



Plum Creek Watershed Partnership Steering Committee Meeting

City of Umland Community Center
15 N. Old Spanish Trail, Umland, TX 78640

Tuesday, February 12, 2019
12:00 PM to 2:00 PM

Agenda

- 12:00 Welcome & Introductions - Steve Risinger**
- 12:15 Watershed Coordinator Updates - Steve Risinger**
- 12:25 Bacterial Source Tracking Final Results & Discussion– Steve Risinger**
- Short & long term goals
 - Appropriate BMPs
- 1:25 Steering Committee Member Updates**
- Member Review
- 2:00 Adjourn**

Next Meeting: 15 May, 2019
Time: 6 - 7:30 pm
Location: TBD
PCWP Public Meeting



Steve Risinger
Plum Creek Watershed Coordinator



PLUM CREEK WATERSHED
PARTNERSHIP BUSINESS MEETING
12 FEBRUARY 2019

WATERSHED UPDATES

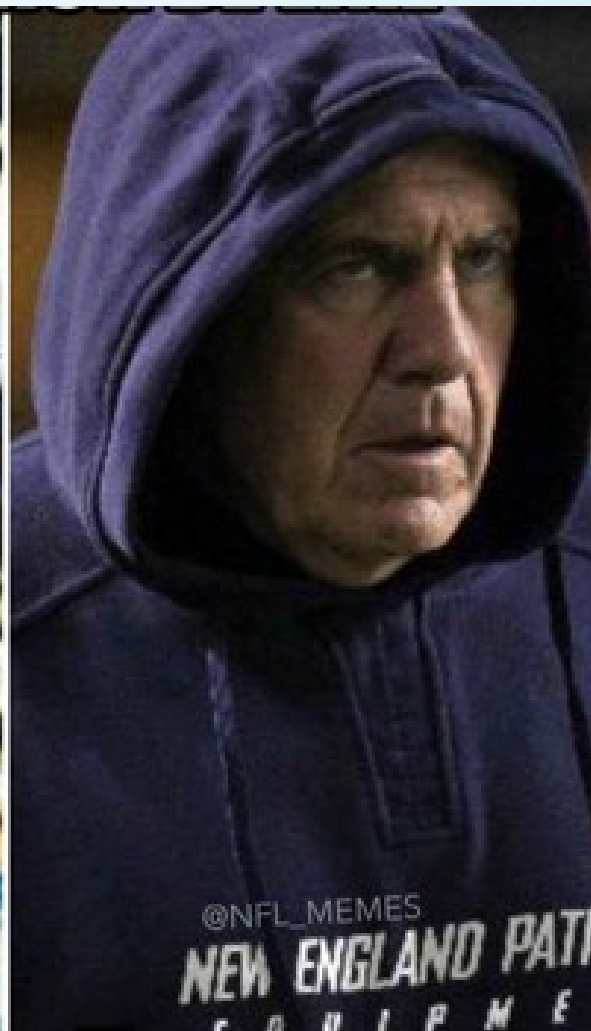
- ❖ Watershed Updates
- ❖ Bacterial Source Tracking Results
- ❖ BMP Review
- ❖ Steering Committee Member Updates/Review



Steve Risinger
Plum Creek Watershed Coordinator

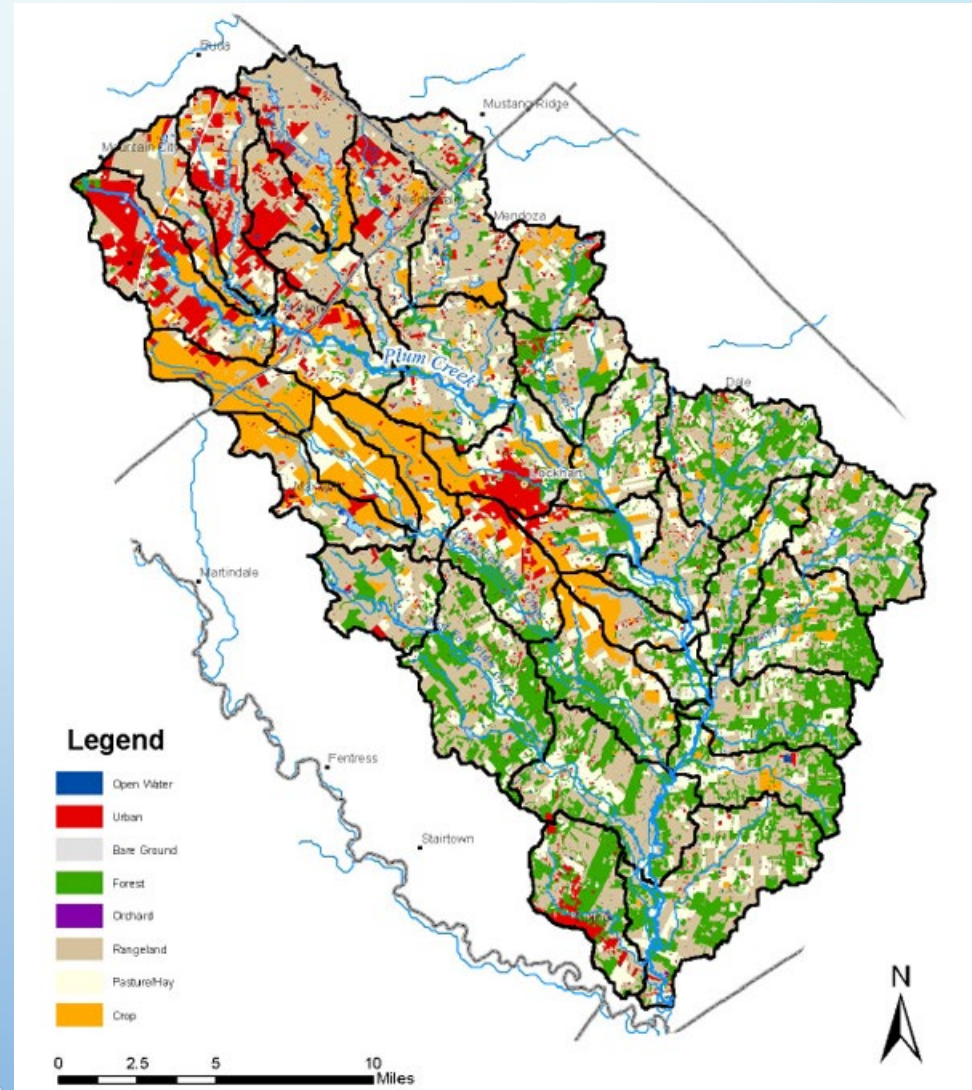
Welcome New Representatives!

**PLUM CREEK WATERSHED
PARTNERSHIP BUSINESS MEETING
12 FEBRUARY 2019**



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.
- ❖ 2016 The TCEQ Integrated Report concerns: depressed DO, Nitrate, Total Phosphorus



WATERSHED UPDATES

- ❖ Caldwell County Justice Center
 - ❖ Deliverables to be completed:
 - ❖ Pervious paver lot design and construction
 - ❖ Education signage
 - ❖ RFQ accomplished, 1 bid received
 - ❖ Extended to Feb 2020
- ❖ Submitted 2018 Governor's Community Achievement Award of Excellence:
Lockhart
 - ❖ Total project award is \$160,000

