

*TRINITY RIVER AUTHORITY CLEAN RIVERS PROGRAM*  
**2016 BASIN HIGHLIGHTS REPORT**



An electronic version of this report with active links can be found at  
<http://www.trinityra.org/default.asp?contentID=97>.

# Acknowledgements

PREPARED IN COOPERATION WITH THE  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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## The Texas Clean Rivers Program

The Texas Clean Rivers Program (CRP) was created in 1991 by Texas Senate Bill 818 and is administered by the Texas Commission on Environmental Quality (TCEQ) which contracts with local planning agencies to conduct the program in each river basin. The program is tasked with protecting the water quality resources of the state and improving water quality. In the Trinity River basin, the Trinity River Authority (TRA) Clean Rivers Program focuses on water quality monitoring, special projects, and public outreach to achieve the goals of the program. Data collected by the TRA CRP and other river authorities are used for regulatory purposes, such as setting water quality standards and modeling for permit limits and for water quality assessments.



Image 1: Joe Pool Lake

## Annual Reports

Each year, the local planning agencies produce a Basin Highlights Report which summarizes the CRP activities in their basin and may include information on events effecting water quality, a summary of water quality data, an overview of public outreach activities, and updates on special projects. Every fifth year, a greatly expanded Basin Summary Report provides a detailed analysis of water quality data and potential sources of impairments, as well as offering recommendations for future basin activities. Past reports are available on TRA's website at <http://www.trinityra.org/default.asp?contentID=97>.

As a Basin Summary Report was completed in 2015, the format for this year's report will be that of a program update. The goal of this report is to provide a brief update on major basin activities that have occurred since the completion of the Basin Summary Report.

## 2014 Texas Integrated Report

Every two years, TCEQ conducts an assessment of water quality throughout the state and issues a water quality Integrated Report which identifies impairments and concerns for designated uses. These designated uses include Aquatic Life Use, Contact Recreation, General Use, Fish Consumption, and Public Water Supply Use. The Draft 2014 Texas Integrated Report (IR) was extensively discussed and analyzed in the TRA CRP 2015 Basin Summary Report which can be found at <http://www.trinityra.org/default.asp?contentID=97>. The 2014 IR was approved by EPA on November 19, 2015. A summary of this document can be found in Appendix A. The full IR and associated documents can be found on the TCEQ website at <https://www.tceq.texas.gov/waterquality/assessment/14twqi/14txir>.

Differences between the draft and final 2014 IR include:

- 1) The bacteria impairments for assessment units (AUs) 0841\_01, 0841\_02, 0841G\_01, 0841H\_01, 0841J\_01, 0841L\_01, 0841M\_01, 0841R\_01, 0841T\_01, and 0841U\_01 were changed from category 5a to category 4a. Category definitions are listed at the end of Appendix A.
- 2) The bacteria impairment for 0822B\_01 was changed from 5c to 4a.
- 3) The bacteria impairment for 0810\_01 was changed from 5b to 5c.
- 4) AU 0806D\_01 was added with a concern for bacteria and a fully supporting finding for Aquatic Life Use.
- 5) Dioxins in fish tissue were added to the fish consumption impairment for 0841A\_01.
- 6) A concern for chlorophyll-a was added for 0838\_02.
- 7) The Aquatic Life Use concerns for depressed dissolved oxygen in 0826\_01 and 0826\_07 were changed to no concern and fully supporting.

Changes from the 2012 IR include six new listings and seven delistings. The details of these are found in Tables 1 and 2.

**Table 1: 2014 IR New Listings**

Subwatershed	Segment	Segment Description	AU	Impairment	Impairment Category
West Fork	0809B	Ash Creek	0809B_01	<i>E. coli</i> Geomean	5c
Richland Chambers	0814	Chambers Creek Above Richland-Chambers Reservoir	0814_01, 0814_02, 0814_03, 0814_04	Chloride	5c
East Fork	0820B	Rowlett Creek	0820B_01	<i>E. coli</i> Geomean	5c

**Table 2: 2014 IR Delistings**

Subwatershed	Segment	Segment Description	AU	Parameter	Reason Code	2012 IR Impairment Category
Main Stem	0803 Lake Livingston	From Livingston Dam in Polk/San Jacinto County to a point 1.8 km (1.1 miles) upstream of Boggy Creek in Houston/Leon County, up to normal pool elevation of 131 feet (impounds Trinity River)	0803_01	pH	Meets standard	5c
Main Stem	0804G Catfish Creek	Twenty mile stretch of Catfish Creek running upstream from US 287 in Anderson Co., to Catfish Creek Ranch Lake just upstream of SH 19 in Henderson Co.	0804G_01	<i>E. coli</i> Geomean	Meets standard	5b
West Fork	0810B Garrett Creek	Eighteen mile stretch of Garrett Creek running upstream from confluence with Salt Creek to Wise County Road approximately 14 miles upstream of SH114, Wise County	0810B_01	<i>E. coli</i> Geomean	Meets standard	5b
West Fork	0812 West Fork Trinity River Above Bridgeport Reservoir	From a point immediately upstream of the confluence of Bear Hollow in Jack County to SH 79 in Archer County	0812_01	Total Dissolved Solids	Meets standard	5b
West Fork	0812 West Fork Trinity River Above Bridgeport Reservoir	From a point immediately upstream of the confluence of Bear Hollow in Jack County to SH 79 in Archer County	0812_02	Total Dissolved Solids	Meets standard	5b
East Fork	0819 East Fork Trinity River	From the confluence with the Trinity River in Kaufman County to Rockwall-Forney Dam in Kaufman County	0819_01	Chloride	Meets standard	5c
Main Stem	0841S Vilbig Lakes	A 5 acre area in NW corner of Vilbig Lakes, near confluence with unnamed creek, approx. 100 m south of intersection of Rusdell Rd./Marvel Dr. in Irving, Dallas, Co.	0841S_01	<i>E. coli</i> Geomean	Meets standard	5c



## Trinity River Basin Monitoring

Over the course of the Clean Rivers Program, TRA has built an extensive monitoring network that has grown to include over 190 stations. This has been achieved through the efforts of the volunteer entities as shown in Figure 1. This network has allowed for much greater basin coverage than would be possible with in-house resources and has effectively leveraged the program budget with a four to one return on each dollar spent on monitoring. During the last fiscal year, two partners were added to the volunteer monitoring network – North Texas Municipal Water District and the DFW Airport Environmental Affairs Department. A complete monitoring schedule is available at <https://cms.lcra.org/>.

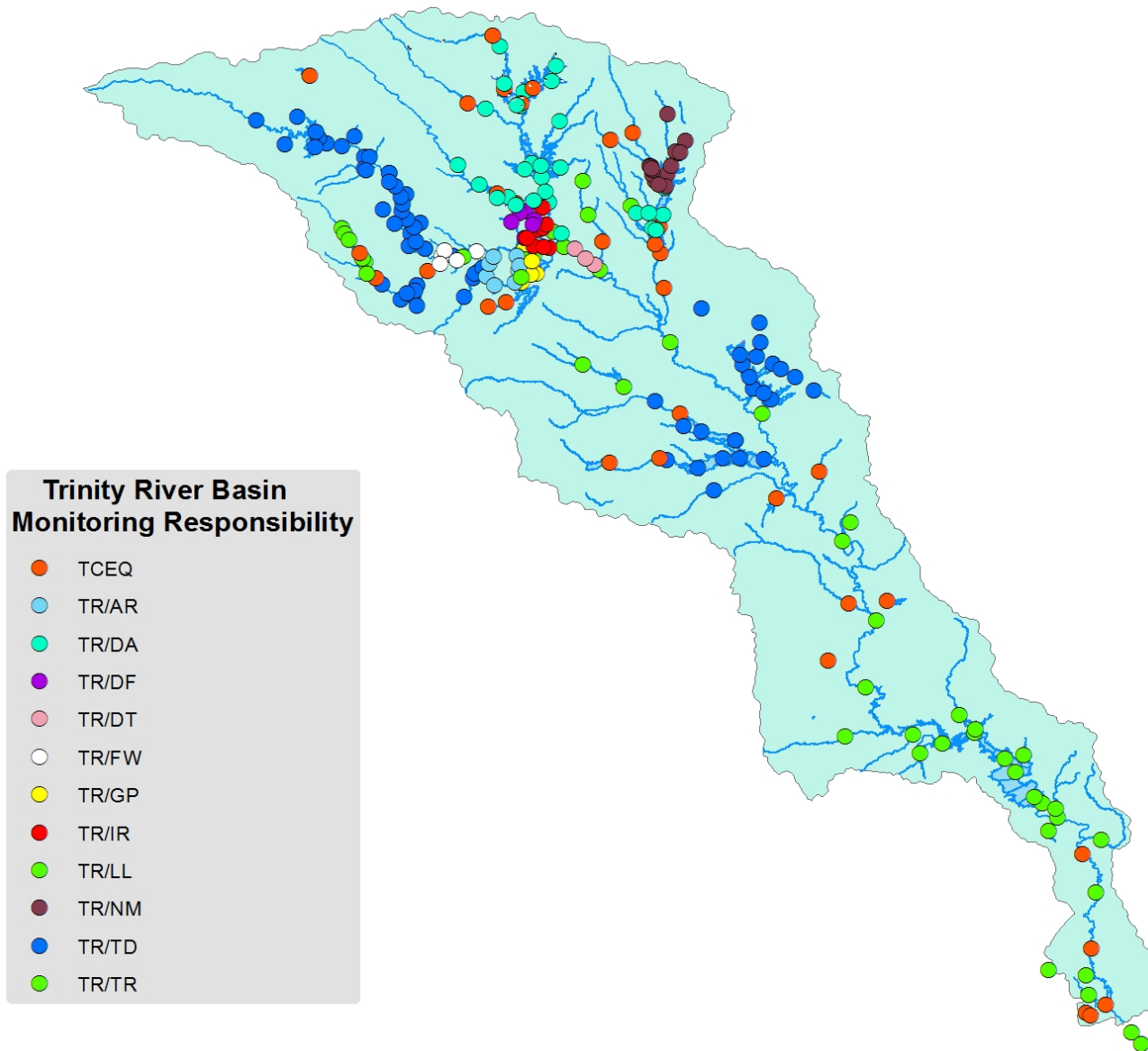


Figure 1: Trinity River Basin Volunteer Monitoring Network

The number of sites monitored by each partner entity and the types of parameters sampled are shown in Table 3. Parameters typically included in each group include those listed below.

