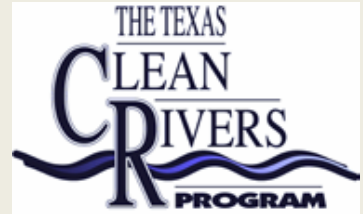




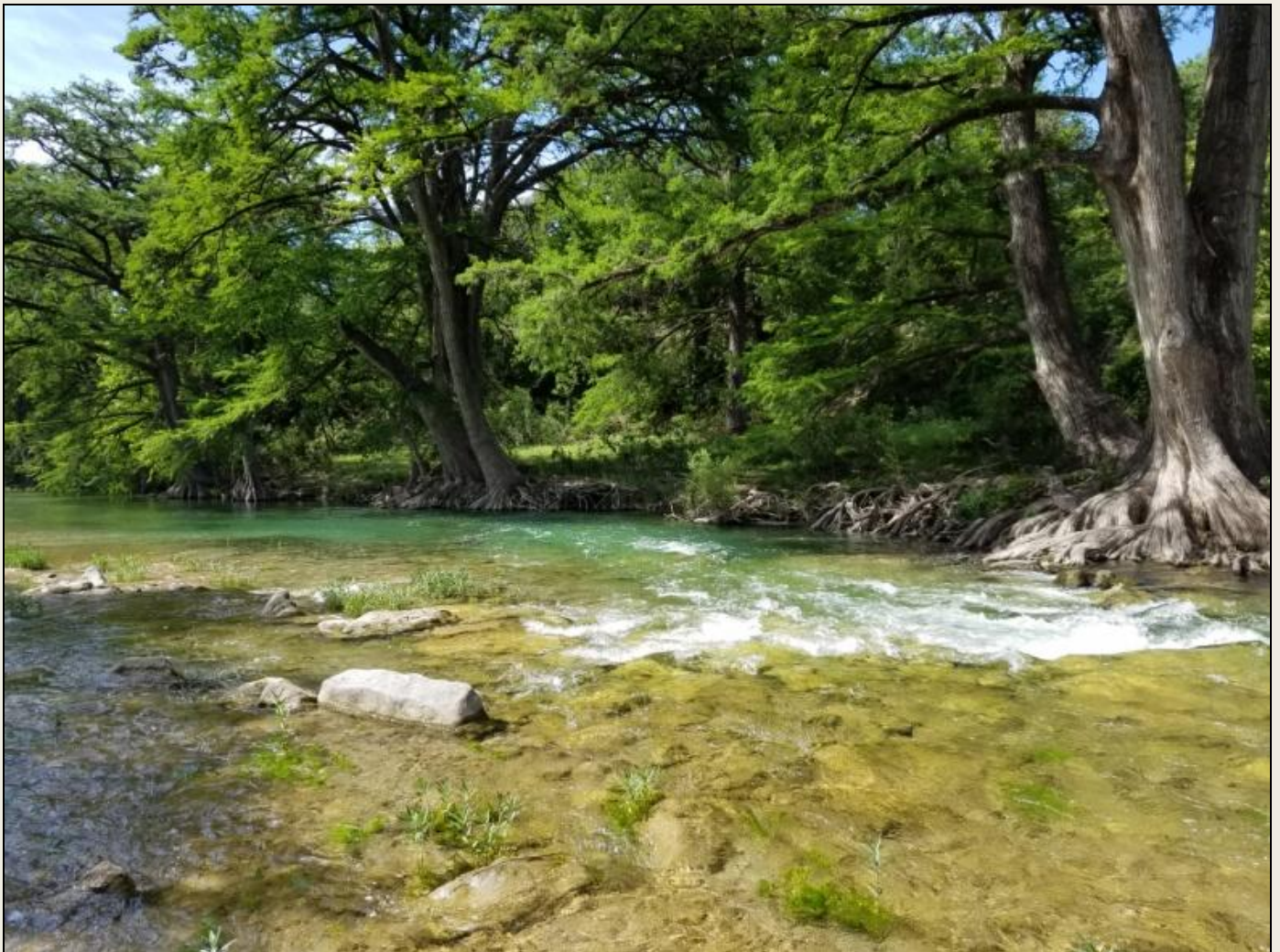
Nueces River Authority
Steering Committee and Stakeholder Update #7
(7th Quarter of FY 2016-17)
March – May 2017



