



CRP Activities in Kerr County

Tara Bushnoe

Natural Resources Coordinator
Upper Guadalupe River Authority



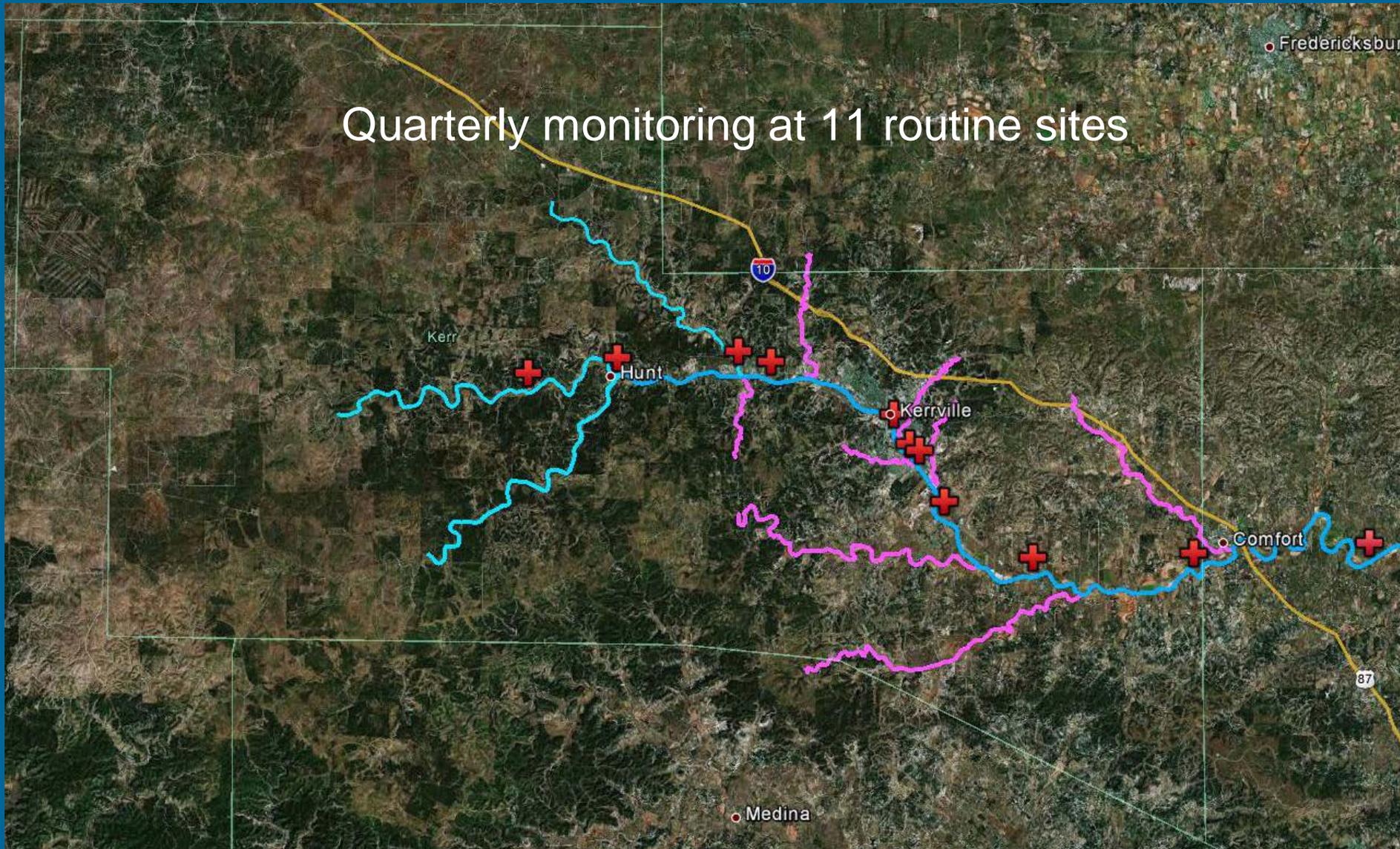
Clean Rivers Program Activities in Kerr County

