

Chapter 8: Resources to Implement the Watershed Protection Plan

The Bois d’Arc Lake watershed is a largely rural watershed with limited resources available for the implementation of the management measures identified by stakeholders. This chapter identifies the potential sources of technical and financial assistance available to maximize the implementation of management measures. Grant funding will likely be a substantial source of implementation funding given the availability of resources identified thus far. In addition to funding management measures, it is recommended that funds be identified and developed to hire a local watershed coordinator to guide WPP implementation and facilitate long-term success of the plan.

Technical Assistance

Designing, planning and implementing some of the management recommendations in the plan will require technical expertise. In these cases, appropriate support will be sought to provide needed technical guidance. Funds required to secure needed expertise will be included in requests for specific projects and may come from a variety of sources. Table 37 provides a summary of the potential sources of technical assistance for each management measure.

Table 37. Summary of potential sources of technical assistance

Technical Assistance	
Management Measure	Potential Sources
MM1: Promote and implement WQMPs or conservation plans	AgriLife Extension; NRCS; TSSWCB; local SWCDs
MM2: Promote technical and operational assistance to landowners for feral hog control	AgriLife Extension; NRCS; TPWD; TSSWCB; local SWCDs
MM3: Identify, inspect and repair or replace failing on-site sewage systems	AgriLife Extension; Fannin County Environmental Development Department – Septic Systems and designated representative
MM4: Reduce the amount of pet waste mixing into water bodies	City public works departments; AgriLife Extension
MM5: Implement and expand urban and impervious surface stormwater runoff management	City public works departments; Engineering firms; AgriLife Extension
MM6: Identify potential wastewater conveyance system failure and prioritize system repairs or replacement	WWTF operating entities; City public works departments; Contractors; Consulting engineers
MM7: Reduce illicit and illegal dumping	AgriLife Extension; County law enforcement; TPWD game wardens
MM8: Volunteer monitoring on other streams in the watershed	Texas Stream Team, NTMWD
MM9: Conduct soil testing for both agriculture and urban areas	AgriLife Extension, NTMWD, Counties
MM10: Conduct old and new landowner education workshop	AgriLife Extension, NTMWD, Counties

Livestock Management

Developing and implementing practices to improve livestock management will require significant technical assistance from TSSWCB, local SWCDs, AgriLife Extension and local NRCS personnel. Producers requesting planning assistance in the watershed will work with these entities 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.

Feral Hog Management

Watershed stakeholders will benefit from technical assistance regarding feral hog control approaches, options, best practices and regulations. AgriLife Extension and TPWD provide educational resources through local programs and public events. Technical resources regarding trap and transport regulations, trap construction and design, exclusion fencing construction, and other related feral hog resources are available through AgriLife Extension as publications and videos for homeowners: <https://feralhogs.tamu.edu/>.

OSSF Management

Technical support is needed to address failing OSSFs throughout Fannin County. Technical assistance will be sought from respective county-designated representatives and permitting offices in prospective OSSF program design, funding acquisition, identification of potential participants and publicizing of program availability as funds become available. Technical assistance for education and outreach will be provided through AgriLife Extension.

Pet Waste

Limited technical assistance is available to directly address pet waste. City public works and parks departments will be relied upon to identify appropriate sites. Technical assistance for educational materials will be provided through AgriLife Extension.

Urban Stormwater

Limited technical assistance is available to address urban stormwater in these largely rural watersheds. City public works staff will be relied upon to identify potential projects and sites. For structural projects, engineering designs may be needed and will be integrated into the costs of the projects. Technical assistance with education and outreach is available through AgriLife Extension.

Centralized Wastewater

Technical assistance needs for addressing inflow and infiltration issues within wastewater collection systems will vary depending on the capacity to perform needed tasks within each entity. Collection system inspections using smoke testing or autonomous video technology and making needed repairs may require contractors to conduct or consulting engineers to design these projects.

Illicit Dumping

Efforts to reduce illicit dumping will focus on education and outreach. AgriLife Extension will provide technical assistance with education and outreach efforts. County law enforcement and TPWD game wardens are the primary source of enforcement and monitoring activities associated with illicit dumping.

Volunteer Monitoring

NTMWD will assist, as funding allows, in coordinating the establishment of a volunteer monitoring program with the TST and citizens in the watershed. The TST will train citizen scientists to collect and submit water quality monitoring data and provide information on the purchase of the necessary monitoring kits.

Soil Testing

Soil testing efforts will focus on education and outreach. AgriLife Extension will provide technical assistance with developing and delivering educational and outreach materials to landowners in the watershed.

Small Landowner Education

AgriLife Extension will provide technical assistance with developing and delivering educational and outreach materials to new or small landowners in the watershed.