- Field – the standard four water quality parameters (Dissolved Oxygen, Specific Conductivity, pH, and Temperature) as well as parameters describing any contact recreation activities and drought conditions.
- Diurnal – summary information for the standard four parameters noted above that are collected over a 24-hour period.
- Flow – instantaneous flow measurements, method of measurement, and flow severity category.
- Bacteria – E. coli.
- Conventionals – nutrients such as Nitrogen and Phosphorus species, Hardness, Chlorophyll-a, Alkalinity, Chloride, Sulfate, and suspended and dissolved solids.
- Metals – total and/or dissolved metals.
- Organics – petroleum hydrocarbons.
- Biological – Habitat, benthic macroinvertebrate, and nekton data.

**Table 3: Monitoring Entity Sites and Parameters**

Entity	# of Sites	Field	Diurnal	Flow	Bacteria	Conventionals	Metals	Organics	Biological
City of Arlington (AR)	8	x		x	x	x	x		
City of Dallas (DA)	30	x		x			x		
DFW Airport Environmental Affairs Department (DF)	6	x		x	x	x	x	x	
City of Dallas Trinity Watershed Group (DT)	3	x		x	x				
City of Fort Worth (FW)	7	x		x	x				
City of Grand Prairie (GP)	7	x		x	x	x	x		
City of Irving (IR)	9	x		x	x	x	x		
TRA Lake Livingston Project (LL)	24	x	x	x	x	x	x		
North Texas Municipal Water District (NM)	16	x		x	x	x	x		
Tarrant Regional Water District (TD)	67	x	x	x	x	x	x		
TRA (TR)	22	x	x	x	x	x	x		x



## Biological Monitoring

In 2013, TRA began an aquatic life (biological) monitoring program. This monitoring consists of an assessment of the habitat in and around a waterbody as well as the collection of benthic macroinvertebrates and nekton (fish) for the assessment of population diversity and health. This information is used to provide baseline data for a stream in order to determine if aquatic life uses are being met.

During the spring and summer of 2013, two sites were monitored by a consultant – Bear Creek in Irving and Clear Fork Trinity River near Aledo. In 2014, TRA staff monitored one site – Red Oak Creek just south of Red Oak. In 2015, prolonged high flows (discussed later in this report) prevented TRA from being able to conduct biological monitoring. Two sites are being planned in 2016. Methods used for biological monitoring can be found in the TCEQ Surface Water Quality Monitoring Procedures, Volume 2 ([https://www.tceq.texas.gov/assets/public/comm\\_exec/pubs/rg/rq416/rg-416.pdf](https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rq416/rg-416.pdf)).



Image 2: Electrofishing, Red Oak Creek



Image 3: Largemouth Bass, Red Oak Creek



Image 4: Processing fish, Red Oak Creek

# Village Creek-Lake Arlington Watershed Protection Plan

In September 2015, TRA began work on a Watershed Protection Plan for the Village Creek-Lake Arlington watershed (Figure 2). This project is funded by a Clean Water Act Section 319 (Nonpoint Source) grant with matching funds from the City of Arlington.

Project goals include improving water quality in Village Creek (Segment 0828A) and protecting water quality in Lake Arlington (Segment 0828). The focus will be on *E. coli* levels in Village Creek for which this stream has been found to be impaired. In addition, while there are no impairments in Lake Arlington, Nitrate and Chlorophyll-a have been identified as concerns.

Please go to <http://www.trinityra.org/lakearlingtonvillagecreek> to get more information and to get involved in the stakeholder process.



Image 3: Lake Arlington

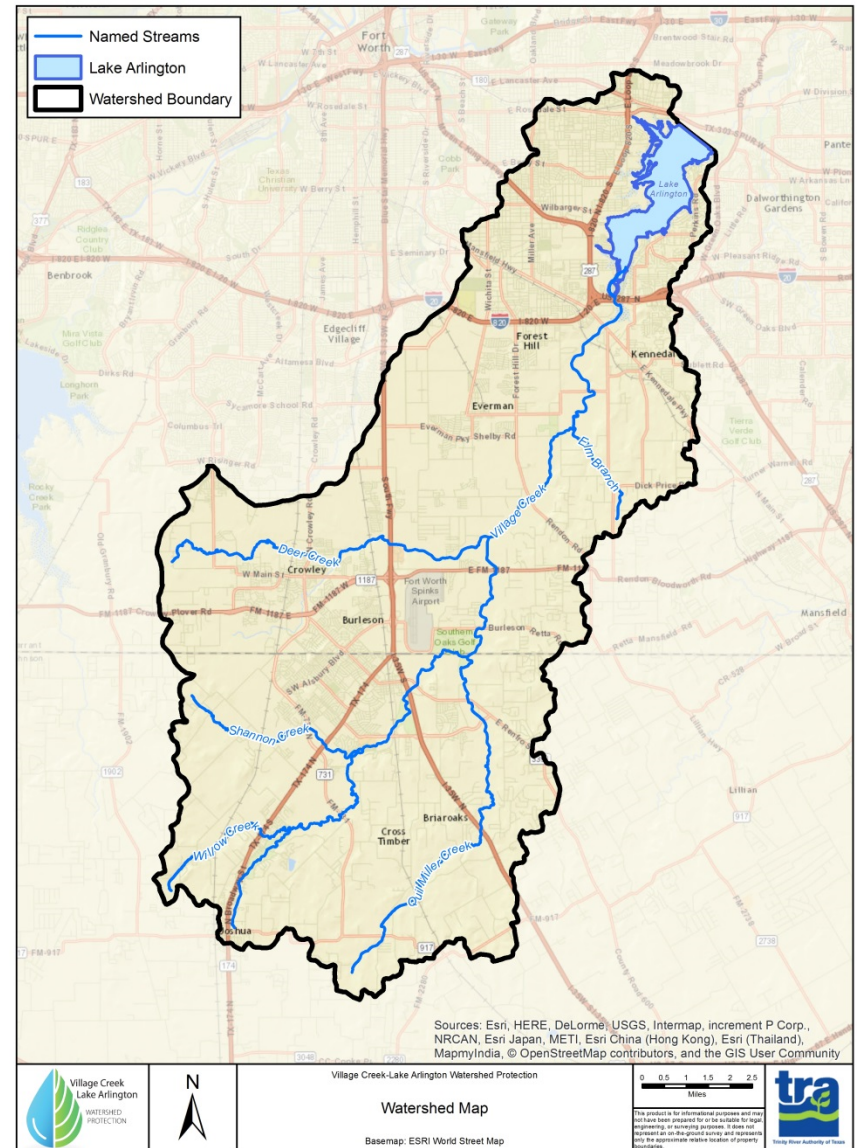


Figure 2: Village Creek-Lake Arlington Watershed Protection Plan Area

## Fish Consumption Ban

On December 18, 2015, the Texas Department of State Health Services issued a fish consumption advisory (Advisory 53) for dioxins and PCBs on the Trinity River from US 287 downstream to US 90 including Lake Livingston. This advisory is in addition to existing advisories in the Trinity River basin. A full list of fish consumption advisory documentation and maps of affected areas for the State of Texas can be found at <http://www.dshs.state.tx.us/seafood/advisories-bans.aspx>.

Table 4 summarizes the advisories for the Trinity River basin. With the exception of mercury, all the listed compounds have been banned. These compounds do not readily break down in the environment and therefore are found in much the same form as when they were originally used. Levels of these compounds can biomagnify up the food chain to predator fish species or bioaccumulate in bottom-feeding species. Ultimately, these compounds can reach concentrations in the edible portions of fish that are harmful to humans.

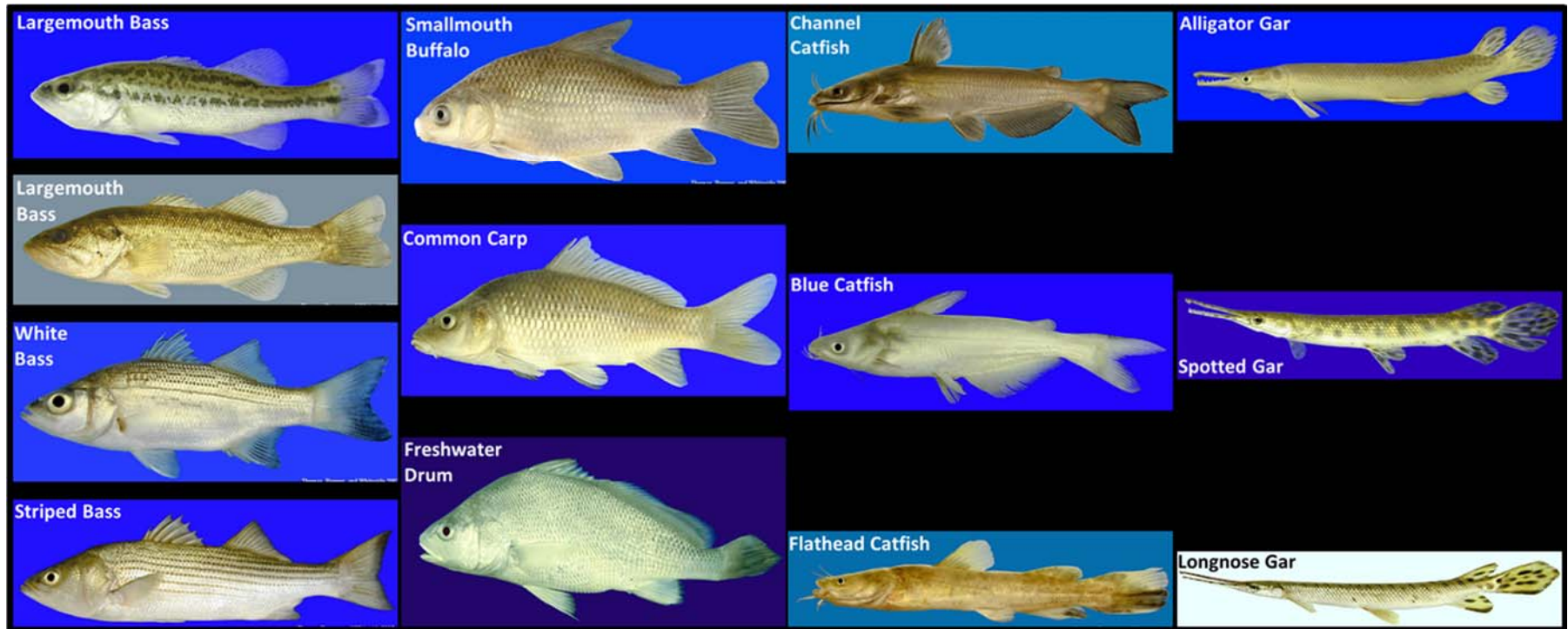


Image 4: Specific Affected Fish Species (Images from <http://txstate.fishesoftexas.org/>)

