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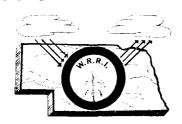
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### WATER RESOURCES NEWS

NEBRASKA WATER RESOURCES RESEARCH INSTITUTE
212 AGRICULTURAL ENGINEERING BUILDING

THE UNIVERSITY OF NEBRASKA LINCOLN, NEBRASKA 68503



Volume 2 Number 11

December 1970

### MARCH SEMIMAR PLANNED

The Nebraska Water Resources Research Institute (NWRRI) is planning a two-day Seminar, entitled "Water Resources Planning and Public Opinion", to be held March 8,9, 1971 at the Nebraska Center for Continuing Education. The fee for the program will be \$35 per person.

The objective of this conference is to acquaint water resources planners, managers, developers, researchers, and educators with public opinion. The conference will deal with such basic questions as: What is public opinion? How can planners assess it? The what ways can the planner take advantage of existing opinion? How can public opinion be shifted in favor of the planners' innovation? The answers to these questions will help planners to obtain the advice of persons who will be affected by public planning, and the consent of those who must pay for it.

The Conference is designed for persons involved in water resources planning, research, management development and education. Participants will include public works directors, officals from local municipalities and counties,

irrigation district administrators, water resource consultants, educators and researchers as well as those whose job title includes the word "planner". Attendance will be limited to maximize opportunities for significant interchange between experts and participants.

Staff includes:

Dr. Norman R. Luttbeg, Associate Professor of Political Science, Florida State University

Dr. Donald F. Smith, Associate Professor of Sociology, Florida State University

Dr. David Allee, Associate Director, Water Resources Center, Cornell University

Dr. Nicholas Babchuk, Professor of Scciology, University of Nebraska

Mr. Hal Schroeder, Manager, Salt Valley Watershed, Lincoln, Nebraska

Dr. Loyd K. Fischer, Professor of Agricultural Economics, University of Nebraska

Dr. Carroll R. McKibbin, Professor of Political Science, University of Nebraska

Mr. Edgar A. Imhoff, Director, Water Resources Center, University of Maine

Excellent accommodations are available in the Nebraska Center where the conference will be held. All rooms are air-conditioned and hotel services are available.

Program for the Seminar follows:

### March 8

- 9:30 Welcome and Introductions
  10:00 "Public Opinion Primer" What
  is public opinion? What
- public is relevant to water resources planning? How do they make up their mind? Dr. Norman Luttbeg

12:00 Lunch

- 1:00 Panel I "Translating Theory
  Into Action"
  Panelists: Mr. Hal Schroeder
  Water Resources Manager;
  Dr. Nicholas Babchuk Sociologist; Dr. David J.
  Allee Economist
  - 3:00 Small Group Discussion I
    "Application to Specific
    Water Resource Problems"
    Groups organized around
    occupations of participants

4:30 Report by Group Leaders

7:00 Banquet and Address - Sodo-Economic Research Within the P.L. 88-379 Frogram - Dr. H. Garland Hershey, Director, Office of Water Resources Research, Dept. of Interior

#### March 9

- 8:30 "Changing Public Opinion; Problems and Prospects" Dr. Donald F. Smith
- 10:20 Panel II "Translating Theory"
  Into Action"
  Panelists: Dr. Loyd K.
  Fischer Agricultural Economist; Dr. Carroll R. McKibbin
  Political Scientist; Mr.
  Edgar A. Imhoff Water
  Resources Planner

12:00 Lunch

1:00 Small Group Discussion II
"Application to Specific
Water Resources Problems"

2:30 Report by Group Leaders

### GROUNDWATER SEMINAR

The annual Groundwater Seminar, conducted by the Conservation and Survey Division, University of Nebraska, will be held January 19,20, 1971, at the Nebraska Center for Continuing Education, Lincoln, Nebraska.

The following topics will be presented: (1) Water, Nebraska's Heritage—the first of a series of four new films produced by the University of Nebraska on Nebraska's Water; (2) Water Supply, Availability and Use; (3) A Critical Look at Well Design, Construction, and Development; (4) Rural Water Supply and other Aid programs of the Farmers Home Administration; (5) Federal Water Quality Programs; (6) Water Quality and Manufactured Milk; (7) Pitless Adapters, Well Seals, and Sanitary Distribution Systems.

