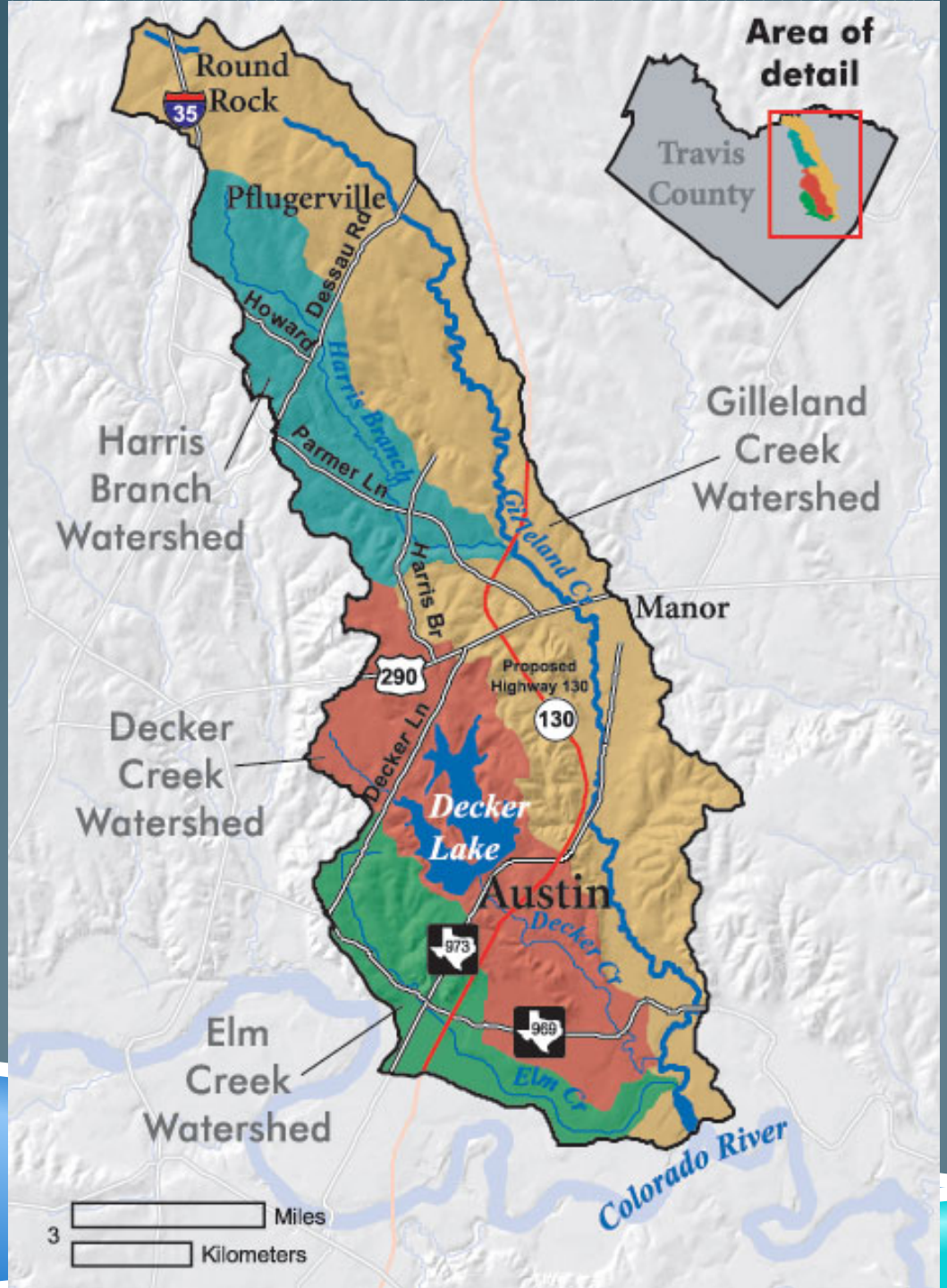
GILLELAND CREEK TMDL IMPLEMENTATION PLAN YEAR 3

Lauren Young
TCEQ TMDL Program

Monday, April 7, 2014

THE TMDL PROCESS


Area of detail
Travis County
Round Rock
35
Pflugerville
Dessau Rd
Howard
Harris Branch
Parmer Ln
Harris Br
Gilleland Cr
Harris Branch Watershed
Gilleland Creek Watershed
Manor
290
Proposed Highway 130
130
Decker Ln
Decker Creek Watershed
Decker Lake
Austin
Decker Cr
973
969
Elm Cr
Elm Creek Watershed
Colorado River
Miles
3
Kilometers

WHY GILLELAND CREEK?

