

the divining rod

New Mexico Water Resources Research Institute

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24th Water Conference Plans Final

Planning for the 24th Annual New Mexico Water Conference, to be held on the NMSU Las Cruces campus on Thursday and Friday, May 3-4, has entered final stages, with all speakers and panel members named.

This year's theme, "The New National Water Policy: Will it Work in New Mexico?" promises lively and meaningful sessions.

The recent special edition of the divining rod stated that Joe Kathrein, U.S. Fish and Wildlife Service, would speak on Instream Uses and Recreational Value of Water. He has been replaced by Dr. Berton L. Lamb of the USFWS Co-operative In-stream Service Group. Dr. Lamb is a recognized authority in this field.

Thomas Lera, New Mexico Section Chief, Water Programs Branch of EPA will present the EPA perspective on an "Update on Section 208." The New Mexico response will be given by William P. Stephens, Director of the New Mexico Department of Agriculture.

As announced in the special edition of the divining rod, the speakers and topics for other sessions of the conference will be:

Leo Eisel, Director, U.S. Water Resources Council, with response by Steve

E. Reynolds, N.M. State Engineer and Interstate Stream Commission - Overview and Current Status of National Water Policy.

Hal Brayman, Professional Staff, U.S. Senate Environment and Public Works Committee - Water Conservation and New Approaches to Augmentation: Views From the U.S. Senate.

Garrey E. Carruthers, Professor, Agricultural Economics and Agricultural Business Department, NMSU - Uses of New Mexico's Saline Water: Views From an Economist.

There will be two panel discussions which will invite participation from the audience. New this year will be a barbeque lunch on Thursday, with exhibits and displays highlighting current research and water technology.

A banquet at the Holiday Inn de Las Cruces will give conferees a chance to compare notes on the first day's sessions. Dr. M. Wayne Hall, Chairman of the Missouri River Basin Commission will be the featured speaker. The banquet will be preceded by a no-host social hour in the enclosed patio at the Holiday Inn.

Registration begins at 8:00 a.m. Thursday, May 3rd at Stucky Hall on the Las Cruces Campus, and the first

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A Note From The Director

BACK TO THE DRAWING BOARD

A bill which would have provided New Mexico's researchers with a unique opportunity to study uses for saline and brackish water without desalting has failed to pass the last session of the New Mexico State Legislature.

House Bill 180, introduced by Representative Bud Hettinga of Dona Ana County, would have provided \$500,000 for research on a variety of subjects ranging from developing new salt tolerant crops to fish and shrimp farming in brackish and saline groundwater.

Despite this setback the WRRRI would like to express its thanks to the many who enthusiastically supported this legislation. We will simply have to work harder during the rest of this year to demonstrate how this type of research will extend our limited supplies of fresh water and pay economic dividends to the people of New Mexico. In the meantime this topic is still a high priority and we will attempt to fund a few projects in this area from our limited budget.

Tom Bahr

Alamogordo Named Desalting Site

Alamogordo, New Mexico has been named as one of the first two candidate cities in the U.S. to receive a full-scale water desalting plant in a study prepared for the U.S. Department of the Interior's Office of Water Research and Technology (OWRT).

WRRRI has received one copy of the study, prepared by Boyle Engineering Corporation of San Diego. The inch-thick document details selection criteria, and lists ranking scores for the 37 cities and counties considered as candidates for four desalination plants under a program recently authorized by Congress. No money has been appropriated for the plants, however.

The NMSU Mobile Water Laboratory, with its several types of desalting equipment, will set up in Alamogordo immediately after its visit to Las Cruces as a part of the Annual Water Conference displays. The lab will operate in Alamogordo for several weeks to provide data for use in

planning the design of the desalting plant there.

Virginia Beach, Va. received top ranking in the study, with an overall score of 82.7. Alamogordo had a score of 81.75 in the complex rating schemes but was top-ranked in the category which considered inland brackish groundwater desalinization.

The scores were arrived at after consideration of eight general criteria; 1. interest and commitments; 2. general site considerations (management potential, etc.); 3. consideration of desalting needs; 4. demographic and socio-economic needs; 5. water supply considerations; 6. financial considerations; 7. energy considerations; and 8. environmental considerations.

The report is available for examination at WRRRI in Stucky Hall, on the New Mexico State University Las Cruces campus.

