

Implementing the Plum Creek Watershed Protection Plan and Long-term Sustainability

Plum Creek Watershed Partnership

Nikki Dictson

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Plum Creek Watershed Protection Plan

Developed by

THE PLUM CREEK WATERSHED PARTNERSHIP

February 2008



View the *Plum Creek Watershed Protection Plan*

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Read the latest issue of our newsletter, *The Plum Creek Current* 

COMING SOON! Join us at upcoming events in the watershed!

The Plum Creek Watershed Partnership has developed a Watershed Protection Plan to promote a sustainable, proactive approach to cleaning up and protecting Plum Creek in Caldwell and Hays Counties in South Central Texas. The watershed planning process led to key recommendations including public outreach campaigns and a variety of management practices. A result of focused local effort throughout the watershed, implementation is underway to address water quality issues, including *E. coli* bacteria and nutrient levels. Browse the website to find out more and get involved as we move forward with watershed management in Texas!



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Potential Sources

Potential Sources	Bacteria	Nutrients	Other
<u>Septic Systems</u>	X	X	X
<u>Wildlife</u>			
Deer	X	X	
Feral Hogs	X	X	
<u>Cropland</u>		X	
<u>Livestock</u>			
Sheep and Goats	X	X	
Horses	X	X	
Cattle	X	X	
<u>Oil and Gas Production</u>			X
<u>Urban Runoff</u>	X	X	X
<u>Wastewater Treatment Facilities</u>	X	X	

The 4b Process

- *EPA Region 6 Process for Review of WPPs in lieu of TMDLs (May 23, 2007)*
 - document discusses the national EPA guidance & regulatory mechanisms governing the process of utilizing WPPs in lieu of TMDLs, as well as, discusses how this “4b option” relates to the 9 essential elements of WPPs
 - http://www.tsswcb.state.tx.us/wpp#4b_option

TCEQ Definition of Category 5c & 4b

- 5c: The waterbody does not meet applicable water quality standards or is threatened for one or more designated uses by one or more pollutants [&] additional data & information will be collected before a TMDL is scheduled.
- 4b: Standard is not supported or is threatened for one or more designated uses but does not require the development of a TMDL [because] other pollution control requirements are reasonably expected to result in the attainment of the water quality standard in the near future.

EPA's 6 elements for 4b

- 1) statement of the problem causing the impairment
- 2) description of the proposed implementation strategy & supporting pollution controls necessary to achieve water quality standards, including the identification of point & nonpoint source loadings that when implemented assure the attainment of all applicable water quality standards
- 3) estimate or projection of the time when water quality standards will be met

EPA's 6 elements for 4b

- 4) reasonable schedule for implementing the necessary pollution controls
- 5) description of, & schedule for, monitoring milestones for tracking & reporting progress to EPA on the implementation of the pollution controls
- 6) commitment to revise as necessary the implementation strategy & corresponding pollution controls if progress towards meeting water quality standards is not being shown

Reclassification of Plum Creek

- Developed a report on the justification or rationale for reclassifying Plum Creek from category 5c to 4b water body.
- After review of draft 4b Rationale by the Steering Committee, TCEQ submitted it to EPA for review & comment
- The rationale is part of the 2010 Texas Integrated Report, which is in the process of being reviewed by EPA.
- Plum Creek would be shifted, based on the final Rationale, from Category 5c (requiring a TMDL) to Category 4b on the *2010 303(d) List* which is to be published by TCEQ

Pros & Cons

- 1st WPP to attempt 4b in Texas
- TMDL (federally-driven, regulatory-framed) must be developed at some time before 2017 if Plum Creek remains impaired & in Category 5
- Because moving to 4b is a TCEQ/EPA decision both agencies would essentially be approving your WPP
- Incentivize greater commitment to implement WPP, especially voluntary NPS strategies
- Long-term utility of 4b may be limited as EPA may shift waterbody back to 303(d) List if progress in implementing WPP & achieving water quality standards is not demonstrated



