

La Nana Bayou Watershed Protection Plan

Draft Chapter 7 – Education and Outreach Plan

Introduction

Effective education and outreach are foundational to all successful WPP implementation efforts. Long-term commitments from residents will be necessary for achieving improvements in the watershed. The education and outreach component of implementation will focus on keeping the public, landowners, and agency personnel informed of project activities, providing information about appropriate management practices, and assisting in identifying and forming partnerships to lead the effort.

Watershed Coordinator

Leading the implementation of the WPP will require a watershed coordinator, either hired on as a new employee in one of the many stakeholder groups involved in the development and solely focused on WPP implementation like the Plum Creek Watershed Partnership has done, or a duty carried out by a current stakeholder that is already volunteering or working in the watershed in a similar capacity.

A successful watershed coordinator will primarily focus on establishing relationships and maintaining stakeholder support during the life of the WPP. This will allow them to secure funding for implementing the management measures, track its success, and adapt the plan as needed. During the development of this plan, TWRI, ANRA, and SFASU shared this role. A dedicated person is recommended to ensure the plan is supported in the future.

Future Stakeholder Engagement

To sustain engagement beyond the development of the WPP, the stakeholder group will apply for funding to implement the plan. The stakeholder group will coordinate the transition from development to implementation by continuing to host educational programs and public meetings after submitting the WPP for review, updating the website, and participate in local events to promote WPP awareness. News articles, newsletters, and the project website will be primary tools used to communicate with watershed stakeholders on a regular basis and will be developed to update readers periodically on implementation progress, provide information on new implementation opportunities, inform them on available technical or financial assistance, and other items of interest related to the WPP effort.

Education Programs

Hosting a variety of workshops in the watershed will be an important part of successful WPP implementation. Multiple programs geared toward providing information on various sources of potential pollutants and feasible management strategies have been and will continue to be hosted in the watershed. As implementation and data collection continues, the adaptive management process will be used to select the most appropriate educational workshops to meet the needs of the stakeholders.

Youth Education

The La Nana Bayou watershed stakeholders have a high interest in developing and implementing watershed education programs for primary and secondary schools. There are already several state-wide and ISD-specific watershed education programs available in Texas, so the stakeholder group will work with local school administrators to identify the needs of the teachers and students, research existing programs, and develop programs or materials to fill gaps. Existing resources that could serve as a model for developing programs in Nacogdoches include Austin’s watershed education programming, the Guadalupe-Blanco River Authority’s (GBRA) classroom tools, and TWRI’s ACCESS program.

The City of Austin’s Watershed Education School Outreach programs (<http://www.austintexas.gov>) has activities, videos, and more organized by grade level. In the Guadalupe River Basin, GBRA staff will visit with classes to teach lessons covering watershed protection topics like conservation, quality, and general water resources. They also allow educators to rent activity trunks for free that include the supplies and instructions for lessons covering water properties, water cycle, and a variety of conservation topics. TWRI, along with Texas A&M Engineering Experiment Station and TSWWCB, have developed the Texas Active Community and Citizen Education for Science and Stewardship (ACCESS) program (<https://access.twri.tamu.edu/>) that connects teachers and students to water education resources available in the state. This program includes workshops that educate teachers on TEKS-aligned citizen science opportunities, how to use geographic information systems (GIS) in the classroom, provides toolkits and project materials, and access to online water education resources.

Lone Star Healthy Streams Workshop

The LSHS program is geared toward expanding stakeholders’ knowledge on how beef cattle producers can improve grazing lands to reduce nonpoint source pollution. This statewide program promotes the adoption of BMPs that have been proven to effectively reduce bacterial contamination of streams. This program provides educational support for developing CPs by illustrating the benefits of many practices available for inclusion in a CP to program participants.

