Nueces River Authority - Clean Rivers Program Steering Committee and Stakeholder Update #8 June - August 2015

August 31th, 2015

Dear Steering Committee Members and Stakeholders,

This is the eighth 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 8th Quarter (June through August 2015), NRA conducted routine monitoring at 39 station. No 24 hour dissolved oxygen monitoring occurred in the quarter. The boat ramp that NRA uses to monitor the Northern end of Lake Corpus Christi (Station ID 17384) was operational so NRA was able to grab samples this quarter. Only one site remained dry this quarter, Leona River at FM 140 near Uvalde (Station ID 18418). Nueces River at Barksdale (below) was washed clean after the spring flood. However, water clarity downstream of this site was reduced as sediment accumulated in pools and impoundments.

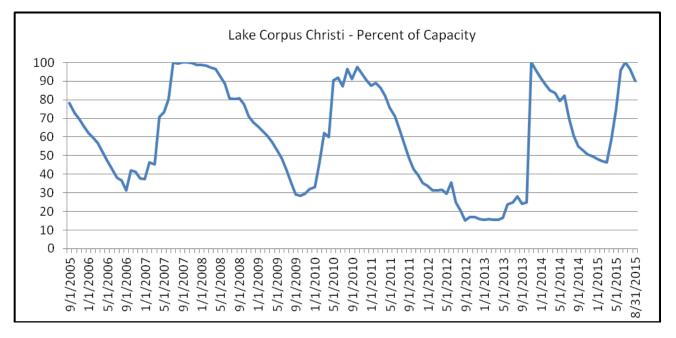


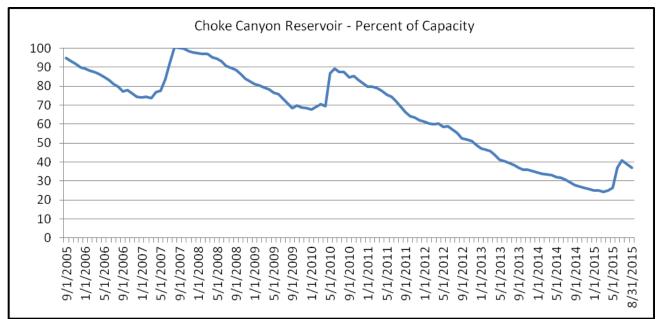
Nueces River at Highway 55 near Barksdale

Drought Status in the Nueces River Basin

The long awaited rains finally came through for the Nueces River Basin in spring but things dried up quickly this summer. At the beginning of the quarter, the combined capacity of the Reservoir System (Choke Canyon + Lake Corpus Christi) was 51.3%. By the end of August, the combined capacity of the reservoir system dropped to 42.5%. The good news is that El Niño is predicted to bring some rain this fall. For the Daily Reservoir System and Pass-Thru Status Report, please visit the website <u>https://www.nuecesra.org/CP/CITY/passthru/index.php</u>.







Petronila Creek CAMS 731 Update

Nueces River Authority has been maintaining a Continuous Water Quality Monitoring (CWQM) Station on Petronila Creek since 2007 collecting specific conductance, TDS, temperature and depth data. The site was flooded in the May 2015 rains but is back up and running thanks to the TCEQs CWQM crew that installed new electronics at the site. To view the data coming off the instrument (updated on an hourly basis), check the following website: <u>http://www.tceq.state.tx.us/cgibin/compliance/monops/water_daily_sum</u> mary.pl?cams=731



Petronila Creek Tributary Study

Petronila Creek (Segment 2204), is a stream approximately 44 miles long that flows into Alazan Bay, a small bay opening onto Baffin Bay. The creek was listed on the 2000 Texas 303(d) list of impaired water bodies for exceeding the standards for chloride (1,500 mg/l), sulfate (500 mg/l), and total dissolved solids

(TDS) (4,000 mg/l). Field investigations identified that excessive chloride, sulfate, and TDS concentrations occur in the downstream section of the creek, southeast of US 77, in an area where man-made nonpoint sources such as produced water, brine pits, and brine injection wells, related to oil and gas production, are most numerous. In support of the Implementation Plan (I-Plan) for Petronila Creek, NRA began a monthly monitoring project that examines the amount of chloride, sulfate, and TDS present in surface waters of Petronila Creek and many of the tributaries that drain into it. Field and lab data collected so far indicates



the contribution of salts to be a widespread issue. Specific conductivity values in the tributaries were as high as 40,000 umhos (salinity of 23 ppt) this summer as flow conditions return to a more normal flow range following the May 2015 floods. Sea grass (Shoal grass) is observed growing in the creek between flood events in the above tidal portion.

