



**Texas State Soil and Water Conservation Board  
 Clean Water Act §319(h) Nonpoint Source Grant Program  
 FY 2014 Workplan 14-10**

SUMMARY PAGE						
Title of Project	Coordinating Implementation of the Plum Creek Watershed Protection Plan					
Project Goals	<ul style="list-style-type: none"> <li>To foster coordinated assistance activities for the Plum Creek Watershed Partnership (PCWP)</li> <li>To conduct regular stakeholder meetings to encourage citizen participation, provide partners with updates on progress, and seek stakeholder input and recommendations on needed activities</li> <li>To support and facilitate the PCWP in identifying management measures to improve water quality, developing proposals to acquire funding for implementation of management measures, managing and tracking implementation projects as well as encourage adoption of BMPs</li> <li>Evaluate progress toward achieving milestones established in the WPP</li> <li>Coordinate and conduct water resources and related environmental outreach/education efforts across the watershed</li> </ul>					
Project Tasks	(1) Project Administration; (2) Support and Facilitation of WPP Implementation; (3) Outreach, Education and Community Support; (4) Community Collection Events					
Measures of Success	<ul style="list-style-type: none"> <li>Provide technical assistance to PCWP</li> <li>Evaluate progress toward achieving milestones and publish an addendum to the WPP</li> <li>Reduction in potential bacterial contamination and nutrient loading for streams from agricultural and urban nonpoint source pollution</li> <li>Increased knowledge of citizens, landowners and agricultural producers of management measures identified in WPP</li> </ul>					
Project Type	Implementation (X); Education (X); Planning ( ); Assessment ( ); Groundwater ( )					
Status of Waterbody on 2012 Texas Integrated Report	<u>Segment ID</u> 1810	<u>Parameter of Impairment or Concern</u> Bacteria Ammonia-Nitrogen; nitrate+nitrite nitrogen; total phosphorus			<u>Category</u> 4b CN	
Project Location (Statewide or Watershed and County)	Plum Creek Watershed in Caldwell, Hays, and Travis Counties					
Key Project Activities	Hire Staff (X ); Surface Water Quality Monitoring ( ); Technical Assistance ( ); Education (X ); Implementation ( ); BMP Effectiveness Monitoring ( ); Demonstration ( ); Planning ( ); Modeling ( ); Bacterial Source Tracking ( ); Other (X)					
2012 Texas NPS Management Program Reference	<ul style="list-style-type: none"> <li>Component One –LTG 2, 3, 6, 7, 8</li> <li>Component One – STGs 2D, 3B, 3D, 3G</li> <li>Component Two</li> <li>Component Six</li> <li>Component Eight</li> </ul>					
Project Costs	Federal	\$218,069	Non-Federal	\$145,315	Total	\$363,384
Project Management	Guadalupe-Blanco River Authority					
Project Period	October 1, 2014 – July 31, 2018					

**Part I – Applicant Information**

Applicant							
Project Lead	Mike Urrutia						
Title	Director of Water Quality Services						
Organization	Guadalupe-Blanco River Authority						
E-mail Address	murrutia@gbra.org						
Street Address	933 E. Court St.						
City	Seguin	County	Guadalupe	State	TX	Zip Code	78155
Telephone Number	(830)379-5822			Fax Number	(830)372-2757		

Project Partners	
Names	Roles & Responsibilities
Texas State Soil and Water Conservation Board (TSSWCB)	Provide state oversight and management of all project activities and ensure coordination of activities with related projects and TCEQ.
Guadalupe-Blanco River Authority (GBRA)	Provide project management and oversight. Provide management of the Plum Creek Watershed Coordinator (PCWC), project reporting, provide assistance for stakeholder relations, support the development of final report. Provide coordination of ongoing implementation efforts. Assess water quality data collected through the Clean Rivers Program and monitoring projects in relation to achieving load reductions. Provide local match.
Texas A&M AgriLife Extension Service, Department of Soil and Crop Sciences (Extension)	Provide training and assistance to the PCWC and PCWP. Maintain project website.
Plum Creek Conservation District, Hays County, Caldwell County, City of Kyle, City of Buda, City of Lockhart, City of Luling, City of Umland, Hays County Soil and Water Conservation District #351, Caldwell-Travis Soil and Water Conservation District #304, Polonia Water Supply	Members of the PCWP; provide local match.
Green Group Holdings	Collaborate with GBRA, PCWP, and appropriate entities to fund 2 Community Collection Events in the Plum Creek watershed.