WATERSHED UPDATES

❖ March 2nd

- ❖ 34th Annual Great Texas River Cleanup with Plum Creek section

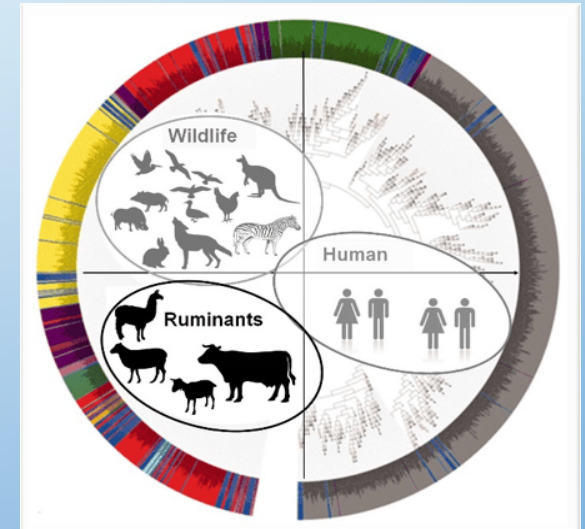
❖ April 6th

- ❖ Don't Mess with Texas Trash Off

BACTERIAL SOURCE TRACKING RESULTS

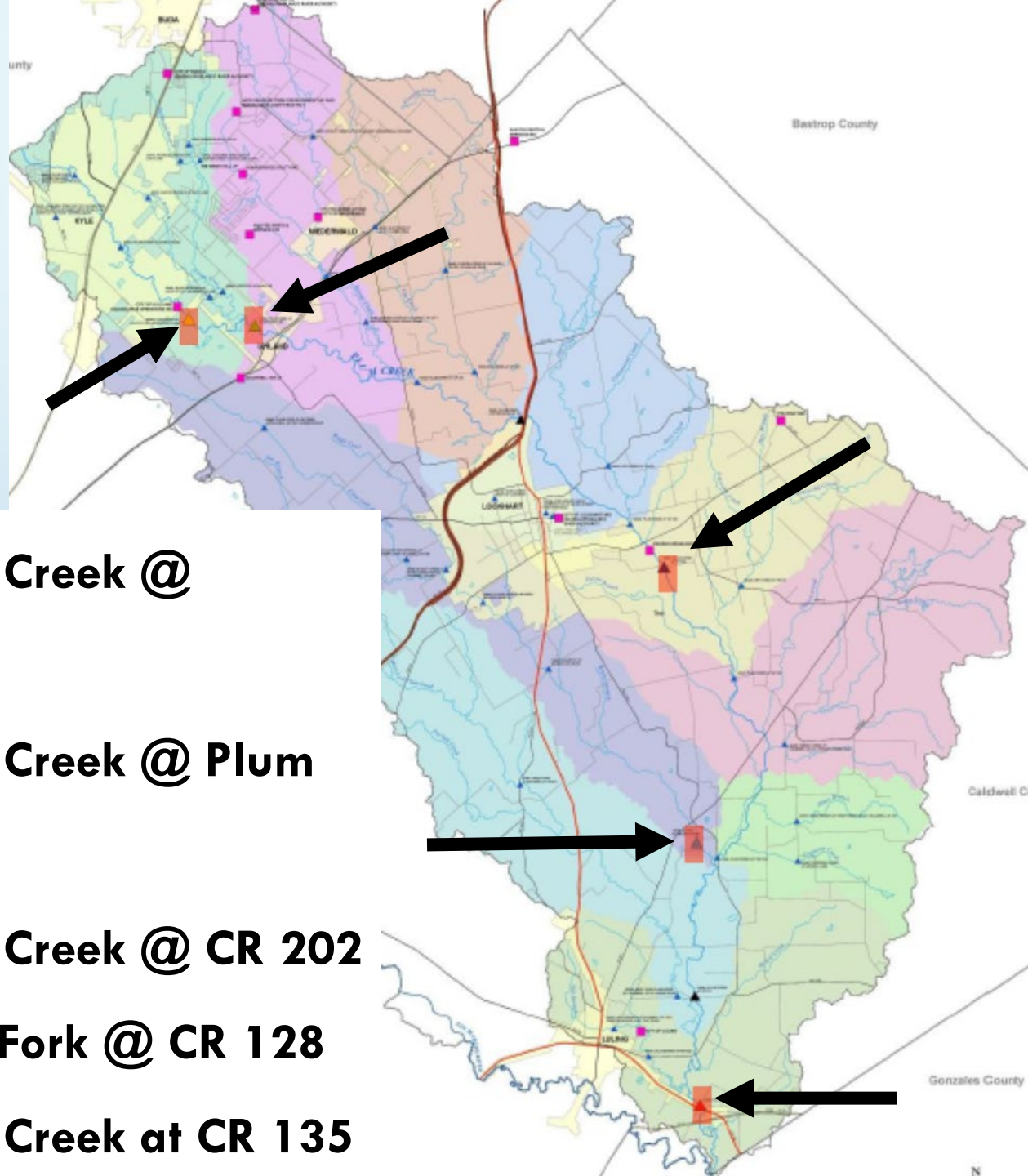
❖ BACTERIAL SOURCE TRACKING

- Determines sources of fecal contamination
- ❖ Based on uniqueness of bacteria from individual sources
- ❖ DNA fingerprinting
- ❖ Improves resource allocation
- ❖ Plum Creek



- TSSWCB
- TWRI
- Texas A&M Agrilife Dept of Soil & Crop Sciences
- UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON SCHOOL OF PUBLIC HEALTH

5 SAMPLING STATIONS



❖ Station 20484 – Plum Creek @
Heidenreich Ln.

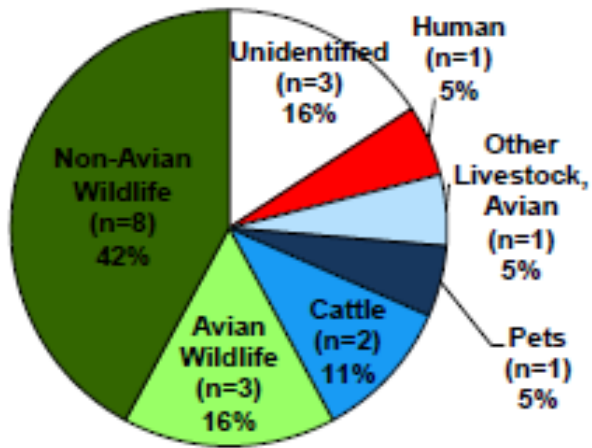
❖ Station 17406 – Plum Creek @ Plum
Creek Rd.

❖ Station 12647 – Plum Creek @ CR 202

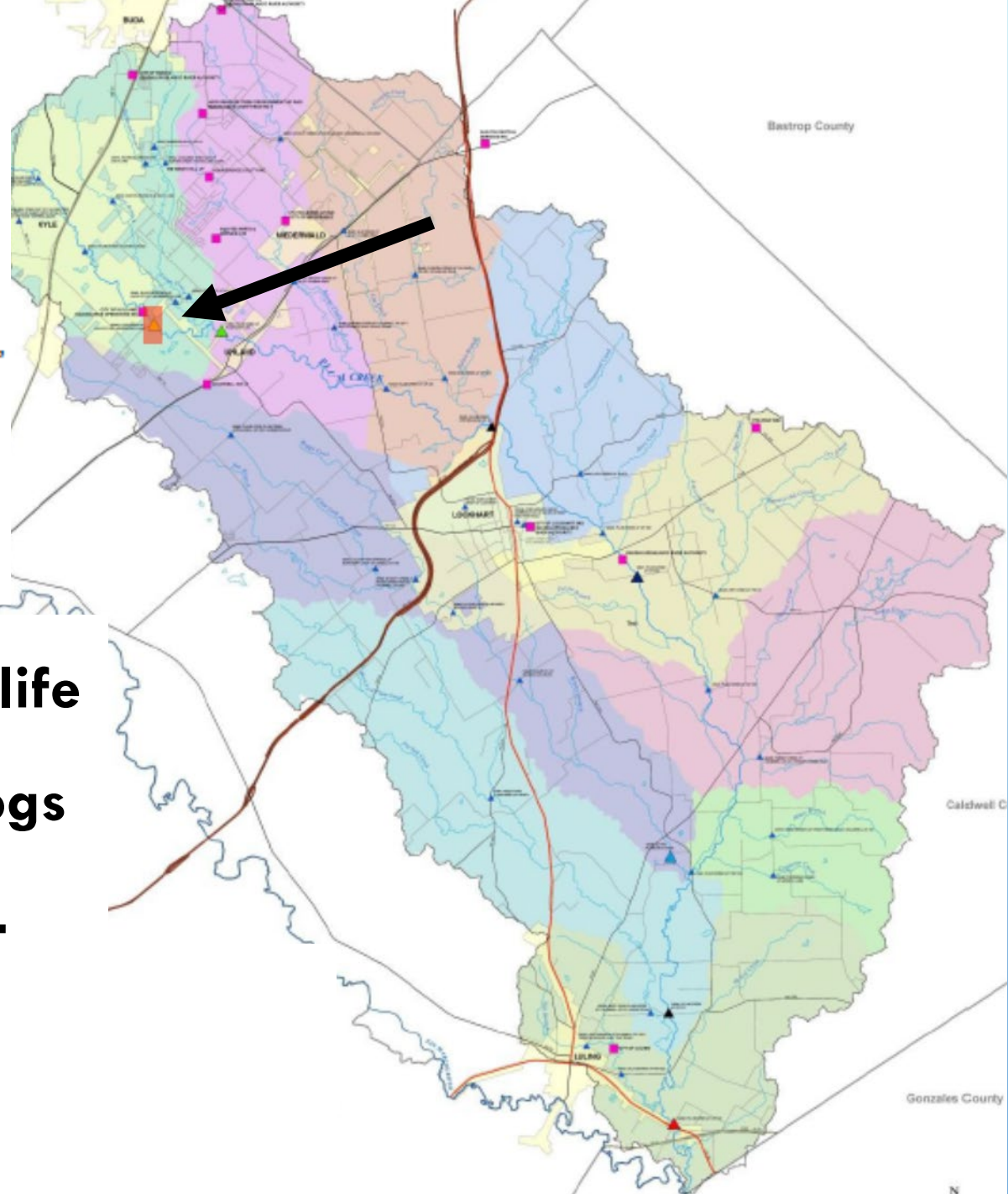
❖ Station 12556 - Clear Fork @ CR 128

❖ Station 12640 – Plum Creek at CR 135

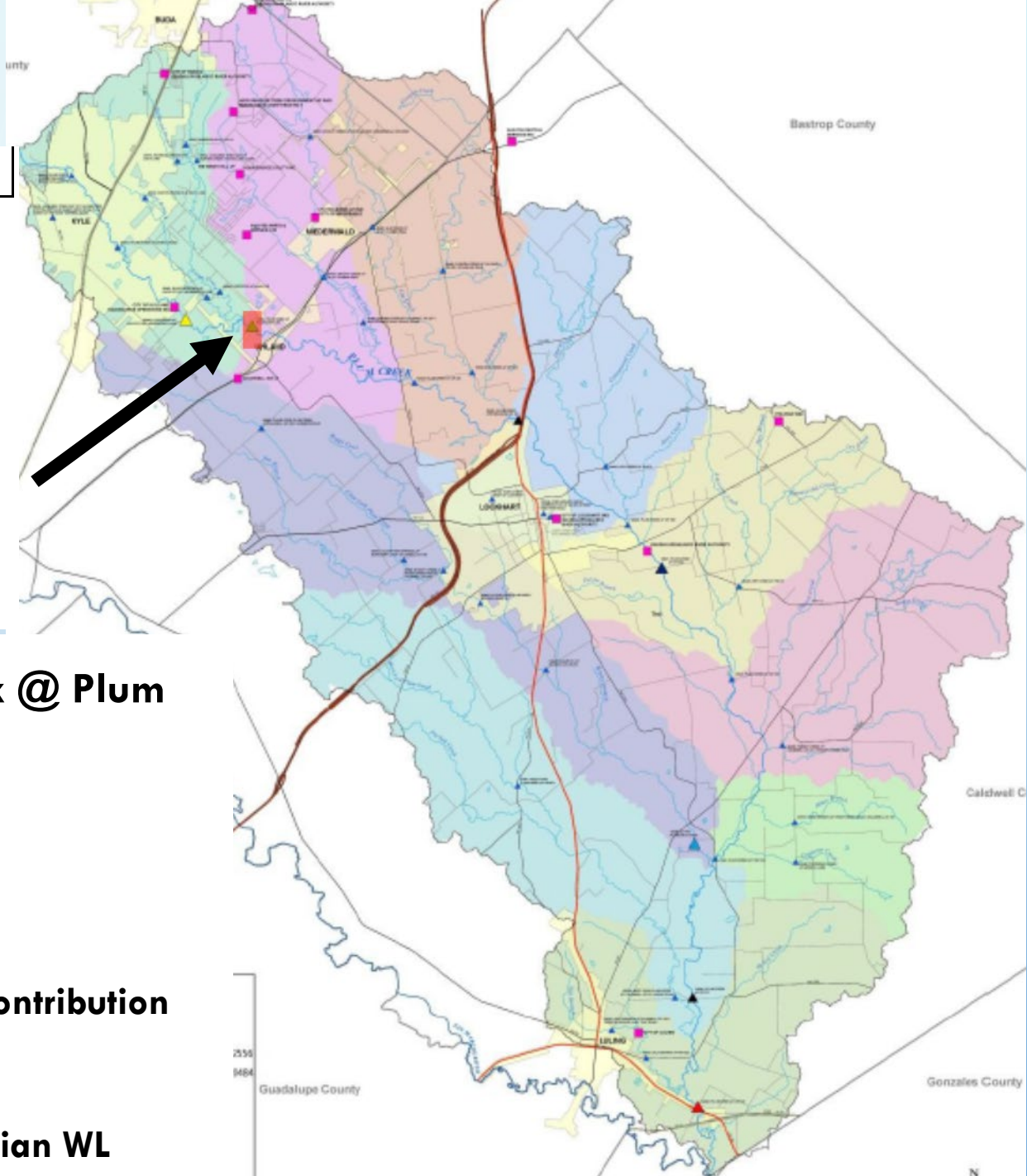
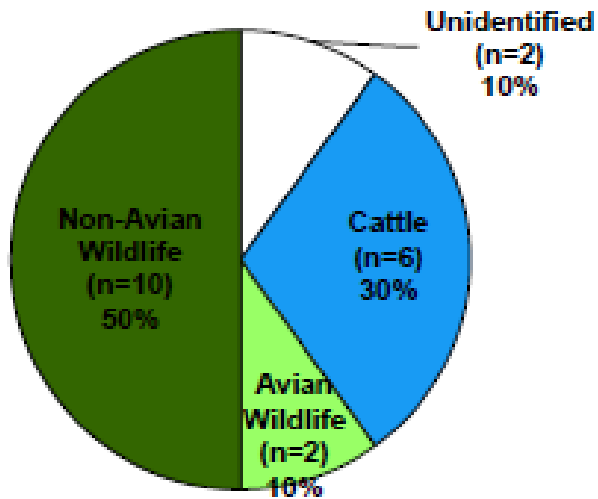
20484 – Plum Creek at Heidenreich Ln



