

INTRODUCTION

In 1991, the Texas Legislature passed the Texas Clean Rivers Act requiring basin-wide water quality assessments to be conducted for each river basin in Texas. Under this act, CRP has developed an effective partnership involving the TCEQ, other state agencies, river authorities, local governments, industry, and citizens. Using a watershed management approach, NRA and TCEQ work together to identify and evaluate surface water quality issues and to establish priorities for corrective action. Under CRP, NRA is responsible for the San Antonio – Nueces Coastal Basin, the Nueces River Basin, the Nueces – Rio Grande Coastal Basin, and the adjacent bays and estuaries. For more information, visit NRA's website at www.nueces-ra.org.

WATERSHED PROJECT UPDATES

SAN ANTONIO – NUECES COASTAL BASIN

Copano Bay

I-Plan and TMDL for Bacteria in Tidal Portions of Mission and Aransas Rivers

Due to elevated bacteria concentrations in the Tidal portions of Mission and Aransas Rivers, the TCEQ is considering two TMDLs and an Implementation Plan for public comment. Implementation strategies and control actions found in the I-Plan include upgrading WWTFs, developing and implementing conservation plans, management of feral hog populations, reduction of illicit dumping and disposal of animal carcasses, and identifying OSSFs to bring them into compliance...

NUECES RIVER BASIN

Lower Nueces River Watershed Protection Plan

The Texas State Soil and Water Conservation Board (TSSWCB) has contracted with NRA to develop a WPP for the Lower Nueces River between Wesley Seale Dam at Lake Corpus Christi to the Saltwater Barrier Dam in Corpus Christi. The WPP will be created to protect the drinking water source for approximately a half a million people within the Coastal Bend area. Public meetings are held on a quarterly basis. For more information about the Lower Nueces River Watershed Partnership and the WPP, visit <http://www.nuecesriverpartnership.org>

Atascosa TMDL RUAA

In early 2009 the TCEQ TMDL team started a use attainability analysis (UAA) to determine the appropriate recreational and aquatic life use categories for the Atascosa River. The data for the recreational use attainability analysis (RUAA) was collected by the Texas Institute of Applied Environmental Research (TIAER) during 2009 and 2010 and the technical report has been submitted to the TCEQ Water Quality Standards group. Sampling for the aquatic life use attainability analysis

(ALUAA) began in the summer of 2010 and was completed in the fall of 2011.

San Miguel Creek RUAA

San Miguel Creek has been listed as impaired for bacteria on the State's 303(d) list since 2006. To address the impairment, NRA and TSSWCB are conducting an RUAA to determine the type of recreational uses that are occurring. NRA will be documenting the physical stream characteristics that affect recreational use and the observed historical and anecdotal recreational uses. The sampling for the project should be completed by the summer of 2014 followed by a final report.

National Rivers and Streams Assessment (NRSA)

NRSA is a comprehensive survey of all the U.S. rivers and streams designed to assess the water quality condition and to establish a baseline to evaluate progress and changes in conditions on the nation's surface waters over time. Environmental Institute of Houston staff completed NRSA sampling and submitted data to the EPA for two sites on the Nueces River. Additional samples were scheduled on the Nueces and Frio rivers but were not collected due to accessibility issues. Sample collection included water chemistry, nutrients, chlorophyll-*a*, sediment enzymes, Enterococcus, fish tissue, physical habitat characteristics, and biological assessments. The sampling for NRSA throughout the state of Texas should be completed in 2014.

Riparian Landowner Network

Arundo Donax in the Upper Basin

The Riparian Landowner's Network identified an explosive growth of *Arundo donax* on the upper Nueces, Frio, Dry Frio and Sabinal Rivers. The *Arundo* is an invasive plant that evapotranspires an enormous amount of water and inhibits riparian function while changing the native habitat. Pull Kill Plant, a landowner driven *Arundo donax* control and riparian restoration project has been underway on the upper Nueces, Frio, Sabinal and Dry Frio rivers for several years. A total of 90 stream miles are under treatment with 200 landowners participating in the project. 266 acres of *Arundo* have been treated and 2.2 million sprouting nodes have been removed from the floodplain of these pristine headwater streams. Multiple state and federal organizations have partnered with NRA to collect data, study water quality and quantity impacts. Visit <http://www.pullkillplant.org> for more information.