## 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 A&M AgriLife Extension TSSWCB		Year Developed	2008		

Watershed Information				
Watershed or Aquifer Name(s)	Hydrologic Unit Code (12 Digit)	Segment ID	Category on 2012 IR	Size (Acres)
Plum Creek	110901050702, 110901050703, 111002030102, 111301050208, 111302090204, 120100040204, 120301010104, 120500030306, 120601020401, 120702010804, 120702010805, 120800020403, 121002030401	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>2012 Texas Integrated Report</i> , Clean Rivers Program Basin Summary/Highlights Reports, or other documented sources.
<b>2012 Integrated Report</b> – Impaired due to bacteria with concerns for dissolved oxygen grab, habitat, nitrate, orthophosphorus, and total phosphorus.
Data collected from December 2003 through November 2010 (Segment 1810_01 through 1810_03):
Bacteria Geomean – 1810_01 (77 samples, 194.47 mean); 1810_02 (35 samples, 150.34 mean); 1810_03 (77 samples, 295.39 mean); Dissolved Oxygen Grab - 1810_01 (77 samples, 12 exceed); 1810_03 (82 samples, 7 exceed); Habitat – 1810_02 (4 assessed, 4 exceed, mean assessed = 17.75); Nitrate - 1810_01 (78 samples, 28 exceed); 1810_02 (38 samples, 36 exceed, mean exceed = 7.7); 1810_03 (77 samples, 60 exceed, mean exceed = 11.06); Ortho-phosphorus - 1810_02 (21 samples, 18 exceed, mean exceed = 0.99); Total Phosphorus - 1810_02 (38 samples, 22 exceed, mean exceed = 1.39); 1810_03 (79 samples, 55 exceed, mean exceed = 2.75);
*Note – 1810_03 Ammonia (50 samples, 10 exceed, mean exceed = 4.65)

Plum Creek Segments 1810\_01 through 1810\_3 were moved to Category 4b with rationale based on WPP.

***Clean Rivers Program 2013 Basin Summary Report*** - The 2013 Clean Rivers Program Basin Summary Report for the Guadalupe River Basin states that a review of the historical data from the Plum Creek at Plum Creek Road site (site no. 17406) shows trends of diminishing water quality. The most prominent water quality concerns are for nutrient and bacteria concentrations. The increased nutrient levels in the creek are due in large part because the stream is effluent-dominated. Additional wastewater effluent and nutrient loading has been added to the creek in recent years as the Kyle and Buda WWTPs have increased in capacity. The water quality data shows an increasing trend in total phosphorus concentrations over time. Nitrate nitrogen also shows an increasing trend over time. Nitrate-nitrogen is also showing an increase over time. Spikes in nitrate concentrations appear to be linked to low flow periods when the stream is effluent-dominated. Total phosphorus and nitrate nitrogen are of concern because of the potential for promoting nuisance algal blooms that can deplete oxygen in the stream, especially in the early morning hours, degrading the habitat for fish and aquatic invertebrates. Ammonia nitrogen exceeded the screening concentration 14.8% of the time but of more concern was the magnitude of the exceedences. Three of the 12 sampling events that exceeded the 0.33 mg/L screening concentration for ammonia nitrogen were greater than 10 mg/L. Ammonia nitrogen is a concern because of its toxicity to fish. Because of the effluent dominance of the stream, the most logical source of these nutrients is wastewater discharge but other sources of nutrients should be considered such as runoff carrying fertilizers from agricultural fields and lawns and organic wastes from animals such as livestock, pets and wildlife.

The median concentration for nitrate nitrogen exceeded the stream screening criteria of 1.95 mg/L 63 out of 67 measurements at the monitoring site on Plum Creek at CR202 (middle assessment unit). Sources of the nitrates at this location are most likely the springs that originate from the Leona formation as well as wastewater effluent. Total phosphorus concentrations are increasing over time at this monitoring station. Sources of total phosphorus include wastewater effluent, storm water that carries in fertilizers and organic material and failing septic tanks.

Ammonia nitrogen appears to be significantly increasing with time at the monitoring site in the lower assessment unit on Plum Creek. This is possibly due to reduction in flow due to drought conditions, which are causing the stream to be more heavily influenced by wastewater and groundwater. Total phosphorus concentrations show a significant increasing trend over time possibly due to the increased frequency of analysis in the later years of the historical record.

## 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 2012 Texas Integrated Report, Plum Creek is impaired by elevated bacteria concentrations (category 4b) and exhibits concerns for depressed DO, habitat, nitrate, total phosphorus, and orthophosphorus.

