

**Nueces River Authority - Clean Rivers Program  
Steering Committee and Stakeholder Update #3  
March 2014 - May 2014**

**June 12<sup>th</sup>, 2014**

Dear Steering Committee Members and Stakeholders,

This is the third of an ongoing series of quarterly email updates for the Nueces River Authority's FY 2014 – 2015 Clean Rivers Program. Related activities throughout the area are also discussed.

**CRP Routine Monitoring**

During the March through May 2014 quarter, NRA conducted routine monitoring at all 40 stations. No 24-hour dissolved oxygen monitoring took place during the quarter on the middle Nueces River.

**Non-Point Source Pollution**



Jace Tunnell, Director of Research and Planning at the Coastal Bend Bays and Estuaries Program, took this photo after a rainstorm in downtown Corpus Christi on May 9th. Approximately one inch of rain was all it took to flush out the storm drains that drain into Corpus Christi Bay. Efforts have been ongoing by the City of Corpus Christi as well as many other groups to raise awareness about littering. A video of the flushing, narrated by Jace's son Jack titled "All the Cups", shows just how much trash comes from the storm drains during a rain event. <http://www.youtube.com/watch?v=Lh1BSOITYdQ&feature=share>

**Drought Status in the Nueces River Basin**

Despite the rainfall in much of the watershed in May, the drought continues on in South Texas. Technically, a drought begins after precipitation falls below normal which it did beginning in October of 2010. However, from a water quantity standpoint, a drought begins after the reservoir system drops below 100% of capacity. The last time the reservoir system (Lake CC & Choke Canyon Reservoir together) in the Nueces River Basin was at 100% of capacity was in September of 2007. Fortunately, NOAA climate predictions indicate an increased likelihood of El Niño conditions (above average rainfall) beginning in Summer/Fall 2014.

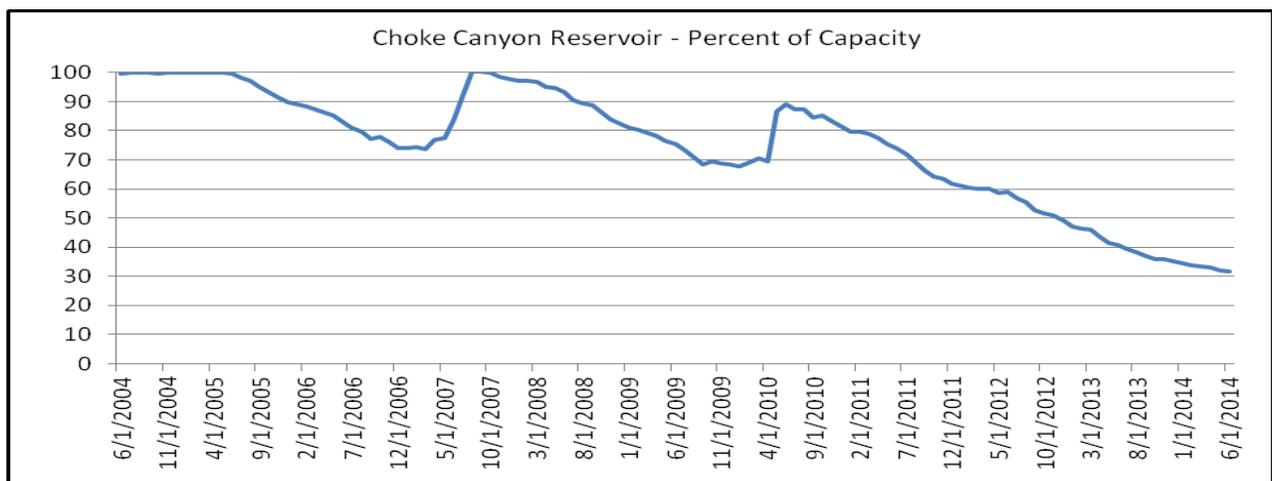
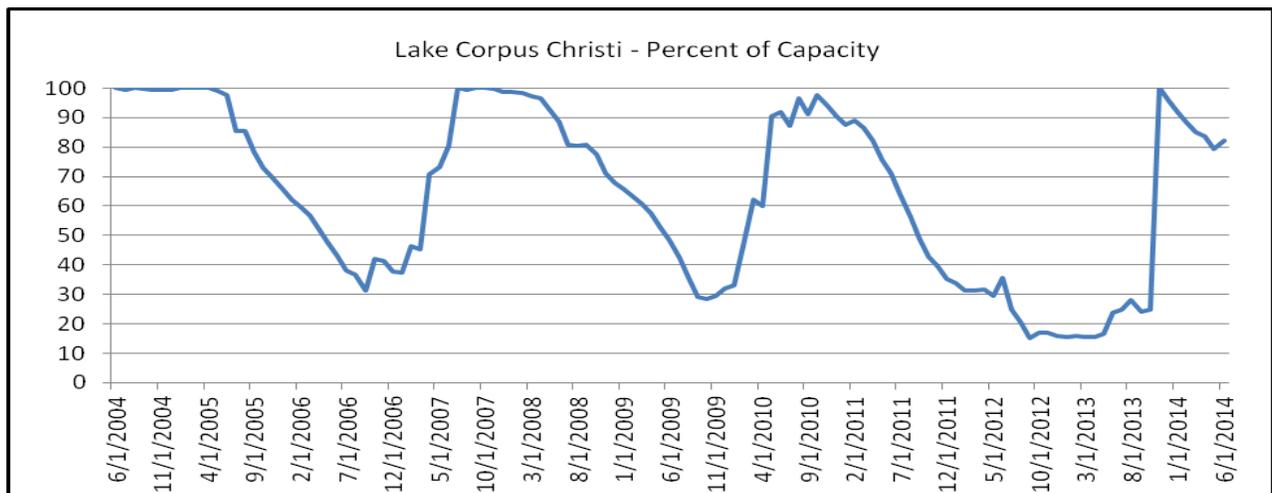
## Water News

