

# **WELCOME!**

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## **DINNER SPONSORED BY:**





## **Plum Creek Watershed Partnership Public Stakeholder Meeting**

The Luling Foundation

523 S Mulberry Avenue, Luling, TX 78648

Thursday, May 30, 2019

6:00 PM to 8:00 PM

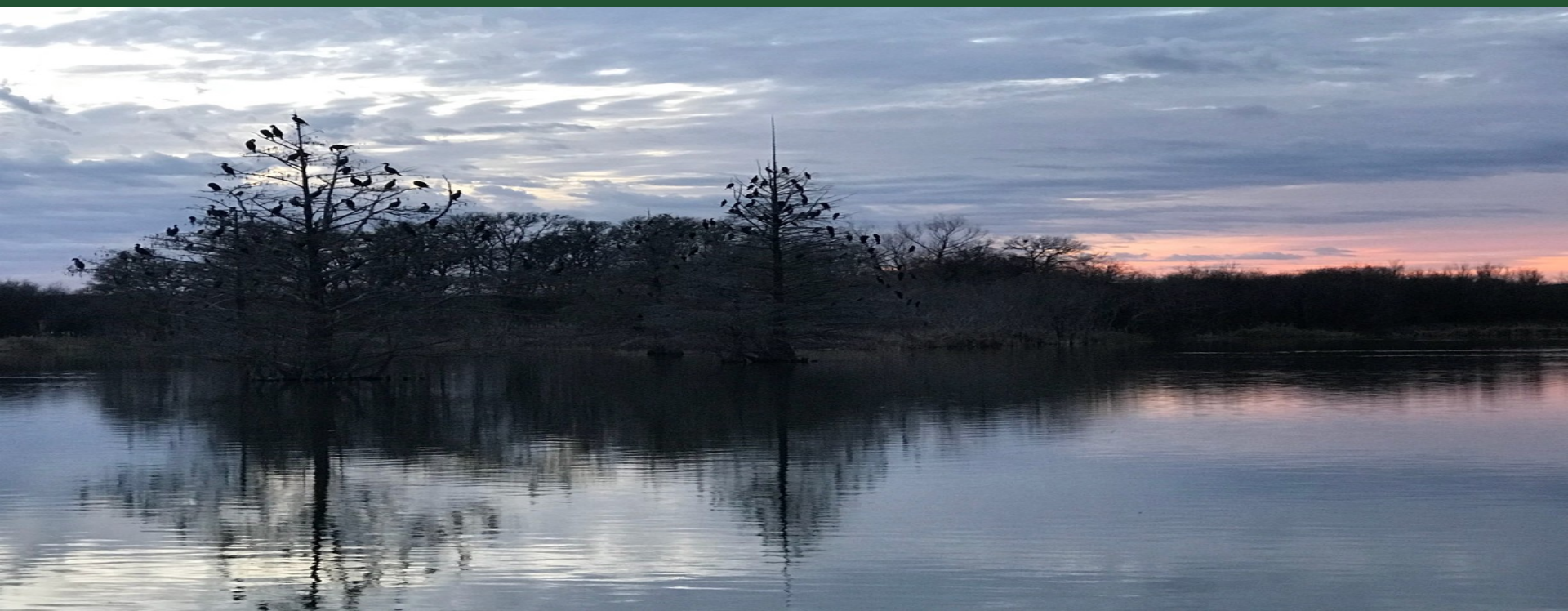
### **Agenda**

- 6:00      Sign in and Meal Served**
- 6:10      Welcome & Introductions – Steve Risinger, Plum Creek Watershed Coordinator**
- 6:20      Watershed Coordinator Updates – Steve Risinger**
- 6:40      Healthy Landscaping – Julie Zimmerman, Texas A&M Agrilife Extension**
- 7:00      Benefits of Healthy Soil Management – Jeremy Hasty, NRCS**
- 7:45      Steering Committee Member Updates**
- 8:00      Adjourn**

**Next Public Meeting:**      November 2019  
Time and date TBD  
Location: Lockhart State Park, Lockhart TX  
PCWP Public Meeting



