Lampasas River Watershed Partnership

Steering Committee Meeting

Thursday, February 25, 2016

Lisa Prcin
Watershed Coordinator
Texas A&M AgriLife Research at
Blackland Research & Extension Center

Lampasas River Watershed Partnership

Partnership Meeting

Thursday, February 25, 2016
Lampasas County Farm Bureau Building
1793 U.S. Hwy 281, Lampasas
6:00 – 8:00 p.m.

Introductions

Overview of 2015

TIAER Surface Water Quality Monitoring Update

Resources for Agriculture Producers in the Lampasas River Watershed
Jackie Bakker, District Technician; Hill Country Soil and Water Conservation District #534

Feral Hog Resources in the Lampasas River Watershed
Josh Helcel, Extension Associate, Texas A&M AgriLife Extension Service

Funding Opportunities for the Partnership

Next Steps for the Partnership

Adjourn

Funding and support are provided by a Clean Water Act §319(h) grant from the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency

720 East Blackland Road • Temple, TX 76502 • Phone: 254-774-6000 • Fax: 254-774-6001
http://blackland.tamu.edu/
http://www.lampasasriver.org

Overview of 2015

2015 Partnership Meeting

- Reviewed Past Business, including proposals were developed and funded within the last year
- Partnership Logo
  - Members preferred logo option number 4; however there was no quorum. The logo will be revisited.
- Update about the progress of TSSWCB project 13-09 "**Surface Water Quality Monitoring to Support the Implementation of the Lampasas River Watershed Protection Plan**
- Jacki Bakker, the District Technician with the Hill Country SWCD was introduced to the Partnership.
- Dr. Matt Berg, fellow with Texas A&M University, presented his research that analyzed historical land use changes within the watershed in the last century.

Potential Logo

1

2

3

4

Educational Programs

- Riparian Area Management Workshop (Spring 2015)
  - 28 Participants
  - Lunch sponsored by City of Killeen

Riparian Area Management Workshop

Parrie Haynes Ranch
2419 Gann Branch Road
Killeen, Texas
June 11, 2015

RSVP by June 9
to Lampasas River
Watershed Partnership
(254) 774-6008 or
lprcin@brc.tamus.edu

FREE one-day course consists of both classroom and field portion.

The workshop will focus on:
- The Function of Riparian Areas
- The Role of Riparian Vegetation
- Assessment of Riparian health
- Assistance for Improving or Restoring Impaired Sites

8:00 - 8:30	Sign-In
8:30 - 12:00	Classroom
12:00 - 1:00	Lunch (provided)
1:00 - 3:30	Field

3 TDA Pesticide Applicators License CEUs are available through Texas A&M AgriLife Extension Service - Bell County

Detailed agenda and additional maps may be found at www.lampasasriver.org

Texas A&M AgriLife Research · TSSWCB · USDA NRCS U.S. Department of Agriculture Natural Resources Conservation Service · Texas A&M AgriLife Extension

Educational Programs

- Lone Star Healthy Streams
  - Attended by 25 Participants

Educational Programs

- Homeowner's Maintenance of Septic System
  - Attended by 18 Participants

Overview

- What is an On Site Sewage Facility (OSSF)?
- Why are we concerned about wastewater?
- Evolution of onsite wastewater treatment
- Operation and maintenance of septic systems
- When to pump a septic tank?
- How to live with a septic system?

Texas A&M AgriLife Research | TSSWCB | Texas A&M AgriLife Extension

How do I know if my septic system is working properly?
If I ignore my septic system, will everything be all right?
Are there any other options?

Join us at a FREE workshop for answers!

Homeowner's Maintenance of Septic Systems

Monday, September 21, 2014
6:00 PM - 8:00 PM
Mills County State Bank
1101 Parker St
Goldthwaite, Texas

Please Pre-Register to:
254-774-6008 or lprcin@brc.tamus.edu

This course provides a basic understanding of the operational and maintenance activities of septic systems and explains how your day to day activities impact your septic system. Presentations cover the treatment processes, health and safety considerations, and how to maintain your system. This course also provides answers to the most frequently asked septic system questions, including when to pump out a tank and what can or cannot go down the drain.

For More Information Contact:

Lisa Prcin, Watershed Coordinator
254-774-6008 | lprcin@brc.tamus.edu
http://www.lampasasriver.org/
http://ossf.tamu.edu/

Brought to you in support of:

Lampasas River Watershed Protection Plan
BY:
The Lampasas River Watershed Partnership,
Texas A&M AgriLife Research &
Texas A&M AgriLife Extension Service

Watershed Coordinator Activities

- Trainings and Meetings
  - Texas Watershed Coordinator Roundtable
  - Local Soil and Water Conservation Meetings
  - Lampasas/Burnet Counties Local Agriculture Work Group
  - Brazos River Clean Rivers Program Steering Committee Meeting
  - Presentation Skills for Technical Professionals
  - Working with Schools for Waterways Education webinar
  - Surface Water Quality Monitoring Guidance Advisory Work Group meeting
  - The Final Clean Water Rule webinar

Watershed Coordinator Activities

- Presentations or display booths at:
  - Texas Military 4-H Water Camp – Muskogee After School Center
  - Central Texas Master Naturalists
  - Keep Copperas Cove Beautiful's 6th Annual Eco Harvest Festival
  - Texas 4-H Tech Wizards After School Program
  - City of Killeen's Annual GIS Day
  - Clearwater Underground Water Conservation District's Bell County Water Symposium
  - Mill's County "Well Screened" well water testing event
  - Annual Meeting of Soil and Water Conservation District Directors

New Newsletter Design!

Lampasas River Watershed Partnership Newsletter

February 2016

Texas A&M AgriLife Research

At A Glance

Partnership Meeting
- ✓ February 25
- ✓ 6 to 8 p.m.
- ✓ Farm Bureau Office
- ✓ Lampasas, TX

Texas Riparian and Stream Ecosystem Education Program
- ✓ March 3
- ✓ 8 a.m. to 4 p.m.
- ✓ Farm Bureau Office
- ✓ Lampasas, TX

Partnership News

I hope this newsletter finds you well and enjoying this New Year! We are trying to make our newsletters a little more exciting, so please let us know how you feel about the new format. It's hard to believe that 2015 is wrapped up and in the books and we are moving on to 2016. November 2015 marked the 5 year anniversary of the formation of the Lampasas River Watershed Partnership. Thank you to those who are still giving of their time and expertise to help improve water quality in the Lampasas River and its tributaries. And a big 'Welcome' to those of you that may be new to our Partnership. There are several upcoming programs that you may find of interest in and around the watershed. Please feel free to share this information with your neighbors and anyone you think might be interested in these programs.

Lampasas River Watershed Partnership Meeting

A Partnership meeting will be held on Thursday, February 25 from 6:00 p.m. to 8:00 p.m. at the Lampasas County Farm Bureau Building located at 1793 N. U.S. Hwy 281. We will be discussing the progress made in implementing the watershed protection plan over the last year. A meeting agenda is included with this newsletter.

Jacki Bakker, the District Technician for the Hill Country Soil and Water Conservation District, will be discussing the assistance available to landowners for the development and implementation of water quality management plans in the watershed. These plans provide technical and financial assistance for landowners to place conservation practices on range and farmland. The funding for this effort is provided by a Clean Water Act Section 319(h) grant from the Texas State Soil and Water Conservation Board.

Josh Helcel, a Texas A&M AgriLife Extension Associate, will also be on hand to discuss the resources available to local landowners for feral hog management and control within the watershed. Mr. Helcel is based in Burnet County and provides educational and technical resources for landowners dealing with feral hog problems. You may check out his website http://feralhogs.tamu.edu/ for more information.

Funding provided through a Clean Water Act §319(h) non-point source grant from the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency.

Texas Riparian and Stream Ecosystem Education Program

We are excited to partner with the Texas Water Resources Institute to offer a new program in the watershed. A Texas Riparian and Stream Ecosystem Education Program will be held March 3 in Lampasas.

The workshop is co-presented by the Texas A&M AgriLife Research and Extension Center at Temple, the Texas A&M AgriLife Extension Service office in Lampasas County and the Lampasas Watershed Partnership.

The workshop's morning session will begin at 8:00 a.m. at the Texas Farm Bureau, 1793 N. U.S. Highway 281. The afternoon session will include a walk and presentations along the Sulphur Creek.

The workshop will focus on the nature and function of stream and riparian zones, as well as the benefits and economic impacts from proper functioning riparian systems. Topics will include riparian and watershed management principles, water quality, riparian vegetation, hindrances to healthy riparian areas, stream processes, management practices and discussion of local resources.

There will be useful information on riparian and watershed processes, as well as the benefits of healthy riparian and what resources are available to reduce degradation and improve water quality.

Presentations will be given by representatives of the Texas Water Resources Institute, U.S. Department of Agriculture's Natural Resources Conservation Service, AgriLife Extension, Texas Parks and Wildlife Department, Texas A&M Forest Service and Texas A&M AgriLife Research.

Attendees must RSVP by Feb. 26 by calling 979-458-5915 or emailing n-dictson@tamu.edu or online at http://texasriparian.org/trainings. A catered box lunch from Subway is available for $10 or attendees may bring their own lunch. Please see the attached flyer for more information.

The workshop offers several types of continuing education units, including three units — two general and one integrated pest management — for Texas Department of Agriculture pesticide license holders. It offers one unit from the Texas Water Resources Institute, six hours from the Texas Forestry Association, four hours from the Society of American Foresters and six hours for Texas Nutrient Management Planning specialists. The program may also be used for continuing education units for professional engineers.

CONTACT US!

If you would like to become involved, please visit us at www.lampasasriver.org

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Texas A&M AgriLife Research at Blackland Research and Extension Center
720 E. Blackland Road
Temple, Texas 76502

Funding provided through a Clean Water Act §319(h) non-point source grant from the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency.