TSSWCB and Texas A&M AgriLife Extension 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 storm water 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 identified responsible parties, implementation milestones and estimated financial costs for individual management measures and outreach and education activities. The plan also described the load reductions expected from the full implementation of all management measures. Since the plan's acceptance by the PCWP, TSSWCB, and EPA, key management measures have been implemented or are in the process of being implemented. Those measures that focus on control of urban nonpoint source pollution, and funded by TCEQ CWA Section 319(h) nonpoint source grants include: 1) adoption of pet waste ordinances and installation of pet waste stations by the cities of Kyle and Lockhart; 2) urban storm water assessments in Kyle and Lockhart that map current storm water flows and conveyance systems, and identify needs and determine optimal placement of additional storm water controls; 3) funding to retrofit two existing storm water detention basins in the City of Kyle that receive runoff from a significant portion of the city; 4) funding to conduct an illicit discharge survey and install filters on storm drain inlets in the City of Lockhart; 5) street sweeping programs in the cities of Buda, Kyle and Lockhart; and, 6) resources directed by cities to manage waterfowl populations in city parks and other locations. The grant awarded to the City of Kyle, "*Plum Creek Watershed Protection Plan Pilot Implementation-City of Kyle*," was completed in August 2011. The grant with the City of Lockhart was completed in August 2012.

Measures that have been implemented or are in the process of being implemented that focus on agricultural nonpoint source pollution include: 1) an 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; 2) financial incentives to agricultural producers for implementing best management practices prescribed in the WQMPs which will achieve bacteria load reductions; and, 3) allocation of the Environmental Quality Incentives Program by the USDA-Natural Resources Conservation Service (NRCS). Funding for the development and implementation of WQMPs (1 and 2 above) has been provided through TSSWCB project 08-07, *Implementing Agricultural Nonpoint Source Components of the Plum Creek Watershed Protection Plan* and TSSWCB project 08-10, *Implementation of Agricultural Best Management Practices in Support of the Plum Creek Watershed Protection Plan*.

Through TSSWCB projects 08-07 and 08-10, the implementation of WQMPs was hampered due to extreme droughts in 2009 and 2011. To date, a total of 11 WQMPs have been developed on approximately 1,386 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 and financial assistance to implement BMPs through WQMPs and other programs including but not limited to the Environmental Quality Incentives Program (EQIP) and

Conservation Reserve Program (CRP) in order to achieve the goals identified in the Plum Creek WPP to restore water quality.

Management measures to reduce impacts from invasive species that have been implemented in the watershed include: 1) hiring of an Extension Assistant to conduct one-on-one and group landowner outreach on feral hog management techniques; 2) aerial control and a landowner cooperative trapping program for the removal of feral hogs from the watershed (funded by Texas Department of Agriculture County Hog Abatement Matching Program (CHAMP) grant, with additional funding coming from local participation); and 3) an on-line feral hog activity reporting system to support identification of target areas for implementation of control activities. Funding for feral hog management education (1 and 3 above) has been provided through TSSWCB project 08-07, *Implementing Agricultural Nonpoint Source Components of the Plum Creek Watershed Protection Plan* and TSSWCB project 12-06, *Statewide Delivery of Lone Star Healthy Streams Feral Hog Component and Providing Technical Assistance on Feral Hog Management in Priority Watersheds*.

In 2012, Caldwell County and Hays County each participated in the Texas Department of Agriculture (TDA) Hog Out County Grants program with Caldwell County being awarded a grant in 2013 to continue abatement efforts for feral hogs. Additionally, the Caldwell County Feral Hog Task Force (CCFHTF) was established in 2013 and developed a 5-year Feral Hog Action Plan for Caldwell and Hays County. These counties, through a joint agreement, were also awarded the first ever TDA CHAMP grant to further education and abatement programs for feral hogs. The CCFHTF will manage and implement the CHAMP grant program in both Caldwell and Hays County.

Additionally, measures that focus on pollution impacts from wastewater that have been implemented include: 1) voluntary bacteria and nutrient monitoring of effluent by several wastewater treatment facilities in the watershed; and 2) replacement of old and degraded sewer pipes and other components of the wastewater collection systems in the Cities of Kyle, Lockhart, Luling and Buda.

In 2013, the City of Buda was awarded funding through the TWDB Clean Water State Revolving Fund to begin planning and design for the decommissioning of failing septic systems and connection of existing homes in the Hillside Terrace subdivision to an existing wastewater treatment facility. Due to the disadvantaged economic status of the subdivision homeowners, the project qualified for 70% loan forgiveness with the remaining portion covered by a joint agreement between the City of Buda and Hays County.

Water quality monitoring is being conducted by GBRA at three sites on Plum Creek through resources dedicated by TCEQ through the Clean Rivers Program. Through TSSWCB project 10-07, *Surface Water Quality Monitoring and Additional Data Collection Activities to Support the Implementation of the Plum Creek Watershed Protection Plan*, GBRA is conducting intensive targeted monitoring on tributaries, springs, wastewater effluent, urban storm water runoff, and other main stem instream sites.

