Addressing NPS Pollution from Failing OSSFs Through a Local Financial Assistance Program in a Central Texas Watershed

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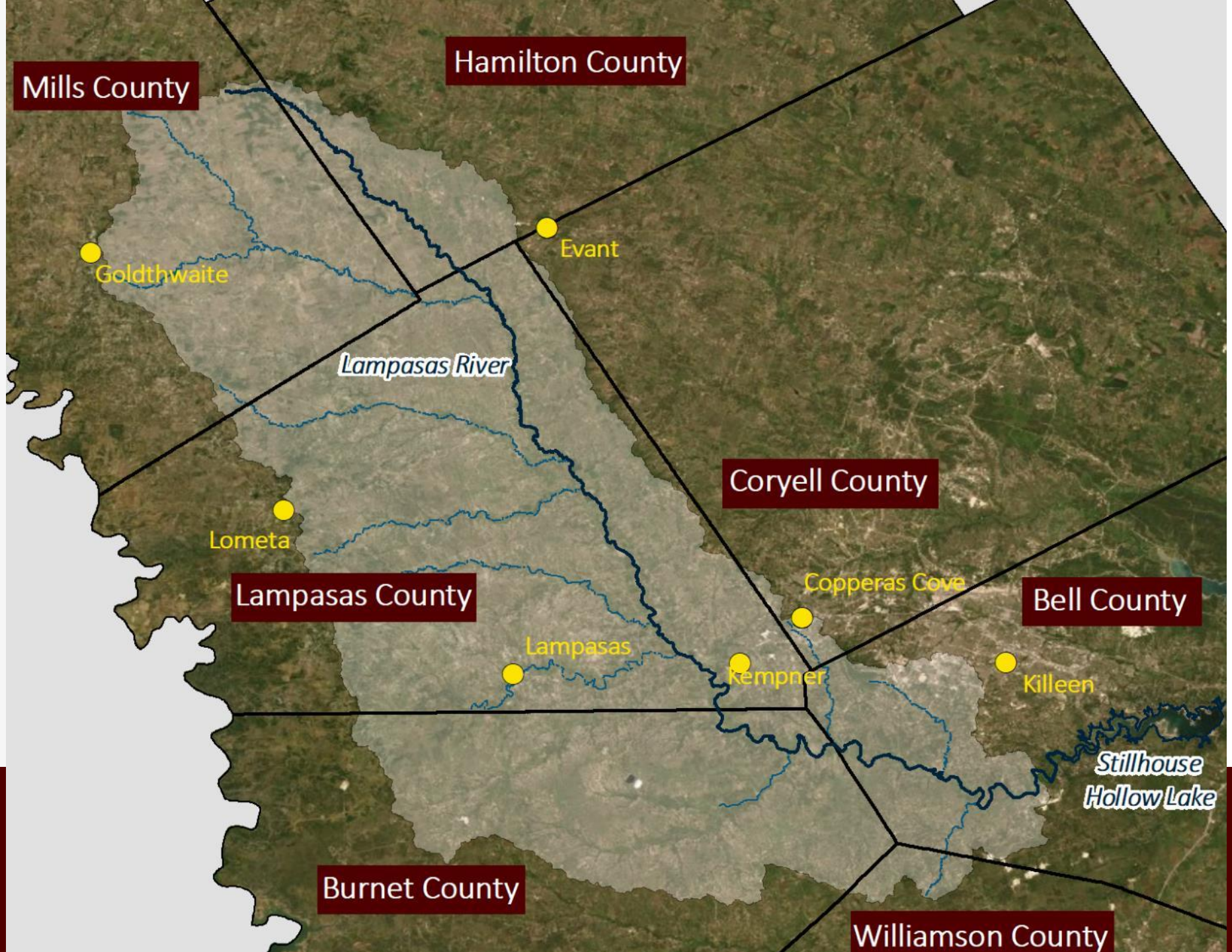
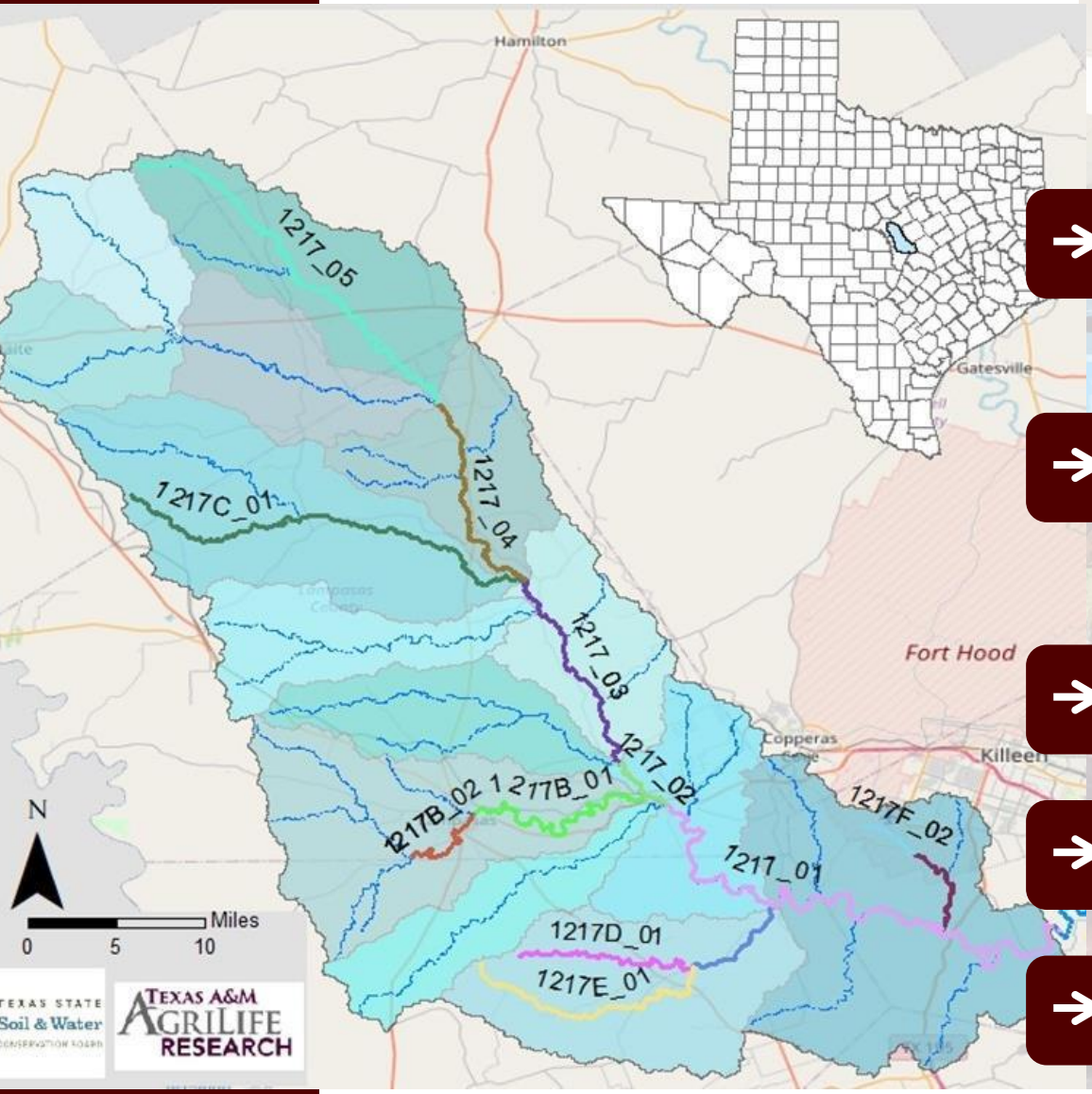