TIAER Surface Water Quality Monitoring Update

2012 Surface Water Quality Standards

Use Categories	Geometric Mean Criteria (colonies/100ml)
Primary Contact (PCR)	126
Secondary Contact 1 (SCR1)	630
Secondary Contact 2 (SCR2)	1030
Noncontact Recreation (NCR)	2060

Primary Contact Recreation
Activities that are presumed to involve a significant risk of ingestion of water (e.g., wading by children, swimming, water skiing, diving, tubing, surfing, and the following whitewater activities: kayaking, canoeing, and rafting).

Secondary Contact Recreation 1
Activities that commonly occur but have limited body contact incidental to shoreline activity (e.g., wading by adults, fishing, canoeing, kayaking, rafting and motor boating). These activities are presumed to pose a less significant risk of water ingestion than primary contact recreation but more than secondary contact recreation 2.

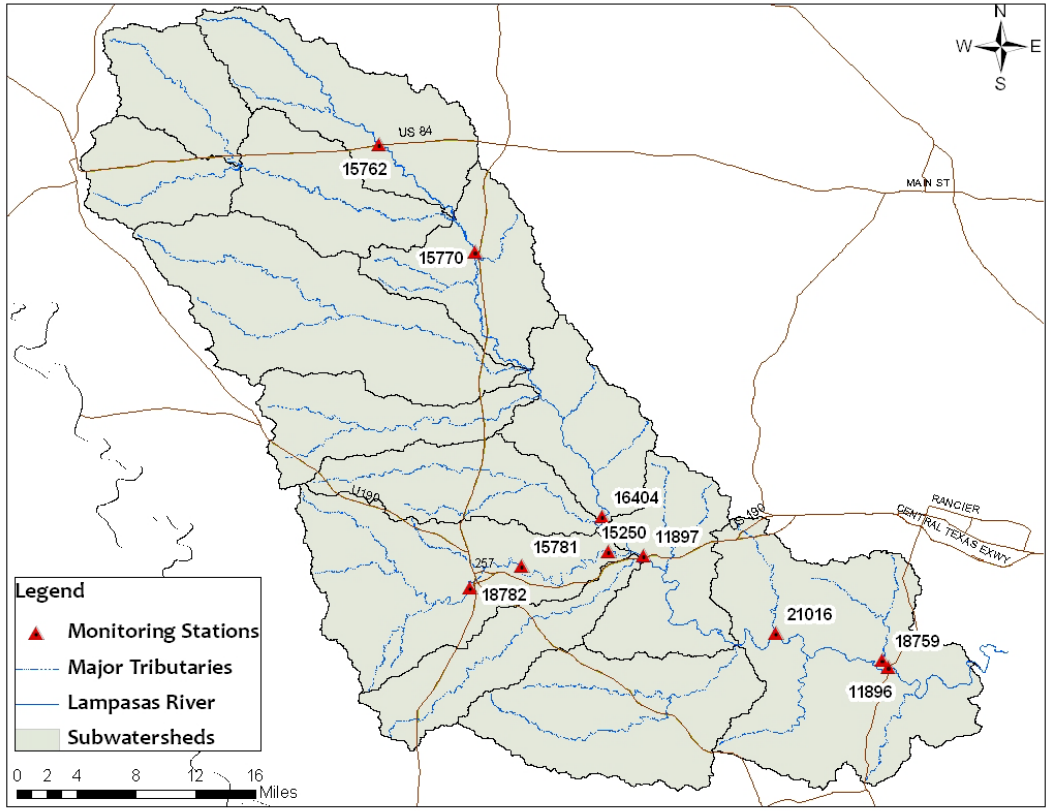
Secondary Contact Recreation 2
Activities with limited body contact incidental to shoreline activity (e.g. fishing, canoeing, kayaking, rafting and motor boating) that are presumed to pose a less significant risk of water ingestion than secondary contact recreation 1. These activities occur less frequently than secondary contact recreation 1 due to physical characteristics of the water body or limited public access.

Noncontact Recreation
Activities that do not involve a significant risk of water ingestion, such as those with limited body contact incidental to shoreline activity, including birding, hiking, and biking. Noncontact recreation use may also be assigned where primary and secondary contact recreation activities should not occur because of unsafe conditions, such as ship and barge traffic.

Listing a waterbody for E. *coli*…

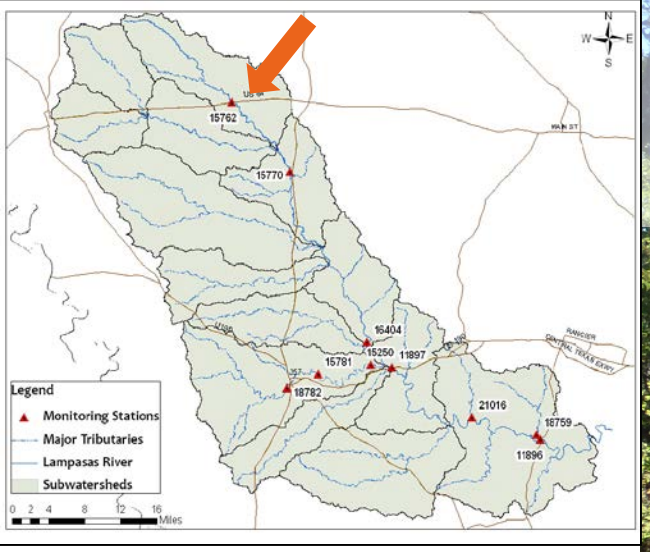
- If the geomean is over the 126 CFU/100 mL based on a minimum of 20 samples over a 7 year period, it is listed as impaired.
- A geomean* is used because it is less sensitive to outliers

"Surface Water Quality Monitoring to Support the Implementation of the Lampasas River Watershed Protection Plan"



- Sampling began July 2014
- Sampling ends June 2016
- Monthly routine grab samples
- Quarterly stormflow grab samples

Lampasas River at US 84
Site 15762

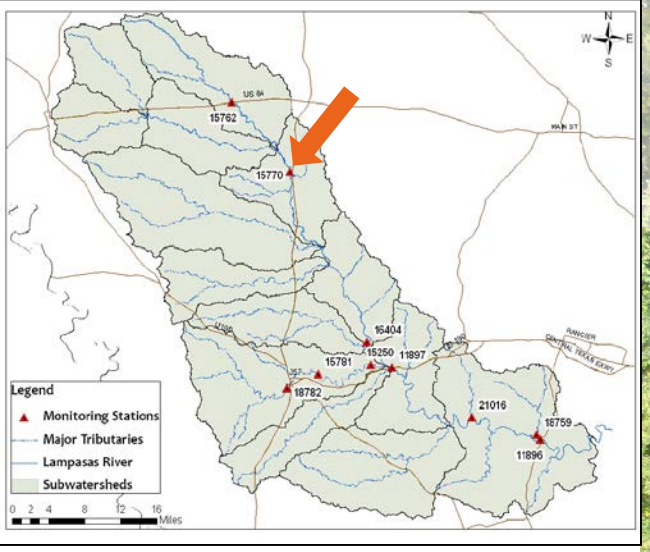


Type: Mainstem
Number of Routine: 5
Number of No Flow: 11
Number of Storm: 4
Total: 20

NS[1] = Insufficient flow for sample collection
IS[2] = Insufficient data points for analysis

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	150
August 6, 2014	RT	>7	NS[1]
September 3-4, 2014	RT	>7	NS
October 14, 2014	RT	2	NS
November 6, 2014	RT	1	NS
December 4, 2014	RT	>7	NS
January 13, 2015	RT	>7	NS
February 10, 2015	RT	>7	NS
March 19, 2015	RT	>7	NS
April 16, 2015	RT	>7	NS
May 14, 2015	RT/S	<1	3,200
May 25, 2015	S	1	3,600
June 17, 2015	RT	<1	1,600
July 8, 2015	RT	>7	470
August 12, 2015	RT	>7	61
September 16, 2015	RT	>7	NS
October 15, 2015	RT	>7	NS
October 26, 2015	S	1	1,500
October 31, 2015	S	<1	138,000
November 11, 2015	RT	>7	370
Geomean (Excluding Storms)			IS[2]

Lampasas River at CR 2925
Site 15770

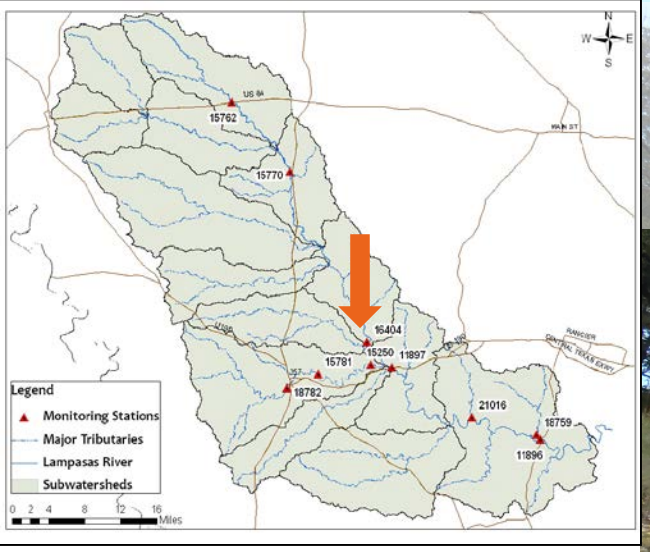


Type: Mainstem
Number of Routine: 6
Number of No Flow: 10
Number of Storm: 4
Total: 20

NS[1] = Insufficient flow for sample collection
IS[2] = Insufficient data points for analysis