Technical Resource Descriptions

AgriLife Extension

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

Engineering Firms

Private firms provide consulting, engineering and design services. The technical expertise provided by firms may be required for urban BMP design. Funding for services will be identified and written into project budgets as required.

Fannin County Designated Representative

OSSF construction or replacement in Fannin County requires a permit to be filed with Fannin County. Permits must be applied for through a TCEQ licensed professional installer. The County Designated Representative is responsible for approving or denying permits. Site evaluations in Fannin County must be done by a TCEQ licensed Site & Soil Evaluator, licensed maintenance provider or licensed professional installer.

Fannin County Environmental Development Department -Septic Permits

As an authorized agent of TCEQ, Fannin County is responsible for implementing and enforcing rules pertaining to OSSFs under the Texas Health and Safety Code and Texas Administrative Code. These codes establish minimum standards for the planning, permitting, construction and maintenance of OSSFs.

Municipal Public Works Departments

The respective public works departments of the City of Bonham and Honey Grove are responsible for the management of city street, utility and open space infrastructure. Implementation of stormwater BMPs and dog waste stations will require coordination and assistance from public works departments from each city.

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 specialists to prevent erosion, improve water quality and promote sustainable agriculture. Assistance is available to help landowners (1) maintain and improve private lands, (2) implement improved land management technologies, (3) protect water quality and quantity, (4) improve wildlife and fish habitat, and (5) enhance recreational opportunities. The local NRCS service center is located in Bonham.

Soil and Water Conservation Districts

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 are able to 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 Fannin County SWCD #520.

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 also consistent with other land use goals, to ensure plant and animal diversity, provide aesthetic and economic benefits, and conserve soil, water and related natural resources. To participate, landowners may request assistance by contacting the TPWD district serving their county.

Texas State Soil and Water Conservation Board

The TSSWCB WQMP Program provides technical assistance for developing management and conservation plans at no charge to agricultural producers. A visit with the local Fannin County SWCD office is the first step for operators to begin the plan development process. The Fannin County Office administers the TSSWCB WQMP program in Fannin County.

Texas Stream Team

The Texas Stream Team program provides training and information on necessary equipment to citizen scientists to develop volunteer water quality monitoring programs in their local area. Texas Stream Team is housed at the Meadows Center for Water and the Environment at Texas State University. To partner with TST, citizens or entities can fill out the following form on their website:

<https://www.meadowscenter.txstate.edu/Leadership/TexasStreamTeam/Partners/PartnerForm.html>

Financial Resource Descriptions

Successful implementation of the Bois d'Arc Lake WPP, as written, will require substantial fiscal resources. Diverse funding will be sought to meet these needs. Resources will be leveraged where possible to extend the impacts of acquired and contributed implementation funds.

Many landowners are already engaged in implementing the WPP through the development and implementation of WQMPs and installation of other conservation practices through Farm Bill-funded programs such as USDA NRCS Environmental Quality Incentive Program (EQIP). The continued funding support from federal and state governments will provide a large portion of funds needed to implement this WPP.

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 activities. Grant funds are not a sustainable source of financial assistance but are necessary to assist in WPP implementation. Other sources of funding will be used, and creative funding approaches will be sought where appropriate. Appropriate funding sources applicable to this WPP will be sought and are described in this chapter.

Federal Funding 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 nonpoint source pollution through the §319(h) Nonpoint Source Grant Program. These grants are administered by TCEQ and TSSWCB in Texas. WPPs that satisfy the nine key elements of successful watershed-based plans are eligible for funding through 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:

- Development and delivery of educational programs
- Water quality monitoring
- OSSF repairs and replacements, land BMPs, water body clean-up events, and others

Further information can be found at:

<https://www.tceq.texas.gov/waterquality/nonpoint-source/grants> and

<https://www.tsswcb.texas.gov/programs/texas-nonpoint-source-management-program>.

Environmental Education Grants

Under the Environmental Education Grant Program, EPA seeks grant proposals from eligible applicants to support environmental education projects that promote environmental stewardship and help develop knowledgeable and responsible students, teachers, and citizens. This grant program provides financial support for projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques as described in the Environmental Education Grant Program solicitation notices.

Environmental Quality Incentives Program (EQIP)

USDA-NRCS operates a voluntary conservation program, the EQIP, which provides assistance to farmers and ranchers to address natural resource concerns by implementing activities to improve soil, water, plant, animal, air, and other resources associated with agricultural land. An EQIP contract extends up to 10 years, which provides financial and technical assistance for planning and implementing prescribed conservation practices. EQIP participants includes individuals engaged in livestock or agricultural production on eligible land. Selected practices 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/detail/tx/programs/financial/eqip/?cid=nrcs144p2_002597

Conservation Stewardship Program (CSP)

USDA-NRCS administers a voluntary conservation program known as Conservation Stewardship Program (CSP) that encourages producers to address resource concerns in a comprehensive manner by adding, maintaining, improving, and managing 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. Practices may include, but are not limited to, prescribed grazing, nutrient management planning, precision nutrient application, manure application, and integrated pest management.

