303d Vision

City of Fort Worth

October 2015

Bacteria and Fort Worth

- We've got a bacteria problem
- Two watersheds within FW are 303(d)
  - Sycamore Creek (22,660 acres—95.5%)
  - Village Creek (14,511 acres—18.7%)
- Two more are Watersheds of Concern
  - Little Fossil (5,471 acres—43.4%)
  - Marine Creek (12,154 acres—86.8%)

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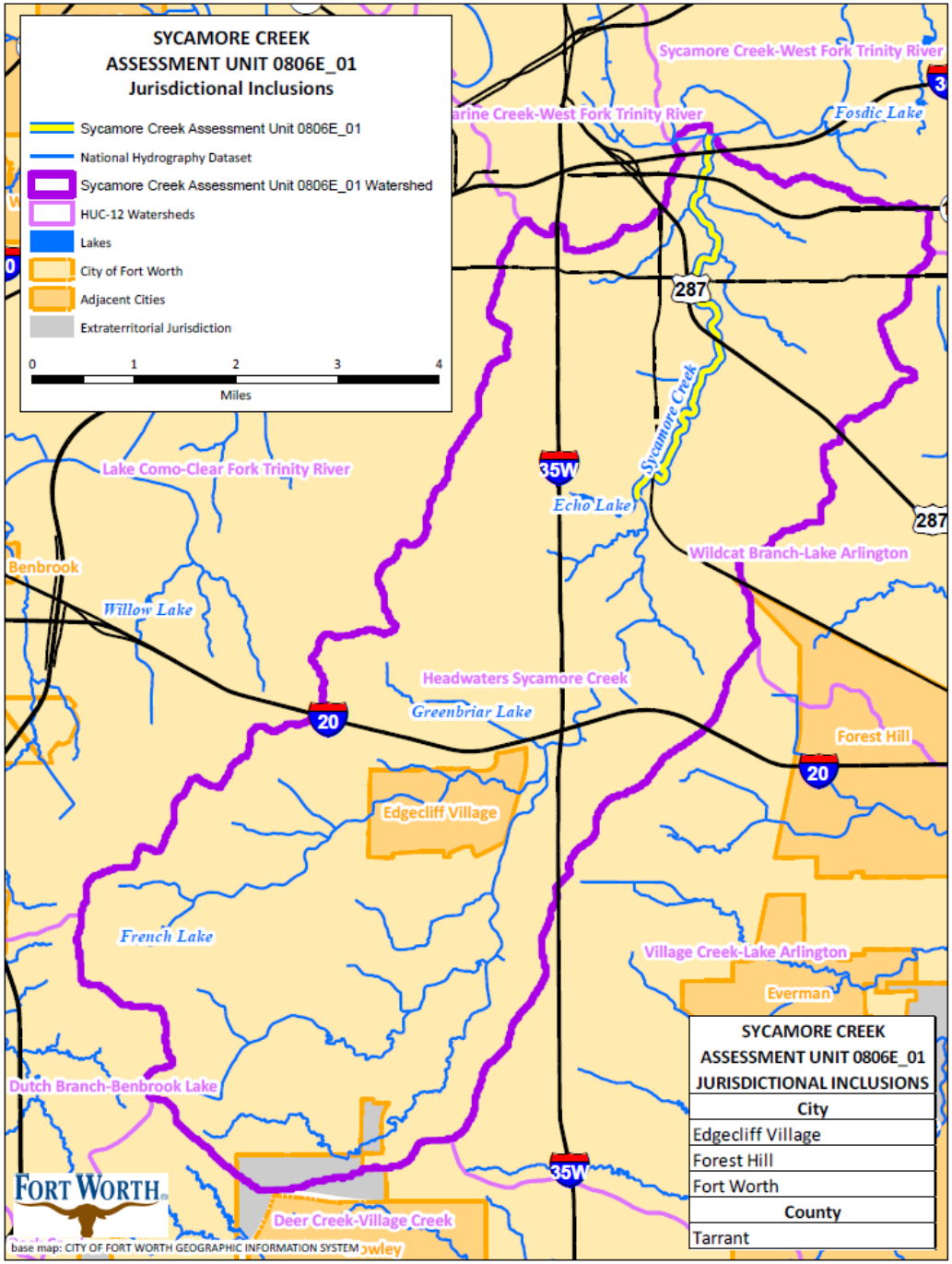
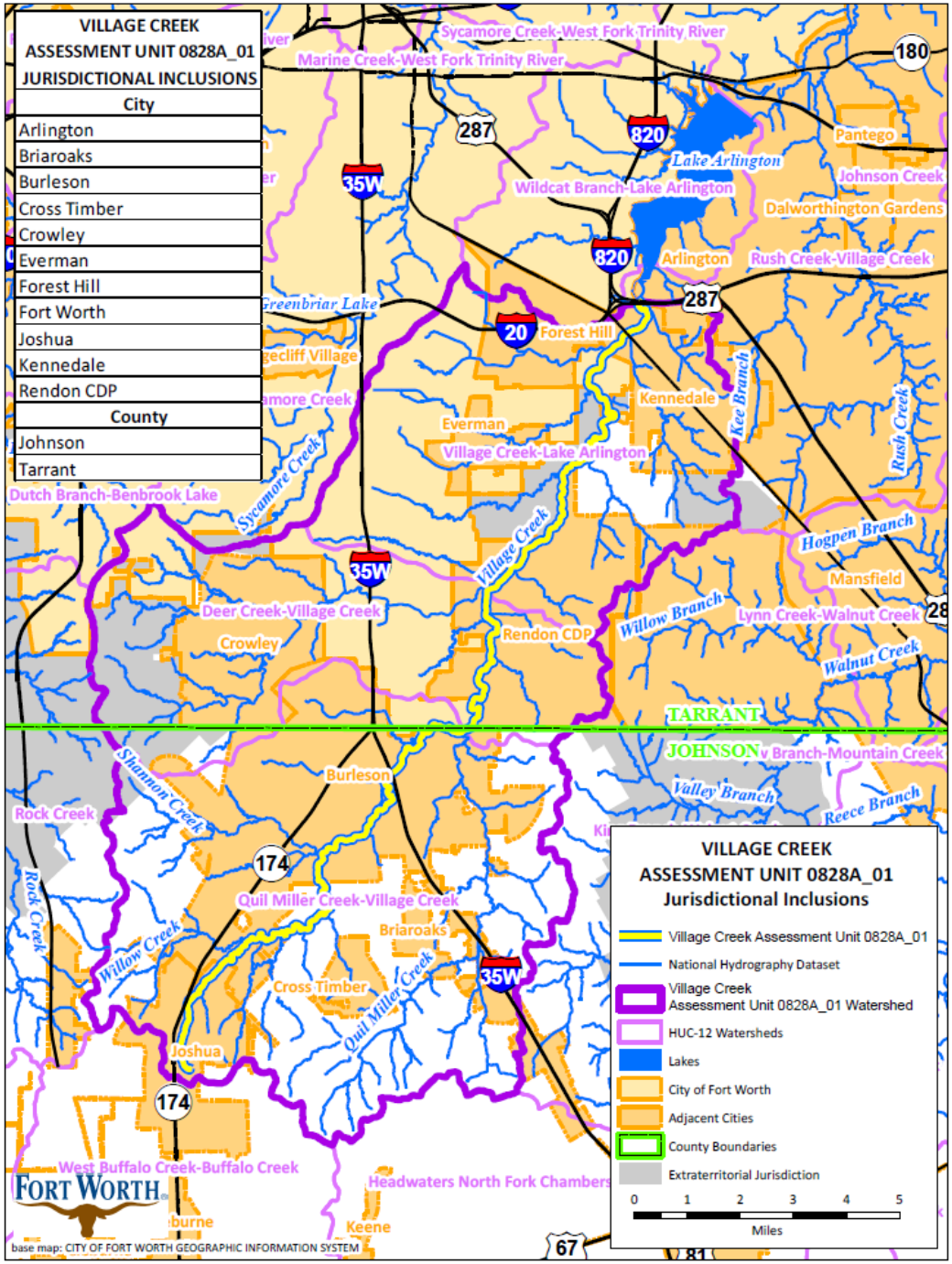
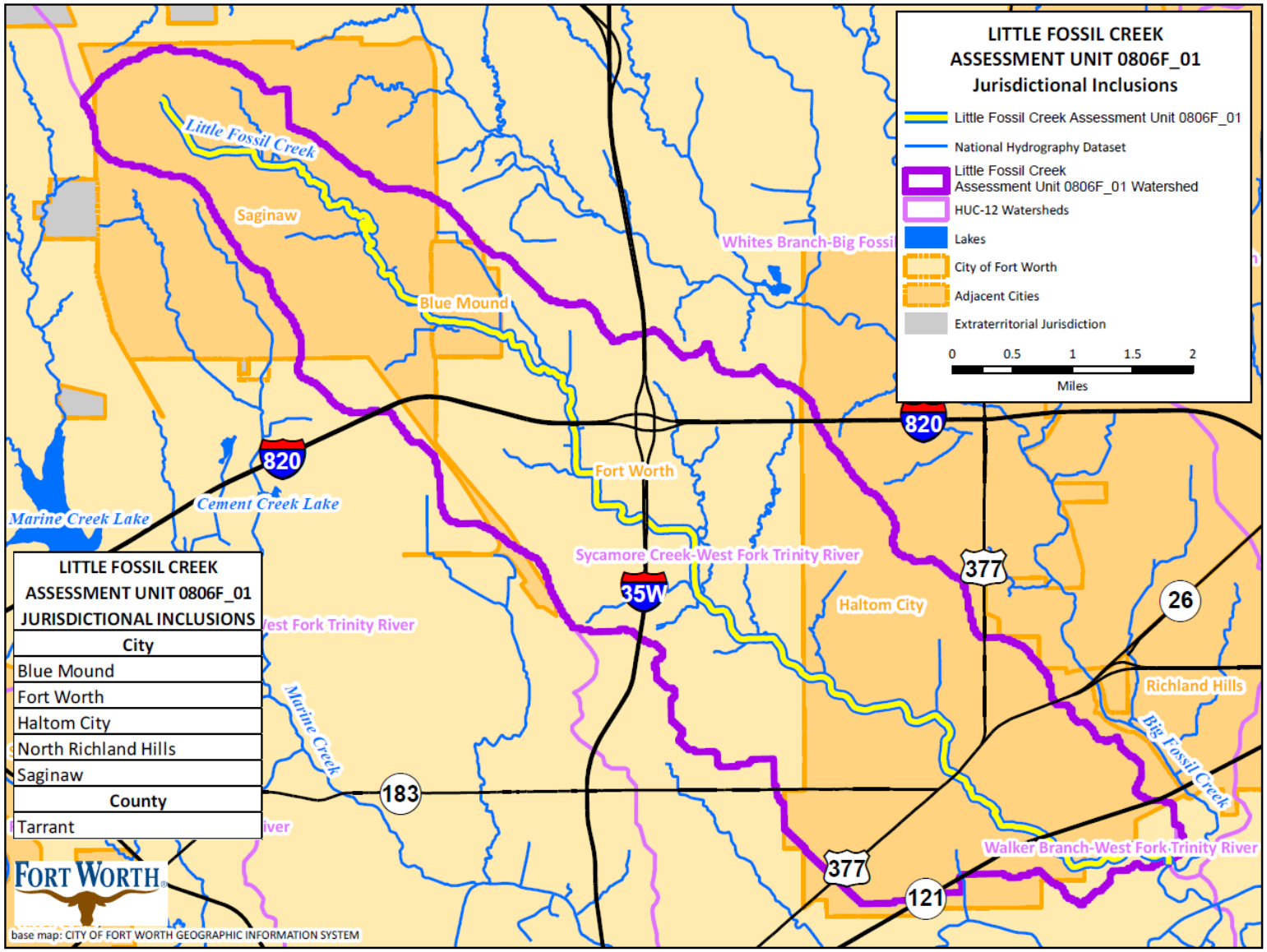
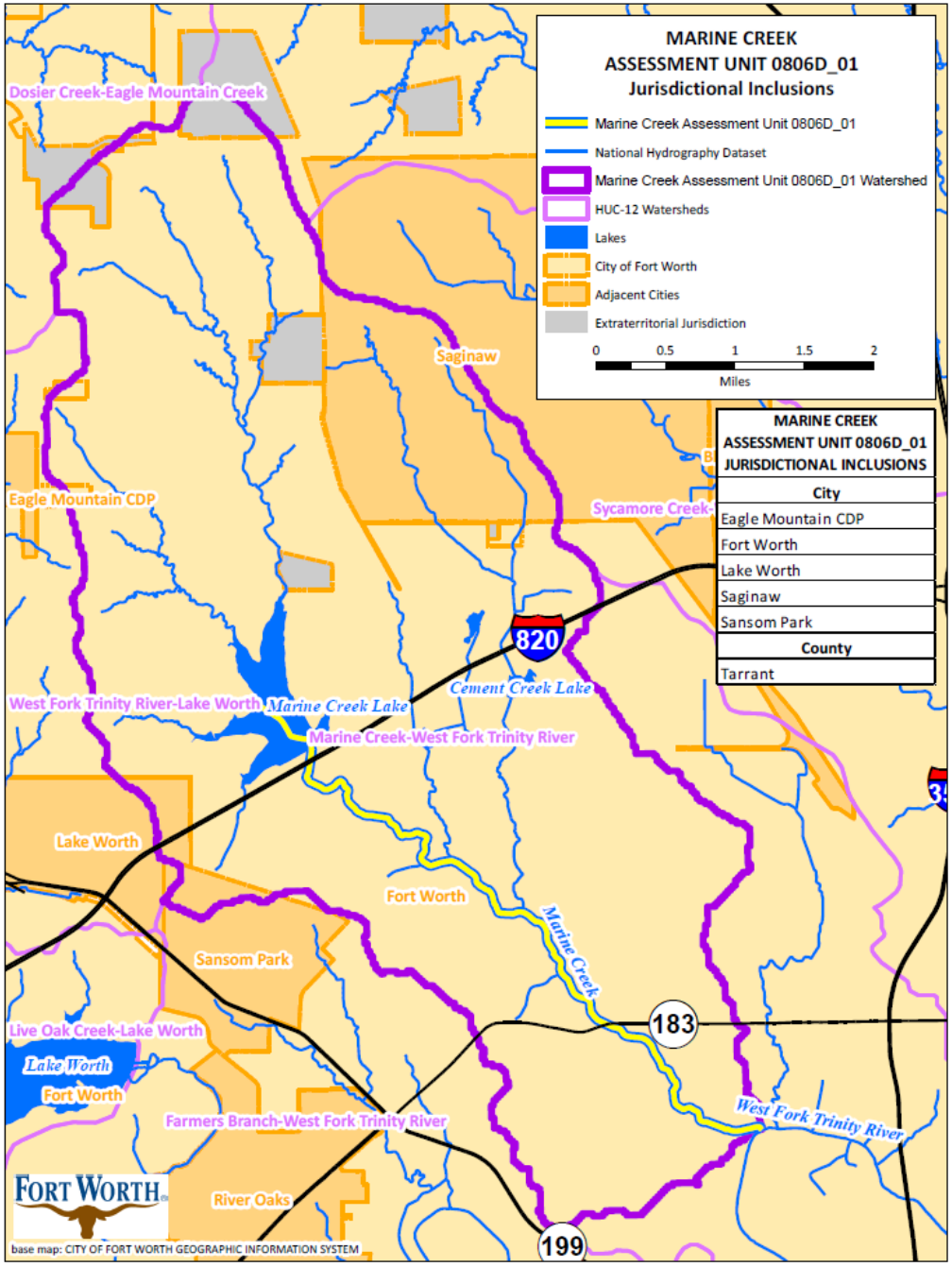