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	120
August 6, 2014	RT	>7	106
September 3-4, 2014	RT	>7	NS
October 14, 2014	RT	2	NS
November 6, 2014	RT	1	NS
December 4, 2014	RT	>7	NS
January 13, 2015	RT	>7	NS
February 10, 2015	RT	>7	NS
March 19, 2015	RT	>7	NS
April 16, 2015	RT	>7	NS
May 14, 2015	RT/S	<1	7,400
May 25, 2015	S	1	2,000
June 17, 2015	RT	<1	640
July 8, 2015	RT	>7	150
August 12, 2015	RT	>7	46
September 16, 2015	RT	>7	NS
October 15, 2015	RT	>7	NS
October 26, 2015	S	1	6,400
October 31, 2015	S	<1	2,700
November 11, 2015	RT	>7	220
Geomean (Excluding Storms)			IS

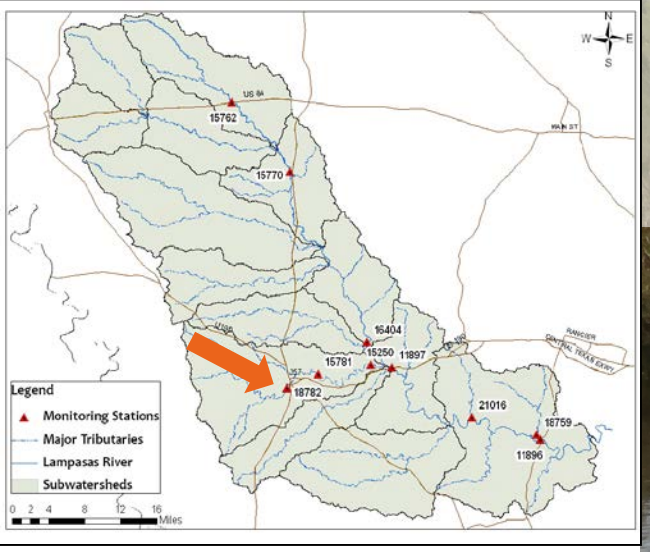
Lampasas River at 2313 Site 16404



Type: Mainstem
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	15
August 6, 2014	RT	>7	22
September 3-4, 2014	RT	>7	4
October 14, 2014	RT	2	1,400
November 6, 2014	RT	1	107
December 4, 2014	RT	>7	46
January 13, 2015	RT	>7	29
February 10, 2015	RT	>7	15
March 19, 2015	RT	>7	27
April 16, 2015	RT	>7	19
May 14, 2015	RT/S	<1	670
May 25, 2015	S	<1	7,500
June 17, 2015	RT	<1	530
July 8, 2015	RT	>7	110
August 12, 2015	RT	>7	2
September 16, 2015	RT	>7	6
October 15, 2015	RT	>7	11
October 26, 2015	S	1	19,000
October 31, 2015	S	<1	17,818
November 11, 2015	RT	>7	230
Geomean (Excluding Storms)			34

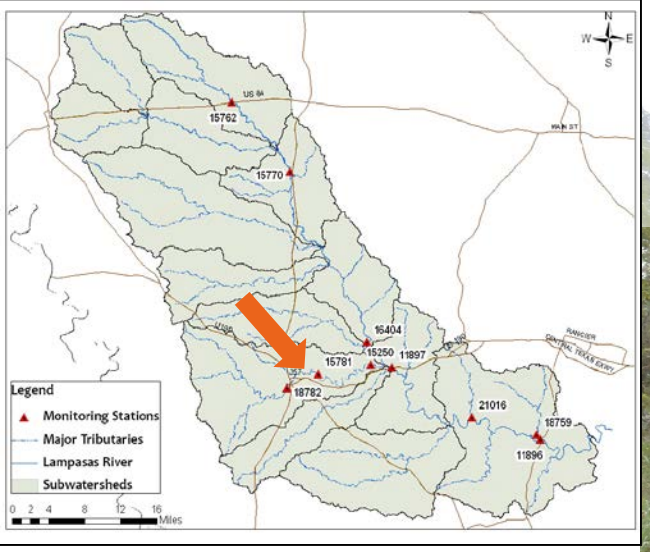
Sulphur Creek at Naruna Rd
Site 18782



Type: Tributary
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	22
August 6, 2014	RT	>7	39
September 3-4, 2014	RT	>7	14
October 14, 2014	RT	2	6
November 6, 2014	RT	1	31
December 4, 2014	RT	>7	92
January 13, 2015	RT	>7	11
February 10, 2015	RT	>7	63
March 19, 2015	RT	>7	38
April 16, 2015	RT	>7	5
May 14, 2015	RT/S	<1	230
May 25, 2015	S	<1	120
June 17, 2015	RT	<1	34
July 8, 2015	RT	>7	25
August 12, 2015	RT	>7	7
September 16, 2015	RT	>7	5
October 15, 2015	RT	>7	38
October 26, 2015	S	1	5,900
October 31, 2015	S	<1	2,200
November 11, 2015	RT	>7	69
Geomean (Excluding Storms)			22

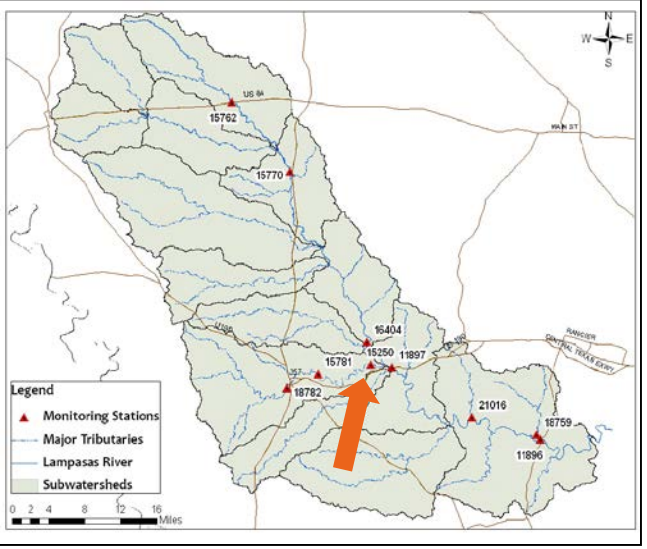
Sulphur Creek at CR 3010
Site 15781



Type: Tributary
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	35
August 6, 2014	RT	>7	70
September 3-4, 2014	RT	>7	33
October 14, 2014	RT	2	64
November 6, 2014	RT	1	58
December 4, 2014	RT	>7	7
January 13, 2015	RT	>7	21
February 10, 2015	RT	>7	40
March 19, 2015	RT	>7	54
April 16, 2015	RT	>7	29
May 14, 2015	RT/S	<1	160
May 25, 2015	S	<1	300
June 17, 2015	RT	<1	150
July 8, 2015	RT	>7	28
August 12, 2015	RT	>7	81
September 16, 2015	RT	>7	50
October 15, 2015	RT	>7	62
October 26, 2015	S	1	1,600
October 31, 2015	S	<1	16,364
November 11, 2015	RT	>7	180
Geomean (Excluding Storms)			47

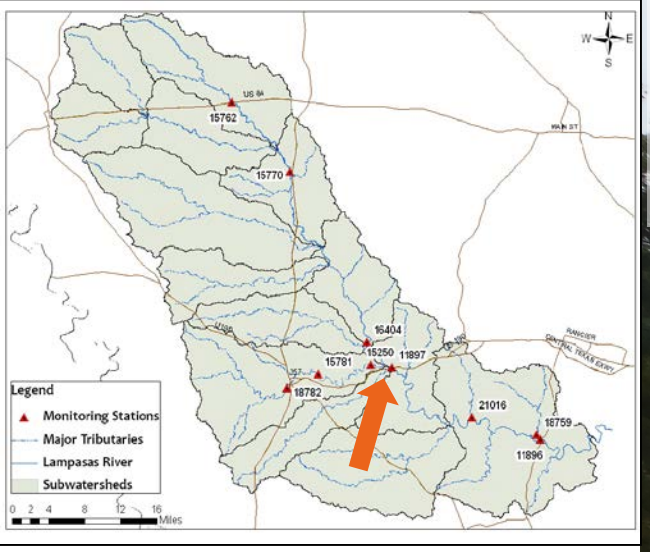
Sulphur Creek at FM 1715
Site 15250



Type: Tributary
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	75
August 6, 2014	RT	>7	32
September 3-4, 2014	RT	>7	105
October 14, 2014	RT	2	92
November 6, 2014	RT	1	90
December 4, 2014	RT	>7	63
January 13, 2015	RT	>7	30
February 10, 2015	RT	>7	35
March 19, 2015	RT	>7	160
April 16, 2015	RT	>7	49
May 14, 2015	RT/S	<1	76
May 25, 2015	S	<1	440
June 17, 2015	RT	<1	780
July 8, 2015	RT	>7	33
August 12, 2015	RT	>7	96
September 16, 2015	RT	>7	64
October 15, 2015	RT	>7	180
October 26, 2015	S	1	1,600
October 31, 2015	S	<1	17,000
November 11, 2015	RT	>7	230
Geomean (Excluding Storms)			85

