

**Texas State Soil and Water Conservation Board  
Clean Water Act §319(h) Nonpoint Source Grant Program  
FY 2019 Workplan 19-08**

| SUMMARY PAGE   |   |  |             |                                  |                 |
|--|---|--|-------------|----------------------------------|-----------------|
| Title of Project                                     | Implementing Agricultural Nonpoint Source Components of the Plum Creek Watershed Protection Plan  |  |             |                                  |                 |
| Project Goals  | <ul style="list-style-type: none"> <li>• Provide technical assistance to agricultural producers for the development of Water Quality Management Plans (WQMPs) and implementation of Best Management Practices (BMPs) and track progress</li> <li>• Provide educational programs to increase stakeholders and citizens knowledge about water quality issues in the watershed</li> <li>• To conduct status reviews on WQMPs to track implementation success</li> <li>• To foster coordinated technical assistance between TSSWCB, SWCDs and NRCS</li> <li>• Inform and coordinate project efforts with the Plum Creek Watershed Steering Committee and Partnership</li> </ul> |  |             |                                  |                 |
| Project Tasks  | 1) Project Administration; (2) Promotion and implementation of the TSSWCB WQMP Program  |  |             |                                  |                 |
| Measures of Success                                  | <ul style="list-style-type: none"> <li>• Provide needed technical assistance to agricultural producers;</li> <li>• Development and implementation of WQMPs;</li> <li>• Implementation of management measures outlined in Plum Creek WPP;</li> <li>• Reduction in potential pollutant loads of streams from NPS pollution from agricultural operations</li> </ul>  |  |             |                                  |                 |
| Project Type   | Implementation (X); Education (X); Planning ( ); Assessment ( ); Groundwater ( )  |  |             |                                  |                 |
| Status of Waterbody on 2014 Texas Integrated Report  | <u>Segment ID</u><br>1810   | <u>Parameter of Impairment or Concern</u><br>bacteria<br>orthophosphorus; nitrate; total P<br>depressed DO |             | <u>Category</u><br>4b<br>Concern |                 |
| Project Location (Statewide or Watershed and County) | Plum Creek (Segment 1810) Watershed in Caldwell, Hays, and Travis Counties  |  |             |                                  |                 |
| Key Project Activities                               | Hire Staff (X); Surface Water Quality Monitoring ( ); Technical Assistance (X); Education (X); Implementation (X); BMP Effectiveness Monitoring ( ); Demonstration ( ); Planning ( ); Modeling ( ); Bacterial Source Tracking ( ); Other ( )  |  |             |                                  |                 |
| 2017 Texas NPS Management Program Reference          | <ul style="list-style-type: none"> <li>• Component 1 – Long Term Goal – Objectives 1, 2, and 3</li> <li>• Component 1 – Short Term Goals – 2A, 2B, 2D, 3A, 3D, and 3G</li> <li>• Components 2, 3, and 4</li> </ul>  |  |             |                                  |                 |
| Project Costs  | Federal   | \$159,010  | Non-Federal | \$0                              | Total \$159,010 |
| Project Management                                   | • Caldwell-Travis Soil and Water Conservation District #304   |  |             |                                  |                 |
| Project Period                                       | November 1, 2019 – December 31, 2022  |  |             |                                  |                 |

## Part I – Applicant Information

| Applicant        |          |  |          |       |            |          |                |
|------------------|----------|--|----------|-------|------------|----------|----------------|
| Project Lead     |          | Donald Graham  |          |       |            |          |                |
| Title            |          | Chairman   |          |       |            |          |                |
| Organization     |          | Caldwell-Travis Soil and Water Conservation District #304                            |          |       |            |          |                |
| E-mail Address   |          | <a href="mailto:caldwelltraviswcd@tx.nacd.net">caldwelltraviswcd@tx.nacd.net.org</a> |          |       |            |          |                |
| Street Address   |          | 1403-D Black Jack Street   |          |       |            |          |                |
| City             | Lockhart | County   | Caldwell | State | TX         | Zip Code | 78644          |
| Telephone Number |          | (512) 398-2121 ext. 3  |          |       | Fax Number |          | (512) 398-5043 |