According to articles from the *Corpus Christi Caller Times*, in April, the City of Corpus Christi announced that it will be looking into desalination as an option for diversifying water supply options for the area. A pilot research program will take place to study variable salinity desalination, to conduct a groundwater assessment and site selection for a demonstration plant.

Also in April, the groundbreaking for extending the Mary Rhodes Pipeline to the Colorado River was held. The second phase of the project is a 41 mile extension of the pipeline that will bring up to 35,000 acre-feet of water from the Colorado River via the Mary Rhodes pipeline to the Coastal Bend.

## Reservoir System Details

At the end of May 2014, Lake Corpus Christi was at 81.4% of capacity (down from 85.2%); Choke Canyon Reservoir was at 31.5% (down from 33.4%). The combined capacity of the Reservoir System at the end of May 2014 was at 45.0% (down from 47.3). Lake Texana, however, was at 100% capacity at the end of May.



## **Flooding in the Nueces River Basin**



A heavy rain event on Memorial Day weekend sent river levels rising in much of the upper/middle Nueces River Watershed. The rain event was fairly widespread, resulting in runoff on the Frio, Sabinal, Leona, and Atascosa Rivers and many of the tributaries including Seco, Hondo, and San Miguel creeks.

Aerial photographs of the flood on the Frio River were taken by Mark Huffstutler from Sierra Industries. The picture on the left is from the crossing at SH 127 at Concan. The picture on the right is of the leading edge. The peak flow on the Frio at Concan was approximately 8,000 cubic feet per second (cfs) on May 26<sup>th</sup>. Streamflow before the rain event was approximately 15 cfs at the USGS gage at Concan.

### **Outreach and Education**

NRA's Education and Outreach Program reached out to 4,137 people from March through May using custom made tools including NRA's watershed, rainwater, and groundwater models. For more information about outreach and education, contact [slewey@nueces-ra.org](mailto:slewey@nueces-ra.org).

### **Arroyo Colorado Watershed Partnership**

The Arroyo Colorado Watershed Partnership hosted the Steering Committee meeting on May 22<sup>nd</sup> at the Estero Llano Grande World Birding Center located at 3301 S. FM 1015. The group discussed the progress of the Arroyo Colorado Watershed Protection Plan.

### **Petronila Creek Chloride, Sulfate, and Total Dissolved Solids Implementation Plan**

The final report for the Implementation Plan (I-Plan) for the Total Maximum Daily Load for Chloride, Sulfate, and TDS in Petronila Creek was turned in at the end of March for review.

Petronila Creek (Segment 2204) is a 44-mile “freshwater” stream in Kleberg and Nueces County located southwest of Corpus Christi in the Baffin Bay watershed. In 2000, water quality testing found elevated levels of chloride, sulfate, and TDS in the creek. Elevated dissolved salt concentrations are attributed to produced water discharged in open pits and ditches which were outlawed in 1969 and 1987 respectively. NRA conducts monthly sampling for impaired parameters and maintains a continuous water quality monitoring site (CAMS 731) hosted by the TCEQ which can be viewed at:

[http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water\\_daily\\_summary.pl?cams=731](http://www.tceq.state.tx.us/cgi-bin/compliance/monops/water_daily_summary.pl?cams=731)

More information about the Petronila I-Plan can be found at:

<http://www.tceq.texas.gov/assets/public/waterquality/tmdl/32petronila/32-petronila.pdf>