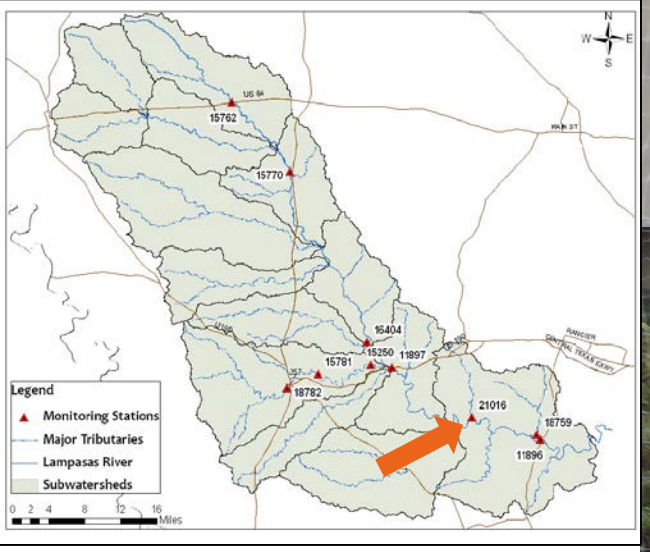
Lampasas River at US 190
Site 11897



Type: Mainstem
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	27
August 6, 2014	RT	>7	14
September 3-4, 2014	RT	>7	13
October 14, 2014	RT	4	99
November 6, 2014	RT	1	56
December 4, 2014	RT	>7	33
January 13, 2015	RT	>7	13
February 10, 2015	RT	>7	7
March 19, 2015	RT	>7	31
April 16, 2015	RT	>7	7
May 14, 2015	RT/S	<1	740
May 25, 2015	S	<1	6,700
June 17, 2015	RT	<1	610
July 8, 2015	RT	>7	32
August 12, 2015	RT	>7	15
September 16, 2015	RT	>7	15
October 15, 2015	RT	>7	21
October 26, 2015	S	1	17,000
October 31, 2015	S	<1	20,000
November 11, 2015	RT	>7	210
Geomean (Excluding Storms)			30

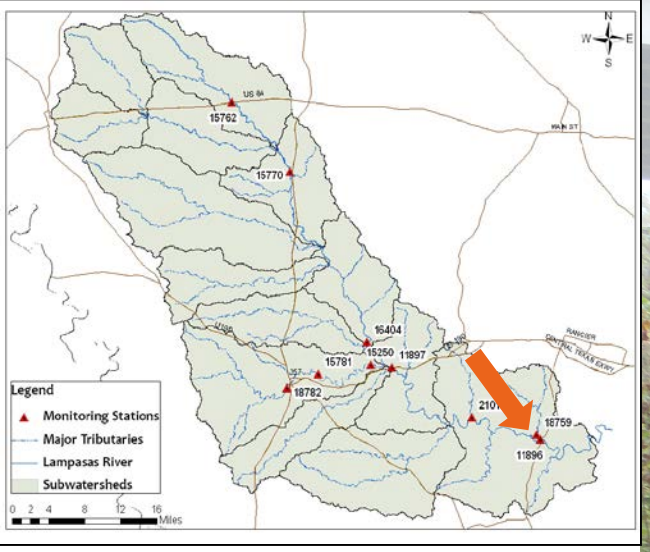
Clear Creek at Oakalla Rd Site 21016



Type: Tributary
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	62
August 6, 2014	RT	>7	32
September 3-4, 2014	RT	>7	10
October 14, 2014	RT	4	290
November 6, 2014	RT	1	1,220
December 4, 2014	RT	>7	27
January 13, 2015	RT	>7	79
February 10, 2015	RT	>7	5
March 19, 2015	RT	>7	24
April 16, 2015	RT	>7	7
May 14, 2015	RT/S	<1	700
May 25, 2015	S	<1	600
June 17, 2015	RT	<1	8,900
July 8, 2015	RT	>7	28
August 12, 2015	RT	>7	4
September 16, 2015	RT	>7	9
October 15, 2015	RT	>7	13
October 26, 2015	S	1	560
October 31, 2015	S	<1	9,182
November 11, 2015	RT	>7	180
Geomean (Excluding Storms)			45

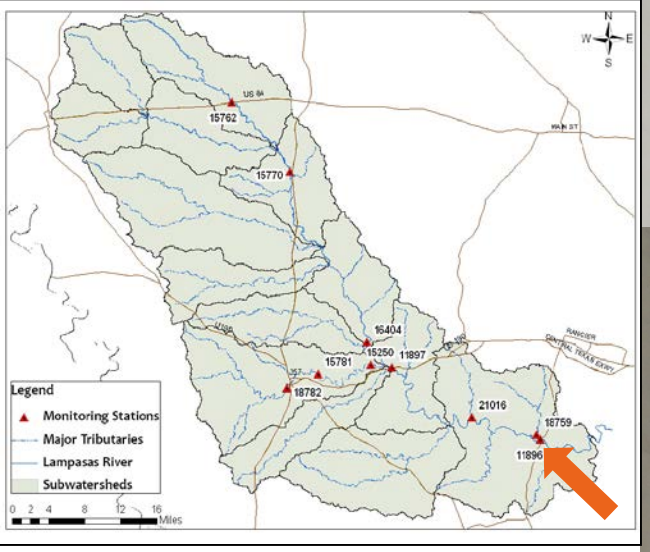
Reese Creek at FM 2670
Site 18759



Type: Tributary
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	75
August 6, 2014	RT	>7	85
September 3-4, 2014	RT	>7	18
October 14, 2014	RT	4	2100
November 6, 2014	RT	1	52
December 4, 2014	RT	>7	48
January 13, 2015	RT	>7	50
February 10, 2015	RT	>7	64
March 19, 2015	RT	>7	43
April 16, 2015	RT	>7	16
May 14, 2015	RT/S	<1	650
May 25, 2015	S	<1	550
June 17, 2015	RT	<1	8,000
July 8, 2015	RT	>7	39
August 12, 2015	RT	>7	26
September 16, 2015	RT	>7	120
October 15, 2015	RT	>7	250
October 26, 2015	S	1	670
October 31, 2015	S	<1	5,800
November 11, 2015	RT	>7	160
Geomean (Excluding Storms)			96

Lampasas River at HWY 195
Site 11896



Type: Mainstem
Number of Routine: 16
Number of Storm: 4
Total: 20

Sample Date	Type	DSLP	E. coli
July 9-10, 2014	RT	>7	140
August 6, 2014	RT	>7	10
September 3-4, 2014	RT	>7	35
October 14, 2014	RT	4	220
November 6, 2014	RT	1	112
December 4, 2014	RT	>7	62
January 13, 2015	RT	>7	8
February 10, 2015	RT	>7	17
March 19, 2015	RT	>7	17
April 16, 2015	RT	>7	37
May 14, 2015	RT/S	<1	660
May 25, 2015	S	<1	11,400
June 17, 2015	RT	<1	6,300
July 8, 2015	RT	>7	34
August 12, 2015	RT	>7	46
September 16, 2015	RT	>7	5
October 15, 2015	RT	>7	32
October 26, 2015	S	1	22,000
October 31, 2015	S	<1	28,000
November 11, 2015	RT	>7	113
Geomean (Excluding Storms)			49

Geomean of routine samples

Name	Site	Number of Routine	*E. coli* Geomean
Lampasas River at Hwy 84	15762	5	IS*
Lampasas River at CR 2925	15770	6	IS
Lampasas River at FM 2313	16404	16	34
Sulphur Creek at Naruna Rd	18782	16	22
Sulphur Creek at CR 3010	15781	16	47
Sulphur Creek at FM 1715	15250	16	85
Lampasas River at Hwy 190	11897	16	30
Clear Creek at Okalla Rd	21016	16	45
Reece Creek Near FM 2670	18759	16	96
Lampasas River Near Hwy 195	11896	16	49

*Insufficient sample size to calculate geomean.

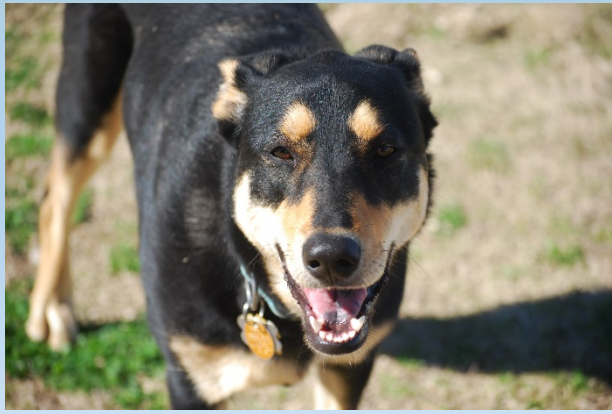
Resources for Agriculture Producers in the Lampasas River Watershed