- ❖ Non - avian wildlife
= mostly feral hogs
- ❖ Highest avian WL
concentration



17406 – Plum Creek at Plum Creek Rd



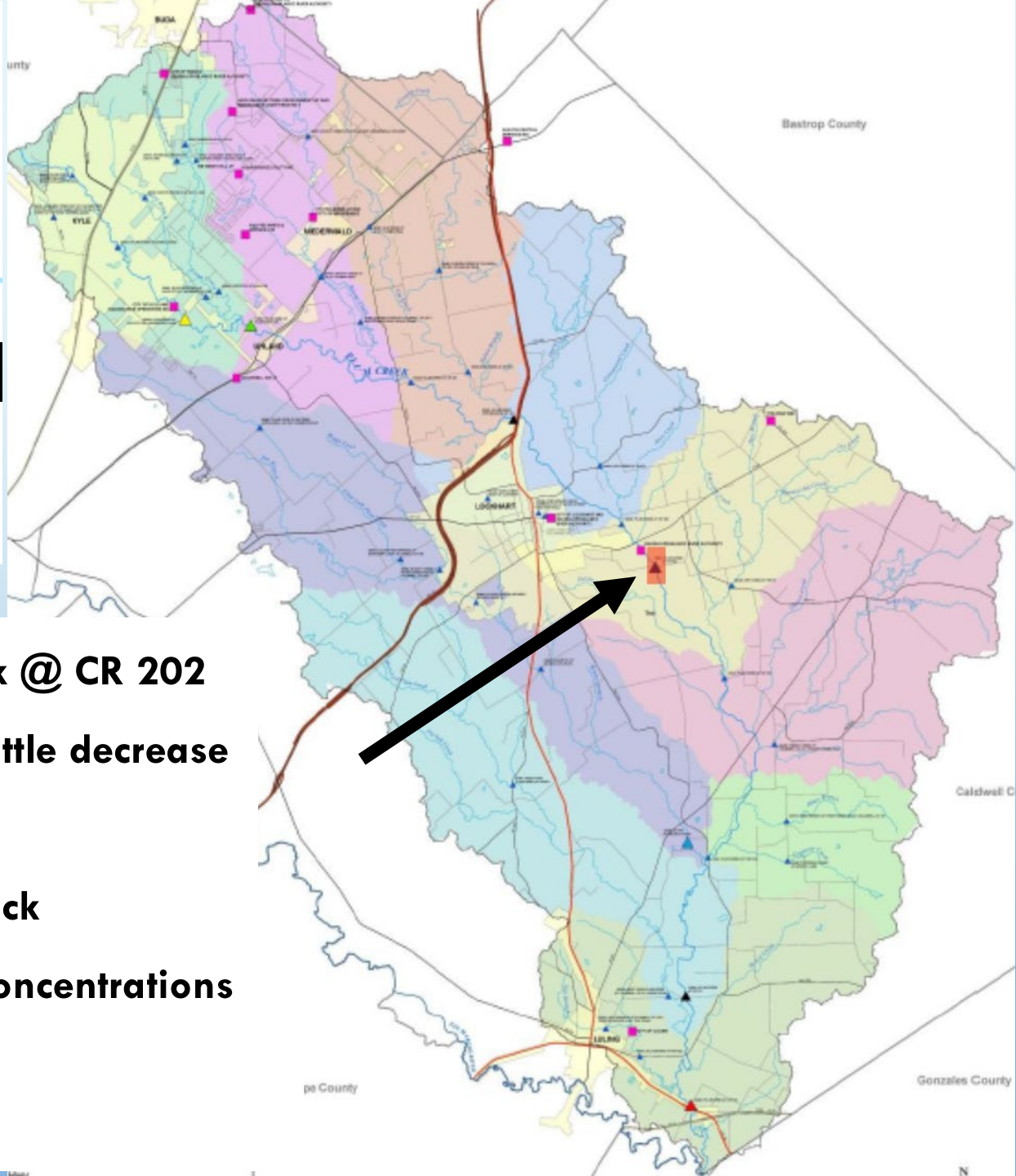
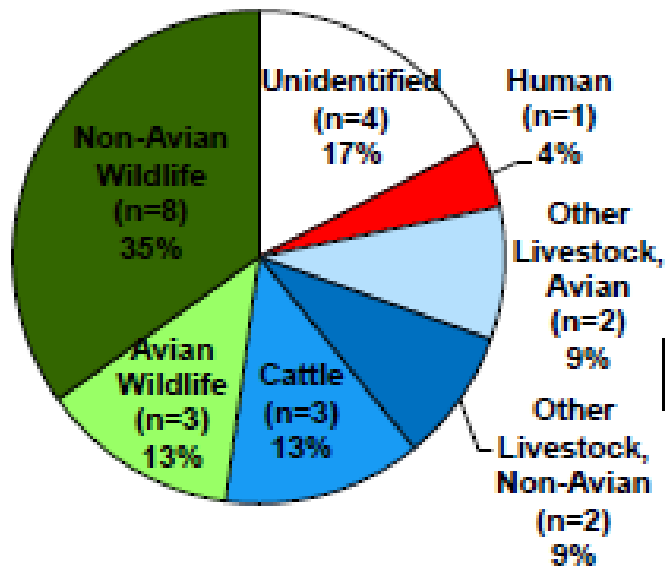
❖ Station 17406 – Plum Creek @ Plum Creek Rd.

