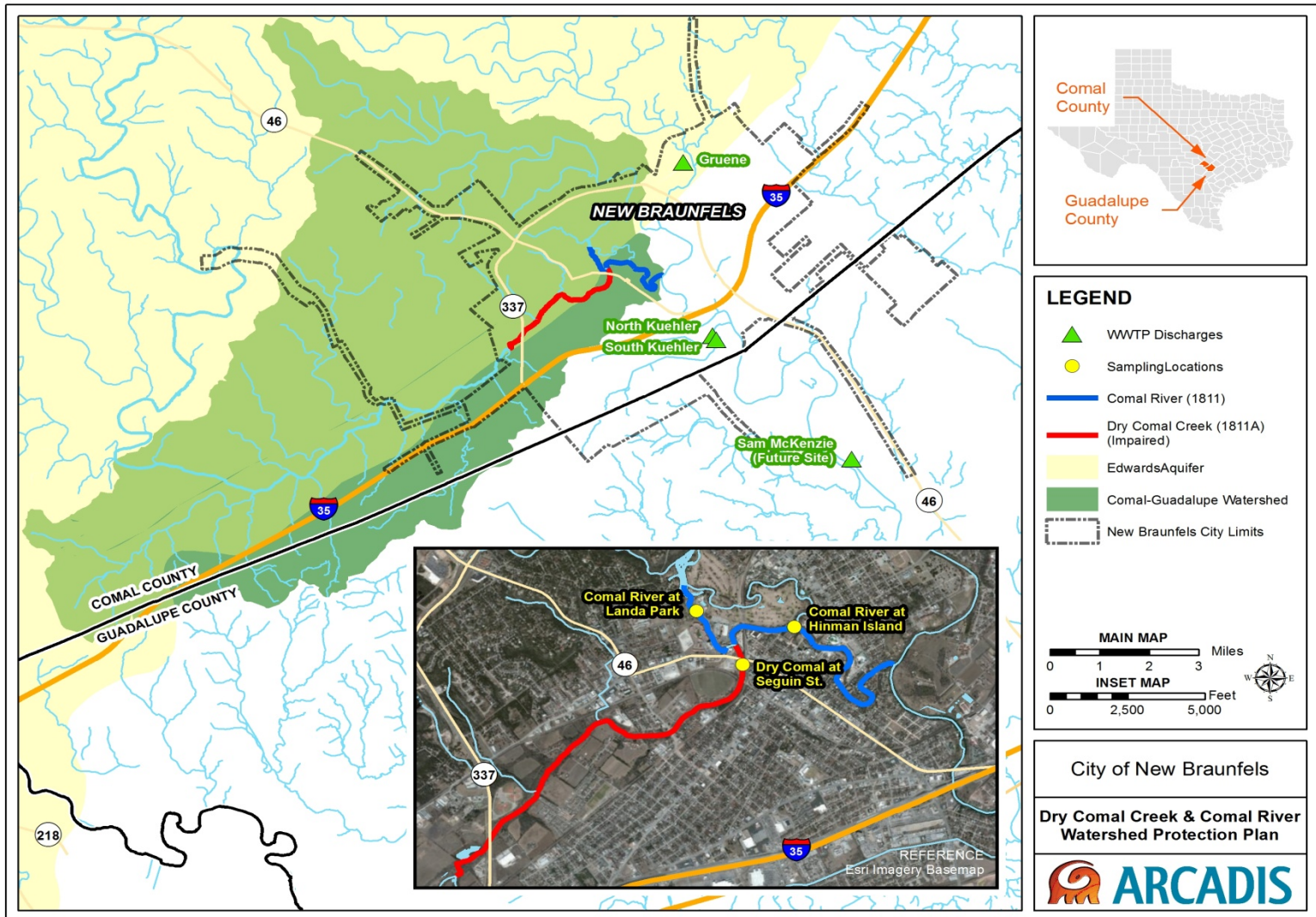


Dry Comal Creek and Comal River Watershed Protection Planning

Mark Enders
Watershed Coordinator
City of New Braunfels



Dry Comal Crk and Comal River Watershed & CRP Monitoring Locations



Reach Characteristics and CRP Monitoring Locations

**Dry Comal Creek (Segment 1811a) at
Knights of Columbus**

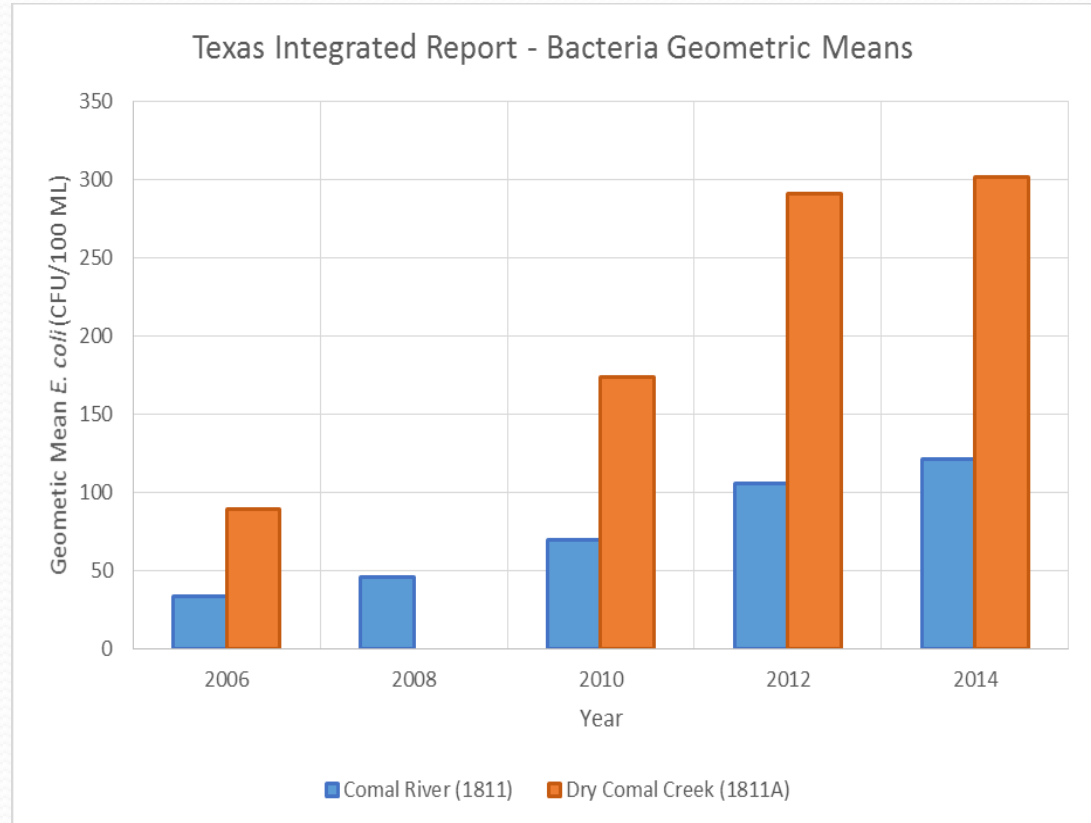


**Comal River (Segment 1811) at Hinman
Island Park**



Water Quality Issues

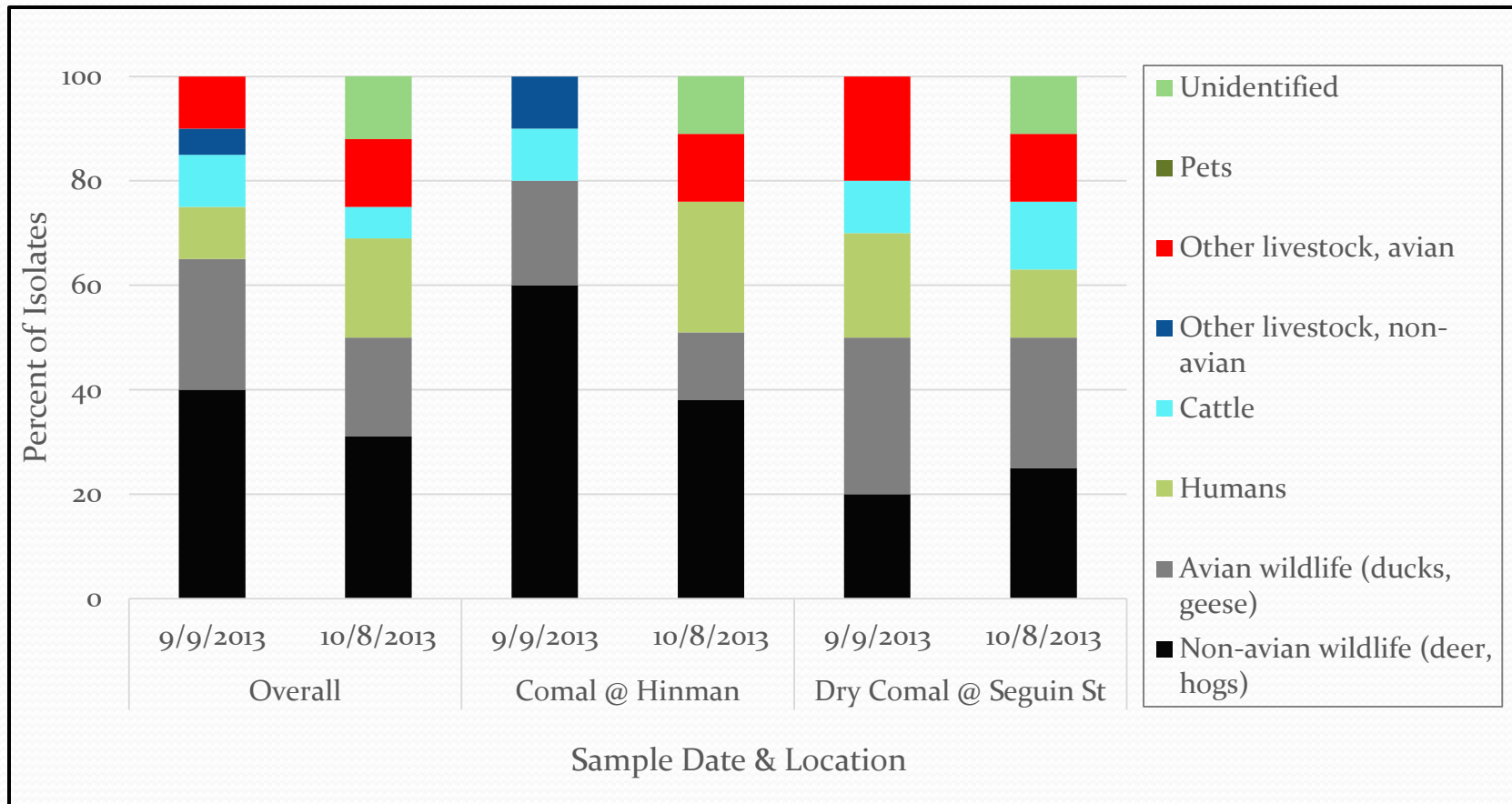
- Dry Comal Creek (Segment 1811a)
 - Initially placed on the 303(d) list for bacteria in 2010.
- Comal River (Segment 1811)
 - *E. coli* levels have been increasing over the past 10 years.



Additional Monitoring

- In response to Dry Comal Creek 303(d) listing and increasing levels on Comal River, CoNB increased monitoring efforts
 1. Added additional monthly E.coli monitoring locations on both Dry Comal Creek (+5) and Comal River (+4) upstream of CRP monitoring stations