- 2004 303(d) list
  - Elevated *E. coli* densities
  - Contact recreation standard
- *E. coli*
  - Bacteria commonly found in human and animal waste
  - Often indicate the presence of disease-causing microorganisms
  - Can pose a threat to public health

GILLELAND CREEK PARTNERS

- City of Pflugerville
- City of Austin
- City of Round Rock
- Travis County
- Lower Colorado River Authority
- Austin Water Utility
- Windermere Utilities
- UT Center for Research in Water Resources
- Texas AgriLife Extension Service
- Texas State Soil and Water Conservation Board
- Natural Resources Conservation Service
- US Fish and Wildlife Service
- Texas Stream Team
- Volunteers in the watershed

OSSFs
Wastewater
Natural Resource Management
Gilleland Creek I-Plan
Ordinance & Planning
Storm Water
Education & Outreach

ON-SITE SEWAGE FACILITIES

- Identify, prioritize, inspect and bring into compliance malfunctioning on-site sewage facilities

- Partners involved:
  - City of Austin
  - Travis County
  - TCEQ

OSSF IMPLEMENTATION MEASURES

- Inspect up to 25% of highest priority OSSFs
  - COA 40% inspected, 1 system repaired, 1 in progress
- Provide educational materials to OSSF owners
  - COA distributed EPA SepticSmart Program door hangers

CITY OF AUSTIN ADDITIONAL OSSF ACTIVITIES

- Revised Ordinance
  - Adopted City Council 10/3/2013 and TCEQ 10/31/2013
- Free homeowner training
  - 2/22/2014
  - Maintenance of aerobic treatment systems

NATURAL RESOURCE MANAGEMENT

- Programs to work with landowners to protect riparian areas
- Partners involved:
  - Governmental and Non-Governmental Programs
  - Local landowners

IMPLEMENTATION MEASURES

- LCRA Creekside Conservation Program
- USFWS-Partners for Fish and Wildlife
- TSSWCB/SWCD WQMPs developed
- City of Pflugerville
- Texas AgriLife Extension Service

TEXAS AGRILIFE EXTENSION SERVICE FERAL HOG EDUCATIONAL EFFORTS

- Dan Gaskins, new Extension Agent (Gatesville)
- Workshops/trainings/outreach programs
- Social media
  - Wild Wonderings blog
  - iPhone app
  - New Youtube videos
  - Facebook
  - Twitter
  - Online feral hog reporting system

RETROFITTING STORM WATER DETENTION BASINS

- Determine the effectiveness of retrofitting existing flood control facilities (storm water detention basins) to also perform as water quality facilities

- Partners:
  - Center for Research in Water Resources
    at the University of Texas
  - City of Pflugerville

STORM WATER DETENTION FACILITIES

IMPLEMENTATION MEASURES

- Sampled 2 storm events 2013
- Amended QAPP

EDUCATION AND OUTREACH

- Coordinate with partners to develop a general campaign to raise public awareness of nonpoint-source contributions of bacteria pollution, specifically pet waste

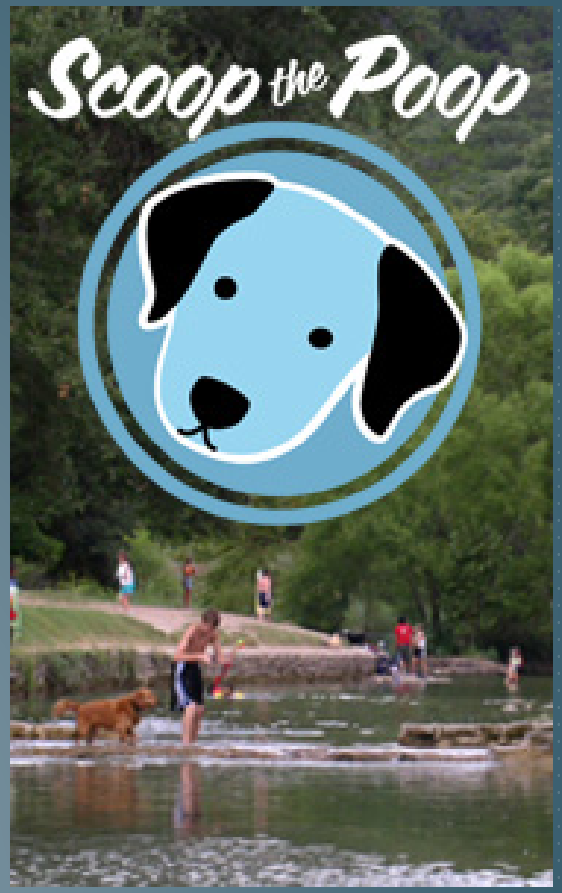
- Partners
  - LCRA
  - City of Austin
  - City of Pflugerville
  - City of Round Rock
  - Travis County