**Table 4: Trinity River Basin Fish Consumption Advisories**

Body of Water	Contaminants of Concern	Species Affected	Women of Childbearing Age	Children <12	Women Past Childbearing Age and Adult Men
Echo Lake	Dieldrin, Dioxins, PCBs	Common Carp	Do Not Eat	Do Not Eat	Do Not Eat
		Largemouth Bass	Do Not Eat	Do Not Eat	1 meal/month
Fosdic Lake	PCBs	Common Carp	Do Not Eat	2 meals/month	2 meals/month
Lake Como	Dieldrin, Dioxins, PCBs	Common Carp	Do Not Eat	Do Not Eat	Do Not Eat
Lake Madisonville	Mercury	Largemouth Bass	Do Not Eat	2 meals/month	2 meals/month
Mountain Creek Lake	Dioxins, PCBs	Channel Catfish	Do Not Eat	Do Not Eat	Do Not Eat
		Common Carp	Do Not Eat	Do Not Eat	Do Not Eat
		Freshwater Drum	Do Not Eat	Do Not Eat	Do Not Eat
		Largemouth Bass	Do Not Eat	Do Not Eat	Do Not Eat
		Smallmouth Buffalo	Do Not Eat	Do Not Eat	Do Not Eat
		White Bass	Do Not Eat	Do Not Eat	Do Not Eat
Lake Worth	Dieldrin, Aldrin, PCBs	Blue Catfish	Do Not Eat	Do Not Eat	Do Not Eat
		Channel Catfish	Do Not Eat	Do Not Eat	Do Not Eat
		Smallmouth Buffalo	Do Not Eat	Do Not Eat	Do Not Eat
Clear Fork Trinity River From Benbrook Lake Dam Downstream to the Confluence With the West Fork Trinity River	Dioxins, PCBs	All Fish Species	Do Not Eat	Do Not Eat	Do Not Eat
West Fork Trinity River From Lake Worth Dam Downstream to Trinity River at US 287	Dioxins, PCBs	All Fish Species	Do Not Eat	Do Not Eat	Do Not Eat
Trinity River From US 287 Downstream to US 90 (Including Lake Livingston)	Dioxins, PCBs	Blue Catfish	Do Not Eat	Do Not Eat	1 meal/month
		Flathead Catfish	Do Not Eat	Do Not Eat	1 meal/month
		Freshwater Drum	Do Not Eat	Do Not Eat	2 meals/month
		Gar (All Species)	Do Not Eat	Do Not Eat	Do Not Eat
		Smallmouth Buffalo	Do Not Eat	Do Not Eat	1 meal/month
		Striped Bass	1 meal/month	1 meal/month	3 meals/month
		White Bass	1 meal/month	1 meal/month	3 meals/month



## Mountain Creek Wastewater Pipeline Break

During data analysis for the 2015 Basin Summary Report, a trend was discovered at 10815 site in Mountain Creek (0841O), just upstream from the confluence with the Trinity River. This site displayed increasing trends for several parameters including BOD5, Ammonia, and *E. coli*. More importantly, the increasing trends were a result of sharp increases in values for these parameters starting in mid-2011. Further data analysis showed that the sudden increase in values coincided with a prolonged decrease in lake levels in Mountain Creek Lake and flow in Mountain Creek itself. Drought can cause ground shifting due to decreased soil moisture and damage to underground infrastructure.

In coordination with staff at the TRA Central Regional Wastewater System, a pipeline was identified that had a semi-exposed crossing over Mountain Creek. Field reconnaissance and testing in late-March 2015 found that this pipeline was broken in several places. The owner of the pipeline was notified and repairs were made immediately. As shown in Figure 3, levels of BOD5, Ammonia, and *E. coli* decreased following the repair (green vertical line). There are some elevated *E. coli* levels following the repair; however, this is attributed to runoff from the extreme high flows that have been prevalent in the watershed since early 2015.

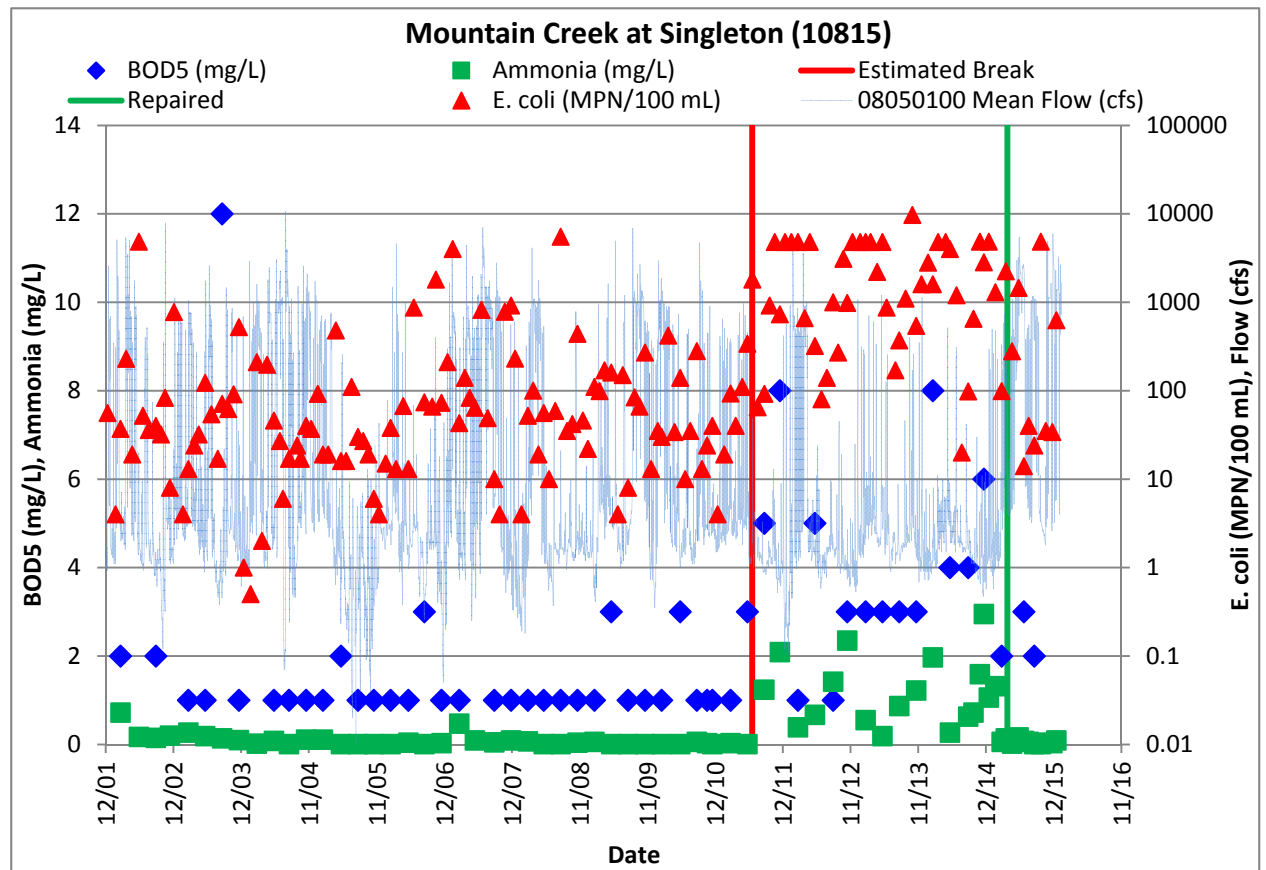


Figure 3: BOD5, Ammonia, and *E. coli* for Station 10815



## Basin Flooding

2015 set a record for cumulative precipitation in many parts of Texas. Based on the NOAA gage at DFW Airport, 2015 was the wettest year on record with 62.8 inches of precipitation. This exceeds the previous record year of 1991 by more than 9 inches and is equal to the amount of precipitation recorded in the preceding two and a half years from June 1, 2012 to December 31, 2014. Figure 4 below illustrates the cumulative total precipitation for the past five years as measured at DFW Airport.