Jackie Bakker


Hill Country SWCD #534
District Technician
Jacki Bakker

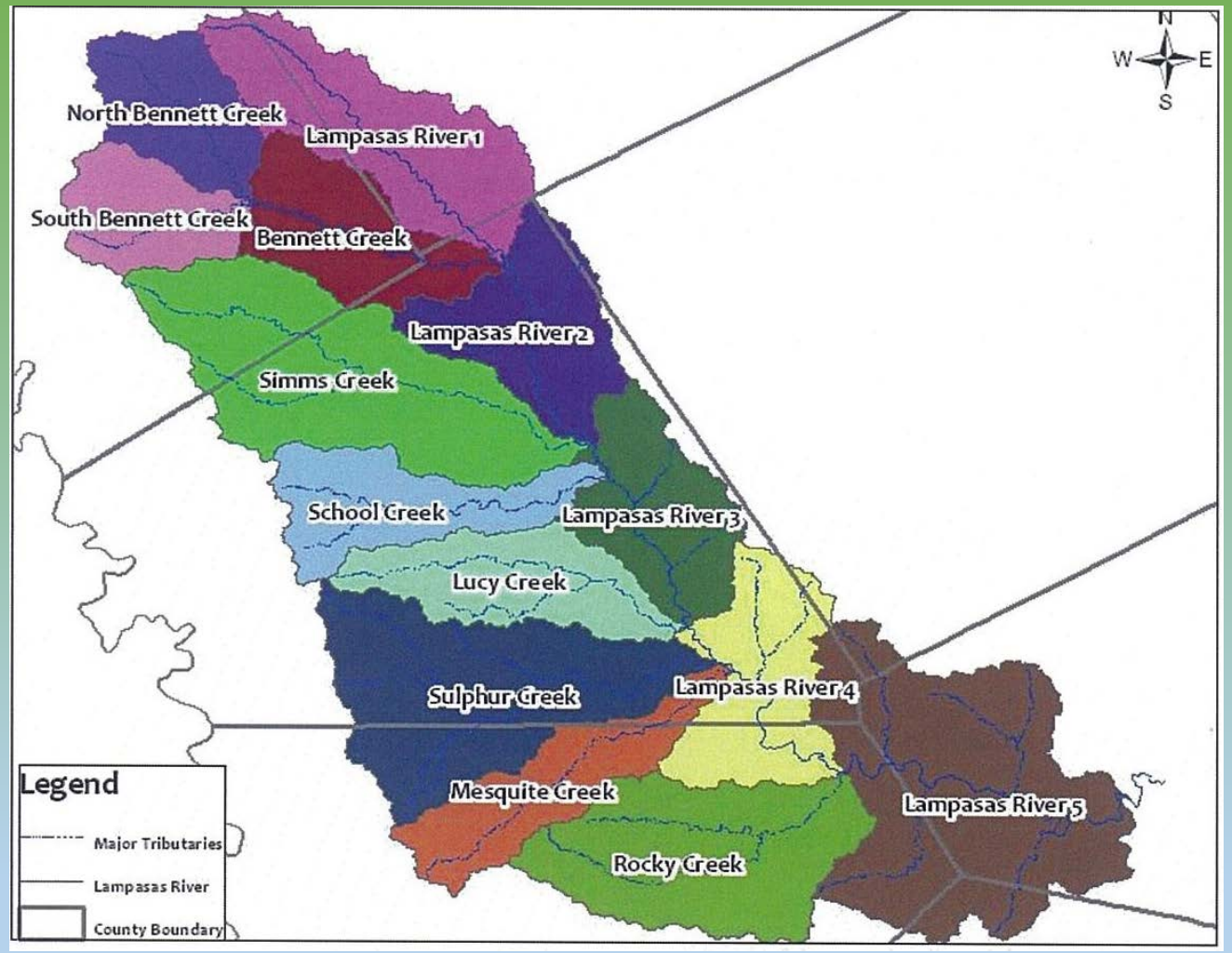
Who Am I?

- BS in Speech Communication
- ATTS Environmental Science Technology
- Certified Texas Master Naturalist
- Veteran
- Spouse to Service Member
- Proud mommy to two Miniature Schnauzers and a Redbone Coonhound mix that thinks she's a Miniature Schnauzer!

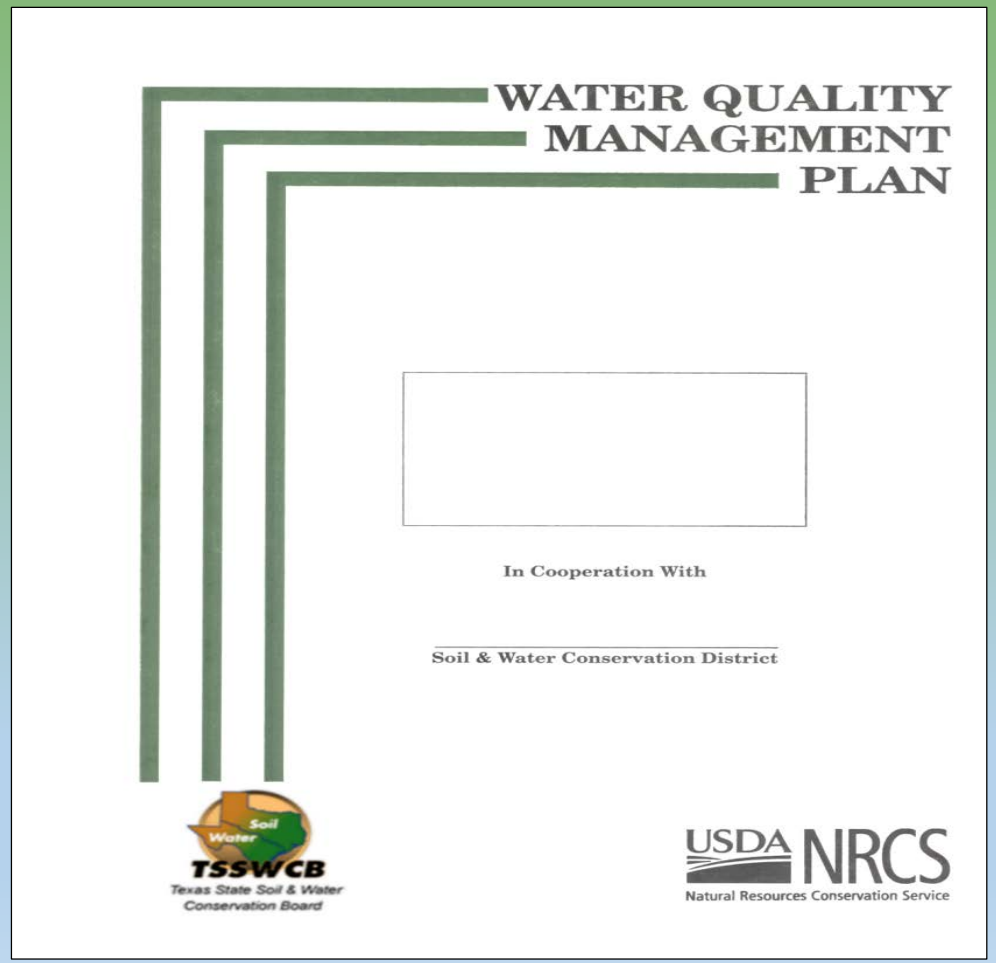


How I got here:

- To help implement management measures identified in the Lampasas River Watershed Protection Plan, the Hill Country SWCD #534 hired a District Technician to write Water Quality Management Plans (WQMPs) within the watershed.



Water Quality Management Plans:



- Site-specific plan for land improvement measures developed through SWCD for agricultural lands
- Provides ranchers and landowners a voluntary opportunity to achieve a level of pollution prevention or abatement consistent with state water quality standards
- Includes appropriate and essential land treatment practices, production practices, management measures, or technologies applicable to the planned land use
- Best available management and technology as described in NRCS Field Office Technical Guide

What are WQMPs?

- Site specific plans with a combination of BMPs for the treatment of identified resource concerns
- Based on:
  - Soil types
  - Planned land use/production goals
  - Known/potential water quality/natural resource problems (SWAPA)
  - Other site specific factors (topo, etc.)

WQMPs…

- Cover the entire ranch or property
- Specifically designed to achieve pollution prevention/abatement

Technical Criteria for WQMPs:

NRCS Field Office Technical Guide (FOTG)

To view all approved practices for selected county:

- http://efotg.nrcs.usda.gov/efotg_locator.aspx?map=TX
- Select region
- Select county
- Select Section IV
- Select A. Conservation Practices

FOTG "essential practices" for each land: use:

- Rangeland
  - Brush management
  - Prescribed grazing
- Wildlife
  - Wildlife management
  - Brush Management
- Pastureland
  - Brush management
  - Prescribed grazing
- Cropland
  - Conservation crop rotation
  - Residue management
  - Nutrient management

WQMPs also include:

- Range planting
- Cross fencing
- Upland Wildlife Habitat Management
- Meeting the Water Needs for Texans and Wildlife

WQMPs also include:

- Erosion control measures to bring soil loss to acceptable levels (T)
- Erosion control to treat other forms of erosion (i.e. gullies) according to FOTG quality criteria
- Other practices to meet site specific concerns

Why have a WQMP?

- Abate/prevent erosion and promote conservation
- A strategic "management" plan for your operation
- "Assurance" policy – state-certified proof that you aren't just sitting around doing nothing
- Demonstrate that voluntary conservation programs promote agricultural production and environmental quality as compatible goals
- Demonstrate that agriculture is doing our part to protect water quality
- Resolve water quality complaints through voluntary process with SWCD and TSSWCB

WQMPs…

What Does A Plan Contain?

- District-Cooperator Agreement
- Request for Planning Assistance
- Soils Map & Interpretations
- Conservation Plan Map
- Narrative Record of decisions (practices) needed to implement WQMP
- Implementation schedule indicating years practices are to be applied
- Worksheets used during the inventory and planning process of developing WQMP
- NRCS Practice Standards and engineering designs
- Signature sheet to verify individual's privacy

How to get a WQMP?

- An individual requests planning assistance through their local SWCD
- The WQMP is usually developed by the SWCD Technician with NRCS and TSSWCB assistance
- The WQMP is approved by the landowner, the SWCD and NRCS and then certified by the TSSWCB
- Producer implements the WQMP on their land
- Annual status reviews are conducted to ensure that the landowner implements BMPs as agreed to in the implementation schedule

Financial Assistance!

State (TSSWCB) or Federal (NRCS) assistance is obtainable for certain conservation practices

- TSSWCB
  - SB503 WQMP Financial Assistance
  - CWA Section 319 funding
- NRCS
  - Farm Bill Programs

Lampasas River WQMP Implementation:

- Through CWA §319 funding, TSSWCB has supported implementation in the watershed
- Since April 2015 the Hill Country SWCD technician has fully developed 6 WQMPs covering 2,946.8 acres.
- Brush Management and Cross-Fencing are the most implemented BMPs.
- Implementation is ongoing with 14 more WQMPs in various stages of progress in Lampasas and Burnet Counties.

Questions?

