

WRC NEWSLETTER

VOL. 7 NO. 4 JULY 1992

WATER RESOURCES CENTER, TEXAS TECH UNIVERSITY, LUBBOCK, TX 79409
(806)742-3597

Water, Inc. Library Donated to the WRC

The Water Resources Center recently acquired a comprehensive library consisting of publications dealing

with water resources and water resources develop-

ment from Water, Inc. The Board of Directors offered the WRC their library when Water, Inc. closed its doors in April, 1992.

Water, Inc., an organization formed in 1969, was dedicated to ensure adequate future water for everyone in the High Plains. It was a promotional organization financed with annual dues by over 5,000 members. Membership included virtually every bank and public utility in eastern New Mexico, western Oklahoma and the Panhandle. Dan M. Wells, the first Director of the Water Resources Center, was one of the charter members and served on the Board of Directors.

According to Mr. Duncan Ellison, Executive Director since 1973, "bringing awareness throughout the U.S. of the High Plains water situation and its contribution to world agriculture was a major accomplishment." Ellison also

said that a specific and more lasting achievement was being instrumental in the legislature in

"bringing awareness throughout the U.S. of the High Plains water situation and its contribution to world agriculture was a major accomplishment."

creating the Ogallala Aquifer Water Import Authority. "No one has a statutory right to contract with other states to import water, but because of 12 years of effort on the part of Water, Inc., the law that would allow this is now on the books."

The Water Resources Center would like to thank The Board and Water, Inc. for the generous donation of their library. The WRC is now in the process of cataloguing and combining this new acquisition

with the current library. Faculty and students will have access to numerous articles, reports, papers, etc. through computer search capabilities using key words, authors or dates.

Retirement dinner planned

Dr. Billy J. Claborn Retires

Dr. Billy J. Claborn is retiring after 30 years of teaching and research in the Civil Engineering Department at Texas Tech University. Dr. Claborn joined Texas Tech in 1963 as an assistant professor and over the years worked his way to full professor. Dr. Claborn's professional experiences include design and construction of irrigation projects in California and West Pakistan, applied research in reducing canal seepage by plastic lining, and hydrology of monsoon

floods in West Pakistan. His principal area of interest and expertise has been computer applications to solve problems in hydraulics and hydrology.

Billy Claborn received a B.S. degree in civil engineering from Texas Tech University in 1956; an M.S. in civil engineering from Stanford University in 1957; and a Ph.D. in civil engineering from the

Continued on page 2 ...

Claborn retires

Congratulations

Brian M. Avirett and Mahesh Rege have recently been awarded the Dan M. Wells Memorial Endowed Scholarship for the 1992-93 academic year. They each have an interest in a career in a field directly related to water resources. Among the qualifications they have demonstrated are scholastic ability, leadership potential and character.

•Brian has been on the President's and Dean's honor lists. He has served as secretary for Chi Epsilon, and vice president and Concrete Canoe Chair of the Student Chapter of ASCE. His specific interest is groundwater contamination, which includes leaky underground storage tanks, hazardous waste spills, and recovery of fuels such as gasoline. His interest in this area began when he served as an extern for Fugro-McClelland Consultants in Houston.

•Mahesh received third place in the graduate student paper contest held by the American Institute of Chemical Engineers. He served as president of the Chemical Engineering Association and Coordinator of Chemical Week - 1988. Having completed the Master's program in Chemical Engineering in August 1991, he began work towards a doctorate. He is currently investigating the efficacy of different empirical mathematical models in predicting destruction rates of organics using AOP.

The two annual scholarships are available for Texas Tech University seniors or graduate students. The scholarships are funded by family, friends and students in honor and recognition of Dr. Dan M. Wells, who served as Director of the Water Resources Center at Texas Tech University from 1967 to 1977. Donations are welcomed and should be directed to the Director of the Water Resources Center.

Claborn Retires

Continued from page 1

University of Texas at Austin in 1970. His accomplishments include numerous publications in professional journals, proceedings, and other sources. In addition, he has presented papers at conferences in this country and abroad and has been principal or co-principal investigator on many funded research projects. He also maintains memberships in professional organizations such as the American Society of Civil Engineers, American Geophysical Union, and others. He is a registered professional engineer in Texas and California.

Professional employment in Claborn's career before coming to

61), and Design Engineer with Tipton and Kalmbach, Inc., in Denver, Colorado (1961-63).

Dr. Claborn and his wife, Nancy, recently bought a house in Athens, Texas where they plan to spend their retirement. Even though he is retiring from Texas Tech, Dr. Claborn intends to do some consulting work and to remain active in civil engineering. The Claborns have four children; Alison

To honor Dr. Billy J. Claborn for his 30 years of teaching and research in the Civil Engineering Department at Texas Tech University, you are cordially invited to attend an afternoon barbecue, Sunday, August 16, 1992. Friends, family, former students, and colleagues will gather from 4:00 to 6:00 p.m. at The County Line restaurant in Lubbock to wish him well in his retirement. For reservations and more details, contact Dana Grove by August 12 at (806) 742-3597.