Image 7: Trinity River at Westmoreland Road near Dallas, 5/29/2015

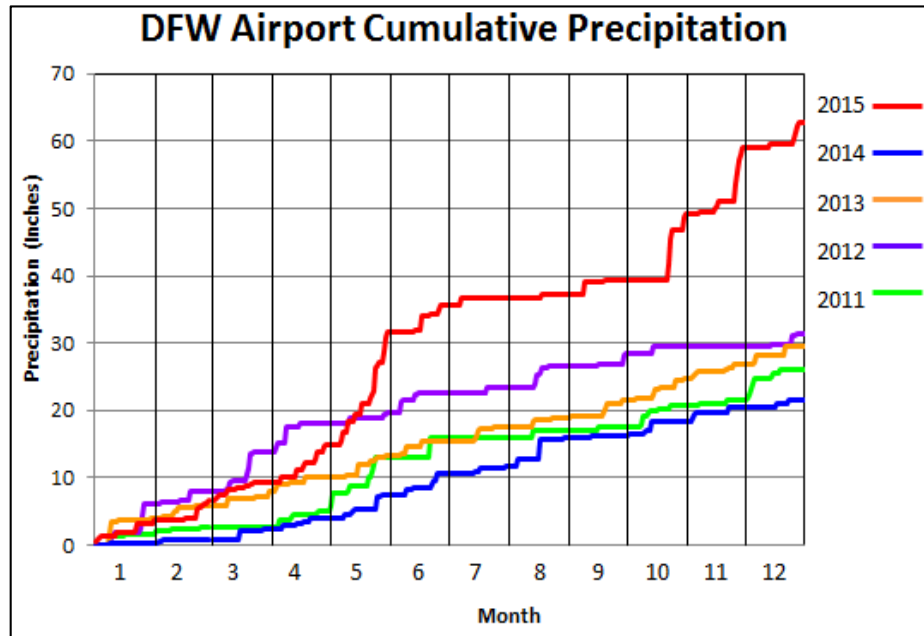


Figure 4: DFW Airport Cumulative Precipitation for 2011 to 2015



Image 8: Trinity River downstream of Richland Chambers Reservoir, 6/4/2015



Figure 5 shows the cumulative flow in acre-feet that passed by the USGS gage near Rosser for both 2014 and 2015. In 2015, more than 10 times as much water passed by the gage than in 2014. Additionally, the total 2014 volume was exceeded by mid-May 2015.

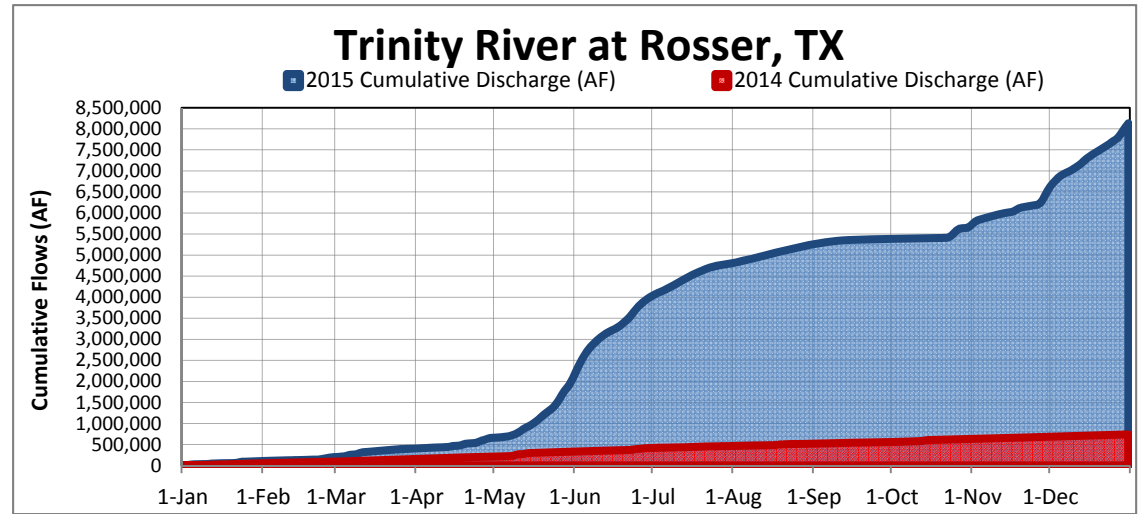
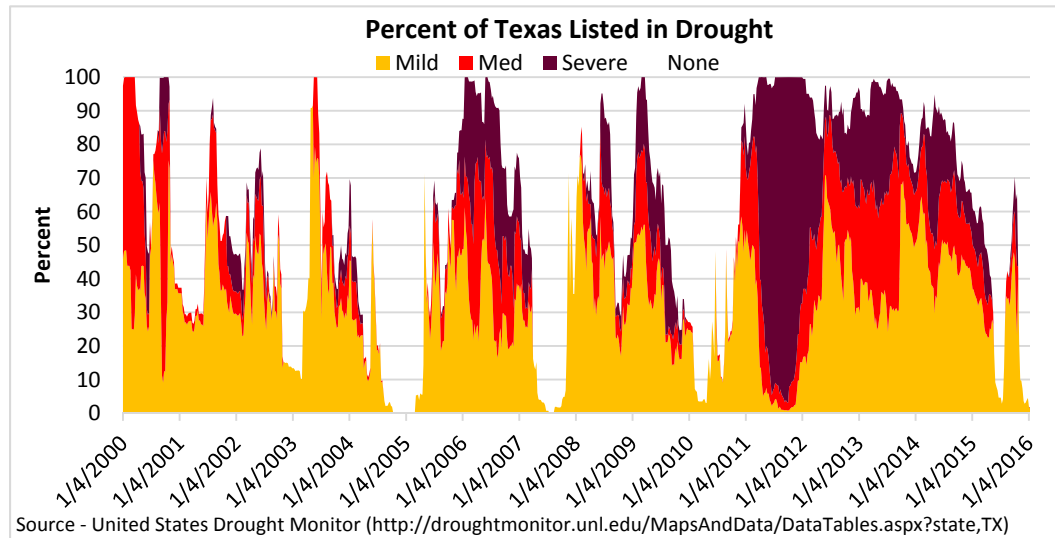


Figure 5: 2014 and 2015 Cumulative Flows, Trinity River at Rosser

Prior to the heavy rainfalls of 2015, much of the state was in varying degrees of drought with 2011 being especially severe. Figure 6 shows the percentages of the state that were listed as being in mild, medium, or severe drought. The rains in early-2015 brought most of the state out of drought. This was followed by a “flash drought” during the summer which was then relieved by the fall and winter rains. As of mid-January 2016, less than five percent of the state was in drought.



Source - United States Drought Monitor (<http://droughtmonitor.unl.edu/MapsAndData/DataTables.aspx?state,TX>)

Figure 6: Percent of Texas Listed in Drought

The flooding that resulted from this unprecedented rainfall was especially pronounced in the Trinity River basin. Many reservoirs have been at or above normal pool elevation for much of the time since March/April 2015. Many of these are flood control reservoirs and, as a consequence, the controlled releases have prolonged the elevated stages seen in the river downstream of these reservoirs. The following graphs (Figure 7 to Figure 11) show water surface elevations for several basin reservoirs as well as flow at the downstream river gages.