SYCAMORE CREEK
ASSESSMENT UNIT 0806E_01
Jurisdictional Inclusions
Sycamore Creek Assessment Unit 0806E_01
National Hydrography Dataset
Sycamore Creek Assessment Unit 0806E_01 Watershed
HUC-12 Watersheds
Lakes
City of Fort Worth
Adjacent Cities
Extraterritorial Jurisdiction
0 1 2 3 4
Miles
Sycamore Creek-West Fork Trinity River
Fosdic Lake
287
Sycamore Creek
35W
Echo Lake
Lake Como-Clear Fork Trinity River
Wildcat Branch-Lake Arlington
Benbrook
Willow Lake
Headwaters Sycamore Creek
Greenbriar Lake
20
Forest Hill
Edgecliff Village
French Lake
Village Creek-Lake Arlington
Everman
Dutch Branch-Benbrook Lake
Deer Creek-Village Creek
FORT WORTH
base map: CITY OF FORT WORTH GEOGRAPHIC INFORMATION SYSTEM
SYCAMORE CREEK
ASSESSMENT UNIT 0806E_01
JURISDICTIONAL INCLUSIONS
City
Edgecliff Village
Forest Hill
Fort Worth
County
Tarrant


VILLAGE CREEK
ASSESSMENT UNIT 0828A_01
JURISDICTIONAL INCLUSIONS
City
Arlington
Briaroaks
Burleson
Cross Timber
Crowley
Everman
Forest Hill
Fort Worth
Joshua
Kennedale
Rendon CDP
County
Johnson
Tarrant
Sycamore Creek-West Fork Trinity River
Marine Creek-West Fork Trinity River
Lake Arlington
Wildcat Branch-Lake Arlington
Pantego
Johnson Creek
Dalworthington Gardens
Arlington
Rush Creek-Village Creek
Forest Hill
Kennedale
Kee Branch
Rush Creek
Everman
Village Creek-Lake Arlington
Dutch Branch-Benbrook Lake
Sycamore Creek
Village Creek
Hogpen Branch
Mansfield
Deer Creek-Village Creek
Crowley
Willow Branch
Lynn Creek-Walnut Creek
Rendon CDP
Walnut Creek
TARRANT
JOHNSON
Burleson
Shannon Creek
Rock Creek
Valley Branch
Reece Branch
Quil Miller Creek-Village Creek
Briaroaks
Willow Creek
Cross Timber
Quil Miller Creek
Joshua
West Buffalo Creek-Buffalo Creek
Headwaters North Fork Chambers
Keene
FORT WORTH
base map: CITY OF FORT WORTH GEOGRAPHIC INFORMATION SYSTEM
VILLAGE CREEK
ASSESSMENT UNIT 0828A_01
Jurisdictional Inclusions
Village Creek Assessment Unit 0828A_01
National Hydrography Dataset
Village Creek
Assessment Unit 0828A_01 Watershed
HUC-12 Watersheds
Lakes
City of Fort Worth
Adjacent Cities
County Boundaries
Extraterritorial Jurisdiction
0 1 2 3 4 5
Miles


LITTLE FOSSIL CREEK
ASSESSMENT UNIT 0806F_01
Jurisdictional Inclusions
Little Fossil Creek Assessment Unit 0806F_01
National Hydrography Dataset
Little Fossil Creek
Assessment Unit 0806F_01 Watershed
HUC-12 Watersheds
Lakes
City of Fort Worth
Adjacent Cities
Extraterritorial Jurisdiction
0 0.5 1 1.5 2
Miles
Little Fossil Creek
Saginaw
Blue Mound
Whites Branch-Big Fossil
Fort Worth
Marine Creek Lake
Cement Creek Lake
Sycamore Creek-West Fork Trinity River
Haltom City
Richland Hills
Big Fossil Creek
Marine Creek
Walker Branch-West Fork Trinity River
820
35W
377
26
183
121
LITTLE FOSSIL CREEK
ASSESSMENT UNIT 0806F_01
JURISDICTIONAL INCLUSIONS
City
Blue Mound
Fort Worth
Haltom City
North Richland Hills
Saginaw
County
Tarrant
FORT WORTH
base map: CITY OF FORT WORTH GEOGRAPHIC INFORMATION SYSTEM