VOLUNTEER MONITORING

- LCRA CRWN
- 7 sites
- 50 monitoring events
- 65+ volunteer hours

PET WASTE IMPLEMENTATION MEASURES

- Education/outreach
- Install additional mutt mitt and waste containers



PFLUGERVILLE EDUCATION ACTIVITIES

- Stormwater
- Water quality
- Water conservation
- Pollution prevention

WATER QUALITY ORDINANCES

- Develop and adopt equivalent water quality ordinances between government jurisdictions

- Partners:
  - City of Austin
  - City of Pflugerville
  - Travis County
  - City of Round Rock

WASTEWATER COLLECTION SYSTEMS

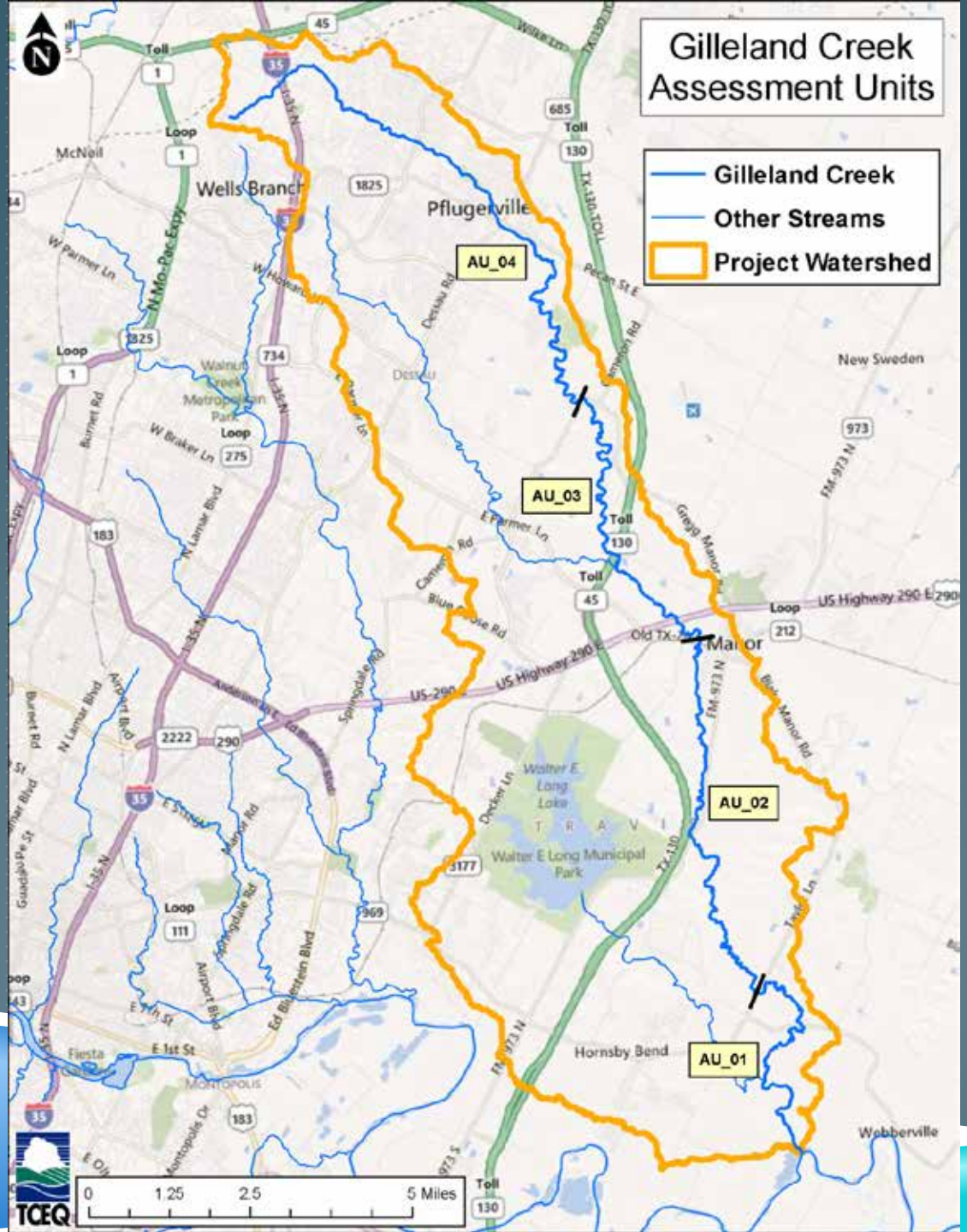
- Annual visual inspection of collection systems within 100 feet from the centerline of the Gilleland Creek and its tributaries.