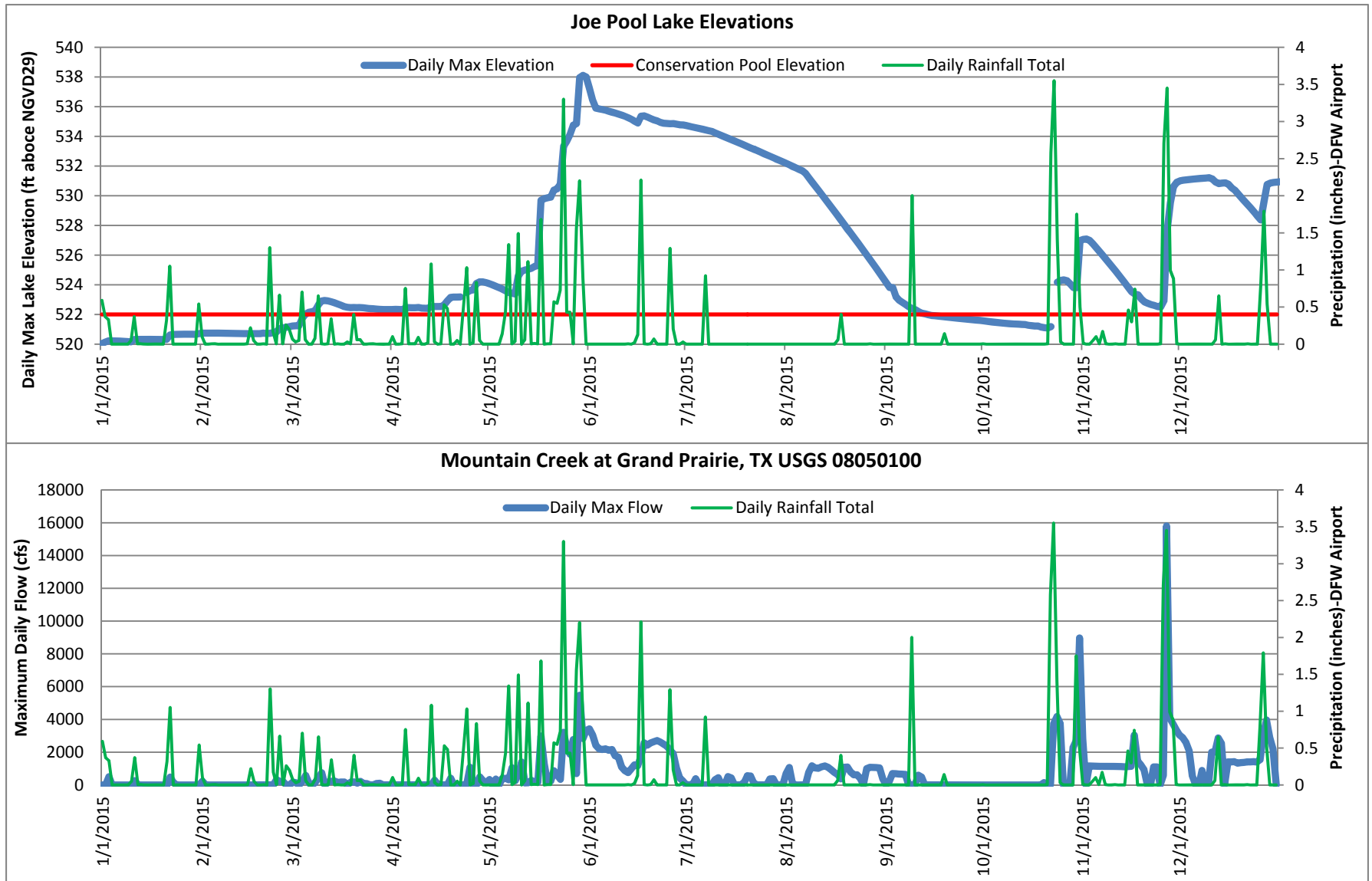


Figure 7: Joe Pool Lake Elevation and Downstream Flow

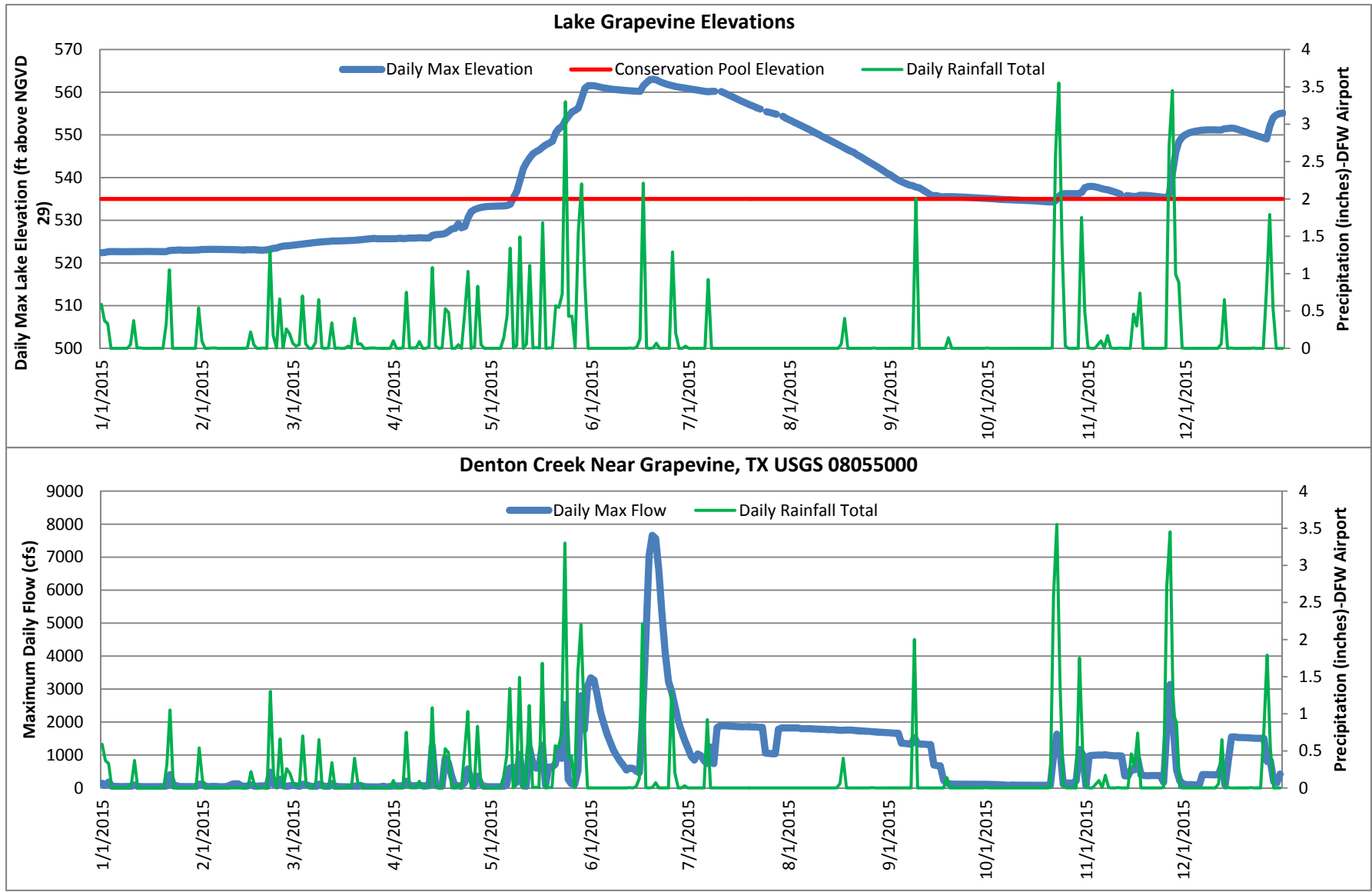


Figure 8: Lake Grapevine Elevation and Downstream Flow

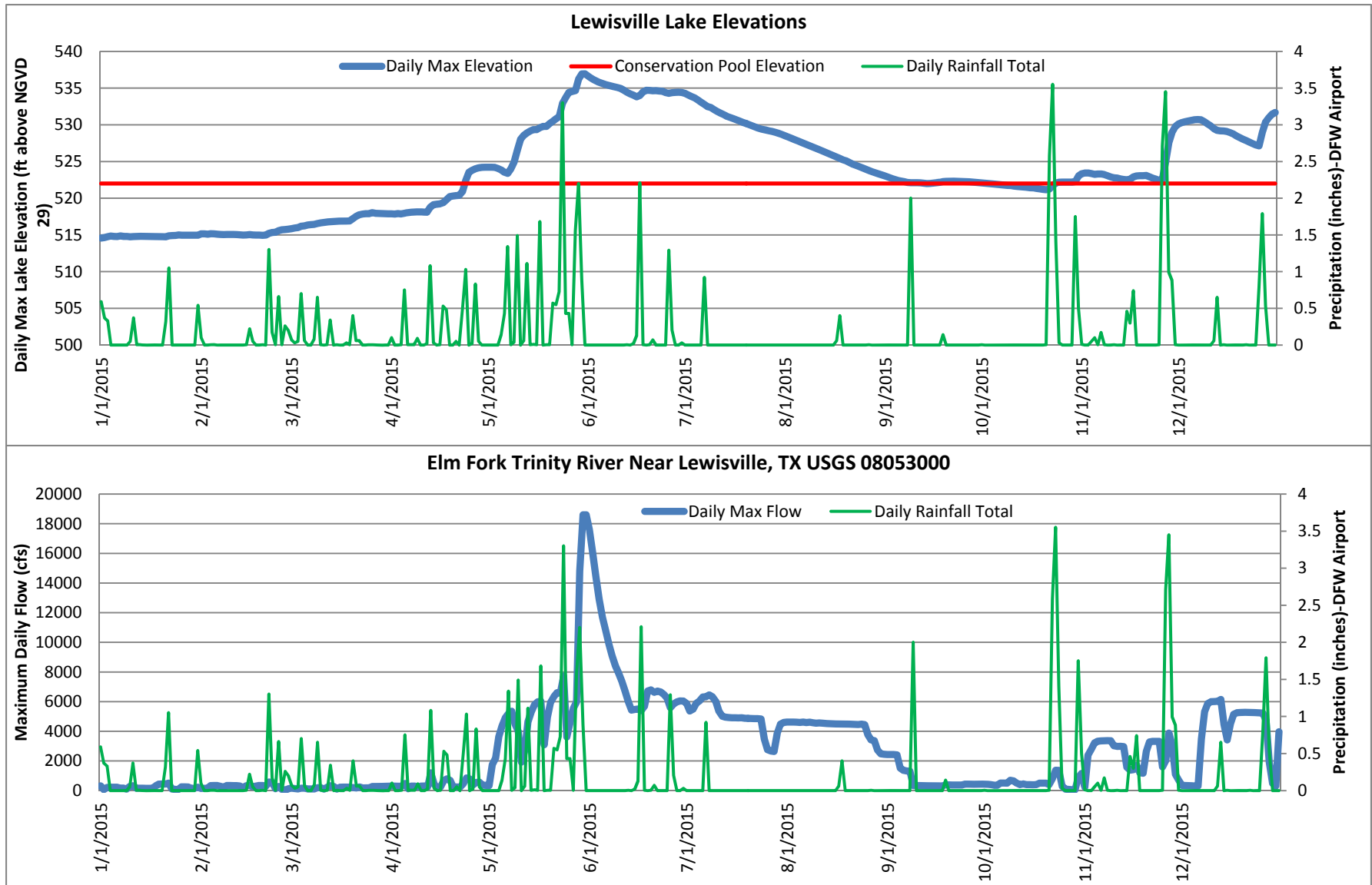


Figure 9: Lewisville Lake Elevation and Downstream Flow



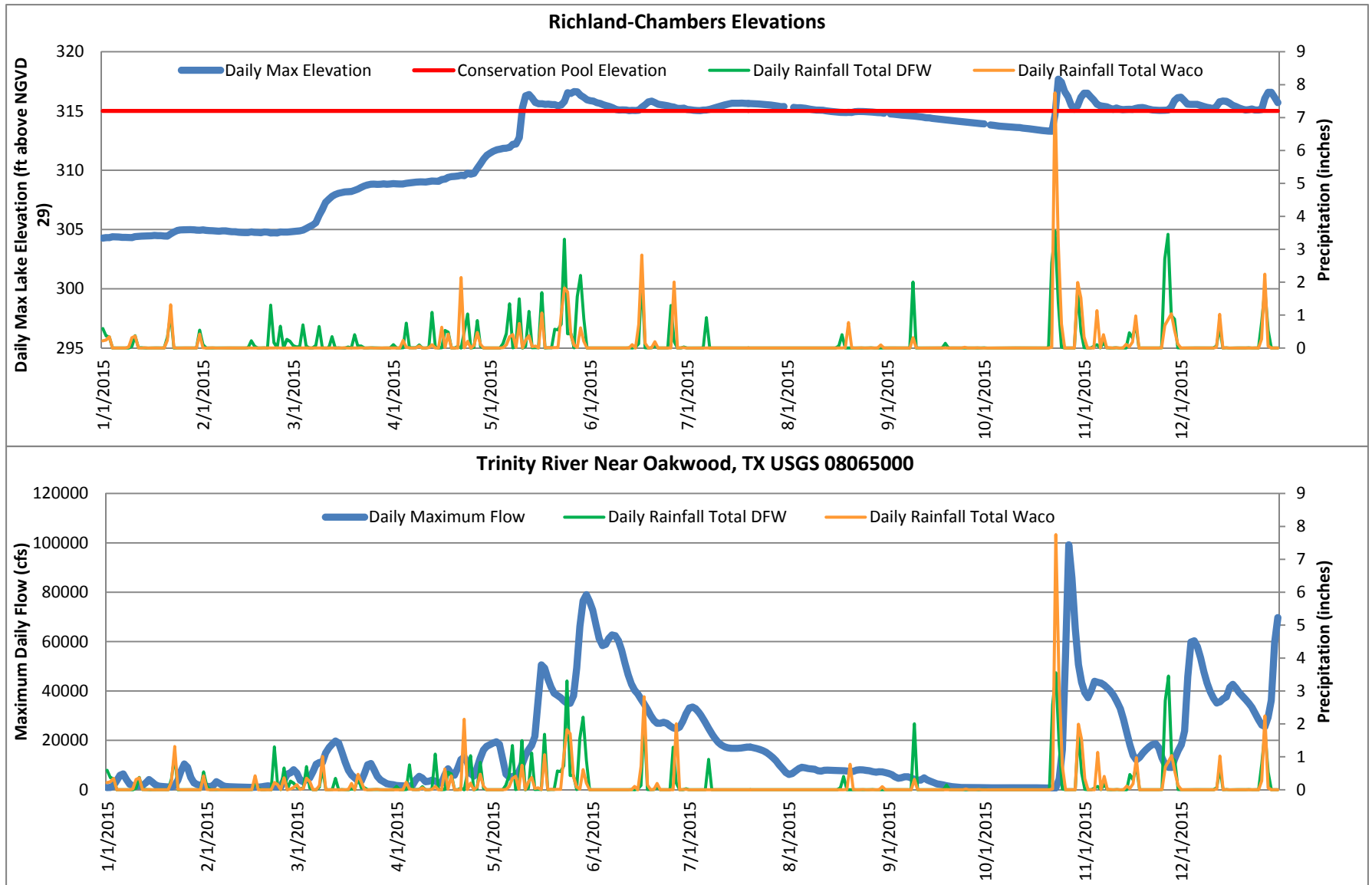


Figure 10: Richland-Chambers Reservoir Elevation and Downstream Flow

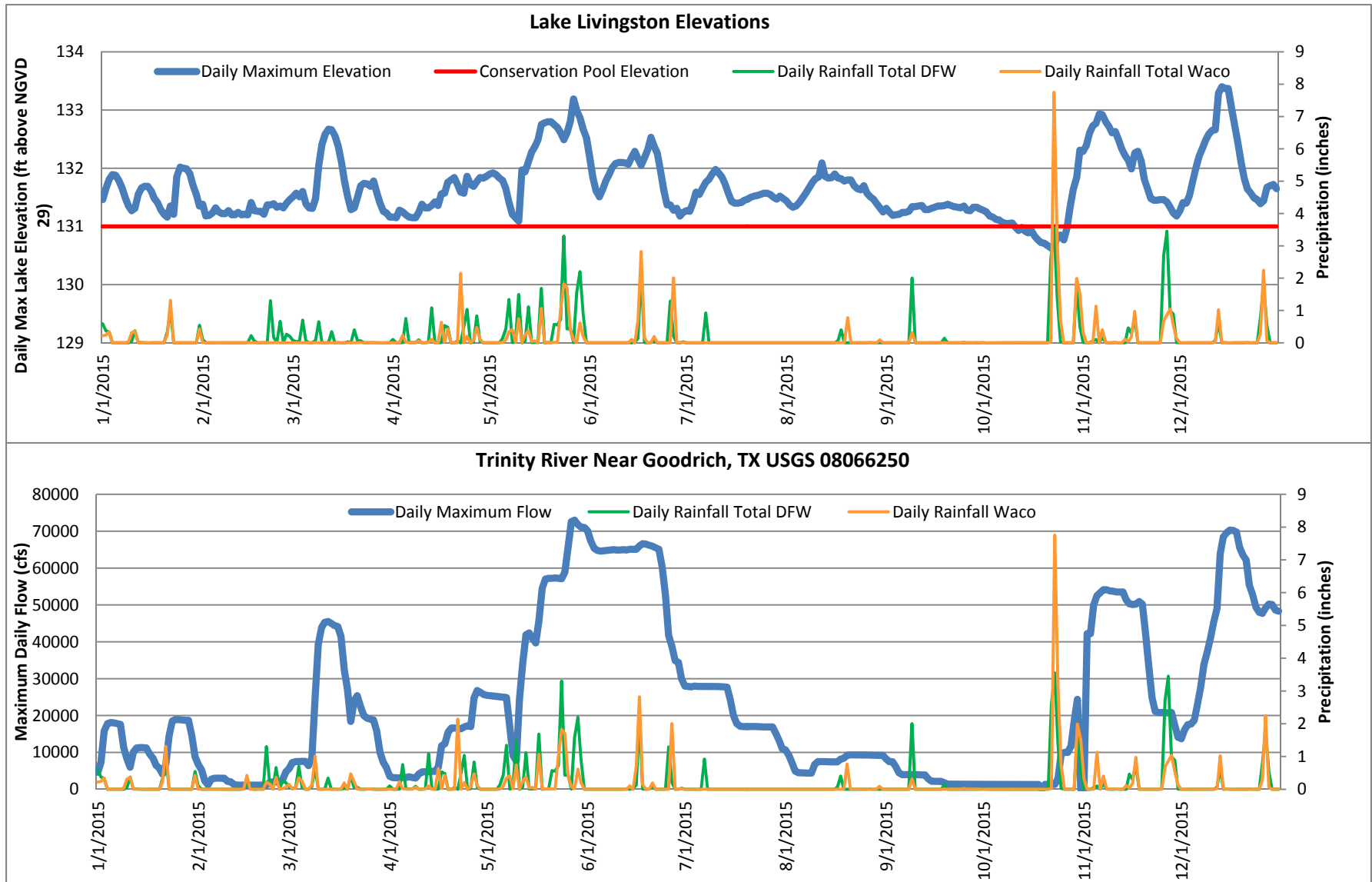


Figure 11: Lake Livingston Elevation and Downstream Flow

## Long-Term Channel Monitoring (SB3)

In 2007, the 80th Texas Legislature passed Senate Bill 3 (SB3) which created a stakeholder driven process designed to establish environmental flow standards for all of the major river basins in Texas. During the SB3 process, instream habitat, hydraulics, geomorphology, and ecology gaps were identified in the Trinity basin. To address these data gaps the TRA led or participated in several on-the-ground field data collection and modeling studies at several sites along three reaches of the main stem. This research was benefitted by additional intensive instream work conducted by the TRA since 2011. This previous work has cultivated sound field methods and informed the site selection of the 2015 study. Though the flooding of 2015 brought challenges and delays to this and other Trinity River studies, it also provided an opportunity to collect high flow data during a historical event.

As part of the 2015 study, field data was collected at three sites to better characterize the biology, geomorphology, and hydrology of each site. After initial site selections were made, hardened benchmarks (Image 9) were secured and mapped with RTK GPS (Image 10). Data collected included:

1. Photographic – automated time-lapse camera and standard photographs (Image 11);



Image 9: Overbank sediment deposition being measured and removed from atop a hardened benchmark at site 080444



Image 10: RTK GPS base station setup at relic lock near 080444

2. Sediment – suspended and substrate/bed (Image 12);
3. Flow – acoustic Doppler and wading rod, as required (Image 13);
4. Survey – benchmarks, cross-section, water surface profile, and longitudinal (Image 14);
5. Pressure transducers (PT) – water level time-series on-site;
6. Riparian – tree, sapling and seedling counts along a transect; and
7. Field observations and notes.



Image 11: Remote camera installation captures varying river stages near site 080295



Image 12: Field staff attempt to capture bed sediment at site 080444



Image 13: Moving bed calculations being performed by acoustic Doppler profiler during high flows at site 080295. Similar methods are employed to calculate flow (Q) data.





Image 14: Cross-sectional survey being performed with robotic total station at Site 080075