Steve Risinger  
Plum Creek Watershed Coordinator



PLUM CREEK WATERSHED  
PARTNERSHIP PUBLIC STAKEHOLDER  
MEETING, MAY 30<sup>TH</sup> 2019

# AGENDA

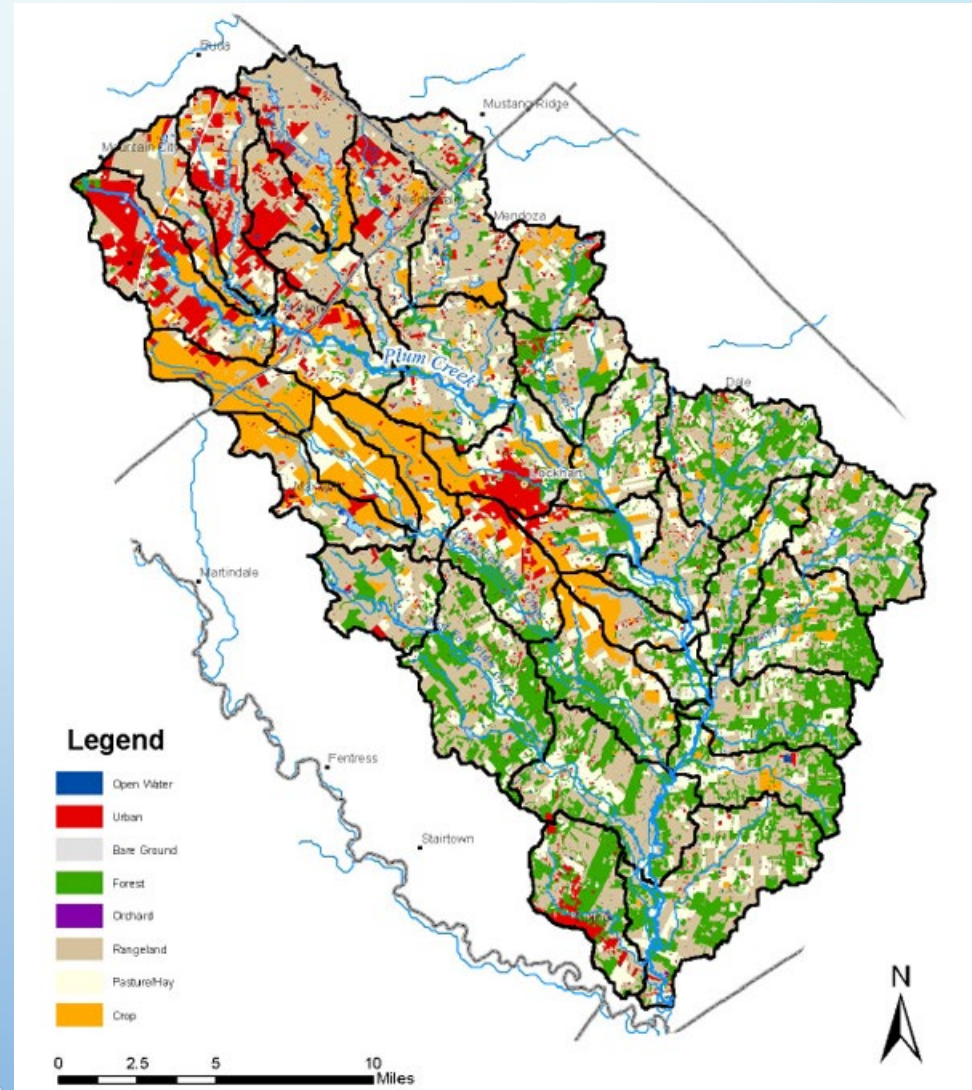
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- ❖ Plum Creek Watershed Overview
- ❖ Plum Creek Watershed Partnership
- ❖ Watershed Protection Plan
- ❖ Watershed Updates
- ❖ Implementation



