

Brazos River Basin Highlights Report 2016



Brazos River Authority

Brazos River Basin Highlights Report 2016

Watersheds Covered



Lubbock

Abilene

Fort Worth Dallas

Waco

Austin

San Antonio

Houston

 Area Covered in 2016 BHR

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Introduction

In recent Basin Highlights Reports (BHR), water quality of 14 major subwatersheds in the Brazos River Basin were presented. For the 2014, 2015 and 2016 BHRs, the 14 major subwatersheds are subdivided in to a total of 134* smaller subwatersheds based on the USGS generated 10-digit Hydrologic Unit Codes (HUC10). The 2014 BHR characterized 51 of these HUC10 delineated subwatersheds (referred to as watersheds for the remainder of the report) within the Clear Fork of the Brazos River and the Salt and Double Mountain Forks of the Brazos River watersheds. The 2015 Brazos River Basin Highlights Report characterized 53 watersheds within the Aquilla, Bosque, Lampasas, Leon, Little River, and Upper watersheds of the Brazos River. For this 2016 Basin Highlights Report, 30 watersheds within the Central, Navasota River, Yegua Creek, Lower, and Upper Oyster Creek watersheds are characterized. The following headings and figures are included in each watershed characterization:

Watershed Description:

The full name of the watershed is given and area of watershed in square miles.

Land Use Land Cover in Watershed:

A figure is presented showing land use and land cover in the watershed. Land use land cover (LULC) was acquired for the United States Geological Survey (USGS) using the most recent, 2011 edition of National Land Cover Data (NLCD) 2006 land cover layer for the United States. Percentage surface areas of each LULC class are calculated. For purposes of this report, LULC classes used are:

- **Developed** - Includes areas with a mixture of constructed materials and vegetation in the form of lawn grasses and impervious surfaces. These areas include single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes, also, apartment complexes, row houses, and commercial/industrial areas.
- **Planted/Cultivated** - Areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20 percent of total vegetation. This class also includes areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20 percent of total vegetation. All land being actively tilled is also included in this class.
- **Herbaceous/Shrub** - Areas dominated by shrubs; less than 5 meters tall with shrub canopy typically greater than 20% of total vegetation. This class includes true shrubs, young trees in an early successional stage or trees stunted from environmental conditions. This class also includes areas dominated by grammanoid or herbaceous vegetation, generally greater than 80% of total vegetation. These areas are not subject to intensive management such as tilling, but can be utilized for grazing.
- **Forest** - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover.
- **Wetland** - Areas where forest or shrub land vegetation accounts for greater than 20 percent of vegetative cover and the soil or substrate is periodically saturated with or covered with water and areas where perennial herbaceous vegetation accounts for greater than 80 percent of vegetative cover and the soil or substrate is periodically saturated with or covered with water.
- **Water** - all areas of open water, generally with less than 25% cover or vegetation or soil.

- **Barren** - barren areas of bedrock, scarps, talus, slides, sand dunes, strip mines, gravel pits and other accumulations of earthen material. Generally, vegetation accounts for less than 15% of total cover.

Segments in Watershed:

Each assessment unit (AU) in the watershed is listed with a full name description. If there are stations in the AU monitored in fiscal year (FY) 2016, the station is listed with a full name description.

Impairments in Watershed Description:

If an AU in the watershed is impaired or if there is a concern for a use based on a screening level in the 2014 Integrated Report (IR), the type of impairment and/or the parameter of concern is listed.

Possible Contributions if Impaired:

Point Sources: Identifies possible point source contributions to the impairment.

Non-point sources: Identifies possible non-point source contributions to the impairment.

Potential non-State Agency Stakeholders:

Listed are entities that operate within the watershed that would potentially have a vested interest in water quality issues.

Actions taken if Impaired:

If actions are being taken to address the impairment in the watershed, they are listed here.

Recommendations if Impaired:

Possible next steps to address any water quality impairment in the watershed are listed here.

At the end of each section is a figure depicting the watershed. Each figure shows base satellite imagery with counties, cities, roads, the watershed of interest, AUs, monitoring stations, waste water outfalls, and any impairments or concerns in the watershed.

* Note that in the 2014 BHR this number was stated as 191 subwatersheds and in the 2015 BHR, this number was stated as 154 subwatersheds. This discrepancy was due to clipping the HUC10 watershed layer to the Brazos River Basin watershed layer generated by the Brazos River Authority. The two layers did not match well as one neared the lower portion of the Brazos River Basin. Sliver portions of subwatersheds not truly within the Brazos River Basin were inadvertently counted when the subwatersheds were totaled. The total of 134 smaller subwatersheds reported in this last report of the series is the true and correct total of subwatersheds reported on in the Brazos River Basin.

Segments in Watershed (Figure 2):

- Castleman Creek
- Upstream portion of 1242_05: Portion of Brazos River from confluence with Deer Creek in Falls County upstream to confluence with Tehuacana Creek in McLennan County
- 1242_06: Portion of Brazos River from confluence with Tehuacana Creek in McLennan County upstream to Lake Brazos Dam in McLennan County
Monitoring Station: 12038 - BRAZOS RIVER IMMEDIATELY UPSTREAM OF SH 6
SOUTHEAST OF WACO
- 1256_01: Brazos River portion of segment
- 1256_02: Lake Brazos portion of segment

Impairments in Watershed Description (Figure 2):

- None
There are concerns for chlorophyll-*a* in 1242_05 and 1256_02

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

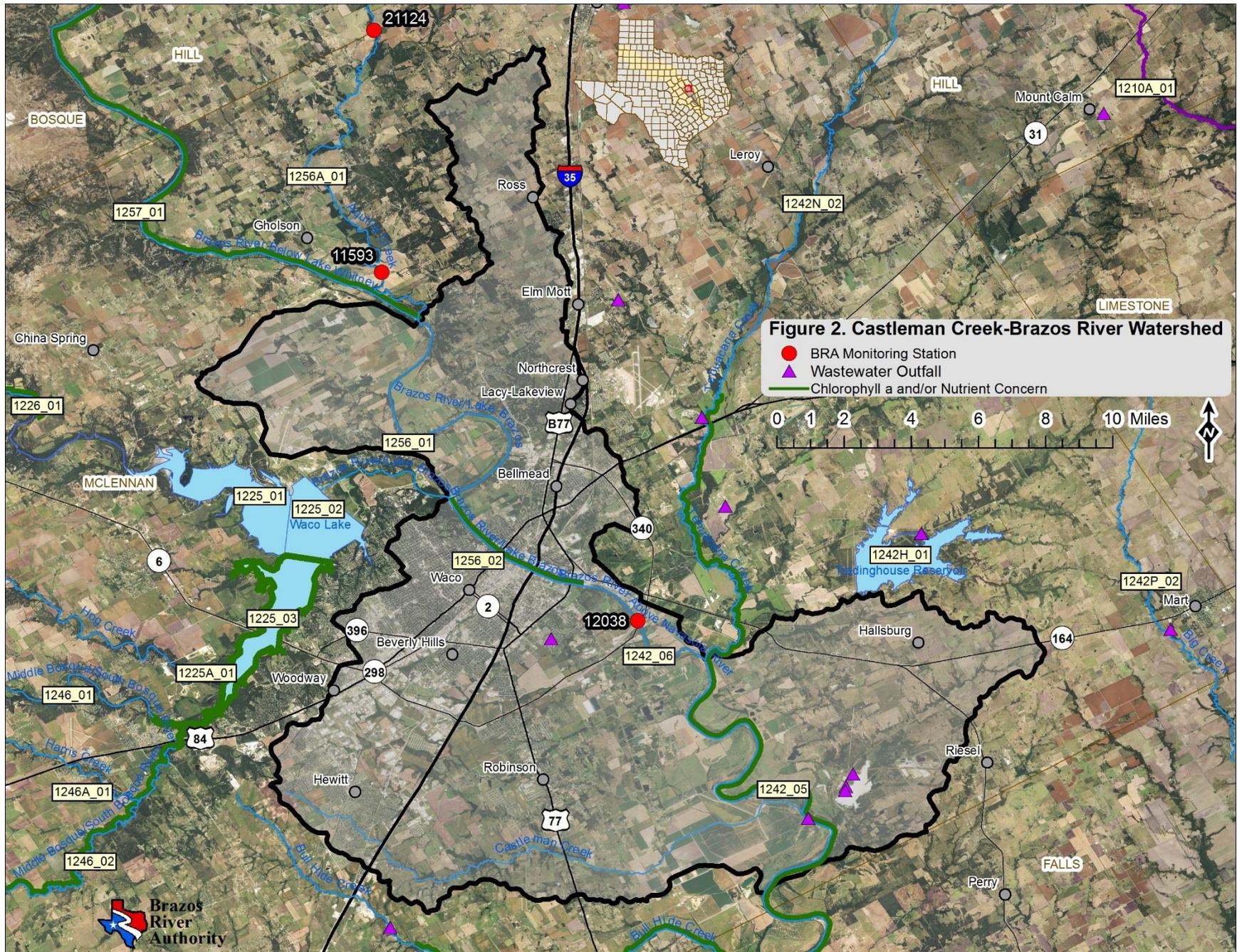
- City of Northcrest
- City of Lacy-Lakeview
- City of Belmead
- City of Waco
- City of Beverly Hills
- City of Woodway
- City of Hewitt
- City of Robinson
- City of Hallsburg
- City of Riesel
- Lone Star Growers LP
- Luminant Generatiob Co LLC
- Sandy Creek Energy Associates LP

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A



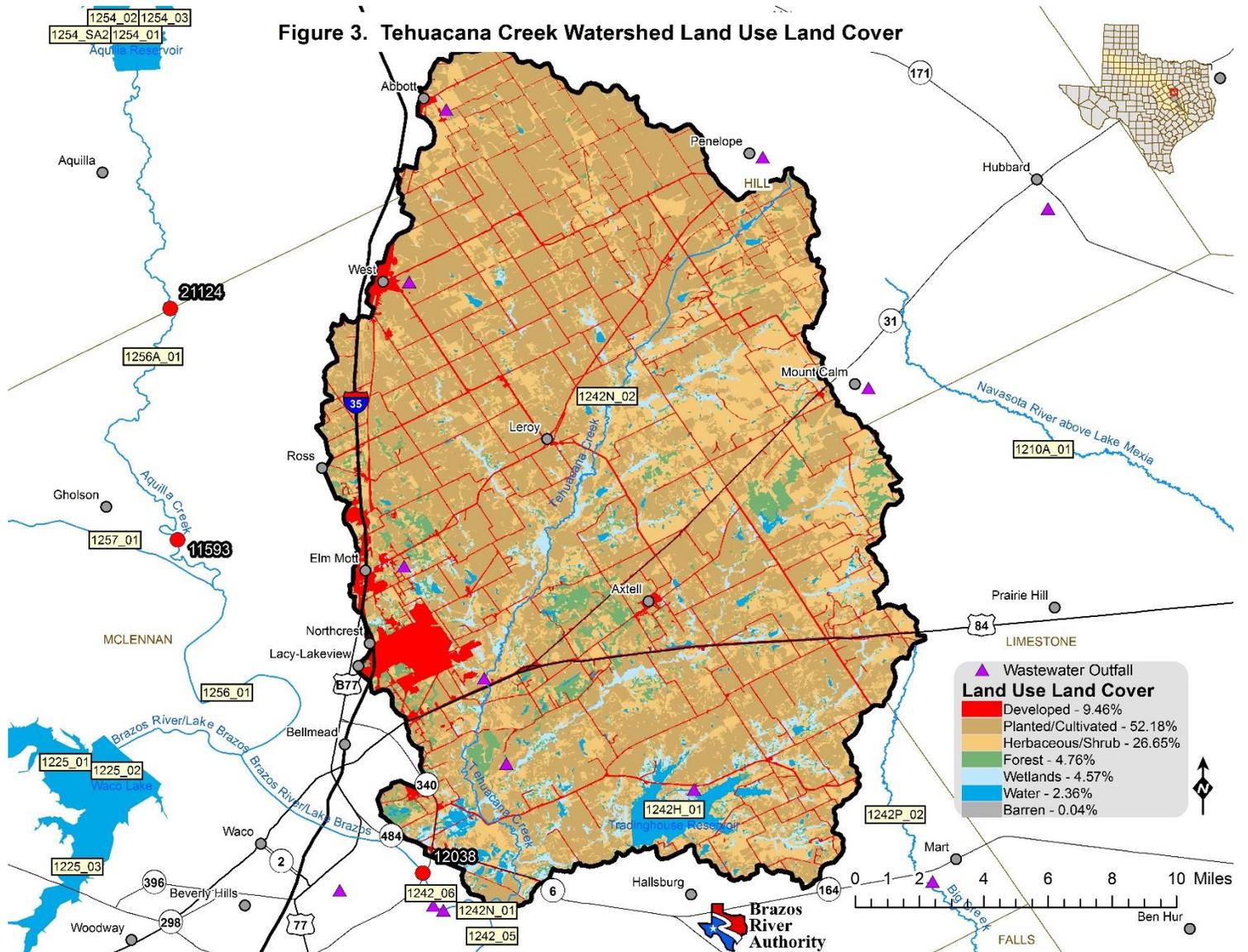
Tehuacana Creek Watershed

Watershed Description:

The Tehuacana Creek Watershed is approximately 300 square miles in area.

Land Use Land Cover in Watershed (Figure 3):

There are nine cities and six wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being herbaceous/shrub. There is a moderate amount of development in the watershed. Tradinghouse Reservoir lies within the watershed. The reservoir is used for industrial and recreational purposes.



Segments in Watershed (Figure 4):

- 1242H_01: Impounded Tradinghouse Creek, within the city of Hallsburg, McLennan County
- 1242N_01: Downstream portion of water body, from confluence with Brazos River upstream to confluence with Little Tehuacana Creek
- 1242N_02: Upstream portion, from confluence with Little Tehuacana Creek upstream to headwaters

Impairments in Watershed Description (Figure 4):

- None
There is a concern for chlorophyll-*a*, nitrate, and total phosphorus in 1242N_01.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

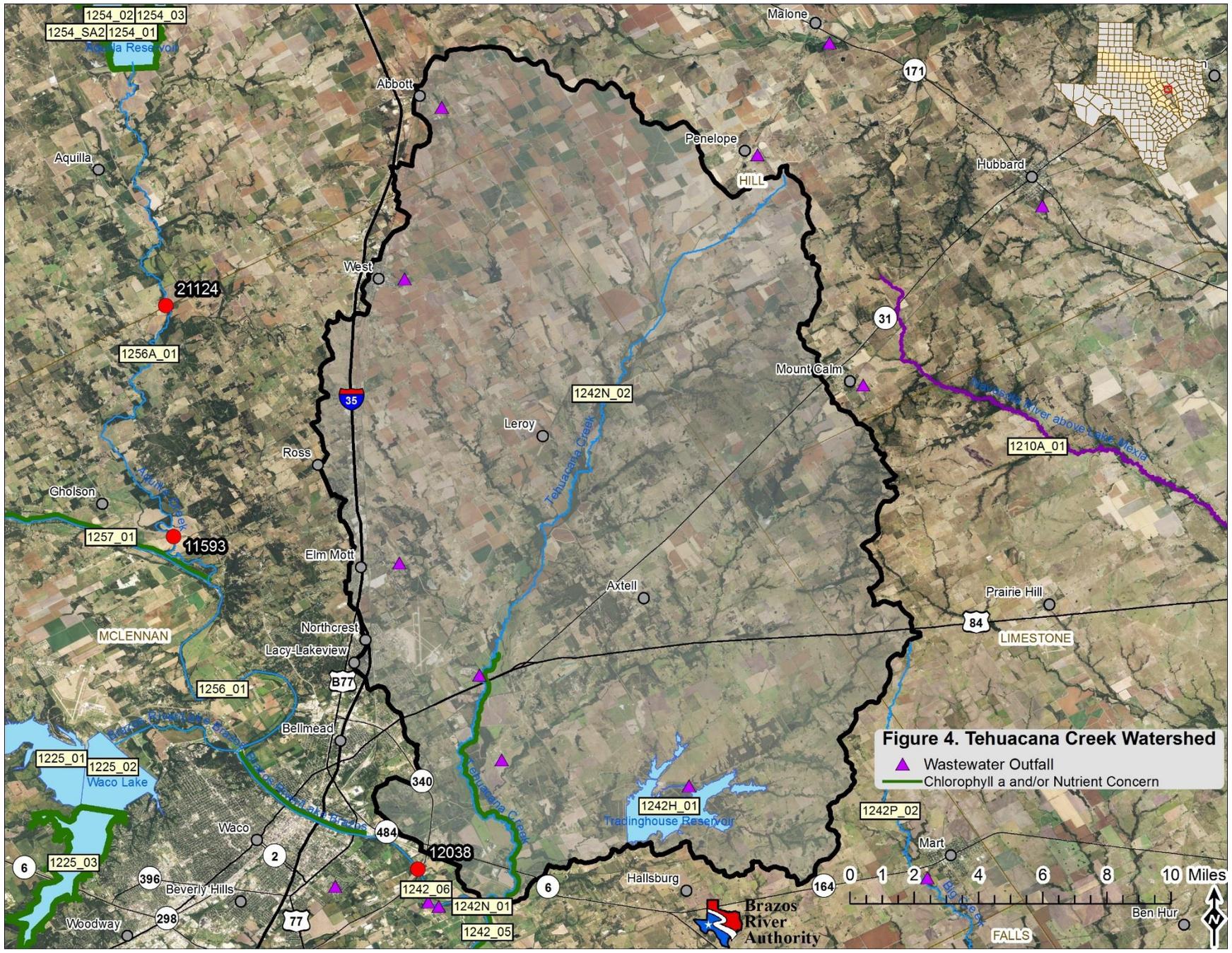
- City of Abbott
- City of West
- City of Ross
- City of Leroy
- City of Northcrest
- City of Lacy-Lakeview
- City of Belmead
- City of Waco
- City of Hallsburg
- McLennan County
- Hill County
- Limestone County
- Sanderson Farms Inc
- Methodist Children's Home
- Tradinghouse Power Co LLC
- Luminant Generation Co LLC
- Any marinas or other businesses on or that serve Tradinghouse Reservoir

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A



Segments in Watershed (Figure 6):

- Upstream portion of 1242_04: Portion of Brazos River from confluence with Pond Creek in Milam County upstream to confluence with Deer Creek in Falls County.
- Downstream portion of 1242_05: Portion of Brazos River from confluence with Deer Creek in Falls County upstream to confluence with Tehuacana Creek in McLennan County
- 1242J_01: Deer Creek an Appendix D perennial stream from the confluence of the Brazos River upstream to the confluence of Dog Branch northwest of Lott
- 1242Q_01: Portion of Bull Hide Creek from the confluence with the Brazos River in Falls County upstream to the confluence with unnamed tributary (NHD RC 12070101002570) in McLennan County.
- 1242Q_02: Portion of Bull Hide Creek from the confluence with unnamed tributary (NHD RC 12070101002570) upstream to the headwaters.
- 1242R_01: From the confluence with the Brazos River above Navasota River upstream to the confluence with North / South Cow Bayou in Falls County.

Impairments in Watershed Description (Figure 6):

- 1242J_01: Recreational Use—bacteria
There are concerns for chlorophyll-*a* in 1242_04 and 1242_05.
There is also a concern for nitrate in 1242Q_01.

Possible Contributions if Impaired:

Point Sources: There are eleven cities and three wastewater discharges in the watershed. However, the permitted discharge nearest to 1242J_01 is a pond system and does not discharge to the stream.

Non-point sources: Over 50% of the watershed is made up of planted/cultivated crops. Runoff from agriculture and ranchland could provide contributions. Herbaceous/shrubland could provide contributions from wildlife with a coverage of approximately 28%.

Potential non-State Agency Stakeholders:

- City of Waco
- City of Bellmead
- City of Lacy-Lakeview
- City of Woodway
- City of Hewitt
- City of Riesel
- City of Robinson
- City of Hewitt
- City of Hallsburg
- City of Lorena
- City of Golinda
- City of Satin
- City of Perry
- City of Bruceville-Eddy
- City of Eddy
- City of Cego
- City of Chilton
- City of Marlin

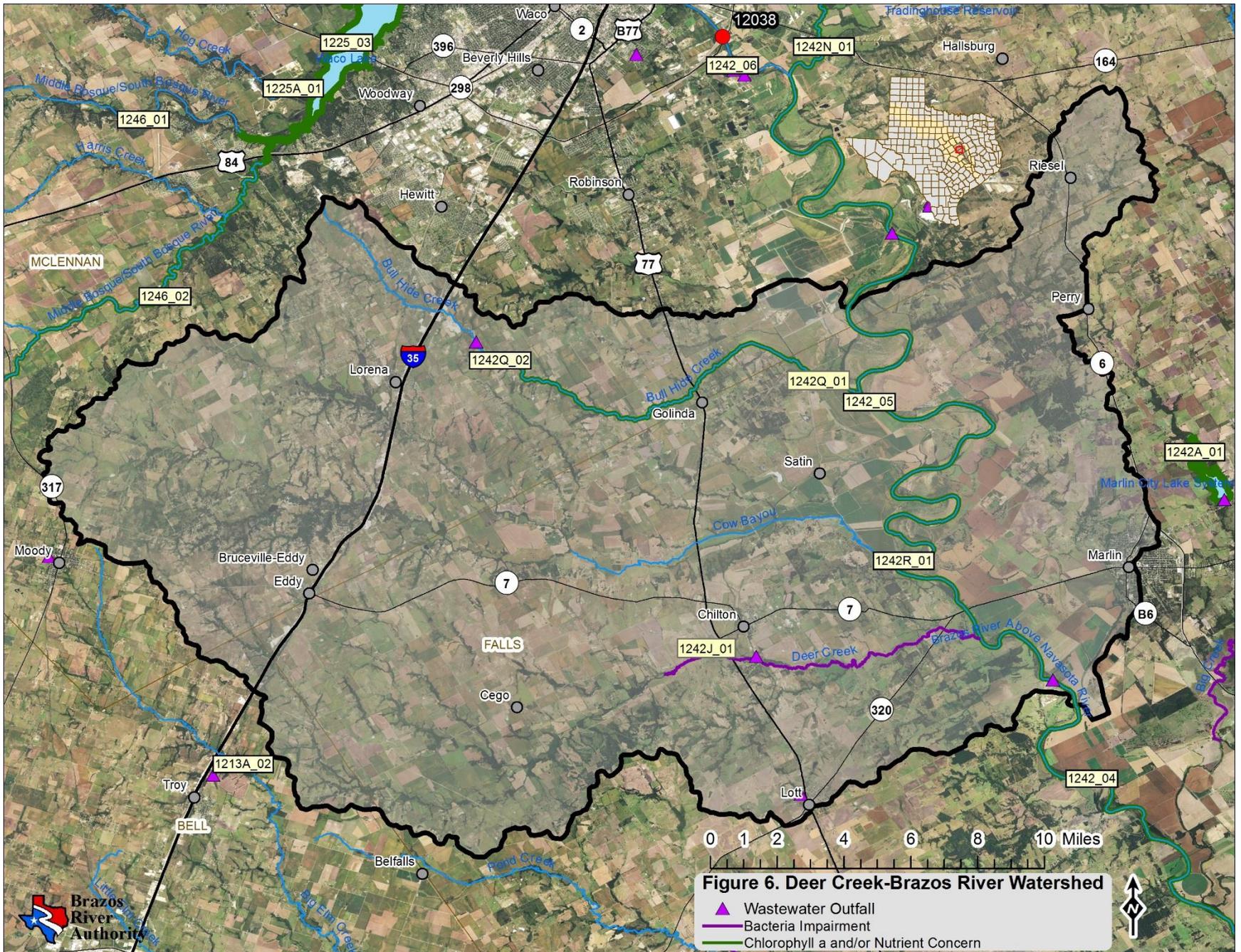
- City of Lott
- McLennan County
- Falls County
- Bell County

Actions taken if impaired:

- Additional data collection including land use/land cover analysis and watershed characterizations were performed in the Deer Creek watershed through the Two Data Collection Initiatives project administered by BRA, ending in 2013. No point sources were determined to be contributing to the impairment. Runoff from agriculture and ranchland appeared to be the most likely contributors. An RUAA study was recommended.
- An [RUAA](#) has been conducted in segment 1242J_01 and results have led to the recommendation that the segment remain classified as a Primary Contact Recreation (PCR) segment.

Recommendations if impaired:

- 1242J_01 is currently on the Watershed Action Plan (WAP) table for discussion and evaluation. Input from regional water quality monitors will be obtained during the yearly coordinated monitoring meeting.



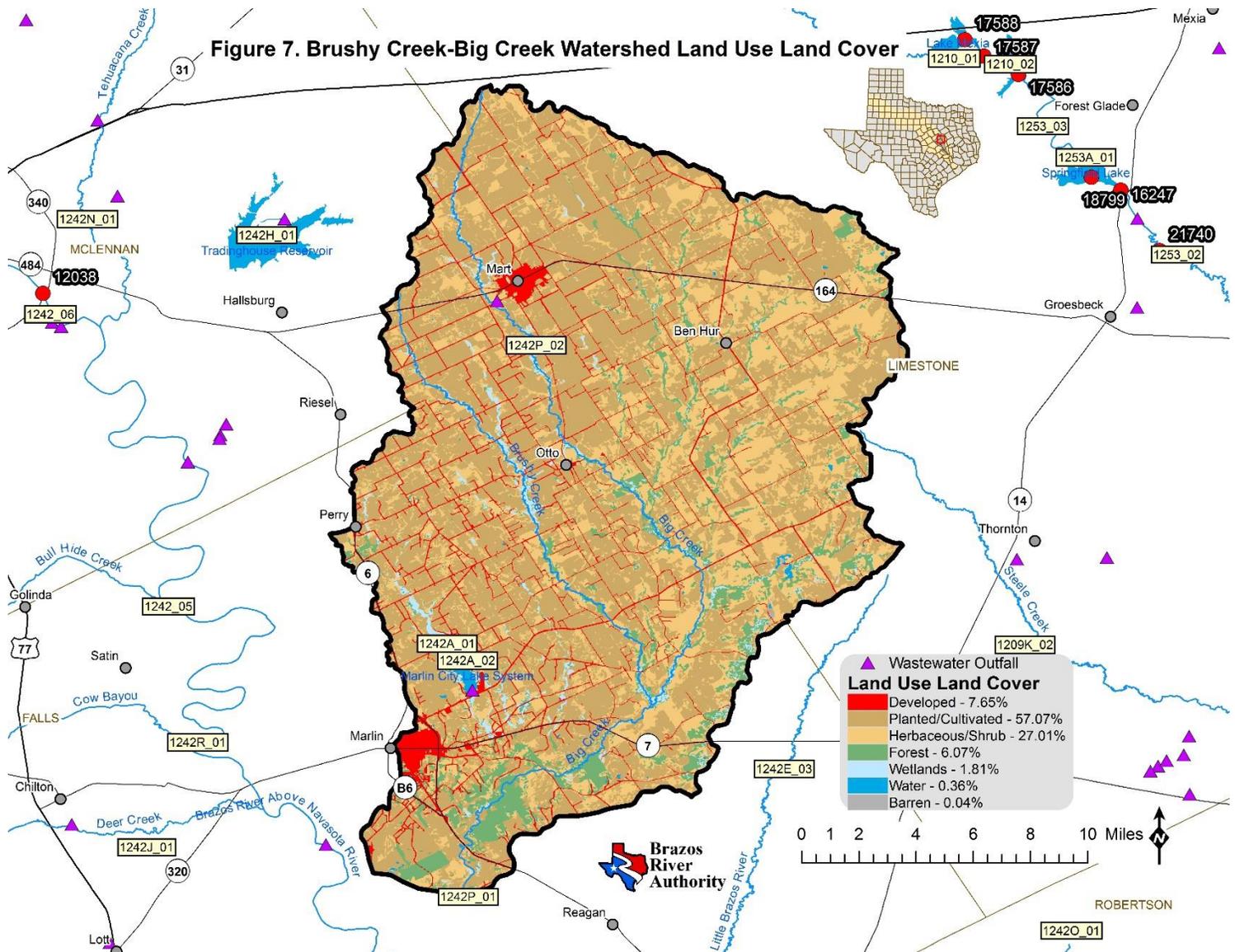
Brushy Creek-Big Creek Watershed

Watershed Description:

The Brushy Creek-Big Creek Watershed is approximately 312 square miles in area.

Land Use Land Cover in Watershed (Figure 7):

There are five cities and two wastewater outfalls in the watershed. Two reservoirs comprising The Marlin City Lake System are within the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being herbaceous/shrub. There is a moderate amount of development in the watershed.



Segments in Watershed (Figure 8):

- Brushy Creek
- 1242A_01: Old Marlin City Lake
- 1242A_02: New Marlin City Lake
- 1242P_01: Downstream portion of Big Creek
- 1242P_02: Upstream portion of Big Creek, including confluence with City of Mart WWTP rec. water

Impairments in Watershed Description (Figure 8):

- 1242P_01: Recreational Use—bacteria
There is a concern for chlorophyll-*a* and total phosphorus in 1242A_02.

Possible Contributions if Impaired:

Point Sources: There are five cities and two wastewater outfalls in the watershed.

Non-point sources: Approximately 57% of the watershed is made up of planted/cultivated crops. Runoff from agriculture and rangeland could provide contributions. Herbaceous/shrubland could provide contributions from wildlife with a coverage of approximately 27%. The majority of forested land cover is along the banks of 1242P_01 as well, providing attractive habitat near the stream.