Texas Tech includes Resident Engineer for the City of Lubbock (1956), Water Resource Engineer for Kern County Land Company in Bakersfield, California (1957-

Claborn of Lubbock; Jay Claborn of Houston; Joe Claborn of Waxahachie; and Mitchell Claborn of Plano.

WRC Salutes Recent Graduates

The Water Resources Center staff would like to extend a hearty CONGRATULATIONS to students who have recently completed their graduate degrees. The following students have been either partially or fully supported during their graduate studies either directly through Water Resources Center research projects or indirectly under projects managed by the WRC.

Name	Degree	Report/Thesis
Shahid R. Bhuiyan	MS	An Overview of Environmental Legislation in Bangladesh
Narayana Murthy	MS	Treatment of Food Processing Waste for Frito Lay, Inc.
Satya Neelakantan	MS	Effects of Discharge of Municipal Effluent into Water Bodies in the West Texas Area
Donald White	MS	An Overview of Water Conservation Methods and Program Development

Project Update

Groundwater Recharge Project Continues on "Hold"

The Bureau of Reclamation continues to cooperate with local sponsors in the conduct of

groundwater recharge projects under Public Law 98-434. The High Plains States Groundwater Demonstration Program Act of 1983 authorizes a special study of the potential for groundwater recharge in the High Plains and in other Reclamation Act States (the 17 Western States).

issues resolved, but at a significantly higher cost than that initially proposed. Similar cost increases were encountered by other projects in the program as well.

Presently there are nine projects in operation and four others are in various stages of construction. Two operating projects each are in Kansas and Nebraska, and one project each in Washington, Montana, Nevada, Utah, Colorado, Oklahoma and Texas. Projects are under construction in Oregon, South Dakota, Arizona and Idaho. Six projects, including the Texas High Plains project are being deferred until such time as funds become available through legislation proposed to increase the ceiling on PL 98-434.

Under PL 98-434, \$20 million is authorized for Reclamation to design, construct, operate and evaluate 21 demonstration projects. One project, proposed by the High Plains Underground Water Conservation District No. 1 and the Texas Tech University Water Resources Center, was targeted for the Texas High Plains. Due to environmental concerns, however, the proposal was tabled. At the request of Reclamation, the project was subsequently revised and the



WRC
Newsletter
July
1992

The WRC Newsletter is published quarterly by the Water Resources Center at Texas Tech University Box 41022 Lubbock, Texas 79409-1022 (806) 742-3597

Editor and Desktop Publishing:
Dana Grove

Contributing Editor:
Lloyd V. Urban

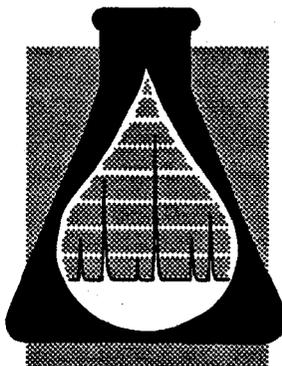
Cooperation Results In New TOC Analyzer For ESL

The Environmental Science Laboratory (ESL) has recently initiated steps to acquire a Total Organic Carbon (TOC) analyzer. Although the instrument will be located in the ESL, its acquisition resulted from the pooled funds of several researchers. The largest contributions were made by Dr. Raghu Narayan (Chairman, Chemical Engineering), and Dr. Cliff Fedler (Civil Engineering). Dr. Richard Tock (Chemical Engineering) and Dr. Lloyd Urban (Director, Water Resources Center) also provided significant support.

The chief use of this technology will be for direct measurement of

carbon in organic matter in solution or suspension, rather than inferring carbon concentration from determinations of Biochemical Oxygen Demand (BOD) or Chemical Oxygen Demand (COD). The analysis is

made by decomposing the organic matter in a sample and measuring the carbon dioxide produced. Along with TOC, the analyzer can measure inorganic (IC) and volatile organic (VOC) carbon fractions in brine as well as normal surface and groundwater samples.



The sources of funding for the purchase are evidence that TOC testing has high demand and broad application in environmental research. Accurate carbon fraction determinations are essential for status monitoring of effluents and waterways, measuring efficacy of treatment methods, and nutrient studies.



WRC

WATER RESOURCES CENTER
TEXAS TECH UNIVERSITY
Box 41022
LUBBOCK, TX 79409-1022

Non-Profit Org.
U.S. Postage
PAID
Lubbock, TX
Permit No. 719