MARINE CREEK
ASSESSMENT UNIT 0806D_01
Jurisdictional Inclusions
Marine Creek Assessment Unit 0806D_01
National Hydrography Dataset
Marine Creek Assessment Unit 0806D_01 Watershed
HUC-12 Watersheds
Lakes
City of Fort Worth
Adjacent Cities
Extraterritorial Jurisdiction
0 0.5 1 1.5 2
Miles
MARINE CREEK
ASSESSMENT UNIT 0806D_01
JURISDICTIONAL INCLUSIONS
City
Eagle Mountain CDP
Fort Worth
Lake Worth
Saginaw
Sansom Park
County
Tarrant
Dosier Creek-Eagle Mountain Creek
Saginaw
Eagle Mountain CDP
Sycamore Creek-
820
Cement Creek Lake
West Fork Trinity River-Lake Worth
Marine Creek Lake
Marine Creek-West Fork Trinity River
Lake Worth
Fort Worth
Marine Creek
Sansom Park
183
Live Oak Creek-Lake Worth
Lake Worth
Fort Worth
Farmers Branch-West Fork Trinity River
West Fork Trinity River
River Oaks
199
FORT WORTH
base map: CITY OF FORT WORTH GEOGRAPHIC INFORMATION SYSTEM

Data

- The second Tuesday of every month is Bacteria Tuesday
  - Rain, shine, drought, flood, or cobblestone ice
  - Samples are collected along the Trinity and 2 tributaries
  - Bacteria is analyzed and reported to TCEQ
    - Quarterly samples to certified lab
    - Certified and un-certified results reported to TRA