Potential non-State Agency Stakeholders:

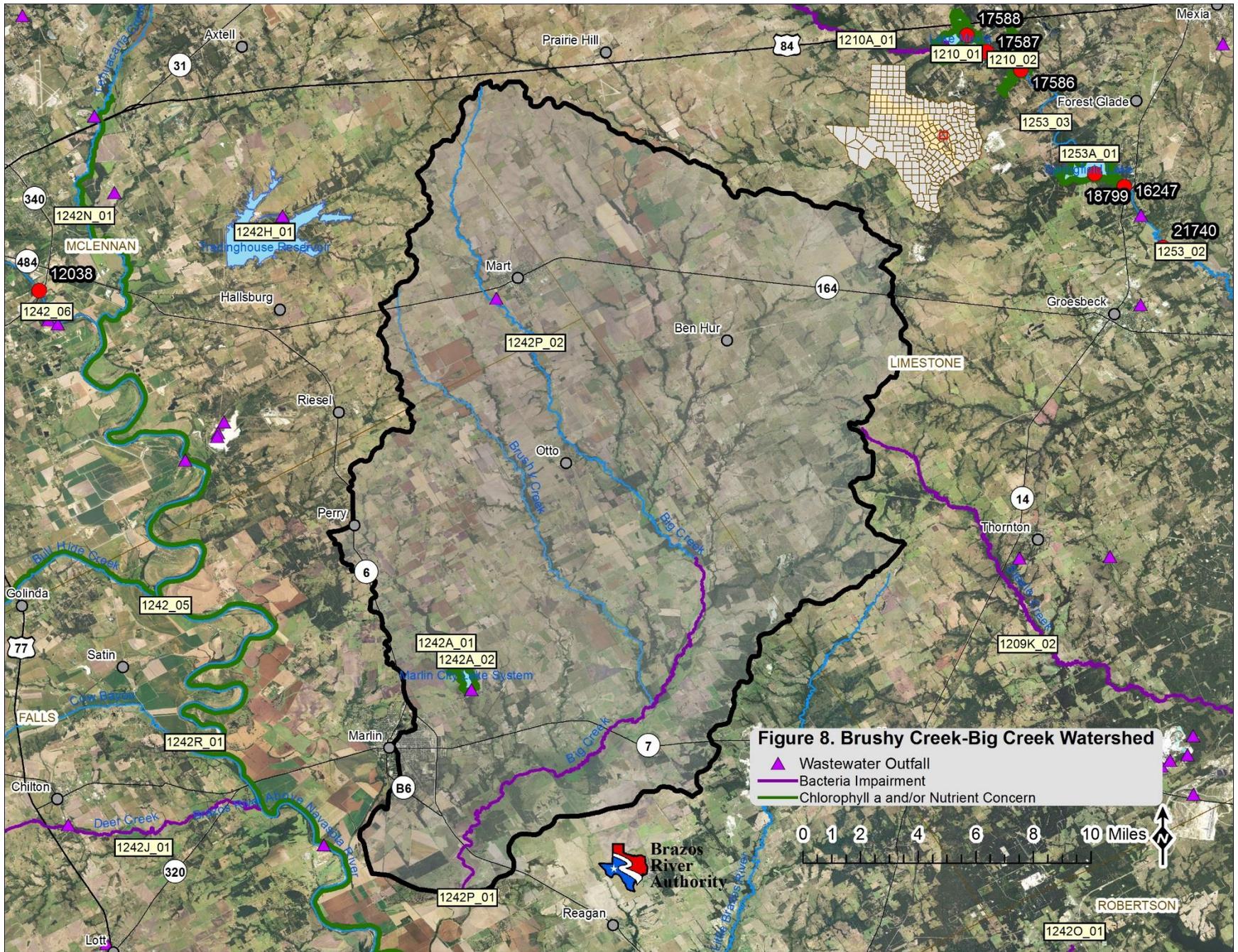
- City of Mart
- City of Ben Hur
- City of Otto
- City of Perry
- City of Marlin
- McLennan County
- Falls County
- Limestone County
- Any marinas or other businesses on or that serve Marlin City Lake System

Actions taken if impaired:

- An [RUAA](#) has been completed for 1242P_01. Results have led to the recommendation that the recreational use of these segments be revised to secondary contact recreation 1 (SCR1).

Recommendations if impaired:

- Await EPA review and approval of revised recreational use for 1242P_01 before a management strategy is selected.



Segments in Watershed (Figure 10):

- Middle portion of 1242_04: Portion of Brazos River from confluence with Pond Creek in Milam County upstream to confluence with Deer Creek in Falls county.

Monitoring Stations:

12032 - BRAZOS RIVER IMMEDIATELY DOWNSTREAM OF FM 413 NORTHEAST OF ROSEBUD

- Upstream portion of 1242E_02: Portion of Little Brazos River from confluence with Walnut Creek in Robertson County upstream to confluence with Fish Creek in Falls County.
- 1242E_03: Portion of Little Brazos River from confluence with Fish Creek in Falls county upstream to headwaters in Limestone County.

Impairments in Watershed Description (Figure 10):

- None

There is a concern for chlorophyll-*a* in 1242_04.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

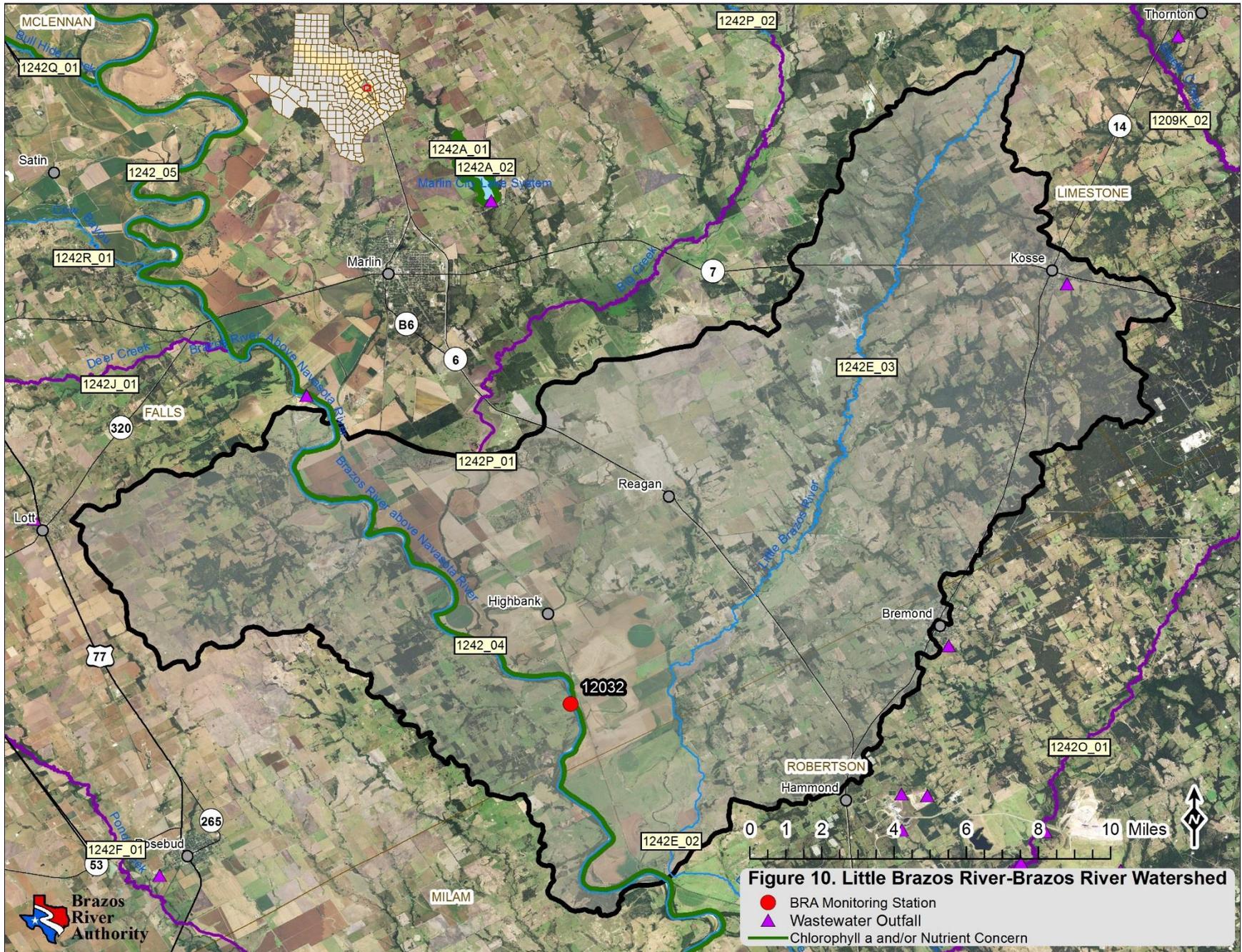
- City of Kosse
- City of Reagan
- City of Highbank
- City of Bremond
- Falls County
- Milam County
- Robertson County
- Limestone County

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A



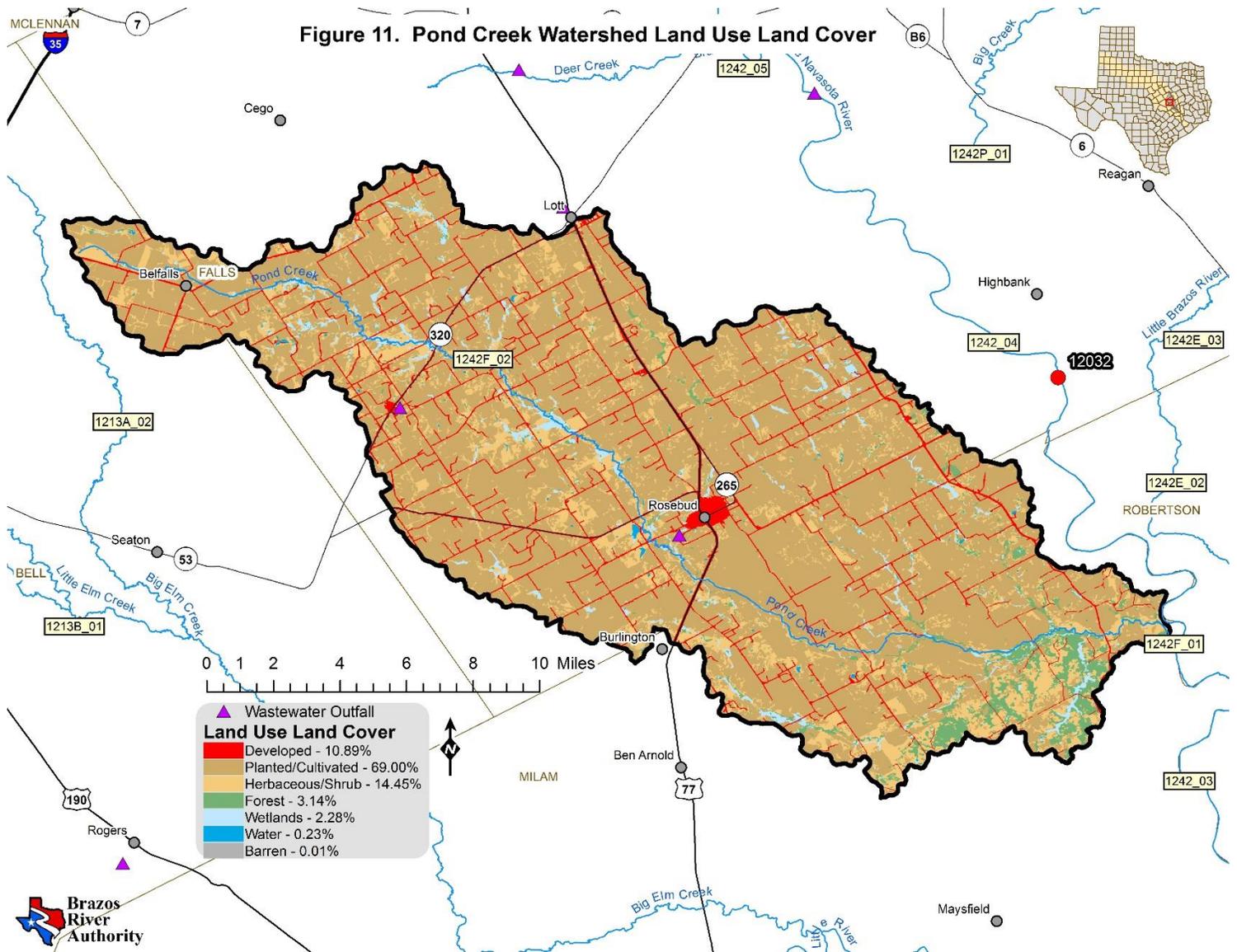
Pond Creek Watershed

Watershed Description:

The Pond Creek Watershed is approximately 229 square miles in area.

Land Use Land Cover in Watershed (Figure 11):

There are two cities and two wastewater outfalls in the watershed. Dominant landcover is planted/cultivated. There is a fair amount of herbaceous/shrub and developed area in the watershed.



Segments in Watershed (Figure 12):

- 1242F_01: Pond Creek from the Brazos confluence upstream to Live Oak Creek confluence.
- 1242F_02: Pond Creek from the Live Oak Creek confluence to the headwaters 0.18 km north of FM 935 in Bell County.

Impairments in Watershed Description (Figure 12):

- 1242F_01: Recreational Use—bacteria

Possible Contributions if Impaired:

Point Sources: There are two cities and two wastewater outfalls in the watershed.

Non-point sources: Planted/cultivated crops account for 69% of the land use in the watershed. Runoff from agriculture and ranchland could provide contributions. Approximately 19% of the watershed has land cover suitable for wildlife as well.

Potential non-State Agency Stakeholders:

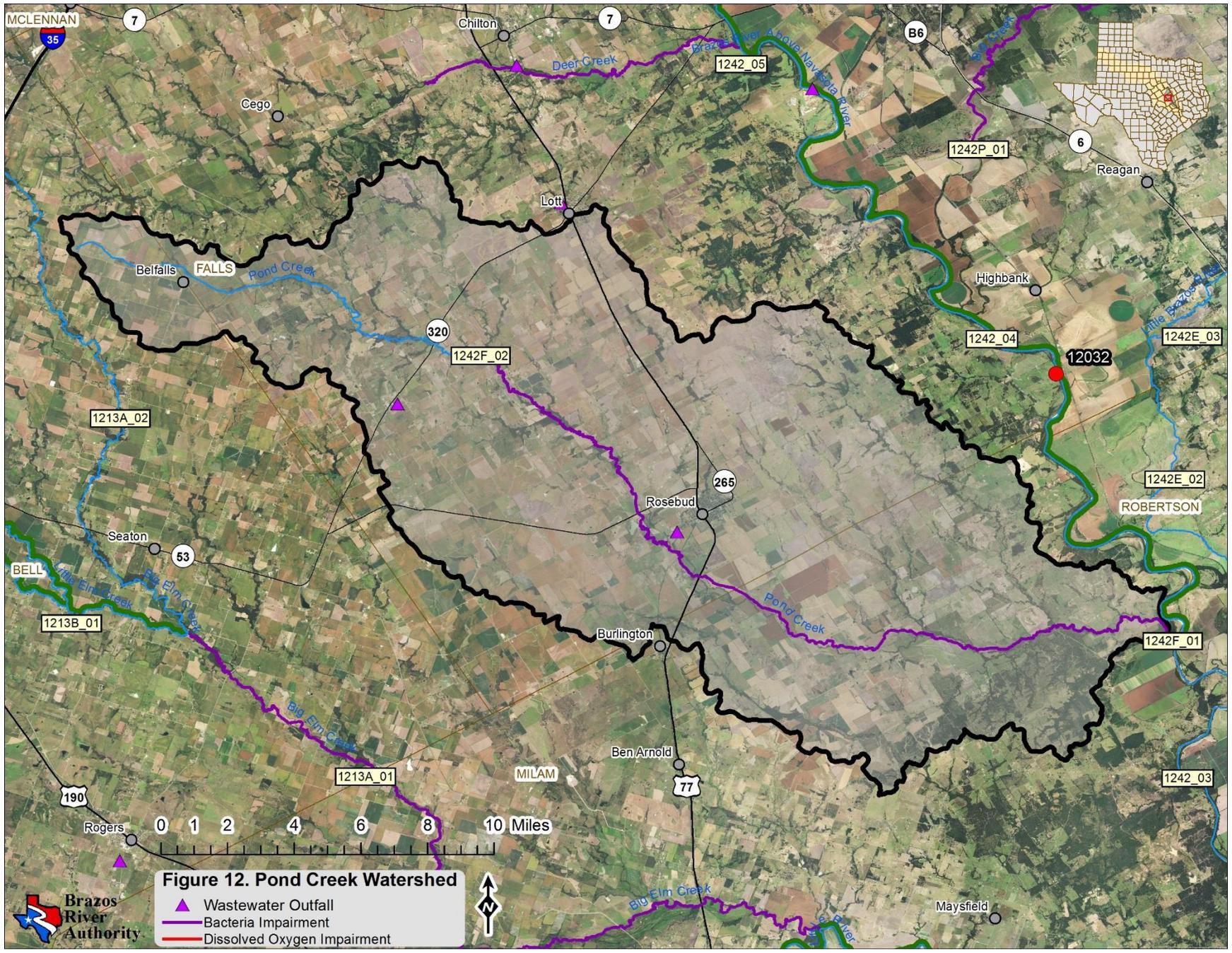
- City of Belfalls
- City of Rosebud
- Westphalia Water & Sewer Supply Corp
- Bell County
- Falls County
- Milam County

Actions taken if impaired:

- An [RUAA](#) has been conducted in segment 1242F_01 and results have led to the recommendation that the segment remain classified as a Primary Contact Recreation (PCR) segment.

Recommendations if impaired:

- 1242F_01 is currently on the Watershed Action Plan (WAP) table for discussion and evaluation. Input from regional water quality monitors will be obtained during the yearly coordinated monitoring meeting.



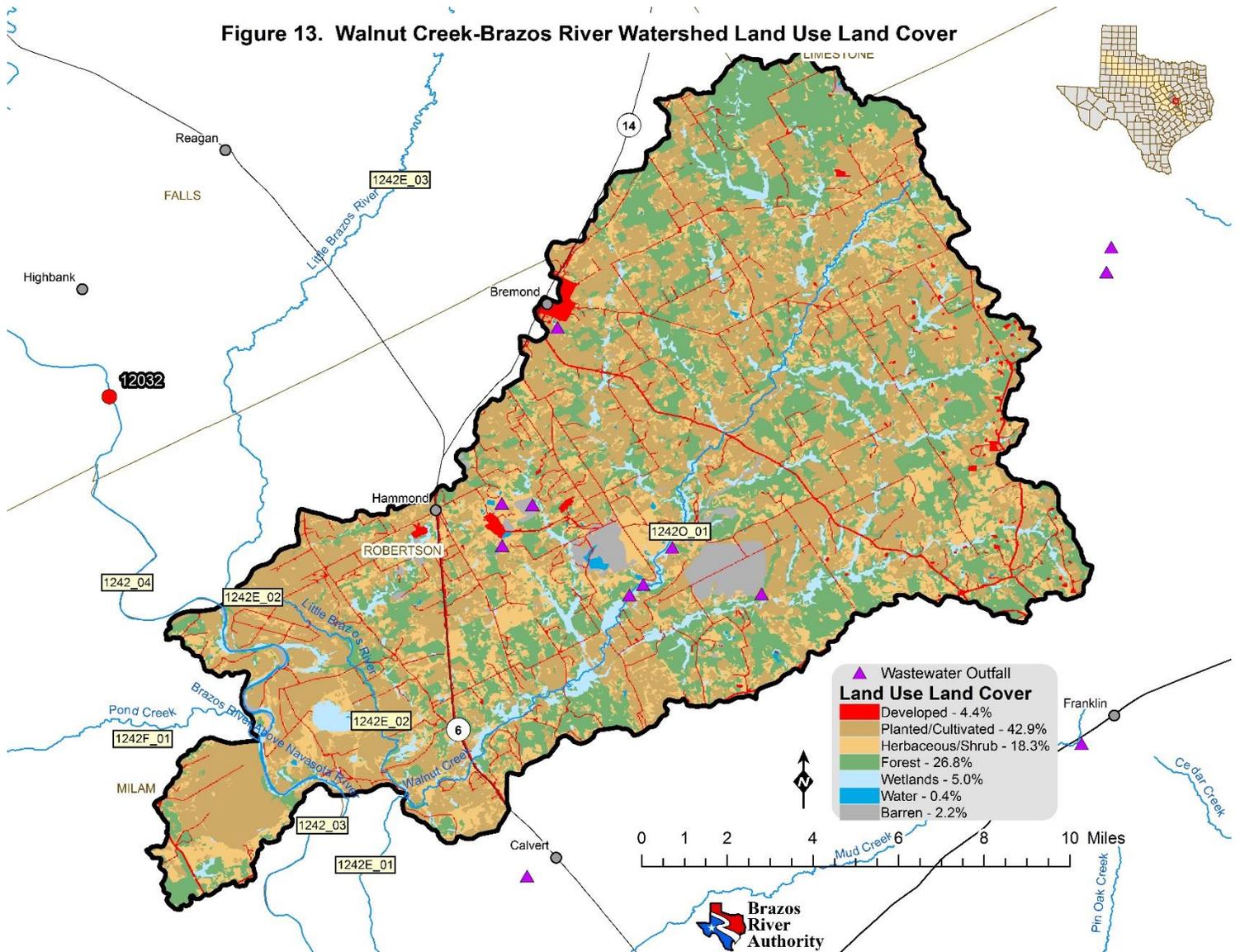
Walnut Creek-Brazos River Watershed

Watershed Description:

The Walnut Creek-Brazos River Watershed is approximately 171 square miles in area.

Land Use Land Cover in Watershed (Figure 13):

There are two cities and seven wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a moderate amount of herbaceous/shrub area in the watershed. There is a larger than typical percentage of barren land cover due to mining activity in the watershed.



Segments in Watershed (Figure 14):

- Upstream portion of 1242_03: Portion of Brazos River from confluence with Little River upstream to confluence with Pond Creek in Milam County.
- Downstream portion of 1242_04: Portion of Brazos River from confluence with Pond Creek in Milam County upstream to confluence with Deer Creek in Falls county.
- Downstream portion of 1242E_02: Portion of Little Brazos River from confluence with Walnut Creek in Robertson County upstream to confluence with Fish Creek in Falls County.
- 1242O_01: Walnut Creek from the confluence with the Little Brazos River in Robertson County, upstream to the headwaters, one mi south of White Rock

Impairments in Watershed Description (Figure 14):

- 1242O_01: Recreational Use—bacteria
There is a concern for chlorophyll *a* in 1242_04.

Possible Contributions if Impaired:

Point Sources: There are two cities and seven wastewater outfalls in the watershed.

Non-point sources: Approximately 50% of the watershed has land cover suitable for wildlife. Runoff from agriculture and ranchland could provide contributions as well with planted/cultivated crops accounting for approximately 43% of the land use in the watershed.

Potential non-State Agency Stakeholders:

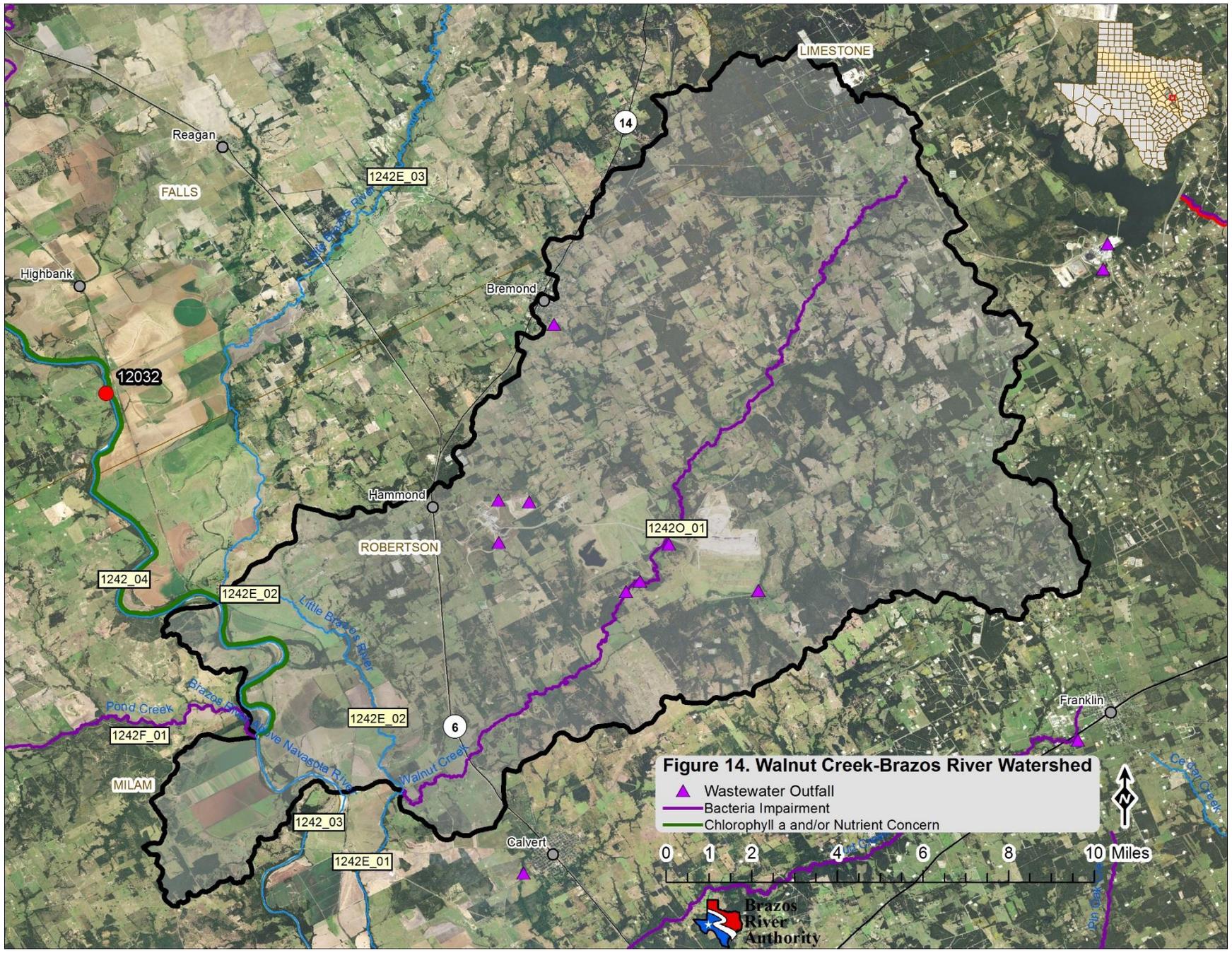
- City of Bremond
- City of Hammond
- Robertson County
- Milan County
- Limestone County
- KT Mining Inc.
- Optim Energy Twin Oaks LP

Actions taken if impaired:

- [RUAA](#) fieldwork is complete for 1242O_01.

Recommendations if impaired:

- Await TCEQ review of 1242O_01 RUAA report and recommendation before a management strategy is selected.



Segments in Watershed (Figure 16):

- Cedar Creek
- Upstream portion of 1242_02: Portion of Brazos River from confluence with Thompson's Creek in Brazos County upstream to confluence with Little River in Milam County.
Monitoring Station: 15767 - BRAZOS RIVER AT SH 21 11 MILES NORTHEAST OF CALDWELL
- 1242_03: Portion of Brazos River from confluence with Little River upstream to confluence with Pond Creek in Milam County.
- 1242E_01: Portion of Little Brazos River from confluence with Brazos River in Brazos County upstream to confluence with Walnut Creek in Robertson County.
Monitoring Station: 11591 - LITTLE BRAZOS RIVER IMMEDIATELY UPSTREAM OF SH 21 WEST OF BRYAN
- 1242I_01: Campbell's Creek from the confluence with the Little Brazos River upstream to the headwaters, one mi west of Old San Antonio Road
- 1242K_01: Mud Creek from confluence with the Little Brazos River, upstream to the confluence with Touchstone Branch and Wolf Den Branch, in Robertson County
- 1242L_01: Pin Oak Creek from the confluence with the Little Brazos River in Robertson County upstream to the headwaters, 2.07 mi south of Franklin
- 1242M_01: Spring Creek from the confluence with the Little Brazos River in Robertson County, upstream to the headwaters, 1.5 mi north of FM 391

Impairments in Watershed Description (Figure 16):

- 1242I_01, 1242K_01, 1242L_01 and 1242M_01: Recreational Use—bacteria
There is a concern for chlorophyll-*a* in 1242_02.

Possible Contributions if Impaired:

Point Sources: There are nine cities and six wastewater treatment plants in the watershed.

Non-point sources: Approximately 44% of the watershed is made up of planted/cultivated crops. However, near the impaired segments, forested land cover (making up 30% of the watershed) is the dominant land cover, providing attractive habitat for wildlife near these segments.

Potential non-State Agency Stakeholders:

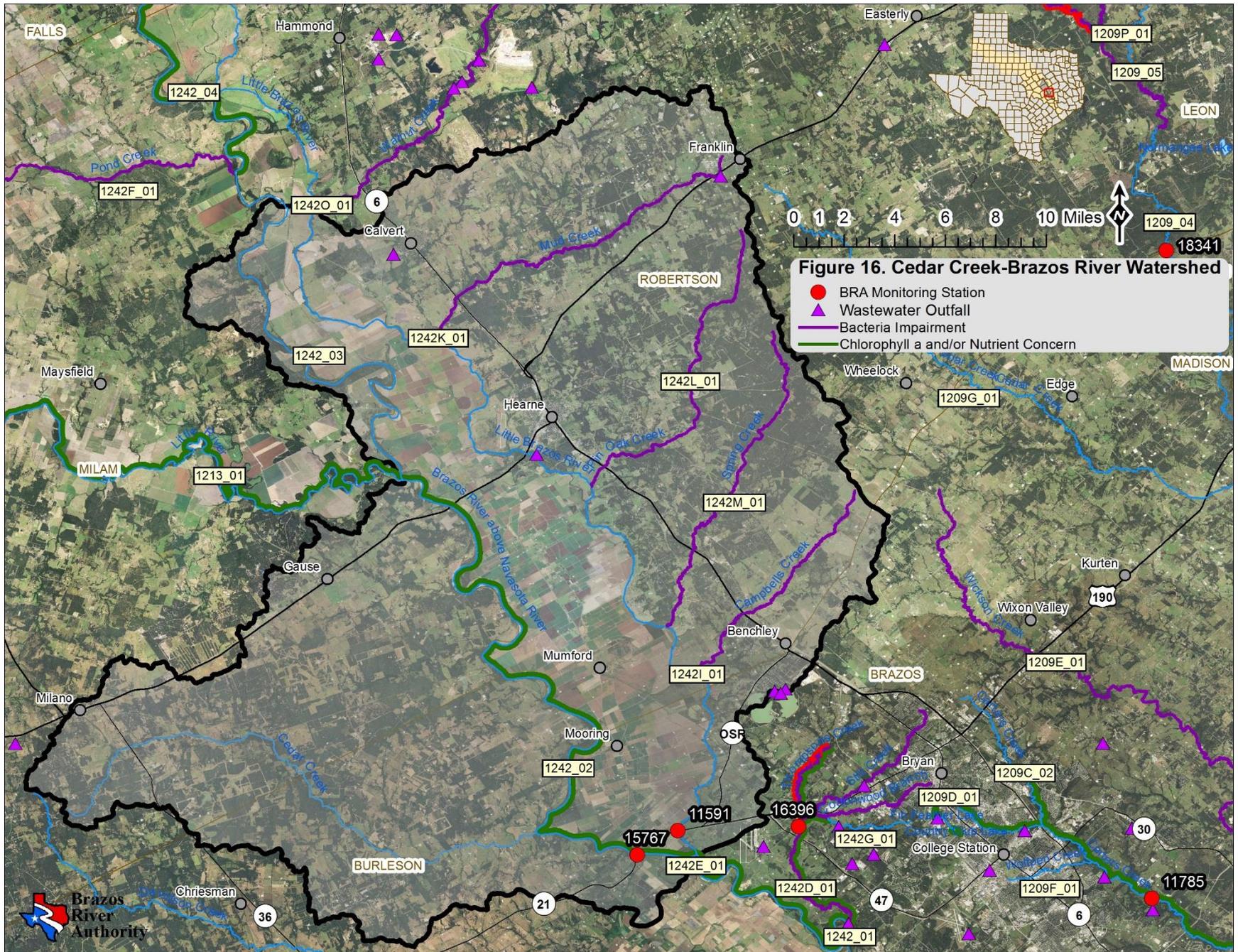
- City of Calvert
- City of Franklin
- City of Hearne
- City of Gause
- City of Milano
- City of Mumford
- City of Benchley
- City of Mooring
- City of Bryan
- Milam County
- Robertson County
- Brazos County
- Burleson County

Actions taken if impaired:

- [RUAA](#) fieldwork is complete for 1242I_01, 1242K_01, 1242L_01 and 1242M_01.

Recommendations if impaired:

- Await TCEQ review of 1242I_01, 1242K_01, 1242L_01 and 1242M_01 RUAA reports and recommendations before a management strategy is selected.