# THE PLUM CREEK WATERSHED

- ❖ 397 square mile drainage
- ❖ Tributary to the San Marcos River
- ❖ Primary land use: farms & rural areas
- ❖ Placed on 2004 Texas 303(d) list for exceeding the primary standard for contact recreation for bacteria ( $E. coli < 126$  cfu). All 3 segments remain impaired.
- ❖ The 2016 TCEQ Integrated Report concerns: depressed DO, Nitrate, Total Phosphorus



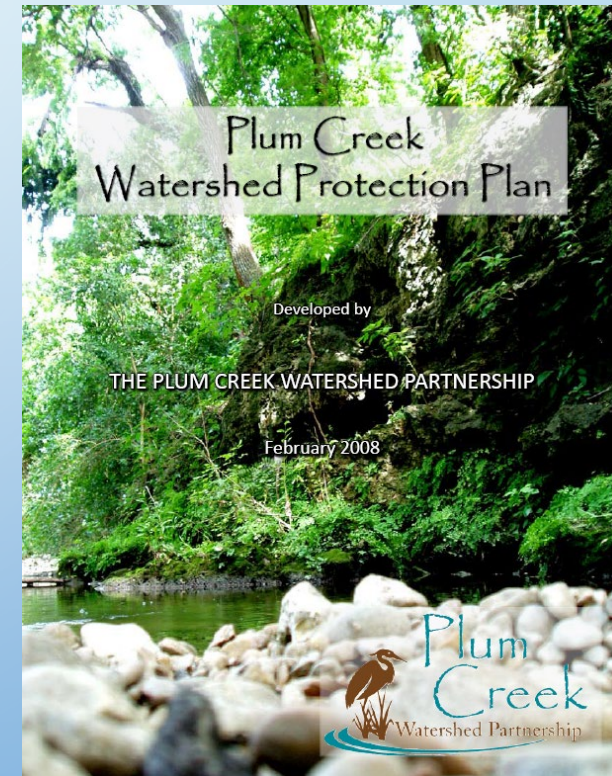
# THE PLUM CREEK WATERSHED PARTNERSHIP

est. 2006



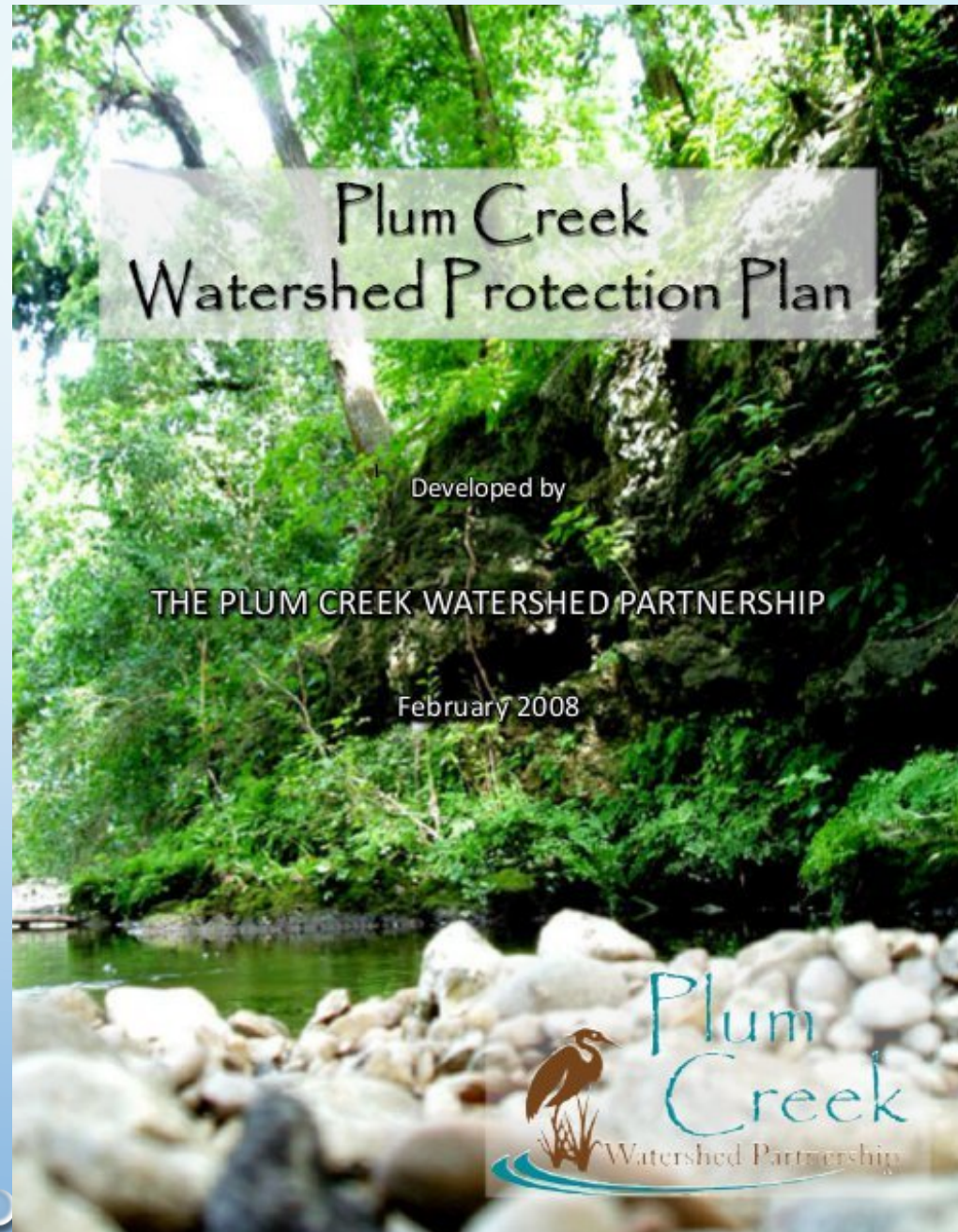
“THE **PARTNERSHIP** WORKS WITH CITIZENS, BUSINESSES AND OFFICIALS IN THE WATERSHED TO RESTORE THE HEALTH OF PLUM CREEK, RECOGNIZING THAT SUCCESS IN IMPROVING AND PROTECTING WATER RESOURCES DEPENDS ON THE PEOPLE WHO LIVE AND WORK THERE.”