❖ Highest Non avian WL concentrations

❖ Large (19%) increase in contribution from cattle

❖ 8% increase from Non Avian WL

12647 – Plum Creek at CR 202



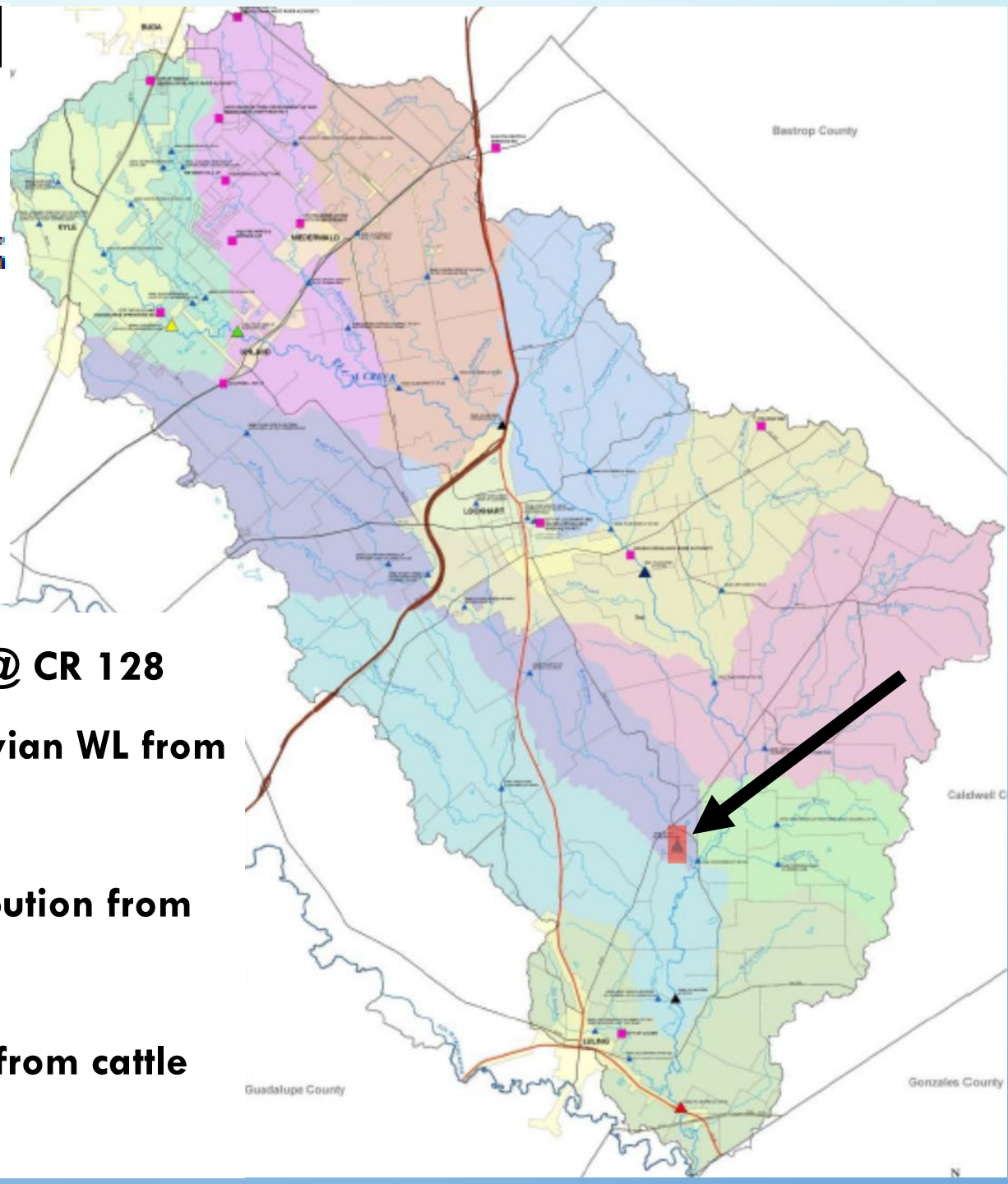
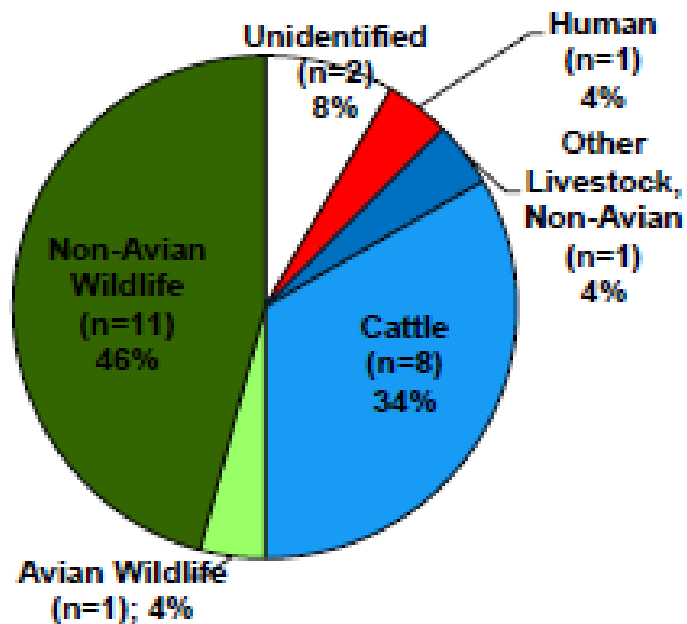
❖ Station 12647 – Plum Creek @ CR 202

❖ Concentrations from cattle decrease from 30% to 13%

❖ 18% from other livestock

❖ 2nd highest avian WL concentrations

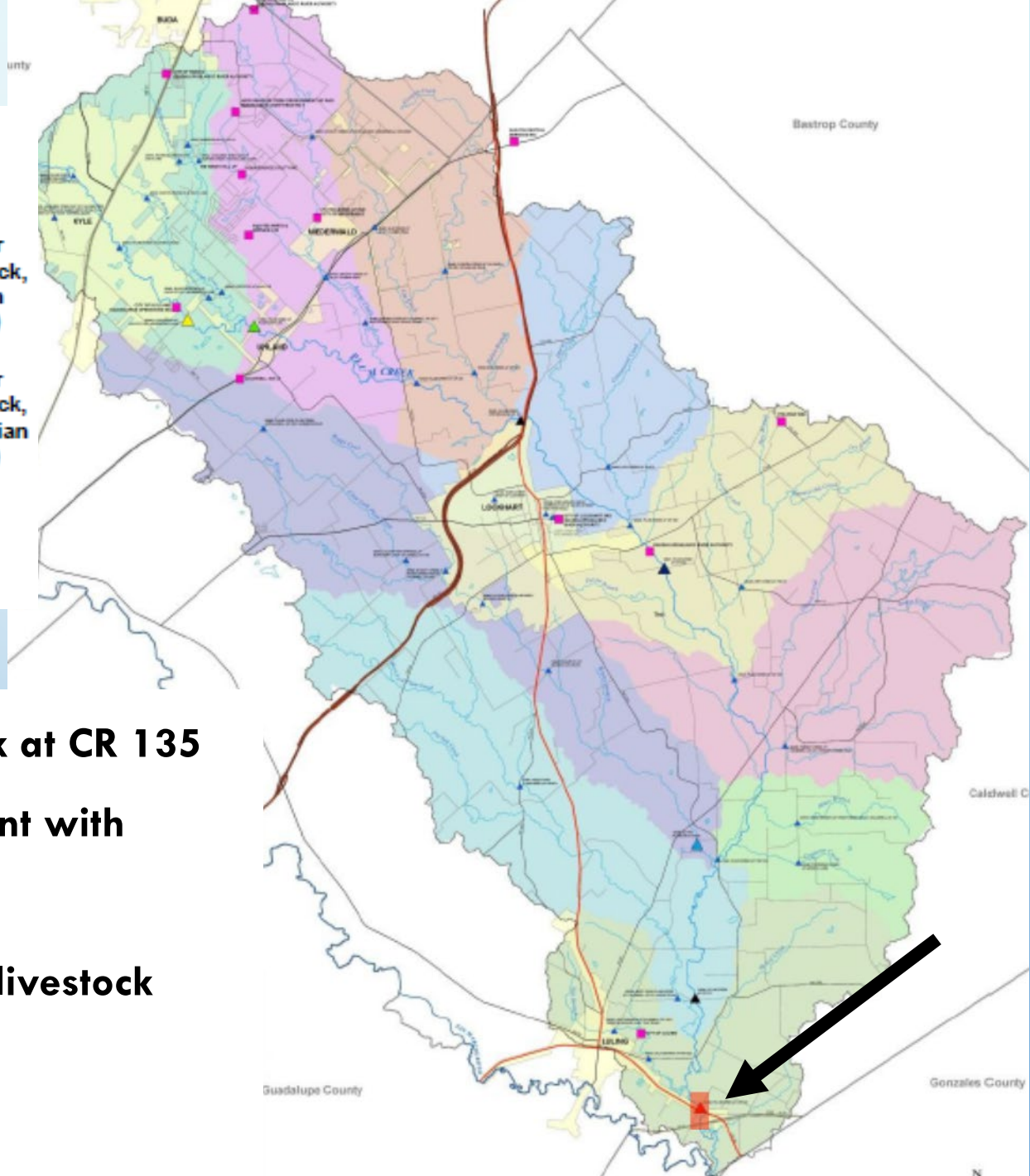
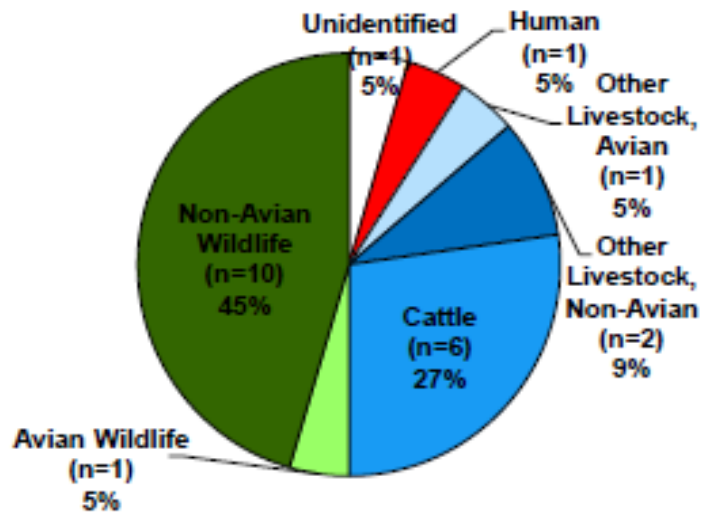
12556 – Clear Fork at CR 128



❖ Station 12556 - Clear Fork @ CR 128

- ❖ 11% increase in non avian WL from upstream site
- ❖ 21% increase in contribution from cattle from upstream site
- ❖ Highest concentrations from cattle

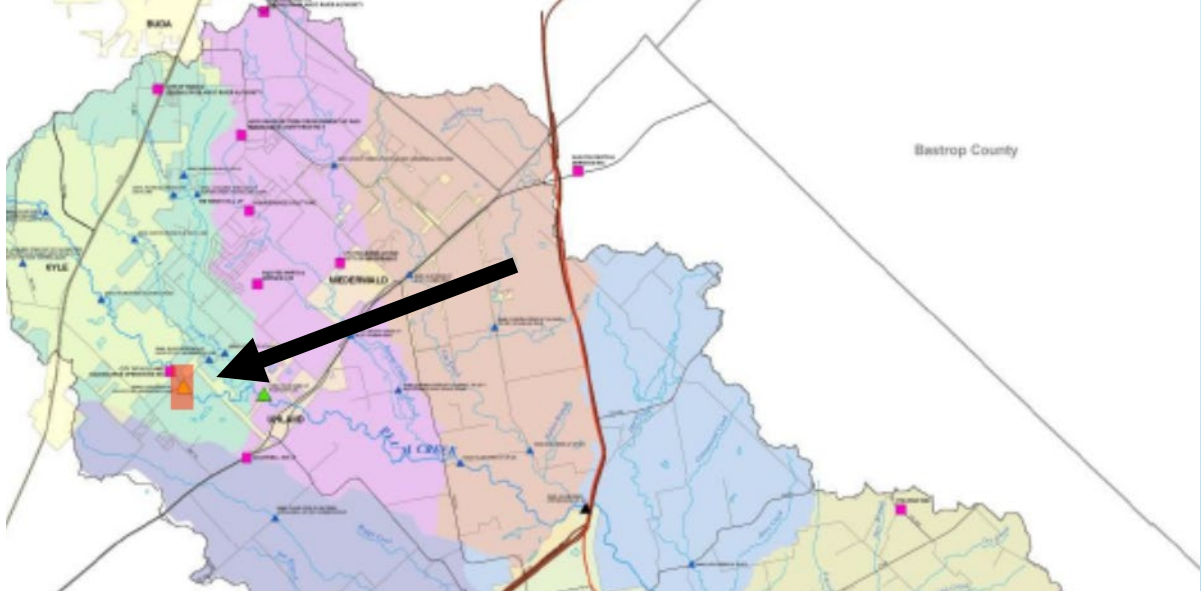
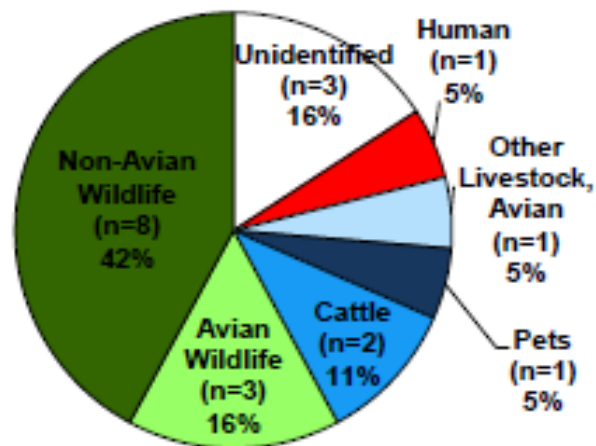
12640 – Plum Creek at CR 135