Hamilton County
Mills County
Evant
Goldthwaite
Lampasas River
Coryell County
Lometa
Lampasas County
Copperas Cove
Bell County
Lampasas
Kempner
Killeen
Stillhouse
Hollow Lake
Burnet County
Williamson County

The Lampasas River Watershed Partnership



- Identified as not meeting state standards for contact recreation in 2002
- Clean Water Act §319(h) grant from TSSWCB and U.S. EPA to address the bacteria impairment and other pollutant concerns
- Began development of WPP in 2009
- WPP was approved by stakeholders and accepted by EPA in 2013
- Implementation of WPP has been ongoing since 2013






Implementation of the WPP

OSSF Project Overview

Collaboration between AgriLife Extension and AgriLife Research

Develop all program materials

Promotional materials, ranking criteria, needs assessment and application, etc.

Deliver education programs

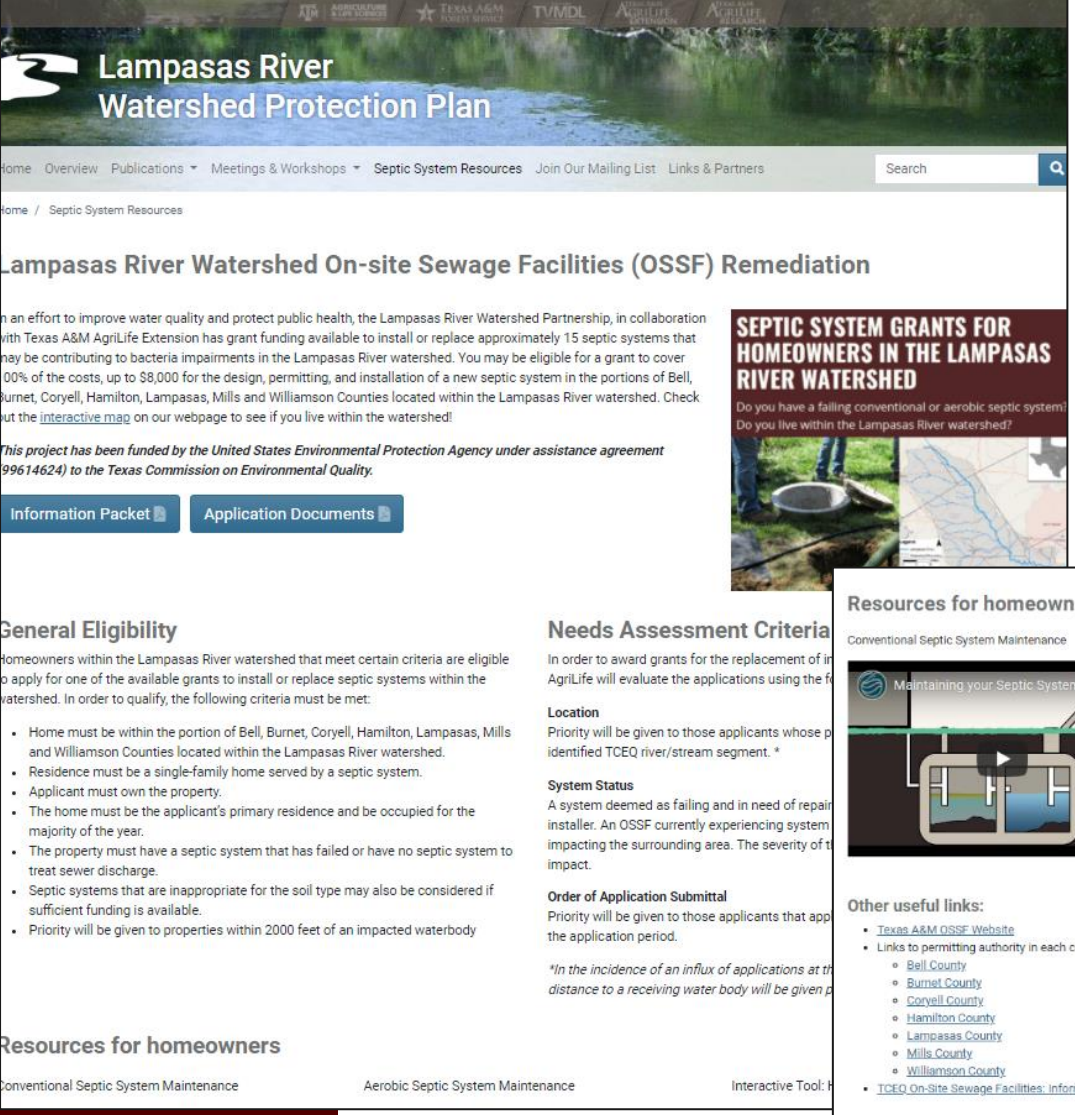
Prepare and deliver twice annual educational programs for homeowners

