Corn and Grain Sorghum in the Great Plains	Darrell G. Watts Ag. Engineering
Tillage Practice Effects on Water Conservation and the Efficiency and Management of Surface Irrigation Systems	Dean Eisenhauer Ag. Engineering South Central Station

Other Grants and Contracts

Evaluation of Legal and Institutional Arrangements Associated with Groundwater Allocation in Missouri River Basin States	J. David Aiken Raymond J. Supalla Ag. Economics
Water Quality Study of Runoff From Agricultural Lands (Dee Creek)	Denis P. Gilbert NWRC
High Plains-Ogallala Aquifer Study	Raymond J. Supalla Ag. Economics
State Water Planning - Policy Issue Analysis (Lead Agency: Water Use Efficiency Task Force)	Robert Burns Donn Rodekohr NWRC
Water Resources Management Grant from Lindsay Manufacturing	James R. Gilley Ag. Engineering

WATER RESOURCES SEMINAR SERIES

Once again the Water Resources Center will sponsor an Interdisciplinary Water Resources Seminar Series during the 1981 spring semester. The intent of these seminars is to bring together upper classmen, graduate students, professional persons, faculty and others interested in water topics.

This year the series will feature on-going water-related research being conducted at the University. The seminars will be held on Tuesday afternoons beginning on January 13, 1981 from 3:00 to approximately 5:00 p.m. in the East Campus Union Building. The exact room will be listed each week on the activities calendar in the Union.

Students wishing to receive one or two hours credit should register, with their advisor's permission, in their departmental seminar and/or special studies course listing. Attendance and note-taking will satisfy the one-hour requirement; a short term paper will be an added requirement for anyone wishing to receive two credit hours.

A preliminary draft schedule of seminar topics follows. For additional information, contact the Water Resources Center, extension 3305.

1981 INTERDISCIPLINARY WATER RESOURCES SEMINAR

Water Resources Research at the University of Nebraska

3:00 - 5:00 on Tuesday in East Campus Union

January 13	Registration, Instructions, General Overview
January 20	Overview of Water Resources and Water Problems in Nebraska
January 27	Non-Point Source Pollution (Nitrates and Sedimentation)
February 3	Non-Point Source Pollution (Agricultural Runoff)
February 10	Eutrophication and Its Control
February 17	Wastewater Treatment
February 24	Water Conservation
March 3	Water Use Efficiency (Irrigation Scheduling, Crop Water Use, Crop Modeling)
March 10	Water Use Efficiency (Moisture Stress in Crops, ET and Meteorological Research)
March 17	Drought Management Strategies
March 24	NO CLASS - SPRING BREAK
March 31	Ground and Surface Water Hydrology
April 7	Wildlife and Recreation
April 14	Legal, Institutional and Economic Aspects
April 21	Historical and Social Aspects
April 28	Water Resources Planning and Management
May 5	Last Day of Class - TBA

FER WORKSHOP

The Nebraska Water Resources Center, along with the Nebraska Natural Resources Commission, the U.S. Army Corps of Engineers, and the UNL Civil Engineering Department, is presenting a Workshop on Flood Estimates and Routing (FER) Computer Program, to be held November 24-26, 1980 at the Nebraska Center for Continuing Education.

The objective of the workshop is to introduce the Flood Estimates and Routing (FER) computer model as an alternative approach to modeling storm and runoff events. The seminar will begin with a review of the hydrologic principles and routines involved in the model, followed with a "hands-on" application of the computer program to demonstrate and teach the basics of operating the model and using the manual.

The workshop will be of interest to consulting firms, state and federal agencies, students and other individuals involved with the modeling of rain-fall/runoff events. Because of space and time limitations, enrollment will be limited to 40. The registration fee is \$40 for three days, including two luncheons, course materials and refreshment breaks.

For additional information, contact: Mr. Denis Gilbert, Nebraska Water Resources Center, 310 Ag. Hall, University of Nebraska, Lincoln, Nebraska 68583. Telephone: (402) 472-3305 or 472-3805.

FEDERAL HIGHLIGHTS

GLOBAL REPORT 2000 COMPLETED

The President's Council on Environmental Quality (CEQ) and the U.S. Department of State have recently completed a report entitled The Global 2000 Report to the President: Entering the Twenty-First Century. Projections show that unless the nations of the world act quickly and decisively to change current policies, life for most of the world's people will be more difficult and more precarious in the year 2000 than it is today.