| Project Partners   |   |
|--|---|
| Names  | Roles & Responsibilities  |
| Texas State Soil and Water Conservation Board (TSSWCB)   | Provide state oversight and management of all project activities. Work with and assist SWCDs in the development, implementation, and maintenance of WQMPs. Responsible for technical review and certification of WQMPs.                           |
| Caldwell-Travis Soil and Water Conservation District (SWCD 304)                                  | Supervise one technician. Develop, implement and maintain WQMPs. Conduct WQMP status reviews. Responsible for all project deliverables.   |
| Hays County Soil and Water Conservation District (SWCD 351)                                      | Cooperate with SWCD 304 to develop, implement and maintain WQMPs.   |
| United States Department of Agriculture-Natural Resources Conservation Service (NRCS)            | Support SWCD technician in the development, implementation, and maintenance of WQMPs. Provide training as necessary to the technician.  |
| Guadalupe-Blanco River Authority (GBRA)  | Collaborate with SWCD 304 to track implementation of BMPs for incorporation into the biennial update through TSSWCB project 11-07.  |
| Plum Creek Watershed Partnership (PCWP)  | Collaborate with SWCD 304 to promote stakeholder participation in WQMPs via watershed-based outreach and education programs.  |
| Texas A&M AgriLife Extension Service – Department of Wildlife and Fisheries Sciences (Extension) | Collaborate with SWCD 304 to promote stakeholder participation in WQMPs via watershed-based outreach and education programs through feral hog management education programs and tracking feral hog management activities conducted by landowners. |

**Part II – Project Information**

| Project Type   |   |   |  |                |      |    |  |
|--|---|---|--|----------------|------|----|--|
| Surface Water  | X | Groundwater   |  |                |      |    |  |
| Does the project implement recommendations made in (a) a completed WPP, (b) an adopted TMDL, (c) an approved I-Plan, (d) a Comprehensive Conservation and Management Plan developed under CWA §320, (e) the <i>Texas Coastal NPS Pollution Control Program</i> , or (f) the <i>Texas Groundwater Protection Strategy</i> ? |   |   |  | Yes            | X    | No |  |
| If yes, identify the document.   |   | Plum Creek Watershed Protection Plan  |  |                |      |    |  |
| If yes, identify the agency/group that developed and/or approved the document.   |   | Plum Creek Watershed Partnership facilitated by Texas AgriLife Extension Service and TSSWCB |  | Year Developed | 2008 |    |  |

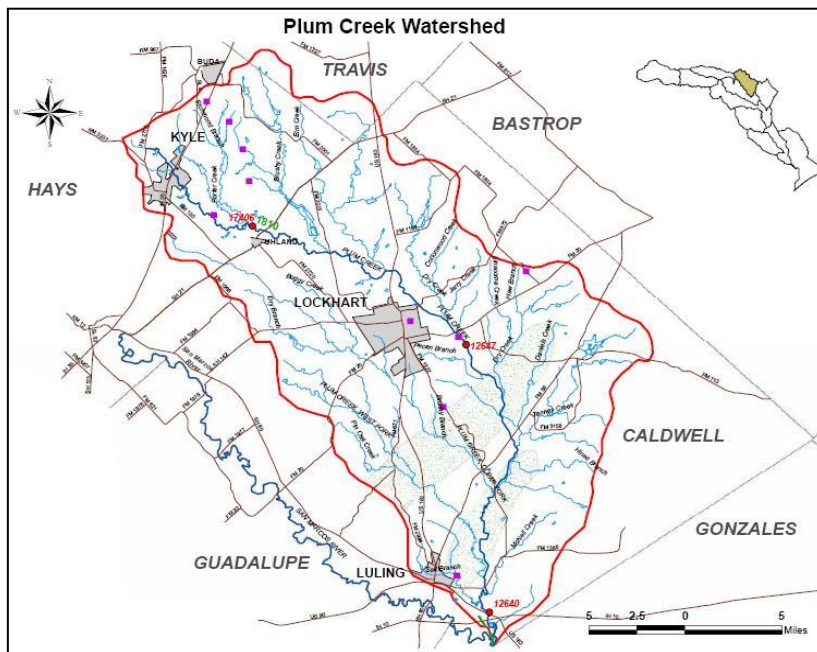
| Watershed Information        |   |            |                     |              |
|------------------------------|---|------------|---------------------|--------------|
| Watershed or Aquifer Name(s) | Hydrologic Unit Code (12 Digit)   | Segment ID | Category on 2010 IR | Size (Acres) |
| Plum Creek                   | 110901050702,<br>110901050703,<br>111002030102,<br>111301050208,<br>111302090204,<br>120100040204,<br>120301010104,<br>120500030306,<br>120601020401,<br>120702010804,<br>120702010805,<br>120800020403,<br>121002030401-<br>121002030403 | 1810       | 4b                  | 288,240      |