 2. Additional CRP site added to Comal River segment upstream of confluence with Dry Comal Creek
 3. Performed Bacteria Source Tracking at CRP sites (Texas A&M AgriLife)

Bacteria Source Tracking Results



Key Findings:

- 50% or more of bacteria from wildlife (i.e. deer, ducks, geese, hogs)
- No isolates from pet sources
- Bacteria from cattle and livestock present

Dry Comal Creek/ Comal River WPP

- City worked with ARCADIS to apply for non-point source (NPS) grants from TCEQ/ EPA to develop WPP
 - Phase 1: \$200,000
 - Phase 2: \$475,000
 - 60% grant funding; 40% in-kind
- Phase 1 grant executed August 5th, 2015 for watershed characterization
- Phase 2 grant pending for final development of WPP
- Although not listed on 303(d), Comal River included in WPP scope



WPP Phase 1 Scope of Work

- **Task 1.** Project administration and coordination with TCEQ, EPA, and Arcadis
- ✓ **Task 2.** Quality Assurance and Quality Assurance Project Plan (QAPP)
- ✓ **Task 3.** Public outreach and education
 - ✓ Form WPP Stakeholder Group to support project and public outreach
 - ✓ Hold Stakeholder meetings (held in Nov 2015 and Feb 2016)
- **Task 4.** Data acquisition, evaluation, and characterization and pollutant source identification
 - Estimate pollutant loading reductions required
 - Includes FDCs/ LDCs and SELECT modeling
- **Task 5.** Phase 1 Report due July 2016

WPP Phase 2 Scope of Work

- Phase 2 tasks include:
 1. Continued stakeholder involvement and public outreach
 2. Additional monitoring (as needed) to support WPP development
 3. Develop and evaluate WQ management strategies
 4. WPP Approval-Stakeholders, TCEQ & EPA
 5. Final Project Report
- The Dry Comal Creek/ Comal River WPP expected to be completed and approved by August 2018.

Questions?



**SPRINGS. RIVERS. WATERSHED.
OUR RESPONSIBILITY**

NEW BRAUNFELS WATERSHED MANAGEMENT