

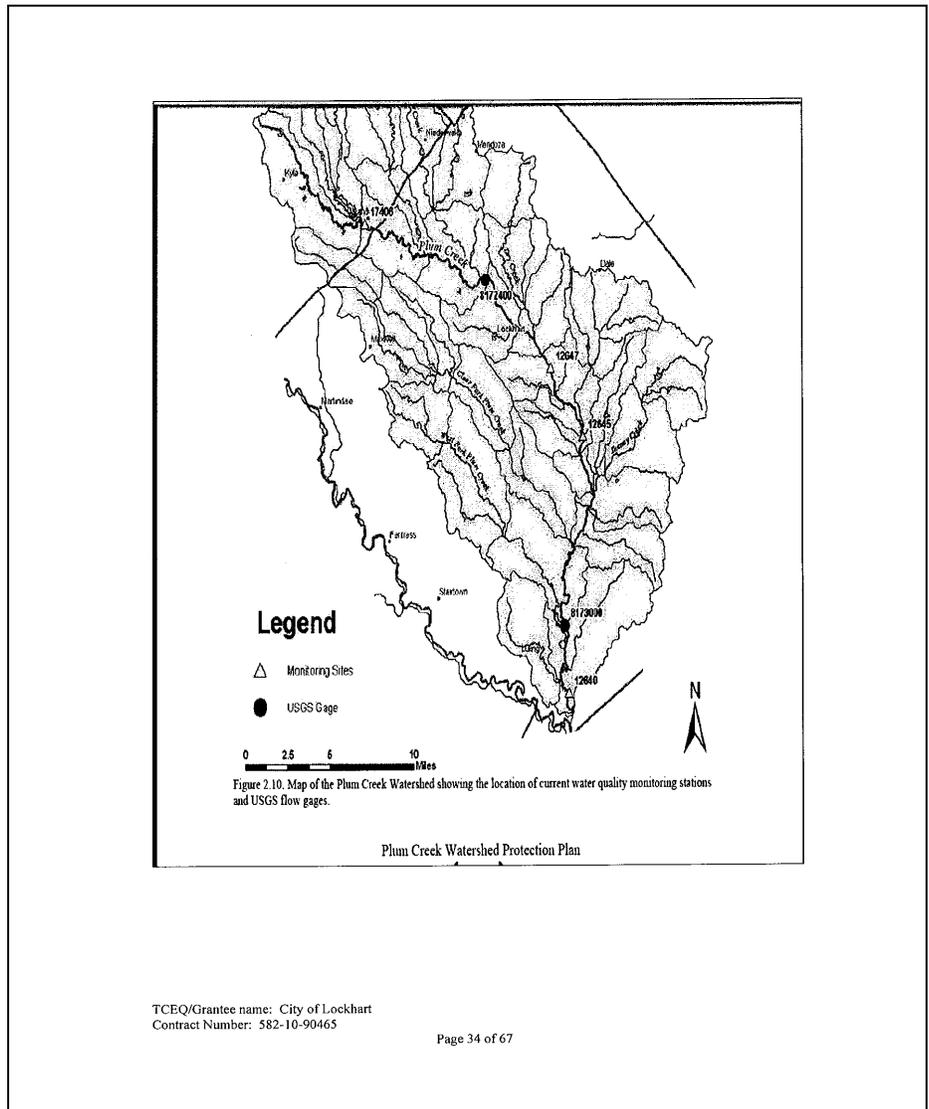
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Title:	NSP Water Quality Management Program
Water Body:	Plum Creek CR-1810
Location:	Lockhart, Texas
River Basin:	Lower San Marcos R-1808
Implementing Agency:	City Of Lockhart
Project Period:	August 17, 2010 – August 31, 2012 (To be revised)

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## Project Summary

The WPP in the Plum Creek Watershed has identified control measures and compliance strategies that will improve the water quality in the impaired Plum Creek Watershed by focusing on improving urban storm water quality. The City of Lockhart’s implementation project will include mapping and evaluating the existing storm water system and identifying and prioritizing upgrades to the city’s storm water management system, including cleaning out storm drains and installing storm drain filters. The project will also include information initiatives, stenciling of storm sewer inlets, maintaining the existing dog waste collection stations program in the parks and coordinating city “housekeeping activities” (street sweeping, creek cleanup days, household hazardous and electronic waste collection days, etc.). All of these activities are designed to improve water quality.



An illicit discharge survey will be conducted in the city using resources such as the EPA Guidance Manual on “Illicit Discharge and Detection. Sampling will be conducted at locations identified during the survey to measure constituents of concern. Subsequent, regular sampling at the same locations will detect the reduction/elimination of illicit discharges.

