

SPECIAL PROJECTS

The Brazos River Authority's (BRA) public outreach activities include involving our stakeholders in planning water quality and watershed protection activities in the Brazos Basin as well as education and outreach programs.

Watershed Protection Plan for Lake Granbury

In May 2002, a study began to monitor and assess water quality in the canals and coves of Lake Granbury. The canals are backwater areas that have little or no circulation and mix slowly with the main body of the reservoir. The result can mean stagnant conditions where pollution problems have the potential to persist. The on-site sewage facilities located along the many canals and coves of Lake Granbury may be a significant source of bacteria and nutrients to the reservoir and may cause water quality concerns in many of the canals. The BRA and TCEQ are currently developing a Watershed Protection Plan (WPP) to address the concerns that these canals present. The Lake Granbury WPP has a large, active stakeholder group with representatives from government agencies, local, state and federal government, municipalities, and other locally interested parties. In addition, a Technical Advisory Group made up of agency representatives provides technical input to the plan development.

The Lake Granbury Watershed Protection Plan Stakeholders group continued their efforts to develop a Watershed Protection Plan to reduce bacterial impacts in the canals of Lake Granbury. During 2008, the stakeholders group completed source identification projects including: land use analysis, water quality modeling and bacterial source identification projects. The sources varied by location. In urban areas the bacteria in Lake Granbury canals appears to come mostly from domestic waste, pet waste, and wildlife. While in rural areas the source appears to be a combination of domestic waste, livestock, and wildlife. The Stakeholders Group is now working to select and analyze Best Management Practices. It is anticipated that the Watershed Protection Plan will be completed fiscal year 2010.

Watershed Protection Plan for Lake Granger and the San Gabriel River

The BRA, in coordination with the Little River-San Gabriel Soil and Water Conservation District (SWCD), has received grant funding from the Texas State Soil and Water Conservation Board to develop a Watershed Protection Plan (WPP) for Lake Granger and the San Gabriel River Watershed. The Little River-San Gabriel SWCD received a funding to provide technical and financial support to farmers and ranchers for the implementation of best management practices on agricultural lands.

Utilizing stakeholder input, the BRA has identified stream erosion and sedimentation as the primary concerns in the watershed. In addition, Mankins Branch and Willis Creek both are listed on the State's 303(d) List of Impaired Waterbodies for having *E. coli* bacteria concentrations that exceed the state's contact recreation designation.

The BRA will continue to coordinate with stakeholder groups and project partners to develop a WPP that is holistic and includes the most appropriate management strategies to address water quality concerns.

Watershed Protection Plan for the Leon River

The Leon River was placed on the State's 303(d) List of impaired waters in 1997. In 2002 the TCEQ began developing a Total Maximum Daily Load on the portion of the river downstream of Lake Proctor and upstream of Hamilton. As a result, local stakeholders requested the BRA facilitate the development of a WPP for the Leon River that would assist the TCEQ in selecting implementation strategies for the TMDL. Additional bacteria listings and nutrient concerns on a number of the tributaries have resulted in the BRA expanding the project to address these concerns as well.

The BRA has met with stakeholders on numerous occasions to discuss the most appropriate and acceptable implementation measures. The next step for the project will be to model these scenarios to determine their potential impact on water quality. The WPP is expected to be complete in late 2009.

Little Brazos River Tributaries Bacteria Assessment

The BRA has received funding from the Texas State Soil and Water Conservation Board to further assess water quality in the Little Brazos River Watershed in Robertson County. In 2004, five tributaries to the Little Brazos River were placed on the State's 303(d) List for having bacteria concentrations that exceed state water quality standards for contact recreation. The purpose of this project is to better characterize the bacteria impairment and to determine possible sources. For the project, the BRA has added 8 new water quality monitoring sites throughout the watershed and started monitoring flow and collecting stormwater data in November 2008. The BRA will complete the assessment project in August of 2010.

Clean Texas Marina Program

The Clean Texas Marina Program was established in 2001 in partnership with the marina industry, federal and state agencies and civic organizations. The program is coordinated by the Small Business and Environmental Assistance Division of the Texas Commission on Environmental Quality through a collaborative partnership with the U.S. Environmental Protection Agency, Marina Association of Texas, Texas A&M University Sea Grant Program, Texas Parks and Wildlife Department, General Land Office (Coastal), U.S. Army Corps of Engineers, and other local agencies.

The goal of the Clean Texas Marina Program is to provide technical assistance to implement pollution prevention programs, improve compliance with environmental regulations and enhance water quality. The program also promotes clean boating public education and outreach efforts to promote improved sewage handling and other environmental impacts.

The BRA has administered this program for TCEQ at Possum Kingdom Reservoir and Lake Granbury since 2004. To date, six marinas on Possum Kingdom Lake and two marinas on Lake Granbury have been certified as Clean Marinas. Currently, one additional marina on Lake Granbury has pledged to join the program and is in the process of making necessary repairs and upgrades. Upon completion of upgrades and repairs, they will have a confirmation inspection.

Clean Water Sticker Program

The Clean Water Sticker Program is a legislatively-mandated program aimed at reducing sewage inputs into freshwater lakes from boats and sewage pump-out facilities. In 2004, the TCEQ delegated authority to the BRA for performing annual inspection and certification activities for sewage pump-out facilities at marinas on Possum Kingdom Reservoir and Lake Granbury. Since the delegation, the BRA has inspected seven pump-out stations annually at Possum Kingdom Reservoir and two at Lake Granbury. During these inspections, Authority staff have identified compromised pump-out systems and provided technical assistance to the systems owners to bring them into compliance and eliminate the release of sewage from these systems.

Beginning in 2007, the BRA has also been designated authority by TCEQ to perform Clean Water Sticker inspections and certify that boats with onboard marine sanitation devices are not capable of discharging sewage into the environment. Boats subject to this program include: houseboats, boats longer than 26 feet with permanent sleeping quarters, and any boat with a permanently installed marine sanitation device. The goal of the boat inspection is similar to that for the pump-out stations, to reduce sewage discharged from boats that may degrade water quality and to ensure that designated vessels are in compliance with federal and state laws.