| Water Quality Impairment  |
|---|
| Describe all known causes (i.e., pollutants of concern) and sources (e.g., agricultural, silvicultural) of water quality impairments or concerns from any of the following sources: <i>2014 Texas Integrated Report</i> , Clean Rivers Program Basin Summary/Highlights Reports, or other documented sources.   |
| <b>2014 GBRA CRP Basin Highlights Report</b> – Nitrate-nitrogen and total phosphorus concentrations at these stations are some of the highest in the river basin.   |
| <b>2014 Texas Integrated Report</b> - Plum Creek has been listed as impaired on the 303d List since the 2004 due to bacterial contamination. The geometric mean of data collected on the three assessment units on Plum Creek from December 1, 2003 through November 30, 2010 was 194, 150, 295 cfu/ 100 mL downstream to upstream respectively. The geometric mean for uppermost assessment unit was slightly higher than the geometric mean (199 cfu/100mL) reported in the 2010 assessment. The lower two assessment units were found to be higher in the 2012 assessment (141 and 235 cfu/100mL). |

## Project Narrative

### Problem/Need Statement

Plum Creek rises in Hays County north of Kyle and runs south through Caldwell County, passing Lockhart and Luling, and eventually joins the San Marcos River at their confluence north of Gonzales County. Plum Creek is 52 miles in length and has a drainage area of 389 mi<sup>2</sup>. According to the 2014 Texas Integrated Report, Plum Creek is impaired by elevated bacteria concentrations (category 4b) and exhibits concerns for nitrate, total phosphorus, depressed DO and orthophosphorus.



TSSWCB and Texas A&M AgriLife Extension Service, Department of Soil and Crop Science established the Plum Creek Watershed Partnership (PCWP) in April 2006. The PCWP Steering Committee completed the Plum Creek WPP in February 2008. Information about the PCWP, including the WPP and implementation activities, is available at <http://plumcreek.tamu.edu/>. Sources of pollutants identified in the Plum Creek WPP include urban stormwater runoff, pet waste, failing or inadequate on-site sewage facilities (septic systems), wastewater treatment facilities, livestock, wildlife, invasive species (feral hogs), and oil and gas production. The WPP Update notes that since the completion of the plan and implementation has begun, the watershed has seen significant changes, including severe drought, construction of State Highway 130 and subsequent commercial and residential growth, all of which have altered the land use and

management of many areas in the watershed, affecting the implementation of some strategies (Extension, 2012).

Measures that have been implemented or are in the process of being implemented that focus on control of agricultural nonpoint source pollution include a SWCD Technician located in the watershed that provides technical assistance to agricultural producers for the development and implementation of Water Quality Management Plans (WQMPs) that focus on reducing bacteria loading from livestock operations in targeted areas across the watershed. A WQMP is a site-specific plan developed through and approved by SWCDs which includes appropriate land treatment practices, production practices, management measures, and technologies that prevent and abate agricultural and silvicultural nonpoint source pollution. The best management practices (BMPs) prescribed in a WQMP are defined in the NRCS Field Office Technical Guide. TSSWCB and NRCS have various financial incentive programs which provide financial assistance to producers in implementing a WQMP. Funding for the development and implementation of WQMPs has been provided through TSSWCB project 08-07, *Implementing Agricultural Nonpoint Source Components of the Plum Creek Watershed Protection Plan*, project 08-10, *Implementation of Agricultural Best Management Practices in Support of the Plum Creek Watershed Protection Plan*, project 13-06, *Implementing Agricultural Nonpoint Source Components of the Plum Creek Watershed Protection Plan* and project 16-07, *Implementing Agricultural Nonpoint Source Components of the Plum Creek Watershed Protection Plan*.

To date, through TSSWCB projects 08-07, 08-10, 13-06 and 16-07 there are 43 active WQMPs that cover approximately 4,498.7 acres. It was estimated that a total of 235 management plans on livestock operations and 24 management plans on cropland operations would need to be implemented to achieve estimated bacteria and nutrient load reductions called for in the Plum Creek WPP. As such, there continues to exist a significant need for technical assistance and financial incentives to implement BMPs through WQMPs in order to achieve the goals in the WPP to restore water quality.

A local watershed coordinator funded through TSSWCB project 11-07, *Coordinating Implementation of the Plum Creek Watershed Protection Plan*, and project 14-10, *Coordinating Implementation of the Plum Creek Watershed Protection Plan*, began work in the watershed in March of 2012. Coordination of the WPP implementation will continue through TSSWCB project 18-08, *Coordinating Implementation of the Plum Creek Watershed Protection Plan*.