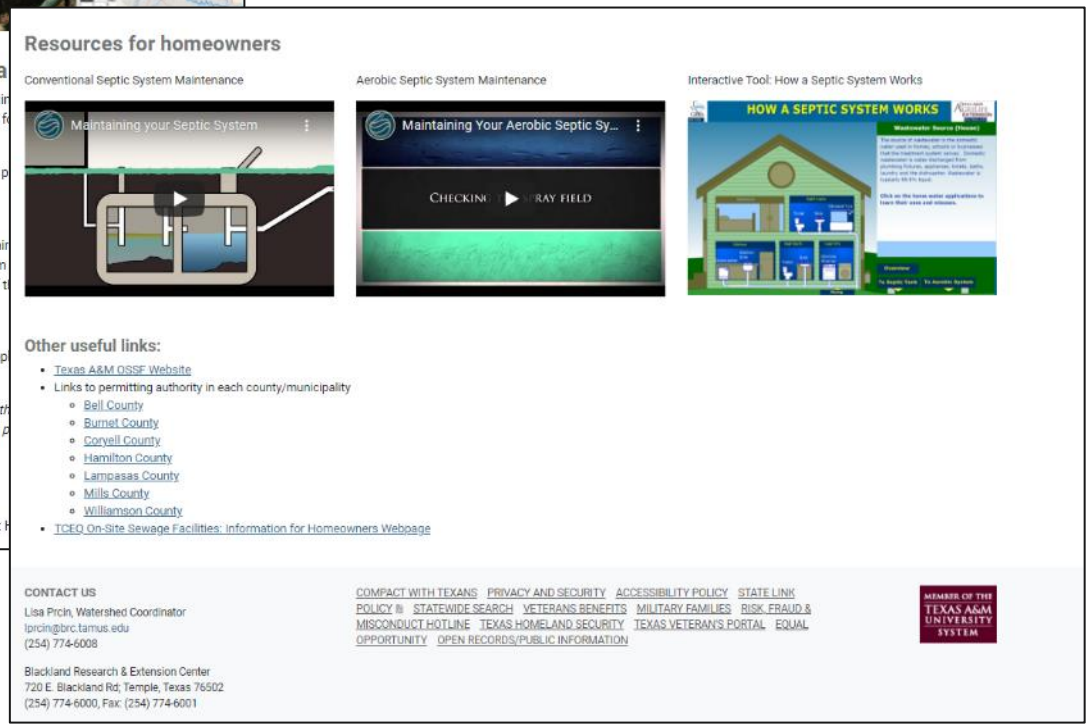
Inspect, repair or replace failing OSSFs

Coordinate with homeowner, OSSF installers and TAMUS to pay up to $8,000 for repair or replacement of 15 failing systems.

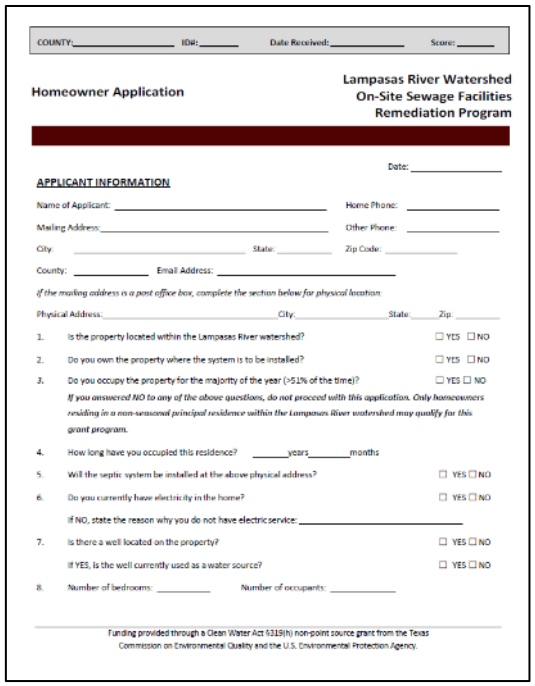
This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement 99614620 to Texas Commission on Environmental Quality.

OSSF Materials & Resources





http://www.lampasasriver.org/ossf/



COUNTY:_____ ID#:_____ Date Received:_____ Score:_____

Homeowner Application

Lampasas River Watershed On-Site Sewage Facilities Remediation Program

Date: _____

APPLICANT INFORMATION

Name of Applicant: _____ Home Phone: _____

Mailing Address: _____ Other Phone: _____

City: _____ State: _____ Zip Code: _____

County: _____ Email Address: _____

If the mailing address is a post office box, complete the section below for physical location:

Physical Address: _____ City: _____ State: _____ Zip: _____

1. Is the property located within the Lampasas River watershed? ☐ YES ☐ NO
2. Do you own the property where the system is to be installed? ☐ YES ☐ NO
3. Do you occupy the property for the majority of the year (>51% of the time)? ☐ YES ☐ NO

If you answered NO to any of the above questions, do not proceed with this application. Only homeowners residing in a non-seasonal principal residence within the Lampasas River watershed may qualify for this grant program.