Education and outreach programs, in addition to being measures used to engage stakeholders and support the development of the WPP, have been identified by the WPP as critical to the successful implementation and effectiveness of management measures for the reduction of nonpoint pollution. Activities that have been conducted include 1) community and stream clean ups; and 2) training events that include Texas Watershed Steward Program, Nonpoint Education for Municipal Officials, Sports and Athletic Field Education, on-site sewage system operation and maintenance, and feral hog workshops. TCEQ funded the development of on-line educational modules for information transfer to owners of septic systems, city employees and homeowners, covering operation and maintenance of on-site sewage systems, best practices for urban storm water management at city facilities, and correct disposal of fats, oils and greases, respectively. TSSWCB provided funds through project 10-07 for GBRA to install three educational kiosks in the cities of Kyle, Lockhart and Luling. The kiosks provide a link to the project webpage, links to the on-line educational modules mentioned above as well as continuous real-time water quality data being collected on Plum Creek

by GBRA.

Early, local involvement in the development of the WPP was crucial for the successful implementation of the plan. Now that the plan is completed, maintaining a connection with stakeholders and expanding participation will increase the likelihood of success and water quality improvement. To support the different aspects of WPP implementation, obtaining funding, conducting public outreach and increasing participation is still needed.

Texas A&M AgriLife Extension served as the watershed coordinator through the development and implementation of the WPP years 1-3. Texas A&M AgriLife Extension secured funding for implementation measures through grants, has tracked the progress of implementation, and has evaluated and reported water quality trends resulting in the implementation of management measures. As funding for Texas A&M AgriLife Extension ended, it was the desire of the PCWP to continue progress on implementing the Plum Creek WPP by establishing a local watershed coordinator. The WPP states, "In addition to technical and financial assistance required for implementation of management measures and outreach programs, it is recommended that a full-time [Watershed] Coordinator be employed to facilitate continued progress [throughout the 10-year implementation schedule]. This position will oversee project activities, seek additional funding, organize and coordinate regular updates for the Plum Creek Watershed Partnership, maintain the website, and coordinate outreach and education efforts in the watershed."

TSSWCB project 11-07, *Coordinating Implementation of the Plum Creek Watershed Protection Plan*, provided funding for a watershed coordinator and the continuation of outreach and education efforts in the Plum Creek watershed. The local watershed coordinator has worked with stakeholders, local governments and organizations, state and federal agencies to acquire funding and develop partnerships toward the full implementation of the Plum Creek WPP. Public participation at quarterly meetings and community projects has increased and new projects have been conceptualized and developed. Having a watershed coordinator employed and officed in the watershed has provided numerous opportunities for engagement with communities and individuals, allowed for rapid response to fish kills and illicit discharges, as well as an enhanced presence and awareness of the PCWP. The watershed coordinator's efforts to: acquire funding and develop partnerships for the continuation of the Hillside Terrace Project; facilitate new approaches to feral hog management, and engage new and existing developers has led to a tremendous media presence in the watershed, bringing awareness of the PCWP and watershed protection planning process to a large cross-section of the public.

The continuation of this project is a critical component of the Plum Creek WPP and will serve as an example to other watershed groups seeking to learn from the PCWP's experiences, setbacks and successes. The Plum Creek WPP serves as a guide for new and existing WPPs in both the planning and implementation phases. The hiring of a local watershed coordinator is an example of the vision and dedication of the stakeholders in the watershed in the WPP implementation process. The Interlocal Agreement entered into by numerous entities within the Plum Creek watershed in 2011 and renewed for 2014 is a testament to the commitment of local stakeholders to this process and to the value that they see in funding a local watershed coordinator.

## Project Narrative

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

Through a local presence in watershed, the Plum Creek Watershed Coordinator (PCWC) will serve as the primary conduit for interaction with landowners, citizens, and entities to facilitate the implementation of the WPP. The PCWC will coordinate meetings with the PCWP Steering Committee and Work Groups to update them, seek their input and recommendations on needed activities, and continue to support and facilitate implementation efforts of the plan. The

PCWC will continue to assist the cities, counties, local boards and businesses to identify management measures to improve water quality and acquire resources to enable WPP implementation. The PCWC will work with state and federal agencies, as appropriate, to bring technical and financial assistance to the watershed.