A "Ground Water Expert Workshop" will be presented by the
Ground Water Resourses Institute
on Tuesday, January 19. The Workshop topics are as follows:
(1) Introduction: Why becoming
the water expert in your Community
makes business sense; (2) Working
with Customers; (3) Working with
Civic and Conservation Groups;
(4) Working with School Groups;
(5) Working with Newspapers and
Radio-TV; (6) Conclusion

### SUMMER SHORT COURSE PLANNED

The University of Nebraska, Department of Civil Engineering and the Omaha District, Corps of Engineers will sponsor a summer short course this summer. The program, entitled "Rivers Systems-Planning & Environmental Aspects", will be held June 21-July 2, 1971 at the University of Nebraska. The fee for the program will be \$300 per person, which includes all cost for the river field trips.

Planning concepts from engineering, ecology and geomorphology will
be used by participants to prepare
a preliminary plan for river
regulation. Theory and recent
developments in the fields of sediment transport, channel stabilization, movable bed models, and river
management will be applied to a
team solution of a river problem.

Following presentation of basic theory, two days will be spent in the field to study river problems downstream from the Lewis and Clark Reservoir. An inspection of the river will be made by boat of the meandering channels above Sioux City. This trip will give the participants "real" sightings of the river environment and an appreciation of the problems of planning river developments.

The course will conclude with work on large river models inspection of the navigation channel structures and development through the Omaha area, and a presentation and critique of the workshop projects.

Farticipants will include ecologists, engineers, geologists, planners, and other professionals engaged in the planning, design, and operation of river controls, reservoirs, and related hydraulic systems and teachers in these fields.

Several river authorities will augment the staff from the 1970 course and will include:

James C. Brice, Professor of Geology, Washington, University, St. Louis

James M. Malkowski, Director, Fontenelle Forest, Omaha

Corps of Engineers: Coordinator of Staff and Field Trips - Howard E. Christian, Chief, Channel Stabilization Section; Warren J. Mellema, Hydraulic Engineer.

For additional information, please write to:
Professor R. R. Marlette
Department of Civil Eng.
University of Mebraska
Lincoln, NE 68508

#### BOY SCOUT GUIDES!

Anvone wanting a Boy Scout Leader's Guide, entitled "Water Pollution and It's Control" may do so by writing one of the following addresses:

Carl Chloupek F.W.C.A. U.S. Department of the Interior 225 North Cotner Blvd. Lincoln, NE 68505

Dr. Warren Viessman, Jr. Director Water Resources Institute University of Nebraska 212 Ag. Engineering Lincoln, NE 68503

Towena S. Taylor
Information Specialist for Youth
U.S. Dept. of Interior
F.W.Q.A.
911 Walnut Street, Rm. 702
Kansas City, MO 64106

### BENEFICIAL EFFECTS OF AIR POLLUTION ARATEMENT

Two Pittsburgh economists, Dr. Lester B. Lave and Eugene P. Seskin of the Carnegie-Mellon School of Industrial Administration, recently compiled statistics indicating that

if air pollution were cut by 50 percent in major cities: (a) deaths from lung cancer and in fact all lung disease would be cut by 25 percent; (b) a new-born baby would have an additional 3-5 years life expectancy; (c) death and disease from heart and blood vessel disorders might be cut by 10-15 percent; (d) all diseases and deaths would be reduced by 45 percent yearly, and the annual saving to the nation would be at least \$2 million.

"We can put it more simply," said Lave in an interview with the Washington Post. "For the average middle-class American family living in an urban area, abating air pollution is the single most important thing we could do to improve health. If we could reduce air pollution by 50 percent, it would save nearly as much in money and life as if we found a complete dure for cancer."

### ENGINEEPING CRITERIA FOR ANIMAL WASTE TREATMENT LAGOONS IM MORTH CAROLINA

Tentative guidelines for the design of animal waste treatment lagoons in North Carolina have recently been released by the State Department of Water & Air Resources. These guidelines are subject to revision and refinement based upon findings of research now in progress.

No lagoons will be approved for direct discharge of effluent into streams unless approved by the Department, designed by a registered nurpose. Less restrictive controls engineer, and a State permit received prior to layout and construction.

Copies of the criteria can be requested from Mr. D. L. Coburn, Chief, Water Quality Division, N.C. Department of Water and Air Resources, P.O. Box 27048, Raleigh, N.C. 27611.