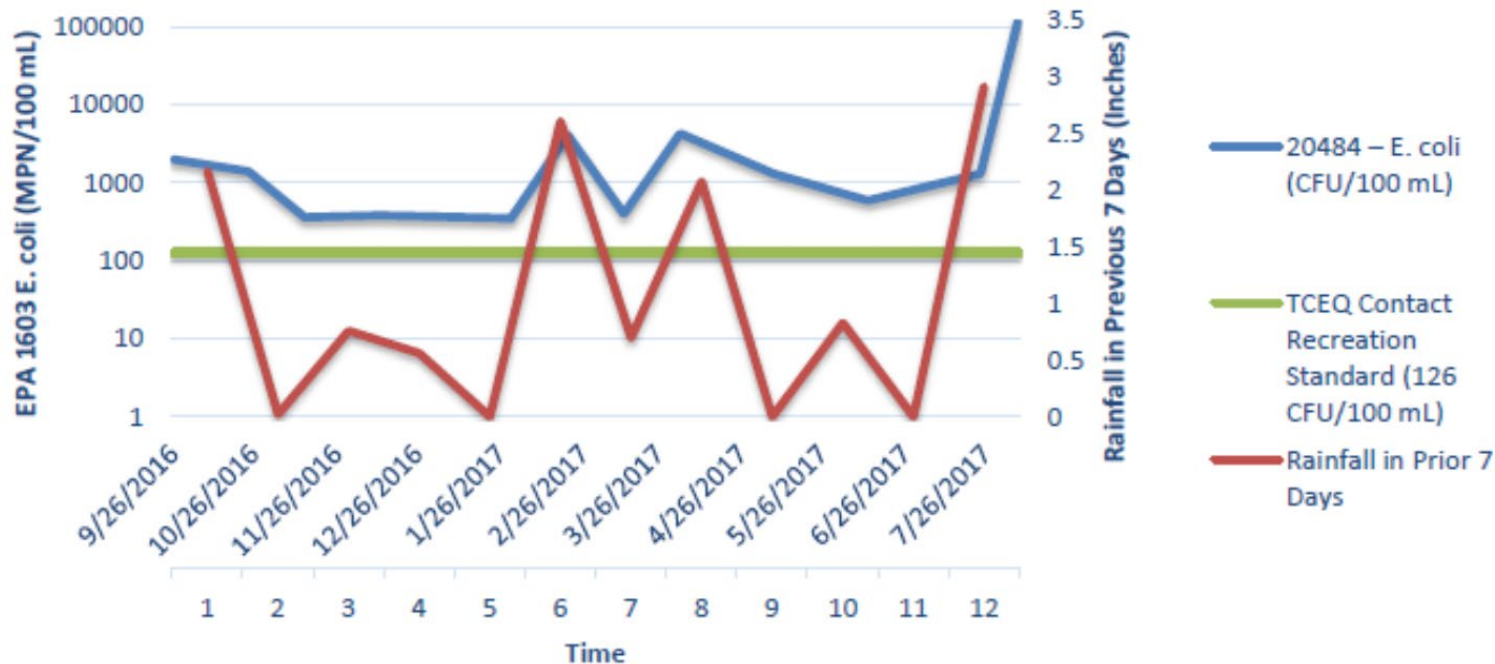
❖ Station 12640 – Plum Creek at CR 135

- ❖ Non-avian WL consistent with upstream site
- ❖ 14% increase in other livestock
- ❖ 7% decrease in cattle concentrations

20484 – Plum Creek at Heidenreich Ln



E. coli Concentrations at Plum Creek at Heidenreich Lane (Station 20484)

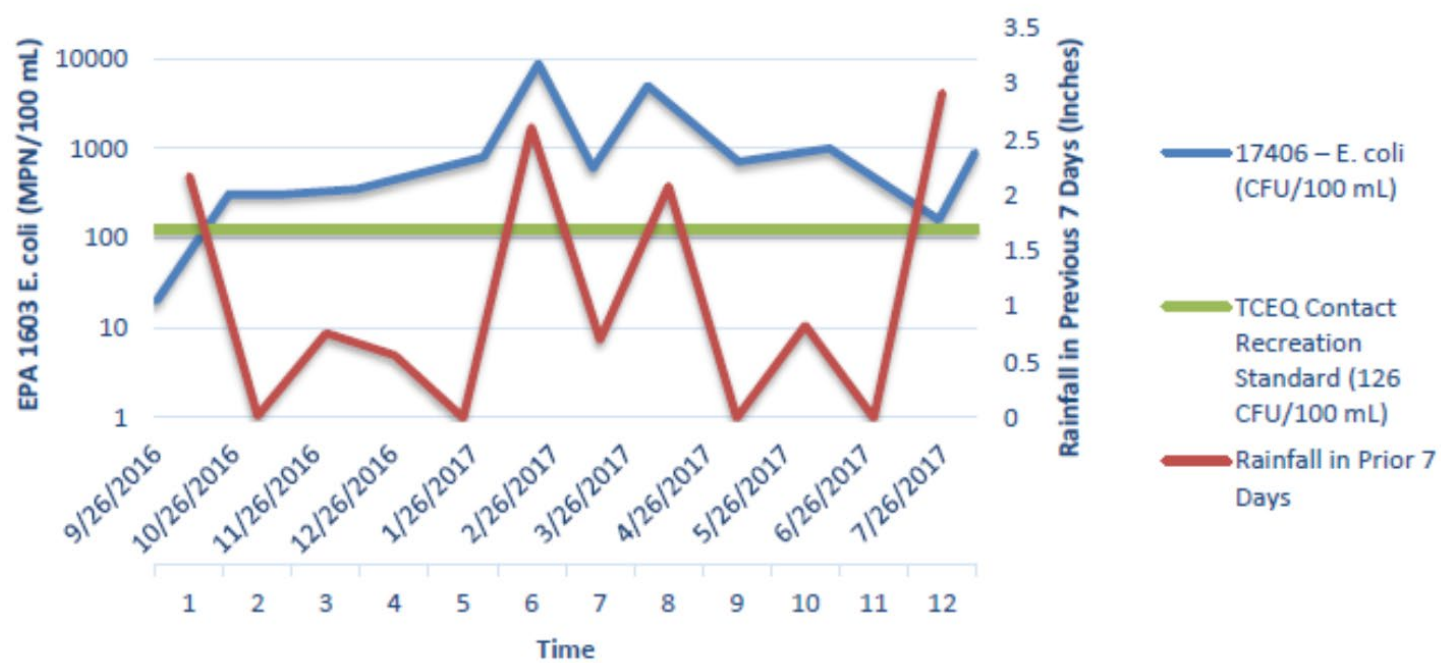


❖ Station 17406 – Plum
Creek @ Plum Creek Rd.

