Plum Creek Cleanup Effort
The Plum Creek Watershed

- 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 a confluence point north of Gonzales county.
- Plum Creek is 52 miles in length and has a drainage area of 389 mi$^2$.
- Major Tributaries of Plum Creek include Brushy Creek, Porter Creek, Elm Creek, Dry Creek, West Fork of Plum Creek, Clear Fork of Plum Creek, Salt Branch of Plum Creek and Tenney Creek.
- Plum Creek receives at least five major wastewater discharges from the municipalities of Buda, Kyle, Lockhart (2 WWTP) and Luling, as well as several smaller plants (GBRA Shadow Creek). More discharges are expected as the populations in these areas continue to expand.
- According to the 2006 Water Quality Inventory and 303(d) List, Plum Creek (Segment 1810) is impaired by elevated bacteria concentrations (category 5c) and exhibits nutrient enrichment concerns for ammonia, nitrate nitrogen, total phosphorus and orthophosphorus.
Plum Creek Watershed Protection Plan

• The water quality issues identified in Plum Creek along with increasing urban development, land use throughout the watershed, oil and gas production, and potential for agricultural nonpoint source pollution were considered when Plum Creek was selected for a Watershed Protection Plan.

• The Watershed Protection Plan is a stakeholder process driven by public participation, with the goal of providing a foundation for restoring water quality in Plum Creek and its tributary streams by enabling financial, educational and technical assistance for improvements and restoration efforts.

• Once the key water quality issues have been identified by stakeholders, public outreach efforts and voluntary management programs are targeted to restore and protect the water resources of Plum Creek.

• This plan is intended to change over time as conditions change and new data becomes available.
Taking Charge of Water Quality Project

• The Plum Creek Watershed Protection Plan received a joint EPA and TCEQ 106 Education and Outreach Grant designated as “Taking Charge of Water Quality”.
• $150,000 of federal grant money was allocated for public education and outreach.
• This project is tasked with assisting the Plum Creek Watershed Partnership efforts to address the bacteria impairment and nutrient concerns in the watershed through education and outreach.

Objectives:

1. Develop educational online training and/or workshops for wastewater treatment, septic tank operation and maintenance, stormwater, FOG and household chemical disposal.
2. Develop and distribute educational brochures and create a marketing plan to notify interested parties of assistance available.
3. Provide technical assistance and training to counties, cities, athletic fields, schools and septic tank inspectors to identify and reduce potential impacts.
4. Identify and cleanup three major illegal dumping sites near waterways, that require special equipment and disposal. Organize and conduct two community cleanup events near waterways.
Objectives of Illegal Dumping Site Cleanup

**Tasks:**

1. Inventory and prioritize sites of illegal dumping in the Plum Creek Watershed
2. Identify challenges to cleanup events at each priority site, i.e. the need for heavy equipment, land owner access, traffic considerations, availability and location of solid waste disposal facilities.
3. Identify landowners at the priority sites and obtain permission to enter their property for access to the waterway.
4. Conduct cleanup events at three priority sites.
5. Properly dispose of collected materials.
6. Sponsor two community cleanup events.
7. Distribute outreach and education materials at each community cleanup event.
8. Notify the TCEQ region 11 office if suspected hazardous waste is discovered.
9. Post signs at identified locations.
Cleanup Administration