### DEPARTMENT OF THE INTERIOR ORGANIZATIONAL ALIGNMENTS AFFECTING OURR

Pursuant to the Secretary of Interior's directive of November 25, 1970, OWRR and OSM now have been placed under the general supervision of Mr. James M. Smith, Assistant Secretary for Water and Power Development. In addition to OWRR and OSW, Assistant Secretary Smith has within his organizational purview the Bureau of Reclamation, the Bonneville, Southeastern, Southwestern, and Alaska Power Administrations, and the Defense Electric Power Administration. Mr. Smith's office also provides staff services to the Secretary of the Interior relating to the Secretary's responsibilities as Chairman of the Water Resources Council.

### PHOSPHATE DETERGENTS PANNED I'' CHICAGO

Chicago will be the first city in the United States to ban the sale of detergents containing phosphates. Effective June 30, 1972, no detergents containing phosphates may be sold within the City for any will apply during the interim period.

Among the detergent manufacturer Sears, Roebuck & Company (2% of

market) is now marketing a phosel free product. Proctor and Gamble is planning the complete elimination of phosphates from laundry detergents within the next few years.

## WATER RESOURCES LEGISLATION IN THE CONGRESS

### Bills Introduced:

- H.R. 19621 To create the Office of Water Disposal Research and Development in the Department of the Interior.
- H.R. 19665 To amend the Small Business Act to encourage the development and utilization of new and improved methods of waste disposal and pollution control; to assist small business concerns to effect conversions required to meet Federal or State pollution control standards, and for other purposes.
- H.R. 19721 To require Federal contractors to comply with air and water pollution control regulations.
- H.R. 19763 To amend the Act of August 3, 1969 to protect the ecology of estuarine areas by regulating dumping of waste materials, to authorize the establishment of a system of marine sanctuaries, and for other purposes.

### MSF FUNDS CURRICULUM PROJECT TO AID FIGHT AGAINST WATER POLLUTION

To aid the fight against water pollution, the National Science Foundation has funded a pioneering corriculum to train technicians to

e- examine the complex physical, chemical, and biological factors encountered in estuary environments

The grant, totaling \$76,550, was made to Charles County Community College, La Plata, Maryland.

The college expects 25 students to enter the program in the fall of 1971. With the completion of the two-year program students will be awarded an associate of arts degree in estuarine resource technology and will be competent to perform advanced level sampling and analysis.

The grant by NSF was awarded initially for a period of one year to fund curriculum development. The Foundation intends, however, to continue support of the project for two additional years, through the first graduating class. With the completion of the three-year pilot project, the estuarine resource technology program at Charles County Community College will be self-sustaining.

Students in the program will take such courses as water chemistry, wastewater treatment, ecology, hydrology, fisheries, limnology, and data processing. The inter-disciplinary project is under the direction of Professor Belva Jensen, chairman of the Department of Biology.

Charles County Community College reports that it is the only junior college in the country offering an associate arts degree in pollution abstement technology. It has laboratories, a treatment plant, and other training facilities located on campus. The estuarine technology project builds on the pollution abatement program.

Charles County Community College is located 34 miles south of

Columbia near the Potomac River. The county is surrounded by water-ways on three sides.

#### RUCKELSHAUS NAMED EPA HEAD

William D. Ruckelshaus was recently nominated as Administrator of the Environmental Protection Agency (EPA). Mr. Ruckelshaus was Assistant Attorney General, Civil Division, Department of Justice.

EPA brings together in a single organization major federal pollution control programs now existing in four separate agencies and one interagency council.

Mr. Ruckelshaus indicated that he was withholding filling the new agency's key positions until after his formal confirmation.

## RECYCLED MASTEMATER USED AT LATEX PLANT

A latex plant at Dalton, Ga., comes close to achieving what industrialists, regulatory officals, and politicans have increasingly urged--complete recycling of wastewater.

The plant normally circulates all its process, wash, and cooling wastewater through coagulation pits, where alum coagulates latex. Then the flow goes through a strawfilter system to a give-acre lagoon. The plant recirculates roughly 1 mgd through the lagoon.

The plant manager of Dow Chemical says that when the system was first installed 3 years ago, a constant small overflow was expected. However, overflow has occurred only during heavy rain, and this has

provided adequate purge to eliminate the need for scheduled blow-down. In addition to providing recirculating waters, the pond serves as a fire emergency reservoir.