- Water Quality Monitoring
- Public Outreach

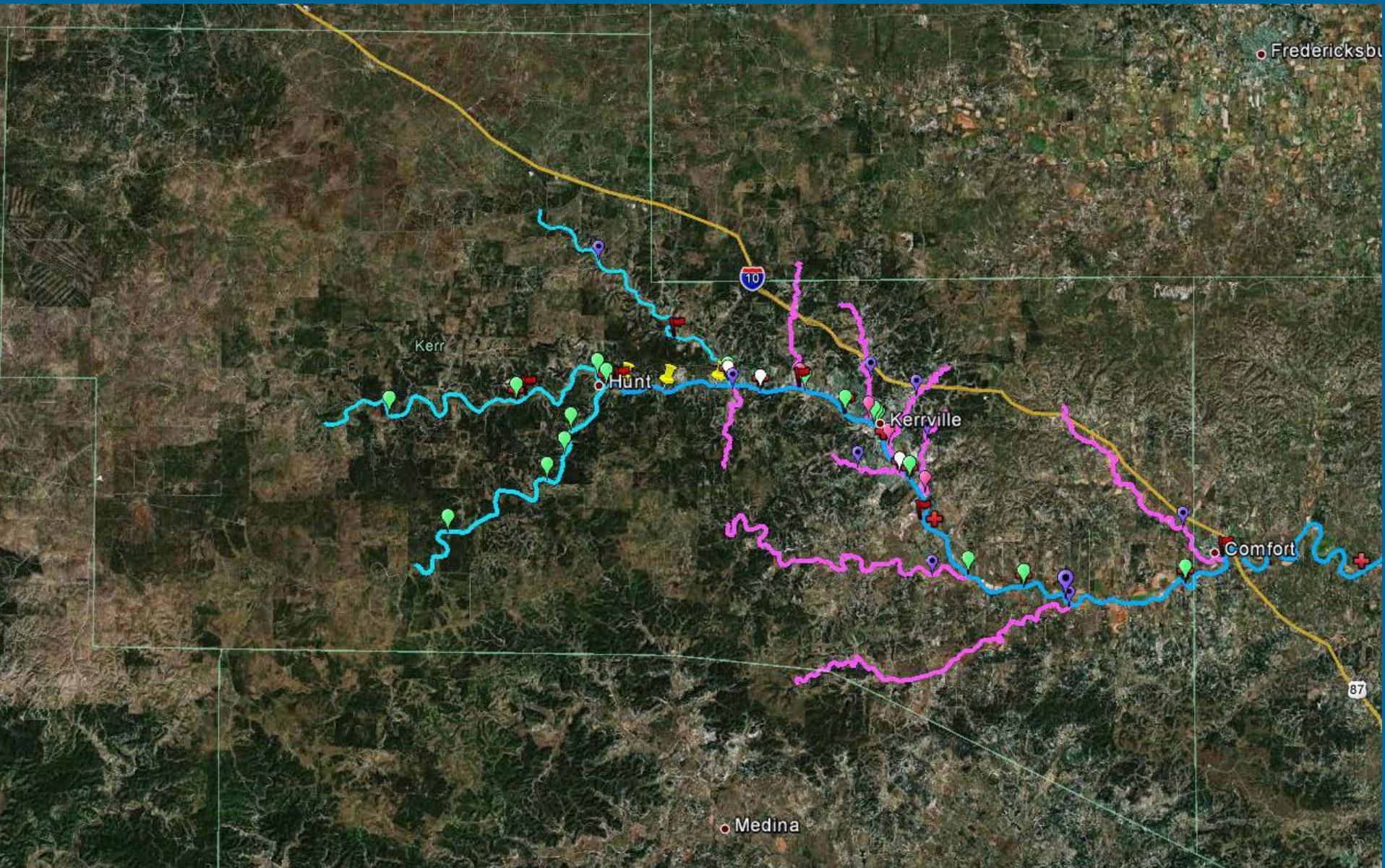


CRP Water Quality Monitoring

Quarterly monitoring at 11 routine sites



Monitoring



WQ Monitoring Summary 2012

- CRP
 - 4 sampling events
 - 11 sites
 - \$11,664

- UGRA Water Quality Programs
 - 47 sampling events
 - Over 40 sites
 - 18 water quality investigations
 - \$21,043