The report presents projections of global population, natural resources and environmental trends. The report's major findings and conclusions related to water resources note that deforestation will contribute to severe regional water shortages and the deterioration of water quality. Population growth alone will cause demands for water to at least double from 1971 levels. Competition for water resources will also increase international tensions.

The report states that "if present trends continue, the world in 2000 will be more crowded, more polluted, less stable ecologically, and more vulnerable to disruption than the world we live in now."

Copies of the Global 2000 report are available from the U.S. Government Printing Office, Washington, D. C. 20402. Stock numbers and prices are:

- Vol. 1 - The Summary Report, S/N 041-011-00037-8, \$3.50
- Vol. 2 - The Technical Report, S/N 041-011-00038-6, \$13
- Vol. 3 - The Government's Global Model, S/N 041-011-00051-3, \$8.00

GROUNDWATER CONTROLS NECESSARY

A new report by the General Accounting Office (GAO) notes that if the U.S. is to meet ever-increasing demands for food and agricultural products, federal, state and local authorities will have to establish better groundwater pumping control and conservation programs.

It is noted that in nearly all areas of the country, groundwater overdraft (extracting more water than is naturally replenished) has caused the use of more energy to pump water from lower levels. Agricultural economies are weakened when groundwater is depleted and land has to be abandoned or dry farmed.

According to the study, efforts to solve groundwater problems are hampered by legal, institutional and physical constraints. Existing methods for defining water rights are "piecemeal, cumbersome, and often inequitable."

While GAO says that primary responsibility for water management should continue to remain with the states, the study recommends that the Departments of Agriculture, Army and Interior should require state and local governments to implement or have plans before the start of federally funded water projects.

The report, "Groundwater Overdrafting Must be Controlled," (CED-80-96) may be ordered from the U. S. General Accounting Office, Document Handling and Information Services Facility, P.O. Box 6015, Gaithersburg, Maryland 20760.

CONFERENCES

NWRA NATIONAL CONVENTION

The National Water Resources Association (NWRA) is holding their 49th Annual Convention in Omaha, Nebraska, October 19-23, 1980. The keynote address at the convention will be given by Senator James A. McClure of Idaho. Other presentations include a "first report" by Lt. Gen. Joseph K. Bratton who will take over as Chief of the U.S. Army Corps of Engineers on October 1, and a "Nebraska report" by Governor Charles Thone.

Both President Carter and Governor Reagan have been invited to address the convention, but due to the necessity of keeping campaign schedules flexible, it is unknown whether either candidate will be available.

Registration fee is \$90. To obtain additional information or registration forms, contact the Nebraska Water Resources Association, 308 Sharp Building, Lincoln, Nebraska 68508. Telephone: (402) 474-3242.

SECOND NATIONAL IRRIGATION SYMPOSIUM

The American Society of Agricultural Engineers (ASAE) is sponsoring the Second National Irrigation Symposium October 20-23, 1980 at the Nebraska Center for Continuing Education at the University of Nebraska-Lincoln. The objective of the symposium is to present an in-depth summary of irrigation research, development and practices during the past ten years. It will update irrigation scientists, engineers and others on recent developments for improved design, operation and management of irrigation systems to increase

irrigation efficiencies and improve water management. The program will have over 25 different speakers addressing the problems, needs and future trends of on-farm irrigation, particularly for the 1980's.

The registration fee is \$85 which includes all conference expenses including lunch on Monday, Tuesday and Wednesday, refreshments at the breaks, a copy of the proceedings and some local transportation costs.

For additional information on the program contact: Mr. Dale Heermann, Program Chairman, USDA-SEA-AR, Box E, Fort Collins, Colorado 80522. Telephone: (303)221-0577. Questions on housing or registration should be addressed to: Department of Conferences and Institutes, 205 Nebraska Center, University of Nebraska, Lincoln, Nebraska 68583. Telephone: (402) 472-2844.

25TH ANNUAL MIDWEST GROUNDWATER CONFERENCE

The 25th Annual Midwest Groundwater Conference will be held October 22-24, 1980 at the Sheraton West Hotel in Indianapolis, Indiana. The conference is sponsored by the Indiana Department of Natural Resources, Division of Water.

