

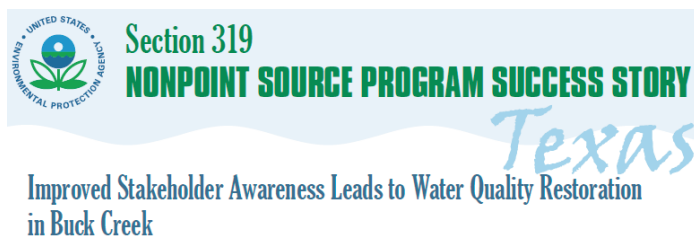
# Buck Creek Watershed Partnership

December 2012 Newsletter

<http://buckcreek.tamu.edu>

## Nonpoint Source Program Success Story

Buck Creek was listed as impaired for elevated levels of bacteria and has been on the 303d list of impaired waters since 2000. Through unified efforts from the Texas State Soil and Water Conservation Board (TSSWCB), the Texas Water Resources Institute (TWRI), Texas A&M AgriLife Research, the Red River Authority, local soil and water conservation districts, and stakeholders and landowners in the watershed, a 28-mile segment of the creek has been removed from the 303d list.



### Improved Stakeholder Awareness Leads to Water Quality Restoration in Buck Creek

**Waterbody Improved** High levels of *Escherichia coli* bacteria, primarily from wildlife, livestock and humans, in Buck Creek prompted the Texas

Watershed restoration efforts have contributed to reductions in bacterial loading. Awareness created through educational events that guided local stakeholders through the watershed planning process and implementation of best management practices (BMPs) have successfully helped restore water quality in Buck Creek. Water quality monitoring data show the long-term *E. coli* geometric mean in Buck Creek now complies with the state's water quality standards, decreasing from 262.08 colony forming units (cfu)/100mL (1997-2005) to 31.07 cfu/100mL (2002-2009). The success of this initiative could not have occurred without the support of everyone in the watershed.

To view the entire Buck Creek success story, visit [http://buckcreek.tamu.edu/media/342377/final\\_published\\_buck\\_creek\\_success\\_story\\_9.4.2012.pdf](http://buckcreek.tamu.edu/media/342377/final_published_buck_creek_success_story_9.4.2012.pdf) or read the AgriLife Today story at <http://today.agrilife.org/2012/10/10/landowners-lead-successful-buck-creek-restoration-in-panhandle-rolling-plains/>

## WPP in Final Stages of Completion

The Buck Creek Watershed Protection Plan (WPP) is now completed and has been reviewed by the TSSWCB. The WPP is currently in the publishing process and will be released following EPA's acceptance of the document. It is anticipated that the release of the WPP will be in early 2013.

## Buck Creek Water Quality Update

The State of Texas recently released its Draft 2012 Texas Water Quality Inventory for public review and comment. As reported in this assessment, Buck Creek continues to exhibit improved water quality trends.

In the 2010 Texas Water Quality Inventory, the portion of the creek from House Log Creek downstream to the Oklahoma border had an *E. coli* geometric mean of 97.6 cfu/100mL, and in 2012, this number further improved to 69.8 cfu/100mL. Moving upstream of House Log Creek, Buck Creek had recorded *E. coli* geometric means of 44.2 and 36.6 cfu/100mL in 2010 and 2012, respectively. To put these in perspective, the state's water quality standard for *E. coli* is 126 cfu/100mL.

The drought in the area has undoubtedly impacted water quality. Since December 2010, only six water quality samples have been collected on the creek. The geometric mean of these six samples was 96.2 cfu/100mL, and it should be noted that each of these samples was collected within several days of a rain event.

## Rolling Plains Field Day

The Rolling Plains Summer Crops Field Day was held on July 17 at the Texas A&M AgriLife Research Station at Chillicothe, 1340 Farm-to-Market Road 392, south of Chillicothe. The theme was "Maximizing Nutrient and Water-Use Efficiencies."