#### PESCAPCH REVIEW

Project Title: Conjunctive Use of Ground and Surface Waters

Principal Investigator: Dr. Richard S. Harnsberger

Dates: July, 1970 to June 1972

More often than not, water resource development schemes have been categorized as to the primary nature of the source to be tapped, that is, surface water or ground water, with little thought given to the exceedingly important interrelationship existing between the two components. This has been unfortunate and such an artificial separation has been one of the primar; reasons why we are faced today with many complex issues involving the legal right to the use of our subsurface waters. Fortunately, the opportunity to consider the conjunctive development of many regional surface and groundwaters still exists. As a result, a clear need for research into the functioning and management of joint systems is apparent. This study is designed to explore alternative methods for achieving a balance between ground and surface water use within an existing legal framework. When new legislation would annear needed to resolve difficulties, appropriate recommendations toward that end would also be devised.

The optimal development of many regional water resources can be obtained only if there is an effective

coordinated development of ground water and surface water supplies. Research such as that proposed herein is therefore of national significance.

### MEN PUBLICATIONS RECEIVED BY INSTITUTE - DECEMBER

- 1. "Phosphate Removal From Wastewaters Using Lanthanum Precipitaion", U.S. Department of the Interior, Federal Water Quality Administration, April 1970.
- 2. "Use of New Analytical Methods in Water Resource Development", U.S. Department of the Interior, Federal Water Quality Administration, September 1970.
- 3. "Chemical Quality of Streams Draining the Central Basin of Tennessee", A. L. Ressman, A. E. Godrey, Vanderbilt University, 1970.
- 4. "Water Use in Tennessee Part D Summary", State of Tennessee, Department of Conservation, U.S. Geological Survey, 1970.
- 5. "Ultimate Disposal of Phosphate From Waste Water", U.S. Department of the Interior, Federal Water Quality Administration, January 1970.
- 6. "Publications List", State of Tennessee, Department of Conservation 1970
- vation, 1970.
  7. "Report on the Framework Study", James Owen, Nebraska's State Water Plan, Nebraska Soil & Water Conservation Commission, December 1970.
- 8. "HEC-1 Flood Hydrograph Package", U.S. Army Corps of Engineers, Davis, California, October 1970.
  - 9. "The Detroit Institute of Technology", Detroit, Michigan.
  - 10. "Dickinson College Bulletin 1970-72", Dickinson College, Carlisle, PA, 1970-72.

- 11. "Wastes Management Concepts for the Coastal Zone", Committee on Oceanography, Committee on Ocean Engineering, Washington, D.C. 1970.
- 12. "The Effect of Antitranspirant Materials on the Radiation Balance and Evapotranspiration in An Irrigated Alfalfa Field", T. A. Hales, Ph. D., University of Nebraska, 1970.
- 13. "Evaluation of Earthy Materials for Use in Decontamination of Water", J. B. Dixon, Auburn University.
- 14. "Public Policy and Shoreline Landowner Behavior", R. J. Eurby, III, S. Weiss, University of North Carolina, North Carolina State University, July 1970.
- 15. "Collected Papers Regarding Nitrates in Agricultural Waste Water", U.S. Department of the Interior, Federal Water Quality Administration, December 1969.
- 16. "Hydrology of Limestone Terranes - Part A", P.E. LaMoreaux, D. Raymond, T. J. Joiner, University Alabama, 1970. 17. "Hydrology of Limestone
- 17. "Hydrology of Limestone Terrares Part D", T. J. Joner & W. L. Scarbough, University, Alabama, 1969.
- 18. "Soil Surface Characteristics and Rainfall-Runoff-Moisture Relationships on Coastal Plains Soils", R. E. Hermanson, Auburn University, June 1970.
- 19. "Occurrence of Gypsum in the Johnson Shale (Permian) in Memaha County, Nebraska", R. R. Burchett, University of Nebraska Conservation & Survey Division, November 1970.
- & Survey Division, November 1970. 20. "Mathematical Programming For Regional Water Quality Management", U.S. Department of the Interior, Federal Water Quality Administration, August 1970.
- 21. "Evaluation, By Test Drilling, Of Geophysical Methods Used for Ground-Water Development In the Piedmont Area, Alabama",

- G. V. Wilson, T. J. Joiner, J. C. Warman, University of Alabama, 1970.
- "Combined Sewer Regulator 22. Overflow Facilities", U.S. Department of the Interior, Federal Water Quality Administration, July 1970.
- "Combined Sewer Regulation and Management-A Manual of Practice U.S. Department of the Interior, Federal Water Quality Administration, July 1970.