Segments in Watershed (Figure 18):

- Old River
- 1242_01: Brazos River above Navasota River, portion of Brazos River from confluence with Navasota River upstream to confluence with Thompson's Creek in Brazos County.
- 1242_02: Brazos River above Navasota River, portion of Brazos River from confluence with Thompson's Creek in Brazos County upstream to confluence with Little River in Milam County.
- 1242B_01: Portion of Cottonwood Branch from confluence with Still Creek upstream to unnamed tributary (NHD RC 12070101000835) in Brazos County.
- 1242B_02: Portion of Cottonwood Branch from confluence with unnamed tributary (NHD RC 12070101000835) upstream to headwaters in Brazos County.
- 1242C_01: Perennial stream portion of Still Creek from the confluence with Thompsons Creek upstream to the confluence with Cottonwood Branch; Appendix D.
- 1242C_02: Portion of Still Creek from confluence with Cottonwood Branch upstream to headwaters in Brazos County near US 190.
- 1242D_01: Thompsons Creek an Appendix D perennial stream from the confluence of the Brazos River upstream to the confluence of Still Creek in Brazos County.
Monitoring Station: 16396 - THOMPSONS CREEK IMMEDIATELY UPSTREAM OF SILVERHILL ROAD 765 METERS UPSTREAM OF SH 47 WEST OF BRYAN
- 1242D_02: Thompsons Creek an Appendix D intermittent stream with perennial pools from the confluence of Still Creek upstream to the confluence of Thompson's Branch, north of FM 1687
- 1242G_01: Unnamed Tributary of Cottonwood Branch, Intermittent stream with perennial pools from the confluence with Cottonwood Branch upstream to the headwaters.

Impairments in Watershed Description (Figure 18):

- 1242B_01, 1242B_02, 1242C_01, 1242C_02, 1242D_01: Recreational Use—bacteria
 - 1242D_02: : Aquatic Use – depressed dissolved oxygen and Recreational Use – bacteria
- There are concerns for nitrate and total phosphorus in 1242D_01. There are also concerns for ammonia and chlorophyll-*a* in 1242D_02. There are concerns for chlorophyll-*a* in 1242_02.

Possible Contributions if Impaired:

Point Sources: There are five cities and thirteen wastewater outfalls in the watershed.

Non-point sources: Approximately 60% of the watershed is made up of planted/cultivated crops. However, near two (1242B and 1242C) of the three impaired segments, developed land cover is the dominant land cover, allowing for municipal and urban runoff contribution near these segments.

Potential non-State Agency Stakeholders:

- City of Bryan
- City of College Station
- City of Tunis
- City of Snook
- City of Wilcox
- Brazos County
- Burleson County
- Sanderson Farms, Inc
- Texas A&M University
- HYDER SYED N

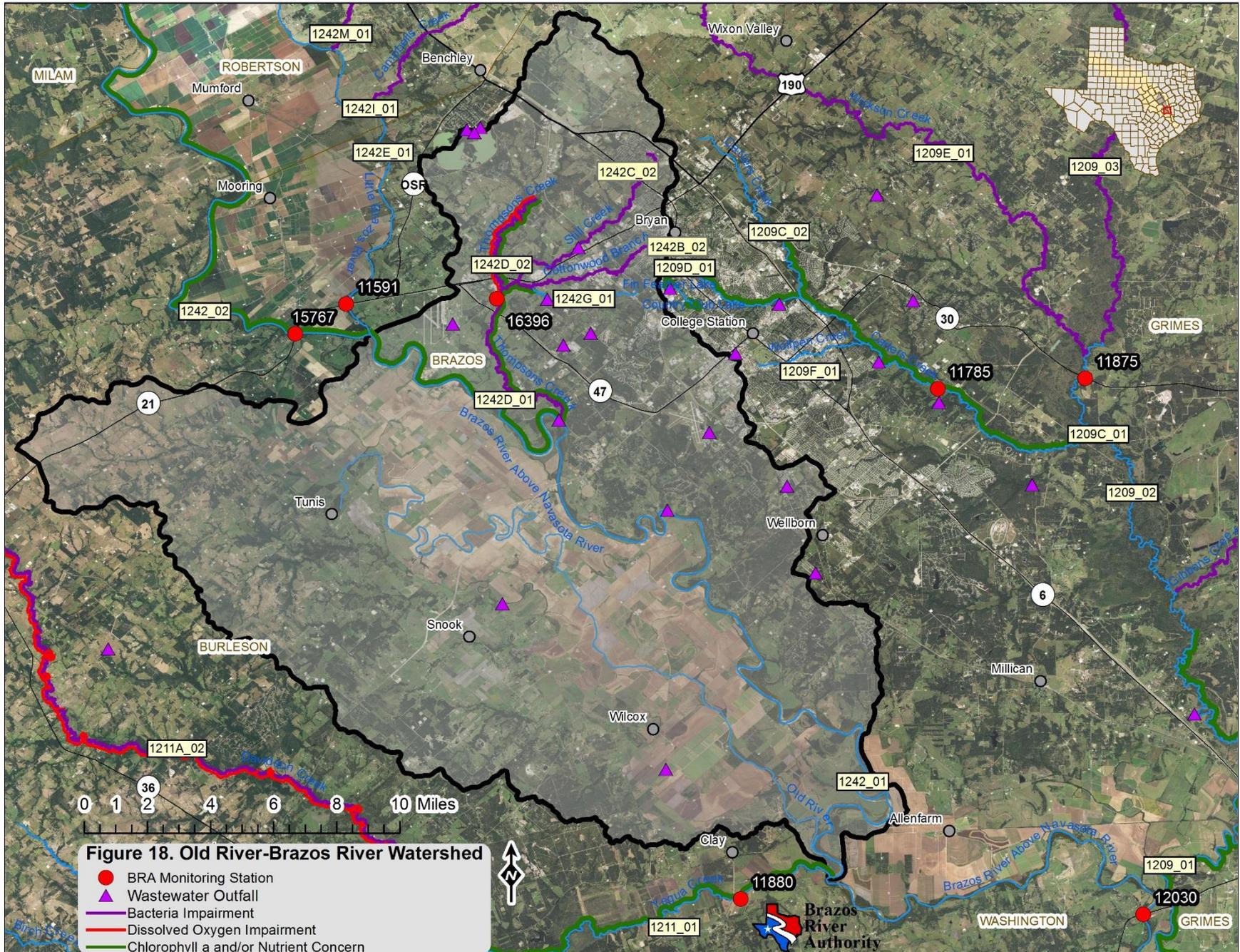
- Five Nine Seven Limited Partnership
- Manitou Ltd Inc
- Wellborn Special Utility District
- TCB Rental Inc

Actions taken if impaired:

- To address the depressed dissolved oxygen impairment, a Use Attainability Analysis (UAA) was performed on 1242D_02 through the Two Data Collection Initiatives project administered by BRA, ending in 2013. The UAA was performed to determine if the existing aquatic life use (ALU) and dissolved oxygen (DO) criteria were appropriate, and if not, provide data for establishing new standards. Findings suggested that ALU designations for 1242D_02 should be hydrologically-based. Differential ALU designations may be necessary for physical habitat, benthic macroinvertebrates, and fish. Flow-dependent DO criteria may also be required.
- RUAs have been completed for [1242B](#), [1242C](#), and [1242D](#). Results have led to the recommendation that the recreational use of segments 1242B and 1242D be revised to secondary contact recreation 1 (SCR1) and that segment 1242C remain classified as a Primary Contact Recreation (PCR) segment.

Recommendations taken if impaired:

- Await EPA review and approval of revised recreational use for 1242B and 1242D before a management strategy is selected.
- 1242C is currently on the Watershed Action Plan (WAP) table for discussion and evaluation. Input from regional water quality monitors will be obtained during the yearly coordinated monitoring meeting.



Segments in Watershed (Figure 20):

- Christmas Creek
- 1210_01: Lake Mexia, eastern end of reservoir, from dam to RR 2681 east of Washington Park.
Monitoring Station: 17588 - LAKE MEXIA SOUTH OF US 84 515 METERS SOUTH AND 1.03 KILOMETERS EAST OF INTERSECTION OF US 84 AND FM 2310 11 KILOMETERS WEST OF MEXIA
- 1210_02: Lake Mexia, Western end, from point where reservoir begins to widen, to upper end.
Monitoring Station: 17586 - LAKE MEXIA 152 METERS NORTH AND 261 METERS WEST OF SOUTHWESTERN EDGE OF DAM 11 KILOMETERS WEST OF MEXIA
Monitoring Station: 17587 - LAKE MEXIA 67 METERS SOUTH AND 264 METERS EAST OF INTERSECTION OFFM 3437 AND REDBUD 11 KILOMETERS WEST OF MEXIA
- 1210A_01: Navasota River above Lake Mexia, from the confluence with the headwaters of Lake Mexia in Limestone County to a point 1.25 mi upstream of SH 31 in Hill County.
- 1253_01: Navasota River below Lake Mexia, from headwaters of Lake Limestone upstream to confluence with Plummer's Creek.
Monitoring Station: 12126 - UPPER NAVASOTA RIVER 81 METERS DOWNSTREAM OF SH 164 EAST OF GROESBECK
Monitoring Station: 21741 - NAVASOTA RIVER APPROXIMATELY 1.75 KM UPSTREAM OF SH 164
- 1253_02: Navasota River below Lake Mexia, from confluence with Plummer's Creek upstream to Springfield Lake.
Monitoring Station: 16247 - SPRINGFIELD LAKE NEAR DAM 69 METERS WEST AND 65 METERS NORTH OF SOUTHERN EDGE OF DAM 5.2 MILES NORTH OF GROESBECK
Monitoring Station: 21740 - NAVASOTA RIVER APPROXIMATELY 40 METERS DOWNSTREAM OF LIMESTONE CR 412 NE OF GROESBECK
- 1253_03: Navasota River below Lake Mexia, from headwaters of Springfield Lake upstream to confluence with Lake Mexia.
- 1253A_01: Springfield Lake, impoundment of Navasota River below Lake Mexia in Limestone County.
Monitoring Station: 18799 - SPRINGFIELD LAKE 535 M SOUTH AND 600 M EAST OF NAVASOTA RIVER MOUTH AND APPROXIMATELY 1700 M UPSTREAM OF THE DAM

Impairments in Watershed Description (Figure 20):

- 1210A_01: Recreational Use—bacteria
There are concerns for chlorophyll-*a* and depressed dissolved oxygen in 1210_01 and 1253_01.
There are also concerns for chlorophyll-*a* and total phosphorus in 1210_02 and 1253A_01.

Possible Contributions if Impaired:

Point Sources: There are five cities and six wastewater outfalls in the watershed.

Non-point sources: With nearly equal amounts of planted/cultivated and herbaceous/shrub landcover dominating the watershed, runoff from agriculture and rangeland as well as could wildlife could provide contributions.

Potential non-State Agency Stakeholders:

- City of Coolidge
- City of Mount Calm

- City of Mexia
- City of Prairie Hill
- City of Groesbeck
- Limestone County
- Hill County
- Any marinas or other businesses on or that serve Lake Mexia or Springfield Lake (Ft. Parker Lake)

Actions taken if impaired:

- An [RUAA](#) was completed, reviewed, recommendations were made, and EPA approved [revising](#) 1210A to a designated use of secondary contact recreation 1 (SCR1). This will be reflected in the 2016 draft IR.

Recommendations if impaired:

- Await publication of the draft 2016 IR.

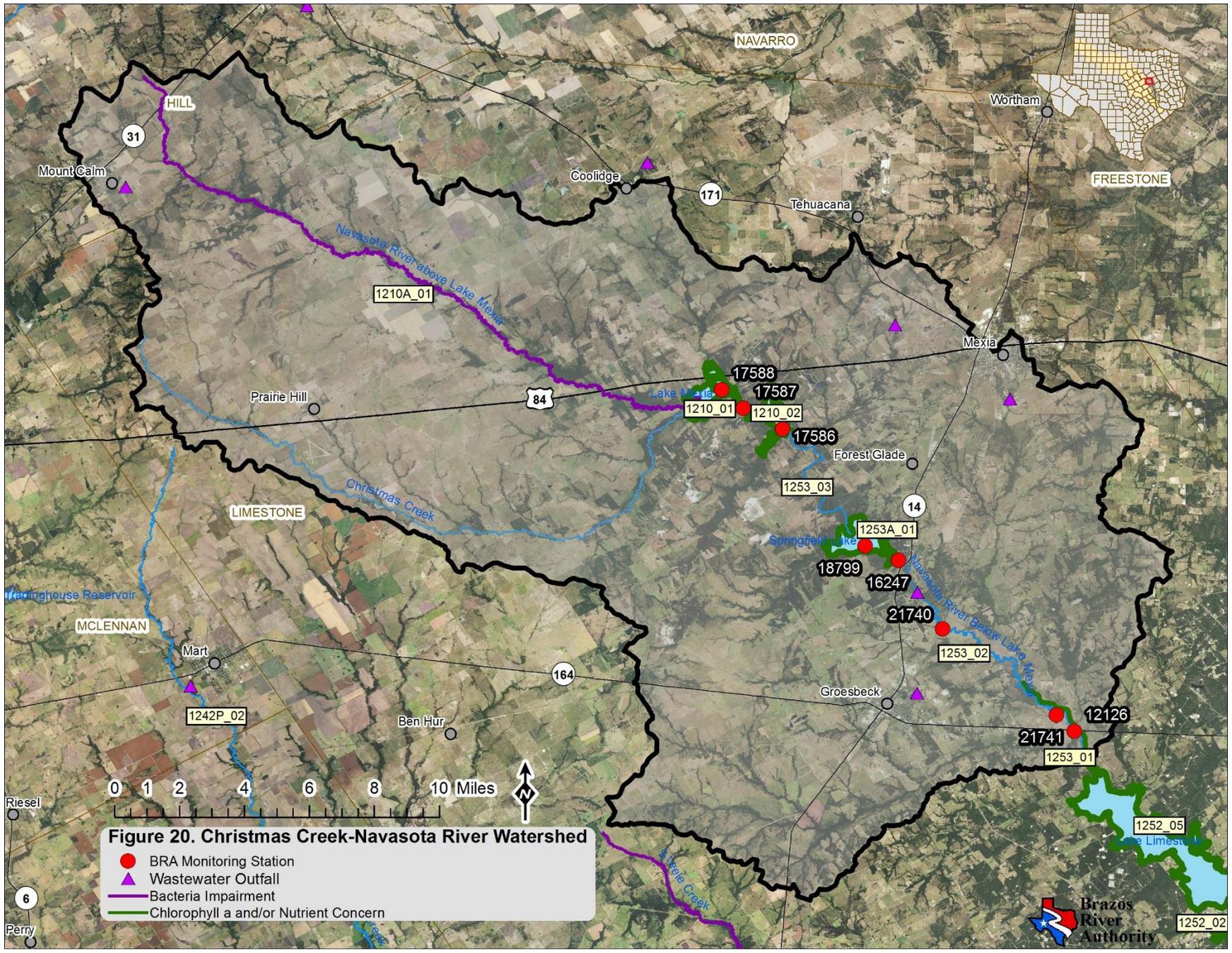


Figure 20. Christmas Creek-Navasota River Watershed

- BRA Monitoring Station
- ▲ Wastewater Outfall
- Bacteria Impairment
- Chlorophyll a and/or Nutrient Concern

Sanders Creek-Navasota River Watershed

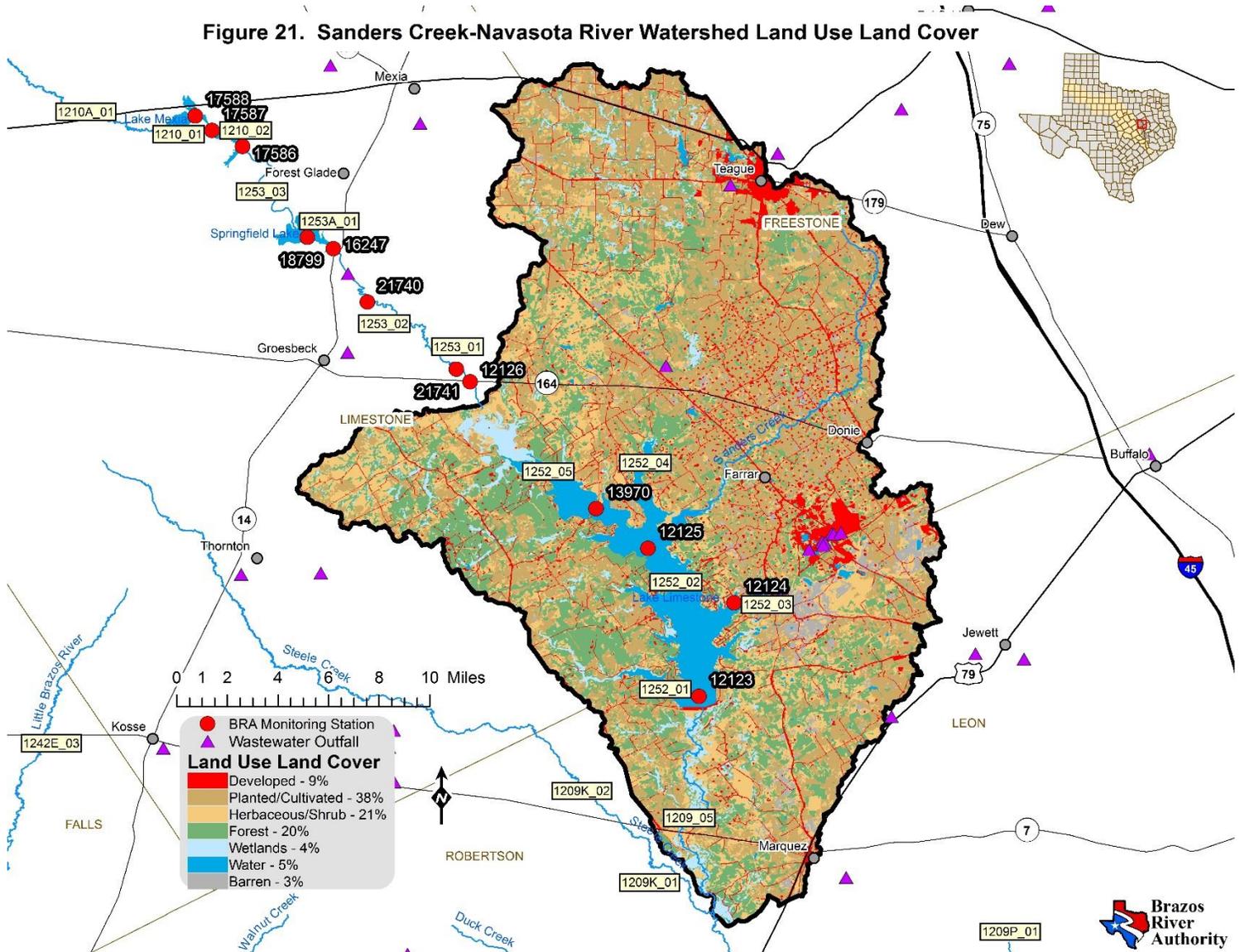
Watershed Description:

The Sanders Creek-Navasota River Watershed is approximately 380 square miles in area.

Land Use Land Cover in Watershed (Figure 21):

There are four cities and nine wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being herbaceous/shrub. There is significant oil and gas activity in the watershed. Lake Limestone lies within the watershed.

Figure 21. Sanders Creek-Navasota River Watershed Land Use Land Cover



Segments in Watershed (Figure 22):

- Sanders Creek
- Upstream portion of 1209_05: Navasota River below Lake Limestone, portion of Navasota River from confluence with Camp Creek upstream to Lake Limestone Dam in Robertson County.
- 1252_01: Lake Limestone, south end of lake near dam
Monitoring Station: 12123 - LAKE LIMESTONE NEAR DAM 572 METERS NORTH AND 2.28 KILOMETERS EAST OF INTERSECTION OF WINDING WAY ROAD AND BRAZOS RIVER AUTHORITY ROAD
- 1252_02: Lake Limestone, main body of lake
Monitoring Station: 12125 - LAKE LIMESTONE AT CONFLUENCE OF NAVASOTA RIVER AND BIG CREEK ARMS 1.33 KM S AND 1.39 KM EAST OF INTERSECTION OF LCR 752 AND 3D RCH RD
- 1252_03: Lake Limestone, Lambs Creek arm on east side of lake
Monitoring Station: 12124 - LAKE LIMESTONE IN LAMBS CREEK ARM 2.19 KILOMETERS DOWNSTREAM OF FM 1512 NEAR LCR 893
- 1252_04: Lake Limestone, Big Creek Arm of Lake
- 1252_05: Lake Limestone, Navasota River Arm near headwaters
Monitoring Station: 13970 - LAKE LIMESTONE AT FM 3371 696 METERS NORTH AND 430 METERS EAST OF INTERSECTION OF FM 3371 AND PARK 2 RD SITE DC USGS 312622096224201

Impairments in Watershed Description (Figure 22):

- 1209_05: Recreational Use—bacteria
There are concerns for chlorophyll-*a* in 1252_01, _02, _03 and _05.

Possible Contributions if Impaired:

Point Sources: There are four cities and nine wastewater outfalls are in the watershed.

Non-point sources: Approximately 38% of the watershed is made up of planted/cultivated crops. However, near the impaired segment, wetland and herbaceous/shrub is the dominant land cover (making up 25% of the watershed), providing attractive habitat for wildlife near this segment.

Potential non-State Agency Stakeholders:

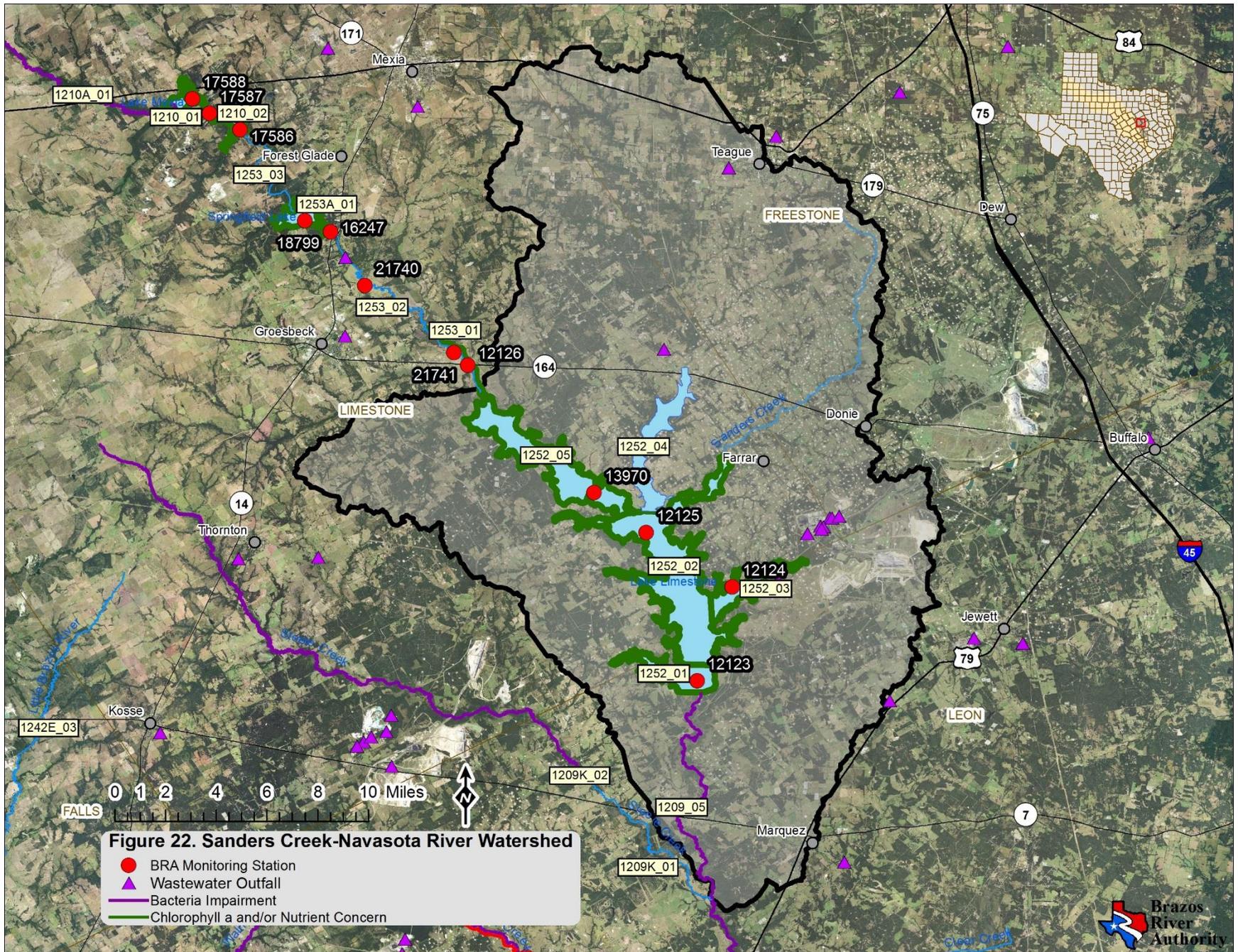
- City of Teague
- City of Marquez
- City of Santo
- City of Farrar
- Limestone County
- Freestone County
- Leon County
- Robertson County
- Bistone Municipal Water Supply District
- NRG Texas Power LLC
- Any businesses or marinas that serve Lake Limestone

Actions taken if impaired:

- An [RUAA](#) has been conducted in segment 1209 and results have led to the recommendation that the segment remain classified as a Primary Contact Recreation (PCR) segment.
- Meetings began in November 2015 to recruit stakeholders for participation in the [development of a Watershed Protection Plan in the Navasota River watershed](#) to address the bacterial impairment in segment 1209.

Recommendations if impaired:

- Await development of the [Navasota River Watershed Protection Plan](#).



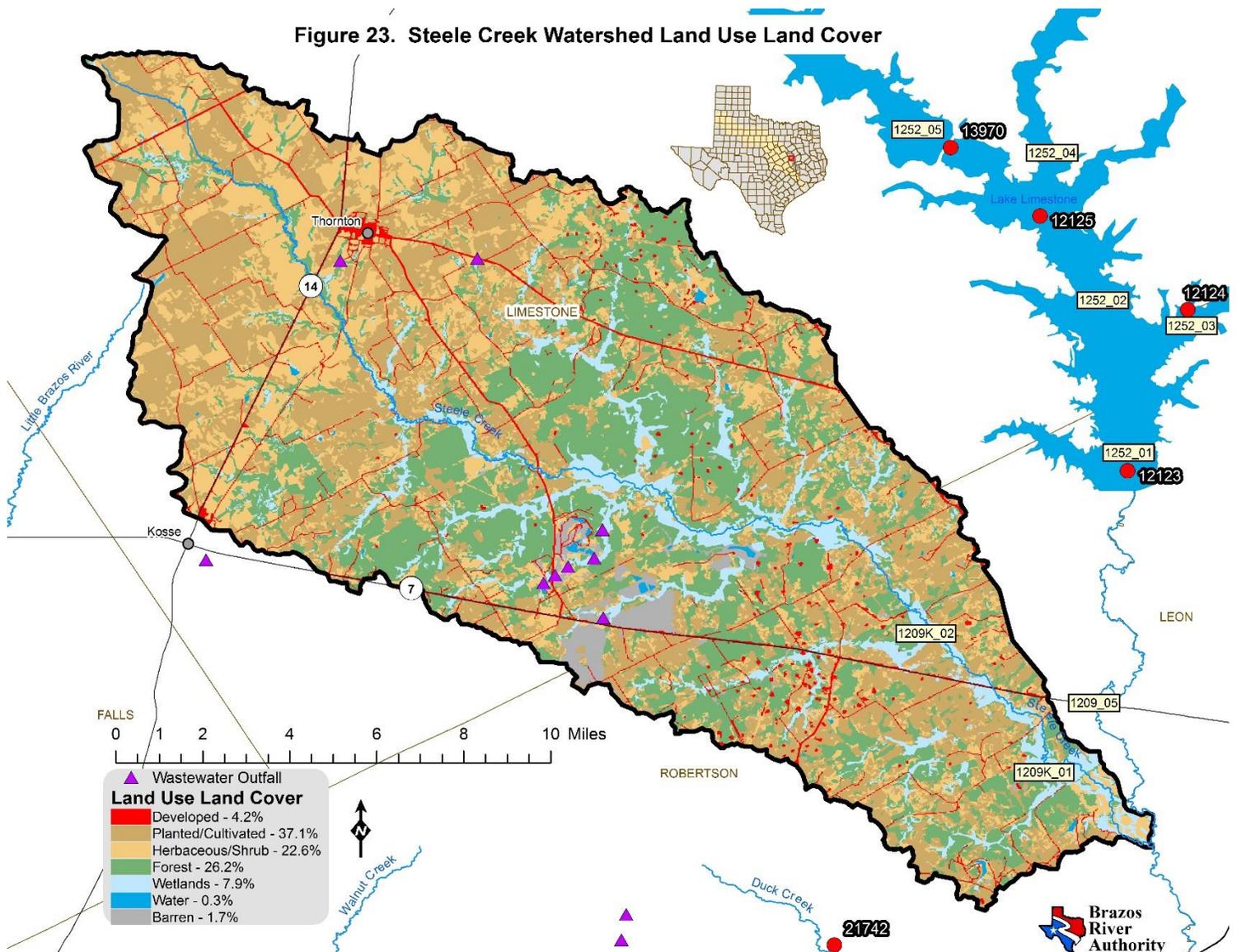
Steele Creek Watershed

Watershed Description:

The Steele Creek Watershed is approximately 185 square miles in area.

Land Use Land Cover in Watershed (Figure 23):

There is one city and eight wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a substantial amount of herbaceous/shrub area in the watershed. There is a larger than typical percentage of barren land cover due to mining activity in the watershed.



Segments in Watershed (Figure 24):

- 1209K_01: Portion of Steele Creek from confluence with Navasota River upstream to confluence with Willow Creek in Robertson County.
- 1209K_02: Portion of Steele Creek from confluence with Willow Creek upstream to headwaters in Limestone County.

Impairments in Watershed Description (Figure 24):

- 1209K_02: Recreational Use—bacteria

Possible Contributions if Impaired:

Point Sources: There is one city and eight wastewater outfalls in the watershed.

Non-point sources: Over 55% of the watershed has land cover suitable for wildlife. Runoff from agriculture and ranchland could provide contributions as well with planted/cultivated crops accounting for approximately 37% of the land use in the watershed.