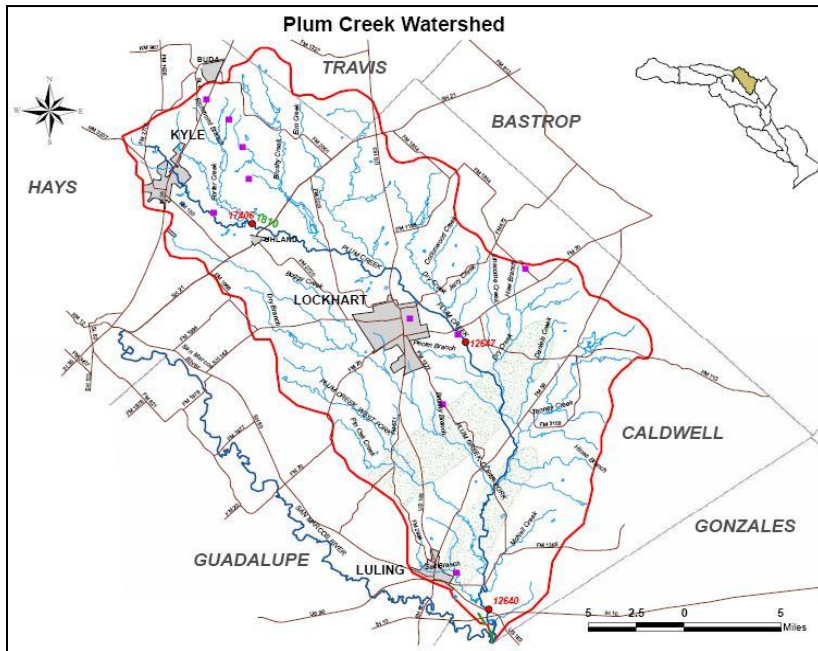
As part of an adaptive management approach embraced by stakeholders, the PCWC will continue to evaluate progress toward achieving milestones established in the WPP, assess water quality data in relation to achieving load reductions, and publish a biennial addendum to the Plum Creek WPP that describes updates to goals and milestones and successes.

Coordination of outreach and education efforts by the PCWC will facilitate and support public

participation by private individuals and local officials in the implementation of the Plum Creek WPP. The PCWC will develop publications, such as a semi-annual newsletter, factsheets, website content, to promote and communicate watershed pollution prevention efforts. Additionally, the PCWC will coordinate and conduct water resources and educational outreach education efforts across the watershed, organizing the following programs: riparian education workshops, a conventional OSSF maintenance workshop for homeowners; and aerobic system operation and maintenance workshops for homeowners.

The PCWC will continue to work with local governments to address littering, illegal dumping and other hazardous and non-hazardous waste issues through Annual Keep Lockhart Beautiful cleanup events; community collection events; and illicit dumping site cleanups.

With an enhanced presence in the community and increasing industrial, citizen and stakeholder involvement, the water quality goals established in the Plum Creek WPP can be realized. The local PCWC has made many strides in these areas, however, continued funding is needed to ensure that project goals are achieved.





<b>Tasks, Objectives and Schedules</b>						
Task 1	Project Administration					
Costs	Federal	\$18,243	Non-Federal	\$11,976	Total	\$30,219
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	GBRA 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 15 <sup>th</sup> of January, April, July and October. QPRs shall be distributed to all Project Partners.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 1.2	GBRA will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 1.3	GBRA will host coordination meetings or conference calls, at least quarterly, with Project Partners to discuss project activities, project schedule, communication needs, deliverables, and other requirements. GBRA will develop lists of action items needed following each project coordination meeting and distribute to project personnel.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 1.4	GBRA will develop a Final Report that summarizes activities completed and conclusions reached during the project, and discusses the extent to which project goals and measures of success have been achieved.					
	Start Date	Month 1	Completion Date	Month 46		
Deliverables	<ul style="list-style-type: none"> <li>• QPRs in electronic format</li> <li>• Reimbursement Forms and necessary documentation in hard copy format</li> <li>• Lists of action items from project coordination meetings</li> <li>• Final Report in electronic and hard copy formats</li> </ul>					