--PLUM CREEK WATERSHED PROTECTION  
PLAN, 2008





One of the key results achieved by the Partnership is the development of the first Watershed Protection Plan accepted by the U.S. EPA in the State of Texas. This living document forms the backbone of efforts in the watershed and provides guidance as the Partnership moves forward to implement a variety of strategies to restore and protect water quality



# WHAT IS A WATERSHED PROTECTION PLAN? (WPP)

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- ❖ Primary goal is to restore and protect water quality of a water body through voluntary/ nonregulatory water resource management, updated biennially
- ❖ Guides the restoration and protection of water quality by:
  - Urban Stormwater Management
  - Wastewater Management
  - Agricultural Non-Point Source Management
  - Wildlife & Non-Domestic Animal Management
  - Education and Outreach



# WATER QUALITY UPDATE

## Increasing Bacteria Concentrations

### Plum Creek Seven Year E. coli Concentrations

	12/01/1995 - 11/30/2002	12/01/1997 - 11/30/2004	12/01/9999 - 11/30/2006	12/01/2001 - 11/30/2008	12/01/2003 - 11/30/2010	12/01/2005 - 11/30/2012	12/01/2007 - 11/30/2014	12/01/2009 - 11/30/2016	12/01/2011 - 11/30/2018
TCEQ Upper AU 1810_03	<b>183</b>	<b>205</b>	<b>217</b>	<b>235</b>	<b>295</b>	<b>307</b>	<b>448</b>	<b>481</b>	<b>536</b>
TCEQ Middle AU 1810_02	N/A	107	107	<b>141</b>	<b>150</b>	<b>200</b>	<b>237</b>	<b>312</b>	<b>381</b>
TCEQ Lower AU 1810_01	90	112	<b>137</b>	<b>199</b>	<b>195</b>	<b>157</b>	<b>144</b>	<b>209</b>	<b>275</b>