Potential non-State Agency Stakeholders:

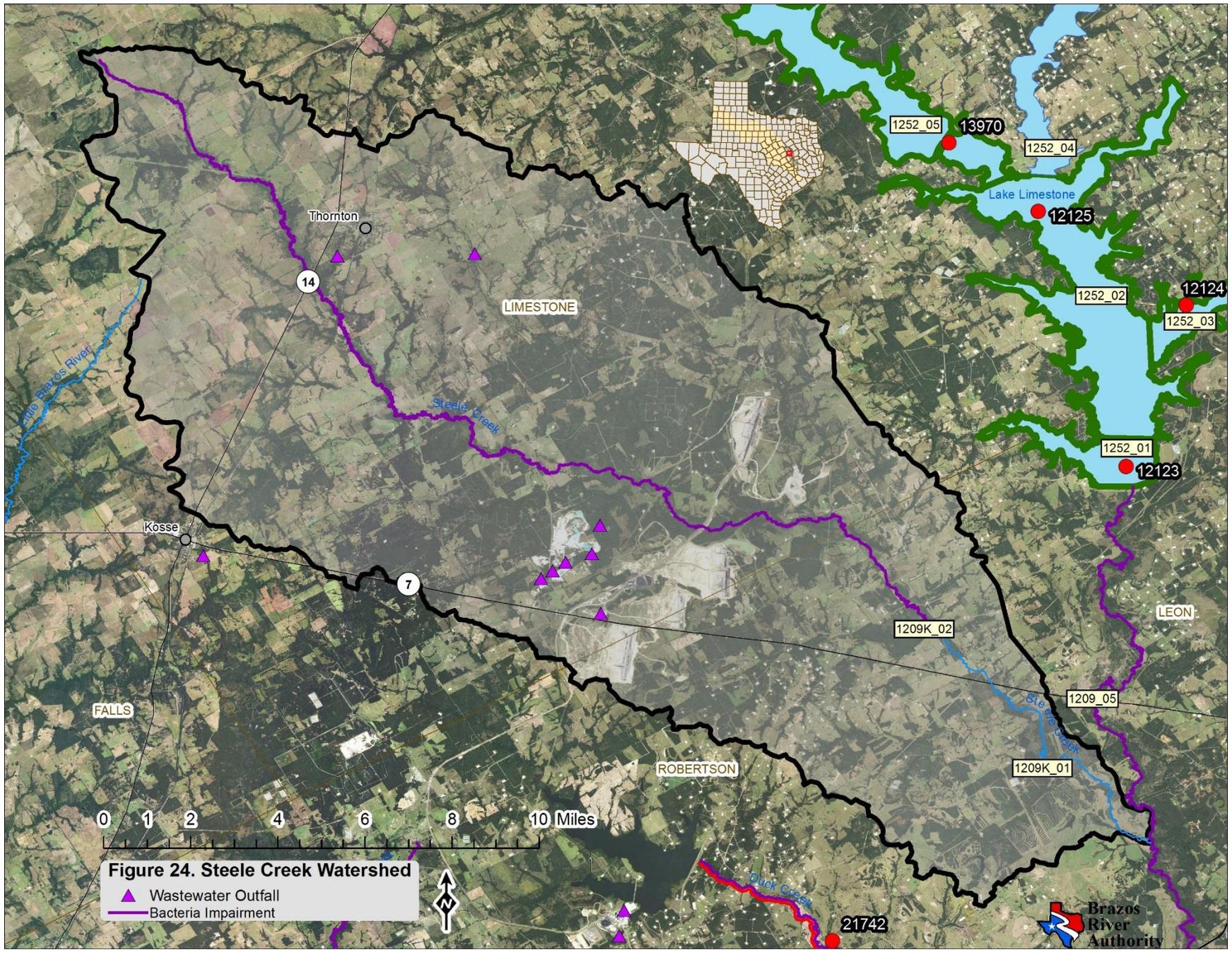
- City of Thornton
- Limestone County
- Robertson County
- Oak Grove Mining Company LLC
- US Silica Company

Actions taken if impaired:

- In 2011, the TCEQ's TMDL Program completed an intensive sampling and analysis [project](#) that included 1209K_02. Data from the project was used to complete an RUAA survey. The [report](#) is under review by TCEQ.

Recommendations if impaired:

- Await TCEQ review of 1209K RUAA report and recommendation before a management strategy is selected.



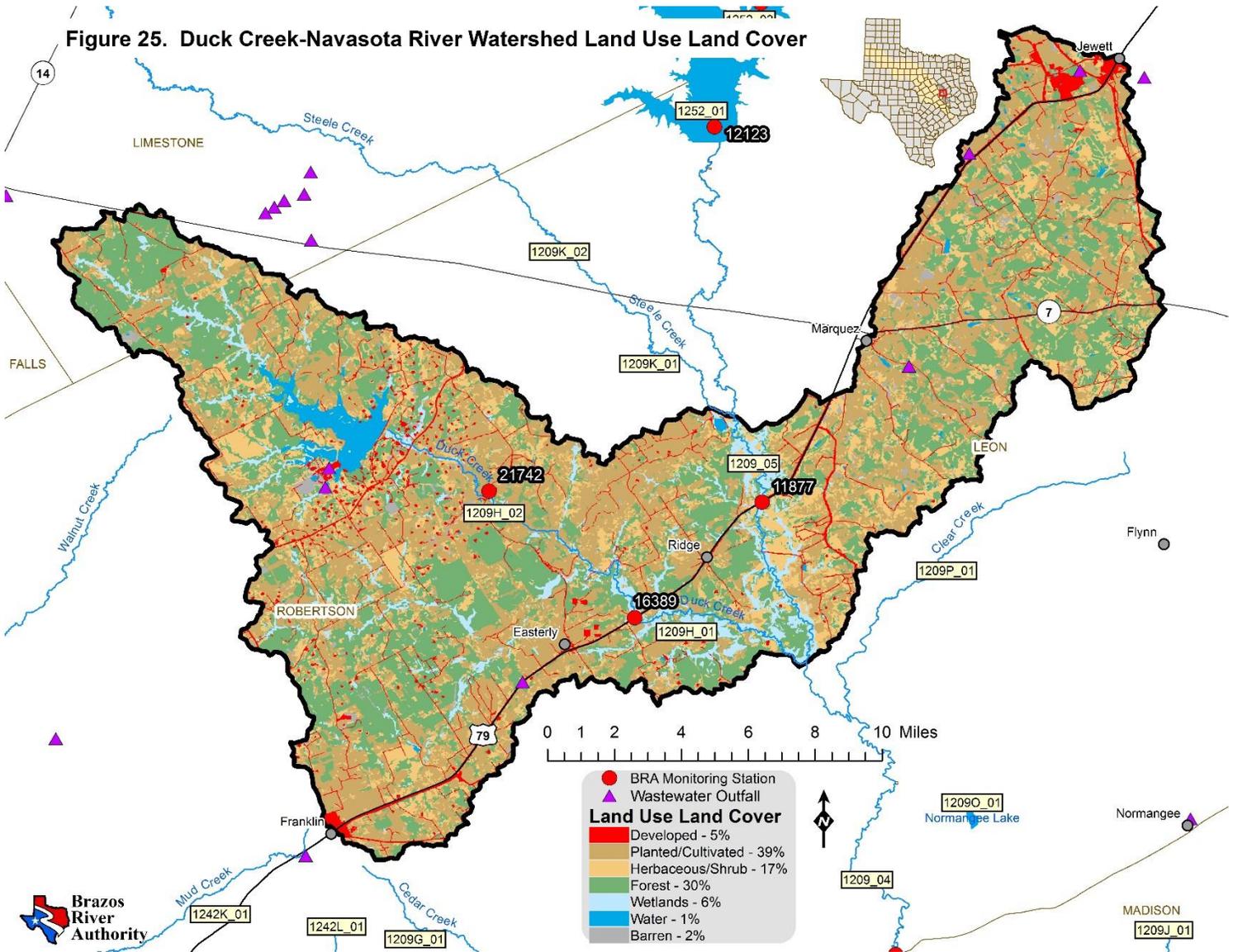
Duck Creek-Navasota River Watershed

Watershed Description:

The Duck Creek-Navasota River Watershed is approximately 251 square miles in area.

Land Use Land Cover in Watershed (Figure 25):

There are five cities and six waste water outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a fair amount of herbaceous/shrub area in the watershed.



Segments in Watershed (Figure 26):

- Middle portion of 1209_05: Portion of Navasota River from confluence with Camp Creek upstream to Lake Limestone Dam in Robertson County.
Monitoring Station: 11877 - NAVASOTA RIVER IMMEDIATELY DOWNSTREAM OF US 79 BETWEEN EASTERLY AND MARQUEZ
- 1209H_01: Portion of Duck Creek from confluence with Navasota River upstream to confluence with Mineral Creek in Robertson County.
Monitoring Station: 16389 - DUCK CREEK AT SH 79 IN THE TOWN OF EASTERLY
- 1209H_02: Portion of Duck Creek from confluence with Mineral Creek in Robertson County upstream to Twin Oak Reservoir dam in Robertson County.
Monitoring Station: 21742 - DUCK CREEK AT FM 2096 NW OF EASTERLY

Impairments in Watershed Description (Figure 26):

- 1209_05: Recreational Use—bacteria
- 1209H_01 and _02: Aquatic Use – depressed dissolved oxygen and Recreational Use – bacteria

Possible Contributions if Impaired:

Point Sources: There are five cities and six waste water outfalls in the watershed.

Non-point sources: Approximately 53% of the watershed has land cover suitable for wildlife. Runoff from agriculture and ranchland could provide contributions as well with planted/cultivated crops accounting for approximately 39% of the land use in the watershed.

Potential non-State Agency Stakeholders:

- City of Jewett
- City of Marquez
- City of Ridge
- City of Easterly
- City of Franklin
- Limestone County
- Robertson County
- Leon County
- Linde LLC
- Jewett ISD
- Sanderson Farms Inc
- Oak Grove Management Company LLC
- Any businesses or marinas that serve Lake Granbury

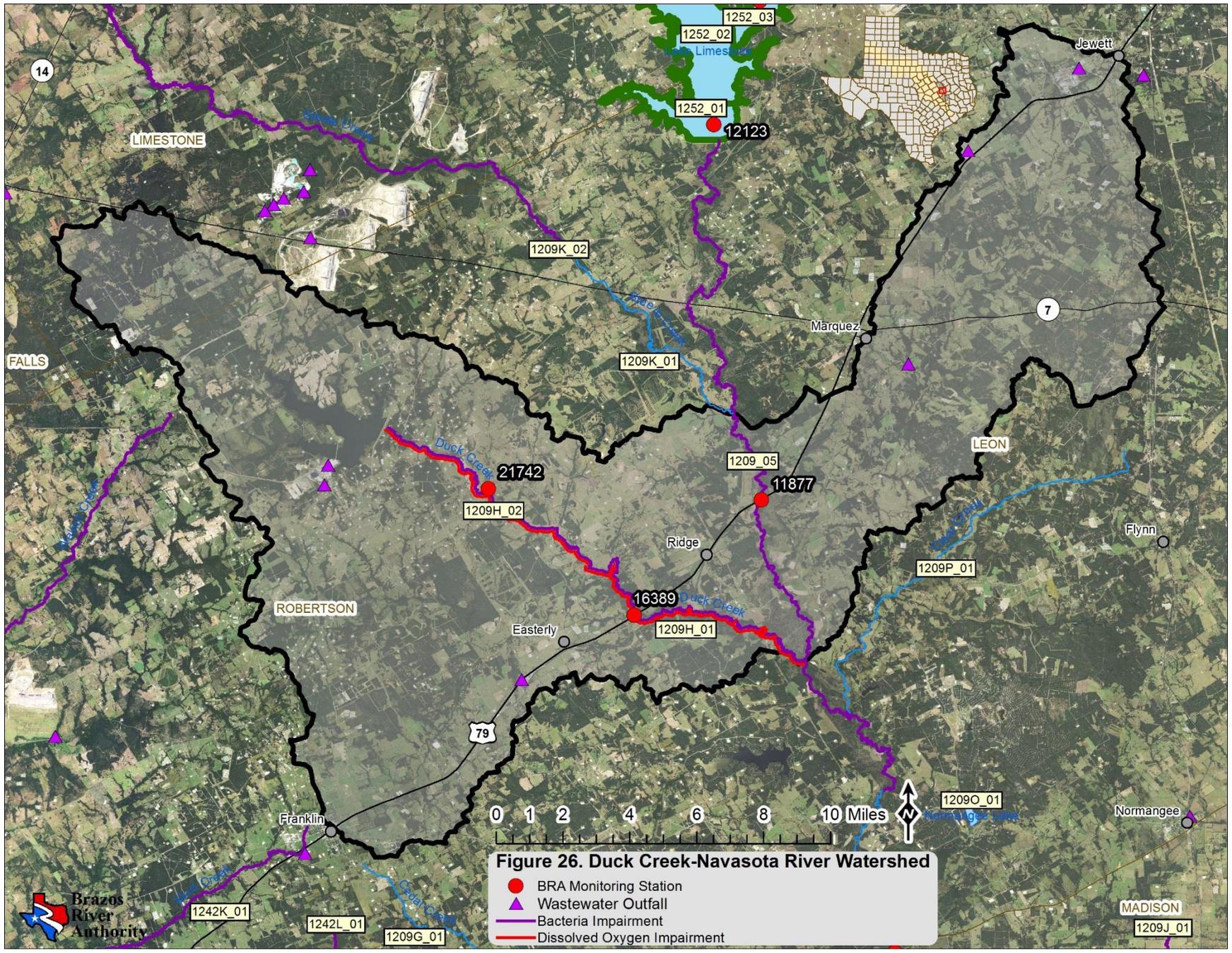
Actions taken if impaired:

- An [RUAA](#) has been conducted in segment 1209 and results have led to the recommendation that the segment remain classified as a Primary Contact Recreation (PCR) segment.
- Meetings began in November 2015 to recruit stakeholders for participation in the [development of a Watershed Protection Plan in the Navasota River watershed](#) to address the bacterial impairment in segment 1209.
- [RUAA](#) fieldwork is complete for 1209H.

- To address the dissolved oxygen impairment, BRA will conduct an aquatic life assessment (ALA) to confirm or refute the high aquatic life use assigned to 1209H. Results will determine the appropriate DO criteria to be applied. A final report will be submitted to TCEQ at the end of FY2018.

Recommendations if impaired:

- Await development of the [Navasota River Watershed Protection Plan](#).
- Await TCEQ review of 1209H RUAA report and recommendation before a management strategy is selected.
- Await results and Texas Water Quality Standards (WQS) review of the 1209H ALA.



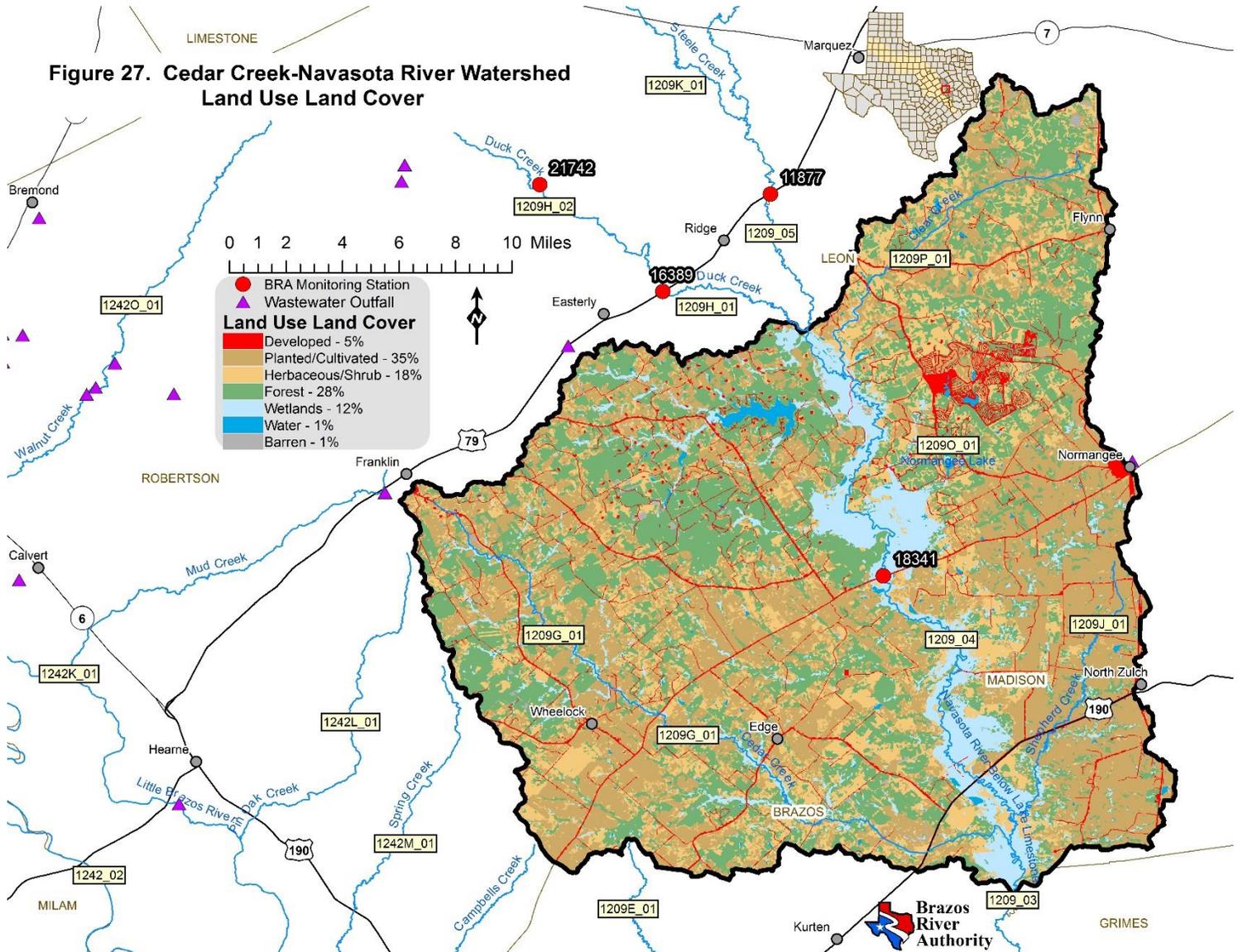
Cedar Creek-Navasota River Watershed

Watershed Description:

The Cedar Creek-Navasota River Watershed is approximately 413 square miles in area.

Land Use Land Cover in Watershed (Figure 27):

There are six cities and no wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a substantial amount of herbaceous/shrub and wetland covered area in the watershed. Normangee Lake lies within the watershed.



Segments in Watershed (Figure 28):

- Upstream portion of 1209_03: Portion of Navasota River from confluence with Sandy Branch upstream to confluence with Shepherd Branch in Madison County.
- 1209_04: Portion of Navasota River from confluence with Shepherd Branch in Madison County upstream to confluence with Camp Creek in Robertson County.
Monitoring Station: 18341 - NAVASOTA RIVER USGS STATION AT OLD SPANISH ROAD/STATE HIGHWAY OSR NEAR BRYAN TEXAS
- Downstream portion of 1209_05: Portion of Navasota River from confluence with Camp Creek upstream to Lake Limestone Dam in Robertson County.
- 1209G_01: Cedar Creek from the confluence with the Navasota River in Brazos County to the confluence with Moores Branch and Rocky Branch in Robertson County
- 1209J_01: Shepherd Creek from the confluence with the Navasota River in Madison County to a point 0.7 mi upstream of FM 1452 in Madison County
- 1209O_01: Normangee Lake, impounded Running Creek, 7.5 km west of Normangee in Leon County.
- 1209P_01: Clear Creek from the confluence with Navasota River below Lake Limestone upstream to headwaters, 11 km southeast of Marquez in Leon County

Impairments in Watershed Description (Figure 28):

- 1209_03, _05, and 1209J_01: Recreational Use—bacteria
There is a concern for arsenic in sediment in 1209O_01.

Possible Contributions if Impaired:

Point Sources: There are six cities and no wastewater outfalls in the watershed.

Non-point sources: Approximately 58% of the watershed has land cover suitable for wildlife. Runoff from agriculture and ranchland could provide contributions as well with planted/cultivated crops accounting for approximately 35% of the land use in the watershed.

Potential non-State Agency Stakeholders:

- City of Flynn
- City of Franklin
- City of Normangee
- City of Wheelock
- City of Edge
- City of North Zulch
- Robertson County
- Leon County
- Brazos County
- Madison County
- Any businesses or marinas that serve Normangee Lake

Actions taken if impaired:

- An [RUAA](#) has been conducted in segment 1209 and results have led to the recommendation that the segment remain classified as a Primary Contact Recreation (PCR) segment.

- Meetings began in November 2015 to recruit stakeholders for participation in the [development of a Watershed Protection Plan in the Navasota River watershed](#) to address the bacterial impairment in segment 1209.
- [RUAA](#) fieldwork is complete for 1209J.

Recommendations if impaired:

- Await development of the [Navasota River Watershed Protection Plan](#).
- Await TCEQ review of 1209J RUAA report and recommendation before a management strategy is selected.

Segments in Watershed (Figure 30):

- Upstream portion of 1209_02: Navasota River below Lake Limestone, portion of Navasota River from confluence with Rocky Creek upstream to confluence with Sandy Branch in Grimes County.
- 1209_03: Navasota River below Lake Limestone, portion of Navasota River from confluence with Sandy Branch upstream to confluence with Shepherd Branch in Madison County.
- 1209E_01: Wickson Creek, perennial stream from the confluence with an unnamed first order tributary (approximately 1.3 km upstream of Reliance Road crossing) upstream to the confluence with an unnamed first order tributary approximately 15 meters upstream of Dilly Shaw Road

Impairments in Watershed Description (Figure 30):

- 1209_03: Recreational Use - bacteria
- 1209E_01: Recreational Use – bacteria

There is a concern for depressed dissolved oxygen in 1209_02.

Possible Contributions if Impaired:

Point Sources: There are five cities and one wastewater outfall in the watershed.

Non-point sources: Approximately 51% of the watershed is made up of planted/cultivated crops which is the dominant landcover near 1209E. Runoff from agriculture and ranchland could provide contributions. Near 1209_03, wetland is the dominant land cover (making up 12% of the watershed), providing attractive habitat for wildlife near this segment.

Potential non-State Agency Stakeholders:

- City of Kurten
- City of Iola
- City of Wixon Valley
- City of Bryan
- City of College Station
- Brazos County
- Madison County
- Grimes County

Actions taken if impaired:

- Meetings began in November 2015 to recruit stakeholders for participation in the [development of a Watershed Protection Plan in the Navasota River watershed](#) to address the bacterial impairment in segment 1209.
- [RUAA](#) fieldwork is complete for 1209E.

Recommendations if impaired:

- Await development of the [Navasota River Watershed Protection Plan](#).
- Await TCEQ review of 1209E RUAA report and recommendation before a management strategy is selected.

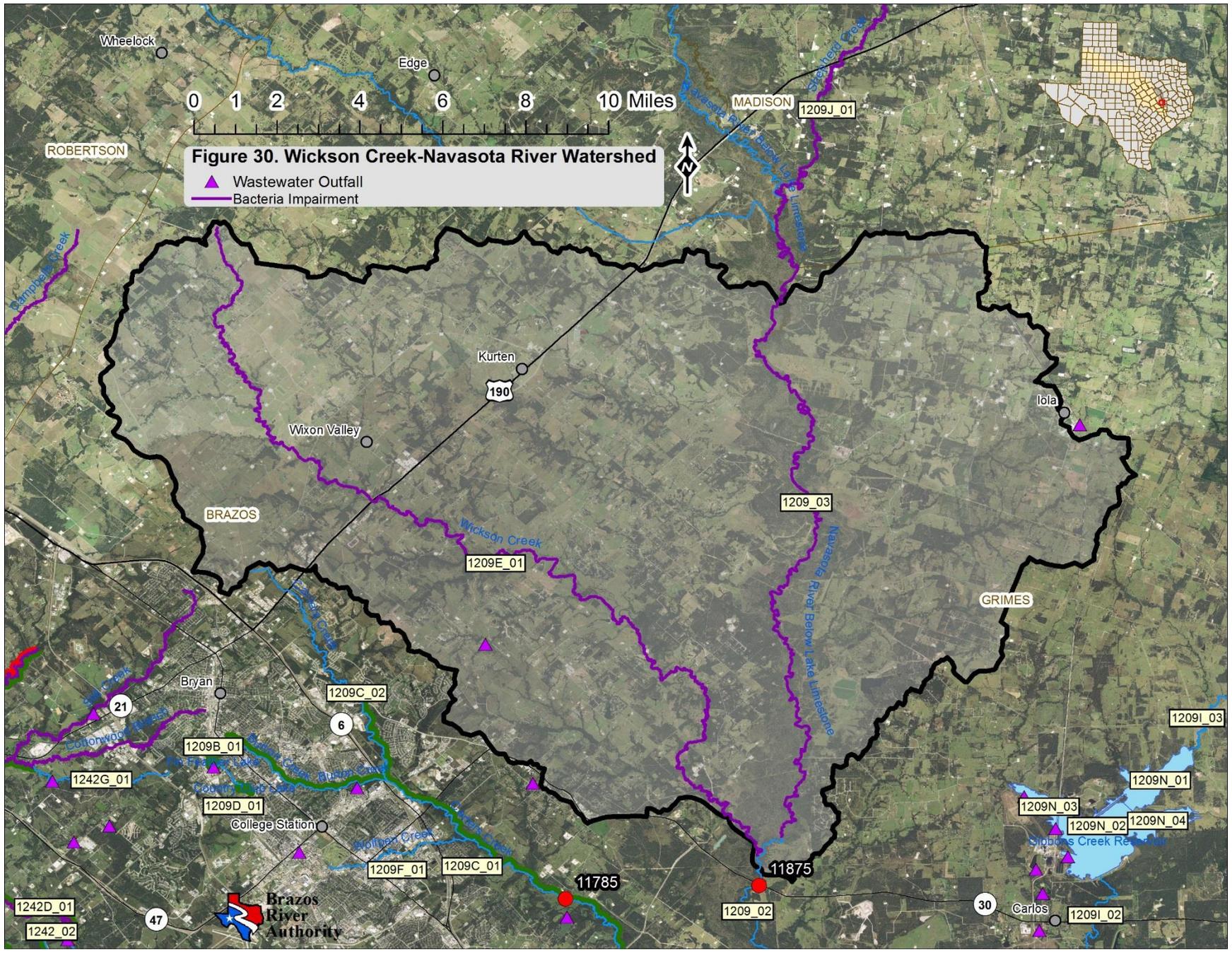


Figure 30. Wickson Creek-Navasota River Watershed

- ▲ Wastewater Outfall
- Bacteria Impairment

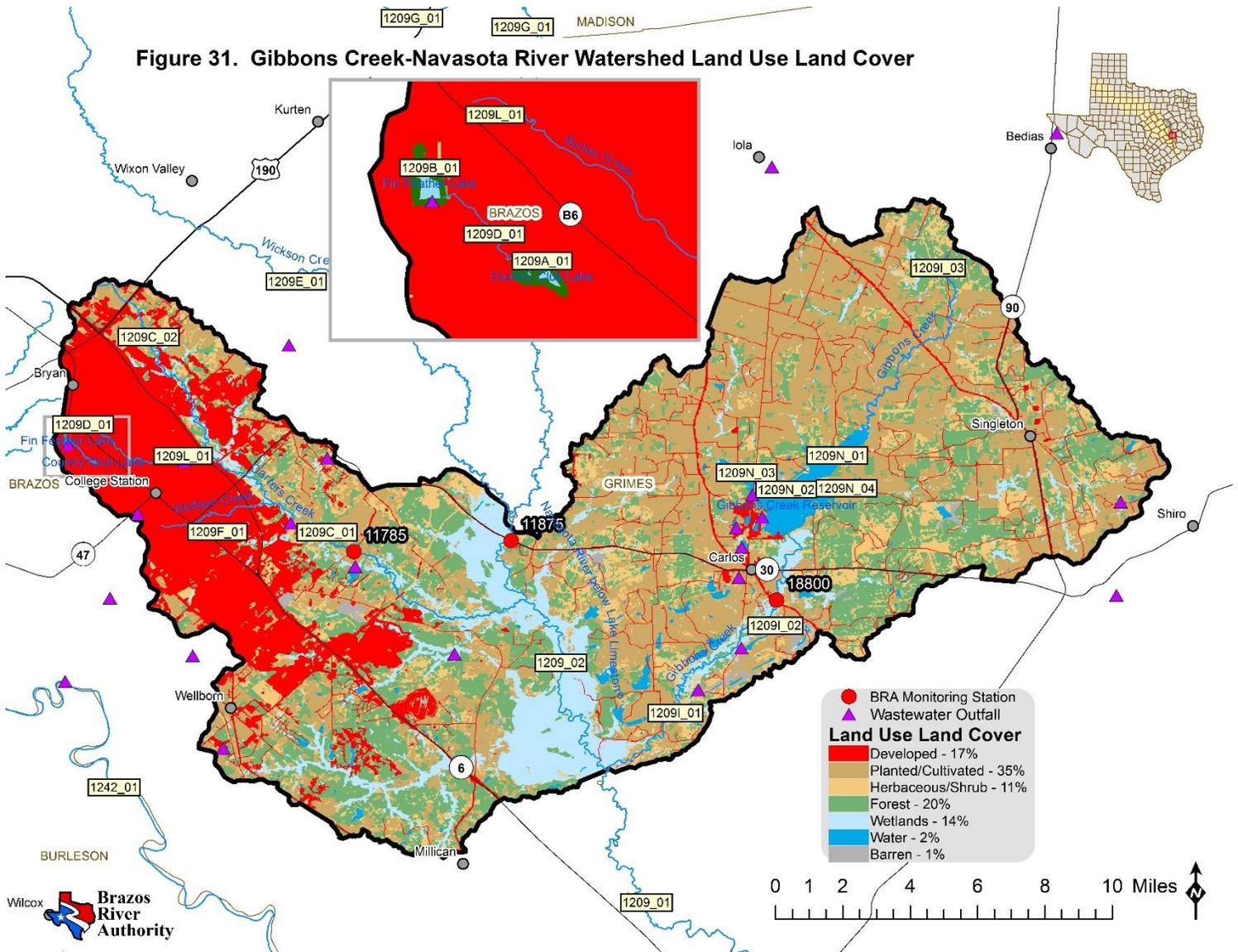
Gibbons Creek-Navasota River Watershed

Watershed Description:

The Gibbons Creek-Navasota River Watershed is approximately 268 square miles in area.

Land Use Land Cover in Watershed (Figure 31):

There are seven cities and eight wastewater outfall in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a substantial amount of developed area in the western portion of the watershed. Fin Feather Lake, Country Club Lake and Gibbons Creek reservoir all lie within the watershed.



Segments in Watershed (Figure 32):

- 1209_02: Navasota River below Lake Limestone, Portion of Navasota River from confluence with Rocky Creek upstream to confluence with Sandy Branch in Grimes County.
Monitoring Station: 11875 - NAVASOTA RIVER IMMEDIATELY DOWNSTREAM OF SH 30 EAST OF COLLEGE STATION
- 1209A_01: Country Club Lake from the Country Club Branch Dam up to normal pool elevation in Bryan in Brazos County.
- 1209B_01: Fin Feather Lake from Fin Feather Dam up to normal pool elevation in northwest Bryan in Brazos County.
- 1209C_01: Carters Creek, perennial stream from the confluence with the Navasota River upstream to the confluence of an unnamed tributary 0.5 km upstream of FM 158; Appendix D.
Monitoring Station: 11785 - CARTERS CREEK 44 METERS DOWNSTREAM OF BIRD POND ROAD SOUTHEAST OF COLLEGE STATION 2 MILES SOUTH OF SH 30
- 1209C_02: Carters Creek from an unnamed tributary 0.5 km upstream of FM 158 to the headwaters 1.6 km upstream on US 190.
- 1209D_01: Country Club Branch from the confluence with Country Club Lake in Bryan in Brazos County to the dam at Fin Feather Lake in Bryan.
- 1209F_01: Wolfpen Creek, intermittent stream with perennial pools from the confluence with Carter Creek to near Bizzell Street in College Station.
- 1209I_01: Portion of Gibbons Creek from confluence with Navasota River upstream to confluence with Dry Creek in Grimes County.
- 1209I_02: Portion of Gibbons Creek from confluence with Dry Creek upstream to Gibbons Creek Reservoir dam in Grimes County.
Monitoring Station: 18800 - GIBBONS CREEK EAST 25 M UPSTREAM OF FM 244
- 1209I_03: Portion of Gibbons Creek from confluence with Gibbons Creek Reservoir headwaters, upstream to headwaters of water body, in Grimes County.
- 1209L_01: Burton Creek from the confluence of Carters Creek in College Station upstream to the headwater 0.7 km northeast of Fin Feather Lake in Bryan.
- 1209N_01: Gibbons Creek Reservoir, Gibbons Creek Arm
- 1209N_02: Gibbons Creek Reservoir, Main Body of Lake
- 1209N_03: Gibbons Creek Reservoir, Hog Creek Arm
- 1209N_04: Gibbons Creek Reservoir, Sulphur Creek Arm

Impairments in Watershed Description (Figure 32):

- 1209I_01: Recreational Use - bacteria
There are concerns for arsenic in sediment and total phosphorus in 1209A_01. There are concerns for arsenic, chromium, copper, DDD, DDE, and zinc in sediment as well as chlorophyll-*a* in 1209B_01. There are concerns for chlorophyll-*a*, nitrate and total phosphorus in 1209C_01. There is a concern for nitrate in 1209L_01. There is also a concern for depressed dissolved oxygen in 1209_02.