Tasks, Objectives and Schedules						
Task 2	Support and Facilitation of WPP Implementation					
Costs	Federal	\$80,500	Non-Federal	\$53,646	Total	\$134,146
Objective	Facilitate continued stakeholder involvement in the PCWP to ensure successful implementation of the Plum Creek WPP and track implementation.					
Subtask 2.1	GBRA, in coordination with the PCWP, will oversee the Plum Creek Watershed Coordinator (PCWC) to engage and facilitate the PCWP and entities identified in the Plum Creek WPP. The PCWC will serve as the primary conduit for interaction with landowners, citizens, and entities to facilitate the implementation of the WPP. The PCWC shall participate in Texas Watershed Coordinator Roundtables and the TSSWCB Southeast and South Central Texas Regional Watershed Coordination Steering Committee meetings. The PCWC will continue to be stationed in the Plum Creek watershed.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 2.2	The PCWC will assist governmental and non-governmental organizations in the Plum Creek watershed, in identification and acquisition of resources (financial and technical) to enable WPP implementation. The PCWC will actively seek and pursue funding opportunities and work with partners to develop grant proposals. The PCWC will work with state and federal agencies, as appropriate, to bring technical and financial resources to the watershed.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 2.3	The PCWC will 1) evaluate and track progress toward achieving milestones established in the WPP; 2) assess water quality data collected through the Clean Rivers Program and other data collection efforts in relation to achieving load reductions; and, 3) publish, print, and distribute to stakeholders a biennial addendum to the Plum Creek WPP that describes modifications/updates to goals and milestones, documents success in achieving goals and milestones, and success in achieving water quality improvement and load reductions (publishing target in spring 2016). The WC will work with TSSWCB and TCEQ to periodically provide information to EPA to support the <i>Rationale for Reclassifying Plum Creek (Segment 1810) from Category 5 to Category 4b on the 2010 Texas Integrated Report</i> and as modified in subsequent Integrated Reports.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 2.4	GBRA and PCWC will facilitate public participation and stakeholder involvement in the watershed planning process, specifically by hosting meetings of the PCWP Steering Committee (quarterly) and Work Groups (as needed) to provide regular updates on progress to implement the WPP and seek input and recommendations on needed activities. The PCWC will coordinate meetings, secure meeting locations, prepare and disseminate meeting notices and agendas. Meeting summaries will be prepared and posted to the project website.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 2.5	GBRA and PCWC will maintain a database of watershed stakeholders and affected parties for use in engaging the public in the watershed planning process. The stakeholder group will be added to, based upon previous efforts of Extension in TSSWCB projects 04-17 and 08-07.					
	Start Date	Month 1	Completion Date	Month 46		
Subtask 2.6	GBRA and PCWC will attend and participate in other public meetings as appropriate in order to communicate project goals, activities and accomplishments to affected parties. Such meetings may include, but are not limited to, city councils, county commissioners' courts, Clean Rivers Program Basin Steering Committee and Coordinated Monitoring, local soil and water conservation districts (SWCDs), groundwater conservation districts and other appropriate meetings of critical watershed stakeholder groups.					
	Start Date	Month 1	Completion Date	Month 46		

Deliverables	<ul style="list-style-type: none"> <li>• Notices, agendas, meeting materials, attendance lists, and summaries from PCWP meetings</li> <li>• Documentation of resource opportunities identified, applied for and resources obtained to support plan implementation</li> <li>• Biennial Addendum to WPP</li> <li>• Stakeholder contact list, updated as needed</li> </ul>
--------------	---

Tasks, Objectives and Schedules						
Task 3	Outreach, Education and Community Support					
Costs	Federal	\$95,100	Non-Federal	\$63,399	Total	\$158,499
Objective	To promote involvement, provide information transfer and encourage participation in the Plum Creek Watershed Partnership.					
Subtask 3.1	<p>The PCWC will coordinate and conduct water resources and related environmental outreach/education efforts across the watershed, as identified in the Plum Creek WPP. GBRA will work with collaborating entities to organize the following training programs:</p> <ul style="list-style-type: none"> <li>• Riparian education workshops – 3 events</li> <li>• Conventional OSSF maintenance workshop for homeowners – 1 event</li> <li>• Aerobic system operation and maintenance workshops for homeowners – 2 events</li> </ul> <p>The PCWC will look into the feasibility of conducting the following water resources and related environmental outreach/education events: Local community cleanups, Texas Watershed Steward Program, Sports and Athletic Field Education, rainwater harvesting workshops, Texas Well Owner Network trainings, well screening events, Texas Stream Team volunteer monitoring trainings, and Lone Star Healthy Stream (grazing cattle component). The PCWC will work with the entities that administer/fund these programs and try to direct delivery of these programs to Plum Creek depending on priorities of those entities and programs.</p> <p>The PCWC will make presentations on the PCWP, WPP and general nonpoint source pollution information to local schools and community organizations.</p> <p>The PCWC will work with Extension (County Agents) to coordinate annual soil testing campaigns targeting fertilizer users (agricultural and urban) in Hays and Caldwell Counties.</p> <p>GBRA and PCWC will support, promote, and participate in, as appropriate, any field days, demonstrations, site tours, or education events sponsored by Extension, NRCS, and/or SWCDs for the Plum Creek watershed.</p> <p>The PCWC will conduct a local farms tour to support and promote agricultural practices to conserve and/or enhance soil health and water quality in the Plum Creek Watershed.</p>					
	Start Date		Month 1	Completion Date		Month 46
Subtask 3.2	<p>GBRA and PCWC will work with TAMU Spatial Sciences Laboratory to continue to host and maintain the PCWP website (<a href="http://plumcreek.tamu.edu">http://plumcreek.tamu.edu</a>) to serve as a public clearinghouse for all project- and watershed-related information. All presentations, documents and results will be posted to this website. The website will serve as a means to disseminate information to stakeholders and the general public.</p>					
	Start Date		Month 1	Completion Date		Month 46