Jacki Bakker, Conservation Technician

Hill Country
Soil &Water Conservation District

Lampasas Field Office
502 E. Key Ave, Ste. E
Lampasas, TX 76550

512-556-5572 ext. 3
Jacki.Bakker@tx.nacdnet.net

Resources for Feral Hog Control in the Lampasas River Watershed

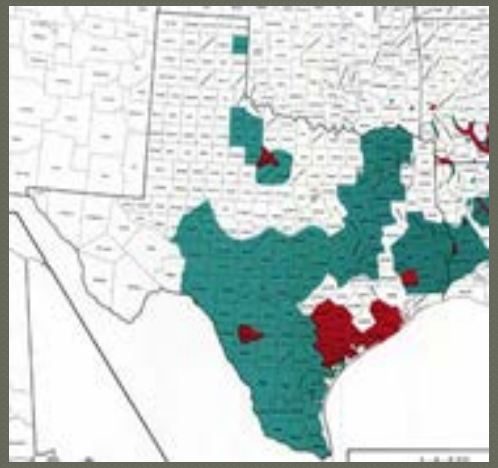
Josh Helcel

Wild Pigs

Josh Helcel, B.S.
Extension Associate
Texas A&M AgriLife Extension Service

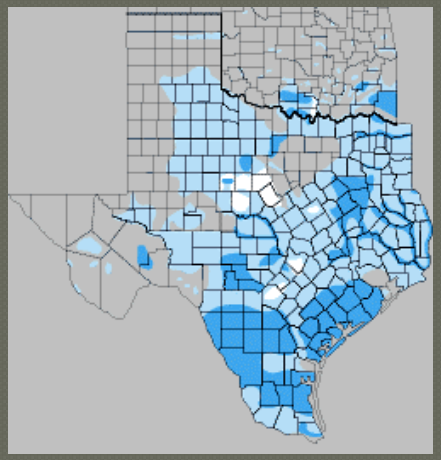
TEXAS A&M AGRILIFE EXTENSION

Texas Distribution



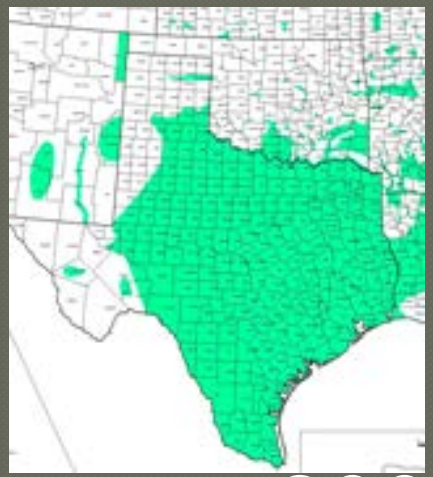
SCWDS
*Density estimate

1982



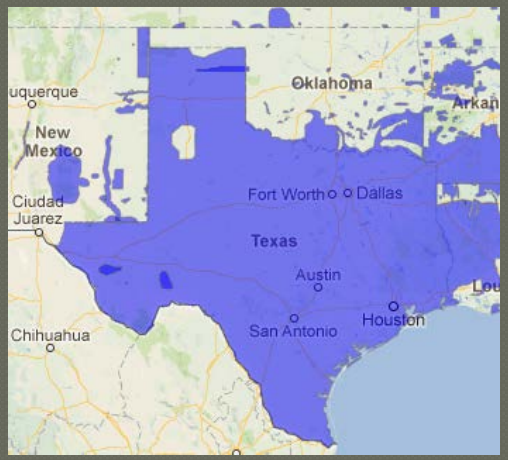
Noble.org

1996



SCWDS

2004



SCWDS

2014

As of 2014, 99% of Texas counties had wild pigs

Research suggests there are now an estimated

2.6 Million wild pigs in Texas.

Water Quality Impacts

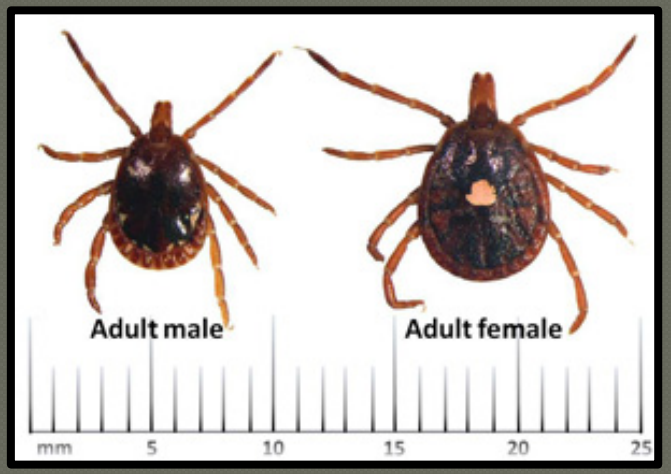
- Loss of riparian vegetation
- Increased runoff and sedimentation
- Bacterial contamination
  - E. Coli (fecal coliforms)
- Watershed impairment

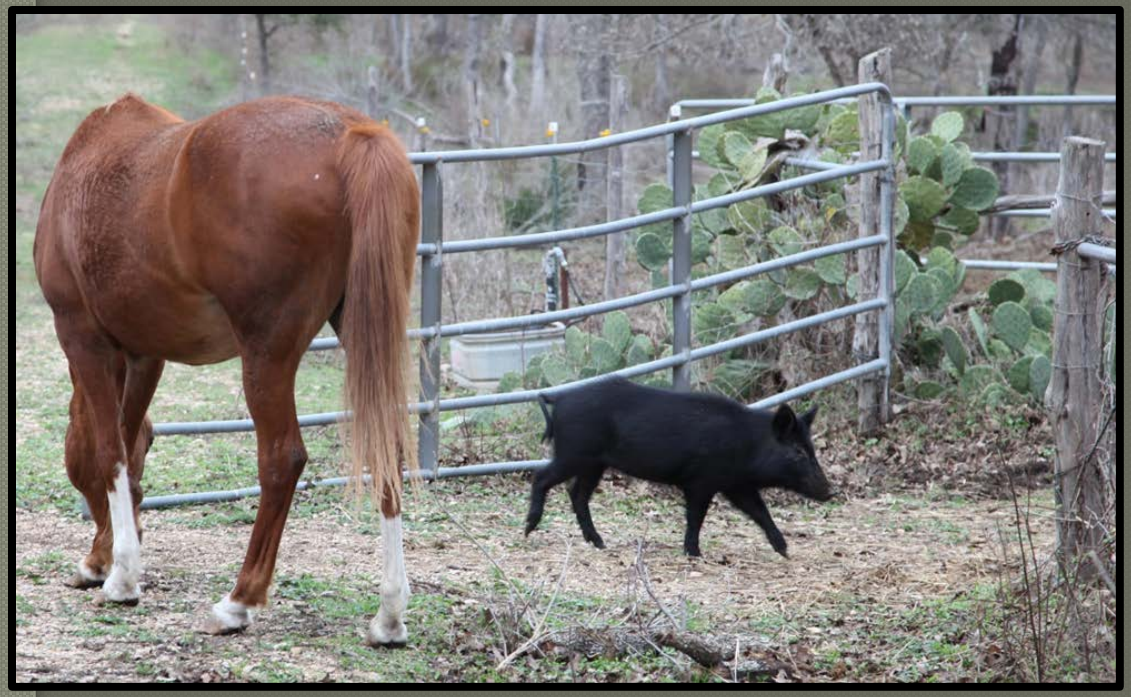
Wildlife Impacts

- Kill/eat wildlife
  - Ground nesting birds
  - Fawns
- Destroy habitat
- Compete with native species for resources like water, food, and habitat

Wild Pigs and Tick-Borne Illnesses

Lyme disease and related co-infections was detected in 45% of the Blacklegged ticks collected (Feria-Arroyo et al. 2014)





3 out of every 4 wild pigs in Texas are potentially infested with ticks capable of disease transmission (Sanders 2011)

Economic Impacts

- Over $1.5 billion across US annually
- $52 million in agricultural damage in Texas
- Texas landowners spend $7 million

Top 6 Most Intelligent Animals

Source: List25.com

Photo Credit:

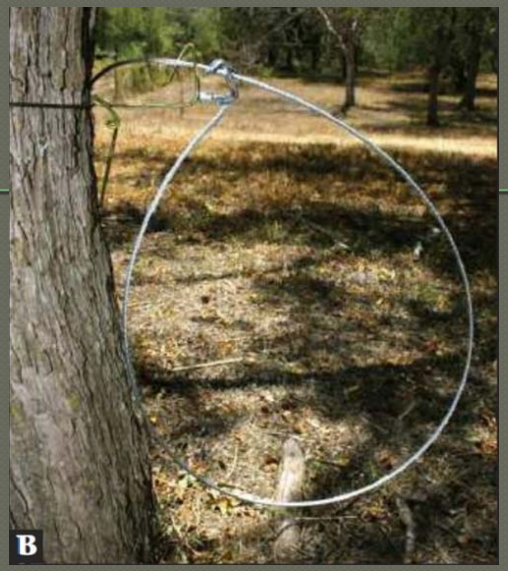
Reproduction: Sows

- *"The most reproductively successful large mammal worldwide"*

- Sexually viable at 6-10 months of age
- Polyestrous - In heat every 18-24 days until bred
- 4-6 piglets per litter
- Adults produce larger litters than yearlings
- Multiple paternity

Legal Options

- Trapping
- Snaring
- Shooting
- Trained Dogs
- Aerial Harvesting



Trapping

ADVANTAGES

- Highly effective
- Capture large groups
- Allows for loading for transport
- Combine with other methods

DISADVANTAGES

- Time intensive
- Materials Cost

Corral Traps

- Gate (or funnel)
- Utility panels
  - No corners
- 4’ t-post spacing
- 5’ panel height


09:23:39PM 03/22/2014

What's New?

- *TOXICANTS* – Sodium Nitrite
  - Humane
  - 5-10 years away (Estimated)
  - Species Specific Delivery
- Contraceptives
  - Impractical
- Currently NO toxins labeled for use in U.S.

Resources

- http://feralhogs.tamu.edu
- Our YouTube Channel: "WFSCAgriLife"- over 20 videos and counting
- Lone Star Healthy Streams Program - Feral Hog Manual
- Wild Wonderings Blog
- Feral Hog Facebook
- Publications

TEXAS A&M AGRILIFE EXTENSION

Feral Hogs Community of Practice

- http://extension.org/feral hogs
- Ask an Expert
- 50 Articles
- Videos
- 103 FAQs
- Webinars

Project Funding

- Provided through a Clean Water Act §319(h) non-point source grant from the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency

Any Questions?