4. How long have you occupied this residence? _____years_____months
5. Will the septic system be installed at the above physical address? ☐ YES ☐ NO
6. Do you currently have electricity in the home? ☐ YES ☐ NO

If NO, state the reason why you do not have electric service: _____

7. Is there a well located on the property? ☐ YES ☐ NO

If YES, is the well currently used as a water source? ☐ YES ☐ NO

8. Number of bedrooms: _____ Number of occupants: _____

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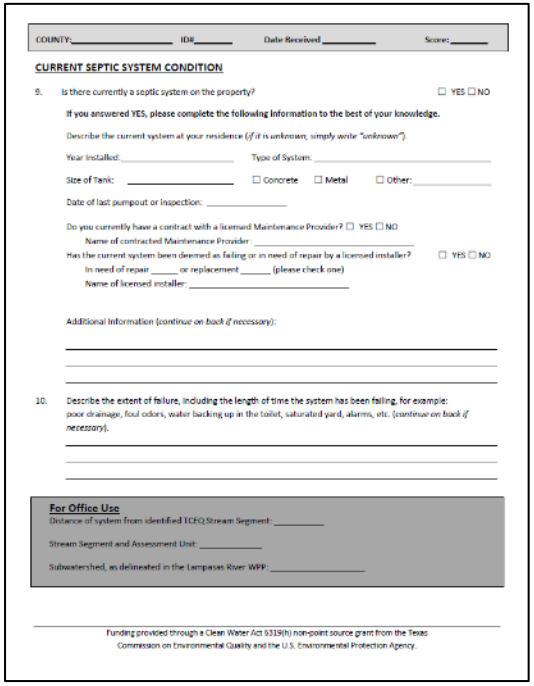

COUNTY:_____ ID#:_____ Date Received:_____ Score:_____

CURRENT SEPTIC SYSTEM CONDITION

9. Is there currently a septic system on the property? ☐ YES ☐ NO

If you answered YES, please complete the following information to the best of your knowledge.

Describe the current system at your residence (*if it is unknown, simply write "unknown"*).

Year Installed: _____ Type of System: _____

Size of Tank: _____ ☐ Concrete ☐ Metal ☐ Other: _____

Date of last pumpout or inspection: _____

Do you currently have a contract with a licensed Maintenance Provider? ☐ YES ☐ NO

Name of contracted Maintenance Provider: _____

Has the current system been deemed as failing or in need of repair by a licensed installer? ☐ YES ☐ NO

In need of repair _____ or replacement _____ (please check one)

Name of licensed installer: _____

Additional Information (*continue on back if necessary*):

_____

_____

_____

10. Describe the extent of failure, including the length of time the system has been failing, for example: poor drainage, foul odors, water backing up in the toilet, saturated yard, alarms, etc. (*continue on back if necessary*).

_____

_____

_____

For Office Use

Distance of system from identified TCEQ Stream Segment: _____

Stream Segment and Assessment Unit: _____

Subwatershed, as delineated in the Lampasas River WPP: _____

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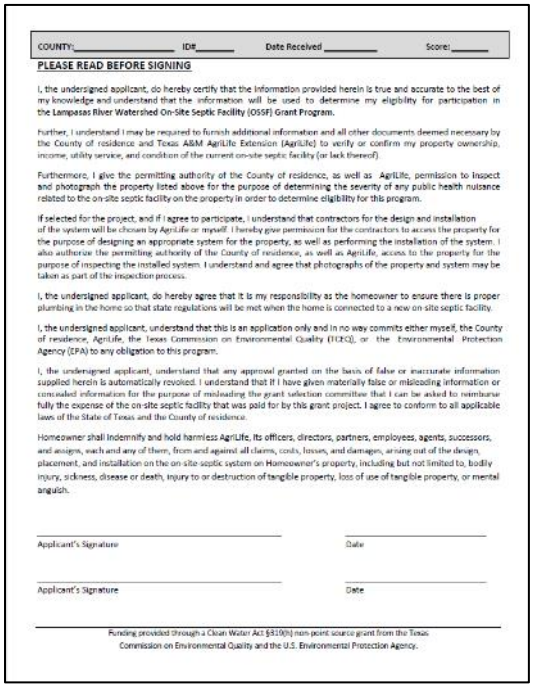

COUNTY:_____ ID#:_____ Date Received:_____ Score:_____

PLEASE READ BEFORE SIGNING

I, the undersigned applicant, do hereby certify that the information provided herein is true and accurate to the best of my knowledge and understand that the information will be used to determine my eligibility for participation in **the Lampasas River Watershed On-Site Septic Facility (OSSF) Grant Program.**

Further, I understand I may be required to furnish additional information and all other documents deemed necessary by the County of residence and Texas A&M AgriLife Extension (AgriLife) to verify or confirm my property ownership, income, utility service, and condition of the current on-site septic facility (or lack thereof).

Furthermore, I give the permitting authority of the County of residence, as well as AgriLife, permission to inspect and photograph the property listed above for the purpose of determining the severity of any public health nuisance related to the on-site septic facility on the property in order to determine eligibility for this program.

If selected for the project, and if I agree to participate, I understand that contractors for the design and installation of the system will be chosen by AgriLife or myself. I hereby give permission for the contractors to access the property for the purpose of designing an appropriate system for the property, as well as performing the installation of the system. I also authorize the permitting authority of the County of residence, as well as AgriLife, access to the property for the purpose of inspecting the installed system. I understand and agree that photographs of the property and system may be taken as part of the inspection process.

I, the undersigned applicant, do hereby agree that it is my responsibility as the homeowner to ensure there is proper plumbing in the home so that state regulations will be met when the home is connected to a new on-site septic facility.

I, the undersigned applicant, understand that this is an application only and in no way commits either myself, the County of residence, AgriLife, the Texas Commission on Environmental Quality (TCEQ), or the Environmental Protection Agency (EPA) to any obligation to this program.

I, the undersigned applicant, understand that any approval granted on the basis of false or inaccurate information supplied herein is automatically revoked. I understand that if I have given materially false or misleading information or concealed information for the purpose of misleading the grant selection committee that I can be asked to reimburse fully the expense of the on-site septic facility that was paid for by this grant project. I agree to conform to all applicable laws of the State of Texas and the County of residence.

