



USDA-CSREES 2007 National Water Quality Conference

The North Bosque Manure Composting Initiative: What have we learned?

Water quality issues associated with animal agriculture receives significant political and regulatory attention as federal and state agencies expand monitoring of waterbodies and regulation of confined animal production. With this increased regulatory pressure, efforts are made to assist agriculture by addressing their concerns through better management practices and assistance programs. In Texas, this particular situation has been focused on dairy operations within the Bosque and Leon River Watersheds. Studies conducted by the Texas Institute for Applied Environmental Research demonstrated that excessive applications of manure to waste application fields in proximity of the dairies located within the watersheds contributed to water quality impairments in the basin. As a result, an innovative multi-agency, multi-program approach was initiated to develop a manure composting program to improve water quality in these watersheds. The following programs were initiated in this joint effort. The Texas State Soil and Water Conservation Board conducted the Dairy Manure Export Support Program. As of April 2006, over 970,000 tons of manure has been transported from dairies in both watersheds to local compost facilities. The Texas Commission on Environmental Quality conducted the Composted Manure Incentive Project. As of August 2005, over 406,000 cubic yards of compost was sold through incentives provided to state-funded public entities to purchase composted dairy manure; approximately 78 percent of this compost was used outside of the impaired watersheds, achieving programmatic goals. The Texas Water Resources Institute and Texas Cooperative Extension conducted the Dairy Compost Utilization Program. From July 2002 through August 2006, the education and assistance program worked to build sustainable markets for composted dairy manure by identifying and linking public needs with the composting industry. In review, many lessons were learned during this collaborative approach and can provide guidance for other states facing these same water quality impairments due to animal agriculture.

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