June 7th, 2017

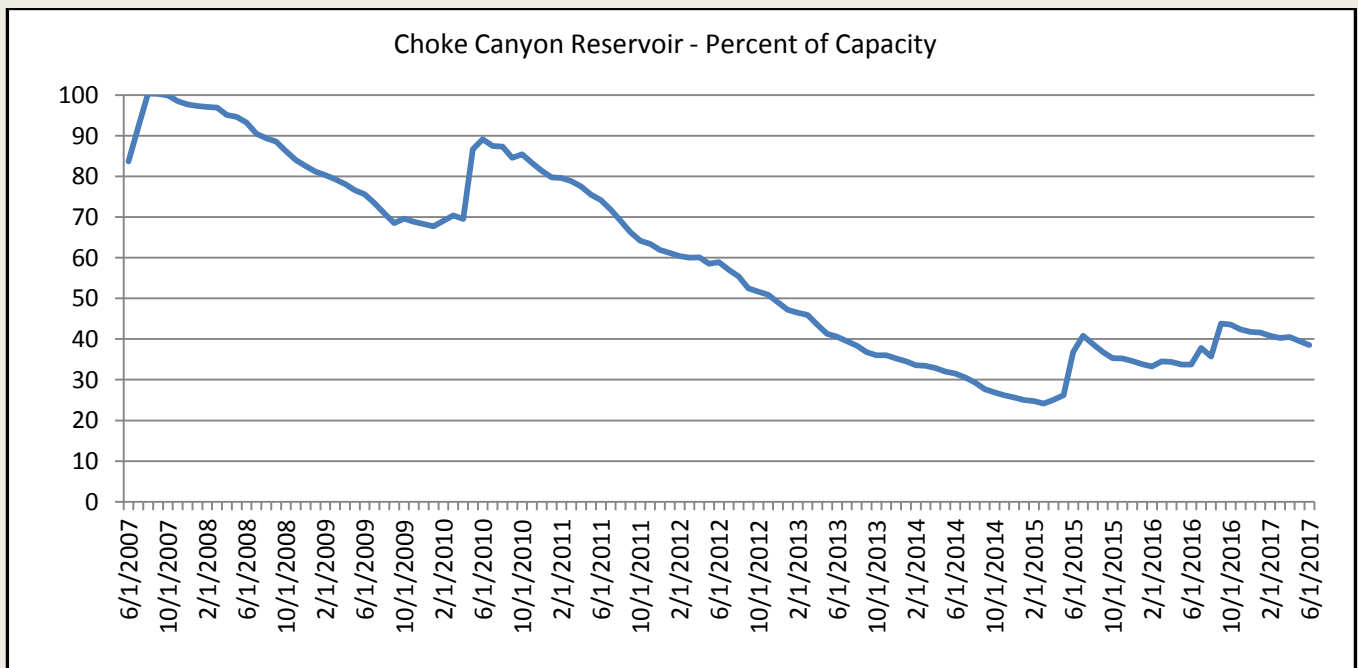
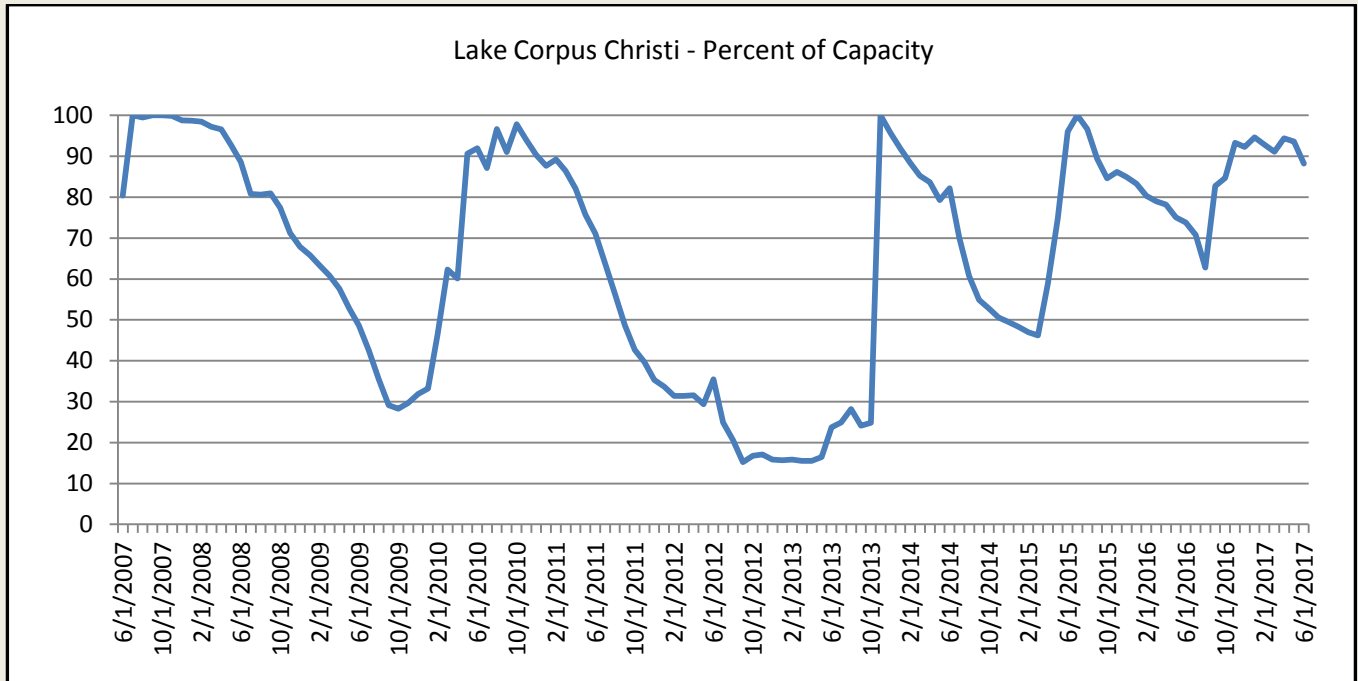
Routine Clean Rivers Program Monitoring