The conference will address the following areas: (1) new techniques in assessing groundwater conditions in glaciated terrains; (2) water law, usage, and management--an overview to the 1980's; (3) the interrelationships of surface and groundwater hydrology and effects on water resources development; and (4) water quality and its importance in utilization of groundwater resources.

Registration is \$25 for pre-registration and \$30 at the conference and includes coffee breaks and a banquet.

For additional information or to obtain a registration form, contact: William J. Steen, Division of Water, Indiana Department of Natural Resources, 605 State Office Building, 100 North Senate Avenue, Indianapolis, Indiana 46204.

UNIFIED RIVER BASIN MANAGEMENT SYMPOSIUM--II

The American Water Resources Association (AWRA), in cooperation with the U.S. Water Resources Council and the Universities Council on Water Resources, Inc., is sponsoring the Unified River Basin Management Symposium--II in Seattle Washington in June 1981. The purpose of this symposium is to continue to focus on the subject of integrated river basin management initiated at a symposium held in May 1980 in Gatlinburg, Tennessee.

The objective of the second symposium is intended to lead to policies, strategies and tactics to achieve the most effective and beneficial development, conservation and use of the nation's rivers and related land resources. In order to focus on the achievable, three main areas will be addressed by Symposium--II. These are: (1) How can the planning and management of water quality and water and related resources be brought into better relation? (2) How can planning processes be improved to provide for effective coordination of water quality, water resources, land and environmental matters? (3) How can planning and management processes better serve those who have the responsibility for making decisions about how the nation's water, land and environmental resources are to be used, and for what purpose?

Contributed papers are solicited which address these three main themes or closely related themes. Papers are sought: (a) describing and analyzing case studies of domestic or foreign practice; (b) based on conceptual research; and (c) identifying needed research or other papers of a related and pertinent nature.

Interested authors are requested to submit an original and five copies of an abstract of their paper no later than December 31, 1980. The abstract should not exceed 200 words and must include the paper's title, author's name(s), and affiliation(s). The senior author should be noted with an asterisk. Author(s) must include on a separate page their full mailing address and a telephone number. Authors will be notified of the selection (or rejection) of their papers by February 15, 1981, and those papers selected must be submitted in publishable form (using AWRA SYMPOSIUM PROCEEDINGS MANUSCRIPT GUIDELINES) no later than April 4, 1981.

Abstracts for contributed papers should be submitted directly to: American Water Resources Association, St. Anthony Falls Hydraulic Laboratory, Mississippi River at 3rd Avenue, S.E., Minneapolis, Minnesota 55414. Telephone: (612) 376-5050.

WATER QUALITY SHORT COURSE

A short course on WATER QUALITY MODELING will be held in Las Vegas, Nevada, January 12-16, 1981. The objectives of this course are to define the need and justification for water quality criteria, to establish the constraints imposed by current regulations, to present the fundamentals of modeling techniques and to demonstrate their applicability to the rational solution of water quality management.

The course is designed to aid managers, technicians, regulatory personnel and others who are intimately involved in the decision making process regarding water quality control. Upon completion of the course, participants will understand the principles of modeling techniques, their limitations and their application to chemical, biological and physical processes. Principal lecturers will include, W.W. Eckenfelder, D.J. O'Connor, G.F. Lee, F.T. Orlob, K.L. Dickson, and P.A. Krenkel.

For further information, contact P.A. Krenkel, Executive Director, Water Resources Center, Desert Research Institute, P.O. Box 60220, Reno, Nevada 89506. Telephone: (702) 673-7362. (Continuing education credits will be awarded, if desired.)

CALL FOR PAPERS

The University of Kentucky at Lexington is sponsoring the Eighth International Symposium on Urban Hydrology, Hydraulics and Sediment Control July 27-30, 1981. Papers are solicited on the following topics: (1) quantifying rainfall, runoff, sediment production and nonpoint water quality in urban areas; (2) case studies and innovative methods for controlling urban stormwater runoff and sediment; (3) hydraulics of urban drainage systems; (4) legal implications and socio-economic

trade-offs associated with urban stormwater management; (5) urban water distribution including the analysis, management and design of water distribution systems; and (6) case studies and comparisons of field and predicted results for urban water distribution systems.