Implementation Projects and Funding



Plum Creek Watershed Implementation Projects

- Water Quality Monitoring
 - \$654,148
- Urban Stormwater Control:
 - \$255,453 (Kyle)
 - \$275,000 (Lockhart)
- Rural Water Quality Management
 - \$996,079
- Watershed Outreach
 - \$150,000
- Caldwell County Regional Water and Wastewater Planning Study
 - \$100,000

Plum Creek Implementation Grants

- TSSWCB CWA § 319 (h) nonpoint source grant for outreach and education, project facilitation, agricultural cost-share programs, and feral hog management education
- TCEQ CWA § 319 (h) nonpoint source grants for cities
 - Kyle
 - Lockhart



Plum Creek TSSWCB 319 Implementation Grant

- Continue Facilitation, education and tracking of implementation projects
- A Soil and Water Conservation District Technician and Cost Share Program for agricultural producers
- An Extension Feral Hog Education position and online tracking system of feral hogs and damage in the watershed.

Technical and Financial Assistance for Ranchers and Farmers in the Plum Creek Watershed

➤ To Date:

- 9 WQMPs certified
- All at different stages of implementation
 - 555 acres under plan
 - 110 acres of grass planted
 - 800 feet of fence constructed
- Will be implementing additional pasture/hayland planting, livestock watering facilities, and additional cross-fencing

*Have had additional interested producers, however, they have not officially applied for the program

News Releases/Media

- 3/2/11 - “He’s your hog, Charlie Brown!” Texas AgriLife Today
- 3/17/11 - “State law regulates trapping, transporting of feral hogs” Texas AgriLife Today
- 3/21/11 - “Feral Hog Transportation Regulations” Wild Wonderings Blog at
 - <http://wild-wonderings.blogspot.com/>
- 3/29/11 - “This little piggy had tularemia...” Texas AgriLife Today
- 4/1/11 - Texas Farm Bureau Radio Interview “Who owns feral hogs in Texas?”
- 4/1/11 – “Feral Hog Disease Concerns” Wild Wonderings Blog
- 4/4/11 - Texas Farm Bureau Radio Interview “What’s wallowing in Texas water?”
- 4/6/11 - “Extension pubs provide info on porcine pest: Materials fat with facts on feral hogs” Texas AgriLife Today
- 4/15/11 - “How to safely transport feral hogs” Wild Wonderings Blog

Feral Hog Management Workshop

- February 23, 2011 in Luling
- Covered feral hog biology, behavior, laws, regulations, and management strategies
- Drew about 280 landowners from the watershed and throughout the region
- I presented on feral hog biology and the Plum Creek Watershed



Available resources

- <http://pcwp.tamu.edu/FeralHogs/>
- Publication links
 - Recognizing Feral Hog Sign
 - Snaring Feral Hogs
 - Building a Feral Hog Snare
 - Placing and Baiting Feral Hog Traps
 - Box Traps for Capturing Feral Hogs
 - Corral Traps for Capturing Feral Hogs
 - Door Modifications for Feral Hog Traps
- Site visits for landowners
- Presentations for groups



Box Traps for Capturing Feral Hogs

Chancey Lewis, Matt Berg, James C. Cathey, Jim Gallagher, Nikki Dictson, and Mark McFarland
Texas AgriLife Extension Service
The Texas A&M University System

Rising feral hog numbers pose a threat to agriculture and water quality in the Plum Creek Watershed and across the state. As part of the toolbox for feral hog management, box traps should be considered among approaches to reducing feral hog numbers and impacts. While they are not the best choice to remove large numbers of animals at a time, box traps are useful as a pinpoint control effort – a tool to remove a small number of hogs or to focus on a relatively small, defined area – and can be a first strike in combination with larger traps and other techniques.

Trap Placement

When deciding where to locate a box trap for capturing feral hogs, identify creeks, ponds, and other watering locations, particularly if these are near bedding or feeding areas. Feral hog trails are ideal locations for trap placement. Set the trap upwind of an area frequented by hogs so animals will be attracted to bait in the trap. A game camera can help determine hog behavior in the area and identify optimal locations for trap placement.