## Project Narrative

### General Project Description (Include Project Location Map)

TSSWCB will administer federal CWA §319(h) funds through Caldwell-Travis SWCD for support of one District Technician who will provide technical assistance to agricultural producers in developing and implementing WQMPs in the Plum Creek Watershed. This District Technician will develop plans and assist ranchers in acquiring financial assistance for the implementation of BMPs. This CWA §319(h) grant will improve and enhance the abilities of local SWCDs to assist area landowners in preventing and abating agricultural nonpoint source pollution.

The District Technician will be placed in the Caldwell-Travis SWCD #304 and will work in the adjacent Hays County SWCD #351 through a cooperative agreement. The District Technician will work under direction of the SWCDs, with assistance from the TSSWCB and NRCS, as needed.

The District Technician will be critically important in promoting the components of this project, including WQMP development and the availability of financial incentives, and encouraging participation from agricultural producers. The District Technician will work with TSSWCB, NRCS, GBRA and PCWP to educate producers about water quality issues and how WQMPs and BMPs address pollutant contamination from agriculture. The District Technician will work with commodity organizations, such as Texas and Southwestern Cattle Raisers Association (TSCRA), Independent Cattlemen's Association of Texas (ICA), and Texas Farm Bureau (TFB), to educate their members on this opportunity to enhance the value of their operation and achieve water quality goals for the watershed at the same time. The Technician will cooperate and communicate with the PCWP in order to efficiently and effectively achieve project goals and to summarize activities and achievements made throughout the course of this project.

The District Technician, with assistance from NRCS and TSSWCB, will assist landowners in the development of WQMPs and Prescribed Grazing Plans. WQMPs are developed according to the NRCS Field Office Technical Guide. Once the WQMP is developed, it is sent to the appropriate TSSWCB regional office for technical review and certification. Upon certification of the WQMP, the District Technician will work with the landowner to implement the BMPs prescribed in the WQMP.

The District Technician, with assistance from NRCS, will assist landowners in applying for and obtaining financial incentives to aid in implementation of BMPs prescribed in WQMPs. The District Technician will conduct annual status reviews on all WQMPs developed and certified through the course of this project and on existing WQMPs in the watershed to ensure that the landowners implement BMPs as specified and agreed to in the WQMP implementation schedule. The District Technician will track utilization of obligated financial incentives (CWA §319(h) and EQIP) and assist landowners in utilizing obligated funds on schedule. The District Technician will develop a final report which describes the success of the project including WQMPs developed, BMPs implemented, and financial incentives obligated and utilized.

| <b>Tasks, Objectives and Schedules</b> |  |          |                  |          |        |          |
|--|--|----------|------------------|----------|--------|----------|
| Task 1:                                | Project Administration   |          |                  |          |        |          |
| Costs:                                 | Federal:   | \$16,803 | Non-Federal:     | \$0      | Total: | \$16,803 |
| Objective:                             | To effectively administer, coordinate, and monitor all work performed under this project including technical and financial supervision and preparation of status reports.  |          |                  |          |        |          |
| Subtask 1.1:                           | Caldwell-Travis SWCD will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 1 <sup>st</sup> of January, April, July and October. QPRs shall be available to all project partners.   |          |                  |          |        |          |
|  | Start Date:  | Month 1  | Completion Date: | Month 38 |        |          |
| Subtask 1.2:                           | Caldwell-Travis SWCD will perform accounting functions and submit appropriate Reimbursement Forms to TSSWCB at least monthly.  |          |                  |          |        |          |
|  | Start Date:  | Month 1  | Completion Date: | Month 38 |        |          |
| Subtask 1.3:                           | Caldwell-Travis SWCD will host coordination meetings or conference calls with the TSSWCB Project Manager, TSSWCB Field Representative, GBRA and Plum Creek Watershed Coordinator, at least quarterly to discuss project activities, project schedule, communication needs, deliverables and other requirements. Caldwell-Travis SWCD will develop lists of action items needed, following each project coordination meeting and distribute to project personnel. |          |                  |          |        |          |
|  | Start Date:  | Month 1  | Completion Date: | Month 38 |        |          |
| Subtask 1.4:                           | Caldwell-Travis SWCD will complete one financial audit during the project period.  |          |                  |          |        |          |
|  | Start Date:  | Month 1  | Completion Date: | Month 38 |        |          |
| Subtask 1.5:                           | Caldwell-Travis SWCD will develop a final report at the culmination of the project. At a minimum the Final Report shall describe the success of the project including WQMPs developed and BMPs implemented.  |          |                  |          |        |          |
|  | Start Date:  | Month 34 | Completion Date: | Month 38 |        |          |
| Deliverables                           | <ul style="list-style-type: none"> <li>• Quarterly Progress Reports in electronic format</li> <li>• Reimbursement Forms and necessary documentation in hard copy format</li> <li>• Final Report (Electronic and hard copy format)</li> </ul>   |          |                  |          |        |          |