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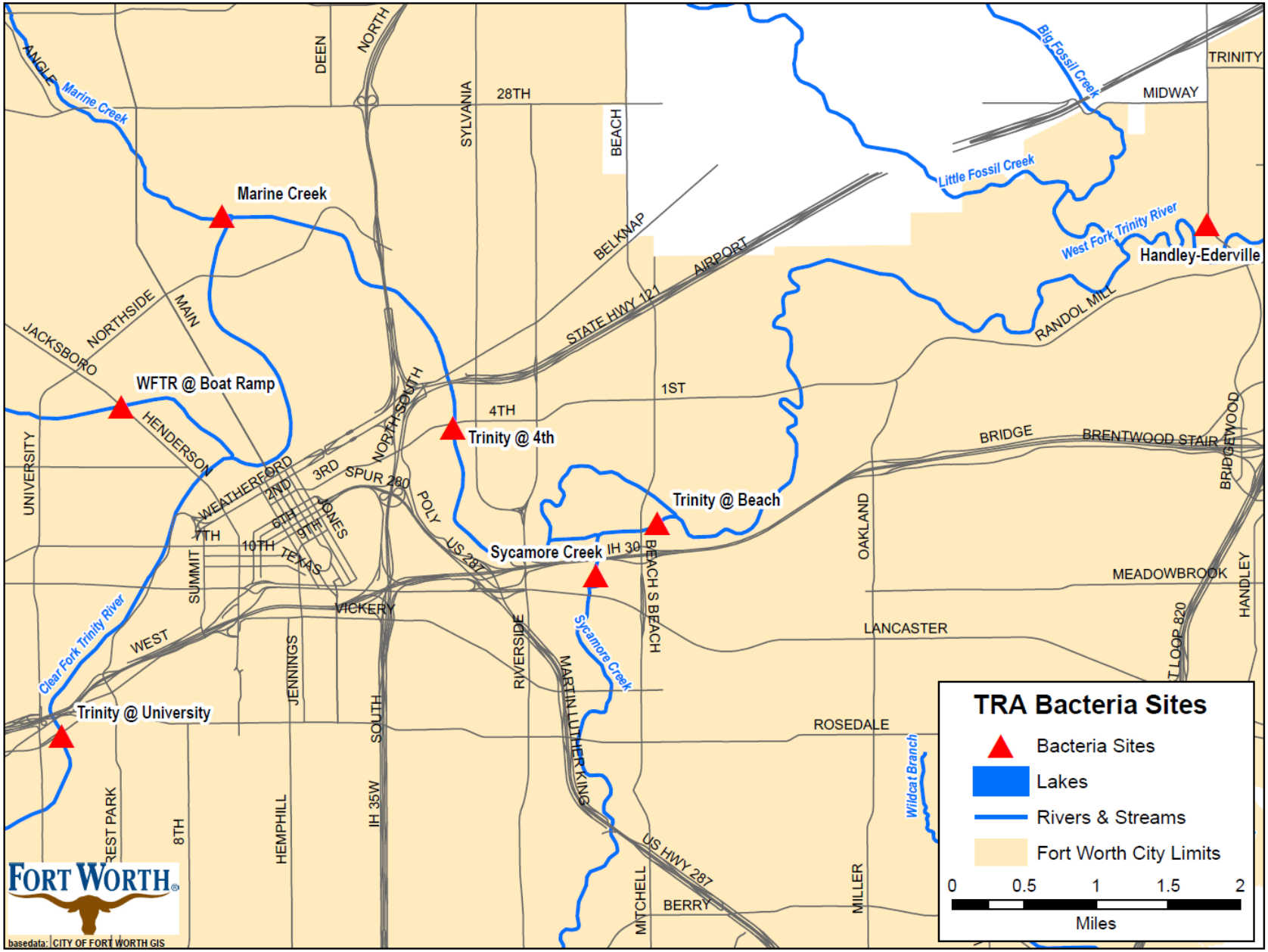
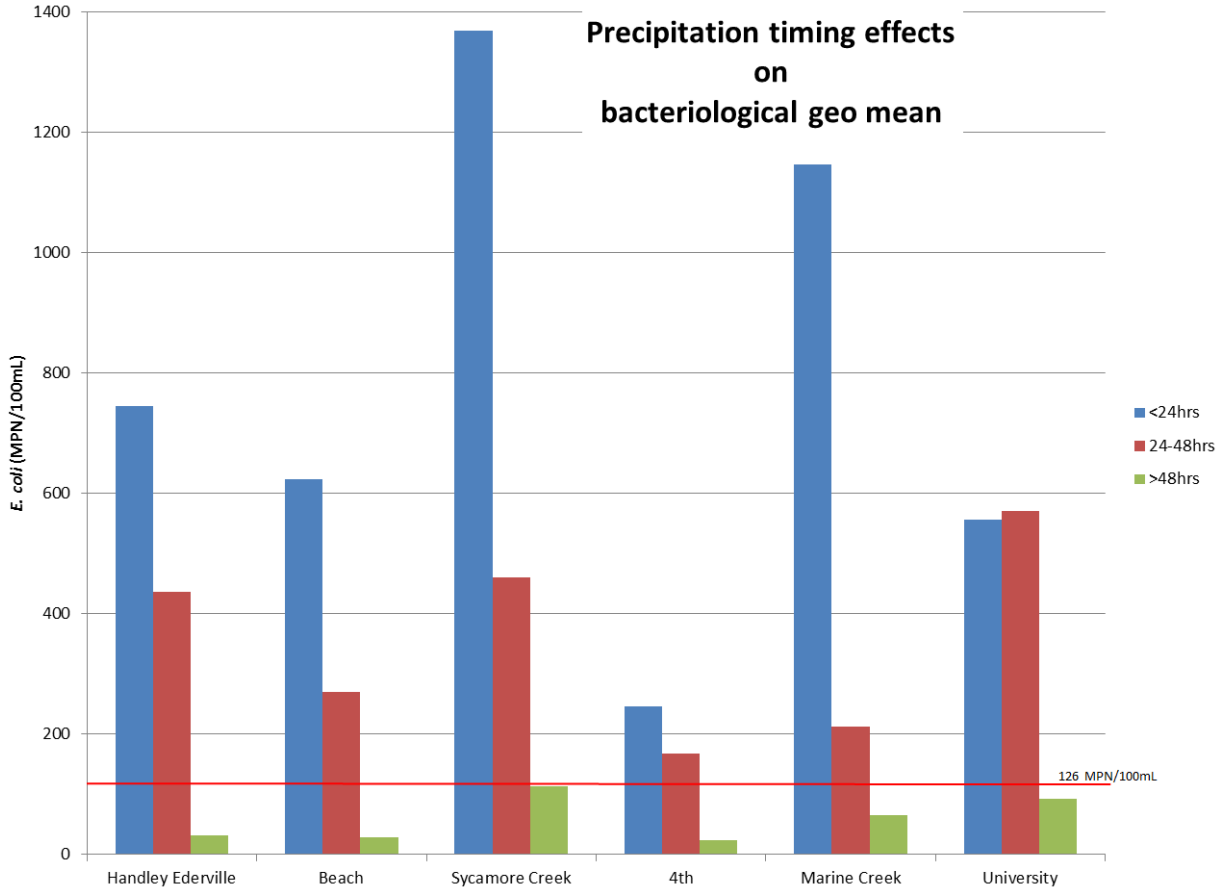

Marine Creek
WFTR @ Boat Ramp
Trinity @ 4th
Trinity @ Beach
Sycamore Creek
Trinity @ University
Handley-Ederville
Big Fossil Creek
Little Fossil Creek
West Fork Trinity River
Clear Fork Trinity River
Wildcat Branch
Sycamore Creek
ANGLE
DEEN
NORTH
SYLVANIA
28TH
BEACH
TRINITY
MIDWAY
BELKNAP
AIRPORT
STATE HWY 121
RANDOL MILL
JACKSBORO
NORTHSIDE
MAIN
HENDERSON
UNIVERSITY
WEATHERFORD
2ND
3RD
4TH
1ST
NORTH SOUTH
SPUR 280
POLY
US 287
IH 30
BEACH S BEACH
OAKLAND
BRIDGE
BRENTWOOD STAIR
BRIDGEWOOD
MEADOWBROOK
HANDLEY
LANCASTER
7TH
9TH
10TH
JONES
TEXAS
SUMMIT
VICKERY
WEST
JENNINGS
SOUTH
RIVERSIDE
MARTIN LUTHER KING
ROSEDALE
8TH
HEMPHILL
IH 35W
US HWY 287
MITCHELL
BERRY
MILLER
TRA Bacteria Sites
Bacteria Sites
Lakes
Rivers & Streams
Fort Worth City Limits
0
0.5
1
1.5
2
Miles
FORT WORTH
basedata: CITY OF FORT WORTH GIS