• GBRA Identified 16 potential illegal dumping cleanup sites.
• Hays county officials offered to perform the cleanup of the priority sites identified in their jurisdiction
• GBRA focused on cleanup sites identified in Caldwell County.
• GBRA realized that the administrative hours required for the bidding and contract process to hire outside contractors would use up a significant portion of the funds allocated for this project.
• In an effort to maximize dollars, the GBRA allocated its internal hydroelectric employees to tackle the cleanup directly.
• As a direct result of this decision, the GBRA was able to double the number of priority cleanup events, from 3 to 6.
• Six priority cleanup sites were addressed in Caldwell County:
  1. Plum Creek @ Whisper Road (CR 135)
  2. Salt Branch @ Salt Flat Road (Spruce Avenue)
  3. Plum Creek @ Biggs Road (CR 131)
  4. Copperas Creek @ Wattsville Road (CR 140)
  5. Plum Creek @ Old McMahon Road (CR 202)
  6. Plum Creek @ Old Kelly Road (CR 186)
The GBRA cleanup crew attaching bulky refuse to a winch cable
The GBRA winch truck operator lowering refuse into a trailer.
Plum Creek at Whisper Road (CR135)  Downstream View  Pre-Cleanup
Plum Creek at Whisper Road (CR 135) Downstream View Post-Cleanup
Plum Creek at Whisper Road (CR 135) Post-Cleanup Refuse
• Salt Branch of Plum Creek at Salt Flat Road Upstream View
  Pre-Cleanup
• Salt Branch of Plum Creek at Salt Flat Road Upstream View Pre-Cleanup
• Salt Branch of Plum Creek at Salt Flat Road Upstream View Post-Cleanup
• Salt Branch of Plum Creek at Salt Flat Road Downstream View Pre-Cleanup
• Salt Branch of Plum Creek at Salt Flat Road Downstream View Post-Cleanup
Salt Branch of Plum Creek at Salt Flat Road Downstream View Pre-Cleanup
Salt Branch of Plum Creek at Salt Flat Road Downstream View Post-Cleanup
• Plum Creek at Biggs Road (CR 131) Upstream View Pre-Cleanup
• Plum Creek at Biggs Road (CR 131) Upstream View
Pre-Cleanup
• Plum Creek at Biggs Road (CR 131) Upstream View Post-Cleanup
• Plum Creek at Biggs Road (CR 131) Downstream View Pre-Cleanup
• Plum Creek at Biggs Road (CR 131) Downstream View Pre-Cleanup
• Plum Creek at Biggs Road (CR 131) Downstream View Post-Cleanup
Plum Creek at Biggs Road (CR 131) Post-Cleanup Refuse
• Copperas Creek at Wattsville Road (CR 140) Downstream View
Pre-Cleanup
• Copperas Creek at Wattsville Road (CR 140) Downstream View Post-Cleanup
• Copperas Creek at Wattsville Road (CR 140) Downstream View Pre-Cleanup
• Copperas Creek at Wattsville Road (CR 140) Downstream View Post-Cleanup
• Copperas Creek at Wattsville Road (CR 140) Downstream View
Pre-Cleanup
• Copperas Creek at Wattsville Road (CR 140) Downstream View
Post-Cleanup
• Copperas Creek at Wattsville Road (CR 140) Upstream View Pre-Cleanup
• Copperas Creek at Wattsville Road (CR 140) Upstream View Post-Cleanup
Plum Creek at Old McMahon Road (CR 202) Downstream View
Pre-Cleanup
• Plum Creek at Old McMahon Road (CR 202) Downstream View

Post-Cleanup
• Plum Creek at Old Kelly Road (CR 186) No Dumping Sign
• Plum Creek at Old Kelly Road (CR 186) Upstream View Pre-Cleanup
- Plum Creek at Old Kelly Road (CR 186) Upstream View Post-Cleanup
• Plum Creek at Old Kelly Road (CR 186) Downstream View Pre-Cleanup
• Plum Creek at Old Kelly Road (CR 186) Downstream View
  Pre-Cleanup
• Plum Creek at Old Kelly Road (CR 186) Downstream View
  Pre-Cleanup
• Plum Creek at Old Kelly Road (CR 186) Downstream View Post-Cleanup
• Plum Creek at Old Kelly Road (CR 186) Day 3 Refuse
Cleanup Effort Yield

• Day 1 (03/25/2008) - 4400 lbs. of refuse, 28 tires, 3 batteries.
  • Plum Creek @ Whisper Road (CR 135).
  • Plum Creek @ Biggs Road (CR 131).
  • Salt Branch @ Salt Flat Road (Spruce Avenue).
• Day 2 (03/26/2008) - 2920 lbs. of refuse, 21 tires.
  • Plum Creek @ Biggs Road (CR 131).
  • Copperas Creek @ Wattsville Road (CR 140).
  • Plum Creek @ Old McMahon Road (CR 202).
• Day 3 (03/27/2008) - 4680 lbs. of refuse, 7 tires.
  • Plum Creek @ Old Kelly Road (CR 186)
• Day 4 (03/28/2008) - 2320 lbs. of refuse, 6 tires.
  • Plum Creek @ Old Kelly Road (CR 186)

• A Total of 14,320 pounds of refuse were disposed of at the New Braunfels Landfill.
• A total of 62 tires and 3 automotive batteries were disposed of at Bexar Waste Incorporated.
• 237 total man hours were utilized for the cleanup.
Illegal Dumping Was Cleaned Up

by the

- Plum Creek Sign Posting
NO DUMPING

You’re in the
Plum Creek Watershed
Report illegal dumping to the
Caldwell County Sheriff’s office
512-398-6777 ext. 501

• Plum Creek Sign Posting
Plum Creek Watershed Information

Guadalupe Blanco River Authority - www.gbra.org
Watershed Protection Plan - http://www.tsswcb.state.tx.us/managementprogram/plumwpp
Plum Creek Watershed Partnership - http://pcwp.tamu.edu/

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