Subtask 3.3	GBRA and PCWC will facilitate communication with stakeholders in order to engage the public and affected entities in the watershed planning process. GBRA and PCWC will utilize all appropriate communication mechanisms including direct mail, e-mail, the project website, and mass media (print, radio, television). GBRA and PCWC will develop and disseminate general project informational materials, including, but not limited to, flyers, brochures, letters, fact sheets, news releases, and other appropriate promotional publications. GBRA will include information about the project in GBRA newsletters (e.g., <i>River Run</i> ) and Clean Rivers Program publications. GBRA and PCWC will develop and utilize a listserv (e.g., <a href="http://listserv.tamu.edu/">http://listserv.tamu.edu/</a> ) to facilitate direct discussion between stakeholders. GBRA and PCWC will make appropriate use of social media (i.e., Facebook, Twitter) as a stakeholder communication mechanism for this watershed. GBRA will develop, publish, and distribute newsletters (i.e., <i>Plum Creek Current</i> ) that highlight Plum Creek watershed activities; the newsletter shall be distributed as most appropriate to individual landowners and entities in the watershed. GBRA and PCWC will solicit content matter for educational materials from Project Partners as appropriate. TSSWCB must approve all project-related content in any informational materials and promotional publications prior to distribution.			
	Start Date	Month 1	Completion Date	Month 46
Deliverables	<ul style="list-style-type: none"> <li>• Documentation of workshops including handouts, agendas and attendance rosters</li> <li>• Project website</li> <li>• Educational and promotional materials, as developed and disseminated</li> <li>• Newsletters</li> </ul>			

Tasks, Objectives and Schedules						
Task 4	Community Collection Events					
Costs	Federal	\$24,226	Non-Federal	\$16,294	Total	\$40,520
Objective	To address potential contamination to the Plum Creek watershed from common illegal dumping sites, promote proper disposal of hazardous and non-hazardous waste and deter future illegal dumping.					
Subtask 4.1	GBRA and PCWC will coordinate 2 Community Collection Events for landowners and residents of the Plum Creek Watershed. Events will provide free disposal of household, non-hazardous waste. Each event will also accept and recycle tires. GBRA and PCWC will provide or select equipment and contactors for the events.					
	Start Date	Month 1	Completion Date	Month 46		
Deliverables	<ul style="list-style-type: none"> <li>• Documentation of cleanups including contractor agreement, number of tires and pounds of waste collected</li> </ul>					

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

- Facilitate and continue implementation of the Plum Creek WPP and foster coordinated assistance activities between the Cities, Counties, GBRA, PCCD, TSSWCB, local SWCDs, NRCS, and members of the PCWP by providing a local presence in the Plum Creek Watershed.
- Conduct PCWP Steering Committee meetings and Work Group meetings to provide updates on progress, seek stakeholder input and recommendations on needed activities, and encourage citizen participation.
- Support and facilitate the PCWP in identifying management measures to improve water quality, developing proposals to acquire funding for implementation of management measures, managing and tracking implementation projects as well as facilitating education programs in order to encourage adoption of BMPs.
- Work with state and federal agencies, as appropriate, to bring technical and financial resources to the Plum Creek watershed.
- Track and document implementation efforts to assess progress toward achieving milestones established in the WPP.
- Coordinate and conduct water resources and related environmental outreach/education efforts across the watershed, by developing publications, website content to promote and communicate watershed efforts, organizing training programs, and by participation in local community clean up events.

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

- Provide technical assistance to the PCWP through identification and acquisition of resources, seek and pursue funding opportunities, and develop grant proposals
- Evaluate progress toward achieving milestones in the WPP and publish an addendum to the Plum Creek WPP that describes modifications/updates to goals and milestones, documents success in achieving goals and milestones and success in achieving water quality improvement and load reductions
- Reduction in potential bacterial contamination and nutrient loading for streams from agricultural and urban nonpoint source pollution
- Increased knowledge of citizens, landowners and agricultural producers of management measures identified in WPP through outreach and educational efforts including training programs