Sycamore	Average	Geo mean
2010	743.2	276.7
2011	988.9	143.9
2012	1061.1	238.3
2013	394.5	198.6
2014	699.3	199.0
2015	3343.6	380.9

2014	Average	Geo mean
WFTR 1	916.8	88.9
WFTR 2	1685.9	108.4
WFTR 3	601.7	70.3
CFTR 1	988.3	192.5
Sycamore Crk	699.3	199.0
Marine Crk	789.0	150.4



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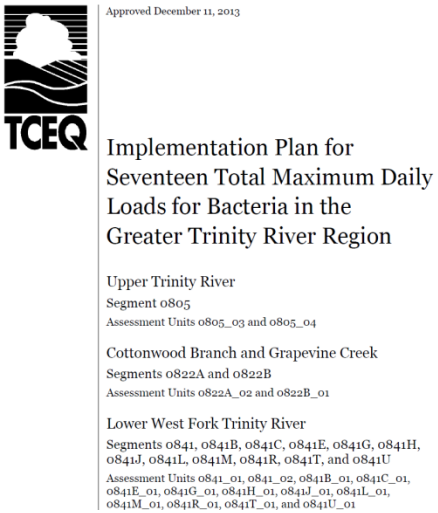
Future Plans

- Add all four watersheds to an existing I-Plan which covers 20+ sub-watersheds east of Fort Worth
  - FW is already following some of the implementation strategies; makes sense to include additional watersheds



Approved December 11, 2013

TCEQ

Implementation Plan for
Seventeen Total Maximum Daily
Loads for Bacteria in the
Greater Trinity River Region

Upper Trinity River
Segment 0805
Assessment Units 0805_03 and 0805_04

Cottonwood Branch and Grapevine Creek
Segments 0822A and 0822B
Assessment Units 0822A_02 and 0822B_01

Lower West Fork Trinity River
Segments 0841, 0841B, 0841C, 0841E, 0841G, 0841H, 0841J, 0841L, 0841M, 0841R, 0841T, and 0841U
Assessment Units 0841_01, 0841_02, 0841B_01, 0841C_01, 0841E_01, 0841G_01, 0841H_01, 0841J_01, 0841L_01, 0841M_01, 0841R_01, 0841T_01, and 0841U_01