Trap Dimensions and Gate Styles

Box traps come in a variety of designs and shapes. Most are constructed of livestock panels with steel pipe or angle iron frames. Most traps are built by the user, and consequently there exists a tremendous variety of traps that differ in size, portability, door configuration, flooring and roofing. In some areas, ready-to-use box traps and different styles of head gates are available for purchase.

A common design is the 4' x 8' heavy duty cage (Fig. 1). Trap height is typically between 3' and 4', and a top is recommended to prevent hogs from crowding in the corners and climbing out. Fully enclosed traps with a top and a floor may allow the trapper to transport a live hog without removing it from the trap. However, all box traps, particularly those without floors, require T-posts to anchor the trap, adding materials that may dissuade a hog from entering and driving up the total cost of the trap.

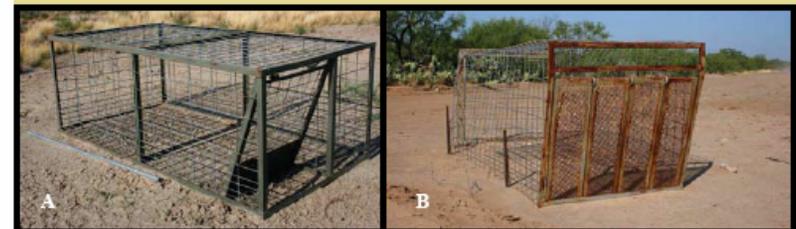


Figure 1. Box traps vary in both size and construction. A common design includes a 4' x 8' cage built with durable materials (A). The best box traps are both effective and low in cost. Many box traps are fashioned with materials readily available to the landowner (B).

City of Kyle Grant from TCEQ

- Retrofit detention facilities at Steeplechase and Plum Creek subdivisions
- Storm sewer marking and education program
- Stormwater mapping and control plan
- Dog waste collection stations and education
- Initiated street sweeping program
- Continue community clean-up events at Steeplechase Park on Plum Creek
- Water quality monitoring of efforts – *E. coli* and nutrients



City of Lockhart Grant from TCEQ

- Storm sewer marking and education program
- Creation of stormwater system mapping and control plan and illicit discharge survey
- Cleaning of storm drains and installation of inlet filters
- Household hazardous and electronic waste collection and expansion of household hazardous waste disposal service to include fats, oils, and grease
- Street sweeping program and community clean-ups
- Maintain dog waste collection station maintenance

OSSF Assistance in Caldwell County

- We would like to assist Caldwell County with potential funding and education for Septic Systems repair/replacement.
- Caldwell County has applied for a Texas Department of Rural Affairs CDBG Grant to do this project.
- Assisted Caldwell County with writing a Solid Waste Grant to CAPCOG that was awarded two years ago and County has continued on funding this program.

OSSF Assistance in Hays County

- Created a Hays County Wastewater Working Group to prioritize projects and develop proposals
- Held meetings with Hays County on potential of funding for Septic Systems
- The county has been interested in building partnerships to connect homes to WWTP or repair/replace onsite septic systems

Update on Hillside Terrace Wastewater Project



Hillside Terrace Residents

- Hays County has supported trying to find funding for this project and has initiated discussions with the residents.
- 2 Public Meetings were held this past summer with over 100 residents in attendance and they unanimously voted to proceed with applying for funding
- They were informed that the next step is the survey and funding applications.
- They also understand that they will have a monthly wastewater bill.

Texas Water Development Board Clean Water State Revolving Fund Loan Program

- Clean Water State Revolving Fund Loan Program – low-interest rate loans and principal forgiveness.
- Requires Water Conservation and Drought Contingency Plan
- Loans are 1.3% below market rate and terms for disadvantaged are 20 years (up to 30 yrs); 1.85% origination fee
- Must have project listed on SFY 2012 CWSRF Intended Use Plan.

Texas Water Development Board Clean Water State Revolving Fund Loan Program

- Pre-design is available in SFY 2012 but is anticipated to be phased out
- Disadvantaged Funding – minimum of 30% of federal capitalization grant
- The area served by the project must have a median Household Income <75% of the state MHI.
- Disadvantaged communities status could potentially cover 70% (<75% MHI) or 100% (less 60% MHI) with loan forgiveness based on the AMHI for benefitted area.