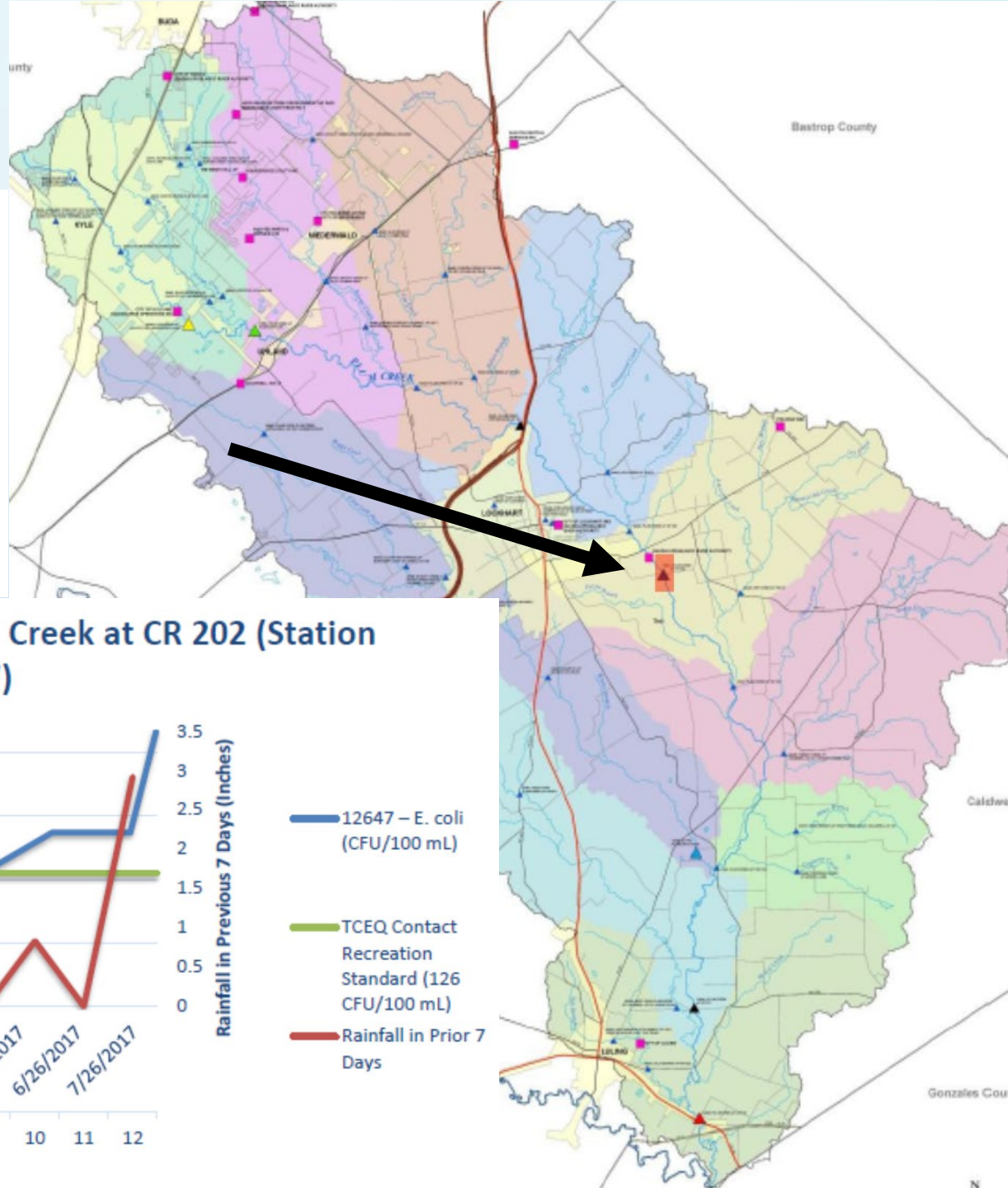
❖ Indicates this station is
heavily influenced by nps
runoff



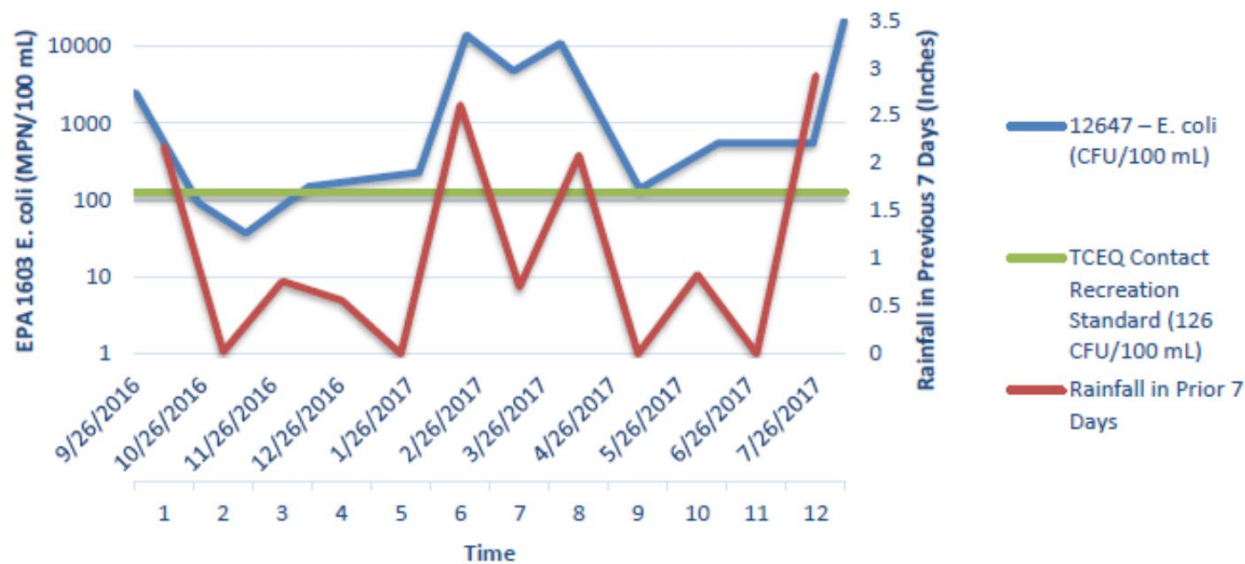
E. coli Concentrations at Plum Creek at Plum Creek Road (Station 17406)



- ❖ Highest concentration during wet, lowest during dry
- ❖ Indicates heavy influence from nps runoff



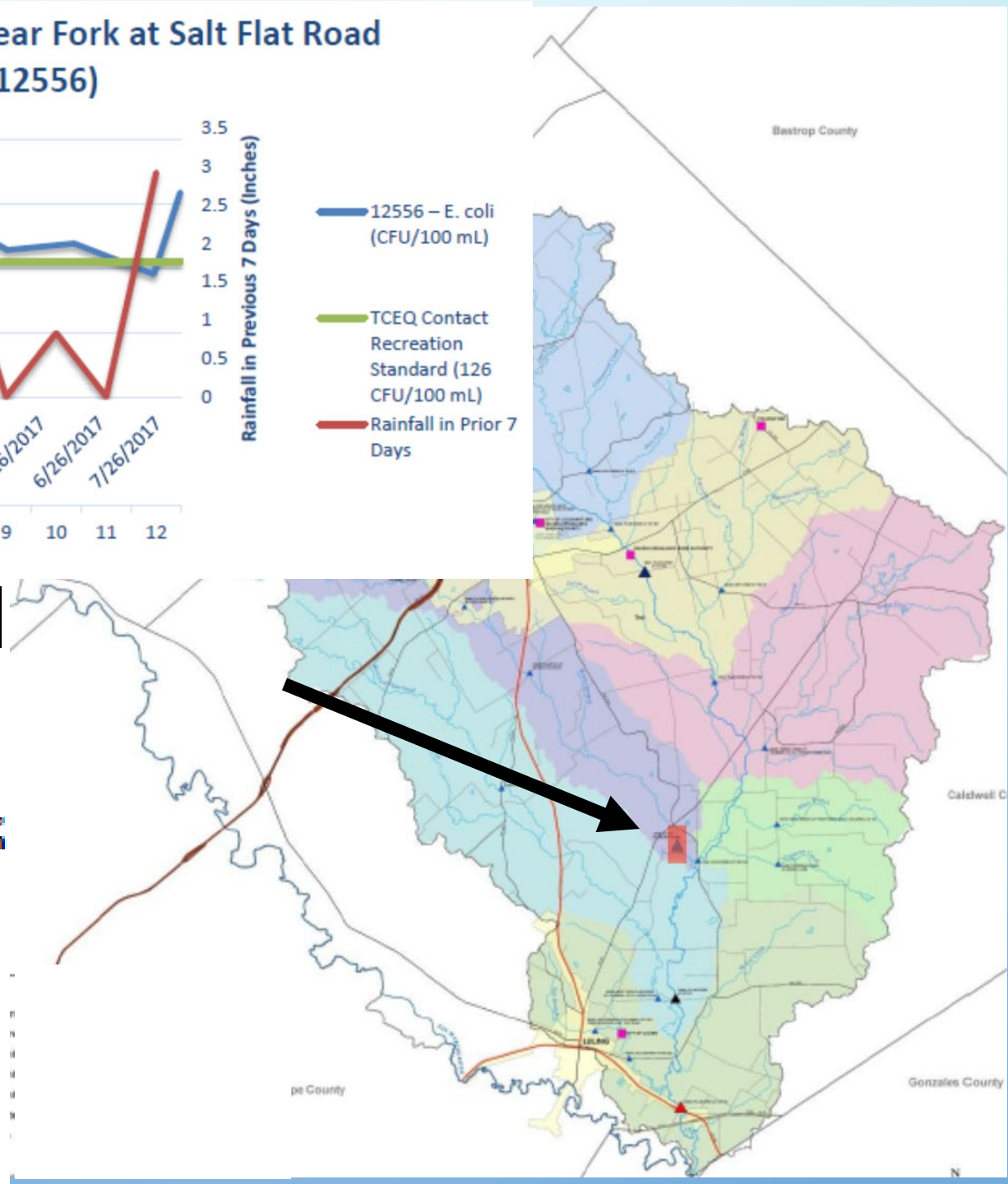
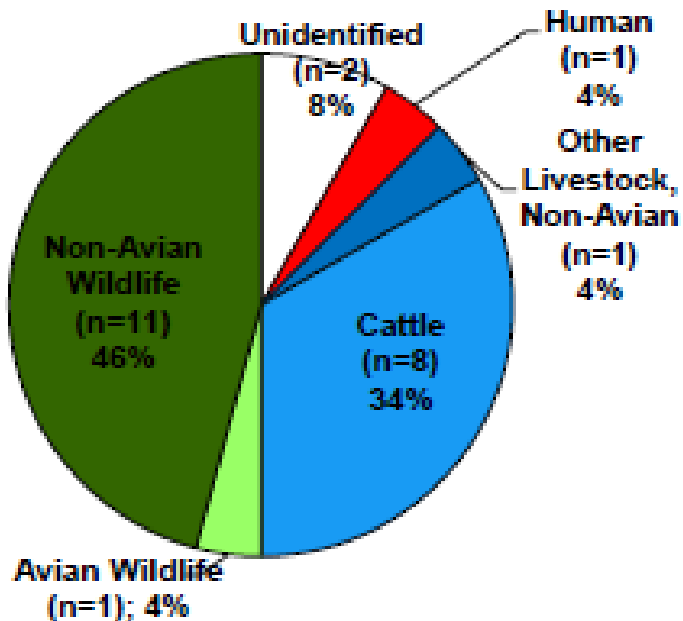
E. coli Concentrations at Plum Creek at CR 202 (Station 12647)