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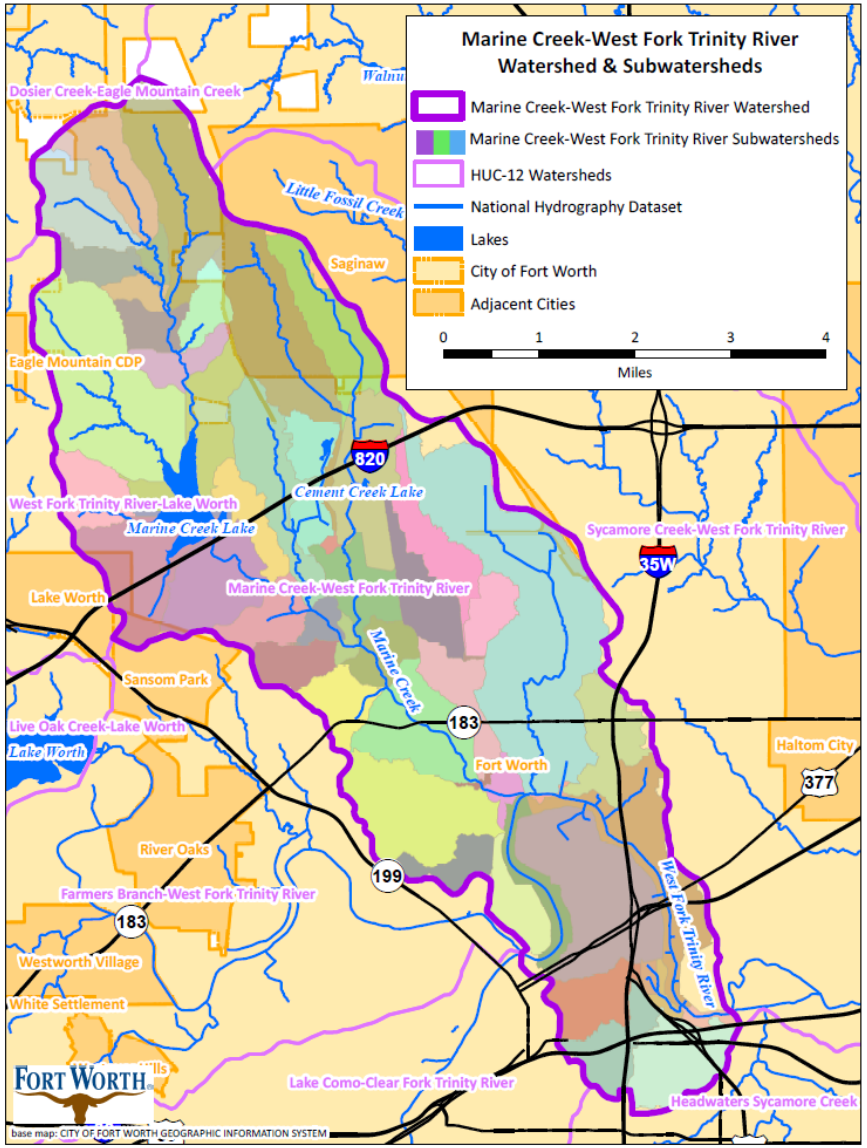
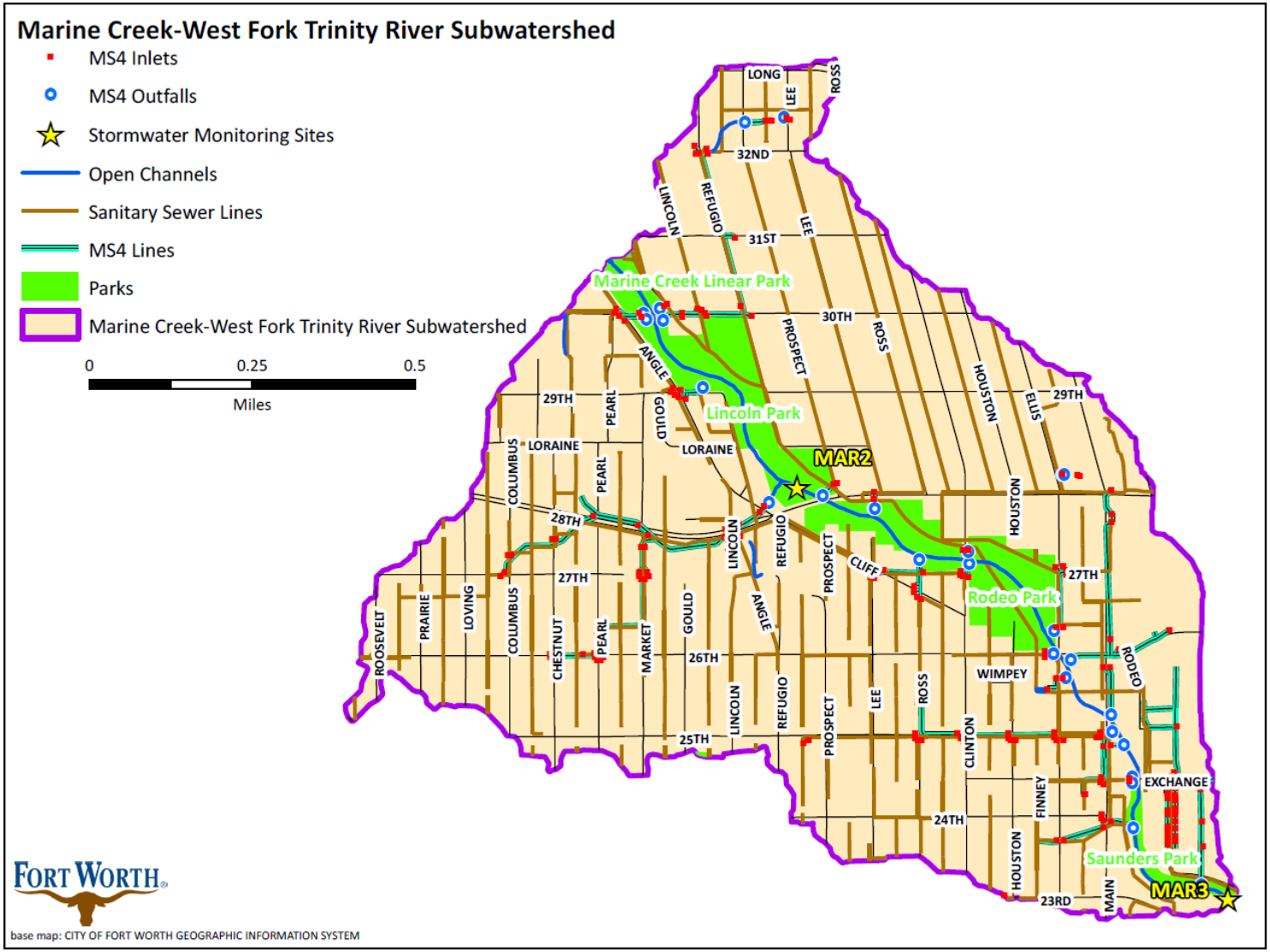
Future Plans

- Sub-watershed delineation
  - Marine Creek—Pilot Project
    - Assist in determining source of bacteria
    - Manageable areas
    - Determine focus of implementation strategies



Future Plans



Future Plans

- Have TCEQ accept our in-house data
  - Split samples show precision values below certified lab precision
    - 2013—Precision 0.60
    - 2014—Precision 0.39
    - 2015—Precision 0.26

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Questions?

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