| <b>Tasks, Objectives and Schedules</b> |  |           |                  |          |        |           |
|--|--|-----------|------------------|----------|--------|-----------|
| Task 2:                                | Promotion and implementation of the TSSWCB WQMP Program  |           |                  |          |        |           |
| Costs:                                 | Federal:   | \$140,457 | Non-Federal:     | \$0      | Total: | \$140,457 |
| Objective:                             | To promote WQMP development and implementation, encourage participation, and provide technical assistance to agricultural producers for the development and implementation of WQMPs. Promote the availability of financial incentives to support BMP implementation. Track implementation of WQMPs to achieve bacterial and nutrient load reductions as identified in the Plum Creek WPP.  |           |                  |          |        |           |
| Subtask 2.1:                           | The Caldwell-Travis SWCD will hire one District Technician to promote, develop, and implement WQMPs.   |           |                  |          |        |           |
|  | Start Date:  | Month 1   | Completion Date: | Month 1  |        |           |
| Subtask 2.2:                           | The District Technician will identify landowners in priority areas to distribute notifications announcing the availability of technical assistance and financial incentives for developing and implementing WQMPs. The District Technician will develop and distribute flyers, brochures, letters, news releases and other appropriate promotional publications to encourage participation from agricultural producers. TSSWCB must approve all announcements, letters and publications prior to distribution.   |           |                  |          |        |           |
|  | Start Date:  | Month 1   | Completion Date: | Month 38 |        |           |
| Subtask 2.3:                           | The District Technician will work with TSSWCB, NRCS and the Plum Creek Watershed Coordinator to educate producers about water quality issues and how WQMPs and BMPs address pollutant contamination from agriculture.  |           |                  |          |        |           |
|  | Start Date:  | Month 1   | Completion Date: | Month 38 |        |           |
| Subtask 2.4:                           | The District Technician will work with commodity organizations, such as Texas and Southwestern Cattle Raisers Association (TSCRA), Independent Cattlemen's Association of Texas (ICA), and Texas Farm Bureau (TFB), to educate their members on this opportunity to enhance the value of their operation and achieve water quality goals for the watershed at the same time.   |           |                  |          |        |           |
|  | Start Date:  | Month 1   | Completion Date: | Month 38 |        |           |
| Subtask 2.5:                           | The District Technician, with assistance from NRCS and TSSWCB will assist landowners in the development of WQMPs and associated Prescribed Grazing Plans. The District Technician will develop at least 10 WQMPs. Noting that the 2018 goal of the Plum Creek WPP is to have 235 WQMPs on livestock operations and 24 WQMPs on cropland operations, the District Technician shall strive to develop additional WQMPs beyond the minimum of 10.   |           |                  |          |        |           |
|  | Start Date:  | Month 1   | Completion Date: | Month 38 |        |           |
| Subtask 2.6:                           | The District Technician with assistance from NRCS and TSSWCB, will assist landowners in applying for and obtaining financial incentives to aid in implementation of BMPs prescribed in WQMPs. \$150,000 in CWA §319(h) funding (TSSWCB project 19-02) is available as financial incentive through the TSSWCB WQMP Program. Landowners shall be eligible to receive a maximum financial incentive amount of \$15,000 from the TSSWCB §319(h) funds. The maximum financial incentive rate shall not exceed 60% of the cost of implementation of the BMPs. The remaining 40% will be provided by the landowner. Financial incentives will be based on actual cost not to exceed average cost of the practice. |           |                  |          |        |           |
|  | Start Date:  | Month 1   | Completion Date: | Month 38 |        |           |
| Subtask 2.7:                           | The District Technician will prioritize WQMP development and financial incentive applications consistent with the priority areas identified in the WPP.  |           |                  |          |        |           |
|  | Start Date:  | Month 1   | Completion Date: | Month 38 |        |           |
| Subtask 2.8:                           | The District Technician will conduct annual status reviews on all WQMPs developed and certified through the course of this project and any existing WQMPs (certified prior to this project) in the Plum Creek watershed to ensure that the landowners implement BMPs as specified and agreed to in the WQMP implementation schedule. The District Technician will document any follow-up technical assistance needed or necessary modifications to the WQMP implementation schedule.   |           |                  |          |        |           |