<b>2012 Texas NPS Management Program Reference (Expand from Summary Page)</b>
Components, Goals, and Objectives
<b>Component One</b> – Explicit short- and long-term goals, objectives, and strategies that protect surface and ground water.
<b>LTG 2</b> - Support the implementation of state, regional, and local programs to prevent NPS pollution through assessment, implementation, and education.
<b>LTG 3</b> - Support the implementation of state, regional, and local programs to reduce NPS pollution, such as the implementation of strategies defined in TMDL I-Plans, WPPs, and other water planning efforts in the state.
<b>LTG 6</b> - Develop partnerships, relationships, memoranda of agreement, and other instruments to facilitate collective, cooperative approaches to manage NPS pollution.
<b>LTG 7</b> - Increase overall public awareness of NPS issues and prevention activities.
<b>LTG 8</b> - Enhance public participation and outreach by providing forums for citizens and industry to contribute their ideas and concerns about the water quality management process.
<b>STG 2D</b> - 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.
<b>STG 3B</b> - Administer programs to educate citizens about water quality and their potential role in causing NPS pollution.
<b>STG 3D</b> - Conduct outreach through the CRP, Texas A&M 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.
<b>STG 3G</b> - Implement public outreach and education to maintain and restore water quality in water bodies impacted by NPS pollution.
<b>Component Two</b> - Working partnerships and linkages to appropriate State, interstate, Tribal, regional, and local entities, private sector groups, and Federal agencies.
<b>Component Six</b> - Implement all NPS program components required by CWA §319(b) and establish flexible, targeted, and iterative approaches to achieve and maintain beneficial uses of water as expeditiously as practicable, including: <ul style="list-style-type: none"> <li>• a mix of water quality-based and/or technology-based programs designed to achieve and maintain beneficial uses of water; and</li> <li>• a mix of regulatory, non-regulatory, financial, and technical assistance as needed to achieve and maintain beneficial uses of water as expeditiously as practicable.</li> </ul>
<b>Component Eight</b> - Manage and implement the NPS program efficiently and effectively, including necessary financial management.

<b>EPA State Categorical Program Grants – Workplan Essential Elements</b>
<b>FY 2011-2015 EPA Strategic Plan Reference</b>
Strategic Plan Goal – Goal 2 Protecting America’s Waters
Strategic Plan Objective – Objective 2.2 Protect and Restore Watersheds and Aquatic Ecosystems

**Part III – Financial Information**

<b>Budget Summary</b>				
Federal	\$	218,069	% of total project	60%
Non-Federal	\$	145,315	% of total project	40%
Total	\$	363,384	Total	100%
Category		Federal	Non-Federal	Total
Personnel	\$	108,289	\$ 63,388	\$ 171,677
Fringe Benefits	\$	43,857	\$ 25,672	\$ 69,529
Travel	\$	8,786	\$ 1,894	\$ 10,680
Equipment	\$	0	\$ 0	\$ 0
Supplies	\$	1,800	\$ 1,200	\$ 3,000
Contractual	\$	0	\$ 0	\$ 0
Construction	\$	0	\$ 0	\$ 0
Other	\$	31,513	\$ 39,216	\$ 70,729
Total Direct Costs	\$	194,245	\$ 131,370	\$ 325,615
Indirect Costs (≤ 15%)	\$	23,824	\$ 13,945	\$ 37,769
Total Project Costs	\$	218,069	\$ 145,315	\$ 363,384

<b>Budget Justification (Federal)</b>		
Category	Total Amount	Justification
Personnel	\$ 108,289	Salary for Watershed Coordinator for 36 months @ 0.60 FTE and 3 months @ 1.0 FTE
Fringe Benefits	\$ 43,857	Benefits for watershed coordinator for 39 months at 40.5% of personnel category
Travel	\$ 8,786	Mileage at state rate; Travel in watershed on a daily basis; periodic overnight stays at @ \$83 room night and \$46/day per diem
Equipment	\$ 0	
Supplies	\$ 1,800	Paper, Toner, General office supplies for watershed coordinator for three years
Contractual*	\$ 0	
Construction	\$ 0	
Other	\$ 31,513	Website maintenance (\$6,000), cellular service (\$6,653), , publication costs (\$3,000), constant contact (\$1,850), google plus (\$510), costs of training workshops (three in-field riparian workshops, one conventional OSSF workshop for homeowners, two aerobic system operation and maintenance workshops for homeowners) (\$4,000), local farm tour (1,000), cost for 2 Community Collection Events (\$6,000), professional development (Soil Health Conference, LID workshops, booth space at TSSWCB Annual Meeting of SWCD Directors, etc.) (\$2,500)
Indirect	\$ 23,824	22% of personnel category

<b>Budget Justification (Non-Federal)</b>		
Category	Total Amount	Justification
Personnel	\$ 63,388	Salary for watershed coordinator for 36 months @ 0.40 FTE
Fringe Benefits	\$ 25,672	Benefits for watershed coordinator for 36 months at 40.5% of personnel category
Travel	\$ 1,894	Mileage at state rate; Travel in watershed on a daily basis; periodic overnight stays at @ \$83 room night and \$46/day per diem
Equipment	\$ 0	
Supplies	\$ 1,200	General office supplies for watershed coordinator for three years
Contractual*	\$ 0	
Construction	\$ 0	
Other	\$ 39,216	Office rental (\$11,700), internet service (\$4,580), vehicle (\$18,936), cost for 2 Community Collection Events (\$4,000)
Indirect	\$ 13,945	22% of personnel category