Public Outreach Activities

- Volunteer Summer Study
- Classes
- Special Events
- Radio Programs

- Newspaper articles
- Commercials
- Information booths
- Major Rivers
- River Clean Up

31 events in 2012



Questions



Bacteria Reduction Plan for the Upper Guadalupe River

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Guadalupe River above Canyon Lake TMDL

- Bacteria impairment for contact recreation in a 3.5 mile reach of Guadalupe River in Kerrville
- Placed on 303(d) list in 2002
- TMDL approved in 2007
- Implementation Plan approved in 2011

Impaired Area



Bacteria Reduction Plan

- Funded by TCEQ Non Point Source Program
- \$475,201 Total Project
 - 60% Federal Funding (\$285,121)
 - 40% Local Match (\$190,080)
- October 15, 2011 – August 31, 2014
- Partners
 - UGRA
 - City of Kerrville
 - Kerr County
 - TXDOT

Match Requirement

- UGRA
- City of Kerrville
- Kerr County
- TxDOT
- Clean Rivers Program



Wildlife

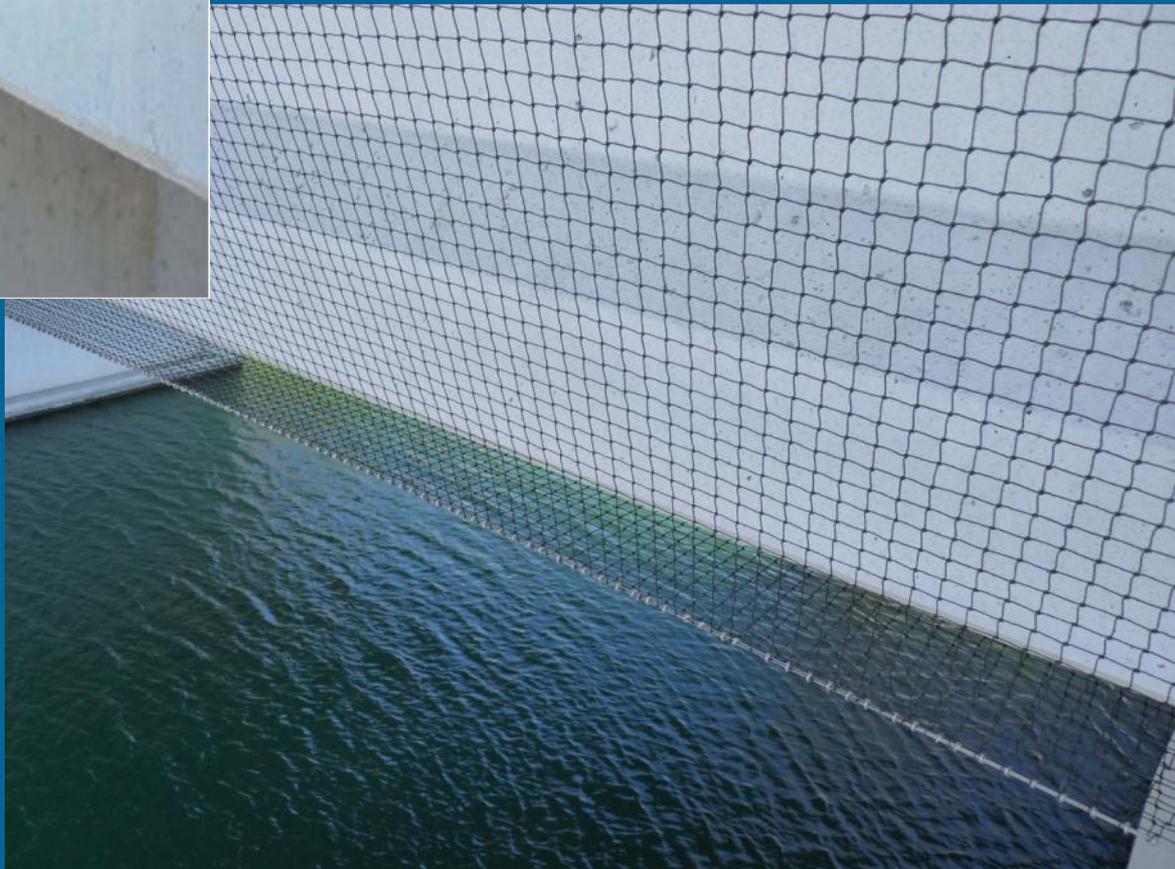
- Install bird exclusion/deterrent structures
- Reduce bird feeding
- Manage waterfowl population
- Partners involved:
 - UGRA
 - City of Kerrville
 - Kerr County
 - TxDOT