Homeowner shall indemnify and hold harmless AgriLife, its officers, directors, partners, employees, agents, successors, and assigns, each and any of them, from and against all claims, costs, losses, and damages, arising out of the design, placement, and installation on the on-site septic system on Homeowner's property, including but not limited to, bodily injury, sickness, disease or death, injury to or destruction of tangible property, loss of use of tangible property, or mental anguish.

_____ _____

Applicant's Signature Date

_____ _____

Applicant's Signature Date

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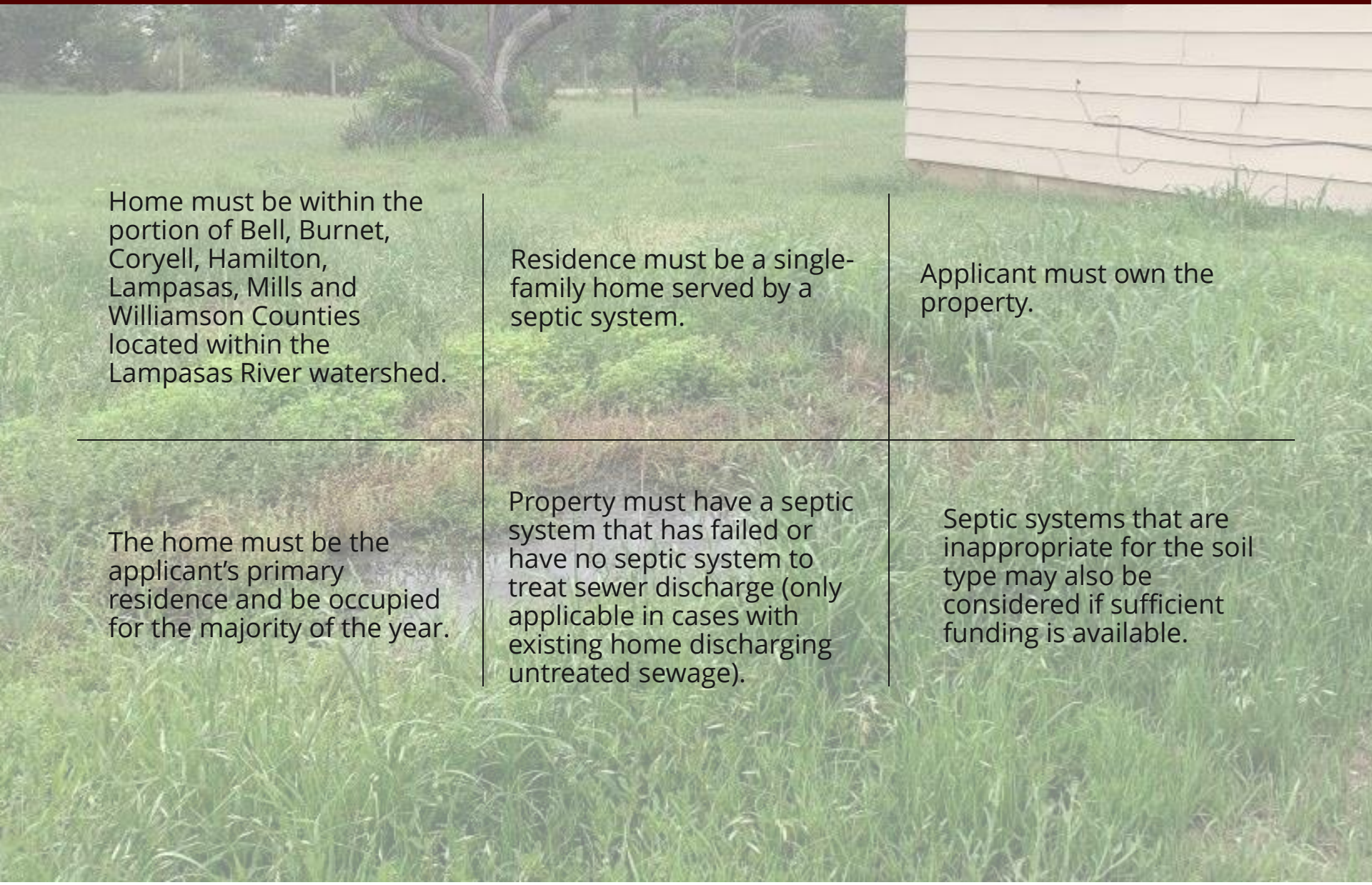
Application

General Eligibility



Home must be within the portion of Bell, Burnet, Coryell, Hamilton, Lampasas, Mills and Williamson Counties located within the Lampasas River watershed.

Residence must be a single-family home served by a septic system.

Applicant must own the property.

The home must be the applicant's primary residence and be occupied for the majority of the year.

Property must have a septic system that has failed or have no septic system to treat sewer discharge (only applicable in cases with existing home discharging untreated sewage).

Septic systems that are inappropriate for the soil type may also be considered if sufficient funding is available.

Needs Assessment Criteria

01

Location

Priority will be given to those applicants whose property are located within 2000 feet of an identified TCEQ river/stream segment. *

*In the incidence of an influx of applications at the beginning of the application period, distance to a receiving water body will be given preference.

02

System Status

System deemed as failing and in need of repair or replacement by a licensed OSSF installer. An OSSF currently experiencing system backup, odor, or surfacing water can be impacting the surrounding area. The severity of the issue can indicate a greater risk of impact.