# POTENTIAL CAUSES OF INCREASING BACTERIA CONCENTRATIONS

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- Influence from increased population growth
  - Additional impermeable cover
  - Additional pet waste
- Increased precipitation influence following several years of drought conditions
  - Additional non-point source runoff
- Reduction in riparian corridors
  - Wildlife concentrated around creeks
  - Less buffering capacity for runoff

# **WATERSHED UPDATES**

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- **2019 Caldwell County Feral Hog Bounty Program**
- Started March 6<sup>th</sup>
- Next Collection Date for Bounty: Wednesday, June 6th
- Approximately 2,000+ feral hogs removed from watershed
- Funds remaining to remove an additional 2,000 feral hogs





# **WATERSHED UPDATES**

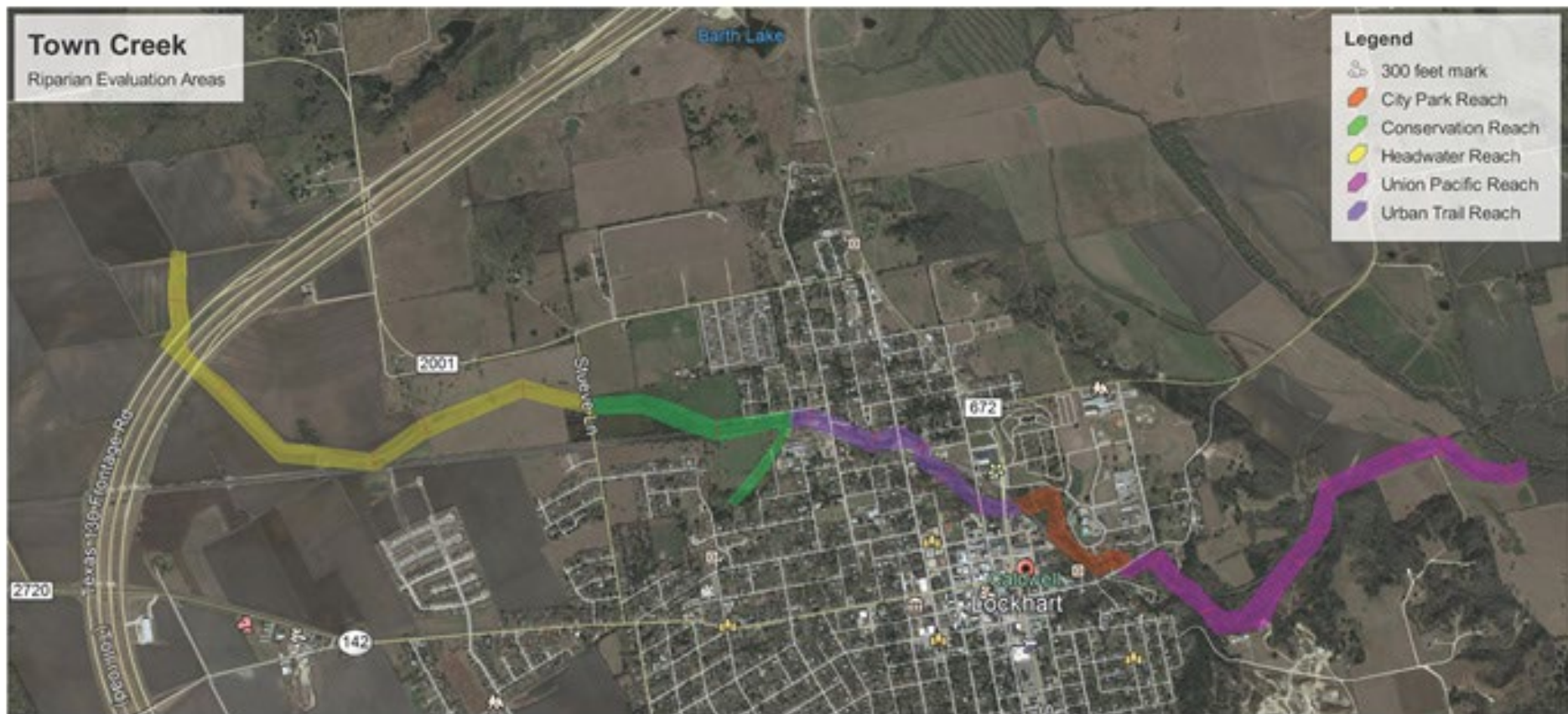
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## **2017 AGRICULTURAL CENSUS**

