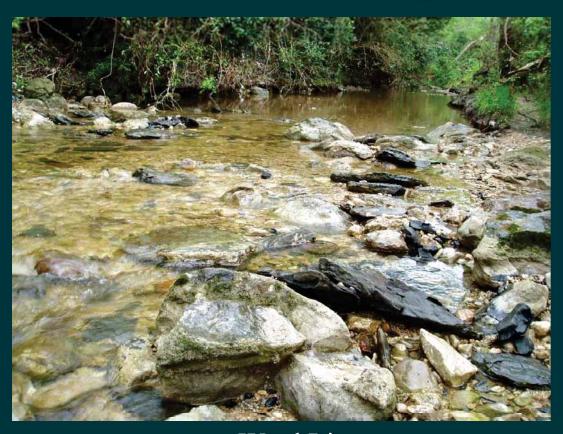
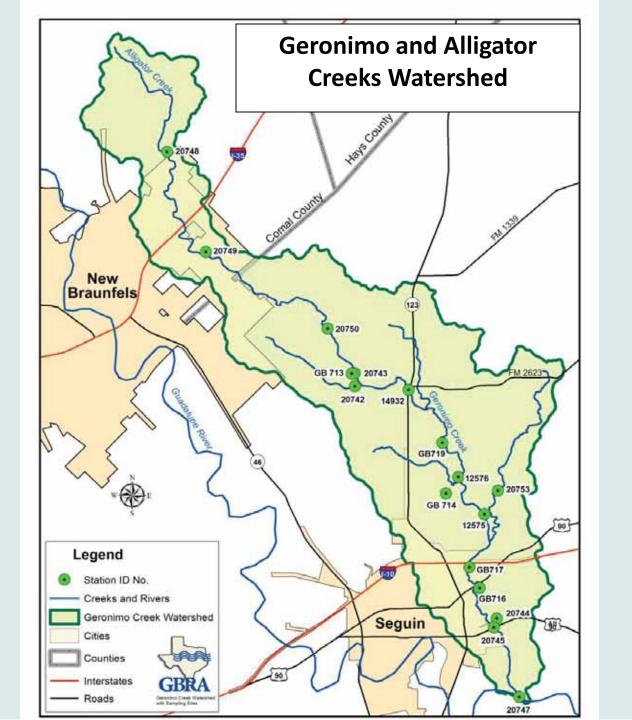
The Geronimo and Alligator Creeks WPP Update



Ward Ling
Texas A&M AgriLife Extension Service





Watershed Overview

- 90% in agricultural production and shrinking
 - Majority in livestock production, rest in row crop
- 8% in urban areas and growing
 - Cities of Seguin and New Braunfels





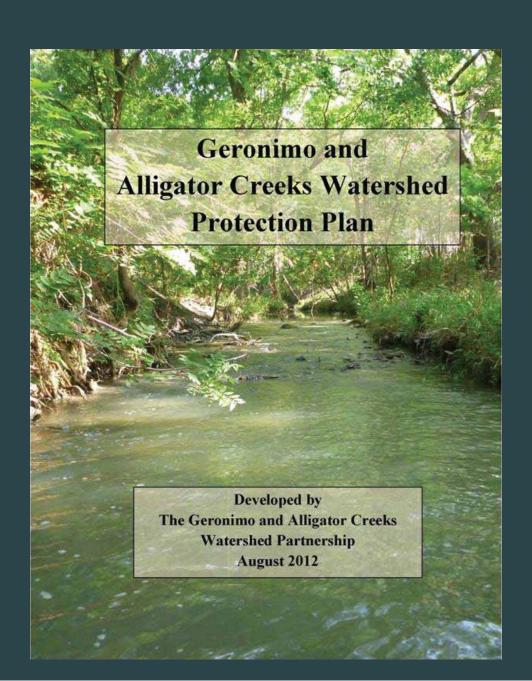
Water Quality Issue

• Geronimo Creek was listed in 2006 for not supporting its contact recreation use

 Geronimo Creek was listed in 2000 for concerns for nutrient enrichment due to elevated nitrates