The Nueces River Authority conducted routine quarterly water quality monitoring at 10 coastal stations and 37 river stations during the 7th quarter. All sites were monitored including the Leona River near Uvalde which was dry for approximately 10 years. In addition to quarterly sampling, 24 hour dissolved oxygen monitoring was also conducted at the Nueces River at FM 624. NRA field staff will attempt to conduct additional 24 hour dissolved oxygen monitoring in the summer of 2017 on the Nueces River in Asherton and FM 624, on the Atascosa River at Pleasanton and McCoy, and on Aransas Creek near Skidmore.



Nueces River Basin Lake Levels

Combined capacity (Choke Canyon + Lake Corpus Christi) of the reservoir system for the 7th quarter edged down from 54.0% to 51.9% of capacity. Lake Corpus Christi ended the quarter at 88.2% of capacity and Choke Canyon Reservoir ended the quarter at 38.5% of capacity. For the Daily Reservoir System and Pass-Thru Status Report, please visit the website <https://www.nueces-ra.org/CP/CITY/passthru/index.php>.



Frio River Aquatic Life Monitoring

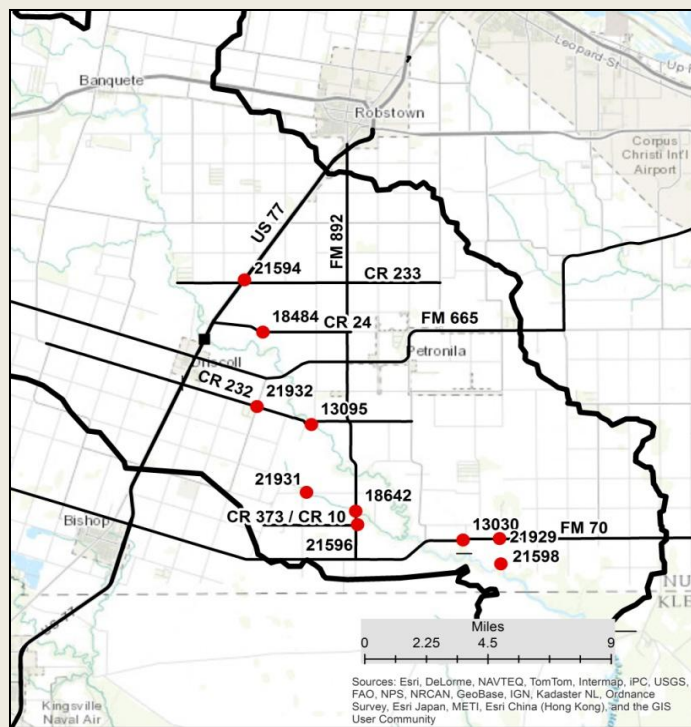
Aquatic Life Monitoring (ALM) is a type of monitoring that's used to derive baseline data on fish communities, benthic macroinvertebrate communities, and physical habitat to determine if designated or presumed aquatic life uses are being attained. An ALM sampling event occurred on the Upper Frio River (Segment 2113) in late April to address the habitat concern and for impairments for fish and benthic macroinvertebrate communities as listed in the Texas Intergrated Report. Nueces Authority Field Staff assisted TCEQs Surface Water Quality Monitoring (SWQM) team and TPWD in conducting the ALM at two locations near Garner State Park and a third location downstream of Concan. Activities included fish and aquatic invertebrate collection, habitat assessment, 24-hour dissolved oxygen data collection, and water chemistry analysis. A second ALM is tentatively scheduled for September 2017.