- Partners
  - City of Austin
  - City of Pflugerville
  - Windermere Utility

WASTEWATER MONITORING

- Monitor and report *E. coli* concentrations from wastewater treatment facilities

- Partners
  - City of Austin
  - City of Pflugerville
  - Windermere Utility

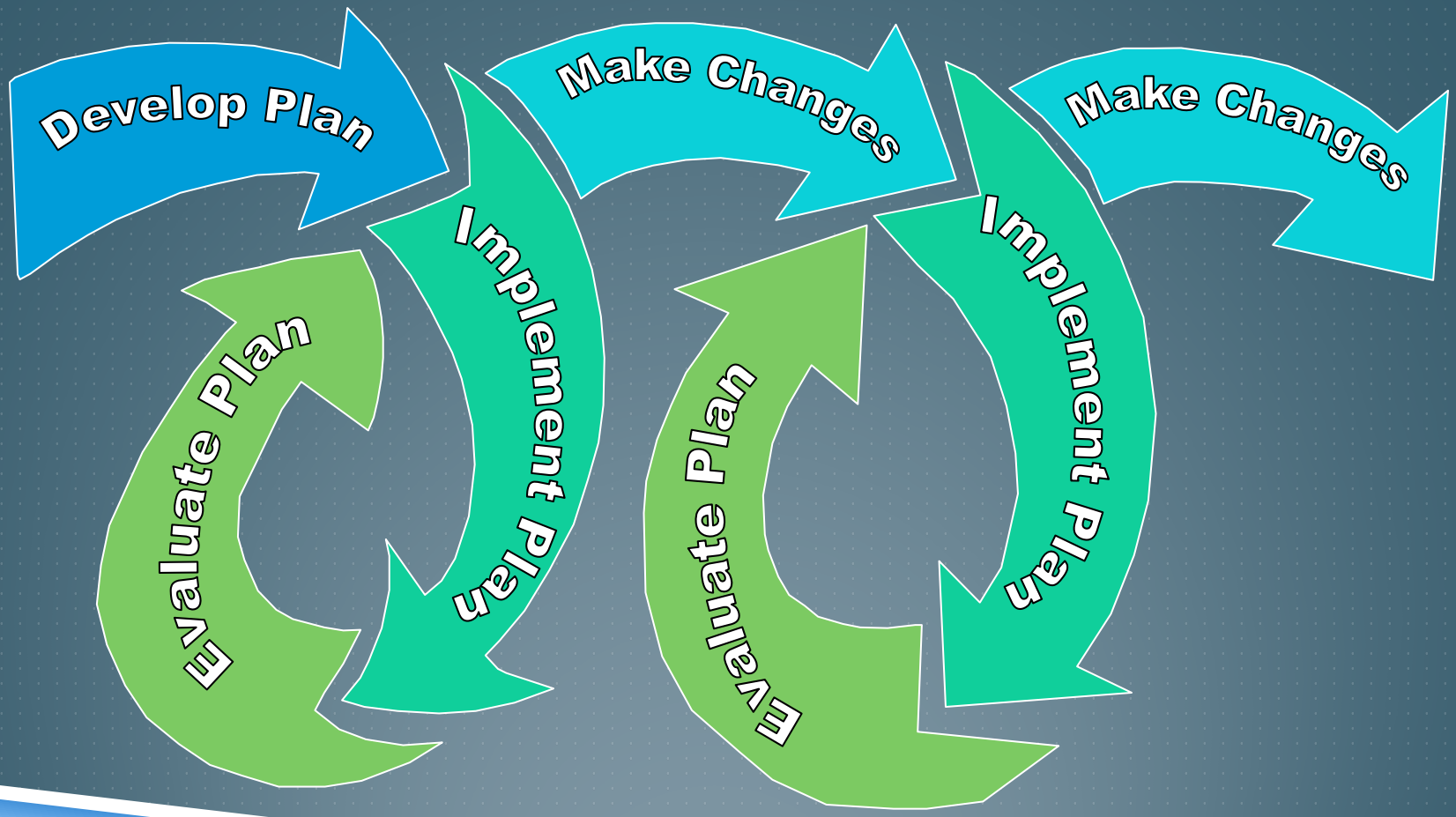

Gilleland Creek
Assessment Units
Gilleland Creek
Other Streams
Project Watershed
AU_04
AU_03
AU_02
AU_01
Wells Branch
Pflugerville
McNeil
New Sweden
Manor
Hornsby Bend
Webberville
Walter E. Long Lake
Walter E Long Municipal Park
Walnut Creek Metropolitan Park
Dessau
Montopolis
Fiesta
0 1.25 2.5 5 Miles