- Number of farming operations in Caldwell County have climbed by 19% since 1997 due primarily to the partitioning and sale of larger properties
- The amount of acreage devoted to agricultural operations has increased from 55,928 to 67,908 – a 21% increase from 2012 totals
- Total number of cattle in Caldwell County has increased by 12% since 2012
- Corn is the leading agricultural product in Caldwell County with over 1.7 million bushels produced

# WATERSHED UPDATES

## Plum Creek Watershed Protection Plan (WPP) Implementation –Town Branch Urban Trail, Lockhart, TX



# **WATERSHED UPDATES**

## **TOWN BRANCH RIPARIAN RESTORATION**

- Collaboration between TCEQ, City of Lockhart, Nueces River Authority, and the Plum Creek Watershed Partnership
- Conduct a riparian evaluation at Lockhart Town Branch Creek to plan and design improved sustainable riparian zones at the creek
- Construct and implement proposed improvements using urban riparian BMPs to address water quality concerns including bacteria, depressed dissolved oxygen and nitrate
- Construct sustainable LID infrastructure to be used at the parks to reduce in urban stormwater runoff
- Conduct public outreach activities and education in support of the Plum Creek WPP
- Project Status: Initial design meeting between project partners completed April 26th



# WATERSHED UPDATES

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## TOWN BRANCH RIPARIAN RESTORATION

- 2,000 square foot rain garden to treat a catchment area of 2 acres
- Expand a riparian buffer strip over a half-acre area treating runoff from a larger upland area in a manner comparable to a vegetated filter strip
- EPA approved Stepl modeling will be used to estimate load reductions for sediment, nitrogen, phosphorus, and BOD
- Eliminate invasive species -
- Controlling flow
- Removing litter
- Using landscape and maintenance controls to stabilize stream banks
- A “rotating views” feature to encourage controlled access to the creek
- And public outreach to include accessibility to information about the park