OSSF Operation and Maintenance Workshop

Once OSSFs in the watershed and their owners have been identified, an OSSF rules, regulations, operation, and maintenance training will be delivered in the watershed. This training consists of education and outreach practices to promote the proper management of existing OSSFs and to garner support for efforts to further identify and address failing OSSFs through inspections and remedial actions. AgriLife Extension provides the needed expertise to deliver this training. Additionally, an online training module that provides an overview of septic systems, how they operate, and what maintenance is required to sustain proper functionality and extend system life is available to anyone interested through their website. This training module was developed by the GBRA in cooperation with AgriLife Extension and is currently available online at: <https://www.gbra.org/presentations/septic/index.html>. AgriLife also now provides an online training for homeowners regarding proper operation, maintenance, and monitoring service of OSSFs: (<https://ossf.tamu.edu/event/homeowner-maintenance-of-atu-online/>).

Healthy Lawns and Healthy Waters

The Healthy Lawns and Healthy Waters (HLHW) program is an educational training program that aims to improve and protect surface water quality by enhancing Texas residents' awareness and knowledge of best management practices for residential landscapes. Funding for HLHW is provided in part through CWA 319 grants from TCEQ through EPA. This program is designed to train homeowners and landowners to design and install residential rainwater capture devices and educate them about the key importance of soil testing and how to determine nutrient application amounts. The goal of this program is to train Texans regarding reduced runoff, water quality, and best management practices for protecting their home landscape, watershed, and surface waters. More information can be found at <https://hlhw.tamu.edu/>.

Texas Well Owners Network

Private water wells provide a source of water to many Texas residents. The Texas Well Owners Network program provides needed education and outreach that focuses on private drinking water wells and the impacts on human health and the environment that can be mitigated by using proper management practices. Well screenings are conducted through this program. The program provides useful information to well owners that will assist them in better managing their water supplies. Information on this program can be found at <https://twon.tamu.edu/>.

Riparian and Stream Ecosystem Education Program

Healthy watersheds and good water quality go hand in hand with properly managed riparian and stream ecosystems. Delivery of the Riparian and Stream Ecosystem Education Program will increase stakeholder awareness, understanding, and knowledge about the nature and function of riparian zones. Additionally, the program will educate stakeholders on the benefits of riparian zones and the BMPs that can be implemented to protect them while minimizing nonpoint source pollution. Through this program, riparian landowners will be connected with local technical and financial resources to improve management and promote healthy watersheds and riparian areas on their land.

Feral Hog Management Workshop

AgriLife Extension personnel deliver periodic workshops focusing on feral hog management. This workshop will educate landowners on the negative impacts of feral hogs, effective control methods, and resources to help them control these pests.

Land Management and Wildlife Management Workshops

Wildlife has numerous significant impacts on the La Nana Bayou watershed and as a result, periodic wildlife management workshops are warranted to provide information on management strategies and available resources to landowners and others interested in protecting wildlife habitat. The watershed coordinator will work with AgriLife Extension wildlife specialists and TPWD as appropriate to plan and secure funding to deliver workshops in and near the watershed.

Public Meetings

Periodic public stakeholder meetings will be held to achieve major goals of WPP implementation. Public meetings will provide a platform for the watershed coordinator and project personnel to provide WPP

updates and planning information such as implementation progress, near-term implementation goals and projects, information on how to sign-up or participate in active implementation programs, appropriate contact information for specific implementation programs, and other information as appropriate. These meetings will also keep stakeholders engaged by providing a platform for feedback and discussing adaptive management as necessary to keep the WPP relevant to watershed and water quality needs. This will be accomplished by reviewing water quality data, implementation goals, and milestones during at least one public meeting annually and actively discussing how watershed needs can be better served. Feedback will be incorporated into WPP addendums as appropriate. It is anticipated that public meetings will be held on an annual basis but will largely be scheduled based on need.

Newsletters and News Releases

Watershed newsletters will be developed and sent directly to actively engaged stakeholders. Newsletters will be sent annually and published between project meetings. News releases will also be developed and distributed as needed through the mass media outlets in the area and will be used to highlight significant happenings related to WPP implementation and to continue to raise public awareness and support for watershed protection. These means will be used to inform stakeholders of implementation programs, eligibility requirements, when and where to sign-up, and what the specific program will entail. Lastly, public meetings and other WPP-related activities will be advertised through these outlets.