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## **Project Description**

### **Plum Creek Water Quality**

Analyses of water samples for the middle of the Plum Creek Watershed indicate higher than desired concentrations of E. coli bacteria, Nitrate Median and Phosphorous Median were found at the Lockhart Monitoring Station. The limits are exceeding regulatory limits although, the City of Lockhart wishes to stress that excessive concentrations are predominately noted to be occurring during the dryer periods of the year when reduced flow/low flow levels are present within the Plum Creek system.

### **Reason for Project**

Reduce nonpoint pollution by implementing a management program to improve water quality in the middle section of the Plum Creek Watershed for which, the City of Lockhart plays a vital role. The newly implemented management program is expected to reduce unwanted contaminants from entering the watershed and by doing so improve the quality of our natural resources. An important role of the management program is to assist the Plum Creek Watershed Protection Plan in reducing the above stated concerns which impacts all parties involved. By taking an active role and partnering with the EPA, TCEQ, GBRA, Texas AgriLife Extension Service and the TSSWCB, Lockhart can step to the forefront and be noted as a model for other communities to follow as an example of community conservation and protection of our vital resources...Fresh Water.

### **Project Goals**

Goals that are currently being implemented cover a variety of methods for eliminating contaminants entering the Plum Creek Watershed. Those are as follows:

- Conduct storm water engineering analysis and city-wide assessment to determine placement and selection of structural management measures.
- Conduct surveys to identify, locate and eliminate illicit discharge sources.
- Conduct stenciling program identifying storm inlets as routes to our creeks and rivers.
- Implement Educational Program to inform residents of the importance of eliminating unnecessary contamination discharges into the Plum Creek Watershed.
- Perform annual household hazardous waste cleanups which will include providing residents with a disposal site for fats, oils and grease.
- Maintain existing dog waste stations within the parks and educating residents of the importance of removing their pet deposits and disposing of it properly.
- Begin implementation of the new street sweeping program to eliminate NPS contributors.
- Begin the installation of storm drain filters to catch unwanted contributors and eliminate a source of contaminants to the Plum Creek Watershed.

### Water Quality Goals

Ultimately the reduction and elimination of the pollutant load at the end of a 10 year period is the goal as noted in the Plum Creek Watershed Protection Plan. A goal of a 15% reduction has been established for E. coli bacteria loads during dry conditions.

Nitrates will require considerable more attention in reducing levels. An 18% reduction is preferred during the moist weather months and reductions of 66% to 80% are needed during the drier periods of the year to meet regulatory requirements.

Nutrients are another concern with high levels of orthophosphorus and total phosphorus being noted during the dry months of the year. This indicates contributions from point sources and possibly direct deposition. Orthophosphorus will require a 49% decrease and a 5% in total phosphorus reduction will be necessary during dry conditions to meet water quality objectives.

The City of Lockhart will strive to assist in attaining the goals and objective as stated in the Plum Creek Watershed Protection Plan by implementing the stated programs required in order to eliminate contaminants from reaching the watershed.

### Major objective of project.

Reduction of contaminants and pollutants in the form of NPS entering the Plum Creek Watershed area with the implementation of programs and measures that will assist in locating and identifying sources which are contributing to the decline in water quality within the region. The City of Lockhart will develop and utilize a management plan which will incorporate the most effective best management practices to perform its role in eliminating NPS.

The City of Lockhart will begin implementing several of the required programs immediately, these being:

- Street sweeping program; ongoing for duration of program.
  - Conducting surveys to identify, locate and eliminate illicit discharges; ongoing.
  - Stenciling of city storm inlets; 1<sup>st</sup> year of program.
  - Implement education program; duration of program.
  - Perform annual Household Hazardous Waste cleanups; annually – to be held during 3<sup>rd</sup> Qtr. (spring) of fiscal year.
  - Continue to maintain pet waste stations located in city parks; ongoing.
  - Installation of storm inlet protection systems; will be performed within the first year of program.
  - GPS mapping of storm inlet system within the city; 1<sup>st</sup> year of program.
  - Conduct stormwater engineering analyses and city –wide assessments to determine placement of structural management measures in the jurisdictional boundaries of the City of Lockhart; to be conducted within the 1<sup>st</sup> year of the program.
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## **Project Partners & Funding**

The funding for this grant is supported by the Texas Commission on Environmental Quality and the Environmental Protection Agency. The total amount dedicated to the lifetime of the project cannot exceed \$458,333. 00.

Other Project Partners Include:

Capital Area Council of Governments (CAPCOG)

- City Household Hazardous Waste (HHW) cleanup Grant

Guadalupe / Blanco River Authority (GBRA)

- Water sampling and testing at Lockhart site

Lockhart Independent School District (LISD)

- Town Branch Creek Clean up
- Third party in-kind donation
- 282 student and parent volunteers

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Last Updated: September 20, 2010

Related Website(s): <http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wgn>

### **For More Information Contact:**

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