Wildlife Results

- Install bird exclusion/deterrent devices
 - Bird deterrent structures designed for SH 16 and SH 534 bridges
 - Plans reviewed by local partners
 - Comments incorporated
 - TXDOT utility installation agreement
 - Publically bid
 - Contractor selected
 - Construction completed January 30, 2013







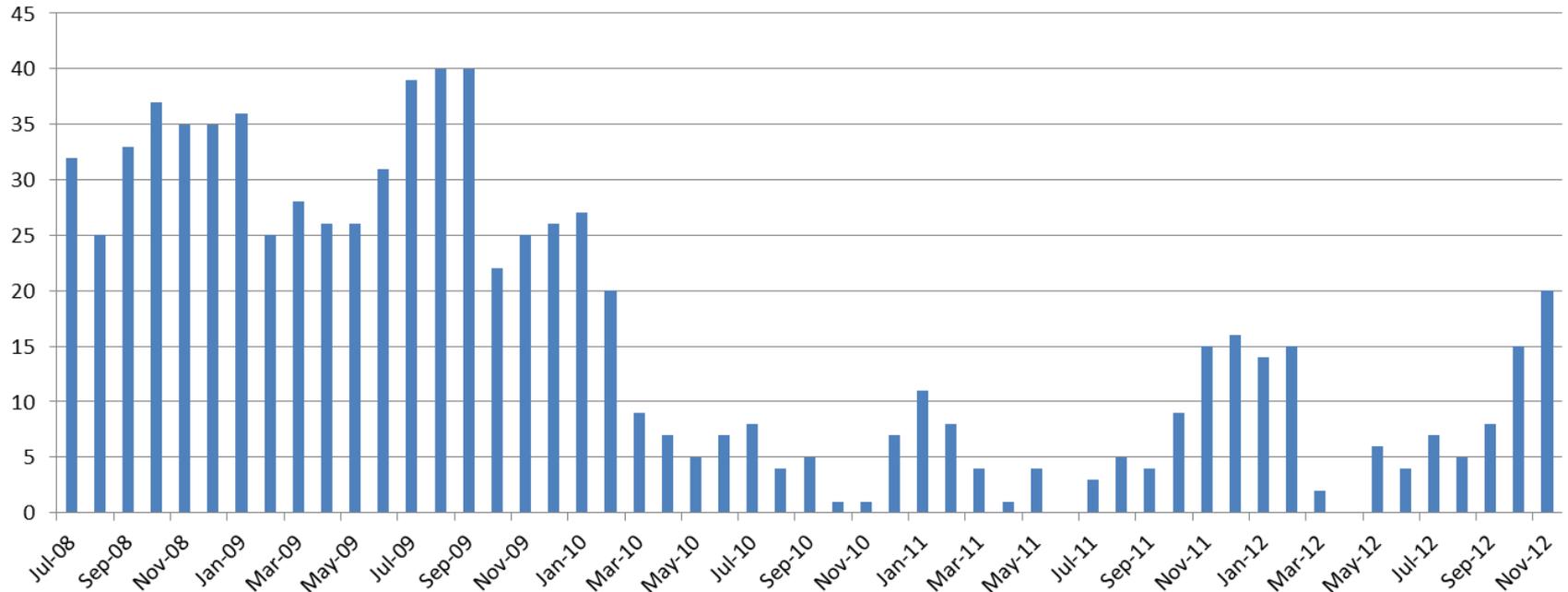




Wildlife Results

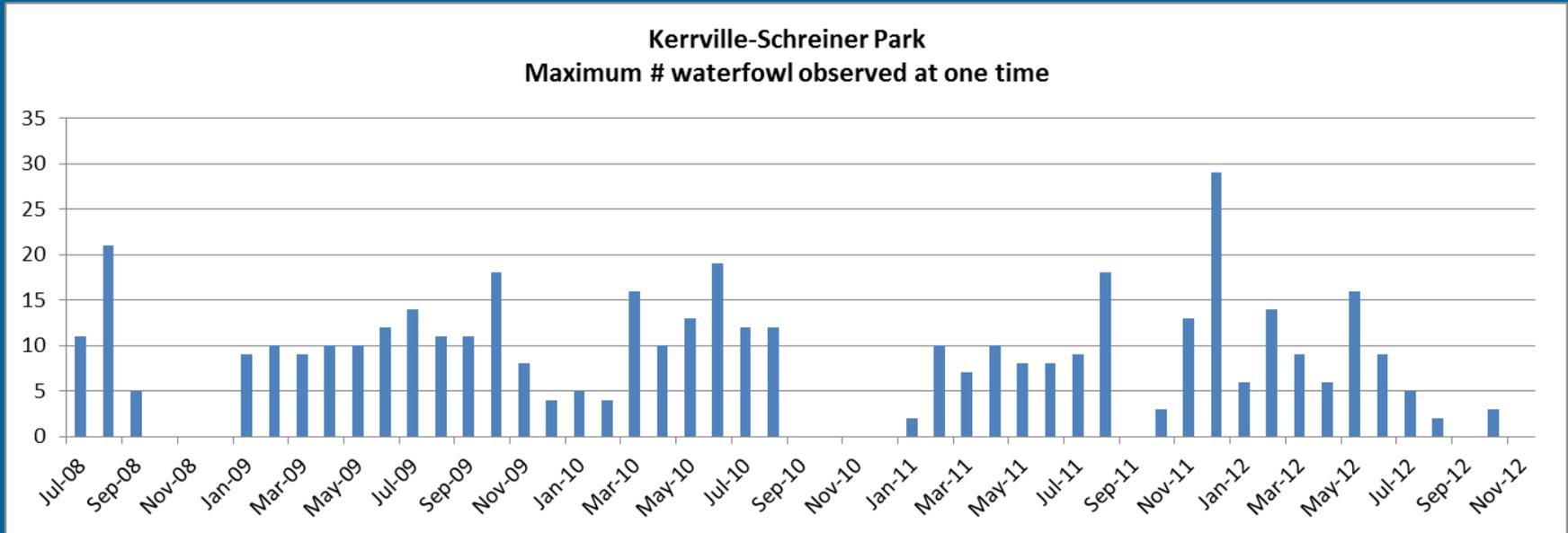