Possible Contributions if Impaired:

Point Sources: There are seven cities and eight wastewater outfall in the watershed.

Non-point sources: Approximately 35% of the watershed is made up of planted/cultivated crops. Runoff from agriculture and ranchland could provide contributions. Approximately 45% of the watershed has land cover suitable for wildlife.

Potential non-State Agency Stakeholders:

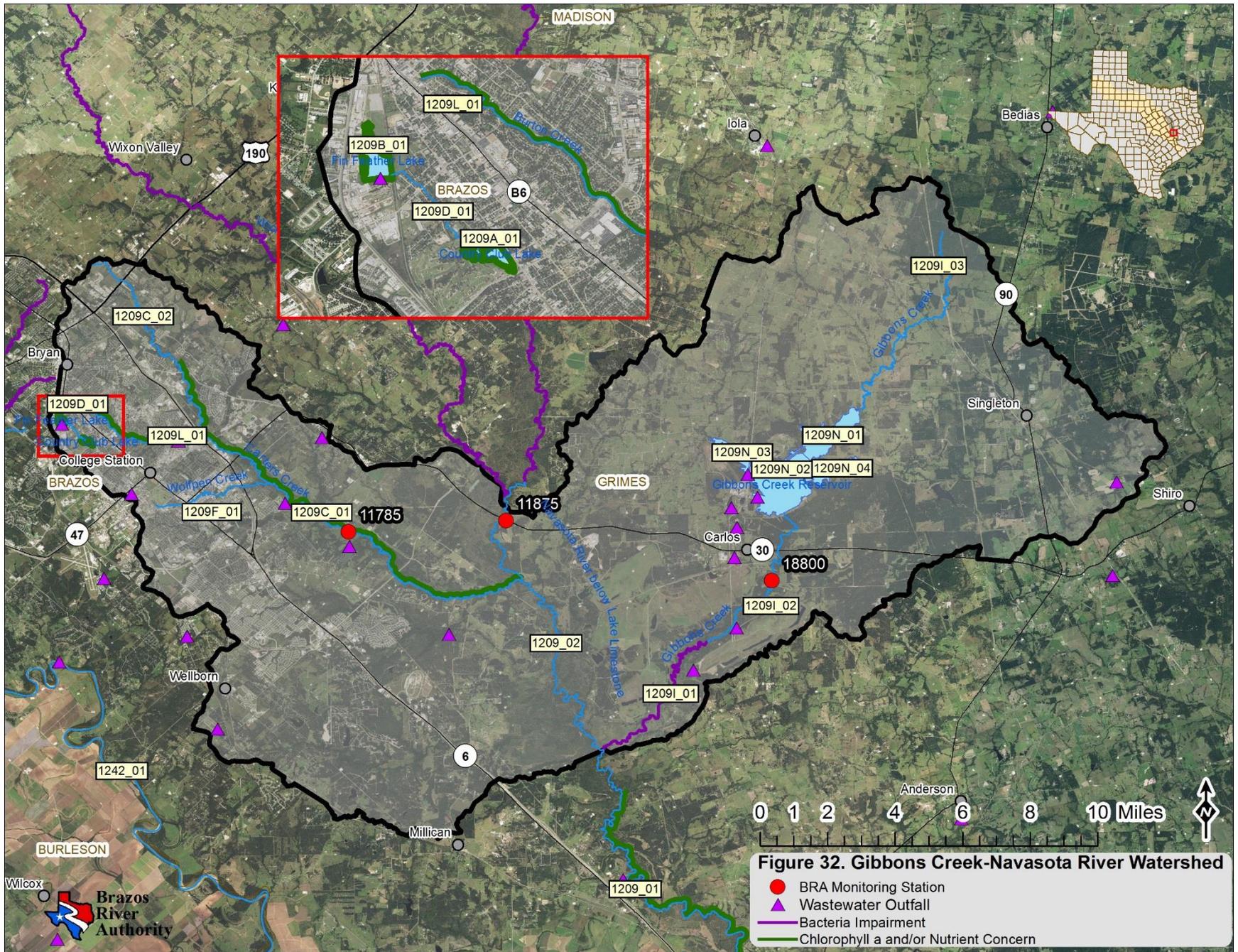
- City of Bryan
- City of College Station
- City of Milican
- City of Rio Carlos
- City of Singleton
- City of Keene
- City of Joshua
- Brazos County
- Grimes County
- Texas A&M University
- R&B MOBILE PARK LLC DBA GLEN OAKS MOBILE HOME PARK
- TEXAS MUNICIPAL POWER AGENCY
- TENASKA FRONTIER PARTNERS LTD
- Any businesses or marinas that serve Fin Feather Lake, Country Club Lake or Gibbons Creek Reservoir

Actions taken if impaired:

- [RUAA](#) fieldwork is complete for 1209I.

Recommendations if impaired:

- Await TCEQ review of 1209I RUAA report and recommendation before a management strategy is selected.



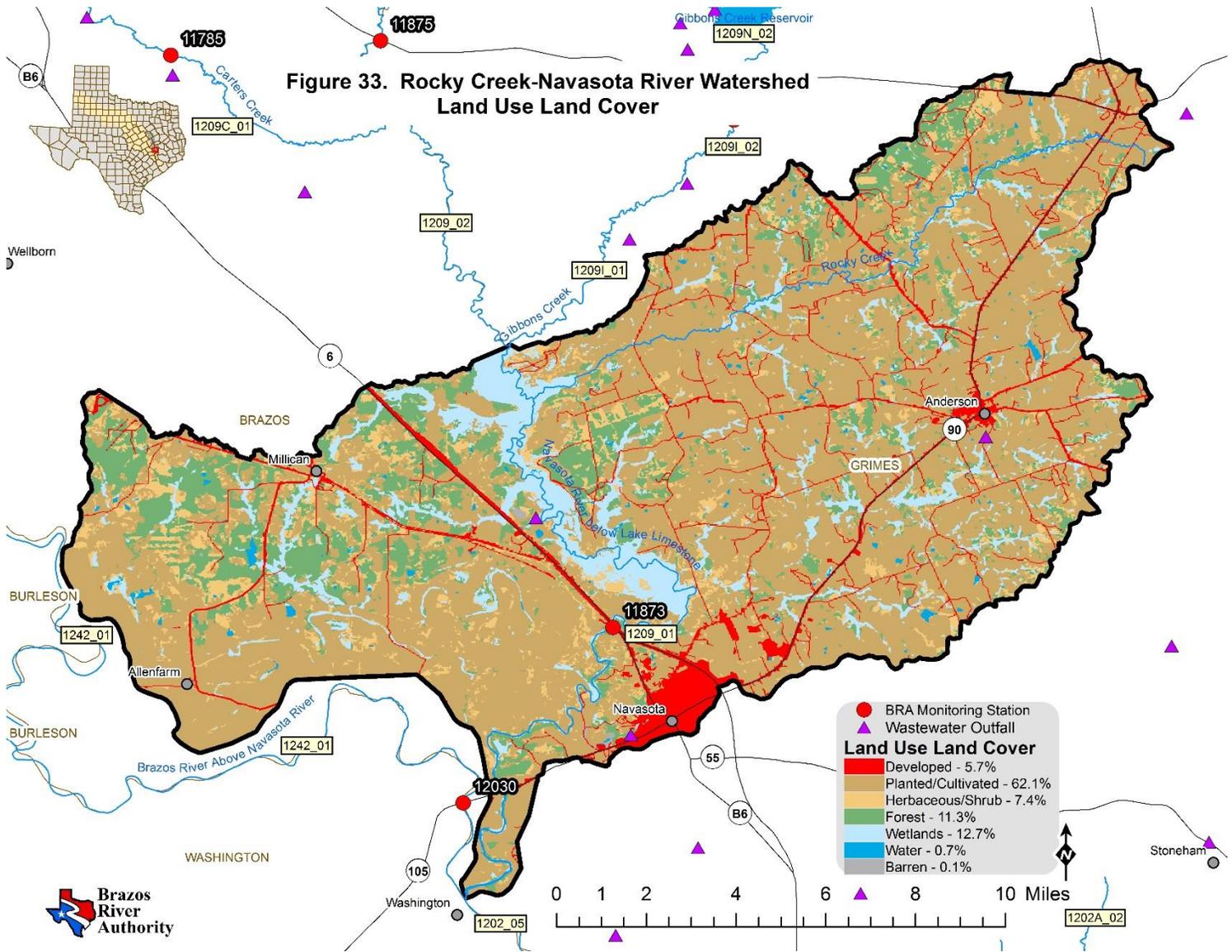
Rocky Creek-Navasota River Watershed

Watershed Description:

The Rocky Creek-Navasota River Watershed is approximately 180 square miles in area.

Land Use Land Cover in Watershed (Figure 33):

There are five cities and three wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the moderate amounts of forest and wetland areas.



Segments in Watershed (Figure 34):

- Rocky Creek
- 1209_01: Navasota River below Lake Limestone, portion of Navasota River from confluence with Brazos River upstream to confluence with Rocky Creek in grimes County.
Monitoring Station: 11873 - NAVASOTA RIVER IMMEDIATELY DOWNSTREAM OF SH 6 NORTH OF NAVASOTA
- Downstream portion of 1209_02: Navasota River below Lake Limestone, portion of Navasota River from confluence with Rocky Creek upstream to confluence with Sandy Branch in Grimes County.

Impairments in Watershed Description (Figure 34):

- None
There are concerns for depressed dissolved oxygen, nitrate and total phosphorus in 1209_01. There is also a concern for depressed dissolved oxygen in 1209_02.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

- City of Millican
- City of Anderson
- City of Allenfarm
- City of Navasota
- City of Laguna Park
- Brazos County
- Grimes County
- NI AMERICA TEXAS DEVELOPMENT LLC

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A

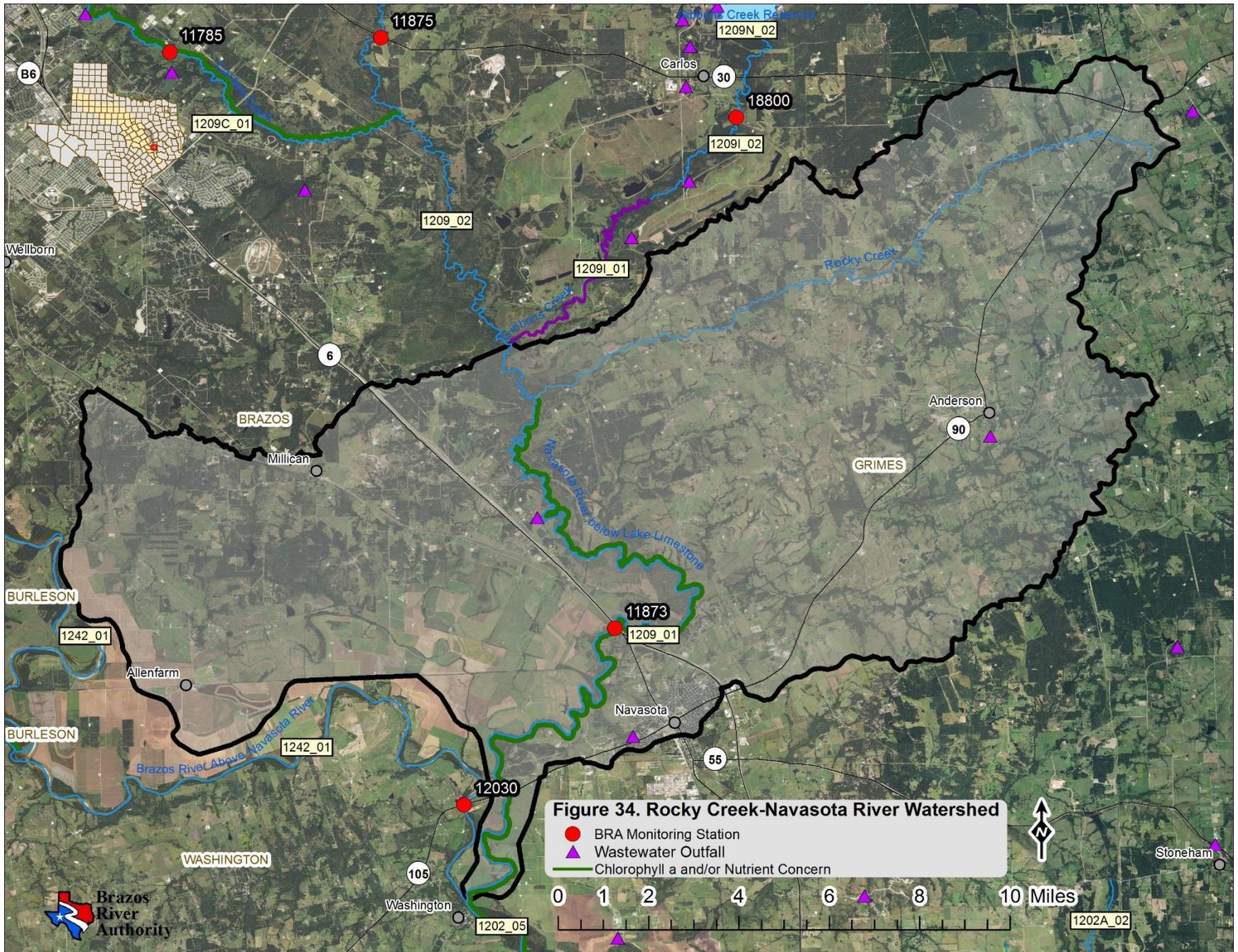


Figure 34. Rocky Creek-Navasota River Watershed

- BRA Monitoring Station
- ▲ Wastewater Outfall
- Chlorophyll a and/or Nutrient Concern



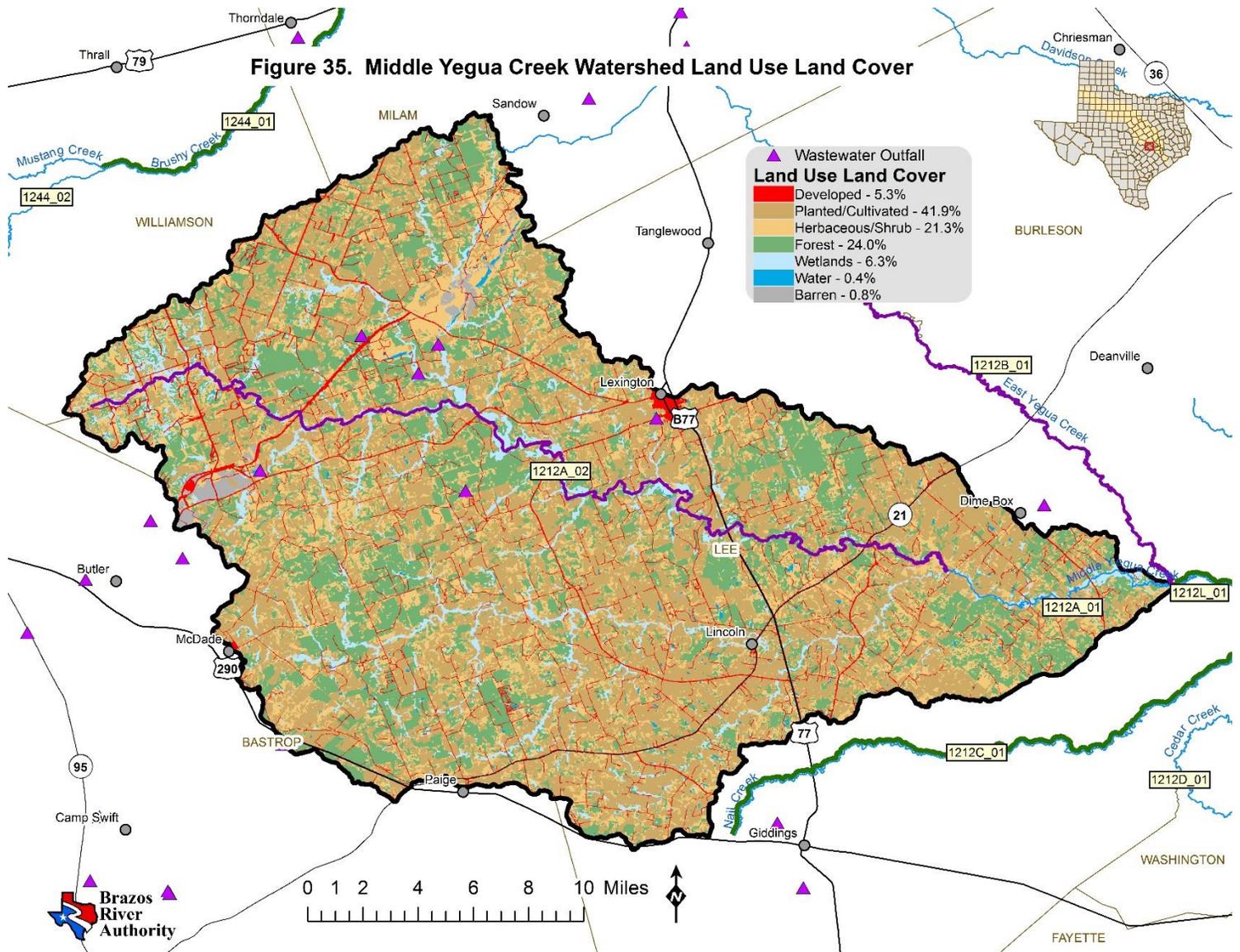
Middle Yegua Creek Watershed

Watershed Description:

The Middle Yegua Creek Watershed is approximately 442 square miles in area.

Land Use Land Cover in Watershed (Figure 35):

There are two cities and six wastewater outfalls in the watershed. Dominant landcover includes planted/cultivated land, with a substantial amount of herbaceous/shrub and forest. There is some mining activity in the watershed as well.



Segments in Watershed (Figure 36):

- 1212A_01: Middle Yegua Creek from confluence with East Yegua Creek upstream to confluence with West Yegua Creek in Lee County.
- 1212A_02: Middle Yegua Creek from confluence with West Yegua Creek upstream to headwaters of water body in Williamson County.

Impairments in Watershed Description (Figure 36):

- 1212A_02: Recreational Use – bacteria
- There are also concerns for depressed dissolved oxygen and impaired habitat for 1212A_02.

Possible Contributions if Impaired:

Point Sources: There are two cities and six wastewater outfalls in the watershed.

Non-point sources: Planted/cultivated crops account for approximately 42% of the land use in the watershed. Runoff from agriculture and rangeland could provide contributions. Approximately 52% of the watershed has land cover suitable for wildlife as well.

Potential non-State Agency Stakeholders:

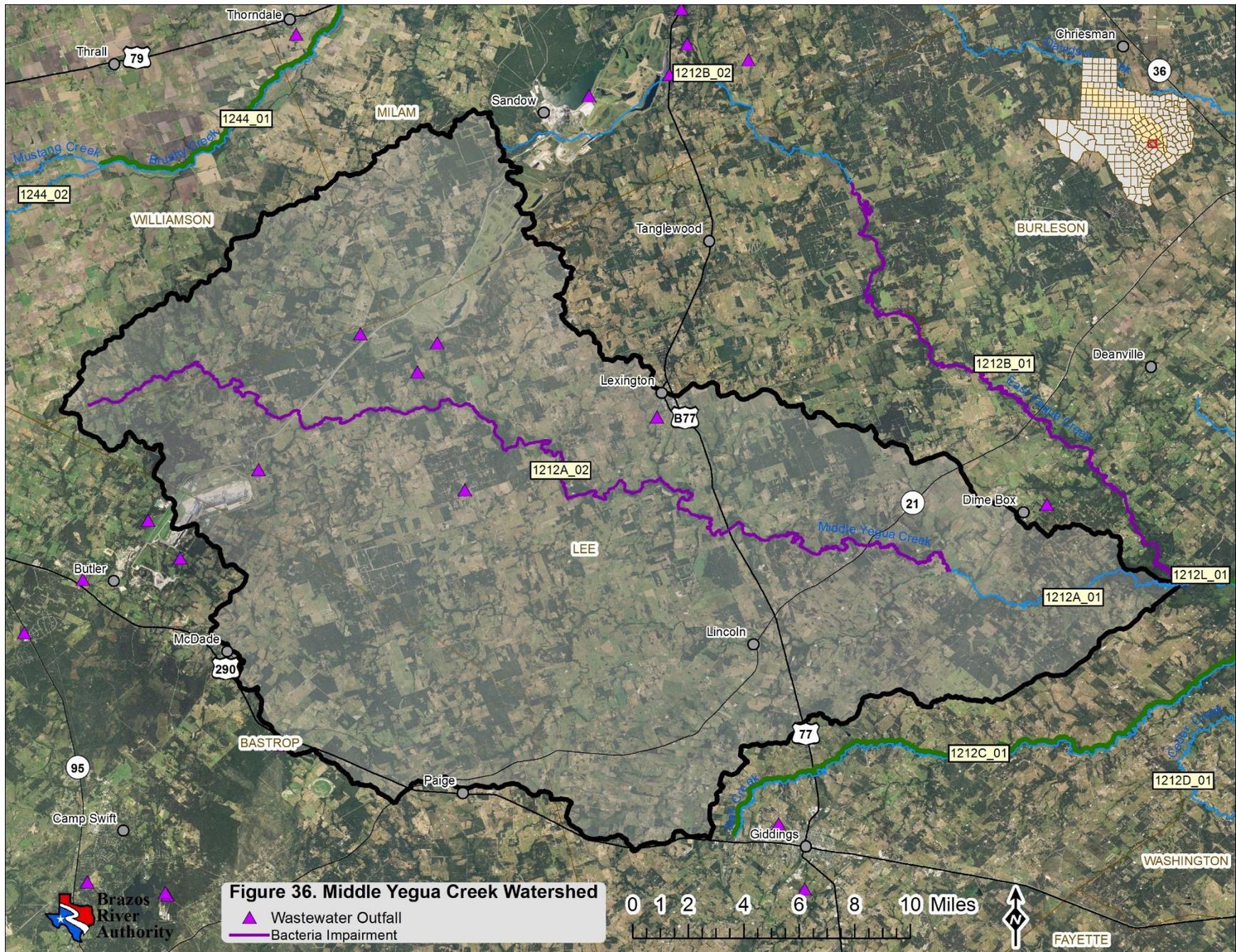
- City of Lexington
- City of Lincoln
- Williamson County
- Milam County
- Lee County
- Bastrop County
- MANVILLE WATER SUPPLY CORPORATION
- ALCOA INC
- LUMINANT MINING CO LLC
- AQUA WSC

Actions taken if impaired:

- An [RUAA](#) has been conducted in segment 1212A_01 and results have led to the recommendation that the segment remain classified as a Primary Contact Recreation (PCR) segment.

Recommendations if impaired:

- 1212A_01 is currently on the Watershed Action Plan (WAP) table for discussion and evaluation. Input from regional water quality monitors will be obtained during the yearly coordinated monitoring meeting.



East Yegua Creek Watershed

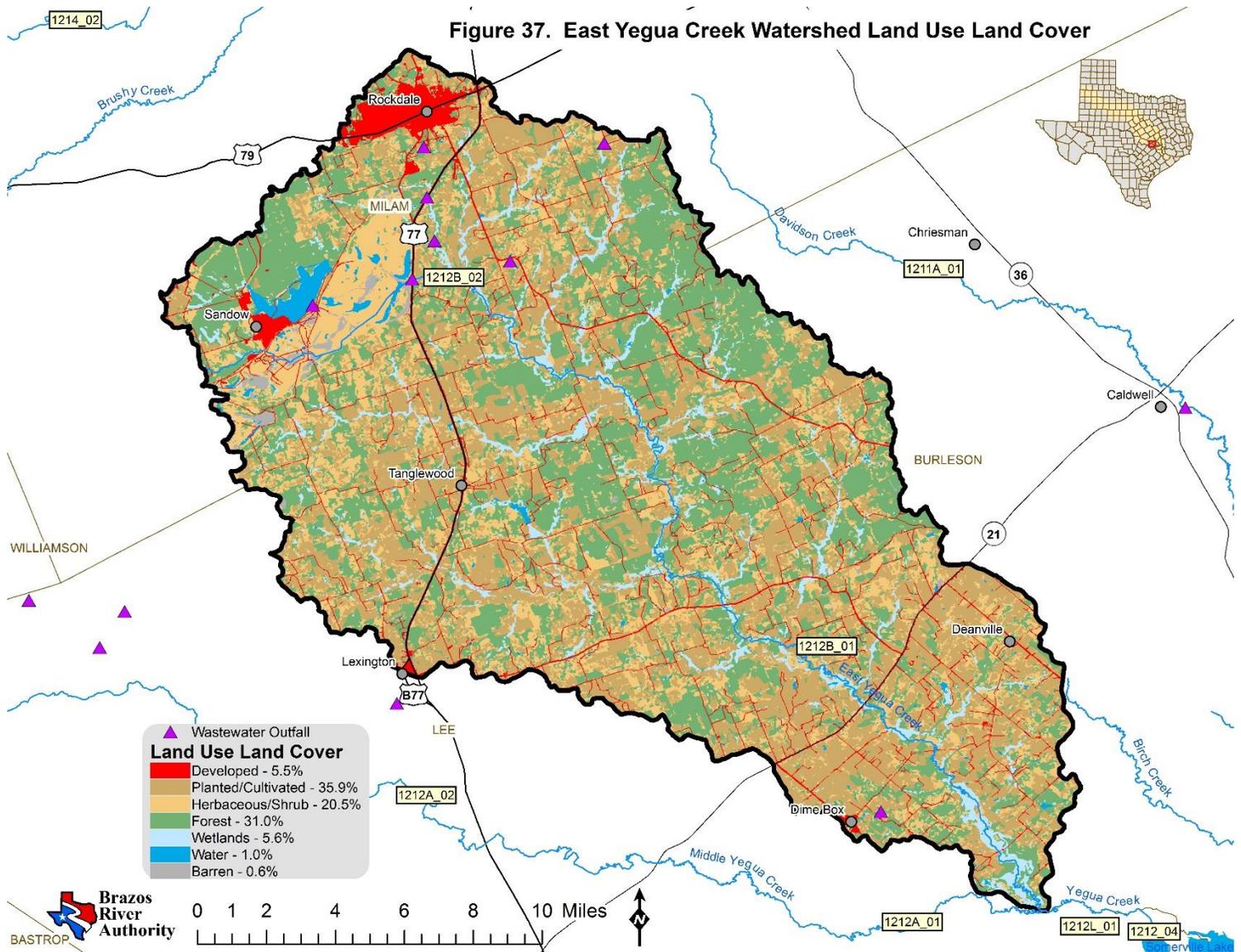
Watershed Description:

The East Yegua Creek Watershed is approximately 287 square miles in area.

Land Use Land Cover in Watershed (Figure 37):

There are six cities and eight wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a substantial amount of herbaceous/shrub area in the watershed.

Figure 37. East Yegua Creek Watershed Land Use Land Cover



Segments in Watershed (Figure 38):

- 1212B_01: Portion of East Yegua Creek from confluence with Middle Yegua Creek in Burleson County upstream to confluence with Allen Creek in Lee County.
- 1212B_02: Portion of East Yegua Creek from confluence with Allen Creek in Lee County upstream to headwaters in Milam County.

Impairments in Watershed Description (Figure 38):

- 1212B_01: Recreational Use - bacteria

Possible Contributions if Impaired:

Point Sources: There are six cities and eight wastewater outfalls in the watershed.

Non-point sources: Planted/cultivated crops account for approximately 36% of the land use in the watershed. Runoff from agriculture and rangeland could provide contributions. Approximately 57% of the watershed has land cover suitable for wildlife as well.

Potential non-State Agency Stakeholders:

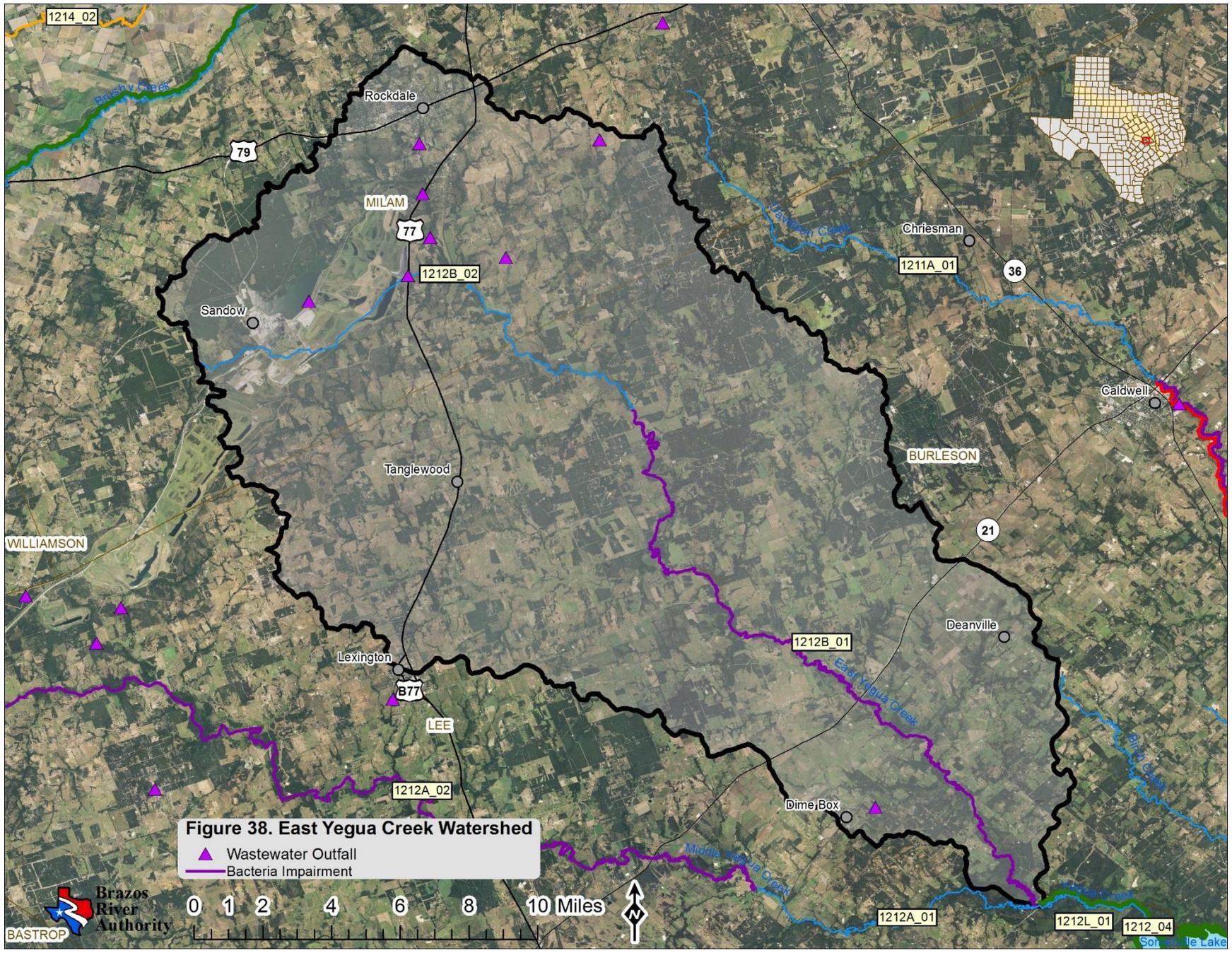
- City of Rockdale
- City of Sandow
- City of Tanglewood
- City of Lexington
- City of Deanville
- City of Dime Box
- Milam County
- Lee County
- Burleson County
- SOUTHWEST MILAM WATER SUPPLY CORP
- ALCOA INC
- SOUTHWEST MILAM WSC
- LEE COUNTY FWSD

Actions taken if impaired:

- An [RUAA](#) was completed, reviewed, recommendations were made, and EPA approved [revising](#) 1212B to a designated use of secondary contact recreation 1 (SCR1). This will be reflected in the 2016 draft IR.

