



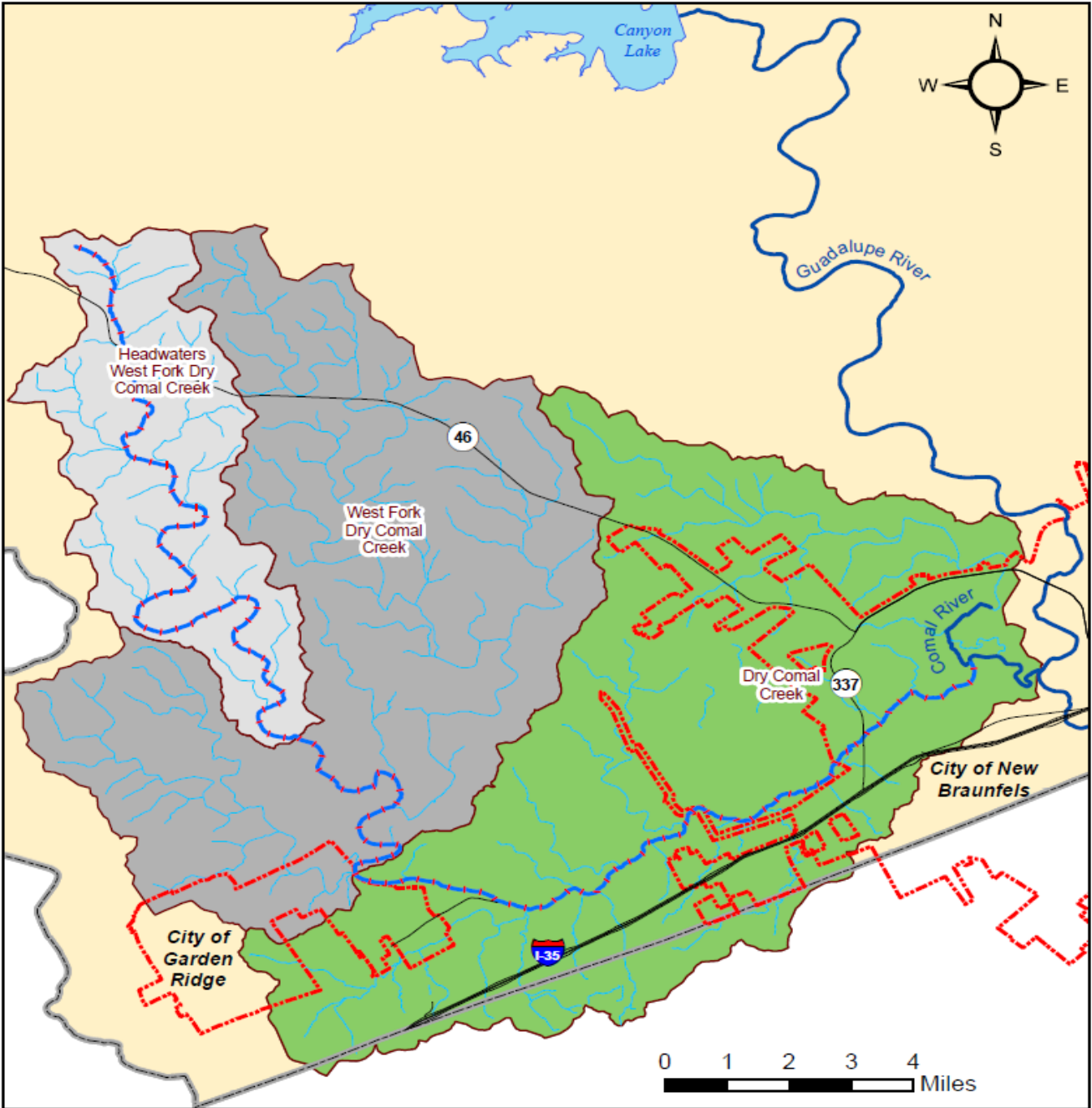
# **Dry Comal Creek & Comal River Watershed Protection Plan**

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Mark Enders  
Watershed Program Manager  
March 29, 2018