03

Order of Submittal

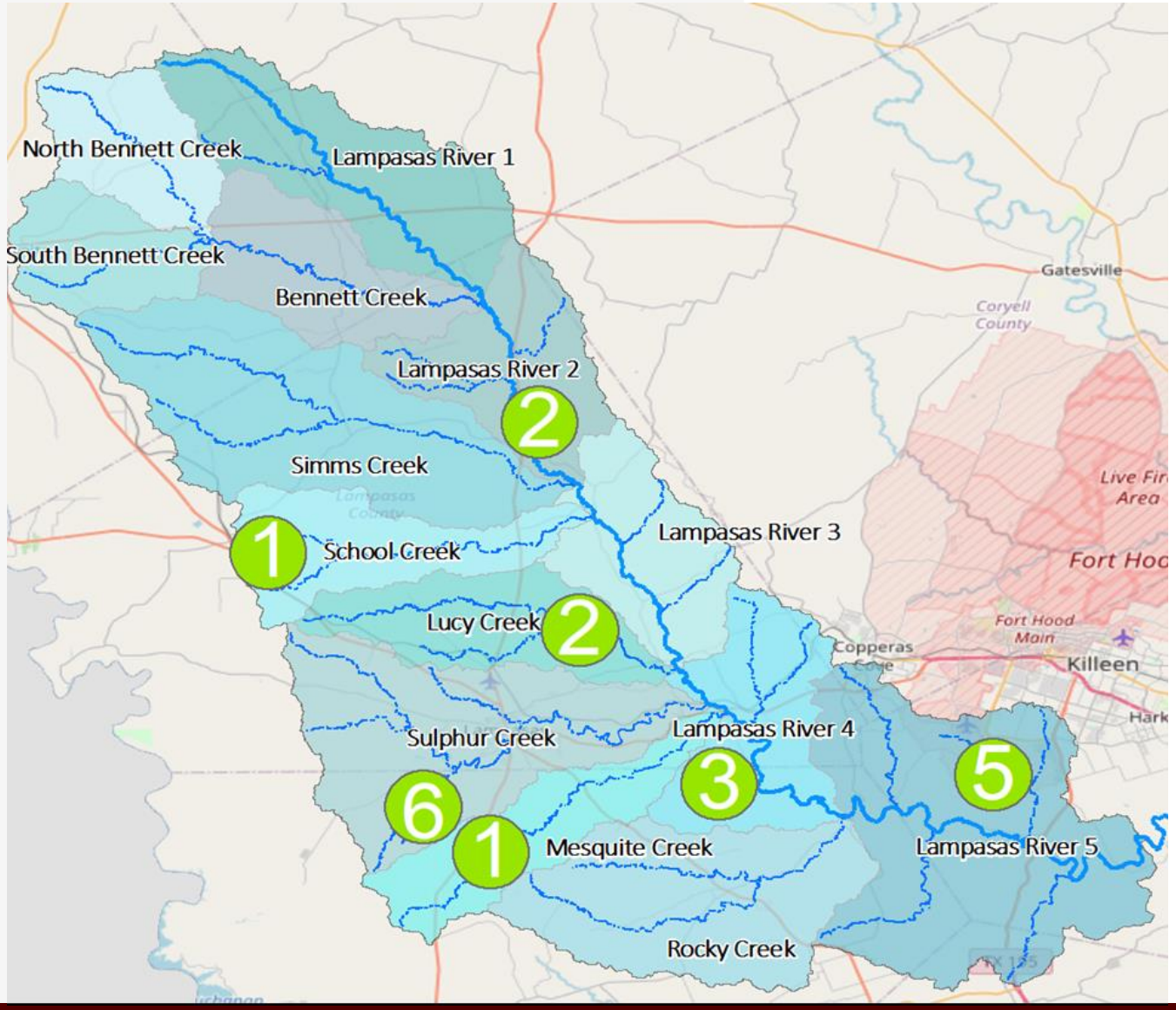
Priority will be given to those applicants that apply on a first come, first serve basis during the application period.

Program Process

- Review General Eligibility rules and Needs Assessment Criteria to determine if your system fits the criteria of the program.
- Complete application and send to project staff. Include any documentation of failure, i.e., pictures or inspection reports from OSSF professional.
- Project staff will review documents and conduct a visual inspection prior to approval into program.
- Once approval has been given, homeowner may select an OSSF Installer or may request AgriLife select the installer through bid process. Selected OSSF installer must meet requirements to be a vendor for Texas A&M, i.e., insurance, liability, etc.
- Installer may begin work. Once work is complete and all county permit requirements are done, installer will invoice Texas A&M for up to $8,000 of the total cost. Homeowner will be responsible for any costs above and beyond $8,000.