### **Cole and Ropes Park Bacteria Reduction Total Maximum Daily Load and Implementation Plan**

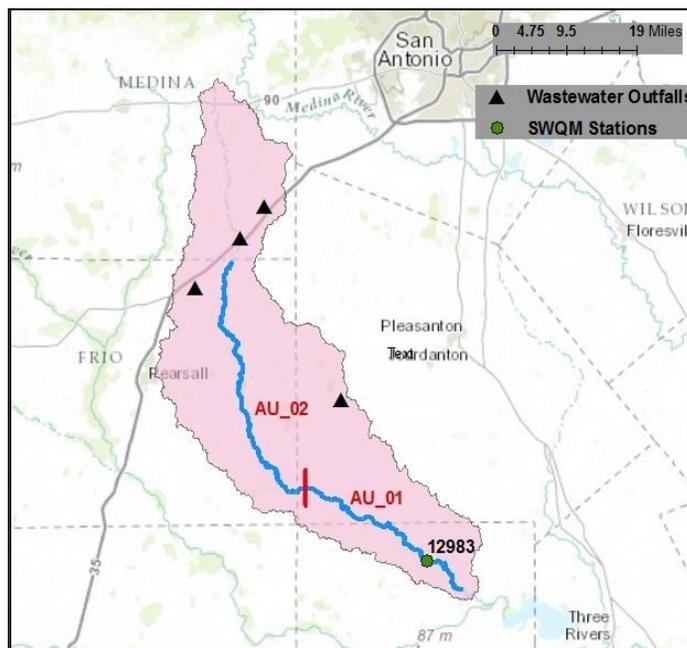
The Coastal Bend Bays Foundation has been hosting numerous public meetings with stakeholders concerned about elevated bacteria concentrations at Cole and Ropes Park along Corpus Christi Bay. An Implementation Team was formed to develop strategies aimed at reducing bacteria concentrations. The next Coordination Committee meeting will take place on July 18<sup>th</sup> at noon at Del Mar College Center for Economic Development at 3209 S. Staples Street in Corpus Christi. For more comprehensive information about the Corpus Christi Bay Beaches TMDL, including an Interim Monitoring Report, and a Historical Data Review and Site Assessment, please visit:

<http://www.tceq.texas.gov/waterquality/tmdl/97-corporbeachesbacteria.html>

### **San Miguel Recreational Use Attainability Analysis**

In 2006, San Miguel Creek (Segment 2108), which flows 66 miles from Choke Canyon Reservoir in McMullen County to the confluence of Perez Creek and Chacon Creek in Frio County was identified as being impaired for having *E. coli* bacteria concentrations that exceed state water quality standards. To address the impairment, the Texas State Soil and Water Conservation Board (TSSWCB) contracted with NRA to conduct a RUAA to confirm the degree of recreation occurring there. The project kicked off in November 2013. The first public meeting occurred on April 10<sup>th</sup> at the Pearsall Community Room in Pearsall. Site surveys are slated to occur in the summer. For more information please visit the project website.

<https://www.nueces-ra.org/SMC/>



### **Oso Creek Total Maximum Daily Load**

Since 2002, Oso Creek (Segment 2485A), which flows 28 miles to the confluence of Oso Bay in Nueces County has been identified as being impaired for having bacteria concentrations that exceed state water quality standards. Since 2003, the TCEQ and the TSSWCB have conducted studies of bacteria sources and quantities in the Oso Creek watershed. Based on the results of those studies, a TMDL for Oso Creek is being developed to address the contact recreation impairment. Staff from the Center for Coastal Studies at Texas A&M University – Corpus Christi and the Coastal Bend Bays Foundation is disseminating information to the public. A public meeting was held on May 29<sup>th</sup> to discuss the previous studies done on the creek. The next public meeting will take place on June 26<sup>th</sup> 6:00-8:00 at the South Texas Botanical Gardens and Nature Center in Corpus Christi.

### **Nueces River Watershed Partnership**

Meetings are held quarterly with the next one scheduled for July 22, 2014. Blackland Research Center will present the results of the side-scan sonar and NRA will present the results of load duration curve analysis. The Texas Water Resources Institute Texas Well Owners Network education program and upcoming workshop on August 19, 2014 will be also discussed.

Funding for the development and support of the Lower Nueces River Watershed Protection Plan (WPP) is through a Clean Water Act grant provided by the Texas State Soil and Water Conservation Board and U.S. Environmental Protection Agency.

For more information about the Lower Nueces River Watershed Partnership and the WPP, visit <http://www.nuecesriverpartnership.org> or contact Rocky Freund at (361) 653-2110 or [rfreund@nueces-ra.org](mailto:rfreund@nueces-ra.org).

Sam Sugarek  
Director of Water Quality Programs  
Nueces River Authority  
361-653-2110  
[ssugarek@nueces-ra.org](mailto:ssugarek@nueces-ra.org)