# Watershed Protection Planning for the Dry Comal Creek and Comal River

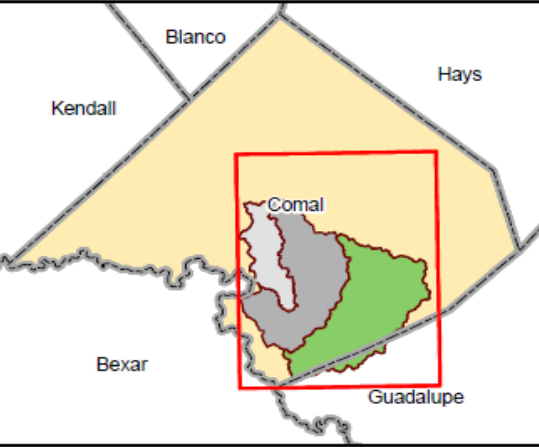
- Project Location
- Water Quality Issues
- Available Data
- WPP & Proposed Bacteria Mgmt Measures
- WPP Implementation



Dry Comal Creek and Comal River Watersheds

Legend

- Roads
- Streams and Tributaries
- Dry Comal Creek
- Rivers
- HUC12: Dry Comal Creek
- HUC12: Headwaters West Fork Dry Comal Creek
- HUC12: West Fork Dry Comal Creek
- - - City Boundaries
- Comal County
- County Boundaries





# Clean Rivers Program (CRP) Water Quality Monitoring Locations





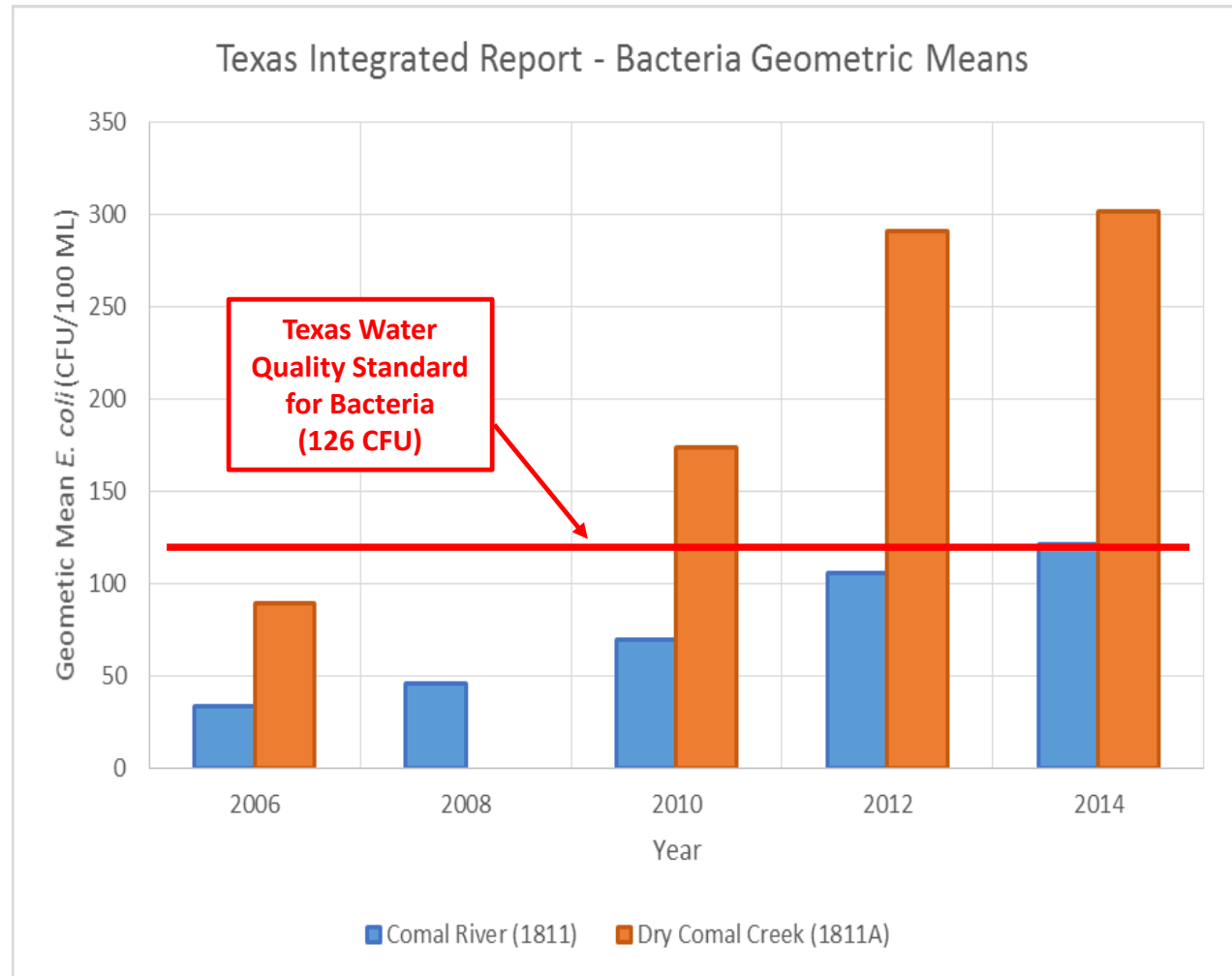
# Bacteria Levels-Dry Comal Crk and Comal Rvr