Applications Received

Site Inspections



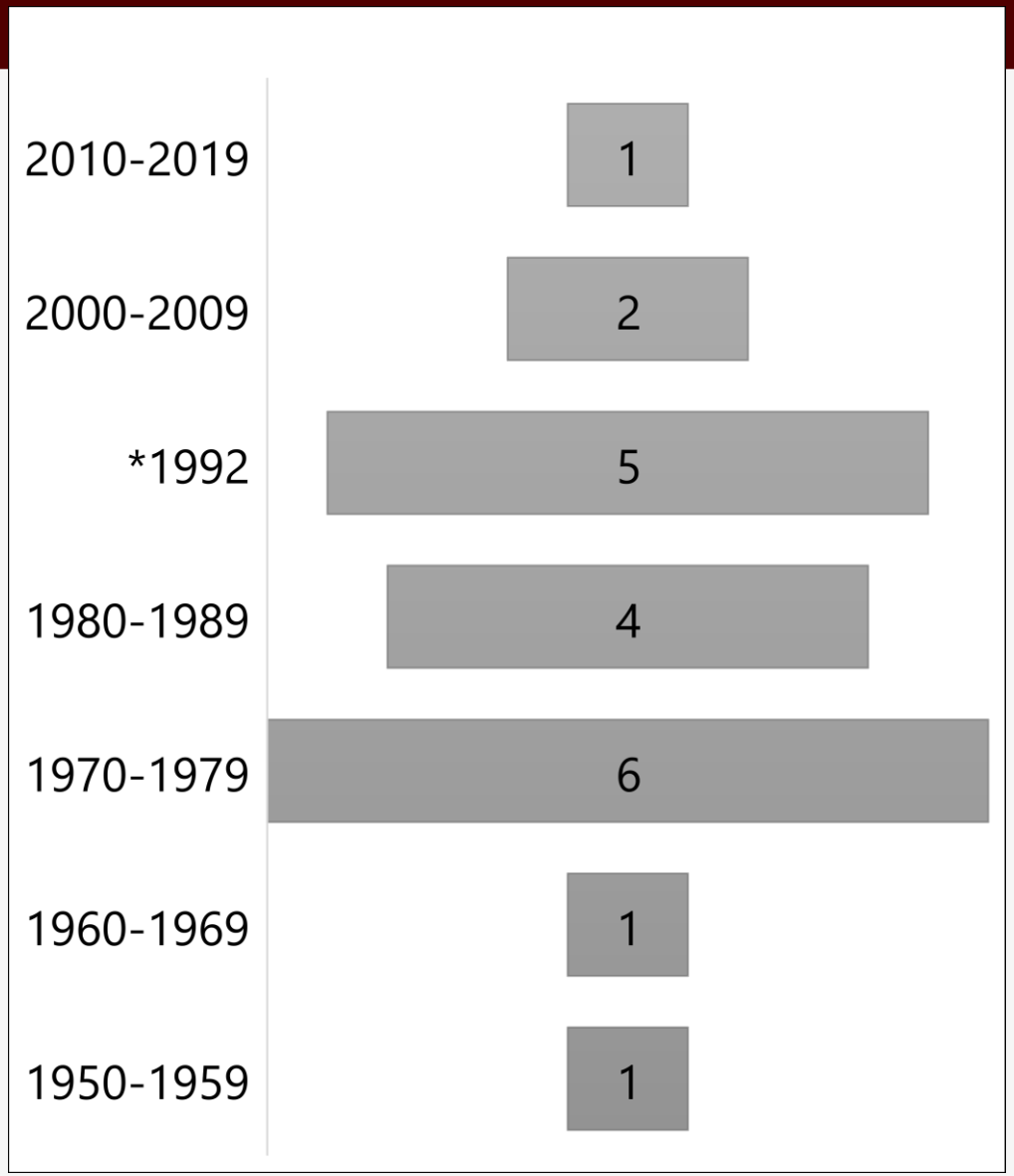
OSSFs Replaced

Installed Systems

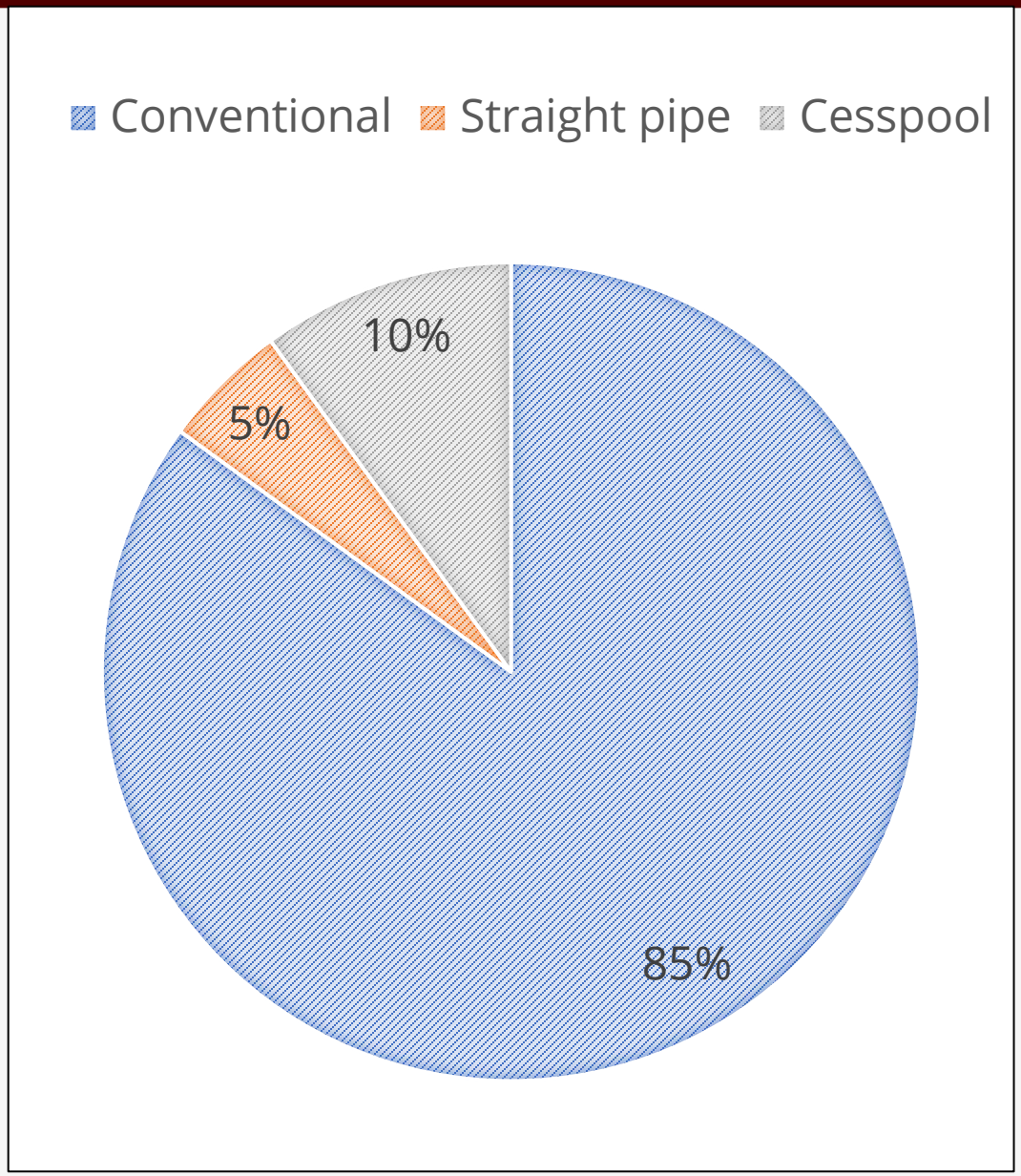
App #	Installed Digester Type	Installed Tank Size/Type	Installed Treatment Capacity	Installed Effluent Disposal	Total Cost	Cost Paid by Program
21-1	Conventional	1000	240	Trench - Leaching Chambers	$9,000	$8,000
21-2	Conventional	750	180	Trench - Leaching Chambers	$6,600	$6,600
21-3	Conventional	1000	300	Trench - Leaching Chambers	$8,300	$8,000
21-5	Conventional	1000	300	Trench - Leaching Chambers	$8,000	$8,000
21-7	Conventional	1250	360	Trench - Leaching Chambers	$8,000	$8,000
21-8	Aerobic	AA500	240	Surface Irrigation	$10,400	$8,000
21-10	Aerobic	AS500L	240	Other - 1200sf area with 600' drip tubing	$16,000	$8,000
22-1	Conventional	1000	180	Trench - Leaching Chambers	$7,500	$7,500
22-2	Conventional	750	180	Trench - Leaching Chambers	$8,000	$8,000
22-3	Conventional	750	240	Trench - Leaching Chambers	$8,500	$8,000
22-4	Aerobic	Pro Flow 500	240	Surface Irrigation	$11,900	$8,000
22-5	Conventional	750	240	Trench - Leaching Chambers	$11,400	$8,000
22-8	Conventional	1000	180	Trench - Leaching Chambers	$8,000	$8,000
22-10	Conventional	1000	240	Trench - Leaching Chambers	$8,000	$8,000
22-11	Conventional	1000	240	Trench - Leaching Chambers	$9,200	$8,000
22-15	Aerobic	AA500-4075	240	Surface Irrigation	$9,500	$8,000
22-16	Conventional	1000	240	Trench - Leaching Chambers	$8,000	$8,000
22-17	Aerobic	AA750	420	Surface Irrigation	$14,600	$8,000
22-18	Conventional	**Pending	**Pending	**Pending	$8,000	$8,000
22-19	Conventional	1500	300	Low Pressure Dosing	$16,720	$5,000