Recommendations if impaired:

- Await publication of the draft 2016 IR.



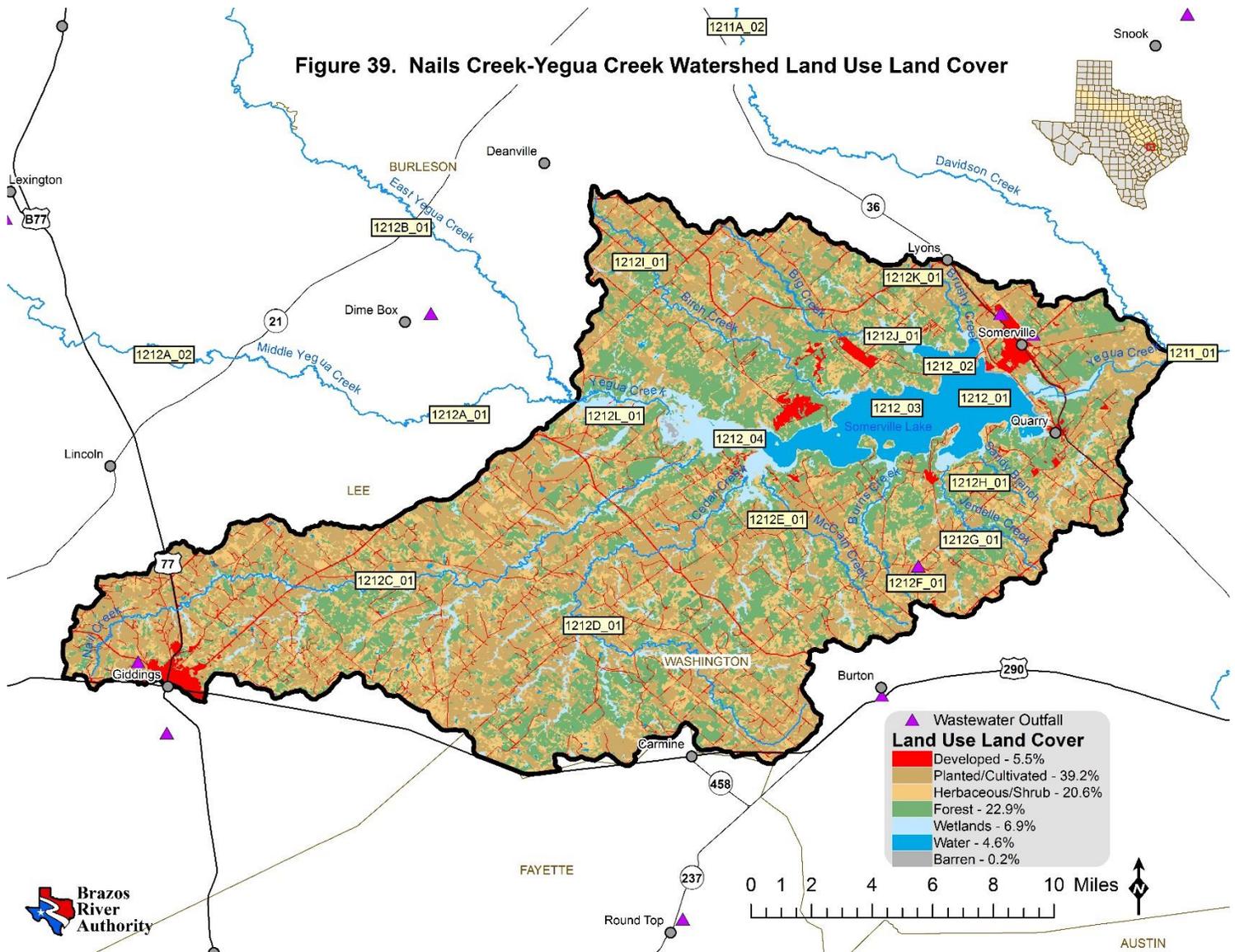
Nails Creek-Yegua Creek Watershed

Watershed Description:

The Nails Creek-Yegua Creek Watershed is approximately 304 square miles in area.

Land Use Land Cover in Watershed (Figure 39):

There are three cities and three wastewater outfalls in the watershed. Dominant landcover includes planted/cultivated land, with a substantial amount of herbaceous/shrub and forest. Somerville Lake is within the watershed.



Segments in Watershed (Figure 40):

- Upstream portion of 1211_01: Yegua Creek from the confluence with the Brazos River in Burleson/Washington County to Somerville Dam in Burleson/Washington County.
- 1212_01: Somerville Lake, Eastern end of reservoir near dam.
- 1212_02: Somerville Lake, Northern arm of reservoir near town of Somerville.
- 1212_03: Somerville Lake, Middle of reservoir near Birch Creek State Park.
- 1212_04: Somerville Lake, Western end of reservoir near upper segment boundary.
- 1212C_01: Nail Creek from the confluence of Yegua Creek upstream to the headwater 340 m north of US 290 west of Giddings.
- 1212D_01: Cedar Creek from the confluence of Somerville Lake upstream to the headwater approximately 2 km north of US 290 approximately 2.2 km west of Burton.
- 1212E_01: McCain Creek from the confluence of Somerville Lake upstream to the headwater near FM 390 W (La Bahia Trail W) approximately 3 km northeast of Burton.
- 1212F_01: Burns Creek from the confluence of Somerville Lake upstream to the headwater approximately 1.4 km north of the intersection of FM 390 W (La Bahia Trail W) and FM 1948 northeast of Burton.
- 1212G_01: Jerdelle Creek from the confluence of Somerville Lake upstream to the headwater near FM 390 W (La Bahia Trail W) approximately 9 km northeast of Burton.
- 1212H_01: Sandy Branch from the confluence of Somerville Lake upstream to the headwater near Haack Lane approximately 4.7 km west of the intersection of FM 390 W (La Bahia Trail W) and SH 36.
- 1212I_01: Birch Creek from the confluence of Somerville Lake upstream to the headwater at FM 60 approximately 11 km south of Caldwell.
- 1212J_01: Big Creek from the confluence of Somerville Lake upstream to the headwater at FM 976 (Frenstat Rd) approximately 12.8 km northwest of Somerville
- 1212K_01: Brushy Creek from the confluence of Somerville Lake upstream to the headwater near the intersection of Burleson CR 408 and CR 415 approximately 3 km northwest of Somerville.
- 1212L_01: Yegua Creek from the confluence of Somerville Lake upstream to the confluence of East Yegua and Middle Yegua Creeks at the Burleson and Lee County Line.

Impairments in Watershed Description (Figure 40):

- 1212_01, _03 and _04: General Use—high pH
There are concerns for chlorophyll-*a* in 1211_01, 1212_01, _03, _04, 1212C_01, 1212F_01, 1212K_01, 1212L_01. There are also concerns for depressed dissolved oxygen and total phosphorus in 1212C_01 and depressed dissolved oxygen in 1212F_01.

Possible Contributions if Impaired:

Point Sources: There are three cities and three wastewater outfalls in the watershed.

Non-point sources: Planted/cultivated crops account for approximately 42% of the land use in the watershed. Runoff from agriculture and rangeland could provide contributions. Approximately 52% of the watershed has land cover suitable for wildlife as well.

Potential non-State Agency Stakeholders:

- City of Somerville
- City of Lyons

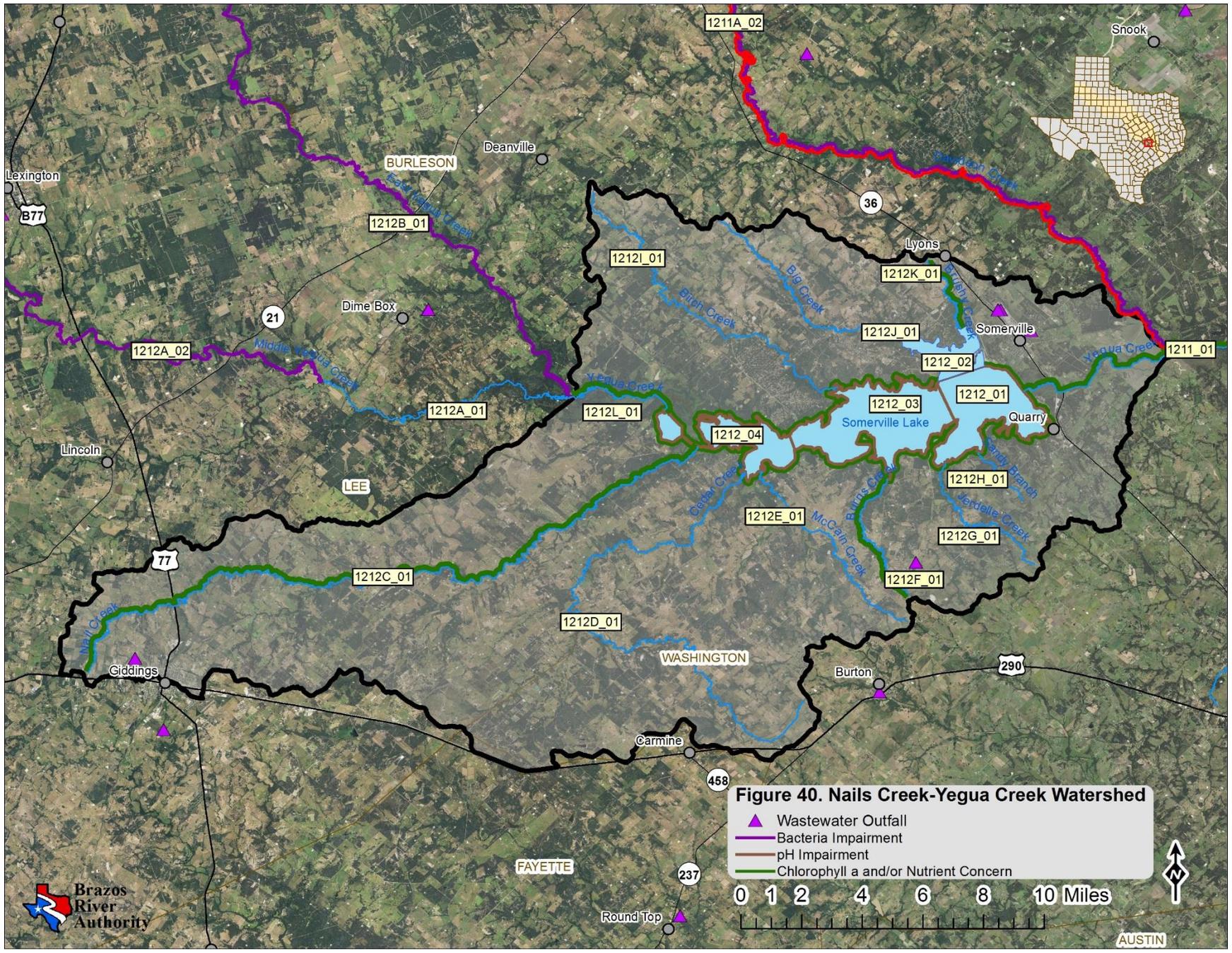
- City of Giddings
- Lee County
- Burleson County
- Washington County
- KOPPERS INC AND BNSF RAILWAY CO
- CAMP FOR ALL FOUNDATION
- Any marinas or other businesses on or that serve Somerville Lake

Actions taken if impaired:

- Additional data collection including: routine monitoring of ten tributaries to Somerville Lake (1212); algae identification, low-level nutrient, silica sampling and algal assays in 1212; and stormwater monitoring in selected subwatersheds were conducted through the Two Data Collection Initiatives project administered by BRA, ending in 2013. No point sources were identified as contributing to the impairment. Internal nutrient cycling within the lake appeared to be the most likely cause of the elevated pH in the reservoir.

Recommendations if Impaired:

- Await TCEQ review of Two Data Collection Initiatives report and recommendation before a management strategy is selected.



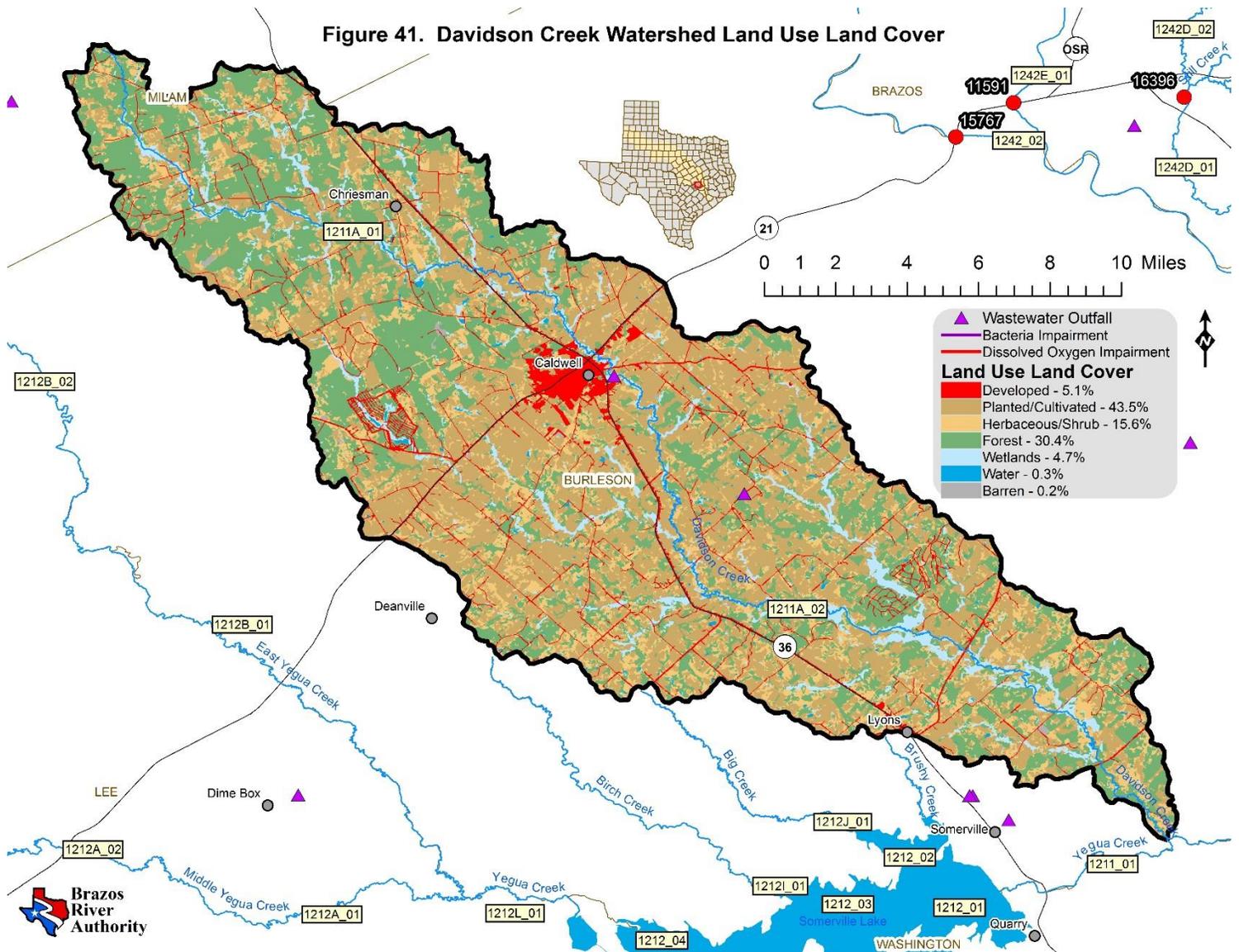
Davidson Creek Watershed

Watershed Description:

The Davidson Creek Watershed is approximately 219 square miles in area.

Land Use Land Cover in Watershed (Figure 41):

There are three cities and two wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a fair amount of herbaceous/shrub area in the watershed.



Segments in Watershed (Figure 42):

- 1211A_01: Davidson Creek from 0.2 km above SH 21 near the City of Caldwell upstream to the headwaters 1.7 km above CR 322; Appendix D.
- 1211A_02: Davidson Creek, intermittent stream with perennial pools from the confluence with Yegua Creek upstream to 0.2 km above SH 21 near the City of Caldwell; Appendix D.

Impairments in Watershed Description (Figure 42):

- 1211A_02: Aquatic Use – Dissolved Oxygen and Recreational Use – Bacteria

Possible Contributions if Impaired:

Point Sources: There are three cities and two wastewater outfalls in the watershed.

Non-point sources: Over 50% of the watershed has land cover suitable for wildlife. Runoff from agriculture and ranchland could provide contributions as well with planted/cultivated crops accounting for approximately 44% of the land use in the watershed.

Potential non-State Agency Stakeholders:

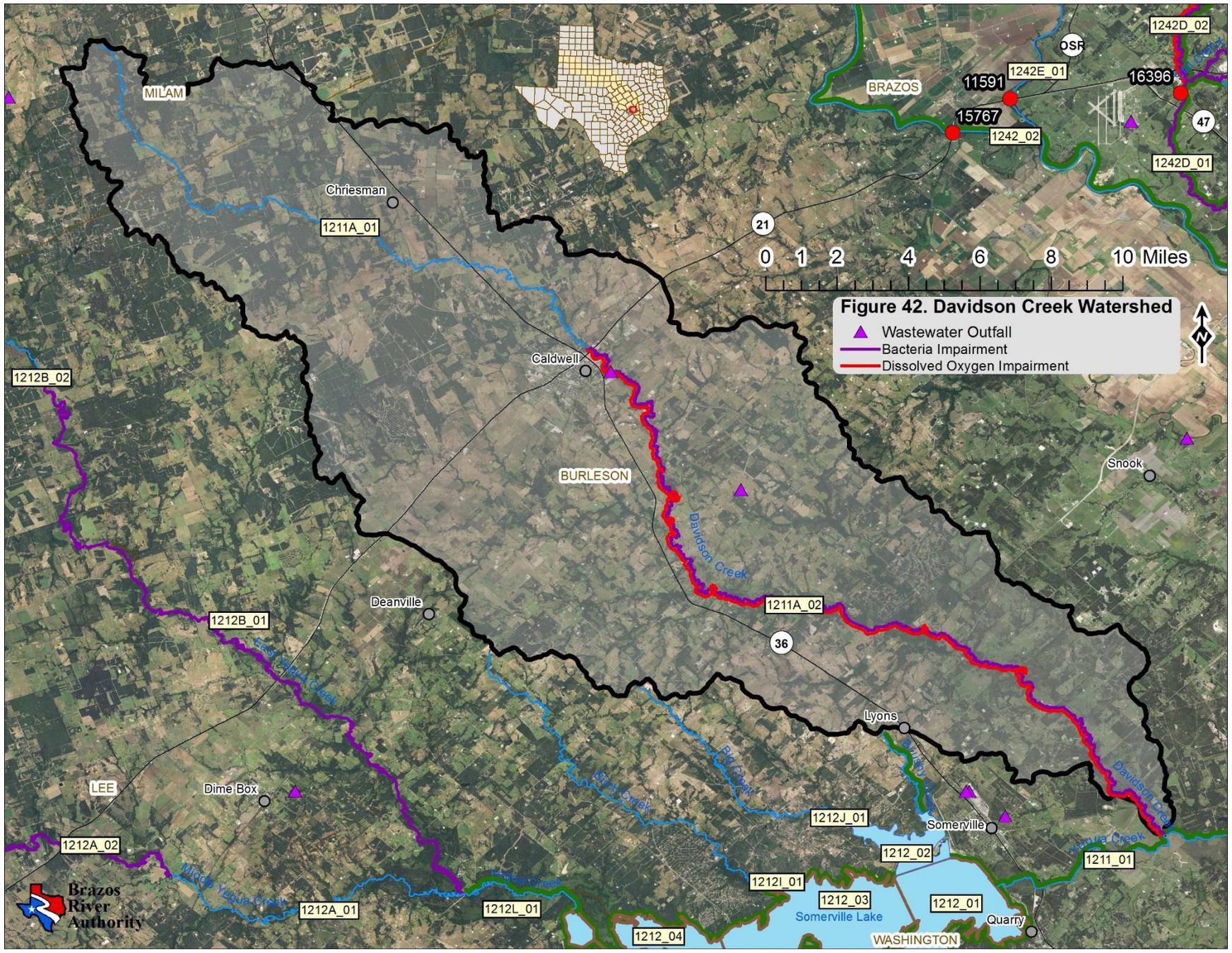
- City of Chriesman
- City of Caldwell
- City of Lyons
- Milam County
- SOUTH CENTRAL WATER CO

Actions taken if impaired:

- An [RUAA](#) has been conducted in segment 1211A_01 and results have led to the recommendation that the segment remain classified as a Primary Contact Recreation (PCR) segment.

Recommendations if Impaired:

- To address the depressed dissolved oxygen impairment, perform a Use Attainability Analysis (UAA) to determine if the existing aquatic life use (ALU) and dissolved oxygen (DO) criteria are appropriate, and if not, provide data for establishing new standards.
- 1211A_01 is currently on the Watershed Action Plan (WAP) table for discussion and evaluation. Input from regional water quality monitors will be obtained during the yearly coordinated monitoring meeting.



Yegua Creek Watershed

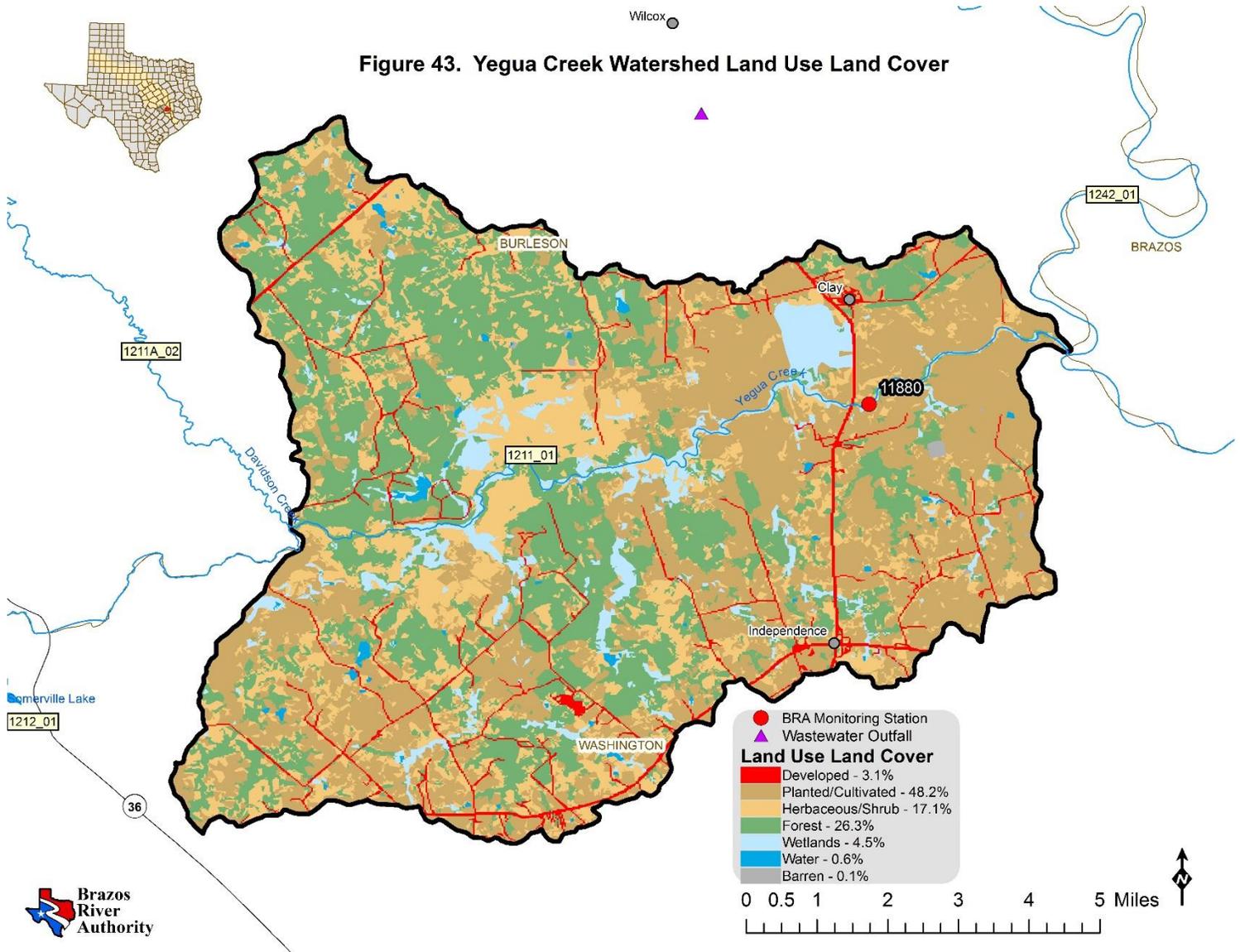
Watershed Description:

The Yegua Creek Watershed is approximately 70 square miles in area.

Land Use Land Cover in Watershed (Figure 43):

There are two cities and no wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being forest. There is a fair amount of herbaceous/shrub area in the watershed.

Figure 43. Yegua Creek Watershed Land Use Land Cover



Segments in Watershed (Figure 44):

- Downstream portion of 1211_01: Yegua Creek from the confluence with the Brazos River in Burleson/Washington County to Somerville Dam in Burleson/Washington County.
Monitoring Station: 11880 - YEGUA CREEK 377 METERS DOWNSTREAM OF FM 50 SOUTH OF CLAY

Impairments in Watershed Description (Figure 44):

- None
- There is a concern for chlorophyll-*a* in 1211_01.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

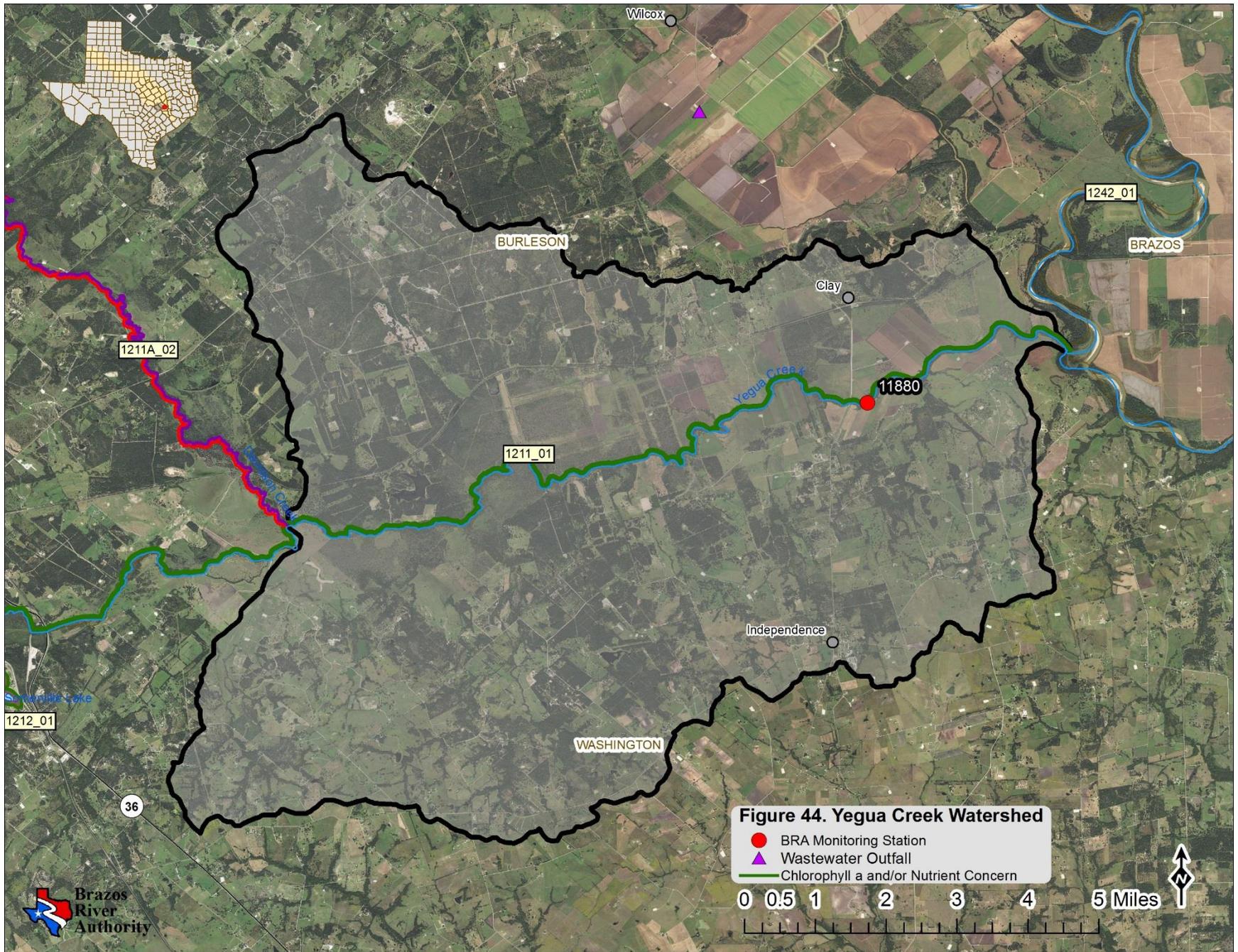
- City of Clay
- City of Independence
- Burleson County
- Washington County

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A



Segments in Watershed (Figure 46):

- Upstream portion of 1202_05: Brazos River below Navasota River, portion of the Brazos River from confluence with Lewisville Creek in Waller County upstream to the confluence with the Navasota River in Grimes County.
- 1202A_01: Beason Creek, perennial stream from the confluence with the Brazos River upstream to the confluence with an unnamed tributary 2.8 km upstream of FM 362; Appendix D.
- 1202A_02: Beason Creek from the confluence with an unnamed tributary 2.8 km upstream of FM 362 to CR 306.
- Downstream portion of 1242_01: Brazos River above Navasota River, portion of Brazos River from confluence with Navasota River upstream to confluence with Thompson's Creek in Brazos County.