- Reduce bird feeding
- Manage waterfowl population

Louise Hays Park
Maximum # waterfowl observed at one time



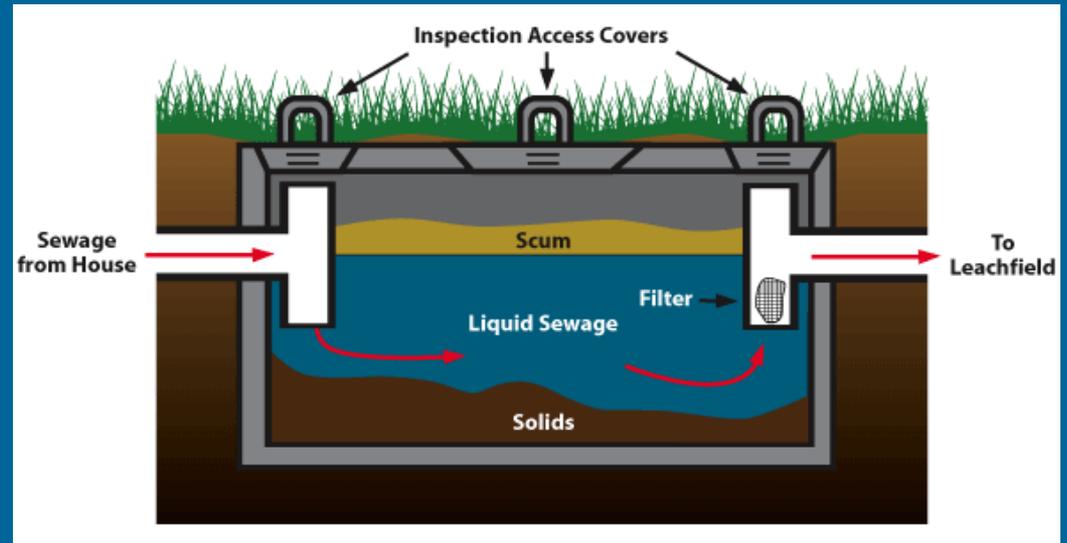
Wildlife Results

- Reduce bird feeding
- Manage waterfowl population



Human Contributions

- Ongoing lateral sewage line replacement
- Sewer inspection and rehabilitation
- OSSFs
- Partners involved:
 - UGRA
 - City of Kerrville
 - Kerr County
 - TxDOT