"Hydrologic Studies in 24. the Rocky Mountain Region", U.S. Department of the Interior, Geological Survey, September 1970.

- 25. "Biological Effects of Effluent From a Desalination Plant at Key West, Florida", U.S. Department of the Interior, Federal Water Quality Administration, February 1970.
- 26. "The Influence of Inadequate Water Supply of Metabolism in Biological Systems", S. H. West, University of Florida, August 1970.
- 'Microstraining and Dis-27. infection of Combined Sewer Overflows", U.S. Department of the Interior, Federal Water Quality Administration, June 1970.
- "Heated Surface Jet Dis-28. charged Into a Flowing Ambient Stream", L. H. Motz, B. A. Benedict, Vanderbilt University, August 1970.
- 29. "Study and Experiments in Waste Water Reclamation by Reverse Osmosis", U.S. Department of the Interior, Federal Water Quality Administration, May 1970.
- "Chemical Exfoliated Vermiculite for Removal of Phosphate on Sludge Incineration Practice", from Wastewaters", U.S. Department of the Interior, Federal Water Quality Administration, August 1970. April 1970.
- "Investigations of a High-31. Pressure Foam Wastewater Treatment Process", U.S. Department of the Interior, Federal Water Quality

- Administration, April 1970.
- 32. "The Effect of Land Utilization on Water Quality Variations", R. R. Tokarski, Rutgers -The State University, October 1970.
- 33. "The Organic Gradient in A Concentration Column", B. T. Kown, Rutgers - The State University, October 1970.
- 34. "Artifical Mixing of Stratified Fluids Formed by Salt and Heat in a Laboratory Reservoir", L. M. Brusch, Jr., Rutgers - The State University, September 1970.
- 35. "BOD Mass Balance and Water Quality Standards", W. Whipple, Jr., Rutgers University, June 1970.
- 36. "Kinetics and Mechanism of Precipitation and Nature of the Precipitate Obtained in Phosphate Removal from Wastewater Using Aluminum (III) and Iron (III) Salts", U.S. Department of the Interior, Federal Water Quality Administration, April 1970.
- 37. "Nutrient Removal From Enriched Maste Elluent by The Hydroponic Culture of Cool Season Grasses", U.S. Department of the Interior, Federal Water Quality Administration, October 1969.
- 38. "Microbial Factor in Acid Mine Drainage Formation", U.S. Department of the Interior, Federal Water Quality Administration, July 1970.
- 39. "A Study of Flow Reduction and Treatment of Waste Water From Households", U.S. Department of the Interior, Federal Water Quality Administration, December 1969.
- "State of the Art Review U.S. Department of the Interior, Federal Water Quality Administration,
- "Plankton Diatom Assemblages 41. in Lake Michigan", U.S. Department of the Interior, Federal Water Quality Administration, December 1969

"Inventory of Active Vater Resources Research Projects in Worth D. K. Todd, Mater Information Carolina", North Carolina State University, University of North Carolina, July 1, 1970.

"Water Resources Research Interests in the Colleges & Universities of North Carolina", North Carolina State University, University of North Carolina, July 1, 1970.

"The University's Role in 44. National Water Policy", Proceedings of UCOUR Conference, Blacksburg,

Virginia, July 1970.

45. "A Uniform Technique Determining Flood Flow Frequencies", Water Resources Council, Washinton, D.C., December 1967.

46. "Annotated Bibliography on Hydrology & Sedimentation 1963-65", United States and Canada, Water Resources Council, June 1969.

"Water Data for Metropolitan water seminar in January.

Areas", Geological Survey, 1970. 48. "Water Resources Regions and Subregions for the National Assessment of Water and Related Land Resources", Water Resources Council, Washington, D.C. July 1970.

"Urban Soil Erosion and Sediment Control", U.S. Department of the Interior, Federal Water Quality Administration, May 1970.

50. "Phosphorus Removal Using Chemical Coagulation and A Continuous Countercurrent Filtration, Process", U.S. Department of the Interior, Federal Water Quality Administration, June 1970.

51. "An Economic Study of the Effect of Municipal Sewer Surcharges on Industrial Wastes", D. E. Ethridge, North Carolina State University, University of North Carolina, November 1970.