This Symposium is intended to provide practicing engineers with useable information pertaining to urban water problems. Papers reporting research results, design and analysis techniques are encouraged. A number of theoretical papers will be accepted. Topics are not limited to those listed, and all appropriate papers dealing with urban water problems will be considered.

Initial paper selection will be based on review of the abstracts. The abstracts should be 250-500 words in length and will be evaluated based on quality, content, originality and applicability. The final acceptance will be based on the content of the paper and how well it meets the description of the abstract. The following deadlines will be followed:

- Receipt of 250-500 word abstract December 29, 1980
- Invitation to submit paper based on abstract January 16, 1981
- Receipt of photo-ready manuscript March 20, 1981
- Notification of acceptance April 10, 1981

Abstracts and papers should be mailed to: Elizabeth R. Haden, Coordinator, Office of Continuing Education, College of Engineering, University of Kentucky, Lexington, Kentucky 40506. Telephone: (606) 257-3971.

All inquiries should be addressed to: Don J. Wood, Department of Civil Engineering, 206B Anderson Hall, University of Kentucky, Lexington, Kentucky 40506. Telephone: (606) 257-2936.

PUBLICATIONS

ESSENTIALS OF GROUND-WATER HYDROLOGY PERTINENT TO WATER-RESOURCES PLANNING

The U.S. Water Resources Council has released a revision of Essentials of Ground-Water Hydrology Pertinent to Water-Resources Planning, Bulletin 16 of the Council's Hydrology Committee. The publication is intended to help bridge the gap between groundwater hydrology and water resources planning.

This bulletin, which is a revised version of Bulletin 16 published in 1973, presents the essential aspects of groundwater hydrology pertinent to water resources planning and discusses advances in analysis of groundwater systems and the factors influencing the management and administration of the groundwater resources. This report will be useful to those unfamiliar with groundwater analysis, utilization, or management because it introduces the principles and interrelationships that must be considered in the management and protection of the resource. It also will be useful to experienced hydrologists and areawide planners as an aid to integrating groundwater into comprehensive planning. Inasmuch as this report can only point out briefly the modern advances in groundwater investigation and analysis pertinent to planning and management, it includes a list of selected references that cover in detail the subjects treated in the bulletin.

A limited supply is available from the U.S. Water Resources Council, 2120 L Street, NW, Washington, DC 20037. Copies are also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The stock number is 052-045-00083-5, and the price is \$2.50.

POSITIONS AVAILABLE

FACULTY POSITION - FULL PROFESSOR

Department of Environmental Science and Engineering, Rice University invites applications to fill a tenure track faculty position at the Full Professor level in water and wastewater engineering. Applicants must have an earned doctorate in environmental, civil, or chemical engineering.

Duties include conducting an active research program and teaching undergraduate and graduate courses. Salary is commensurate with qualifications.

Interested applicants should send resume and have three letters of reference sent to Dr. C. H. Ward, Chairman, Department of Environmental Science and Engineering, Rice University, Houston, Texas 77001.

Rice University is an Equal Opportunity/Affirmative Action Employer.

GRADUATE ASSISTANSHIPS IN HYDROLOGY AND WATER RESOURCES

Graduate Research Assistantships in the Department of Civil Engineering, University of Washington, are available to well-qualified students in one or more of the following areas: statistical aspects of water quality trend detection; rainfall-runoff modeling; stormwater modeling with emphasis on water quality effects of detention; and snowmelt runoff forecasting.

Availability of positions is contingent on acceptance into the graduate program. Stipends are \$550-\$580 per month with partial tuition waiver for out-of-state residents. Assistantships can begin in January, April, or June 1981.

Address inquiries with transcripts to: Dr. S.J. Burges, Department of Civil Engineering, FX-10, University of Washington, Seattle, Washington 98195.

The University of Washington is an Affirmative Action/Equal Opportunity Employer.

RESEARCH REVIEW

TITLE: Public Attitudes of Nebraskans Toward Water Policy

PRINCIPAL INVESTIGATOR: Susan Welch, Professor
Department of Political Science
University of Nebraska-Lincoln

In the Great Plains, the potential shortage of water in the future is, along with the energy question, our most serious public policy issue. The economic future of the area depends, in large part, on an adequate supply of water for agricultural and other purposes. However, for various reasons, state policy makers have been reluctant to act decisively in the water policy area, although they have taken some beginning steps. Part of the reasons, of course, are the strong anti-regulatory pressures exerted by various groups concerned with irrigation coupled with pressure from groups in more water short areas of Nebraska to do something about a potentially serious problem. Relatively infrequently is the voice of the larger public heard in debates about water policy. While the public is less immediately involved in the consequences of greater or lesser regulation, the public will, of course, be greatly involved should current policies and climatic conditions combine to produce a water scarcity.