Petronila Creek Tributary Study

Phase 3 of the Petronila Creek Tributary Study, which analyzes chloride, sulfate, and TDS at ten sites, kicked off in October 2016. Specific conductance readings from the 7th quarter are summarized in the chart below.

Site #	Mar 2017 (µmhos)	Apr 2017 (µmhos)	May 2017 (µmhos)
21594	25,300	29,400	36,800
18484	40,700	42,000	52,400
21932	16,900	16,700	44,800
13095	10,400	14,100	22,600
21931	21,400	15,200	16,100
18642	23,000	25,200	46,800
21596	17,700	18,200	27,700
13030	7,000	30,300	43,800
21929	18,900	27,800	37,700
21598	24,200	30,500	44,200



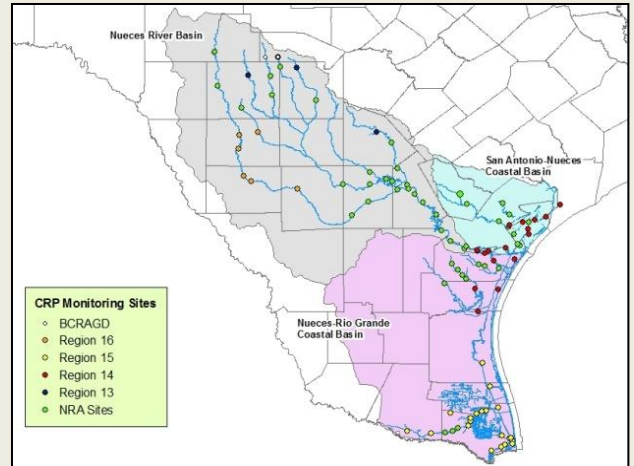
The tributaries on the lower end of Petronila Creek are routinely populated by the aquatic plant, widgeon grass (*Ruppia maritima*), which is adapted to brackish water. A high flow event usually knocks them back for a couple of months but they always return. Sites 21598, 13030, 21931, and 21596 are common locations to observe these aquatic plants.



NRA CRP Coordinated Monitoring Meeting

The Annual Clean Rivers Program (CRP)

Coordinated Monitoring Meeting was held on March 30th in Corpus Christi. Representatives from TCEQ, Texas GLO, University of Texas-Rio Grande Valley, Cameron County, City of Corpus Christi, and Bandera County River Authority and Groundwater District were all in attendance. In addition to coordinating CRP monitoring activities, the meeting also provided an overview of water quality concerns and impairments in the Nueces River Basin, Nueces-Rio Grande Coastal Basin and the San Antonio Coastal Basin. Discussions included the monitoring needs in the Rio Grande Valley and an overview of all water quality impairments and concerns in the Nueces River Basin, the San Antonio-Nueces Coastal Basin, and the Nueces-Rio Grande Coastal Basin.