TCEQ

TEXAS INTEGRATED REPORTS

	2004	2006	2008	2010	2012
1428C_01	240	170.0	166.35	129.37	128.82
1428C_02	NA	NA	147.32	109.43	112.25
1428C_03	NA	NA	175.55	175.55	172.58
1428C_04	NA	NA	135.20	144.72	239.84

Standard:
126 cfu/100ml

WHAT'S NEXT?


Develop Plan
Implement Plan
Evaluate Plan
Make Changes
Implement Plan
Evaluate Plan
Make Changes

TELLING OUR STORY

- Other events, activities, tasks
- Hyperlinks to project pages, maps, news stories
- PSAs
- Press releases
- Photos
- Graphs, charts

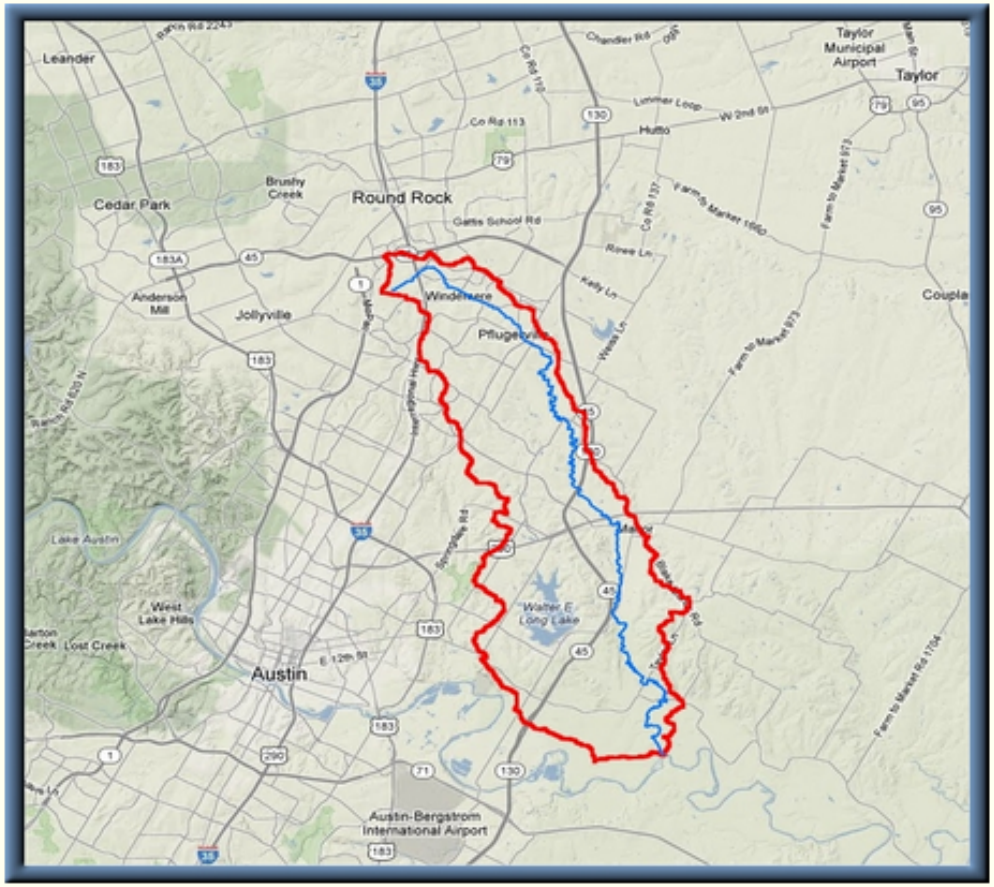
Gilleland Creek: Implementing a TMDL to Protect Recreational Uses