The objective of the current research, then, was to find out what the public in Nebraska believes about the extent and seriousness of a water problem in Nebraska; the extent of their knowledge about the Natural Resources Districts, the existing vehicles for water regulation in the state; and what kinds of water policies the people of the state support or oppose. A primary focus was on water for agricultural use, but information about business, industrial, and household water regulation was also obtained. The major data bases for the project were information obtained in the 1979 and 1980 Nebraska Social Indicators Survey (NASIS) done by the Bureau of Sociological Research at UN-L in the spring of each year. From a statewide random survey of 1800 households more than 900 Nebraskans were sampled each year as to their opinions on water policy. Following the 1979 survey, two NASIS reports were prepared and circulated to the Governor, members of the Legislature and others in water policy areas, as well as to the press. Analysis of the 1980 survey results are just beginning, but a further NASIS report will be prepared on the results of this analysis.

The major findings from the 1979 report included the following:

- (1) Most (69%) Nebraskans believe that we have a water shortage now or will in the next twenty years.
- (2) Most (76%) favor regulation for business and industrial use.
- (3) Regulation for private household use is favored by only a bare majority (53%).
- (4) Two-thirds of Nebraskans also favor regulation of agricultural water use.
- (5) There was little consensus about who should regulate water for agricultural use (a problem obviously reflected in the Legislature), although about one-third of the population supported NRD regulation and one-third local government regulation. The remainder were split between state regulation and individual irrigator regulation, with relatively few supporting federal regulation.

- (6) In comparing alternative kinds of regulation, most Nebraskans favor control (i.e. limiting wells dug, water drawn from wells, requiring water conservation equipment and practices) rather than higher prices on water or some sort of taxation schemes.
- (7) Most Nebraskans (77%) had not heard of transbasin diversion, and of those who had heard of it, only 29% favored it.
- (8) Only 30% of Nebraskans have heard of Natural Resources Districts, but awareness was somewhat higher (46%) among farmers and lower among Lincoln and Omaha residents.

Preliminary results from the 1980 survey indicate that support for water regulation for agricultural use and industrial use has remained fairly constant; but support for regulation of household use has declined, perhaps because of the absence of drought conditions at or before the time of the survey. Knowledge of NRD's has increased somewhat since 1979. We also asked the respondents in 1980 which type of water regulation should be given priority if there was a severe water shortage in Nebraska; these results are not yet analyzed. One other new question asked in 1980 was about the perennial question of where should the legal rights to groundwater lie. While undoubtedly many respondents have only vague notions of this subject, 30% did feel that the rights should lie with the property owner, 8% with the government, and a majority, 56%, that both government and the owner should have some rights to the water.

In sum, while obviously, public opinions in this policy area can be shaped by current climatological and political events, overall the results seemed to show that Nebraskans were "out in front" of their political leaders in favoring water regulation. However, the public offers no clear consensus on who should do the regulating, although the NRD's have gained legitimacy among a substantial minority of the public.

Reports on this project:

Susan Welch and Gordon Kissel, "Nebraskans and State Water Policy: Part I" NASIS-79 Report #5, Bureau of Sociological Research, UN-L, 1979.

Susan Welch and Gordon Kissel, "Nebraskans and State Water Policy: Part II," NASIS-79 Report #7, Bureau of Sociological Reserach, UN-L, 1979.

QUESTIONS AND INQUIRIES

NEWSLETTER ITEMS SOLICITED

The WATER CURRENT Newsletter will publish, without charge, announcements, programs for upcoming conferences, employment opportunities or other newsworthy items on hydrology, water resources or related topics.

QUESTION AND INQUIRIES

Newsletter items and inquiries should be sent to: Editor, Nebraska Water Resources Center, 310 Ag. Hall - East Campus, University of Nebraska, Lincoln, Nebraska 68683; or phone (402) 472-3305.