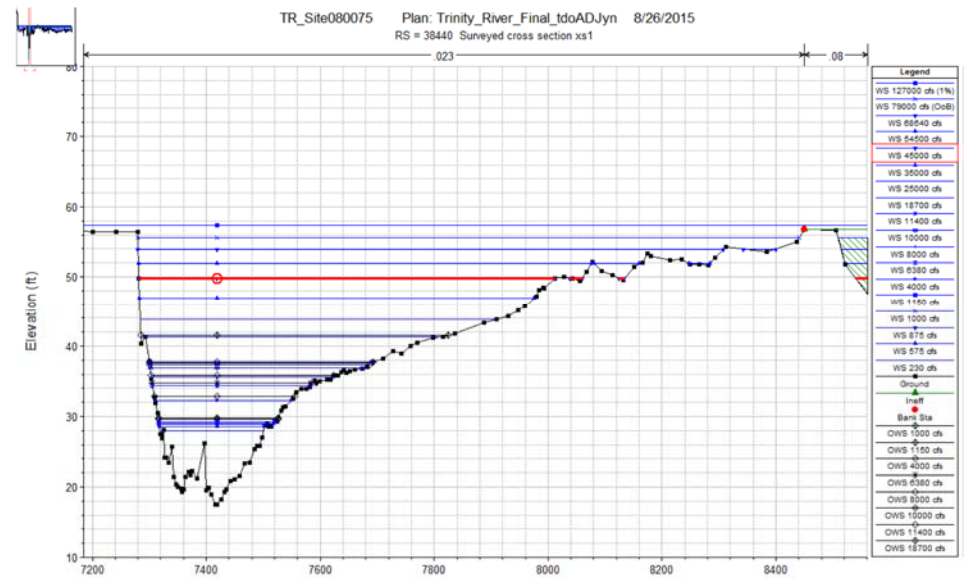


Image 15: Modeled and observed HEC-RAS water surface elevations

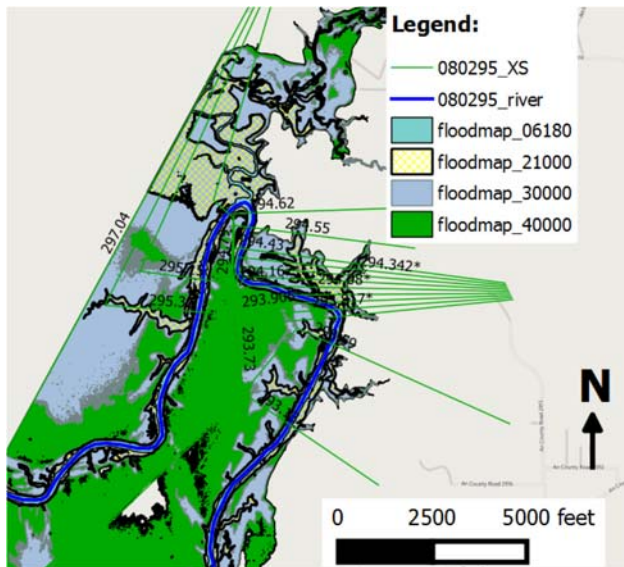


Image 16: Example of an inundation extent map at site 080295 up to 40,000 cfs

These data fed the development of HEC-RAS models at the sites (Images 15 & 16). Future data needs and recommended additional studies were also outlined in the full report which was completed in October 2015. The report is available on the Trinity River Authority website (<http://serv.trinityra.org/reports/BasinSummaryReports/LiDARandEnvironmentalFlowAssessmentofTrinityRiverFinalReport.pdf>).

# Appendix A: 2014 Texas Integrated Report Summary

## CLEAR FORK SUBWATERSHED

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0833	Clear Fork Trinity River Above Lake Weatherford	03	From the confluence of McKnight Branch to the confluence of Strickland Ck. approximately 8 kilometers (5 miles) upstream of FM 51 in Parker County.	11062	NS-DO 24hr avg-5b NS-DO 24hr min-5b CS-DO grab screening level				
		04	From the confluence with Dobbs Branch to confluence with McKnight Branch	17461	CN-DO 24hr min NS-DO grab min-5b				
		05	From the confluence of Dobbs Ck. to the lower end of segment	17462	NS-DO grab min-5c CS-DO grab screening level				
0832	Lake Weatherford	01	Entire reservoir	11061	FS	CS-Chlorophyll-a	NC		FS
0831	Clear Fork Trinity River Below Lake Weatherford	01	Lower 12.75 miles, downstream from South Fork Trinity River confluence	13691, 17444, 17447	FS	CS-nitrate CS-TP	FS		FS
		03	From the confluence with South Fork of Trinity R. to a point 2 mi upstream	17445		FS	NC		FS
		04	2 mi upstream of South Fork Trinity River confluence to Squaw Ck. Confluence	11060	NS-DO 24hr avg-5c NS-DO 24hr min-5c	FS	NC		FS
		05	From the confluence of Squaw Ck. to Lake Weatherford Dam	17446, 17637	NS-DO 24hr avg-5c NS-DO 24hr min-5c CS-DO grab screening level	FS			FS
0831A	South Fork Trinity River	01	Eleven mile stretch of S. Fork Trinity River running upstream from confluence with Clear Fork Trinity River to confluence with Willow Creek, Parker Co.	17454, 17455		CS-TP			
0831B	Unnamed Tributary of South Fork Trinity River	01	Entire segment.	17456	CS-DO grab screening level				
0830	Benbrook Lake	01	Lower portion of reservoir	13830, 15151, 15161	CS-DO grab screening level	CS-Chlorophyll-a	FS		FS
		02	Middle portion of reservoir	13831, 15156	FS	CS-Chlorophyll-a	FS		FS
		03	Upper portion of reservoir	15158	FS	CS-Chlorophyll-a	FS		FS
		05	Rock/Mustang Creek arm of Benbrook Lake.	13832	FS	CS-Chlorophyll-a	FS		FS



**CLEAR FORK SUBWATERSHED (CONTINUED)**

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0829	Clear Fork Trinity River Below Benbrook Lake	01	From the confluence with West Fork Trinity River to 1 mile upstream.	16119, 20427	NC			NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	FS
		02	From 1 mile upstream of the confluence with West Fork Trinity River up to the confluence with Mary's Creek.	11044, 11045, 16122, 18456	FS	FS	FS	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	FS
		03	From the confluence with Mary's Creek up to Benbrook Dam in Tarrant County, TX.	13623				NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
0829A	Lake Como	01	Entire lake	16814				CS-arsenic in edible tissue	

WEST FORK SUBWATERSHED

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply	
0812	West Fork Trinity River Above Bridgeport Reservoir	01	Lower 25 miles of segment	10972, 18058, 18059	NS-DO grab min-5c	FS	CN-E. coli Geomean		FS	
		02	Upper 60 miles of segment	NA		FS			FS	
0811	Bridgeport Reservoir	01	Southeast portion of main body of reservoir	16762, 16764	FS	FS	FS		FS	
		02	Southwest portion of main body of reservoir	15165, 16763	FS	FS			FS	
		03	Central portion of main body of reservoir	10970	FS	FS	FS		FS	
		04	Northern portion of main body of reservoir	15164	FS	FS	FS		FS	
		05	Remainder of reservoir	16736, 16759, 16760, 16761, 16765	FS	FS			FS	
0810	West Fork Trinity River Below Bridgeport Reservoir	01	Lower 25 miles of segment	10967, 10968, 10969, 14246, 17844	FS	CS-Chlorophyll-a	NS-E. coli Geomean-5c		FS	
		02	Upper 11 miles of segment	14904, 20840	FS	FS	FS		FS	
0810A	Big Sandy Creek	01	Fifteen mile stretch of Big Sandy Creek running from confluence with Waggoner Creek to FM 1810 West of Alvord, Wise Co.	15688	FS		NS-E. coli Geomean-5b			
0810B	Garrett Creek	01	Eighteen mile stretch of Garrett Creek running upstream from confluence with Salt Creek to Wise County Road approximately 14 miles upstream of SH114, Wise Co.	16767	FS		FS			
0810C	Martin Branch	01	Eight mile stretch of Martin Branch running upstream from confluence with Center Creek to FM 730 south of Decatur, Wise County.	17848	FS		NS-E. coli Geomean-5b			
0810D	Salt Creek	01	Eleven mile stretch of Salt Creek running upstream from confluence with Garrett Creek, Wise County.	16766	FS		NC			
0809	Eagle Mountain Reservoir	01	Lowermost portion of reservoir near east end of dam	10944	FS	CS-Chlorophyll-a	FS		FS	
		02	Dosier Slough cove	10947		FS			FS	
		03	Ash Creek cove	10949, 10950, 10951			CS-ammonia		FS	
		04	Lowermost portion of reservoir near west end of dam	10945			FS		FS	
		05	Lower portion of reservoir east of Walnut Creek cove	10952	FS	CS-Chlorophyll-a	FS		FS	
		06	Walnut Creek cove	10954			FS		FS	
		07	Old Ranch cove	10958, 10959			FS		FS	
		08	Middle portion of reservoir near Cole subdivision	10956	FS	CS-Chlorophyll-a	FS		FS	
		09	Indian Creek cove	10961, 10962			CS-Chlorophyll-a		FS	
		10	Upper portion of reservoir near Indian Creek cove	10960	FS	CS-Chlorophyll-a	FS		FS	
		11	Darrett Creek cove	10965			FS		FS	
		12	Upper portion of reservoir near Newark Beach	10964	FS	FS	FS		FS	
		14	Mid-Lake, from just above Walnut Cr. Cove to Oakwood Rd. peninsula	17667			CS-Chlorophyll-a			FS



WEST FORK SUBWATERSHED (CONTINUED)

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0809A	Walnut Creek	01	Entire Segment	10853	FS	NC	NC		
0809B	Ash Creek	01	Entire Segment	10854	FS	CS-nitrate CS-TP	NS-E. coli Geomean-5c		
0808	West Fork Trinity River Below Eagle Mountain Reservoir	01	Entire segment	NA				NS-aldrin in fish tissue-4b NS-dieldrin in edible tissue-4b NS-PCBs in edible tissue-5a	
0807	Lake Worth	01	Entire reservoir	10942, 15163, 15166, 15167	FS	CS-Chlorophyll-a	FS	NS-PCBs in edible tissue-4a NS-aldrin in fish tissue-4b NS-dieldrin in edible tissue-4b	FS
0834	Lake Amon G. Carter	01	Entire reservoir	11063	FS	FS	NC		FS