Matching Grant Applications Reviewed

The following projects have been approved by the WRRRI Program Development and Review Board to receive State matching funds if they compete successfully for federal funds from the Office of Water Research and Technology:

*ECONOMIC IMPACT OF ALTERNATIVE RESOLUTIONS OF PUEBLO INDIAN RESERVED RIGHTS IN THE RIO GRANDE BASIN, Investigators: Albert E. Utton, Law School, and M. Brian McDonald, Bureau of Business and Economic Research both of the University of New Mexico.

The three-year project will attempt to show the economic consequences of various court decisions that relate to possible reassignment of water rights from current holders to the Pueblo Indians.

*AN EMPIRICAL ANALYSIS OF LEGAL AND ECONOMIC IMPEDIMENTS TO WATER RIGHTS TRANSFER IN THE STATE OF NEW MEXICO, Investigators: Micha Gisser and Ronald N. Johnson, Department of Economics, University of New Mexico.

A three-year project which will study the complexities of the interactions between the legal and economic factors affecting water rights transfers in the state.

*IRRIGATED AGRICULTURAL DECISION STRATEGIES FOR VARIABLE WEATHER CONDITIONS, Investigators: Robert R. Lansford, Agricultural Economics and Agricultural Business Department and Theodore W. Sammis, Agricultural Engineering Department and Gene O. Ott, Cooperative Extension Service, New Mexico State University.

Proposed for three years, this project will use an interdisciplinary team approach to study the interactions of a declining source of groundwater, uncer-

tainties of yields, increasing production costs, and variable climatic factors in the Southern High Plains of New Mexico. An information dissemination program is included as a part of the project.

*THE IMPACT OF GRAZING ON THE QUALITY OF WATER RUNNING INTO A RECREATIONAL FISHERY, Investigator: Richard A. Cole, Fish and Wildlife Services Department, New Mexico State University

A one-year project will examine watershed areas which have been or are being grazed and from which runoff feeds into recreational fishing streams. Stream water will be analyzed at the onset of storms and the relationship between intensity of grazing and water quality will be determined.

*A GROUND WATER RESOURCE EVALUATION OF THE NUTT-HOCKETT BASIN, SOUTH CENTRAL NEW MEXICO, Investigator: Stephen G. McLin, Department of Civil Engineering, New Mexico State University.

This two-year project will be an attempt to define the factors affecting the declining level of groundwater in the Nutt-Hockett Basin, from which the village of Hatch gets its principal water supply.

*UTILIZATION OF BRACKISH WATER FOR IRRIGATION OF SALT GRASS, A POTENTIAL FORAGE CROP, Investigator: Gary L. Cunningham, Biology Department, New Mexico State University.

A three-year project to develop a computer-simulation model which will allow prediction of rates of salt grass production using environmental and other data. The project will use current work on salt grass as a base of information.

Water Conference

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session starts at 9:15 in Carbine Auditorium, Physical Science Laboratory's Clinton P. Anderson Hall. The conference ends at noon on Friday, May 4, following a field trip to several points of interest in the area.

These include a brief stop at large capacity irrigation wells operated by the Elephant Butte Irrigation District, the NMSU Plant Science Farm to see a Trickle Irrigation System and hear an evaluation of its operation, and a stop at Stahmann Farms for a discussion on irrigation scheduling.

Thursday's exhibits will include The Mobile Desalting Laboratory operated by NMSU's Civil Engineering Department under the direction of Dr. Bruce Wilson, a display explaining Dr. George O'Connor's experiments in irrigation with saline water, windmill equipment and parts from M.I. Rasmussen's Windmill Laboratory, and several others.

Upcoming Conferences

May 3-4, 1979

Twenty-fourth Annual New Mexico Water Conference, "The New National Water Policy: Will it Work in New Mexico?" Hosted by the New Mexico Water Resources Research Institute at the Las Cruces Campus of New Mexico State University. For additional information contact Gail Stockton or Thomas Bahr at Box 3167, NMSU, Las Cruces, New Mexico 88003.

July 17-21, 1979

1979 Irrigation and Drainage Division Speciality Conference, "Irrigation and Drainage in the Nineteen-Eighties". Hosted by the American Society of Civil Engineers, New Mexico Section, at the Four Seasons Motor Inn, Albuquerque, New Mexico. For additional information and programs contact Conrad G. Keyes, Jr., Box 3CE, NMSU, Las Cruces, New Mexico 88003 or Bruce Elsner, 12240 Woodland Avenue, N.E., Albuquerque, New Mexico 87112. (Programs are also available at WRRRI).

DR. THOMAS BAHR, Director, New Mexico Water Resources Research Institute; **WINSTON L. COMER**, Editor.

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