Elephant  
Ears

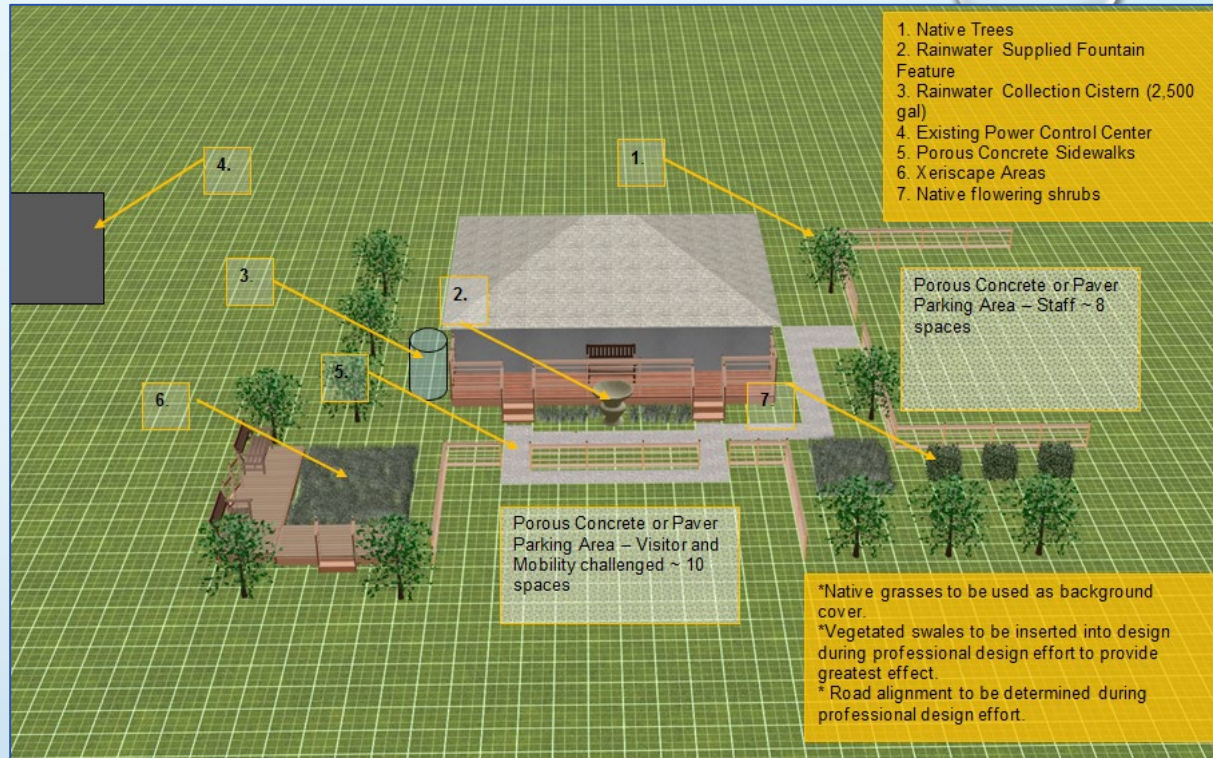


Chinese  
Tallow



# TCEQ 319 GRANTS FUND LID PROJECTS

- ✓ Rainwater Harvesting
- ✓ Porous Concrete
- ✓ Pavers
- ✓ Wet Ponds
- ✓ Grassed swales
- ✓ Raingardens
- ✓ Xeriscaping
- ✓ Outreach and Education





# BENEFITS OF LOW IMPACT DEVELOPMENT

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- Improves Water Quality
- Reduce Volume/Speed of Storm Runoff
- Restores Aquatic Habitat
- Improves Groundwater Recharge
- It Looks GOOD!
- Benefits of LID





# WPP IMPLEMENTATION





# HEALTHY LAWNS HEALTHY WATERS

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- Aims to improve and protect surface water quality by enhancing awareness and knowledge of best management practices for residential landscape
- Half day workshops for home owners
- Free soil testing!!
- June 20<sup>th</sup> Kyle TX

Healthy Lawns  
Healthy Waters



# SEPTIC SYSTEM CLASSES FOR HOMEOWNERS

- 2 hour class that provides a general overview of all types of septic systems
  - Covers general maintenance and operation
  - When to pump out the system
  - What is allowed down the drain
- 6 hour class focuses on aerobic systems
  - Intensively covers how to maintain and operate aerobic systems
  - Provides in-depth explanation of the treatment processes in these systems





# HOW CAN I BE APART?

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- Plum Creek Watershed Partnership Meetings
- Cleanup Events, Septic classes, TWON, LSHS, and other workshops
- Go to <https://plumcreekwatershed.org> for updates, to sign up for email notices and newsletters, find us on social media



# **PARTNERSHIP ACTIVITIES FOR 2019**

- ✓ **THREE LOW IMPACT DEVELOPMENT PROJECTS (KYLE, LOCKHART, CALDWELL CO.)**
- ✓ **SEPTIC SYSTEM WORKSHOPS (CONVENTIONAL/AEROBIC)**
- ✓ **RIPARIAN MANAGEMENT WORKSHOPS**
- ✓ **LOW IMPACT DEVELOPMENT WORKSHOPS**
- ✓ **COMMUNITY COLLECTION EVENTS**
- ✓ **EARTH DAY EVENT**
- ✓ **ANNUAL KEEP LOCKHART BEAUTIFUL CLEANUP AND ENVIRONMENTAL FAIR**
- ✓ **CONTINUED LANDOWNER ASSISTANCE**



**RECRUITING 5-8 INDIVIDUALS  
FOR 2020 WPP UPDATE WORK  
GROUP MEETING, JULY 2019  
IN LOCKHART**




# QUESTIONS?





# NEXT OPEN MEETING

NOVEMBER, 2019  
6:00PM  
LOCKHART, TX



# THANKS!



TEXAS STATE  
**Soil & Water**  
CONSERVATION BOARD

**Steve Risinger**

**Plum Creek Watershed Coordinator**

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