## ➤ Dry Comal Creek

- Initially placed on the 303(d) list for bacteria in 2010.

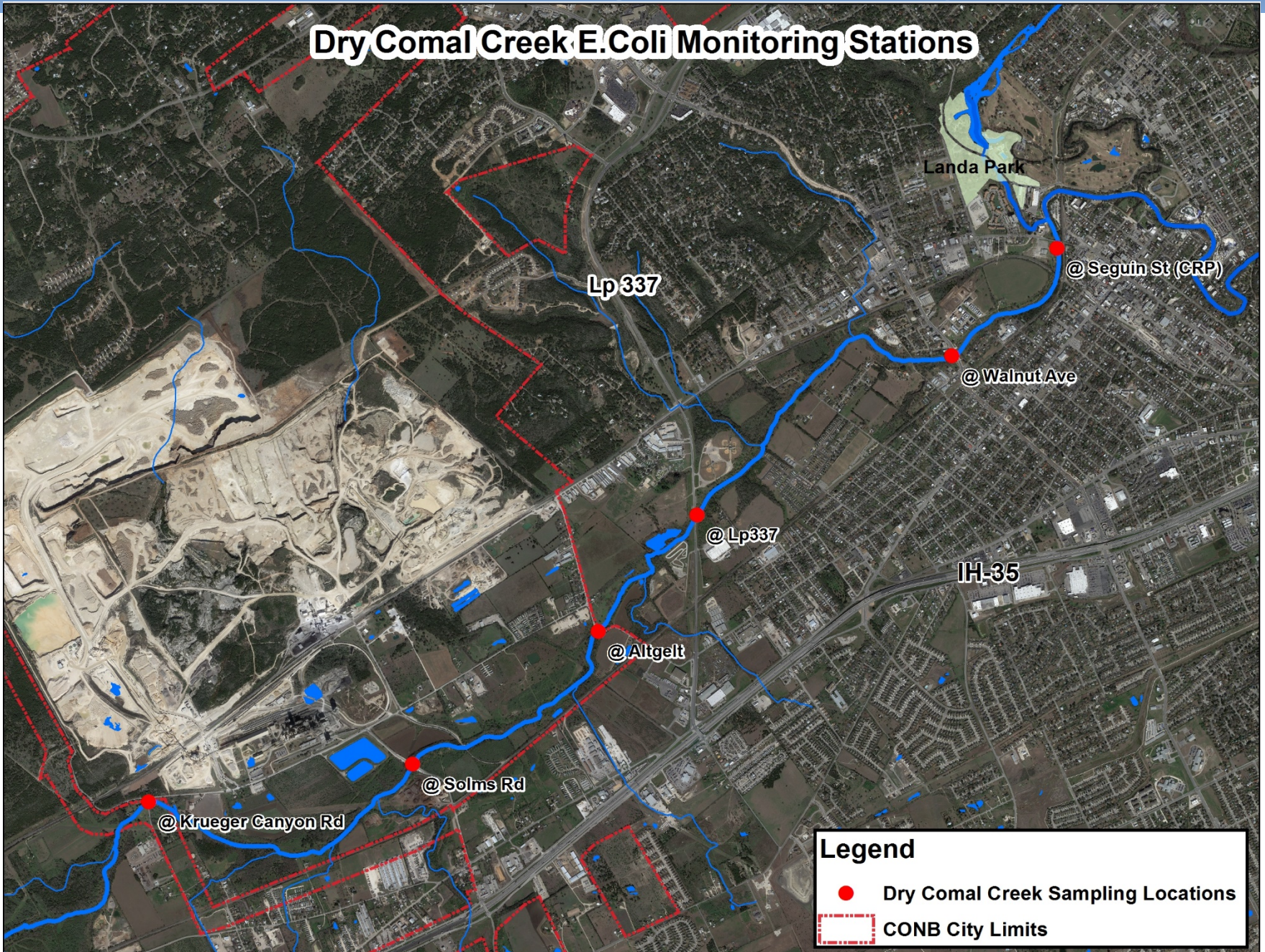
## ➤ Comal River

- Bacteria levels have been increasing over the past 10 years.