Human Contributions Results

- Mapping of On-site Sewage Facilities (OSSF)
 - Designate priority area – 300 feet from waterbody
 - Identify properties in area
 - Cross reference with OSSF database

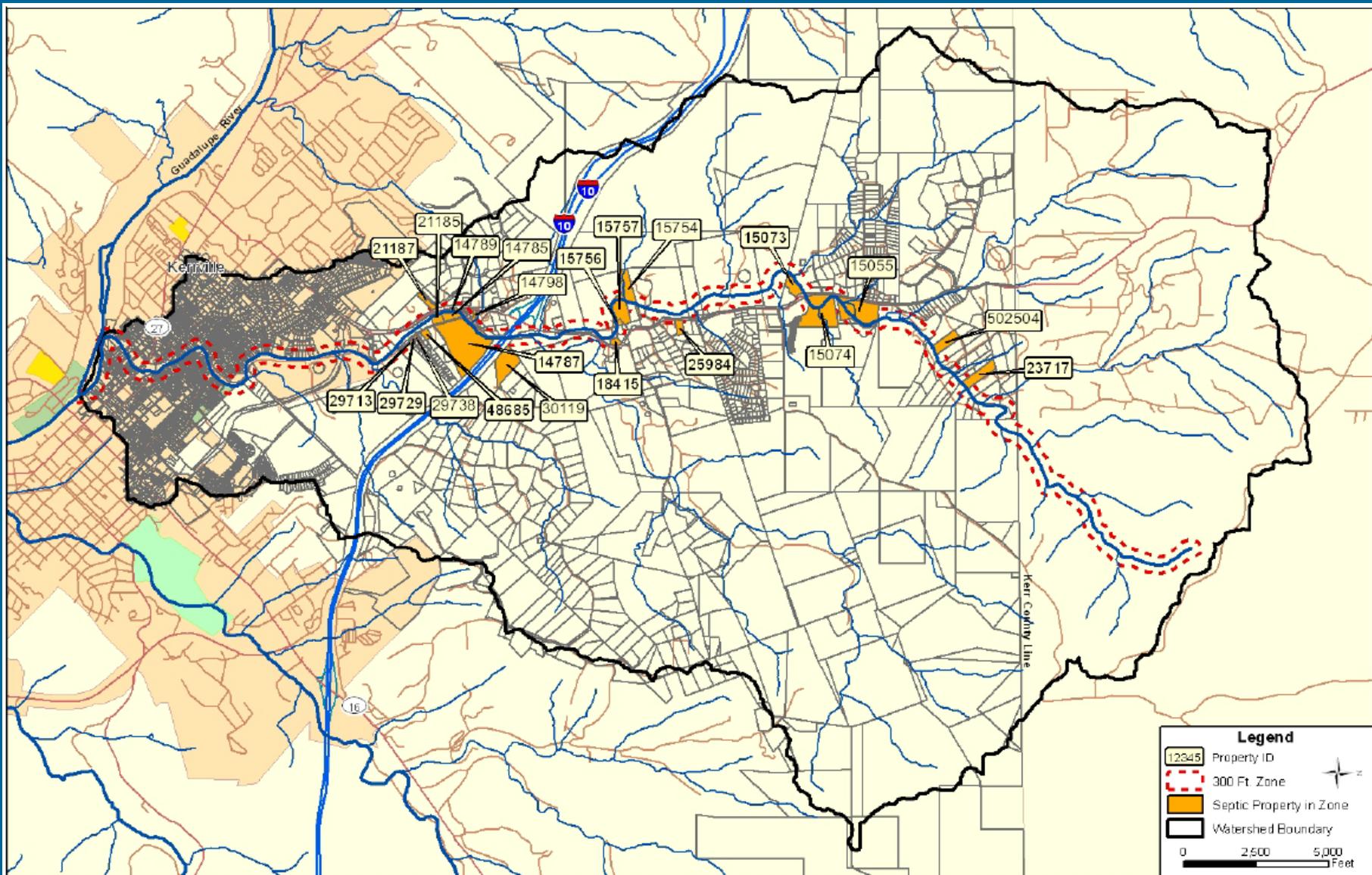


Figure 2: Town Creek Septic System Priority Zone

Human Contributions Results

- Summary of OSSFs in priority area

Watershed	Total Number of Septic Properties	Number of Septic Properties in Priority Area
Town Creek	276	21
Camp Meeting Creek	906	69
Quinlan Creek	121	9
Guadalupe River	84	6
Total	1390	105

Pet Waste

- Implement education program
- Install pet waste stations
- Partners involved:
 - UGRA
 - City of Kerrville
 - Kerr County

Poop Pollutes!

Bacteria found in pet and waterfowl feces have become a problem in the Upper Guadalupe River through Kerrville. In order to maintain swimming, wading, and other recreation uses of the park we need your help.

Clean up after your pet to help keep our river clean!



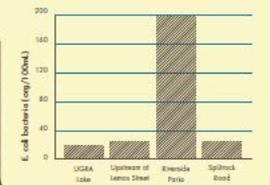
Problems

- ★ Bacteria levels in riverside park areas are much higher than other areas of the Upper Guadalupe River, and sometimes exceed the State standard for contact recreation
- ★ Pet waste may contain harmful pathogens (bacteria, viruses, protozoa) that can make the water unsafe for recreation and other uses
- ★ Pet waste contains nutrients that may accelerate the growth of nuisance algae

Solutions

- ★ Be responsible for your pet – scoop the poop and then toss it in the trash
- ★ Be a hero – pick up pet waste left behind by others and report violators to the Kerr County Environmental Health Department at 896.9020
- ★ Notify the Upper Guadalupe River Authority at 896.5445 if the bag dispenser is empty

Guadalupe River Bacteria Levels



It's the Law!

TEXAS HEALTH & SAFETY CODE § 341.013