|               | Start Date:  | Month 1 | Completion Date: | Month 38 |
|---------------|--|---------|------------------|----------|
| Subtask 2.9:  | The District Technician will track utilization of obligated financial incentives (primarily CWA §319(h) funds, but also EQIP funds). The District Technician, with assistance from TSSWCB and NRCS, will assist landowners in utilizing obligated financial incentives on schedule.  |         |                  |          |
|               | Start Date:  | Month 1 | Completion Date: | Month 38 |
| Subtask 2.10: | To encourage the use of soil testing in support of Nutrient Management (590), the Caldwell-Travis SWCD, will assist holders of WQMPs in the acquisition of current soil tests to comply with soil testing frequencies described in each WQMP and consistent with the NRCS practice standard for Nutrient Management (590).   |         |                  |          |
|               | Start Date:  | Month 1 | Completion Date: | Month 38 |
| Subtask 2.11: | The District Technician will create a spreadsheet and map describing and showing the location of all WQMPs developed and BMPs implemented through the project. The map will not reveal the identity or exact location of any producer.   |         |                  |          |
|               | Start Date:  | Month 1 | Completion Date: | Month 38 |
| Subtask 2.12: | The District Technician will meet monthly with SWCDs 304 and 351 in order to efficiently and effectively achieve project goals; summarize activities and achievements made throughout the course of this project; and discuss project activities, project schedule, communication needs, deliverables, and other requirements.   |         |                  |          |
|               | Start Date:  | Month 1 | Completion Date: | Month 38 |
| Subtask 2.13: | The District Technician will cooperate and communicate with the Plum Creek Watershed Coordinator in order to efficiently and effectively achieve project goals and to summarize activities and achievements made throughout the course of this project. Specifically, the District Technician will, at least, participate in any stakeholder meetings held under the auspices of the Plum Creek Watershed Partnership. |         |                  |          |
|               | Start Date:  | Month 1 | Completion Date: | Month 38 |
| Deliverables  | <ul style="list-style-type: none"> <li>• Promotional and educational publications, as developed and distributed</li> <li>• Status reviews for WQMPs</li> <li>• Map of project area showing location of WQMPs developed; map will not reveal the identity of any landowner</li> </ul>   |         |                  |          |



**Project Goals (Expand from Summary Page)**

- Provide technical assistance to agricultural producers for the development of Water Quality Management Plans (WQMPs) and implementation of Best Management Practices (BMPs) and track progress
- Provide educational programs to increase stakeholders and citizens knowledge about water quality issues in the watershed
- To conduct status reviews on WQMPs to track implementation success
- To foster coordinated technical assistance between TSSWCB, SWCDs and NRCS
- Inform and coordinate project efforts with the Plum Creek Watershed Steering Committee and Partnership

**Measures of Success (Expand from Summary Page)**

- Provide needed technical assistance to agricultural producers
- Development and implementation of WQMPs
- Implementation of management measures outlined in Plum Creek WPP
- Reduction in potential pollutant loads of streams from NPS pollution from agricultural operations