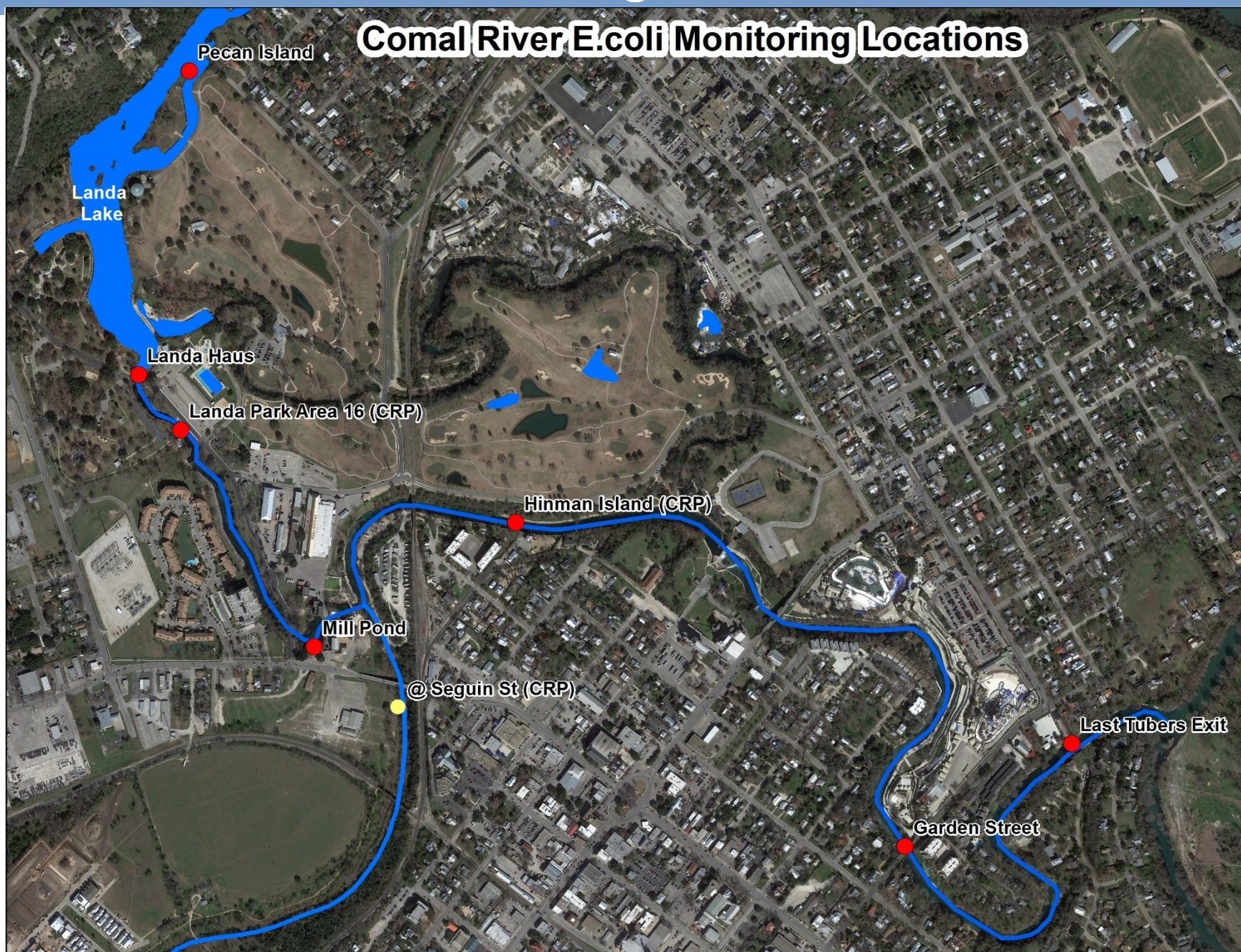


# Additional *E.coli* Monitoring Locations -Dry Comal Creek



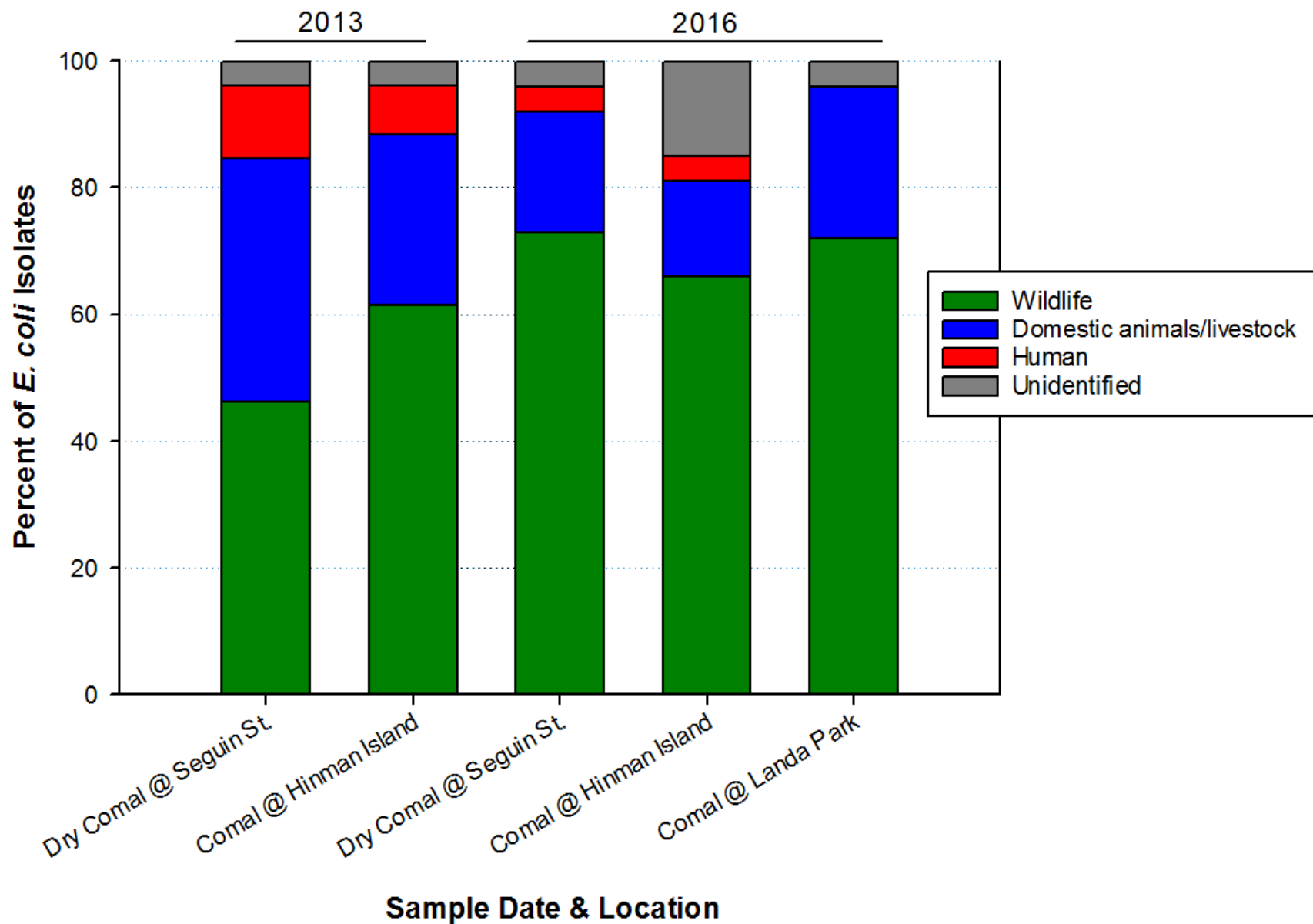


# Additional *E.coli* Monitoring Locations –Comal River





# Bacteria Source Tracking Results (3-Way Split)





# Watershed Protection Planning for the Dry Comal Creek and Comal River

- The City and project partners developed a Watershed Protection Plan to address bacteria loading to the Dry Comal Creek and Comal River.
- The WPP is at TCEQ for final review & approval
- WPP to be submitted to EPA soon



