



Press releases for Upper Big Blue NRD WATER-TIP from 2006-2007

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Upper Big Blue NRD

ANNUAL
REPORT

FY2006

WATER-TIP Program Finishes Up Successful Second Season: NRD Board Enlarges Program

Dan Leininger, Water Conservationist at the Upper Big Blue NRD, and the Upper Big Blue NRD Water Department has been working with Dr. Suat Irmak, UNL Agricultural Water Management Specialist, and several UNL Extension Educators on an atmometer and soil moisture project.

Entitled **Project “WATER—TIP”**, which stands for “**Watermark & ATmometer—Timed Irrigation Project**”, began in May 2005 by installing atmometers and Watermark® sensors at twenty cooperators’ farms throughout the Upper Big Blue NRD. In 2006, we saw the numbers of cooperators jump to 67 members involved with WATER-TIP.

The purpose of the project is to track soil moisture use by crops across the District through measuring evapo-transpiration (ET) with the atmometers and keeping track of soil moisture at each atmometer site with four Watermark® sensors placed at 1-, 2-, 3- and 4-foot depths. (The actual equipment may vary depending on specific needs at each site).

The Upper Big Blue NRD staff foresaw the opportunity that an additional 15 to 20 ET gauge sites in the NRD would improve the network. Therefore, the staff recommended to the board that the ET gauge Irrigation Scheduling Pilot Project be continued in 2007.

At the February 2006 board meeting, The Upper Big Blue NRD Board of Directors approved that Project WATER-TIP be enlarged to an additional 40 cooperators at a cost not to exceed \$12,000 — to be used to purchase atmometers and Watermark® sensors and for Crop ET and Soil Water Management Research and Demonstration activities. The NRD will fund 50% of the equipment needed for up to 40 ET gauge/Watermark® sensors stations. The cooperators will pay the other half of the cost.

As a result, the District offered a pilot program for cost-share in the form of an up-front price break of fifty-percent of the cost of ET gauges, Watermark® sensors and meters. The goal of the program was to get 40 cooperators to operate ET gauges and report the data to the NRD. The total amount authorized was \$12,000. The District will fund one-half of the equipment needed for up to 20 ET gauge/Watermark® sensor stations. The cooperators will pay the other half of the cost. Equipment for a typical station would consist of the following: 1 ET gauge (\$180), 4 to 8 Watermark® sensors (\$24 each) and 1 Watermark® meter (\$219). The actual equipment may vary depending on equipment needed for each site. The NRD and Cooperative Extension staff will assist cooperators in proper placement of the stations. The cooperators agree to provide weekly readings and will assist the NRD in compiling data from the atmometers and Watermark® sensors, as well as the amount of rainfall and irrigation at the sites. This data will then be used to show how evapo-transpiration can vary throughout the District, as well as how the sensors and atmometers can be beneficial tools used to schedule irrigation and use ground water more efficiently.

During the summer of 2006, “Project WATER-TIP” spawned the Nebraska Agricultural Water Management Project to extend this program statewide. The project team is currently made up of Dr. Suat Irmak — UNL Agricultural Water Management Specialist; Dan Leininger — Upper Big Blue NRD Water Conservationist; Rod DeBuhr — Upper Big Blue NRD Water Department Manager; and UNL Extension agents — Gary Zoubek (York Co.), Jenny Rees (Clay Co.), and Brandy VanDeWalle (Fillmore Co.). Dr. Irmak was also successful in obtaining a grant through the Natural Resources Conservation Service to expand this effort to other parts of the State of Nebraska.



Pictured left to right: Jenny Rees, Clay County Extension Educator; Brandy VanDeWalle, Fillmore County Extension Educator; Dr. Suat Irmak, UNL Irrigation Specialist; Gary Zoubek, York County Extension Educator; Jim Watt, cooperating producer; Andy Christensen, Hamilton County Extension Educator; and Dan Leininger, Upper Big Blue NRD Water Conservationist, stand behind the newly installed atmometer on Watt's farm west of York, Nebraska.

Over 67 cooperators have been members in this program since it began in the spring of 2005.