La Nana Bayou Watershed Protection Plan

Draft Chapter 8 – Implementation Resources

Introduction

This chapter identifies potential technical and financial assistance sources available to implement management measures in the La Nana Bayou watershed. Grant funding will be a substantial source of implementation funding given the type and variety of needs identified. Funding support for a local watershed coordinator to guide WPP implementation and facilitate long-term success of the plan is also critical and will be sought through grant opportunities.

Technical Assistance

Designing, planning, and implementing many management recommendations in the plan will require technical expertise. In these cases, appropriate technical support will be sought. Funding required to secure needed expertise will be included as appropriate in requests for specific projects. Potential technical assistance sources for each management measure are listed below (Table 1).

Table 1. Summary of potential sources of technical assistance.

Technical Assistance	
Management Measure (MM)	Potential Sources
MM1: Mitigate Urban Stormwater Runoff Issues	City, AgriLife Extension, TAMFS
MM2: Promote the Development of Water Quality	SWCD, NRCS, County, AgriLife Extension
Management Plans or Conservation Plans	
MM3: Technical Assistance for Urban Waterfowl	City, County, TPWD and other state agencies,
Management	wildlife protection groups
MM4: Promote BMPs for Managing Feral Hog	County, AgriLife Extension, ANRA, TPWD
Populations	
MM5: Promote Proper Disposal of Pet Waste in	City, County, ANRA, AgriLife Extension
Urban Areas	
MM6: Identify, Inspect, and Remediate Failing On-Site	County, designated representatives, AgriLife
Sewage Facilities	Extension
MM7: Reduce Illegal Dumping and Litter	City, County, ANRA
MM8: Work with Area Schools to Develop Water	Nacogdoches ISD, TEA, ANRA, SFASU, other
Quality and Conservation Programs for K-12 Students	Texas educational institutions, TWRI

MM9: Continue and Expand Water Quality	ANRA, SFASU
Monitoring Along La Nana Bayou and Banita Creek	

Waste Management

Pet Waste

Limited technical assistance is available to directly address pet waste. City public works departments, homeowner associations and other entities as appropriate will be relied upon to identify viable sites for additional pet waste stations. These entities may also be able to provide operation and maintenance of current and future pet waste collection sites. Educational materials can be provided to cities and counties through AgriLife Extension and ANRA.

Reduce Illicit Dumping

Efforts to reduce illicit dumping will focus on education and outreach in conjunction with hazardous waste collection events throughout the watershed. AgriLife Extension and the ANRA will provide technical assistance with education and outreach efforts. County law enforcement and TPWD game wardens are the primary source for enforcement and monitoring activities associated with illicit dumping. The cities and counties, in concert with the ANRA, will continue efforts to secure funding support for cleanups and trash collection locations.

OSSF Remediation

Identifying failing OSSFs requires trained personnel and available time. County designated representatives or septic service providers can provide expertise and help identify systems in need of repairs or replacement. Technical support is also needed to help secure funding for large scale programs to repair or replace failing OSSFs. Education and outreach content for OSSF owners is also technical in nature and requires trained personnel. Texas A&M AgriLife Extension Service personnel can provide these educational resources.

Stormwater Runoff

Urban stormwater infrastructure and stormwater management efforts can benefit from technical assistance provided through education programs, BMP demonstrations, and public or privately funded projects. Practice demonstrations provide physical teaching tools and allow decision makers to see how practices look and function. This is especially useful for encouraging green stormwater infrastructure in areas where traditional practices are common. The ANRA, AgriLife Extension, and TAMFS will coordinate with city and county officials to develop and implement demonstration sites and full-scale projects as needed. Technical assistance with education and outreach programming is available through AgriLife Extension and the TAMFS. Structural projects may need engineering designs and should be integrated into the costs of the projects.

Wildlife & Invasive Species

Watershed stakeholders can benefit from technical assistance regarding white-tailed deer and feral hog control approaches, options, best practices, and regulations. AgriLife Extension and TPWD can provide educational resources through local programs and public events. Online resources regarding feral hog

trap and transport regulations, trap construction and design, and trapping techniques are also available at: http://feralhogs.tamu.edu/.

Livestock Management

Technical assistance to develop and implement practices to improve livestock management is available from TSSWCB, SWCD, AgriLife Extension and county agencies. Interested producers must request planning assistance and these agencies will work with the producer to define operation-specific management goals and objectives and develop a management plan that prescribes effective practices that will achieve stated goals while also improving water quality.