Monitoring Station: 12030 - BRAZOS RIVER AT SH 105 WEST OF NAVASOTA

Impairments in Watershed Description (Figure 46):

- None

There is a concern for chlorophyll-*a* in 1202_05.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

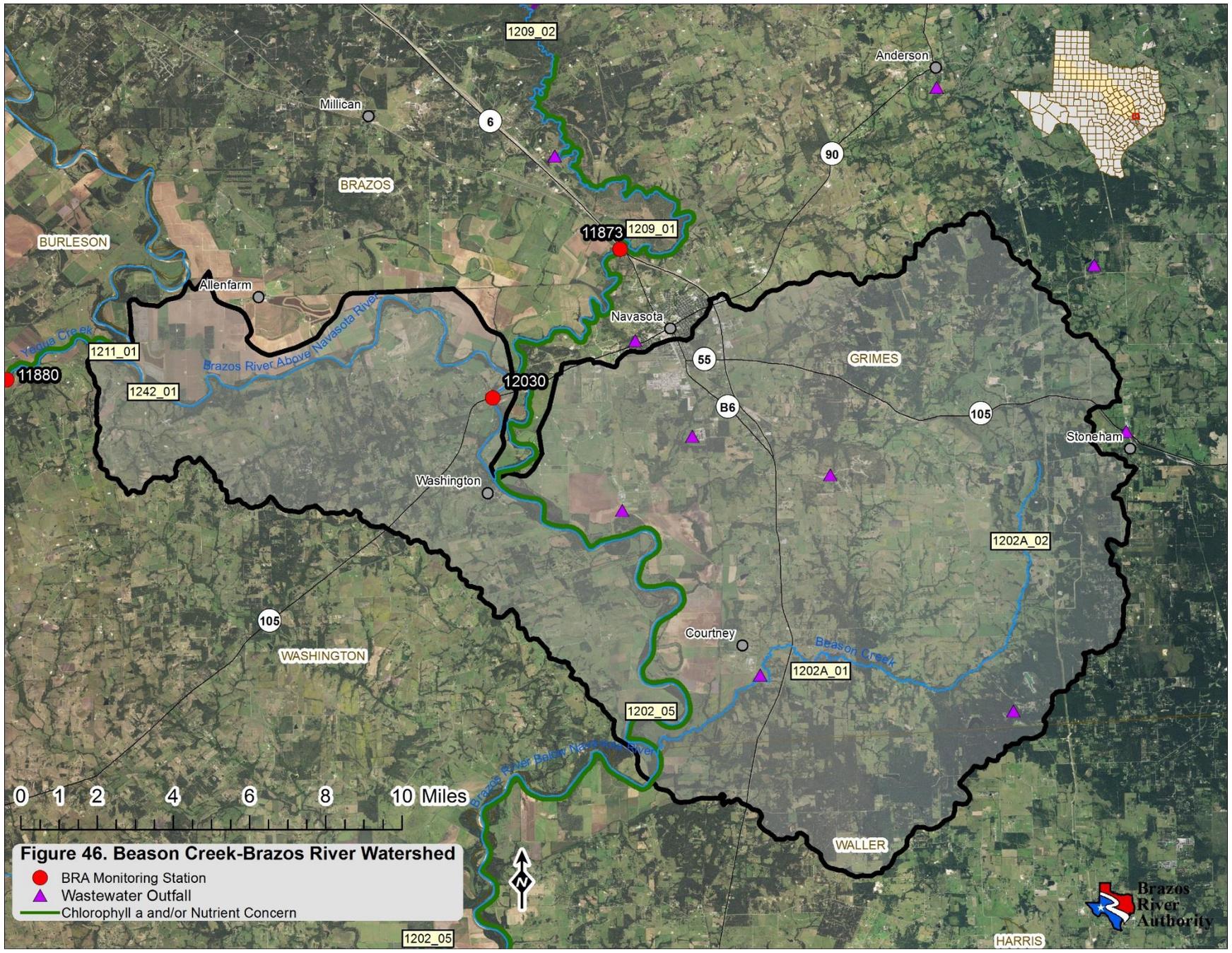
- City of Navasota
- City of Washington
- City of Courtney
- Brazos County
- Washington County
- Grimes County
- Waller County
- ELLWOOD TEXAS FORGE NAVASOTA LLC
- SAM HOUSTON AREA COUNCIL BOYS SCOUTS OF AMERICA
- PROTESTANT EPISCOPAL CHURCH COUNCIL – CAMP ALLEN

Actions taken if impaired:

- N/A

Recommendations if Impaired:

- N/A



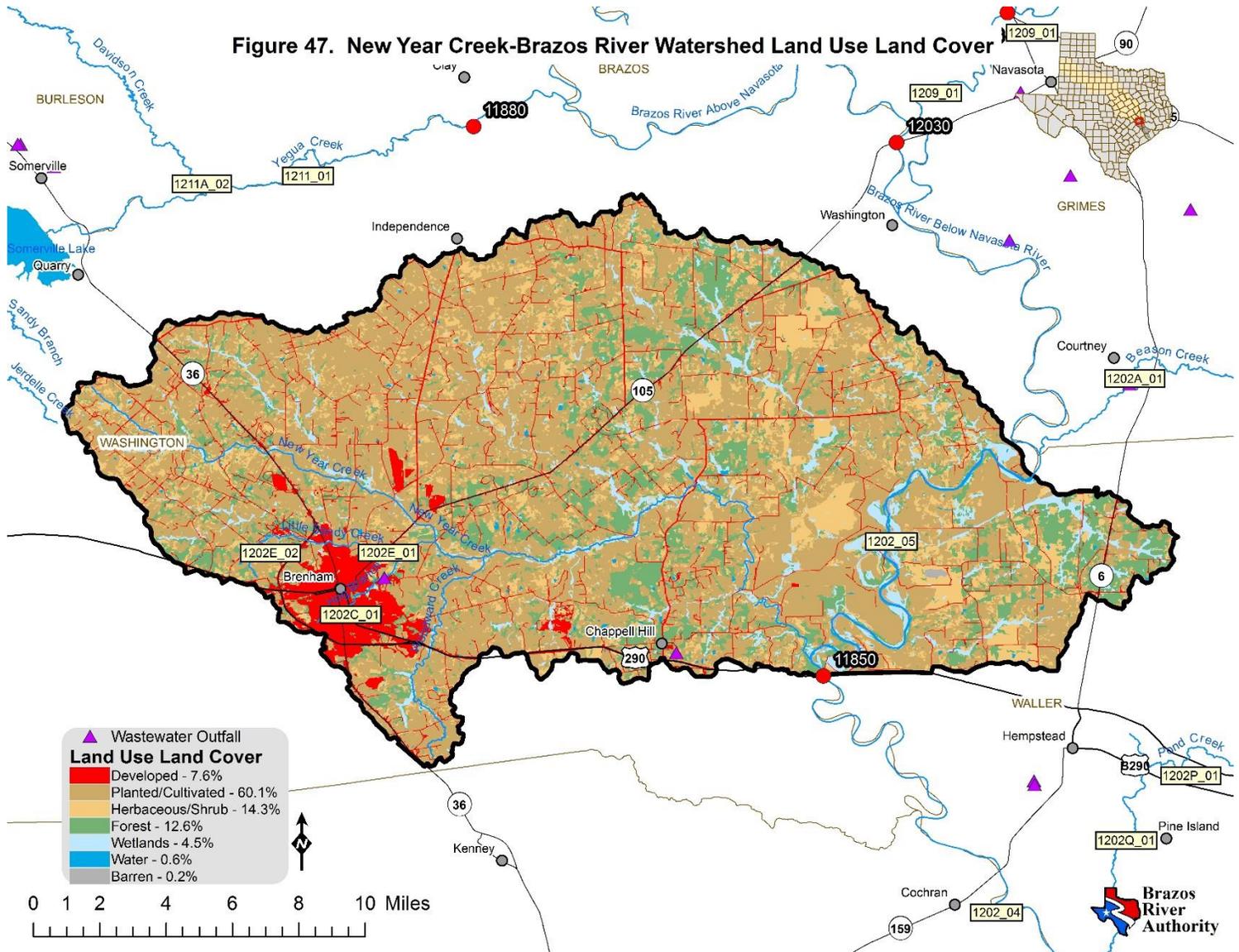
New Year Creek-Brazos River Watershed

Watershed Description:

The New Year Creek-Brazos River Watershed is approximately 277 square miles in area.

Land Use Land Cover in Watershed (Figure 47):

There are two cities and two wastewater outfalls in the watershed. Dominant landcover is planted/cultivated. There is a moderate amount of herbaceous/shrub and forest landcover in the watershed.



Segments in Watershed (Figure 48):

- New Year Creek
- Woodward Creek
- Middle portion of 1202_05: Brazos River below Navasota River, portion of the Brazos River from confluence with Lewisville Creek in Waller County upstream to the confluence with the Navasota River in Grimes County.
- 1202C_01: Hog Branch, perennial stream from the confluence with Little Sandy Creek upstream to Loop 318 in the City of Brenham.
- 1202D_01: New Year Creek an Appendix D perennial stream from the confluence of Woodward Creek upstream to the confluence of Big Sandy Creek.
- 1202E_01: Little Sandy Creek, perennial stream from the confluence with New Year Creek to a point 100 meters upstream of Loop 283.
- 1202E_02: Little Sandy Creek from a point 100 meters upstream of Loop 283 to the headwaters at CR 46A.

Impairments in Watershed Description (Figure 48):

- None
- There is a concern for chlorophyll-*a* in 1202_05.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

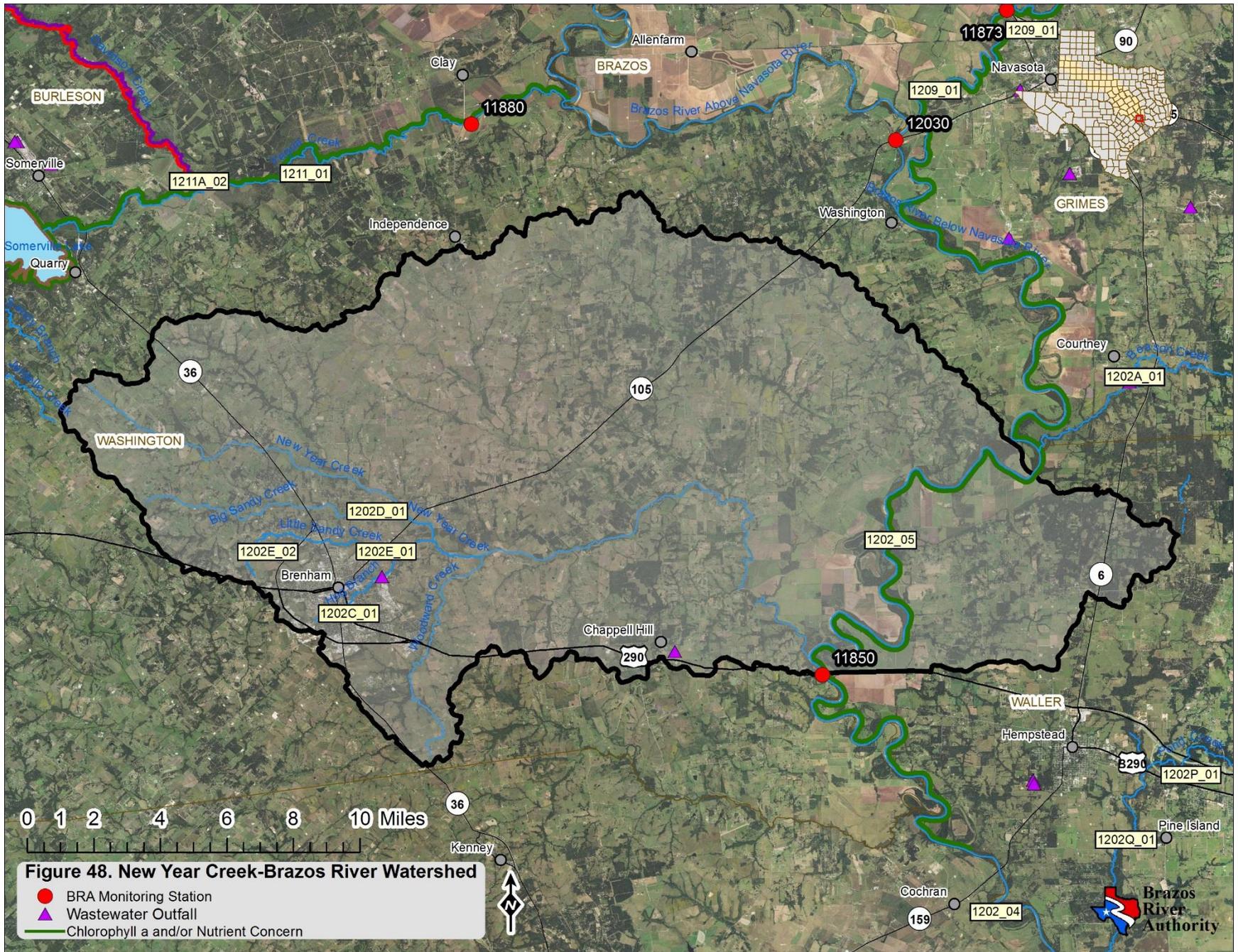
- City of Brenham
- City of Chappell Hill
- Washington County
- Waller County

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A



Segments in Watershed (Figure 50):

- Upstream portion of 1202_04: Brazos River below Navasota River, portion of Brazos River from the confluence with Mill Creek in Austin County upstream to confluence with Lewisville Creek in Waller County.
- Downstream portion of 1202_05: Brazos River below Navasota River, Portion of the Brazos River from confluence with Lewisville Creek in Waller County upstream to the confluence with the Navasota River in Grimes County.
Monitoring Station: 11850 - BRAZOS RIVER AT US 290 6.5 MILES NORTHWEST OF HEMPSTEAD
- 1202P_01: Pond Creek from its confluence with Clear Creek upstream to its headwaters, 3 mi north of Prairie View in Waller County.
- 1212Q_01: Clear Creek an Appendix D perennial stream from the confluence of the Brazos River upstream to the confluence of an unnamed tributary approximately 0.2 km upstream of FM 1488 east of Hempstead.

Impairments in Watershed Description (Figure 50):

- None
There is a concern for chlorophyll-*a* in 1202_05.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

- City of Hempstead
- City of Prairie View
- City of Pine Island
- City of Cochran
- Washington County
- Austin County
- Grimes County
- Prairie View A&M University

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A

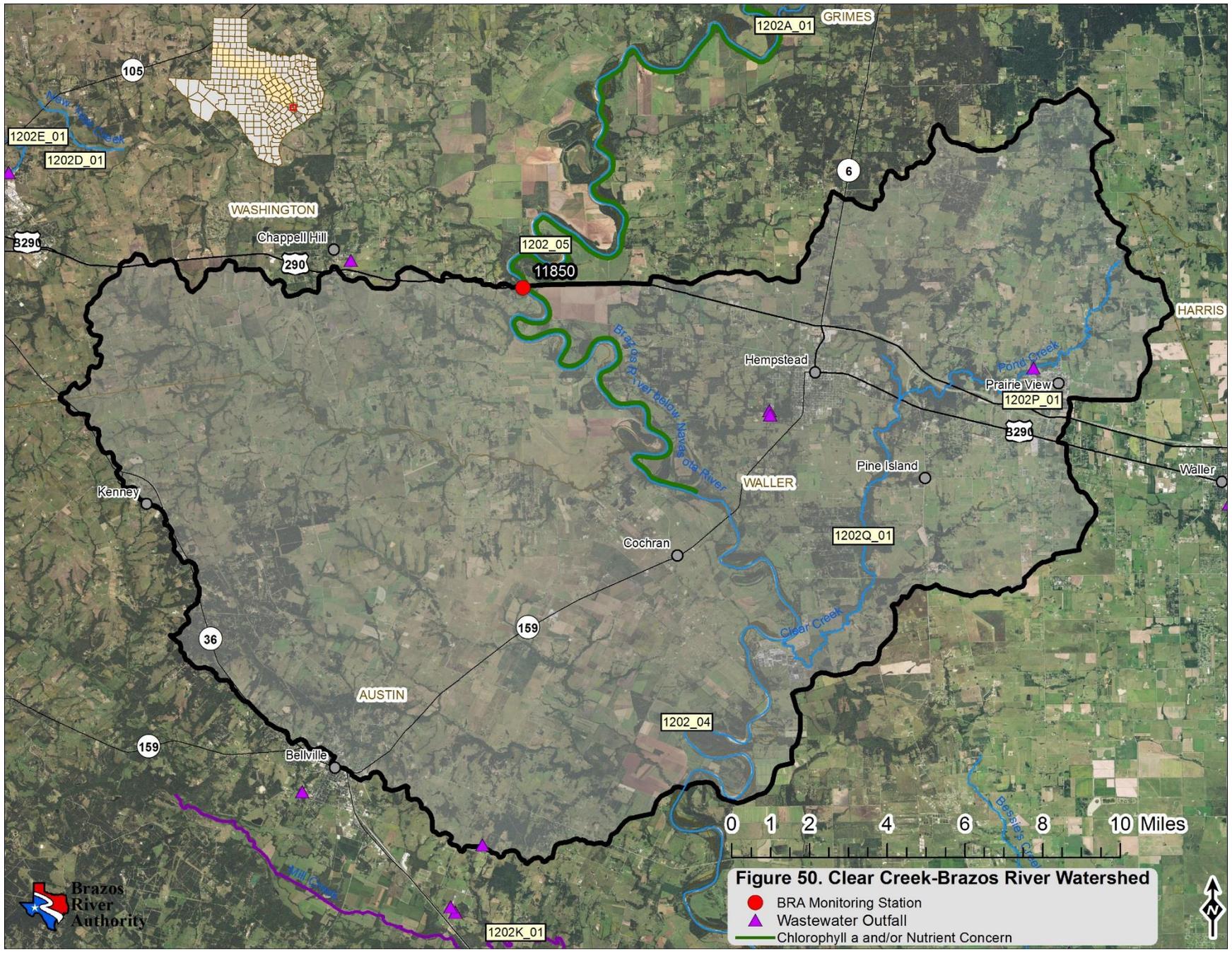


Figure 50. Clear Creek-Brazos River Watershed

- BRA Monitoring Station
- ▲ Wastewater Outfall
- Chlorophyll a and/or Nutrient Concern



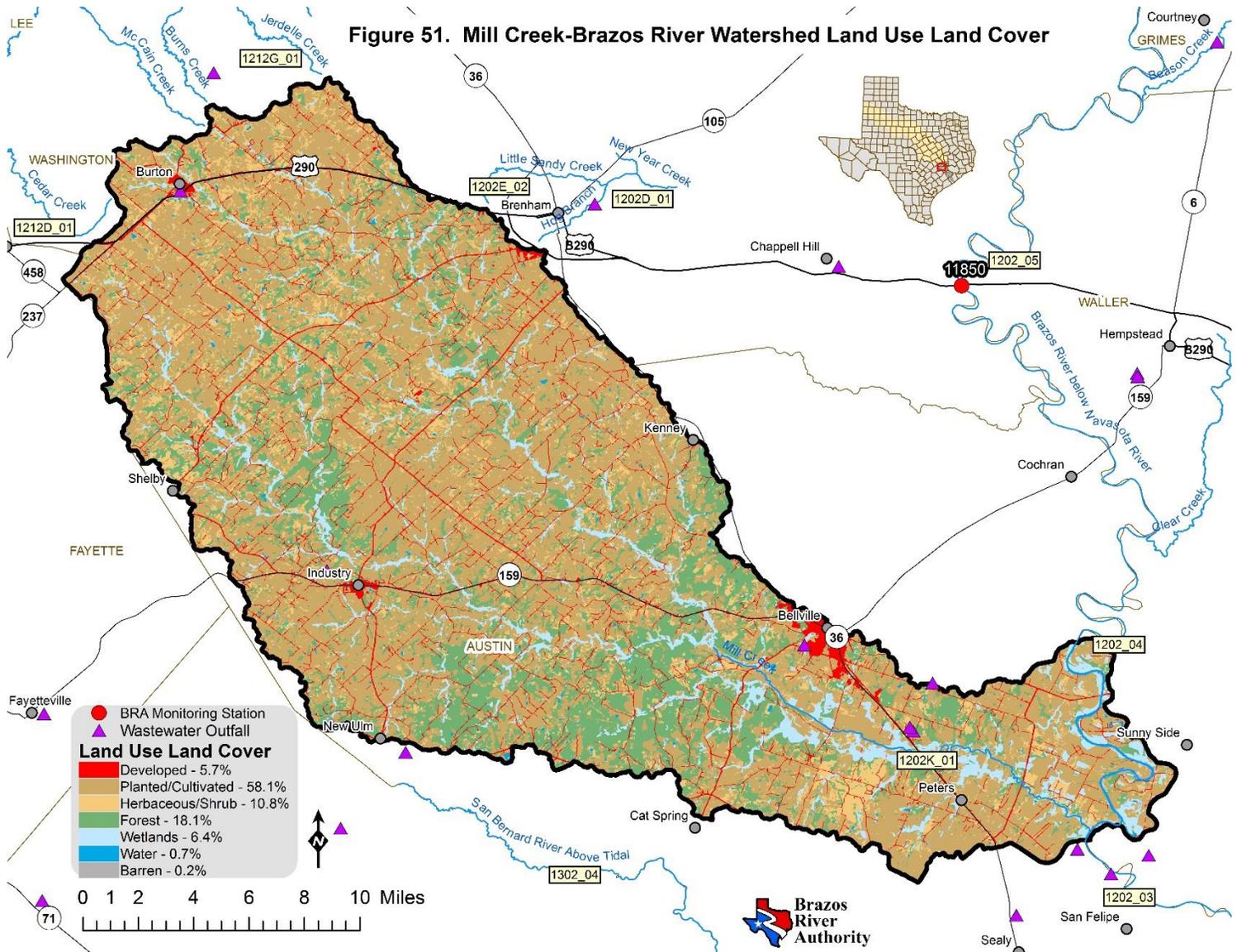
Mill Creek-Brazos River Watershed

Watershed Description:

The Mill Creek-Brazos River Watershed is approximately 424 square miles in area.

Land Use Land Cover in Watershed (Figure 51):

There are six cities and five wastewater outfalls in the watershed. Dominant landcover is planted/cultivated. There is a moderate amount of forest and herbaceous/shrub landcover in the watershed.



Segments in Watershed (Figure 52):

- Downstream portion of 1202_04: Brazos River below Navasota River, portion of Brazos River from the confluence with Mill Creek in Austin County upstream to confluence with Lewisville Creek in Waller County.
- 1202K_01: Portion of Mill Creek from confluence with Brazos River upstream to confluence with East/West Forks Mill Creek in Austin County.

Impairments in Watershed Description (Figure 52):

- 1202K_01: Recreational Use—bacteria
There is a concern for impaired habitat for 1202K_01.

Possible Contributions if Impaired:

Point Sources: There are six cities and five wastewater outfalls in the watershed.

Non-point sources: Planted/cultivated crops account for approximately 58% of the land use in the watershed. Runoff from agriculture and rangeland could provide contributions. Approximately 35% of the watershed has land cover suitable for wildlife as well.

Potential non-State Agency Stakeholders:

- City of Burton
- City of Kenney
- City of Industry
- City of Bellville
- City of New Ulm
- City of Peters
- Washington County
- Austin County
- Waller County
- US STEEL TUBULAR PRODUCTS INC

Actions taken if impaired:

- The draft [Mill Creek Watershed Protection Plan](#) addressing issues in segment 1202K was published in June 2015.

Recommendations if impaired:

- Continue to follow the development and implementation of the Mill Creek Watershed Protection Plan.

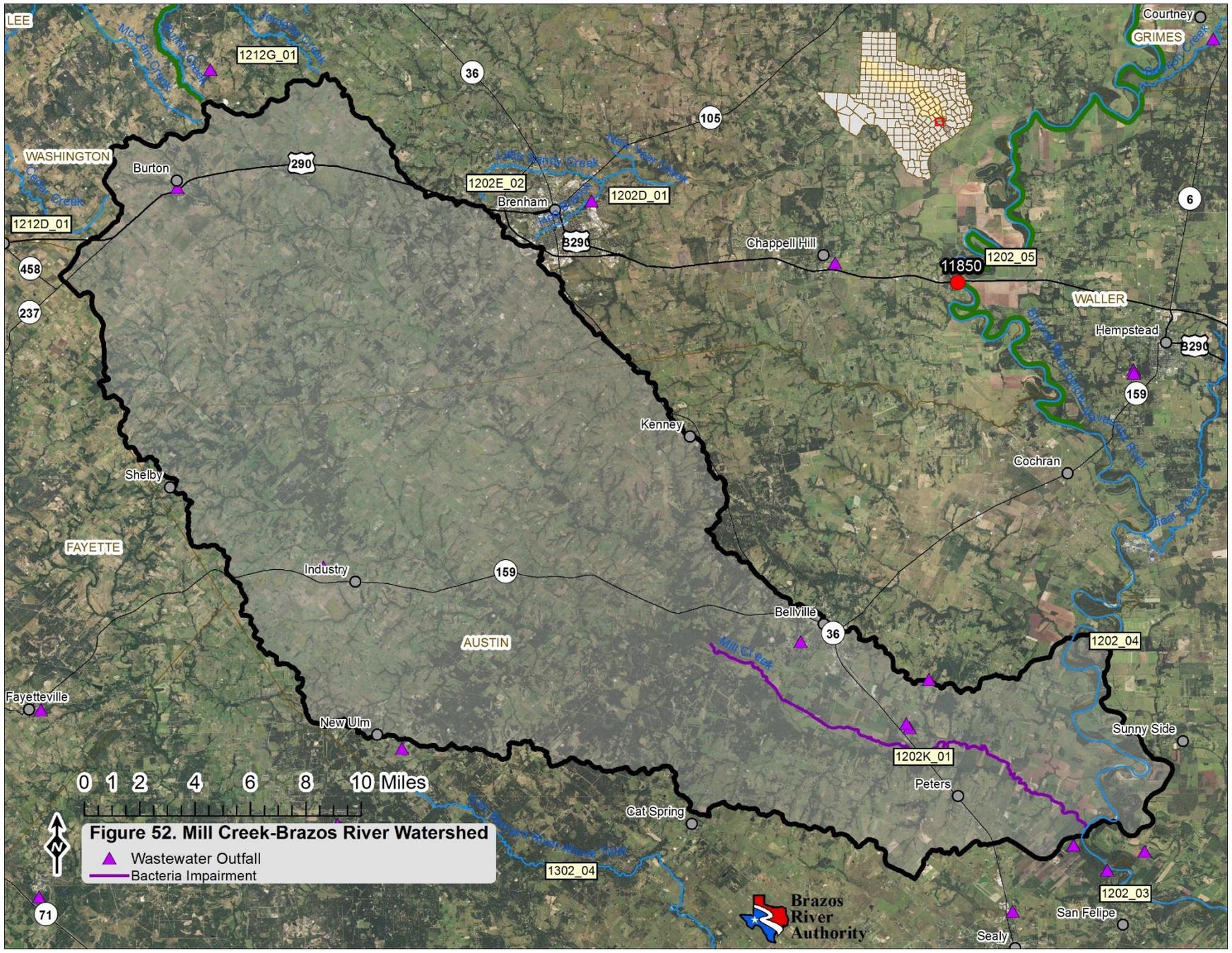


Figure 52. Mill Creek-Brazos River Watershed

- ▲ Wastewater Outfall
- Bacteria Impairment

Segments in Watershed (Figure 54):

- 1202_03: Brazos River below Navasota River, portion of the Brazos River from the confluence with Bessie's Creek in Fort Bend County upstream to confluence with Mill Creek in Austin County.
Monitoring Stations:
11848 - BRAZOS RIVER AT FM 1093 NORTHEAST OF WALLIS
21621 - ALLENS CREEK APPROX 480 METERS EAST AND 165 METERS NORTH OF THE INTERSECTION OF SH 36 AND REDEEMER WAY RD AND 4.0 KM NW OF WALLIS
21753 - ALLENS CREEK AT MIXVILLE RD SOUTH OF SEALY
- 1202G_01: Brookshire Creek an Appendix D perennial stream from the confluence of an unnamed tributary located 0.2 km downstream of SH 359 upstream to 500 m upstream of US 90.
- 1202H_01: Allen's Creek from the confluence with the Brazos River, two miles northeast of Wallis, to the headwaters one mile north of IH 10 in Austin County.
Monitoring Station: 11577 - ALLENS CREEK AT FM 1458 NORTH OF WALLIS
- 1202I_01: Bessie's Creek from the confluence of the Brazos River in Fort Bend County upstream to confluence of Bessie's Bayou west of Brookshire.
- 1202I_02: Bessie's Creek Appendix D section from the confluence of Bessie's Bayou west of Brookshire upstream to the confluence of an unnamed tributary approximately 0.7 km upstream of FM 359 northwest of the City of Pattison.
- 1202I_03: Bessie's Creek from the confluence of an unnamed tributary approximately 0.7 km upstream of FM 359 northwest of the City of Pattison upstream to the headwater north of Pattison.

Impairments in Watershed Description (Figure 54):

- 1202H_01: Recreational Use—bacteria
There are also concerns for depressed dissolved oxygen, nitrate and total phosphorus in 1202H_01.

Possible Contributions if Impaired:

Point Sources: There are nine cities and eighteen wastewater outfalls in the watershed.

Non-point sources: Planted/cultivated crops account for approximately 71% of the land use in the watershed. Runoff from agriculture and rangeland could provide contributions. Approximately 20% of the watershed has land cover suitable for wildlife as well.