NUECES – RIO GRANDE COASTAL BASIN

Oso Bay/Oso Creek TMDL and I-Plan

Water quality testing found that bacteria concentrations are sometimes elevated in Oso Bay and Creek. To address the impairment, the TCEQ initiated two TMDL projects for Oso Bay and Creek for bacteria back in

2004. Since then, Texas A&M University-Corpus Christi compiled data that supported development of the TMDLs. Their work included additional monitoring, model development, analysis of microbial data, and completion of a technical report. Stakeholders are working with the TCEQ to develop and implement the TMDLs (I-Plan) to reduce bacteria concentrations.

Arroyo Colorado

Watershed Protection Plan (WPP)

The Arroyo Colorado WPP is a comprehensive watershed-based strategy to improve water quality and aquatic and riparian habitat in the Arroyo Colorado in South Texas. The Arroyo Colorado WPP is in Phase 1 of the WPP process (The implementation period for phase 1 is 2006-2015) but is considered a "living" document subject to revision and modification every 5 years. The Arroyo Colorado Watershed Partnership, which is comprised of stakeholders, has grown to over 720 members. In collaboration with the lower Rio Grande Valley TPDES Storm water Task Force and local citizens, the Arroyo Partnership installed more than 1,000 storm drains that read "No Dumping, Drains to Laguna Madre". Education and outreach activities occur on a daily basis and over 32,000 individuals have experienced the watershed model, a hands-on water quality education tool which demonstrates the impact of pollution within the watershed. Numerous agriculture and wastewater infrastructure BMPs have been implemented. For more detailed information, visit the Arroyo Colorado Partnership website at www.arroyocolorado.org.

BAYS AND ESTUARIES

Cole and Ropes Park (CARP) TMDL and IP

In 2010, data from the Texas Beach Watch Program indicated that bacteria concentrations had exceeded the State's criteria for contact recreation at Cole and Ropes Park, located in Corpus Christi Bay. To address the impairment, TCEQ developed a TMDL for Cole and Ropes Park beaches in 2013. The City of Corpus Christi, Coastal Bend Bays Foundation (CBBF), Coastal Bend Bays and Estuaries Program (CBBEP), and other stakeholders formed the Cole and Ropes Park (CARP) committee and are currently in the process of developing an Implementation Plan (IP) to improve water quality.

CBBEP Water and Sediment Quality Implementation Team

The Water and Sediment Quality Implementation Team is in the process of developing project proposals for 2015 to address Coastal Bend issues and concerns related to water and sediment quality in Nueces and Baffin Bays. Project proposals will be selected by EPA and /or TCEQ by September of 2014.

ACRONYMS

ALUAA–Aquatic Life Use Attainability Analysis
BMP– Best Management Practice
CARP–Cole and Ropes Park
CBBEP– Coastal Bend Bays and Estuary Program
CBBF–Coastal Bend Bays Foundation
CRP– Clean Rivers Program
EAA–Edwards Aquifer Authority
EPA– Environmental Protection Agency
I-Plan–Implementation Plan
NRA– Nueces River Authority
NRSA– National Rivers and Streams Assessment
OSSF–On Site Sewage Facilities
RUAA– Recreational Use Attainability Analysis
TAMU– CC-Texas A&M University–Corpus Christi
TCEQ– Texas Commission on Environmental Quality
TIAER– Texas Institute of Applied Environmental Research
TMDL– Total Maximum Daily Load
TPDES– Texas Pollutant Discharge Elimination System
TPWD–Texas Parks and Wildlife Department
TSSWCB– Texas State Soil and Water Conservation Board
UAA – Use Attainability Assessment
USFWS–United States Fish and Wildlife Service
USGS–United States Geological Survey
WPP– Watershed Protection Plan
WWTF– Waste Water Treatment Facility



2014 Basin Highlights Report

San Antonio – Nueces Coastal Basin

Nueces River Basin

Nueces – Rio Grande Coastal Basin

Prepared in Cooperation
with the



Texas Commission on Environmental Quality



Nueces River Authority