52. "Investigative Mine Survey of A Small Watershed", U.S. Department of the Interior, Federal Water Quality Administration, March 1970.

53. "The Water Encyclopedia", Center, 1970.

"Factors of the Climatic 54. Water Balance Over the Delmarva Pennsinsula", J. R. Mather, University of Delaware, December

1969.

55. "Report of Evaluation of Minerals and Mineral Potential of the Salmon River Drainage Basin in Idaho Subproject", Wild & Scenic Rivers Study, C. M. Savage, University of Idaho, September 1970.

#### SEMIMAR MONDAY NIGHT

The University of Nebraska, Department of Civil Engineering. will sponsor a one-day ground program, entitled "Role of Ground Water in Nebraska's State Water Plan", will be held Monday, January 11, 1971 at 7:30 in Stout Hall, Room 205, University of Nebraska.

Gerald F. Briggs, Vice President-Chief Engineer, Johnson Division, WOP, of St. Paul, Minnesota will be the speaker. He received Honorary Doctor of Science from University of Nebraska in January 1970.

For further information contact: Ralph R. Marlette, 206 Stout Hall, Phone 472-2371.

### PROGRAM FOR THE 1071 INTERBISCIPLINARY SEMINAR ON WATER RESOURCES

The Interdisciplinary Water Resources Seminar will again be offered during the 1971 Semester. The success of the past three

Seminars and current inquirtes resources de motivated this decision. The average attendance at past Seminars lined below. was 50 persons, an indication of the desirability of inter-departmental cooperation and the need for a Water Resources Seminar. The intent of this Seminar is to bring together upper classmen, graduate students, professional persons, faculty, and others interested in water topics. resources de system. Gen lined below. To receive enroll under Seminar or seminar

resources development on the ecosystem. General topics are outlined below.

To receive credit, students may enroll under their own departmental Seminar or special problems numbers. A short paper will be required.

The Seminar is scheduled to be held from 4:00 - 5:00 p.m. on Mondays in room 115 Ferguson Hall.

The general theme will be the impact of various forms of water

## PROGRAM FOR THE 1971 INTERDISCIPLINARY WATER RESOURCES SEMINAR

# WATER RESOURCES DEVELOPMENT AND THE ECOSYSTEM 4:00 p.m. Mondays, 115 Ferguson

Feb. 1	Ecology and Change	Dr. Patricia Rand, Asst. Professor of Botany
Feb. 8	Ecology and Water - Historic	Dr. Dale Henning, Asst. Professor of Anthropology
Feb. 15	Impact of Climatic Change	Dr. Merlin Lawson, Asst. Professor of Geography
Feb. 22	Geomorphology	Mr. Vince Dreeszen Director, Conservation & Survey Division
March 1	Man's Impact on the Ecosystem Through Water Resources Dev.	House
March 8	Pollution - Agricultural .	As Alaba
March 15	Pollution - Municipal and Industrial	Dr. George Hanna, Chairman, Civil Engineering Dept.
March 22	Eutrophication and Man	Dr. Gary Hergenrader, Asst. Professor of Zoology & Physiology
March 29	Ecclogic Implication of Lakes and Reservoirs	Panel: Dr. Mark Hammer, Assoc. Professor of Civil Engineering Mr. John Mayne, Bureau of Reclamation Representative of the Corps of Engineers

April 5 Irrigation Systems

Panel: Dr. William Splinter, Chairman, Ag. Engineering Department Mr. Leonard Sisson Nebraska Games & Parks Commission

Mr. Dick Spady, Nebraska Recreation Games & Parks Commission

April 19

The following four weeks will include new films developed about Nebraska's water resources followed by discussion

April 26 Water -- Nebraska's Heritage Living with Nebraska's Water May 3 May 10 Working with Nebraska's Water May 17 Nebraska's Water -- Its Future

For further information contact:

Warren Viessman, Jr. - Extension Director, Nebraska Water

Resources Research Institute

Ponald Edwards - Extension 3181 Assistant Dean of Engineering . .

Deon Axthelm - Extension 2824 ... Dept. of Agricultural Engineering

### MEMOLETTED ITEMS

Newsletter items and inquiries should be sent to: Dr. Warren Viessman, Jr., Director, N.W.R.R.I., 212 Agricultural Engineering Building, East Campus, Lincoln, Nebraska 68503.