



USDA-CSREES 2007 National Water Quality Conference

Reducing Bacterial Contamination of Texas Watersheds

The leading cause of water quality impairment in Texas and much of the nation is contamination with fecal bacteria from human and animal sources. A recent Natural Resources Defense Council report found that beach closings due to bacterial contamination continue to rise nationwide and topped 20,000 in 2005, more than ever recorded in their 16 years of monitoring. In Texas, 197 waterbodies currently do not meet bacterial standards established by the state. To address bacterial impairments, Texas and many other states have resorted to completing TMDLs to restore these waterbodies. However, as these bacterial TMDLs are being completed, a number of issues have surfaced, including the need for: 1. better communication within the TMDL process, 2. evaluation of the appropriateness of bacterial water quality standards, 3. better, more consistent methods to develop and allocate bacterial loads, and 4. development, evaluation, and education on methods to reduce bacterial runoff from agricultural and urban landscapes. To help address these issues and reduce the levels of bacterial contamination of Texas watersheds, the Texas Cooperative Extension and the Texas Water Resources Institute have established a number of initiatives. One such initiative is the Lone Star Healthy Streams program. This program, funded by an EPA §319(h) grant provided through the Texas State Soil and Water Conservation Board, is intended to increase communication with livestock producers in TMDL watersheds through implementation of educational programs regarding reduction of bacterial runoff from grazing lands. In addition, this project is providing much needed data on bacterial loadings from grazing lands under a variety of management measures (no grazing, prescribed grazing, and heavy grazing) and best management practices (alternative water supplies and fencing). Other education and assessment programs are being developed for dairies, horse owners, and urban areas. The combined results of these individual programs will provide the state with a comprehensive program for addressing bacterial contamination of Texas watersheds.

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