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 determine if the correct standard is being applied to the water body, the Texas State Soil and Water Conservation Board (TSSWCB) contracted with NRA to conduct a Recreational Use Attainability Analysis (RUAA) to determine if recreation is occurring on the



stream. The project kicked off in November 2013. Field surveys took place this summer in June and July. A public meeting to discuss the second survey results and the draft of the final report is scheduled for September 16th at 6:00pm at the Pearsall Community Room at 400 South Pecan Street in Pearsall. For more information please visit the project website. https://www.nueces-ra.org/SMC/.

Riparian for Lunch

Key riparian lessons were served up in a series of lunch hour talks that focused on the Oso Creek and the Oso bay. The talks were offered by the Nueces River Authority with funding from the Texas Clean Rivers Program and the Texas Commission on Environmental Quality. The talks were part of a summer long effort to promote riparian habitat conservation and expansion to benefit water quality in the Nueces and adjoining basins. For more information, contact Sky Lewey <u>slewey@nueces-ra.org</u>.

Wildlife Observed in the Nueces River Watershed during Q8

NRA observed a nine banded armadillo (*Dasypus novemcinctus*) left, eastern Indigo (*Drymarchon couperi*) middle, and a red-eared slider (*Trachemys scripta elegans*) right while conducting field measurements this summer.



Nueces River Watershed Partnership - Development of the Lower Nueces River Watershed Protection Plan

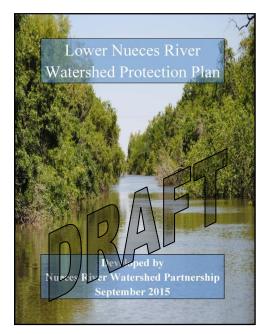
The second hyacinth aerial survey was conducted on August 17, 2015. The flooding that took place in

May and June appears to have wiped out most of the hyacinth. There were fewer, smaller, colonies than witnessed during the February survey. A survey to try and find the source above Lake Corpus Christi is planned for the summer of 2016.

The Draft Watershed Protection Plan is expected to be completed early in September. Draft chapters ready for review are available at http://www.nuecesriverpartnership.org/pubs.php.

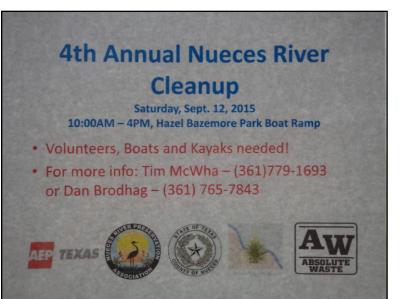
Nueces River Watershed Partnership meeting dates are posted in the 'Announcements, Meetings, and Workshops' section on our homepage, <u>http://www.nueces-ra.org</u>. For more information about the Partnership and the development of the Watershed Protection Plan, visit <u>http://www.nuecesriverpartnership.org</u> or contact Rocky

Freund at (361) 653-2110 or rfreund@nueces-ra.org.



4th Annual Nueces River Cleanup

The 4th Annual Cleanup on the Lower Nueces River (Downstream of Lake Corpus Christi) is scheduled to occur on Saturday, September 12th from 10am-4pm at Hazel Bazemore Park and Boat Ramp. The boat ramp is not in the best shape for launching large boats but folks bringing small boats, kayaks and canoes should be fine. Volunteers, boats, and kayaks are needed so if you know of anyone, please extend the invitation.



Sam Sugarek Director of Water Quality Programs Nueces River Authority 361-653-2110 ssugarek@nueces-ra.org