Technical Resource Descriptions

Texas A&M AgriLife Extension

AgriLife Extension is a statewide outreach education agency with offices in every county of the state. AgriLife Extension provides a network of professional educators, volunteers, and local county extension agents. AgriLife Extension will be consulted to develop and deliver education programs, workshops, and materials as needed.

County or City Designated Representatives

OSSF construction or replacement in Duval, Jim Wells, Kleberg, and Nueces counties requires a permit on file with local authorized agents. Permits must be applied for through a TCEQ licensed professional installer. The county or city's designated representative is responsible for approving or denying permits. Site evaluations must be done by a TCEQ licensed Site & Soil Evaluator, licensed maintenance provider or licensed professional installer.

Natural Resources Conservation Service

The USDA NRCS provides conservation planning and technical assistance to private landowners. For decades, private landowners have voluntarily worked with NRCS personnel to prevent erosion, improve water quality, and promote sustainable agriculture. Assistance is available to help landowners maintain and improve private lands, implement improved land management technologies, protect water quality and quantity, improve wildlife and fish habitat and enhance recreational opportunities. Local NRCS service centers are located in Nacogdoches and Lufkin.

Angelina & Neches River Authority

ANRA provides valuable assistance in all or parts of 17 counties located in the Angelina and Neches River Basins in east Texas. ANRA provides routine water quality monitoring data to the state's database, administers water quality related environmental programs, permit compliance monitoring, an industrial pretreatment program, and provides WWTP operation expertise. ANRA will be a primary source of water quality data and environmental technical assistance across the watershed.

Soil and Water Conservation Boards

A SWCD, like a county or school district, is a subdivision of the state government. SWCDs are administered by a board of five directors who are elected by their fellow landowners. There are 216 individual SWCDs organized in Texas. It is through this conservation partnership that local SWCDs can

furnish technical assistance to farmers and ranchers for the preparation of a complete soil and water conservation plan to meet each land unit's specific capabilities and needs. The local SWCD is the Nacogdoches SWCD at 1122 N University Dr. Ste B.

Texas Commission on Environmental Quality

The TCEQ offers a variety of programming and personnel resources that can provide technical support for WPP Implementation. TCEQ's Sanitary Sewer Overflow Initiative is a voluntary program for permitted WWTFs and municipalities. Through the initiative, an SSO Plan is developed outlining the causes of SSOs, mitigative and corrective actions, and a timeline for implementation. Assistance for SSO planning and participation in the SSO Initiative is available through the TCEQ Regional Office (Region 10, Beaumont) and the TCEQ Small Business and Environmental Assistance Division.

TCEQ Regional Offices also provide resources and expertise for environmental monitoring activities, investigating compliance at permitted facilities and responding to complaints, developing enforcement actions for violations, and performing environmental education and technical assistance for communities as needed. Regional offices also respond to environmental emergencies (disasters, spills, etc.) and evaluate public exposure to hazardous materials.

Texas Parks and Wildlife Department

The TPWD's Private Land Services is a program to provide landowners with practical information on ways to manage wildlife resources that are consistent with other land use goals, to ensure plant and animal diversity, to provide aesthetic and economic benefits and to conserve soil, water, and related natural resources. TPWD offers assistance in developing property-specific wildlife habitat management plans and can aid in tracking the expected water quality improvements. Additionally, TPWD offers a habitat management workshop through their regional biologists. To participate, landowners may request assistance by contacting the TPWD district serving their county.

Texas State Soil and Water Conservation Board

The TSSWCB supports the operation of local SWCDs and leads the WQMP Program by providing technical assistance for developing management and conservation plans at no charge to agricultural producers. A visit with the local SWCD offices is the first step for operators to begin the plan development process.

Clean Coast Texas

CCT is a website and technical information repository developed by the Texas General Land Office and members of the Texas Coastal Nonpoint Source Pollution Program that aims to address the negative impacts of urban development in Gulf Coast communities. Technical manuals are available on subjects such as sustainable stormwater, low-impact development, and green infrastructure. Elected officials, builders, engineers and homeowners are encouraged to utilize the free resources provided. The CCT program may be used as a reference for development and implementation of regulatory or incentivized stormwater management strategies to be adopted at the local government and organizational level.

Harte Research Institute for Gulf of Mexico Studies

The Harte Research Institute for Gulf of Mexico Studies at Texas A&M University Corpus Christi created a regional effort called the Regional Resilience Partnership. Their overall mission is to mitigate disaster risk and increase community resilience in the Texas Coastal Bend. With funding from the Economic Development Administration, the group is building an open-source GIS platform called GeoRED. The platform will integrate datasets of physical structures with layers representative of hazards so that the public may better assess risks in counties along the Texas coast.