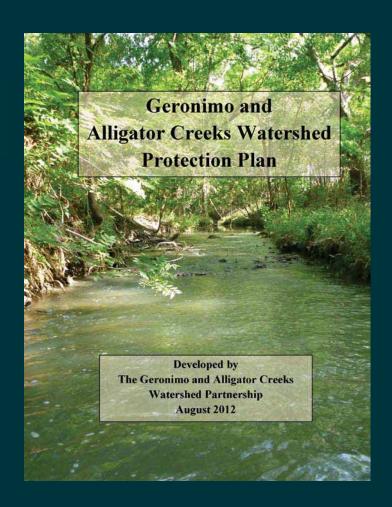


- •Began development in 2010
- •Accepted by EPA in September of 2012

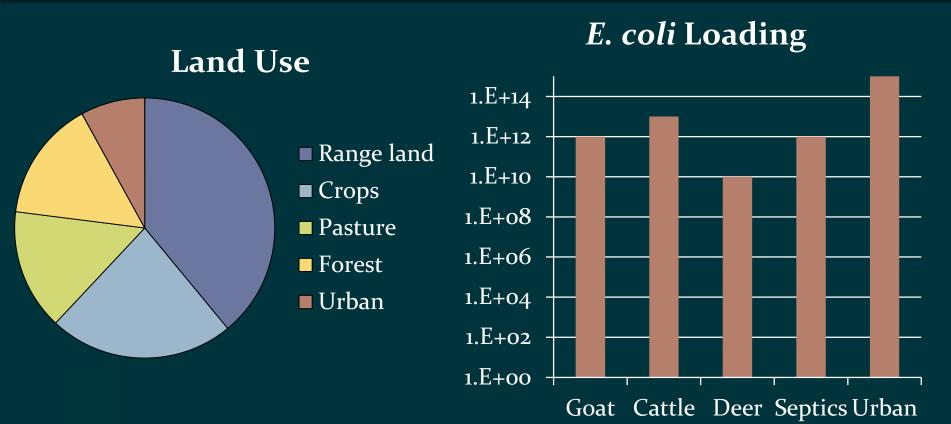


What is the Plan all about?

- A community-driven, voluntary management plan
- Began development in 2010, and accepted by EPA in 2012
- Relies heavily on stakeholders being good stewards at the local level



Where is it coming from?



• In terms of potential loading, urban runoff was higher than all the other sources.

Nonpoint Source Pollution Issues

- There are not any wastewater treatment plants discharging to the creeks except near the Guadalupe River
- There are not any industrial discharges
- The sources of bacteria can be:
 - Humans
 - Pets
 - Livestock
 - Wildlife
 - Invasive species, such as feral hogs

Projects

• Issues identified by stakeholders during development of the WPP, and along the way as the WPP has been implemented...





Septic Systems

- Grant from TCEQ to the City of Seguin
- Assisting homeowners with a septic system decommissioning project in Oak Village North







Field Technician

- Cris Perez, is an employee of the Comal-Guadalupe SWCD
- He is a field technician who works with agricultural producers to better manage runoff from their operations

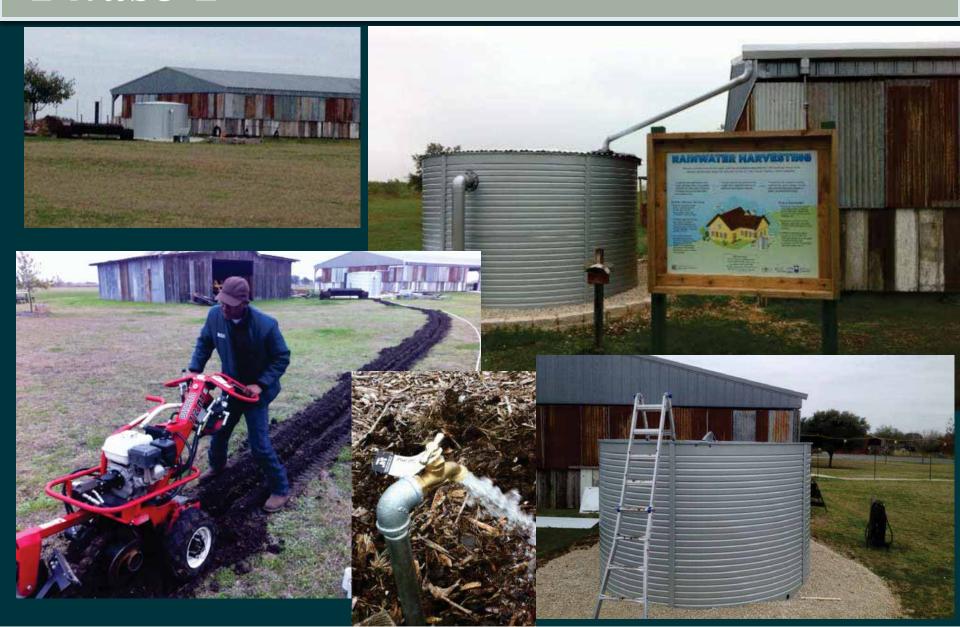


Irma Lewis Seguin Outdoor Learning Center Project

- Collaboration between GBRA, Texas A&M AgriLife, and the Irma Lewis Seguin Outdoor Learning Center
- Rainwater harvesting, vegetated swales, rain garden, detention pond, and pervious pavement, modules, and educational creek walk



Phase 1



Phase 2

- Pervious pavement
- Rain Garden
- Vegetated Swale
- Native Grasses
- Riparian Walk