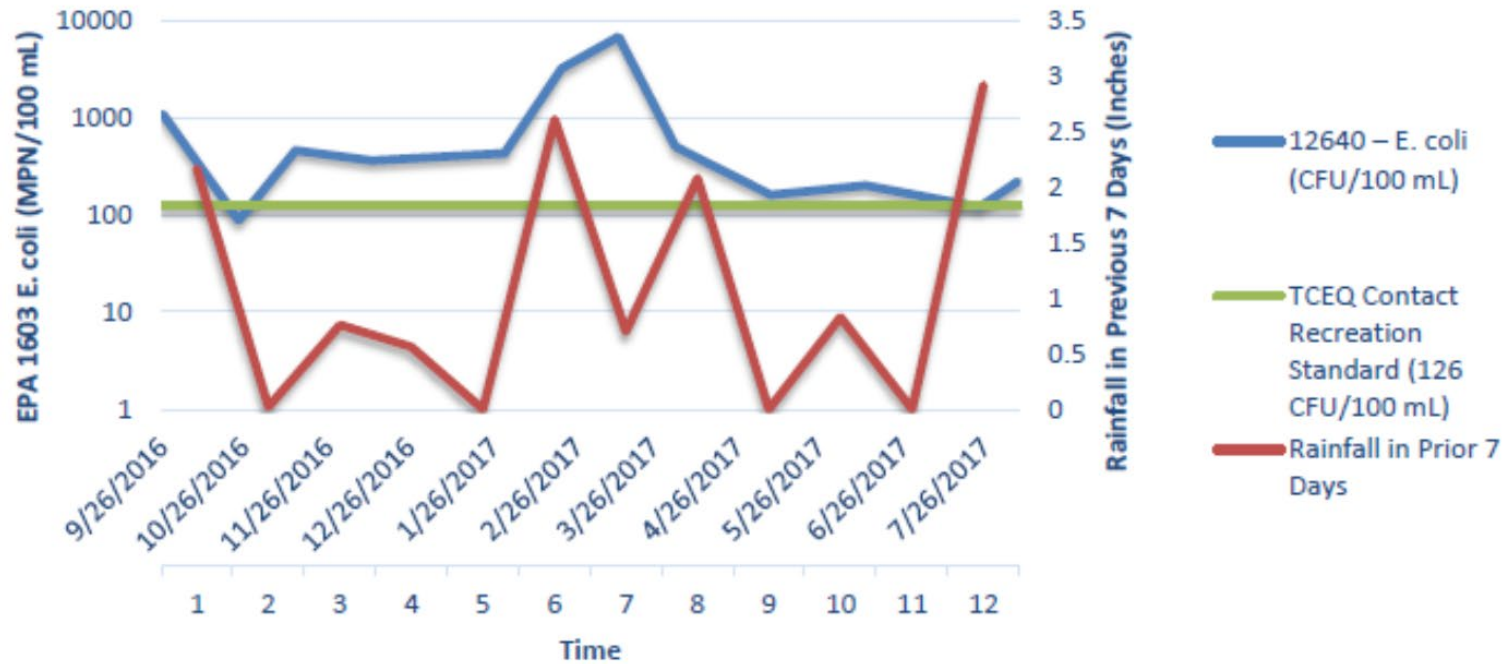
E. coli Concentrations at Clear Fork at Salt Flat Road (Station 12556)



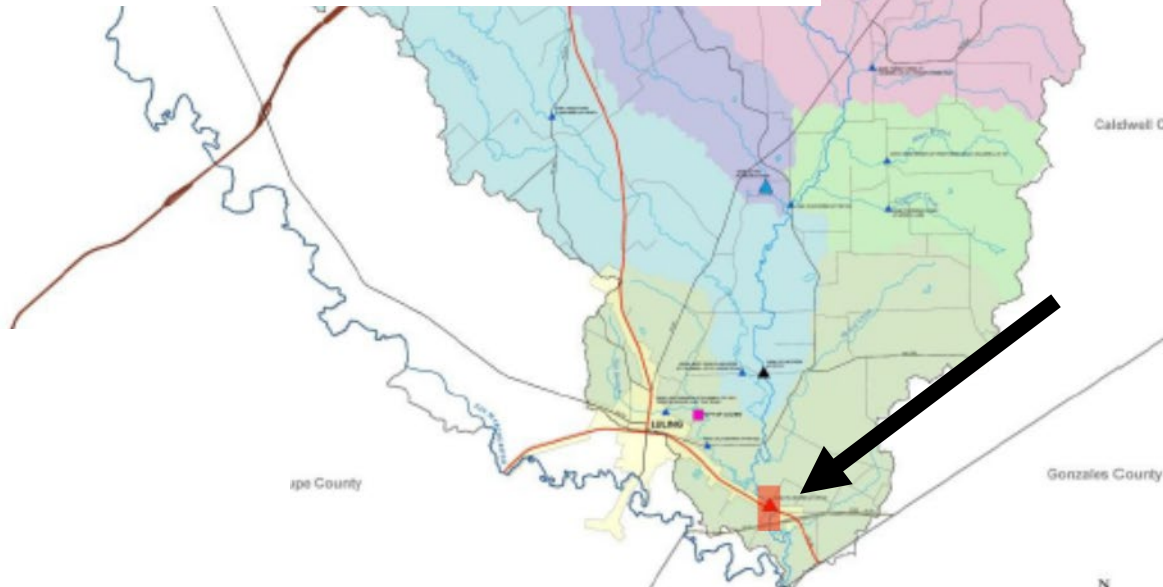
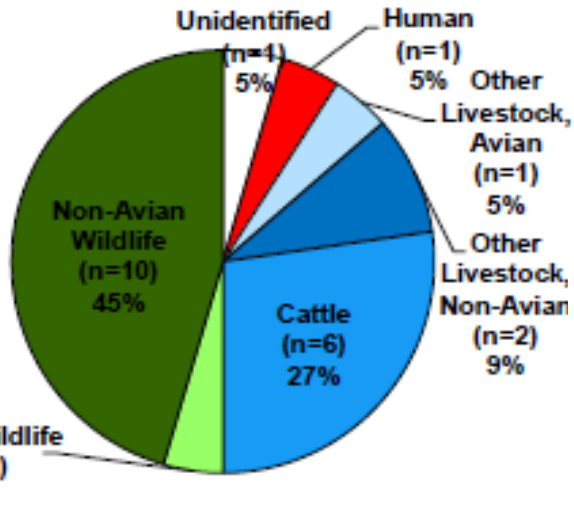
12556 – Clear Fork at CR 128



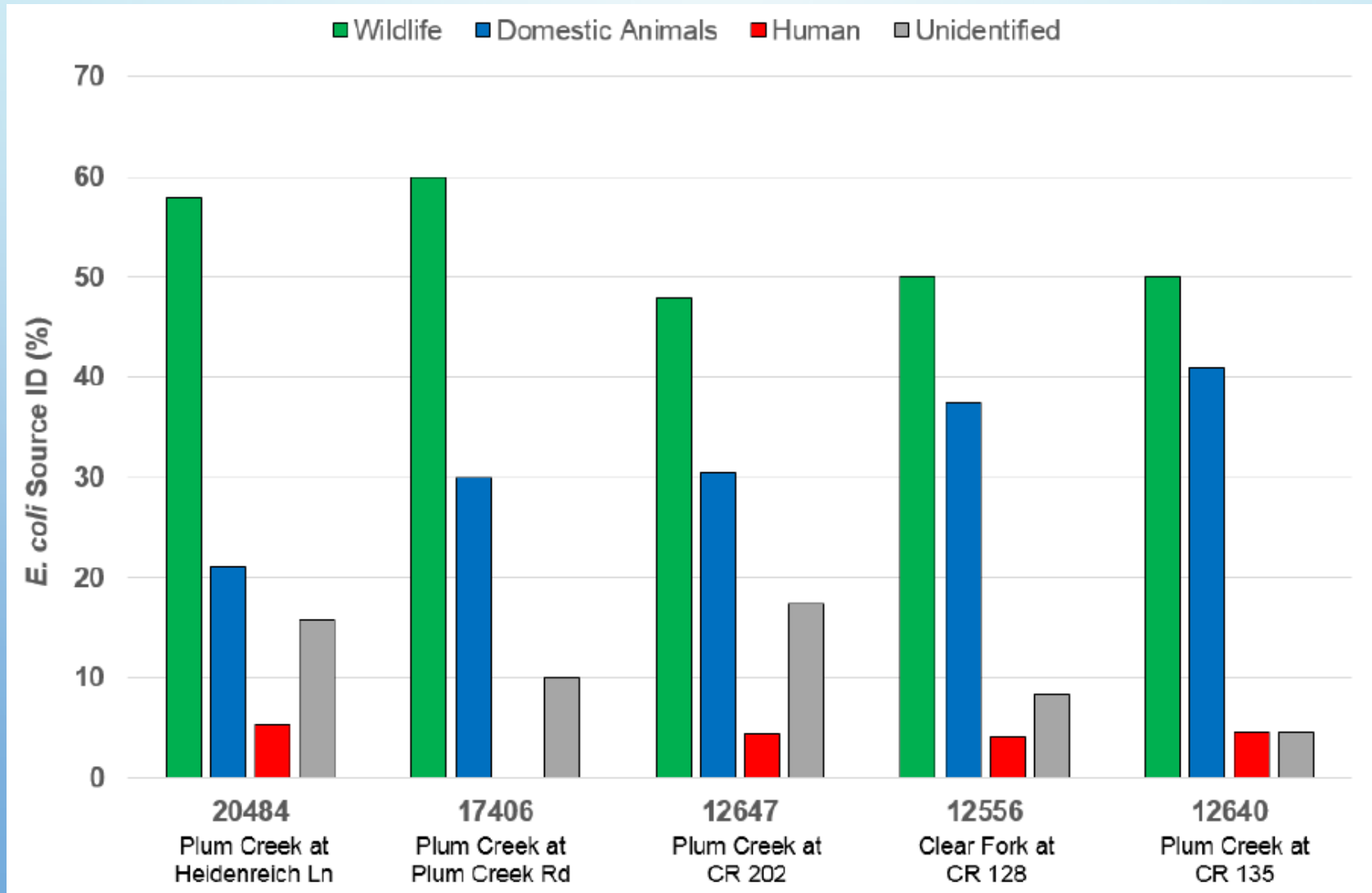
E. coli Concentrations at Plum Creek at CR 135 (Station 12640)