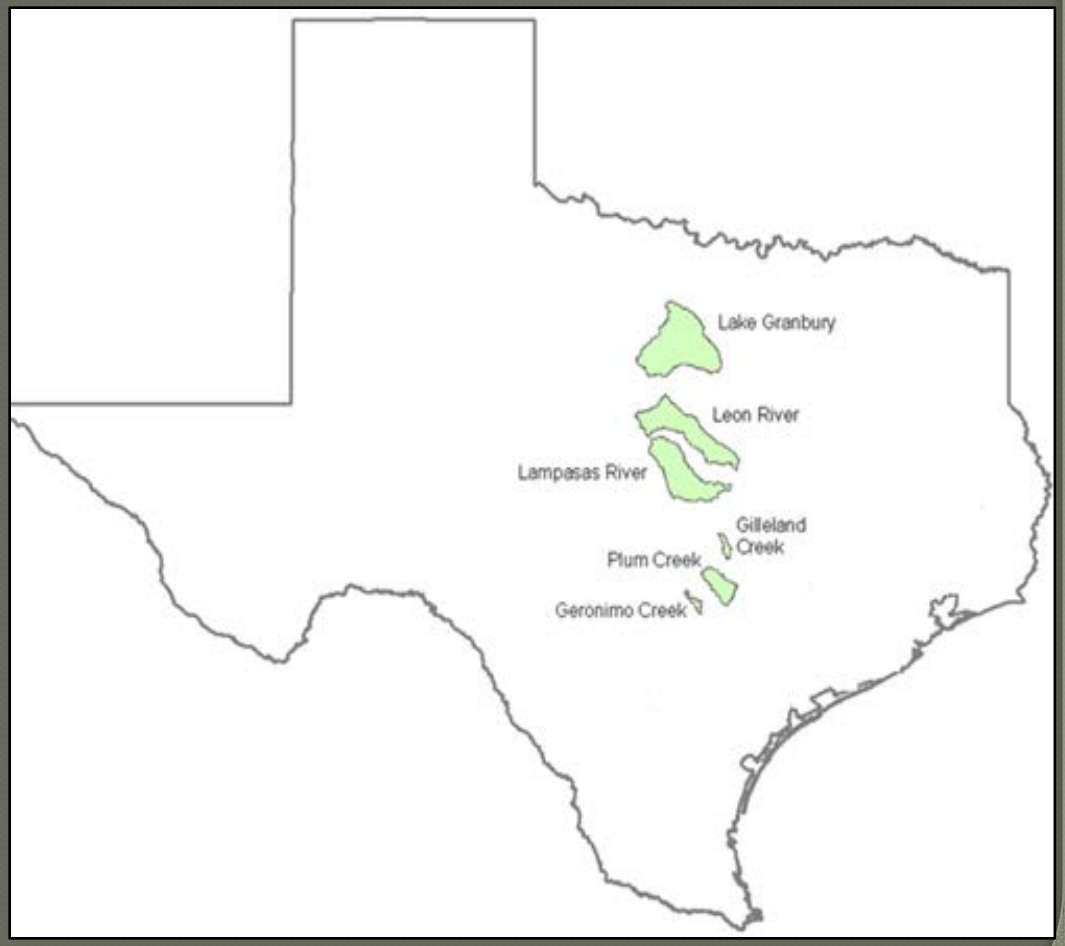
Contact Info:

- Email:

josh.helcel@tamu.edu

- Phone:

512-554-3785



Funding Opportunities for the Lampasas River Watershed

Proposal Development

- ***Implementation of the Lampasas River Watershed Protection Plan through Mapping and Assessment On-Site Sewage Facilities***
  - Develop a watershed-wide database to locate and identify OSSFs.
  - Produce a living database that will be added to as new systems are installed within the watershed.
  - Conduct an assessment of homeowners to determine the level of interest in maintaining an OSSF along with what type of assistance would be considered when approaching a system that is in need of repair and replacement.
  - Determine the need for future repair and/or replacement of systems as well as critical areas to target for additional resources
  - Submitted to TCEQ CWA § 319(h) Nonpoint Source Program in September 2015

Texas Commission on Environmental Quality (TCEQ)
Clean Water Act (CWA) Section 319(h) Nonpoint Source (NPS) Grant Program

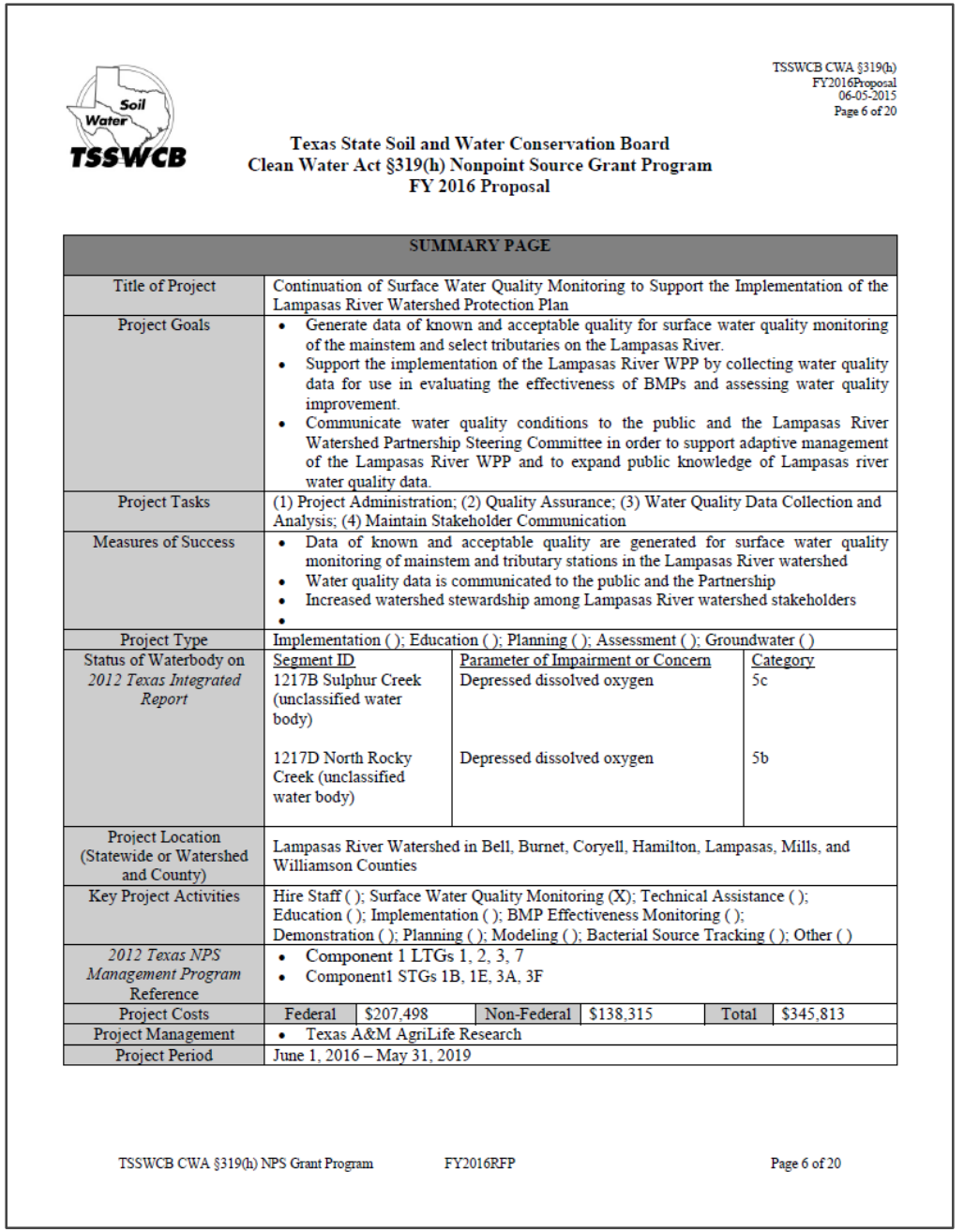
Fiscal Year (FY) 2016 CWA § 319(h) Scope of Work (Proposal)

1. **Title:**	Lampasas River Watershed Protection Plan Implementation – On-Site Sewage Facilities Database
2. **Lead Organization:**	Texas A&M AgriLife Research– Blackland Research & Extension Center (BREC)
3. **Project Leader and Title:**	Raghavan Srinivasan
4. **Federal ID No.:**	74000541
5. **Email and Telephone No.:**	r-srinivasan@tamu.edu; (979) 845-5069
6. **Mailing Address:**	720 E Blackland Rd Temple, Texas 76502
7. **Project Type:**	☒ Watershed-Based Plan (WBP)* Implementation ☐ Full WBP Development ☐ Partial WBP Development: ☐WBP Update ☐ Other: *WBP = 9 Key Element Plan developed in conformance with the Nonpoint Source Program and Grants Guidelines for States and Territories. This includes Watershed Protection Plans (WPPs) and any other document meeting the 9 Key Elements.
8. **Project Tasks:**	1. Project Administration 2. Quality Assurance 3. OSSF Geodatabase and Inventory 4. OSSF Critical Area Ranking 5. Homeowner Assessment 6. Final Project Report
9. **Project Description:**	Develop a database of all permitted and unpermitted On-Site Sewage Facilities (OSSF) within the Lampasas River watershed and rank those systems by critical areas. This project will include an assessment of local homeowners' level of interest in future repair/replacement efforts for malfunctioning OSSF systems.
10. **Funding Level:**	Total $260,743; Federal $156,446; Match $104,297
11. **Project Cities:**	Lampasas, Kempner, portions of Copperas Cove and Killeen (within the watershed boundaries)
12. **Project Counties:**	Portions of Bell, Burnet, Coryell, Hamilton, Lampasas, Mills, and Williamson
13. **Segment ID Number:**	Lampasas River, 1217 Sulphur Creek, 1217B North Rocky Creek, 1217D