| 2017 Texas Nonpoint Source Management Program Reference (Expand from NPS Summary Page)  |
|---|
| Goals &/or Milestone(s)   |
| Component One – Explicit short- and long-term goals, objectives and strategies that protect surface and ground water.   |
| <p>Long Term Goal – To protect and restore water quality from NPS pollution through assessment, implementation, and education.</p> <ul style="list-style-type: none"> <li>• Objective 1 – Focus NPS abatement efforts, implementation strategies, and available resources in watersheds identified as impacted by NPS pollution.</li> <li>• Objective 2 – Support the implementation of state, regional, and local programs to prevent NPS pollution through assessment, implementation, and education.</li> <li>• Objective 3 – Support the implementation of state, regional, and local programs to reduce NPS pollution, such as the implementation of strategies defined in WPPs</li> </ul>   |
| <p>Short Term Goal Two – Implementation – Coordinate the NPS Program to support the implementation of TMDL I-Plans ...and other state, regional, and local plans/programs to reduce NPS pollution ...[by] target[ing] implementation activities to the areas identified as impacted</p> <ul style="list-style-type: none"> <li>• Objective A – Work with regional and local entities to determine priority areas and develop and implement strategies to address NPS pollution in those areas.</li> <li>• Objective B – Develop and implement BMPs to address constituents of concern or waterbodies not meeting water quality standards in watersheds identified as impacted by NPS pollution.</li> <li>• Objective D – Implement TMDL I-Plans, WPPs, and other state, regional, and local plans developed to restore and maintain water quality in water bodies identified as impacted by NPS pollution.</li> </ul> |
| <p>Short-Term Goal Three – Education- Conduct education and technology transfer activities to increase awareness of NPS pollution and activities which contribute to the degradation of water bodies, including aquifers, by NPS pollution</p> <ul style="list-style-type: none"> <li>• Objective A – Enhance existing outreach programs at the state, regional, and local levels to maximize the effectiveness of NPS education.</li> <li>• Objective D – Conduct outreach through the CRP, AgriLife Extension, SWCDs, and others to enable stakeholders and the public to participate in decision-making and provide a more complete understanding of water quality issues and how they relate to each citizen.</li> <li>• Objective G – Implement public outreach and education to maintain and restore water quality in water bodies by NPS pollution.</li> </ul>   |
| Component Two – Working partnerships and linkages to appropriate state, regional, and local entities, private sector groups, and federal agencies.  |
| Component Three – Balanced approach that emphasizes both statewide NPS programs and on-the-ground management of individual watersheds.  |
| Component Four – Abatement of water quality impairments from NPS pollution and prevention of significant threats to water quality from present and future NPS activities.   |

### Estimated Load Reductions Expected

Estimated load reductions expected from implementing BMPs through this project are based on information in the Plum Creek WPP, Tables 7.6, 7.8, and Tables 5, 6, 22, and 25 in the Update to the Plum Creek WPP.

The Plum Creek WPP goals are to reduce pollutant loadings of bacteria (impairment) and phosphorus (concern) from a variety of sources through implementation of a number of BMPs across the entire watershed. WQMPs to be implemented through this project only address agricultural NPS loadings from livestock (bacteria) and cropland (phosphorus) operations in priority implementation focus areas.

In order to calculate estimated load reductions expected, several assumptions were made. First, consistent with Subtask 2.5, all WQMPs to be implemented are assumed to be in Primary/Secondary Focus Areas only. Second, consistent with Table 25 in the WPP Update, all WQMPs to be implemented are assumed to be equitably split between livestock and cropland operations. Third, all WQMPs to be implemented are assumed to be equitably split between the three major subwatersheds (i.e., index sites). Fourth, it is assumed that WQMPs on livestock operations will only result in bacteria load reductions and that WQMPs on cropland operations will only result in phosphorus load reductions (See statement below regarding complementary and supplementary load reductions). Fifth, all load reductions achieved at the individual farm level (i.e., through individual WQMPs) are assumed to translate to equivalent load reductions at the associated index site.

| Livestock Operations               | # WQMPs | Estimated Load Reductions Expected |                  |          |                  |         |                  |
|------------------------------------|---------|------------------------------------|------------------|----------|------------------|---------|------------------|
|                                    |         | Uhland                             |                  | Lockhart |                  | Luling  |                  |
|                                    |         | # WQMPs                            | E. coli (cfu/yr) | # WQMPs  | E. coli (cfu/yr) | # WQMPs | E. coli (cfu/yr) |
| Full WPP Implementation            | 235     | 21                                 | 9.60E+12         | 34       | 2.10E+13         | 180     | 2.90E+15         |
| Primary/Secondary Focus Areas Only | 126     | 16                                 | 7.31E+12         | 21       | 1.30E+13         | 89      | 1.43E+15         |

| Cropland Operations                | # WQMPs | Estimated Load Reductions Expected |           |          |           |         |           |
|------------------------------------|---------|------------------------------------|-----------|----------|-----------|---------|-----------|
|                                    |         | Uhland                             |           | Lockhart |           | Luling  |           |
|                                    |         | # WQMPs                            | P (kg/yr) | # WQMPs  | P (kg/yr) | # WQMPs | P (kg/yr) |
| Full WPP Implementation            | 24      | 4                                  | 827       | 20       | 4,772     | 0       | 0         |
| Primary/Secondary Focus Areas Only | 12      | 4                                  | 827       | 8        | 1,909     | 0       | 0         |