The day consisted of presentations by various AgriLife Research scientists from the Texas A&M AgriLife Research and Extension Center at Vernon, a field tour led by Dr. Paul DeLaune, AgriLife Research environmental soil scientist at Vernon, and soil health and fertility presentations by USDA Agricultural Research Service and Natural Resources Conservation Service scientists. Topics included irrigation scheduling technologies, optimizing fertilizer application to maximize profits, no-till and cover cropping methods, soil health and nitrate availability in soils and well water.



Dr. Nithya Rajan, Texas A&M AgriLife Research agronomist, discusses irrigation scheduling technologies.

## Texas Well Owner Network Training Program to Be Offered March 2013

Private water wells are the source of drinking water for many Texans. Owners of these wells are independently responsible for maintaining their wells and monitoring well water quality to protect the health of their families. The Texas Well Owner Network (TWON) program, in partnership with the TSSWCB, the TWRI and other partner agencies is offering a six-hour educational program on well water quality screening, water treatment, septic system maintenance, groundwater sources and well maintenance. As part of the training, well screenings for fecal coliform bacteria, total dissolved solids, nitrates, arsenic and radioactivity will be conducted for \$10 per sample and will provide information useful to well owners for better managing their water supplies.

The TWON program is scheduled for March 28, 2013 in the Club Room of the Wellington Auditorium, 802 10th Street in Wellington. Meeting registration will begin at 8:30 a.m. and the workshop will begin at 9 a.m. A BBQ sandwich lunch can be purchased for \$5 at the door. Light refreshments will be provided at registration.

Prior to the event, participants should pick up a sample bag and sampling instructions from the Childress, Collingsworth, Donley, Hall or Wheeler County AgriLife Extension Offices. Contact information for each office can be found at <http://agriflifeextension.tamu.edu/>. Then, at the top left, click on 'locations,' which brings up a drop box listing all of the counties. It is very important that only sampling bags from the agents be used and all instructions for proper sampling followed to ensure accurate results. Samples should be brought to the training along with your \$10 to cover the water analysis. Results will be sent to you several days later.

See <http://twon.tamu.edu/> for details about the program, or contact Drew Gholson, the program director, at 979-845-1461.

## Competitor for Environmental Excellence Awards

Annually, the Texas Commission on Environmental Quality recognizes individuals and organizations for their dedication to environmental causes. The Texas Environmental Excellence Awards spotlight the state's highest achievement in environmental preservation and protection.

In past years, TWRI has been selected as the winner for multiple initiatives, such as the Arroyo-Colorado Watershed Partnership (2012), the Rio-Grande Basin Initiative (2008) and the Fort-Hood Range Re-vegetation Project (2006). This year, the Buck Creek Watershed Partnership and the water quality restoration efforts taking place in Buck Creek were nominated in the category of pollution prevention.



The coordinated effort to mitigate elevated *E. coli* levels through bacterial monitoring, source identification and the development of the Buck Creek Watershed Protection Plan led to the reduction in bacteria levels seen in the creek and resulted in Buck Creek being billed as a water quality success story. These coordinated efforts and the local initiative to restore water quality are, in our opinion, certainly worthy of a Texas Environmental Excellence Award.

Winners and finalists will be named in early to mid-March 2013. The awards will be presented in May 2013 at the annual TCEQ awards banquet.

For more on the Texas Environmental Excellence Awards and to see past winners of this award, visit <http://teea.org>.

### Contact Information

#### Texas AgriLife Research

Phyllis Dyer  
 Watershed Coordinator  
 P.O. Box 1658  
 Vernon, TX 76385  
 Ph: 940-552-9941 ext. 270  
 Email: [PMDyer@ag.tamu.edu](mailto:PMDyer@ag.tamu.edu)

#### Texas Water Resources Institute

Lucas Gregory  
 Project Specialist  
 2260 TAMU  
 College Station, TX 77843-2260  
 Ph: 979-845-7869  
 Email: [lfgregory@ag.tamu.edu](mailto:lfgregory@ag.tamu.edu)