TEXAS COMMISSION  
ON ENVIRONMENTAL QUALITY



# Proposed Bacteria BMPs

- **Overabundant Urban Wildlife**

- Wildlife feeding restrictions & education
- Deer & duck population management, To what extent??

- **Urban Stormwater**

- LID and Stormwater Treatment BMPs
- Pet Waste BMPs – education, ordinances, pet waste stations

- **Livestock**

- Voluntary Water Quality Mgmt Plans (WQMPs) for individual ranches
- Education and Outreach – ex. Lone Star Healthy Streams

- **Septic Systems/ OSSFs**

- Septic system operation education
- Require inspection and maintenance be completed by trained professional

- **Feral Hogs**

- Mgmt workshops, bounty program, track trapping rates



# Education and Outreach

- **Focus on students, kids, homeowners & tourists**
- **Develop core message that will:**
  - Link wildlife feeding with protecting water quality
  - Teach that feeding wildlife is harmful to the wildlife
  - Communicate that the WPP is a proactive solution
  - Be a positive message (focus on the future, not impairment)
  - Focus on benefits of taking action
- **Youth activities, outreach at local events, education at NBU's new Headwaters at the Comal facility.**

# WPP Implementation

- The City applied for and was awarded a 319 grant from TCEQ to begin implementation of the WPP.
- Total Grant: **\$739,755**
  - \$443,853 (federal)
  - \$295,902 (match)
- Match from GBRA, EAA, City staff time and City's EAHCP projects
- Grant funding should become available in Sept 2018.
- First phase to focus on education, urban wildlife mgmt, etc



# WPP Implementation

- Working with City Council, TPWD and residents to discuss urban wildlife management in New Braunfels.
- Held urban wildlife education and input workshop in conjunction with TPWD in late Feb 2018.
- Next public workshop on April 11<sup>th</sup> to discuss wildlife management options.
- Implementation of additional WPP education and outreach

# Disposable Container Ordinance

- NB City Council directed staff to implement the Disposable Container Ban starting on November 1, 2017. The ban that was in effect in 2011-2012 will be reinstated.
- The City of New Braunfels in conjunction with the Convention and Visitors Bureau has been working to educate City staff, Tourism related staff, and the public.
- The Ban is expected to once again result in a reduction of litter in the Comal River.



# Disposable Container Ordinance

# 2TOTUBE

YOUR \$2 HELPS KEEP RIVERS CLEAN

## REMEMBER \$2 TO FLOAT THE RIVER

SATURDAYS, SUNDAYS AND HOLIDAYS  
MEMORIAL DAY WEEKEND THROUGH LABOR DAY

DISPOSABLE FOOD & BEVERAGE CONTAINER BAN IN EFFECT ON RIVERS.  
EXAMPLES OF ALLOWED/NOT ALLOWED CONTAINERS ARE BELOW.

## NO



DISPOSABLE BOTTLES



DISPOSABLE BEVERAGE BOXES



DISPOSABLE CUPS



DISPOSABLE CANS



DISPOSABLE SNACK CONTAINERS



DISPOSABLE BAGS

**NO LOUD MUSIC**  
(MUSIC THAT CAN BE HEARD FROM OVER 50 FEET).

## YES



REUSABLE HYDRATION PAKS



REUSABLE JUGS



REUSABLE SPORTS BOTTLES



REUSABLE INSULATED BOTTLES



REUSABLE CUPS



ONE COOLER PER PERSON  
(16 QUARTS OR LESS)



REUSABLE FOOD CONTAINERS

[TubelInNewBraunfels.com](http://TubelInNewBraunfels.com)

CITY ORDINANCE SECTION 86-101



# Questions?

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