Program information can be found at:

<http://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 (FSA). 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: <http://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index>.

Contact the Fannin County FSA office for more information on this and other programs or to enroll: (903) 583-9513 ext 2

National Integrated Water Quality Program (NIWQP)

The NIWQP, administered by the USDA, provides funding for research, education, and extension projects aimed at improving water quality in agricultural and rural watershed, and has identified eight themes that are being promoted: (1) animal manure and waste management, (2) drinking water and human health, (3) environmental restoration, (4) nutrient and pesticide management, (5) pollution assessment and prevention, (6) watershed management, (7) water conservation and agricultural water management, and (8) water policy and economics. Awards are made in four program areas – National Projects, Regional Coordination Projects, and Extension Education Projects. It is important to note that funding from this program is only available to universities.

More information is available at: <https://nifa.usda.gov/national-integrated-water-quality-program-frequently-asked-questions>.

National Water Quality Initiative (NWQI)

The NWQI is administered by the NRCS, and is a partnership between the NRCS, state water quality agencies, and the EPA to identify and address 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/programs/initiatives/?cid=stelprdb1047761>.

State Funding Sources

Clean Rivers Program (CRP)

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. The RRA is CRP partner for the Bois d’Arc Lake watershed. The program supports water quality monitoring and annual water quality assessments and engages stakeholders in addressing water quality concerns in the Red River Basin.

More information about the Clean Rivers Program is available at:

<http://www.rra.texas.gov/>.

Clean Water State Revolving Fund (CWSRF)

The TWDB provides low-cost financing for a variety of wastewater, stormwater, reuse, and other pollution control projects. Political subdivisions and private entities are eligible to apply for loans at lower than market rates to plan, design, acquire or construct projects. 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.

More information on CWSRF is available at:

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

Landowner Incentive Program

Landowner Intensive Program, administered by TPWD, work with private landowners to implement conservation practices that benefit healthy aquatic and terrestrial ecosystem. The program provides financial assistance but does not require the landowner to contribute through labor, materials, or other means.

Further information about this program is available at:

<http://tpwd.texas.gov/landwater/land/private/lip>.

Supplemental Environmental Projects (SEP)

SEP program is administered by TCEQ, which is responsible for directing fines, fees, and penalties for environmental violations to reduce environmental pollution. Through this program, a respondent in an enforcement matter can choose to invest penalty dollars in improving the environment, rather than paying into the Texas General Revenue Fund. Improvement activities such as OSSF repair, trash dump clean-up, and wildlife habitat restoration can be directed by program dollars. Some pre-approved SEP

projects eligible in the watershed are cleanup of unauthorized dumpsites, household hazardous waste collection and wastewater treatment assistance (repair or replace failing OSSFs).

Further information about SEPs and how to apply can be found at:

<https://www.tceq.texas.gov/compliance/enforcement/sep>.

Texas Wildlife Services Program

The Texas Wildlife Services Program is available to provide assistance in addressing feral hog issues to all citizens of the state. While direct control will be limited to availability of personnel in cooperative association areas (i.e., areas designated by groups of landowners to improve wildlife habitats and other associated wildlife programs), technical assistance can be provided to individuals on how to best resolve feral hog problems. Since 2008, Texas Department of Agriculture has awarded grants to Texas Wildlife Services for feral hog abatement programs. The grants are used to carry out a number of specifically identified direct control projects where control efforts can be measured. Certain areas of the state have been targeted due to the contribution from feral hogs to impaired water quality and bacteria loading.

Water Quality Management Plan Program (WQMP)

WQMPs are management plans developed and implemented to improve land and water quality. TSSWCB and local SWCDs provide necessary technical assistance to develop plans that meet producer and state goals. Once the plan is developed, TSSWCB may financially assist implementing a portion of prescribed BMPs. As of 2021, TSSWCB has developed and certified 3 WQMPs in the watershed. These plans can include practices such as conservation cover, prescribed grazing, fencing, heavy-use area protection, water facilities, wells, and upland wildlife management.

Other Sources

Private foundations, non-profit organizations, land trusts and individuals can potentially assist with implementation funding of 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.

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- 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.
- Texas Agricultural Land Trust: provides funding to assist in establishing conservation easements for enrolled lands.

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