Financial Resources Descriptions

Successful WPP implementation will require substantial fiscal resources. Diverse funding sources will be sought to meet these needs. Resources will be leveraged where possible to extend the impacts of acquired and contributed implementation funds.

Grant funds will be relied upon to initiate implementation efforts. Existing state and federal programs will also be expanded or leveraged with acquired funding to further implementation impacts. Grant funds are not a sustainable source of financial assistance but are necessary to assist in WPP implementation. Other sources of funding will be utilized, and creative funding approaches will be sought where appropriate. Sources of funding that are applicable to this WPP will be sought as appropriate and are described in this chapter.

Federal Sources

Clean Water Act §319(h) Nonpoint Source Grant Program

The EPA provides grant funding to the State of Texas to implement projects that reduce NPS pollution through the §319(h) Nonpoint Source Grant Program. These grants are administered by TCEQ and TSSWCB. WPPs that satisfy the nine key elements of successful watershed-based plans are eligible for funding though this program. To be eligible for funding, implementation measures must be included in the accepted WPP and meet other program rules. Some commonly funded items include but are not limited to:

- Development and delivery of education programs
- Water quality monitoring
- OSSF repairs and replacements
- BMP installation and demonstrations
- Waterbody cleanup events

Further information can be found at: https://www.tceq.texas.gov/waterquality/nonpoint-source-grants/grant-pgm.html and https://www.tsswcb.texas.gov/programs/texas-nonpoint-source-management-program

Conservation Stewardship Program

The Conservation Stewardship Program (CSP) is a voluntary conservation program administered by the USDA NRCS that encourages producers to address resource concerns in a comprehensive manner by undertaking additional conservation activities and improving, maintaining, and managing existing conservation activities. The program is available for private agricultural lands including cropland, grassland, prairie land, improved pasture, and rangeland. CSP encourages landowners and stewards to improve conservation activities on their land by installing and adopting additional conservation practices including, but not limited to, prescribed grazing, nutrient management planning, precision nutrient application, manure application, and integrated pest management. Program information can be found at:

https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/csp/

Conservation Reserve Program

The Conservation Reserve Program is a voluntary program for agricultural landowners administered by the USDA Farm Service Agency. Individuals may receive annual rental payments to establish long-term, resource conserving covers on environmentally sensitive land. The goal of the program is to reduce runoff and sedimentation to protect and improve lakes, rivers, ponds, and streams. Financial assistance covering up to 50% of the costs to establish approved conservation practices, enrollment payments, and performance payments are available through the program. Information on the program is available at:

https://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index

Environmental Quality Incentives Program (EQIP)

USDA NRCS operates the EQIP which is a voluntary program that provides financial and technical assistance to agricultural producers through contracts up to a maximum term of 10 years. These contracts provide financial assistance to help plan and implement conservation practices that address natural resource concerns and provides opportunities to improve soil, water, plant, animal, air, and related resources on agricultural land and non-industrial private forestland. Individuals engaged in livestock or agricultural production on eligible land are permitted to participate in EQIP. Practices selected address natural resource concerns and are subject to the NRCS technical standards adapted for local conditions. They also must be approved by the local SWCD. Local work groups are formed to provide recommendations to the USDA NRCS that advise the agency on allocations of EQIP county-based funds and identify local resource concerns. Watershed stakeholders are strongly encouraged to participate in their local work group to promote the objectives of this WPP with the resource concerns and conservation priorities of EQIP. Information regarding EQIP can be found at:

https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/

National Water Quality Initiative

The National Water Quality Initiative (NWQI) is administered by the NRCS, and is a partnership between the NRCS, state water quality agencies, and the EPA to identify and address priority impaired water bodies through voluntary conservation. Conservation systems include practices to promote soil health,

reduce erosion and nutrient runoff. Further information is available at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/water/?cid=stelprdb1047761

Regional Conservation Partnership Program

The Regional Conservation Partnership Program (RCPP) is a comprehensive, and flexible program that uses partnerships to stretch and multiply conservation investments and reach conservation goals on a regional or watershed scale. Through the RCPP and NRCS, state, local and regional partners coordinate resources to help producers install and maintain conservation activities in selected project areas. Partners leverage RCPP funding in project areas and report on the benefits achieved. Information regarding RCPP can be found at:

https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/rcpp/

Rural Development Water & Environmental Programs

USDA Rural Development provides grants and low interest loans to rural communities for potable water and wastewater system construction, repair, or rehabilitation. Funding options include:

- Rural Repair and Rehabilitation Loans and Grants: provides assistance to make repairs to low-income homeowners' housing to improve or remove health and safety hazards.
- Technical Assistance and Training Grants for Rural Waste Systems: provides grants to non-profit organizations that offer technical assistance and training for water delivery and waste disposal.
- Water and Waste Disposal Direct Loans and Grants: assists in developing water and waste disposal systems in rural communities with populations less than 10,000 individuals.