Outreach and Education

It was a very busy quarter for NRA's Education and Outreach Program. Numerous springtime events including Earth Day/Bay in Corpus Christi, Medina and Jim Wells Ag Day, Education Extravaganza at Hurricane Alley, City Hall in the Mall in Corpus Christi, as well as numerous classroom visits in the middle and upper Nueces River Basin brought the quarterly outreach total to 7,635 people. For more information about outreach and education, contact slewey@nueces-ra.org.



Earth Day Litter Clean-ups

The first Earth Day was held on April 22, 1970 as an environmental teach-in to bring awareness of environmental issues to schools and communities across the United States. Since then, the annual event has spread to more than 193 countries worldwide, turning it into the largest secular holiday in the world, celebrated by more than a billion people. Earth Day 2017 in the coastal bend was honored by a number of littler clean-ups from the beaches and bays to the rivers. The Texas General Land Office hosted the 31st annual Adopt-a-Beach at 29 locations up and down the Texas Coast and the Nueces River Preservation Association hosted a river clean-up at Hazel Bazemore Park. NRA's Deputy Executive Director, Rocky Freund (pictured above), donned a pair of gloves and helped rid the Nueces River of litter at the Nueces River Preservation Association's annual clean-up.



Oso Bay 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.



You can learn more about the Oso Bay TMDL and/or the Oso Creek Watershed Public Outreach at the TCEQ project page: <http://www.tceq.texas.gov/waterquality/tmdl/67-osobaybacteria.html>;

Nueces River Watershed Partnership – Implementation of the Lower Nueces River Watershed Protection Plan (WPP)

The quarterly Nueces River Watershed Partnership Stakeholder Meeting was held on May 10, 2017 at the Hilltop Community Center in Corpus Christi. Mr. David Vickers with the San Patricio Historical Society provided the group with a brief history lesson on the Battle of the Nueces Crossing. WPP implementation updates were also discussed.

OSSF Repair and Replacement / OSSF Workshop

The Quality Assurance Project Plan for the contract has been completed and the project is in the beginning phase. An OSSF workshop is scheduled for July 29, 2017.

Pet Waste Collection Stations

Four stations have been purchased and delivered: two for Hazel Bazemore Park and two for San Patricio County parks. 500 leash bag holders have been ordered and will be distributed at future education and outreach events.

Volunteer Cleanups / Trash Collection Events

The Nueces River Preservation Association held their annual river cleanup on April 22, 2017. There was a good turnout and it was a very successful event.

Hyacinth Survey

The aerial survey of the upper end of Lake Corpus Christi and the river above the lake was conducted on May 16, 2017. The upper extent of the infestation has been identified. NRA will work with the City of Corpus Christi and Texas Parks and Wildlife Department to develop a strategy / management plan to address the hyacinth issue.

Spring Ranch Management Field Day / Feral Hog Workshop

Texas AgriLife Extension held their annual Spring Ranch Management Field Day on May 18, 2017. It was held within the Lower Nueces River Watershed on the Little Ranch in Nueces County and the Knolle Ranch in Jim Wells County. It included a presentation on "Feral Hogs in Texas: Biology, Research, and Abatement Techniques."

Riparian Workshop

Texas Water Resource Institute will conduct a day-long riparian workshop on October 3, 2017. This workshop includes an indoor classroom session in the morning and an afternoon field session.

The next steering committee meeting is scheduled for August 16, 2017, and the next stakeholder meeting is scheduled for November 1, 2017 from 2pm – 4pm at the Dougherty House in San Patricio. For more information about the Partnership and the WPP, visit <http://www.nuecesriverpartnership.org> or contact Rocky Freund at (361) 653-2110 or rfreund@nueces-ra.org.

Thank you!

Sam Sugarek

Director of Water Quality Programs

Nueces River Authority – Coastal Bend Division