Totals

Installs by Type	Total	Average Cost	Total Costs	$195,620
Conventional	15	$8,881	Total Incurred by Program	$155,100
Aerobic	5	$12,480	Total Incurred by Homeowners	$40,520
**Costs per initial estimate for systems marked as pending			Average Incurred by Homeowners	$2,026



Build Year of Systems Replaced



Type of OSSF Replaced

Challenges

Supply chain issues
Labor shortages
New home construction boom in rural areas

Program Successes

Well received by stakeholders within the watershed

20 systems were replaced within the Lampasas watershed, in addition to several applicants that remain on a waiting list for future funding

Provides a tangible result of WPP implementation efforts and illustrate federal tax dollars returned to the community

Phase II of OSSF implementation is expected to begin in November 2022

Additional Research Points

Other contributors to failing systems
- –Site factors
- –Soil limitations
- –Changes in household use

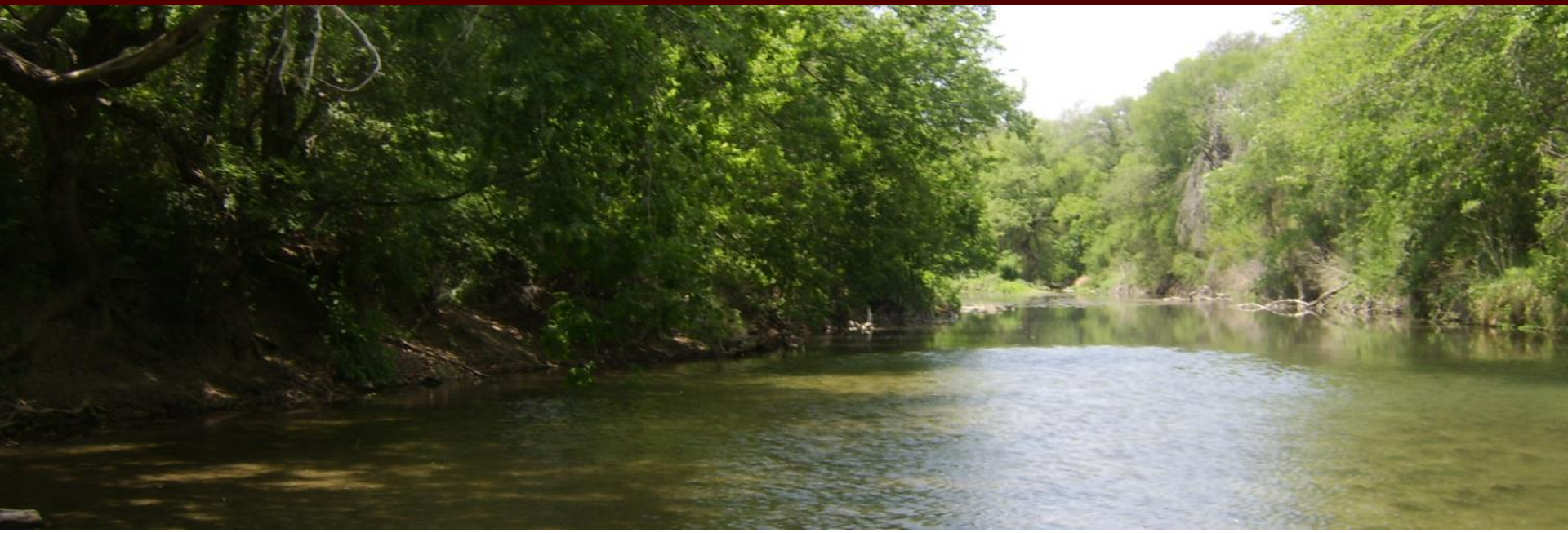
Follow up with homeowners on system maintenance

Acknowledgments

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement 99614620 to Texas Commission on Environmental Quality.

Project staff would like to recognize TCEQ Nonpoint Source Program staff for their oversight, especially Heather Robinson. Additionally, the licensed OSSF installers that replaced systems and county permitting authorities should be recognized for their assistance through the development and implementation of this project.

Thank you



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