Isotope Study

- GBRA and USGS are conducting targeted surface water quality monitoring
- Identify the source of nitrates in the groundwater and surface water
- Possible sources:
 - Fertilizers
 - Septic systems
 - Animal waste
 - Nitrifying plants
 - Atmospheric deposition



Seguin High School

- Never before seen collaboration
- Impacting high school students and beyond



Purpose

- Students tour a Seguin Fabricators' facility
- Extension provides feral hog and water quality information
- Students combine this knowledge to construct feral hog traps
- Traps will be auctioned off and some will be donated to be used in a trap loan program to assist area

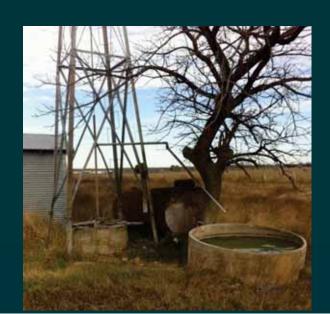




Educational Opportunities

- Texas WatershedSteward Workshop
- Texas Well Owner Network Workshop
- Lone Star Healthy Streams Program
- Septic system workshops
- Master Gardener and Naturalist training

- Bacteria, nutrient, and pesticide management programs
- Soil and water testing campaigns



Septic System Maintenance Classes

- Classes conducted in the spring and/or fall past 2 years
- Two types of classes conducted
 - 2 hr educational overview of systems

6hr certification class for homeowners with aerobic systems

Feral Hog Control

- Josh Helcel, the Feral Hog Education Program Assistant, focuses on feral hog management in the watershed
- The position works directly with landowners to reduce hog populations in the watershed
- Contact info at http://www.geronimocreek.org/





Smart Growth Workshop

- Explore Low Impact Development techniques have an improved impact on surface water, both quality and quantity
- Target audience is the county and city decision makers







Watershed Coordinator

• To ensure that implementation of the WPP is complete and successful

Funding from TSSWCB to Texas A&M AgriLife

Extension



Last Year's Creek Clean Up Event

- Took place on Saturday, April 11, 2015
- Volunteers used an online registration form
- Day of the event, all necessary equipment was provided—water bottles, breakfast tacos, and T-shirts—oh, and gloves, tools, and bags
- Guadalupe County Master Naturalists presented educational presentations to many of the clean up crews



Coverage

- 22 locations covering 17 miles of roadways and creek banks
- Over 195 volunteers participated









Results

- Volunteers collected over 2,000 pounds of trash
- Cities of New Braunfels and Seguin donated disposal and recycling of all materials collected
- Residents have a greater awareness of area creeks
- Great response from area businesses and groups



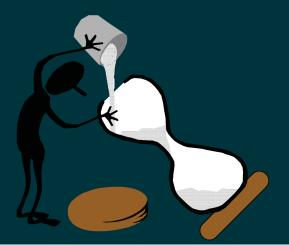
2015 Sponsors

- Cities of New Braunfels and Seguin
- Alamo Group
- Continental Corporation
- Ehlers' Tree Farm
- Geronimo Creek Retreat
- Guadalupe-Blanco River Authority
- HEB
- Progressive Waste
- Corona Visions Inc.

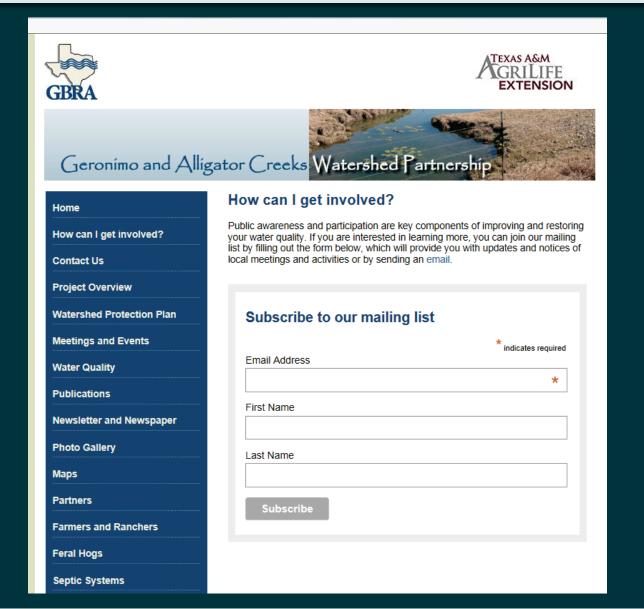
- Liz Sedlacek
- Spirit of Joy Lutheran Church
- Texas A&M AgriLifeExtension
- Guadalupe County
 Groundwater Conservation
 District
- Guadalupe Valley Young Marines
- Other anonymous donors

Upcoming Opportunities

- 4th Annual Stream Clean Up Event April 2
- ILSOLC Low Impact Development Structures Install
- Homeowner Septic System Maintenance Workshops
- Newsletter- sign up for online
- Fall soil testing campaign



How can you get involved and be a good steward?



Thank You!

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