Potential non-State Agency Stakeholders:

- City of Patterson
- City of San Felipe
- City of Sealy
- City of Brazos Country
- City of Brookshire
- City of Simonton
- City of Fulshear
- City of Weston Lakes
- City of Wallis
- Waller County
- Austin County

- Fort Bend County
- BEACON ESTATES WSC
- ACME BRICK CO
- POSTIVE FEED LTD
- MARHABA PARTNERS LIMITED PARTNERSHIP
- B & B INVESTMENTS INC
- FULSHEAR LAKES LTD
- AQUA TEXAS INC
- TWINWOOD US INC
- VULCAN CONSTRUCTION MATERIALS LP
- BRAZOS ISD

Actions taken if impaired:

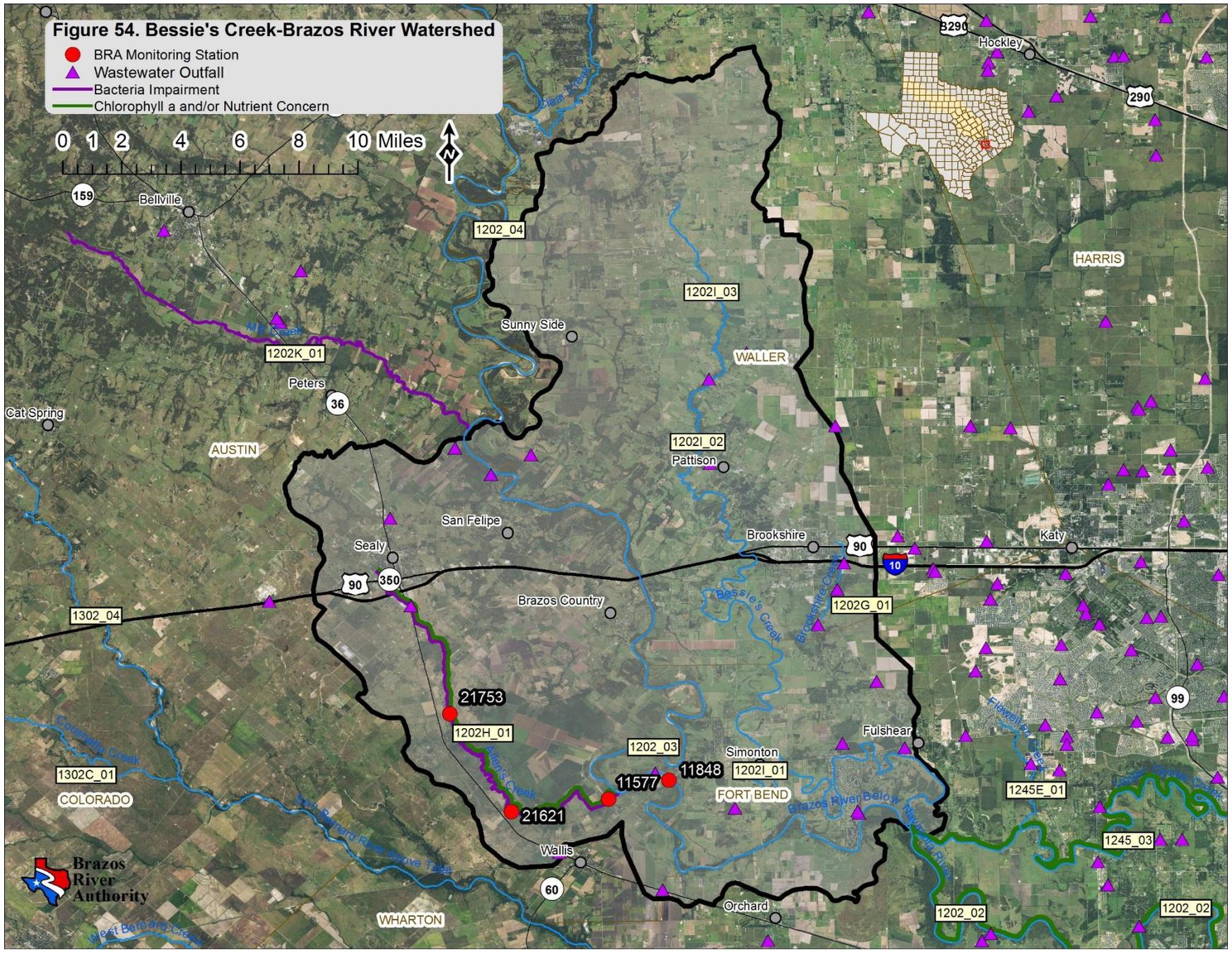
- An [RUAA](#) has been completed for 1202H. Results have led to the recommendation that the recreational use of this segment be revised to secondary contact recreation 1 (SCR 1).

Recommendations if impaired:

- Await EPA review and approval of revised recreational use for 1202H before a management strategy is selected.

Figure 54. Bessie's Creek-Brazos River Watershed

- BRA Monitoring Station
- ▲ Wastewater Outfall
- Bacteria Impairment
- Chlorophyll a and/or Nutrient Concern



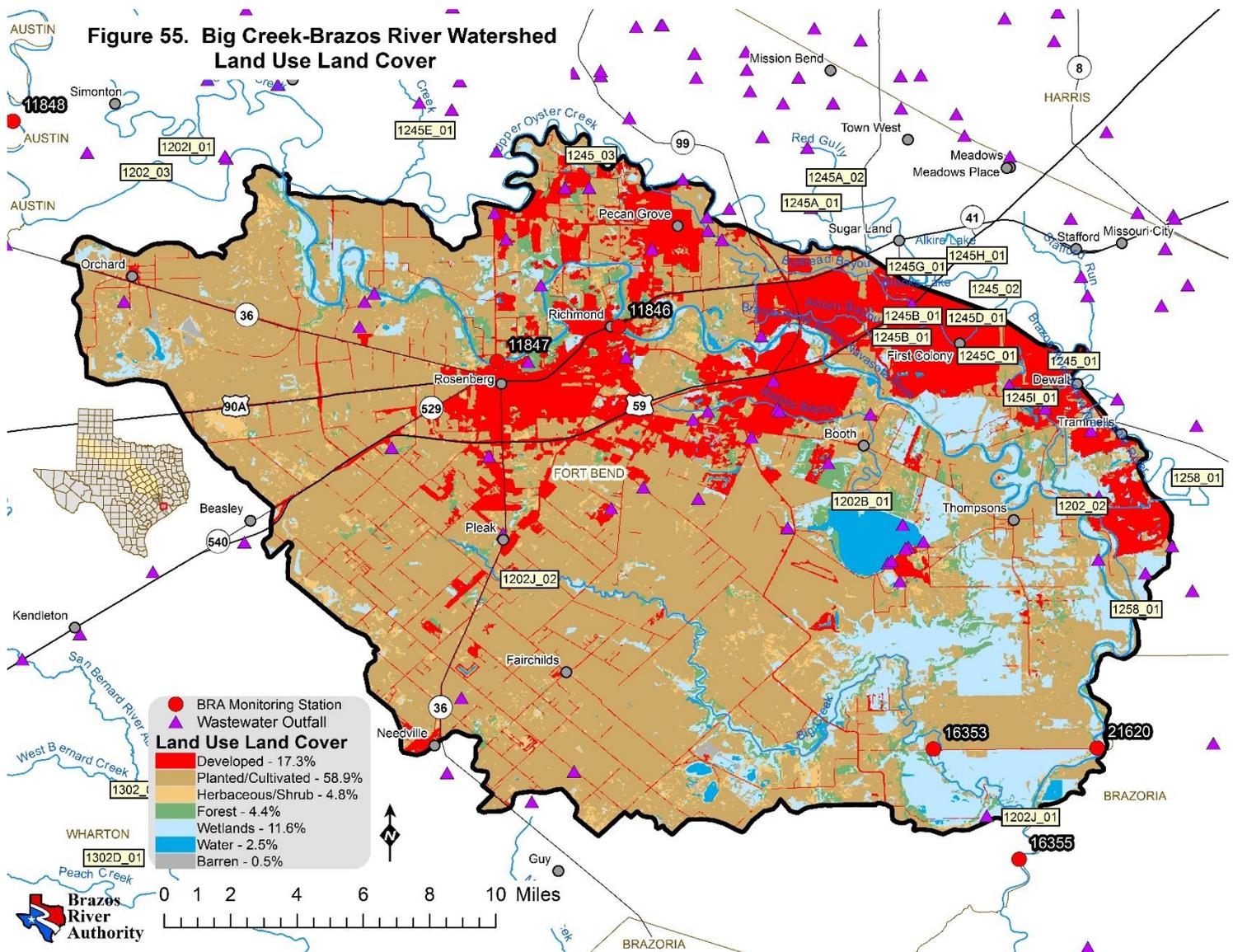
Big Creek-Brazos River Watershed

Watershed Description:

The Big Creek-Brazos River Watershed is approximately 394 square miles in area.

Land Use Land Cover in Watershed (Figure 55):

There are eleven cities and fifty wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being developed. There is a fair amount of wetland area in the watershed.



Segments in Watershed (Figure 56):

- Upstream portion of 1202_01: Brazos River below Navasota River, portion of the Brazos River from the confluence with the Brazos River Tidal in Brazoria County upstream to the confluence with Flat Bank Creek in Fort Bend County.
Monitoring Station: 21620 - BRAZOS RIVER 8.2 KM UPSTREAM OF FM 1462 WEST OF ROSHARON
- 1202_02: Brazos River Below Navasota River, portion of the Brazos River from the confluence with Flat Bank Creek upstream to the confluence with Bessie's Creek in Fort Bend County.
Monitoring Stations:
11846 - BRAZOS RIVER 70 METERS DOWNSTREAM OF US 90A IN RICHMOND
11847 - BRAZOS RIVER AT FM 723 IN ROSENBERG
- 1202B_01: Rabbs Bayou Appendix D perennial stream section from Smithers Lake upstream to the confluence of an unnamed tributary below US 59.
- 1202J_01: Big Creek from the confluence of the Brazos River upstream to the confluence of an unnamed tributary 2.1 km downstream of FM 2977 south of Rosenberg.
Monitoring Station: 16353 - BIG CREEK IMMEDIATELY UPSTREAM OF SAWMILL ROAD 7.0 KM UPSTREAM OF WATERS LAKE BAYOU E OF LONG POINT N OF BRAZOS BEND STATE PARK
- 1202J_02: Big Creek Appendix D intermittent stream with perennial pools section from the confluence with an unnamed tributary 2.1 km downstream of FM 2977 upstream to the confluence of Cottonwood Creek and Coon Creek.
- Downstream portion of 1245_01: Upper Oyster Creek from Steep Bank Creek/Brazos River confluence in Fort Bend County to pumping station on Jones Creek confluence at Brazos River in Fort Bend County (includes portions of Steep Bank Creek, Flat Bank Creek, and Jones Creek).
- 1245B_01: Brown's Bayou from US Hwy 59 downstream to its confluence with Bullhead Bayou in Fort Bend County.
- 1245C_01: Bullhead Bayou from its confluence with Steep Bank Creek in Fort Colony, upstream to its headwaters in Pecan Grove in Fort Bend County.
- 1245D_01: Unnamed Tributary of Bullhead Bayou in Fort Bend County.
- 1245F_01: Alcorn Bayou from the confluence with Steep Bank Creek upstream to its headwaters 0.5km east of Pecan Grove in Fort Bend county.
- 1245I_01: Steep Bank Creek from confluence with Oyster Creek (Flat Bank Creek portion) upstream to end of water body, 0.2 km east of US 59 in city of First Colony, Fort Bend County.
- Downstream portion of 1258_01: Middle Oyster Creek from the confluence with the Brazos River through the Brazos River Authority Canal to the confluence with Upper Oyster Creek above Tidal and upstream to the confluence with the Flat Creek Diversion Channel in Fort Bend County.

Impairments in Watershed Description (Figure 56):

- 1202J_01: Recreational Use—bacteria
- 1245C_01: Recreational Use—bacteria
- 1245D_01: Recreational Use—bacteria
- 1245F_01: Recreational Use—bacteria
- 1245I_01: Recreational Use—bacteria

There are concerns for chlorophyll *a* in 1202_02, 1202J_01, 1245_01. There are also concerns for depressed dissolved oxygen and nitrate in 1202J_02, 1245_01, and 1245I_01. There is a concern for habitat in 1202J_01 and an additional concern for total phosphorus in 1202J_02.

Possible Contributions if Impaired:

Point Sources: There are eleven cities and fifty wastewater outfalls in the watershed.

Non-point sources: Approximately 59% of the watershed is made up of planted/cultivated crops. However, near all but one (1202J) of the five impaired segments, developed land cover is the dominant land cover, allowing for municipal and urban runoff contribution near these segments.

Potential non-State Agency Stakeholders:

- City of Sugarland
- City of Missouri City
- City of Richmond
- City of Rosenberg
- City of Orchard
- City of Pecan Grove
- Pleak Village
- City of Booth
- City of First Colony
- Town of Thompsons
- Village of Fairchilds
- Fort Bend County
- AQUA DEVELOPMENT CO
- VENTANA DEVELOPMENT MCCRARY LTD
- 723 FORT BEND PARTNERS LP
- LAMAR CONSOLIDATED ISD
- FRITO-LAY INC
- ROYAL VALLEY UTILITIES INC
- GRAND PARKWAY 1358 LP
- GREATWOOD HOSPITALITY INC
- PLANTATION MUD
- SIENNA PLANTATION MUD 1
- BHAKTI VISHRAM KUTEER LLC
- ODA MIKE
- THE GEORGE FOUNDATION
- DRY CREEK (HOUSTON) ASLI VII LLC
- NRG TEXAS POWER LLC
- PETRA NOVA CCS I LLC
- BRAZOS VALLEY ENERGY LP AND CALPINE OPERATING SERVICES CO INC

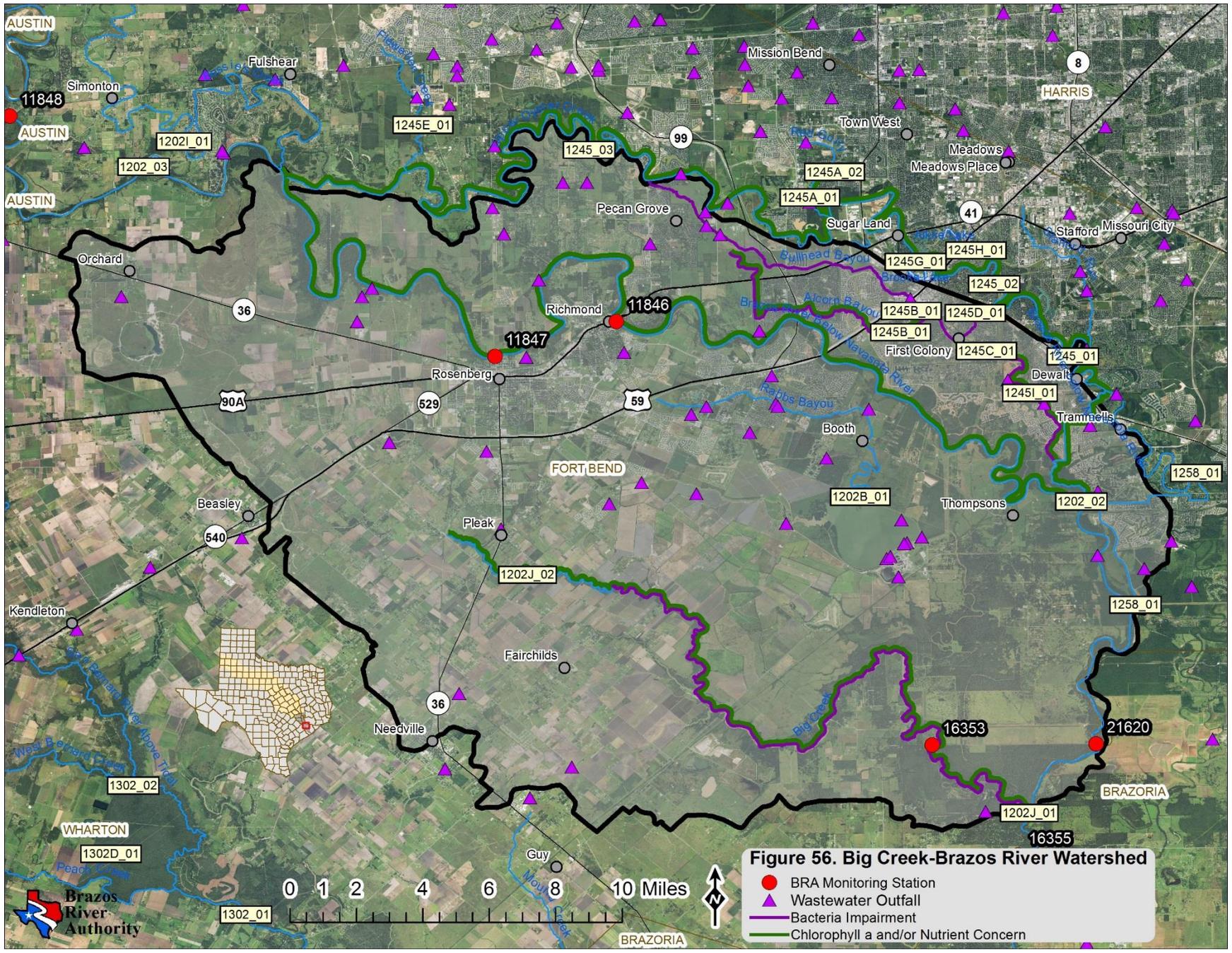
Actions taken if impaired:

- RUAs were completed, reviewed, recommendations were made, and EPA approved [revising 1245C](#) and [1245D](#) to a designated use of secondary contact recreation 1 (SCR1). This will be reflected in the 2016 draft IR.

Recommendations if impaired:

- Await publication of the draft 2016 IR.

- 1202J_01, 1245F_01 and 1245I_01 are currently on the Watershed Action Plan (WAP) table for discussion and evaluation. Input from regional water quality monitors will be obtained during the yearly coordinated monitoring meeting.



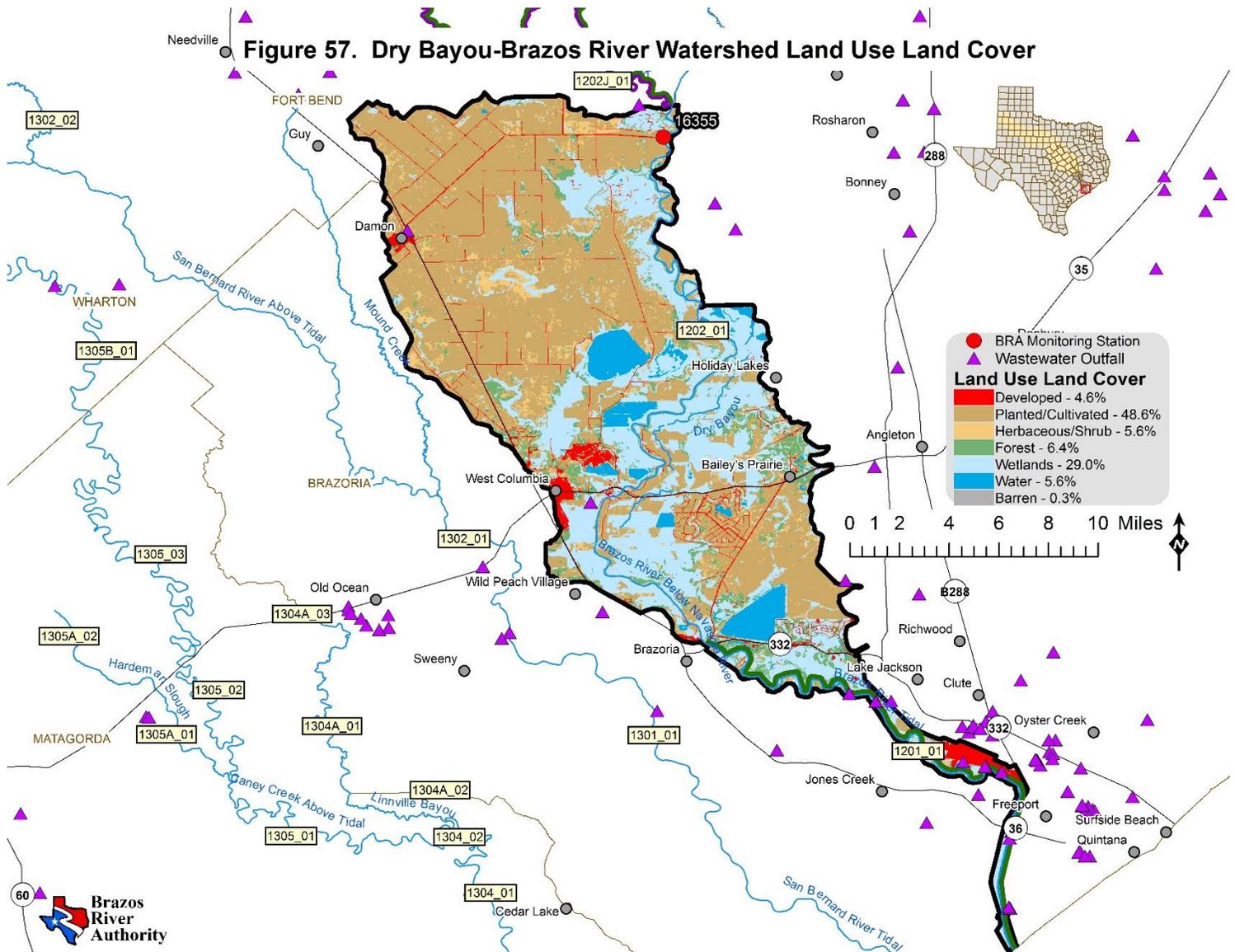
Dry Bayou-Brazos River Watershed

Watershed Description:

The Dry Bayou-Brazos River Watershed is approximately 237 square miles in area.

Land Use Land Cover in Watershed (Figure 57):

There are four cities and ten wastewater outfalls in the watershed. Dominant landcover is planted/cultivated with the next most dominant landcover being wetland.



Segments in Watershed (Figure 58):

- Dry Bayou
- 1201_01: Brazos River Tidal from the confluence with the Gulf of Mexico in Brazoria County to a point 100 meters (110 miles) upstream of SH 332 in Brazoria County.
- Downstream portion of 1202_01: Brazos River below Navasota River, portion of the Brazos River from the confluence with the Brazos River Tidal in Brazoria County upstream to the confluence with Flat Bank Creek in Fort Bend County.

Monitoring Station: 16355 - BRAZOS RIVER AT FM 1462 EAST BANK 4 MILES EAST OF WOODROW AND 7.4 MILES WEST OF ROSHARON

Impairments in Watershed Description (Figure 58):

- None
- There is a concern for chlorophyll-*a* in 1201_01.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

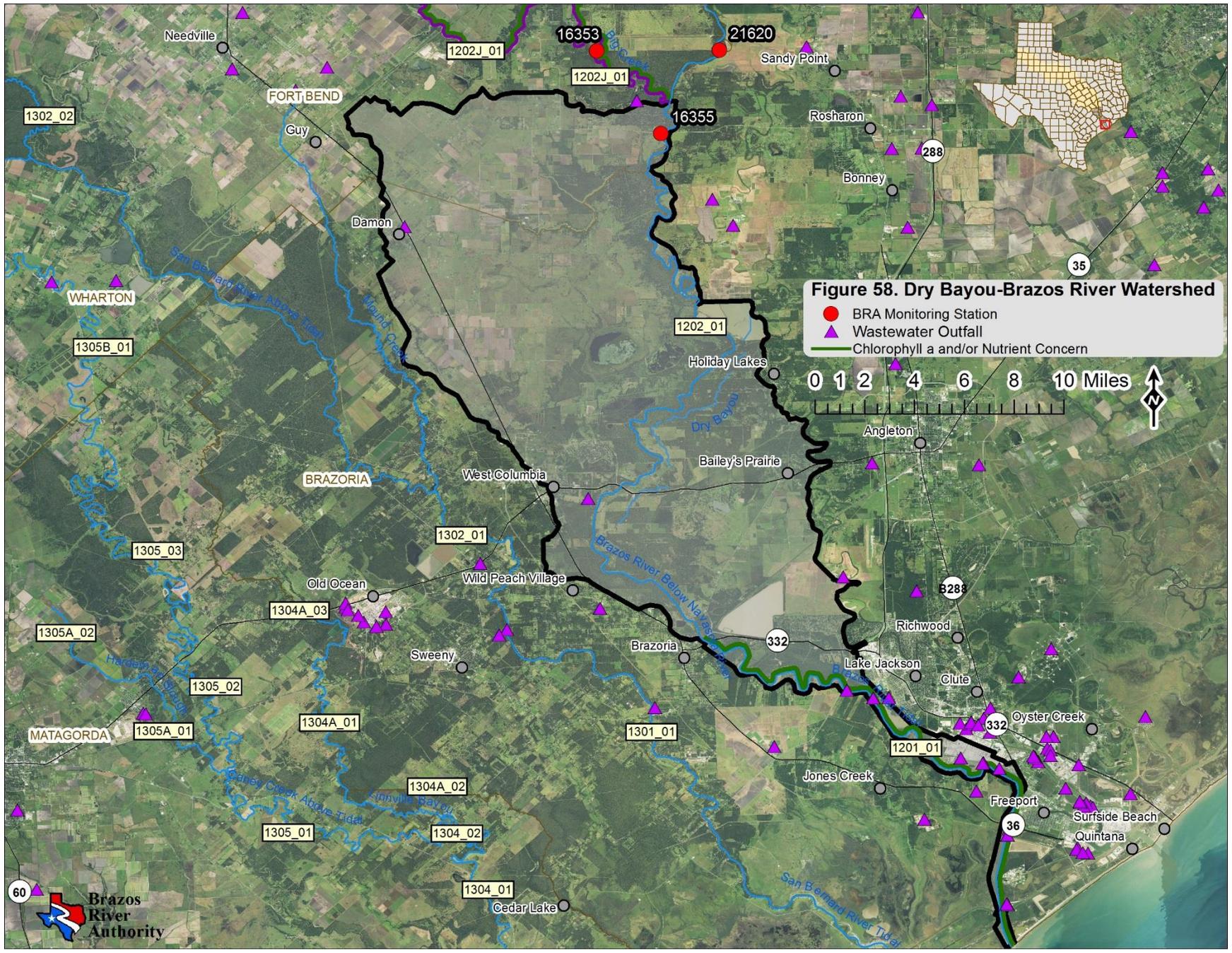
- City of West Columbia
- Village of Bailey's Prairie
- City of Lake Jackson
- City of Freeport
- Brazoria County
- Fort Bend County
- BRAZOSPORT WATER AUTHORITY
- BASF CORP
- THE DOW CHEMICAL CO
- CHEVRON PHILLIPS CHEMICAL COMPANY LP
- TEXAS BARGE AND BOAT INC

Actions taken if impaired:

- N/A

Recommendations if impaired:

- N/A



Segments in Watershed (Figure 60):

- 1202F_01: An unnamed oxbow slough immediately north of the intersection of US 90A and SH 6 at the head of Ditch H.
- The upstream portion of 1245_02: Upper Oyster Creek from Steep Bank Creek/Brazos River confluence in Fort Bend County to pumping station on Jones Creek confluence at Brazos River in Fort Bend County (includes portions of Steep Bank Creek, Flat Bank Creek, and Jones Creek).
- 1245_03: Upper Oyster Creek from Harmon St. crossing in Sugar Land upstream to the end of the segment.
- 1245A_01: Red Gully, perennial stream from the confluence with Oyster Creek upstream to 1.7 km upstream of Old Richmond Road; Appendix D.
- 1245A_02: Red Gully from 1.7 km upstream of Old Richmond Road upstream to the confluence with two unnamed tributaries 0.1 km east of Clodine Road.
- 1245E_01: Flewellen Creek from the confluence with Oyster Creek upstream to the confluence with two unnamed tributaries, 0.3 km east of Fulshear in Fort Bend county.
- 1245G_01: Brooks Lake, impounded Oyster Creek (Dam #2) in south Sugar Land, Fort Bend County.
- 1245H_01: Alkire Lake, amenity lake in south-central Sugar Land, Fort Bend County.

Impairments in Watershed Description (Figure 60):

- None
There are concerns for chlorophyll-*a* and depressed dissolved oxygen in 1245_02. There is also a concern for chlorophyll-*a* in 1245_03. There is a concern for nitrate in 1245A_01.

Possible Contributions if Impaired:

Point Sources: N/A

Non-point sources: N/A

Potential non-State Agency Stakeholders:

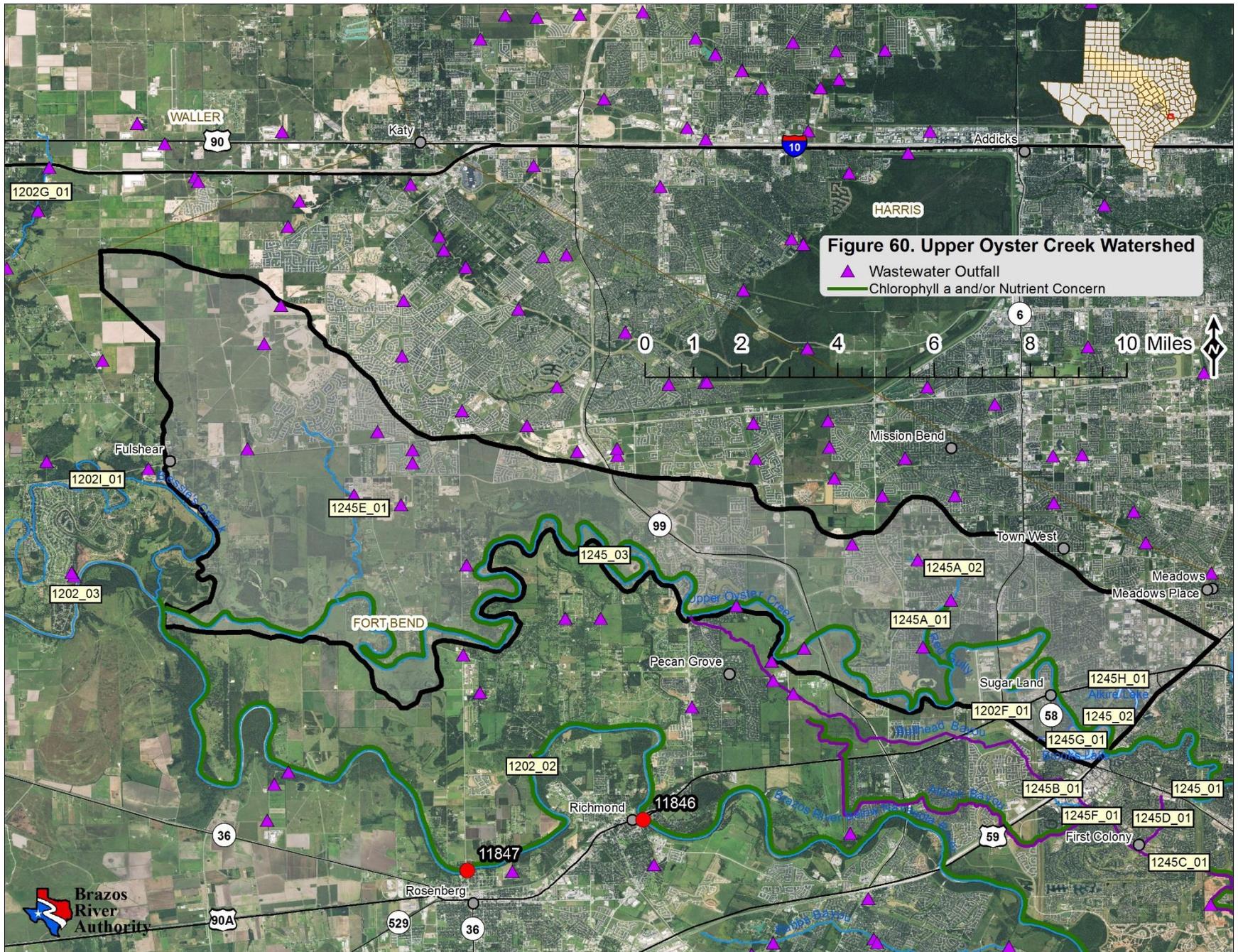
- City of Fulshear
- City of Sugar Land
- Fort Bend County
- TAMARRON LAKES LP
- LONE STAR GROWERS LP
- AMDT LLC

Actions taken if impaired:

- N/A

Recommendations if impaired:

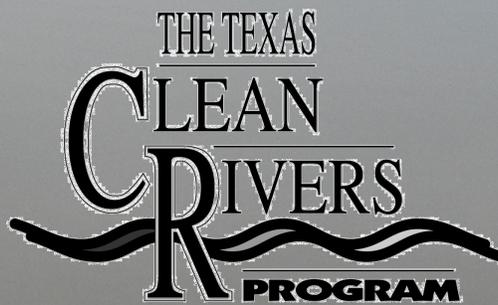
- N/A



Brazos River Basin Highlights Report 2016



Brazos River
Authority



Brazos River Authority
4600 Cobbs Drive
Waco, TX 76710
Phone (254) 761-3100 www.brazos.org