

Trust Grant Awarded for Little Sandy Project— The Little Blue NRD has received a \$42,000 grant from the Nebraska Environmental Trust for the “Little Sandy Creek Watershed Conservation Project”. This is the second year of a two year grant totaling \$180,000. The project is one of the 77 projects receiving grant monies from the Nebraska Environmental Trust this year.

The NET funds, DEQ and LBNRD funding will be utilized toward implementing a Watershed Management Plan to reduce non-point source (NPS) pollution loads (sediment, nutrients, atrazine, etc.) entering the newly constructed Lone Star Reservoir. The dam was completed in July of 2006 and the recreation area is also completed, pending some landscaping. Implementation of this project will improve and protect the surface water quality of Lone Star Reservoir by reducing the NPS pollution load entering the reservoir. The NET component of the overall watershed project will focus specifically on the rehabilitation of the five (5) small dams located upstream from the reservoir.

Trust Grant Awarded for Irrigation Project— The Little Blue NRD has received \$14,450 from the Nebraska Environmental Trust for the “Irrigation Technology to Improve Irrigation Management Program.” This is the first year of three grants totaling \$43,700.

The funding will be used to acquire cost-share monies for the purchase of soil moisture equipment to help producers determine when irrigation is needed. The Little Blue NRD has five Water Quality Sub-Areas developed to curb nitrate leaching and has been actively working with communities on Wellhead Protection Management with 20 communities within the District having “State Approved” Wellhead Protection Plans. The concern is that some of these communities’ municipal wells nitrate levels have exceeded the drinking water limit of 10 PPM. The LBNRD has emphasized soil sampling and applying the correct amount of nitrogen when fertilizing crop ground. This year, the LBNRD was blessed with nearly adequate rainfall and a full water profile in the soil. Producers had some questions of when to start and stop the irrigation. Over-watering has been a concern since the invention of irrigation. If the producers are putting on more water than needed, leaching of nitrates into aquifer will potentially occur. The LBNRD board is proceeding with a pro-active approach to assist the producers in irrigation management so trends in nitrate levels can decrease.

This equipment will be used in a variety of settings from croplands, rangelands and lawns. The equipment can assist with decreasing nitrate and pesticide leaching and conserving water, especially in Wellhead Protection Management Areas. The equipment includes soil moisture sensors and meters, data loggers, ET (evapotranspiration) gauges and soil probes.

Trust Grant Awarded for Irrigation Conservation Initiative— The Little Blue Natural Resources District will receive \$90,240 from the Nebraska Environmental Trust for the “Irrigation Conservation Initiative.” This is the second year of a two year grant totaling \$185,880.

The grant will be used for the purchase of soil moisture probes and acquiring 50% cost share money to install flow meters on high capacity irrigation wells within “Unit 8” of the Little Blue Natural Resources District. The probes and flow meters will be used for implementing proper irrigation scheduling techniques to conserve the local aquifer. The Little Blue NRD’s Groundwater Management Plan divides the District into hydro-geologic units. Each unit is an isolated paleo-valley aquifer within the boundaries of the NRD where; as determined by data collected in the District’s groundwater observation well network, groundwater declines have occurred. This paleo-valley aquifer within Unit 8 averages about 2 miles wide and runs across the length of two counties. Depths of wells can vary within the Unit from 205 to as little as 140 feet, well outputs can vary from 1200 gpm to 50 gpm just as quickly. Depths to water in individual wells, as compared to the 1970s, have declined 20 feet in and around the Chester, NE area.