The goal of this current project is to keep recreation safe in Gilleland Creek by reducing bacteria levels. The adopted TMDL and the approved I-Plan combined are the road map to improving water quality in the creek.

Back to TMDL Projects

Watershed County: Travis
Parameter: Bacteria
River Basin: Colorado
Segment: 1428C

- Overview
  Water quality and the project for Gilleland Creek
- Get Involved
- Partners
- Status and Activities
- Videos, News, Maps, and Photo Galleries
- Reports and other Documents
- Adopted TMDL & Approved I-Plan
- Contact Us



Click map to see monitoring stations, permitted discharges, flood control project sites, and educational inititatives

Google

http://www.tceq.texas.gov/assets/public/waterquality/tmdl/69gilleland/(

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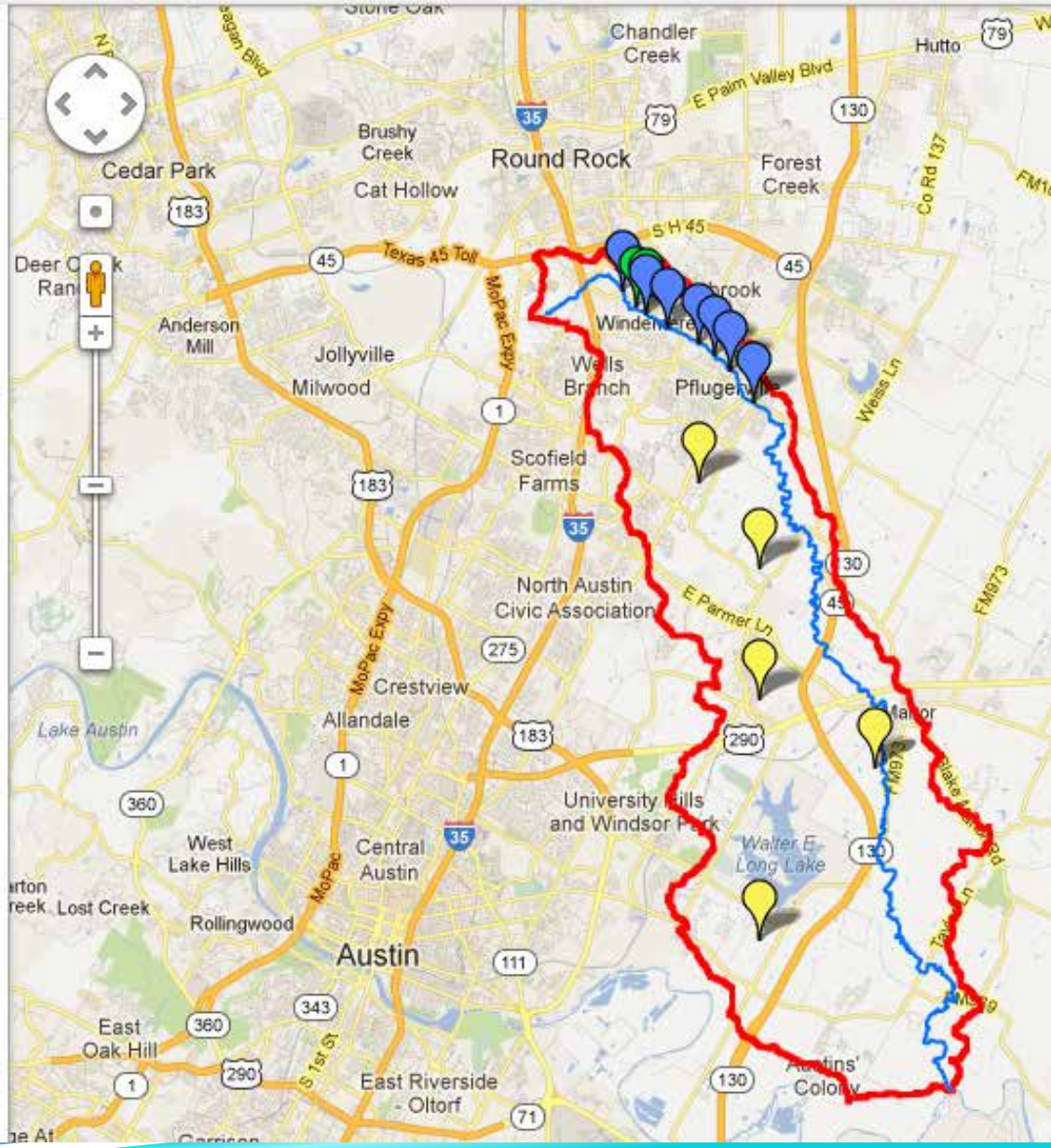
Contents