Waste products, polluting material ... or other waste of any kind may not be deposited or disposed of in a manner that may cause the pollution of the surrounding land or the contamination of groundwater or surface water. **Maximum fine: \$200**

Brought to you by the TMDL Stakeholders Group, find out more at www.ugra.org/projects.html
Material adapted from the City of Austin Watershed Protection

Let's keep OUR river clean!

Off leash is not off the hook

Pet Waste Results

- Seven active stations in Flat Rock Park
- Five active stations in Kerrville Parks
- Ten planned stations along River Trail



Pet Waste Results

- Education materials in Years 2 and 3
- Effectiveness monitoring
 - Weekly monitoring
 - 80-100 pounds of waste/month
 - **2,925 pounds removed since November 2010**
 - 1,207 pounds removed in Year One

Urban Runoff

- Storm water education programs
- River clean ups
- Street sweeping
- Partners involved:
 - UGRA
 - City of Kerrville



Urban Runoff Results

- Interactive kiosk installed at Riverside Nature Center
- Watershed model presentations
- Clean ups
 - 2012 UGRA Annual River Clean 11,165 pounds
 - UGRA Annual River Crossing Clean Up Program 15,020 pounds in 2012
 - Tim Lewis work on Town Creek
- City of Kerrville 488 hours of street sweeping

Advanced
Kiosks



Hop Over

And Learn How
to Keep
OUR River Clean

Brought to you by the UGRA Bacteria Reduction Plan



Supports operations of the Hop Over Kiosk as part of the UGRA Bacteria Reduction Plan. For more information, contact the UGRA Bacteria Reduction Plan at 202-271-2000.





What's Next?

- Year 2
 - Continuation of Year 1 activities
 - Install pet waste stations
 - Waterfowl management
 - OSSF homeowner's guide
 - Education
 - TCEQ interactive webpage





The Bacteria Reduction Plan for the Upper Guadalupe River was financed through grants from the Texas Commission on Environmental Quality