14. **Applicant Signature:**

Proposal Development

- Continuation of Surface Water Quality Monitoring Program
  - Includes:
    - Continued monthly routine grab samples at 10 sites as identified in the WPP
    - Continued quarterly flow biased grab samples at 10 sites as identified in the WPP
  - Submitted to TSSWCB CWA §319(h) Nonpoint Source Program in June 2015



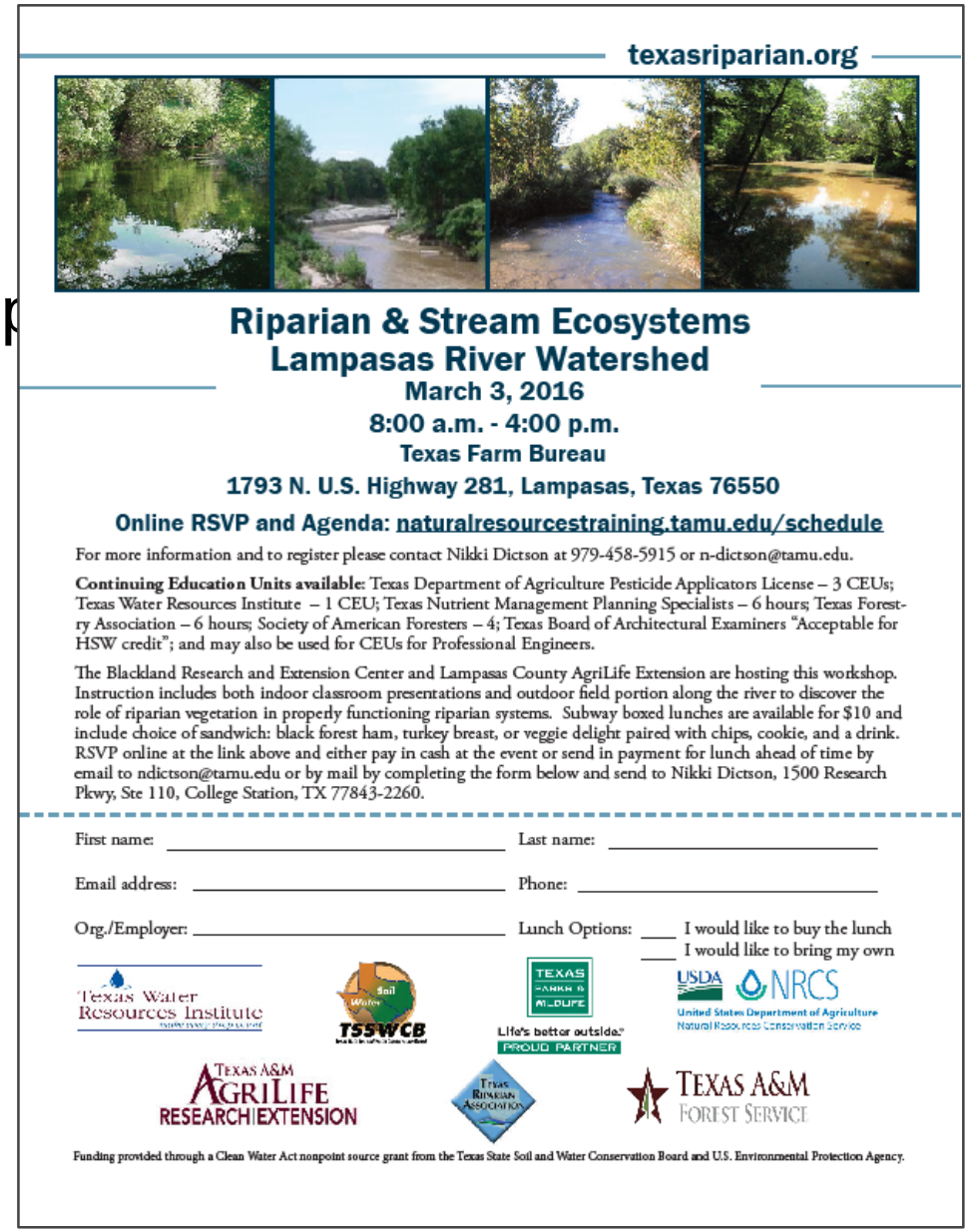
Texas State Soil and Water Conservation Board
Clean Water Act §319(h) Nonpoint Source Grant Program
FY 2016 Proposal

SUMMARY PAGE			
Title of Project	Continuation of Surface Water Quality Monitoring to Support the Implementation of the Lampasas River Watershed Protection Plan		
Project Goals	• Generate data of known and acceptable quality for surface water quality monitoring of the mainstem and select tributaries on the Lampasas River. • Support the implementation of the Lampasas River WPP by collecting water quality data for use in evaluating the effectiveness of BMPs and assessing water quality improvement. • Communicate water quality conditions to the public and the Lampasas River Watershed Partnership Steering Committee in order to support adaptive management of the Lampasas River WPP and to expand public knowledge of Lampasas river water quality data.		
Project Tasks	(1) Project Administration; (2) Quality Assurance; (3) Water Quality Data Collection and Analysis; (4) Maintain Stakeholder Communication		
Measures of Success	• Data of known and acceptable quality are generated for surface water quality monitoring of mainstem and tributary stations in the Lampasas River watershed • Water quality data is communicated to the public and the Partnership • Increased watershed stewardship among Lampasas River watershed stakeholders •		
Project Type	Implementation ( ); Education ( ); Planning ( ); Assessment ( ); Groundwater ( )		
Status of Waterbody on *2012 Texas Integrated Report*	Segment ID	Parameter of Impairment or Concern	Category
	1217B Sulphur Creek (unclassified water body)	Depressed dissolved oxygen	5c
	1217D North Rocky Creek (unclassified water body)	Depressed dissolved oxygen	5b
Project Location (Statewide or Watershed and County)	Lampasas River Watershed in Bell, Burnet, Coryell, Hamilton, Lampasas, Mills, and Williamson Counties		
Key Project Activities	Hire Staff ( ); Surface Water Quality Monitoring (X); Technical Assistance ( ); Education ( ); Implementation ( ); BMP Effectiveness Monitoring ( ); Demonstration ( ); Planning ( ); Modeling ( ); Bacterial Source Tracking ( ); Other ( )		
2012 Texas NPS Management Program Reference	• Component 1 LTGs 1, 2, 3, 7 • Component1 STGs 1B, 1E, 3A, 3F		
Project Costs	Federal $207,498	Non-Federal $138,315	Total $345,813
Project Management	• Texas A&M AgriLife Research		
Project Period	June 1, 2016 – May 31, 2019		

Next Steps for the Partnership

Upcoming Programs

- Riparian & Stream Ecosystems Workshop
  - March 3 at Texas Farm Bureau in Lampasas
- Rainwater Harvesting for Homeowners
  - March 10 at Copperas Cove Library
- Lone Star Healthy Streams Workshop
  - Late Spring 2015
- Partnership Field Day (in lieu of Partnership Meeting!)
  - Potentially include:
    - Feral Hog Management
    - Wildlife Management
    - Rainfall Simulator
    - Any requests?



texasriparian.org

Riparian & Stream Ecosystems
Lampasas River Watershed
March 3, 2016
8:00 a.m. - 4:00 p.m.
Texas Farm Bureau
1793 N. U.S. Highway 281, Lampasas, Texas 76550

Online RSVP and Agenda: naturalresourcestraining.tamu.edu/schedule

For more information and to register please contact Nikki Dictson at 979-458-5915 or n-dictson@tamu.edu.

Continuing Education Units available: Texas Department of Agriculture Pesticide Applicators License – 3 CEUs; Texas Water Resources Institute – 1 CEU; Texas Nutrient Management Planning Specialists – 6 hours; Texas Forestry Association – 6 hours; Society of American Foresters – 4; Texas Board of Architectural Examiners "Acceptable for HSW credit"; and may also be used for CEUs for Professional Engineers.

The Blackland Research and Extension Center and Lampasas County AgriLife Extension are hosting this workshop. Instruction includes both indoor classroom presentations and outdoor field portion along the river to discover the role of riparian vegetation in properly functioning riparian systems. Subway boxed lunches are available for $10 and include choice of sandwich: black forest ham, turkey breast, or veggie delight paired with chips, cookie, and a drink. RSVP online at the link above and either pay in cash at the event or send in payment for lunch ahead of time by email to ndictson@tamu.edu or by mail by completing the form below and send to Nikki Dictson, 1500 Research Pkwy, Ste 110, College Station, TX 77843-2260.

First name: _____ Last name: _____

Email address: _____ Phone: _____

Org./Employer: _____ Lunch Options: ___ I would like to buy the lunch
___ I would like to bring my own

Texas Water Resources Institute · TSSWCB · Texas A&M AgriLife Extension · Life's better outside. PROUD PARTNER · USDA NRCS United States Department of Agriculture Natural Resources Conservation Service · Texas Riparian Association · Texas A&M Forest Service

Funding provided through a Clean Water Act nonpoint source grant from the Texas State Soil and Water Conservation Board and U.S. Environmental Protection Agency.

The facilitation of the Lampasas River Watershed Partnership and development of the watershed protection plan is funded by the Texas State Soil and Water Conservation Board through a Clean Water Act §319(h) grant from the U.S. Environmental Protection Agency.

Lisa Prcin
Texas A&M AgriLife Research
720 E Blackland Rd, Temple, TX 76502
☎ (254) 774-6008 ● prcin@brc.tamus.edu ● www.lampasasriver.org

Thank You »