Participation in the TSSWCB WQMP Program by individual ranchers and farmers is voluntary. This decision to participate is based on a number of factors, including the producer's ability to provide the financial incentive match. Adoption of BMPs and participation in the WQMP Program by producers is highly dependent on the success or failure of outreach and education initiatives and social marketing campaigns. Effectiveness of particular BMPs in reducing pollutants is dependent on a myriad of factors including natural weather phenomena and the ability of producers to correctly install, operate, maintain or manage the BMP. There will be complementary nitrogen and sediment load reductions achieved from livestock and cropland WQMPs, supplementary bacteria load reductions achieved from cropland WQMPs, and supplementary phosphorus load reductions achieved from livestock WQMPs. With these factors accounted for, the estimated load reductions to be expected, as presented above, should be regarded as the "best case scenario" with probability that actual load reductions achieved will be less.

The mechanism for reporting pollutant load reductions achieved through implementation of BMPs funded with CWA §319(h) monies, is through the EPA Grants Reporting and Tracking System (GRTS). Actual load reductions achieved can only be reported after the BMPs are installed and operational. Currently, EPA Program Activity Measures (PAMs) only call for load reductions achieved for nitrogen, phosphorus, and sediment. Nitrogen, phosphorus, and sediment load reductions achieved through this project will be reported through GRTS.

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| EPA State Categorical Program Grants – Workplan Essential Elements<br>FY 2018-2022 EPA Strategic Plan Reference |
| Strategic Plan Goal – Goal 1 Core Mission   |
| Strategic Plan Objective – Objective 1.2 Provide for Clean and Safe Water                                       |

| <b>Part III – Financial Information</b> |           |                            |           |
|---|-----------|----------------------------|-----------|
| <b>Budget Summary</b>                   |           |                            |           |
| Federal                                 | \$159,010 | % of total project         | 100%      |
| Non-Federal                             | \$0       | % of total project (≥ 40%) | 0%        |
| Total                                   | \$159,010 | Total                      | 100%      |
| Category                                | Federal   | Non-Federal                | Total     |
| Personnel                               | \$128,200 | \$0                        | \$128,200 |
| Fringe Benefits                         | \$19,230  | \$0                        | \$19,230  |
| Travel                                  | \$3,490   | \$0                        | \$3,490   |
| Equipment                               | \$0       | \$0                        | \$0       |
| Supplies                                | \$3,350   | \$0                        | \$3,350   |
| Contractual                             | \$3,500   | \$0                        | \$3,500   |
| Construction                            | \$0       | \$0                        | \$0       |
| Other                                   | \$1,240   | \$0                        | \$1,240   |
| Total Direct Costs                      | \$159,010 | \$0                        | \$159,010 |
| Indirect Costs (≤ 15%)                  | \$0       | \$0                        | \$0       |
| Total Project Costs                     | \$159,010 | \$0                        | \$159,010 |

| <b>Budget Justification (Federal)</b> |              |   |
|---------------------------------------|--------------|---|
| Category                              | Total Amount | Justification   |
| Personnel                             | \$128,200    | 1 full time Technician for 3 years (\$122,800)<br>1 part time Bookkeeper @ \$15/hour for 10 hours/month for 3 years (\$5,400)             |
| Fringe Benefits                       | \$19,230     | Fringe Benefits calculated @ 15% of Personnel   |
| Travel                                | \$3,490      | Approximately 4,000 miles @ state rate (\$2,320)<br>Per diem @ (\$51/day) and hotel expenses (\$93/night) for 6 overnight trips (\$1,170) |
| Equipment                             | \$0          | N/A   |
| Supplies                              | \$3,350      | Office Supplies for SWCD @ approximately \$50/month for 36 months (\$1,800), 1 computer @ \$1,550   |
| Contractual*                          | \$3,500      | Financial Audit for Caldwell-Travis SWCD  |
| Construction                          | \$0          | N/A   |
| Other                                 | \$1,240      | Publications (\$490), trainings and workshops (\$500), postage for mailings (\$250)   |
| Indirect                              | \$0          | N/A   |

| <b>Budget Justification (Non-Federal)</b> |              |               |
|---|--------------|---------------|
| Category                                  | Total Amount | Justification |
| Personnel                                 | \$0          | N/A           |
| Fringe Benefits                           | \$0          | N/A           |
| Travel                                    | \$0          | N/A           |
| Equipment                                 | \$0          | N/A           |
| Supplies                                  | \$0          | N/A           |
| Contractual*                              | \$0          | N/A           |
| Construction                              | \$0          | N/A           |
| Other                                     | \$0          | N/A           |
| Indirect                                  | \$0          | N/A           |