Socioeconomic Survey

- Hays County and Buda split the cost of the survey
- Socioeconomic Survey field work was performed from Thursday, February 17, 2011 to Tuesday, February 22, 2011
- Total number of housing units: 262
- Removing the 1 vacant house = 261
- Total number of responses: 145 = response rate of 55.56% well above the 35% required minimum

Survey Results

- The Annual Median Household Income is \$25,500
- The Average Household Size is 4.089 persons (593 persons/145 households).
- Buda and Hays County will receive a letter in June about the project and its ranking on the State Revolving Fund IUP list.
- If they rank high they will be asked to provide a full application for the program.

Community Development Block Grant Funding

- Texas Department of Rural Affairs has funding available to connect the low income residents to the new infrastructure
- Grant Funding of \$350,000 can be applied for to properly abandon the existing septics and connect the homes that qualify.
- Each home would have to complete a CDBG socioeconomic survey

Lockhart and Kyle Cleanup & Environmental Fairs



Long-term Sustainability Discussion

- 3 year implementation project administration funding ends August 2011-potential extension
- GBRA led the effort to develop and submit a proposal for additional §319(h) grant funds from TSSWCB for a watershed coordinator
- Currently working on inter-local agreement with partner entities and 40% match requirement
- TSSWCB has included the project in their FY2011 Grant Application to EPA.

Interlocal Agreement and Match Structure

- Presentations were conducted for City Councils, County Commissioner Courts and Boards to update them on project implementation and providing match for this next grant.
- The interlocal agreement was reviewed by all of the legal councils for the entities
- The Long-term Sustainability Partners developed the match structure with both population and land area for each entity to determine their share of the match.

Meetings with Counties and Cities to Update and Discuss Sustainability

- January 20, 2011 – Luling City Council Meeting
- February 2, 2011 – Hays County Commissioner Mark Jones
- February 7, 2011 – Caldwell County Judge Tom Bonn
- March 1, 2011 – Sustainability meeting with partner entities
- March 2, 2011 – Umland City Council Meeting
- May 5, 2011 - Sustainability meeting with partner entities
- May 12, 2011 – City of Umland
- May 16 , 2011– Caldwell County Commissioners Court
- May 17 – Hays County Commissioners Court
- May 17 – Plum Creek Conservation District
- May 17 – City of Buda

Match Spreadsheet

Entitles	2009 Population	Area Acres	Area (sq. Miles)		Cost	Portion for	
						\$48,000	
					Population Portion (50%)	Land portion (50%)	TOTAL
Caldwell County (In Watershed)	17488	189709	311	296.42	\$3,109	\$5,123	\$9,232
Hays County (In Watershed)	8,622	38628	72	60.3	\$1,533	\$1,247	\$2,779
Kyle	28,700	6000	9.38		\$5,102	\$194	\$5,295
Lockhart	14238	7,210	11.26		\$2,531	\$233	\$2,764
Luling	5502	2120	3.31		\$978	\$68	\$1,046
Buda	7784	1451	2.27		\$1,384	\$47	\$1,431
GBRA	26110	248637	388		\$4,641	\$8,025	\$12,667
FCCD	26110	248637	388		\$4,641	\$8,025	\$12,667
Umland	457	1171	1.83		\$81	\$38	\$119
Watershed	82334	248637	388				
TOTAL	135,011	743,563			\$24,000	\$24,000	\$48,000
TOTAL ESTIMATED BUDGET ■		120000					
ANTICIPATED GRANT AWARD 60% OF BUDGET ■		72000					
ESTIMATED BUDGET BALANCE AFTER GRANT ■		48000					

Next PCWP Steering Committee Meeting

Thursday, August 11, 2011

6:00 to 9:00 pm

Lockhart State Park Meeting
Facility

Lockhart, Texas





Thanks!

Nikki Dictson

2474 TAMU

College Station, Texas 77845

n-dictson@tamu.edu

979-575-4424

<http://pcwp.tamu.edu>