12640 - Plum Creek at CR 135



BACTERIAL SOURCE TRACKING RESULTS



GENERAL OBSERVATIONS

❖ Apparent major E. Coli sources

- ❖ Feral hogs, small mammals, deer, birds**
- ❖ Domesticated animals**

❖ Watershed trends

- ❖ Highest non-avian concentration found in upper watershed, big contributor**
- ❖ Higher livestock/domestic animal concentrations in lower reaches of watershed**
- ❖ Increase in avian WL concentrations downstream of urban area**
- ❖ Less influence from WWTF than anticipated**
- ❖ Limited presence of human E. Coli isolates**

CURRENT IMPLEMENTATION EFFORTS

❖ Urban Stormwater Management

- ❖ CCJC LID Project & Urban Riparian Restoration of Town Branch**

❖ Waste Water Management

- ❖ City of Kyle WWTF maintenance and expansion**

❖ Ag NPS Management

- ❖ 41 Total WQMPs**

❖ Wildlife Management

- ❖ CHAMP/Hog Bounty**

❖ Education/Outreach

- ❖ Cleanups & educational event attendance**

IMPLEMENTATION MILESTONES

Progress toward implementation of management measures identified in the Plum Creek WPP

Management Measure	Responsible Party	Year			
		1-3	4-6	Status thru Dec. 2017	7-10
Urban Stormwater Management Measures					
Pet Waste Collection Stations	City of Kyle	13	4	16	4
Pet Waste Collection Stations	City of Lockhart	10	4	10	4
Pet Waste Collection Stations	City of Luling	6	2	6	2
Pet Waste Collection Stations	City of Buda	10	4	18	4
Comprehensive Urban Stormwater Assessment	City of Kyle	1	---	Completed	---
Retrofit Stormwater Detention Basins	City of Kyle	2	---	Completed	---
Initiate Street Sweeping Program	City of Kyle	---	---	Initiated and continuing	---
Comprehensive Urban Stormwater Assessment and Illicit Discharge Survey	City of Lockhart	1	---	Completed	---
Manage Urban Waterfowl Populations	City of Lockhart	---	---	Ongoing	---
Comprehensive Urban Stormwater Assessment	City of Luling	1	---	0	---
Rehabilitate Stormwater Retention Pond	City of Luling	1	---	0	---
Initiate Street Sweeping Program	City of Buda	1	---	Initiated and continuing	---

IMPLEMENTATION MILESTONES

Progress toward implementation of management measures identified in the Plum Creek WPP

Management Measure	Responsible Party	Year			
		1-3	4-6	Status thru Dec. 2017	7-10
Wastewater Management Measure					
Wastewater Upgrade (TSS Reduction)	WWTF Operators	---	3	3	7
Wastewater Upgrade (Phosphorus Removal)	WWTF Operators	---	3	3	7
Voluntary Monthly E. coli Monitoring	WWTF Operators	---	---	Ongoing	---
Voluntary Monthly Phosphorus Monitoring	WWTF Operators	---	---	Ongoing	---
Sanitary Sewer Pipe Replacement	City of Kyle	2,400 ft	2,400 ft	4,660 ft	3,200 ft
Lift Station SCADA Installation	City of Kyle	3	4	1	---
Sanitary Sewer Pipe Replacement	City of Lockhart	1,800 ft	1,800 ft	5,470 ft	2,400 ft
Initiate Sanitary Sewer Inspection Program	City of Luling	1	---	1	---
Sanitary Sewer Pipe Replacement	City of Luling	2,400 ft	2,400 ft	0	3,200 ft
Lift Station SCADA Installation	City of Luling	4	1	0	
Sanitary Sewer Pipe Replacement	City of Buda	--	8,523 ft	14,754 ft	--
Septic System Inspection/Enforcement (New Position)	Caldwell County	2		0	
Septic System Repair/Replacement	Hays County	300	300	359---	400
Septic System Repair/Replacement	Caldwell County.	150	150	34**	200
Septic System Connection to Sewer	City of Uhland	100	100	0	150

IMPLEMENTATION MILESTONES

Progress toward implementation of management measures identified in the Plum Creek WPP

Management Measure	Responsible Party	Year			
		1-3	4-6	Status thru Dec. 2017	7-10
Agricultural Management Measures					
WQMP Technician (New Position)	SWCD	---	---	Funded through FY 2019	---
Livestock Water Quality Management Plans	SWCD	65	70	120	102
Cropland Water Quality Management Plans	SWCD	6	9	5	9
Non-Domestic Animal and Wildlife Management Measures					
Feral Hog Education (New Position)	AgriLife Extension	---	---	Funded through FY 2019	---
Feral Hog (Demonstration Equipment)	AgriLife Extension	---	---	\$10,000 of Equip.	---
Monitoring Component					
Targeted Water Quality Monitoring	GBRA	---	---	Funded through FY 2019	---
Comprehensive Stream Assessment	GBRA	12	12	13	16
Bacterial Source Tracking	TAMU	1	---	Completed	---

IMPLEMENTATION MILESTONES

Progress toward implementation of management measures identified in the Plum Creek WPP

Outreach Activity	Responsible Party	Year			
		1-3	4-6	Status thru Dec. 2017	7-10
Broad-Based Programs					
Texas Watershed Steward Training Sessions	AgriLife Extension	3	2	3	1
Elementary School Water Quality Project	GBRA	---	---	over 1,000 kids/yr funded through 2017	---
Plum Creek Watershed Protection Brochure	GBRA/ AgriLife Extension	---	---	7,200 distributed of 12,000	---
Tributary and Watershed Roadway Signage	AgriLife Extension	60	---	TxDOT denied	---
Displays at Local Events	AgriLife Extension/TSSWCB	9	9	60	9
Watershed Billboards	AgriLife Extension	Partnership decided against moving forward with this option			
Urban Programs					
Pet Waste Programs	Cities/TCEQ/ AgriLife Extension	2	---	4	---
NEMO Workshops	GBRA/TCEQ/ AgriLife Extension	2	---	4	---
Fats, Oils, and Grease Workshop		2	---	0	---
Municipal Site Assessment Visits		4	---	9	---
Urban Sector Nutrient Education	AgriLife Extension	3	3	4	3
Sports and Athletic Field Education (SAFE)	AgriLife Extension	3	3	1	3

IMPLEMENTATION MILESTONES

Progress toward implementation of management measures identified in the Plum Creek WPP

Outreach Activity	Responsible Party	Year			
		1-3	4-6	Status thru Dec. 2017	7-10
Wastewater Programs					
Develop Online Training Modules	GBRA	4	---	4	---
Septic System Workshops and Assistance	AgriLife Extension/GBRA	4	3	12	3
Agricultural Programs					
Soil and Water Testing Campaigns	AgriLife Extension	3	3	10	3
Agriculture Nutrient Management Education	AgriLife Extension	3	3	10	3
Crop Management Seminars	AgriLife Extension	3	3	3	3
Agricultural Waste Pesticide Collection Days	TCEQ	1	No longer funded by TCEQ	1	No longer funded by TCEQ
Lone Star Healthy Streams – Grazing Cattle Education	AgriLife Extension	3	3	3	3
Non-Domestic Animal and Wildlife Programs					
Lone Star Healthy Streams - Feral Hog Management Workshop	AgriLife Extension	2	1	12	2
Additional Programs					
Stream and Riparian Workshops	AgriLife Extension	2	1	6	2
Illegal Dumping Site Targeted Cleanup	GBRA, AgriLife Extension, Keep Texas Beautiful, Cities, Counties	3	3	13	3
Community Stream Cleanup Events		2	3	20	3
Rainwater Harvesting Education/ Demonstration	AgriLife Extension	2	1	5	2

DISCUSSION



STEERING COMMITTEE UPDATES


STEERING COMMITTEE MEMBER REVIEW

Last Name	First Name	SC	Entity	Email	Phone	Feb. 12, 2019
Auld	Tim	SC	Landowner	timothyauld@yahoo.com	512-623-9617	
Betz	Chris	SC	City of Uhland	ChrisBetz@FiveStarConcrete.net	512-921-7982	
Fogle	Oscar H.	SC	Landowner	oscar@fogle.org	512-376-9950	
Graham	Donnie	SC	Caldwell-Travis SWCD	cowboy44@grandecom.net	512-995-1092	
Haden	Hoppy	SC	Caldwell County*	hoppy.haden@co.caldwell.tx.us	(512) 398-1808	
Hamilton	Frank	SC	Local Realtor	frank.hamilton47@yahoo.com	830-875-9346	
Lillibridge	Brian	SC	City of Kyle,	slillibridge@cityofkyle.com	512-262-3024	
Meckel	Susan	SC	Landowner	susanmeckl@aol.com	512-922-5738	
Meyer	Daniel	SC	PCCD	dmeyer@pccd.org	512-398-2383	
Nett	John	SC	City of Buda	JNett@ci.buda.tx.us	512-523-1025	
Pittman	Paul L.	SC	Polonia WSC	paulp@ranchwireless.com	512-559-2030	
Powell	Chris	SC	City of Luling*	publicworks@cityofluling.net	830-875-5131, 512-738-1099	
Reinecke	Peter	SC	Landowner	peter@preinecke.net	512-376-1496	
Roecker	Kathy	SC	City of Kyle,	kroecker@cityofkyle.com	512-618-8296	
Sager	Chris	SC	City of Lockhart	csager@lockhart-tx.org	512-398-6452	
Steubing	Doris	SC	2SRanch	dhsteubing@gmail.com	512-227-2727	
Storm	Josh	SC	Hays County SWCD	stormranch@yahoo.com	512-626-6726	
Thompson	Alexandra	SC	Hays County	7933@hays.tx.us		
Wassenich	Dianne	SC	San Marcos River Foundation	wassenich@grandecom.net	512-393-3787	
Watson	Bill	SC	Landowner	loiswatson@bcsnet.net	830-875-2941	
Willis	Lauren	SC	GBRA	llwillis@gbra.org	830-379-5822	



NEXT MEETING

MAY 15, 2019
6:00PM
LULING TX



THANKS!



Steve Risinger
Plum Creek Watershed Coordinator

srisinger@plumcreekwatershed.org

405 E. Market Street
Lockhart, TX 78644

(830) 557-7358