More information about the Rural Development Program can be found at:

https://www.rd.usda.gov/programs-services/water-environmental-programs

Urban Water Small Grants Program

The objective of the Urban Waters Small Grants Program, administered by the EPA, is to fund projects that will foster a comprehensive understanding of local urban water issues, identify and address these issues at the local level, and educate and empower the community. In particular, the Urban Waters Small Grants Program seeks to help restore and protect urban water quality and revitalize adjacent neighborhoods by engaging communities in activities that increase their connection to, understanding of, and stewardship of local urban waterways.

More information about the Urban Waters Small Grants Program can be found at:

https://www.epa.gov/urbanwaters/urban-waters-small-grants

State Sources

Clean Rivers Program

The TCEQ administers the Texas CRP, a state fee-funded program that provides surface water quality monitoring, assessment and public outreach. Allocations are made to 15 partner agencies (primarily river authorities) throughout the state to assist in routine monitoring efforts, special studies, and

outreach efforts. ANRA is the partner for the La Nana Bayou watershed. The program supports water quality monitoring, annual water quality assessments, and engages stakeholders in addressing water quality concerns in the La Nana Bayou watershed.

More information about the ANRA CRP is available at:

https://www.anra.org/divisions/water_quality/crp/index.html

Clean Water State Revolving Fund

The Clean Water State Revolving Fund (CWSRF), authorized through the CWA and administered by the Texas Water Development Board (TWDB), provides low-interest loans to local governments and service providers for infrastructure projects that include stormwater BMPs, WWTFs and collection systems. The loans can spread project costs over a repayment period of up to 20 years. Repayments are cycled back into the fund and used to pay for additional projects. Through 2020, the program has committed approximately \$10 billion for projects across Texas. More information on CWSRF is available at:

http://www.twdb.texas.gov/financial/programs/CWSRF/

Landowner Incentive Program

TPWD administers the Landowner Incentive Program (LIP) for private landowners to implement conservation practices that benefit healthy aquatic and terrestrial ecosystems and create, restore, protect or enhance habitat for rare or at-risk species. The program provides financial assistance but does require the landowner to contribute through labor, materials or other means. Further information about this program is available at:

https://tpwd.texas.gov/landwater/land/private/lip/

Supplemental Environmental Projects

The Supplemental Environmental Program (SEP) program, administered by TCEQ, directs fines, fees and penalties for environmental violations toward environmentally beneficial uses. Through this program, a respondent in an enforcement matter can choose to invest penalty dollars to improve the environment, rather than paying into the Texas General Revenue Fund. Program dollars may be directed to OSSF repair, trash clean up and wildlife habitat restoration or improvement, among other things. Program dollars may be directed to entities for single, one-time projects that require special approval from TCEQ or directed entities (such as Resource Conservation and Development Councils) with pre-approved "umbrella" projects. Further information about SEP is available at:

https://www.tceq.texas.gov/compliance/enforcement/sep/sep-main

Texas Farm and Ranch Lands Conservation Program

The Texas Farm and Ranch Lands Conservation Program was established and is administered by TPWD to conserve high value working lands to protect water, fish, wildlife and agricultural production that are at risk of future development. The program's goal is to educate citizens on land resource stewardship and establish conservation easements to reduce land fragmentation and loss of agricultural production. Program information is available from TPWD at:

https://tpwd.texas.gov/landwater/land/private/farm-and-ranch/

Other Sources

Private foundations, non-profit organizations, land trusts and individuals can potentially assist with implementing some aspects of the WPP. Funding eligibility requirements for each program should be reviewed before applying to ensure applicability. Some groups that may be able to provide funding include but are not limited to:

- Cynthia and George Mitchell Foundation: Provides grants for water and land conservation programs to support sustainable protection and conservation of Texas' land and water resources.
- Dixon Water Foundation: Provides grants to non-profit organizations to assist in improving/maintaining watershed health through sustainable land management.
- Meadows Foundation: Provides grants to non-profit organizations, agencies and universities engaged in protecting water quality and promoting land conservation practices to maintain water quality and water availability on private lands.
- Partnerships with local industry in the watershed could also provide in-kind donations or additional funding for implementation projects.
- Texas Agricultural Land Trust: Funding provided by the trust assists in establishing conservation easements for enrolled lands.