- Gilleland Creek
  - Gilleland-AUs
  - Gilleland Creek Watershed
  - Monitoring Stations
  - General Information
  - Retrofitting Flood Control



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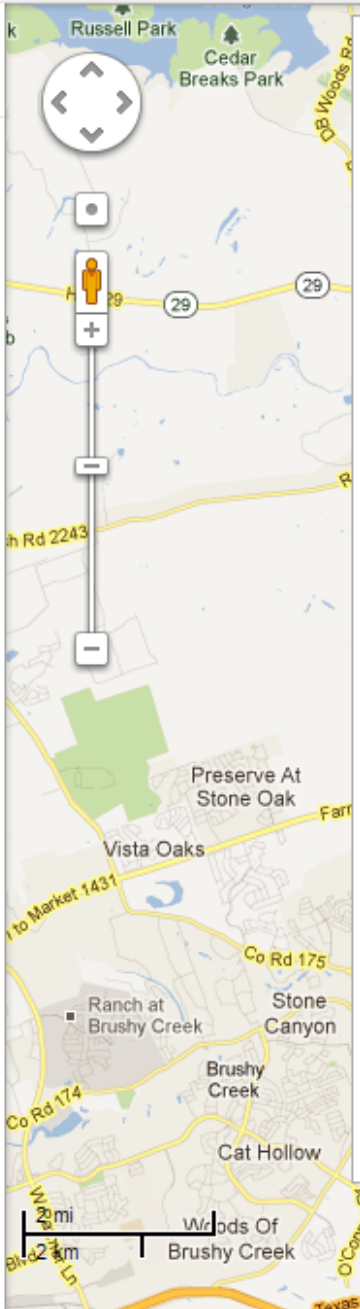
- Gilleland Creek
  - Gilleland-AUs
    - Features
      - 1428C_01
      - 1428C_02
      - 1428C_03
      - 1428C_04
  - Gilleland Creek Watershed
    - Features
      - Watershed Outline
  - Monitoring Stations
    - Site 28
      - Site 28
        LCRA CRWN Site 28 Gilleland Creek at Railro
    - Site 363
      - Site 363
        LCRA CRWN Site 363 Gilleland Creek at Picad
    - Site 365
      - Site 365
        LCRA CRWN Site 365 Gilleland Creek below Bo
    - Site 353



LCRA CRWN Site 363

Gilleland Creek at Picadilly Lane

LCRA's Colorado River Watch Network (CRWN) is the first and largest regional volunteer network of water quality monitors in Texas. Trained volunteers submit water quality data that is reviewed and analyzed by CRWN staff, creating an early warning system that alerts LCRA to potential water quality threats.

Project Web Page

Directions Search nearby Save to map more

QUESTIONS

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http://www.tceq.texas.gov/waterquality/tmdl/nav/69-gillelandcreekbacteria