ELM FORK SUBWATERSHED

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0824	Elm Fork Trinity River Above Ray Roberts Lake	01	Lower 7.5 miles of segment	11029, 11031	FS	CS-Chlorophyll-a CS-nitrate	NC	FS	FS
		02	2 mile reach near unmarked county road, 1.4 km downstream Gainesville WWTP	11033		CS-nitrate		FS	FS
		03	3.5 mile reach near SH 51	15635, 17670	FS	CS-Chlorophyll-a	FS	FS	FS
		04	25 mile reach near FM 3108	16432		FS		FS	FS
		05	Upper 48 miles of segment	NA		FS		FS	FS
0839	Elm Fork Trinity River Below Ray Roberts Lake	01	Entire segment	13619	FS	FS		FS	FS
0840	Ray Roberts Lake	01	Lowermost portion of reservoir adjacent to dam	14039, 17834	FS	FS	NC	FS	FS
		02	Lower portion of Jordan Creek arm west of Pilot Point	11076	FS	FS		FS	FS
		03	Upper portion of Jordan Creek arm	16823	FS	CS-ammonia CS-nitrate CS-TP		FS	FS
		04	Buck Creek cove	16822	FS	CS-ammonia CS-nitrate		FS	FS
		05	Lower portion of Elm Fork arm	NA		FS		FS	FS
		06	Middle portion of Elm Fork arm	14043	FS	FS	NC	FS	FS
		07	Upper portion of Elm Fork arm	16824	FS	FS		FS	FS
		08	Remainder of reservoir	20894, 20895, 20896, 20897, 20898, 20899	CS-DO grab screening level	FS		FS	FS
0823	Lewisville Lake	01	Lowermost portion of reservoir	11025, 13995, 13996	NA	NA		FS	FS
		02	Stewart Creek arm	13997, 16808	FS	CS-ammonia CS-nitrate CS-TP		FS	FS
		03	Hickory Creek arm	11027, 13998, 18475, 18476, 18477, 18478, 18479, 20893	FS	CS-Chlorophyll-a		FS	FS
		04	Little Elm Creek arm	17830	FS	FS		FS	FS
		05	Middle portion of reservoir east of Lake Dallas	11026, 13999, 14001	FS	CS-Chlorophyll-a		FS	FS
		06	Remainder of reservoir	18480, 18481		FS		FS	FS
0823A	Little Elm Creek	01	From the confluence with Lake Lewisville in Denton Co., up to FM 455 in Collin Co. (Lower 12 miles of segment).	13617, 16826	FS		NC	FS	
		02	From FM 455 in Collin Co., up to 1.4 km above FM 121 in Grayson, Co. near Guenther. (Upper 15 miles of segment).	NA				FS	
0823B	Stewart Creek	01	Entire segment.	10860	FS	CS-nitrate CS-TP	NC	FS	



ELM FORK SUBWATERSHED (CONTINUED)

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0823C	Clear Creek	01	Lower 25 miles of segment	10859, 16827	FS	NC	FS	FS	
		02	Upper 40 miles of segment	NA				FS	
0823D	Doe Branch	01	From the confluence (NHD RC 12030103023518) with Lake Lewisville/Elm Fork Trinity in Denton County to the headwaters (NHD RC 12030103005935) northeast of Celina, Collin Co., TX.	18560, 20291	FS	NC	NC	NC	
0825	Denton Creek	01	Entire segment	11034, 14244	FS	FS	CN-E. coli Geomean	FS	FS
0822	Elm Fork Trinity River Below Lewisville Lake	01	Lower 11 miles of segment	16436, 17163, 17164, 18310, 18648, 20287	CS-DO grab screening level	CS-Chlorophyll-a	FS	FS	FS
		02	4.5 miles upstream to 7.5 miles downstream DWU intake	11024, 16438, 17162	CS-DO grab screening level	CS-Chlorophyll-a	FS	FS	FS
		03	1.0 mi upstream to 4.5 miles downstream SH 121	13615, 18358	FS	FS		FS	FS
		04	Upper 1.5 miles of segment	15252, 16437	FS	CS-Chlorophyll-a		FS	FS
0822A	Cottonwood Branch	01	A 2.5 mile stretch of Cottonwood Branch running upstream from confluence with Hackberry Creek to approx. 0.5 miles downstream of N. Story Rd., Dallas Co.	17167, 17168, 18359	NA	NA	NA	NA	
		02	A 3.5 mile stretch of Cottonwood Branch running upstream from approximately 0.5 miles downstream of N. Story Rd. to Valley View Rd, Dallas, Co.	17165, 17166	FS		NS-E. coli Geomean-4a	NA	
0822B	Grapevine Creek	01	Entire water body	17169, 17531, 17939, 20311	FS	NC	NS-E. coli Geomean-4a		
0822C	Hackberry Creek	01	A 5.5 mile stretch of Hackberry Creek running upstream from confluence with S. Fork Hackberry Creek to approximately 2.4 miles upstream of SH 114 in Irving, Dallas Co.	17170, 17171, 17172, 17532, 17938	CS-DO grab screening level	CS-Chlorophyll-a	FS	FS	
0822D	Ski Lake	01	Entire segment.	17849	FS	CS-Chlorophyll-a		FS	
0826	Grapevine Lake	01	Lowermost portion of reservoir	11035, 13873, 13874, 16113, 17827, 20889, 20890, 20891	FS	FS	NC	FS	FS
		02	Morehead Creek cove	11036, 11037, 16118, 20886	FS	FS		FS	FS
		03	Lower portion of reservoir north of Oak Grove Park	16114		FS		FS	FS
		04	North Main Slough cove	16116, 16117, 20887, 20888	FS	FS		FS	FS
		05	Middle portion of reservoir east of Meadowmere Park	13875, 16115	FS	FS		FS	FS
		06	Middle portion of reservoir southeast of Walnut Grove Park	13876, 16112, 17828	FS	CS-Chlorophyll-a	NC	FS	FS
		07	Upper portion of reservoir east of Marshall Creek Park	13877, 13878, 16111, 20882	FS	NS-High pH-5c CS-nitrate		FS	FS
		08	Remainder of reservoir	20880, 20881, 20883, 20884	FS	FS		FS	FS
0826A	Denton Creek	01	Lower 7.9 miles of creek	14485	FS	CS-nitrate		FS	
		02	15.7 miles upstream to 7.4 miles downstream of FM 156	14483	FS			FS	



**EAST FORK SUBWATERSHED**

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0821	Lake Lavon	01	Lowermost portion of reservoir	15684, 15685		CS-nitrate			
0821C	Wilson Creek	01	Entire water body	10777, 15041	FS	NC	NS-E. coli Geomean-5c		
0821D	East Fork Trinity River above Lake Lavon	01	Entire water body	13740	FS	NC	NS-E. coli Geomean-5c		
0820	Lake Ray Hubbard	01	Lower portion of East Fork arm, centering on IH 30	16809	FS	CS-Chlorophyll-a		FS	FS
		02	Middle portion of East Fork arm, centering on SH 66	11001, 16829	FS	CS-Chlorophyll-a		FS	FS
		04	Lower portion of main body of reservoir extending up from dam to Yankee Cr. Arm.	10998, 20194	FS	CS-Chlorophyll-a	NC	FS	FS
		05	Mid-reservoir, I30 crossing Rowlett Cr. Arm to Yankee Cr. Arm	17829	FS	FS		FS	FS
		06	Outfall canal from Lake Lavon Dam	17846	FS	FS		FS	FS
0820B	Rowlett Creek	01	Entire water body	10753, 17845	FS	CS-nitrate	NS-E. coli Geomean-5c	FS	
0820C	Muddy Creek	01	Entire creek	16828, 20110	FS	CS-nitrate	FS	FS	
0819	East Fork Trinity River	01	Entire segment	10987, 10989, 10990, 10991, 10992, 10993, 10996, 10997, 13612, 20284, 20285, 20286	FS	NS-sulfate-5c NS-TDS-5c CS-ammonia CS-Chlorophyll-a CS-nitrate CS-TP	FS		
0819B	Buffalo Creek	01	Entire water body.	10824, 18576		CS-nitrate CS-TP			



MAIN STEM SUBWATERSHED

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0806	West Fork Trinity River below Lake Worth	01	From confluence of Village Creek upstream to confluence of Clear Fork Trinity River	10938, 10939, 10940, 11085, 16120, 17368, 17662, 17863, 18459, 20292, 20336, 20422	FS	CS-Chlorophyll-a	FS	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	FS
		02	From confluence of Clear Fork Trinity River upstream to Lake Worth Dam	10941, 18460, 20424, 20425	NC	FS		NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	FS
0806A	Fosdic Lake	01	Entire lake	16818				CS-arsenic in edible tissue	
0806B	Echo Lake	01	Entire lake	16813				CS-arsenic in edible tissue	
0806D	Marine Creek	01	Marine Creek from the confluence with W. Fork Trinity River 2 miles upstream to Tenmile Bridge Rd. in Ft. Worth	17370, 20428	FS		CN-E. coli Geomean		
0806E	Sycamore Creek	01	Five mile stretch of Sycamore Creek running upstream from confluence with the W. Fork of Trinity River to confluence with Echo Lake Tributary in Fort Worth	17131, 17369, 20431			NS-E. coli Geomean-5b		
0806F	Little Fossil Creek	01	Entire water body.	17129			CN-E. coli Geomean		
0841	Lower West Fork Trinity River	01	From confluence of the Elm Fork Trinity River to the confluence with Johnson Creek.	11079, 11080, 11081, 11082, 11089	FS	CS-Chlorophyll-a CS-nitrate CS-TP	NS-E. coli Geomean-4a	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
		02	From the confluence with Johnson Creek upstream to the confluence of Village Creek.	11083, 11084, 11086, 11087, 11088, 17160, 17669	FS	CS-nitrate CS-TP	NS-E. coli Geomean-4a	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
0841A	Mountain Creek Lake	01	Entire reservoir	NA				NS-dioxin in edible tissue-4A NS-PCBs in edible tissue-4a	
0841B	Bear Creek	01	Entire segment.	10864, 10865, 10866, 10867, 10868, 10869, 17663, 18313, 18315	FS	NC	FS	FS	
0841C	Arbor Creek	01	Entire segment.	17666, 20610	FS	NC	FS	NC	
0841D	Big Bear Creek	01	From the confluence with Little Bear Creek to SH 26, Tarrant County.	17089	FS	NC	NC		
0841E	Copart Branch Mountain Creek	01	Entire segment.	17672	FS	NC	FS	FS	



MAIN STEM SUBWATERSHED (CONTINUED)

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0841F	Cottonwood Creek	01	Entire Segment.	10723, 17674, 17676, 20837	CS-DO grab screening level	NC	NS-E. coli Geomean-5a	FS	
0841G	Dalworth Creek	01	Entire segment.	17671	CS-DO grab screening level	NC	NS-E. coli Geomean-4a	NC	
0841H	Delaware Creek	01	Entire segment.	10871, 15617, 17175, 17176, 17177, 17178, 18314	FS	NC	NS-E. coli Geomean-4a	FS	
0841J	Estelle Creek	01	Entire segment.	17174	NA		NS-E. coli Geomean-4a		
0841K	Fish Creek	01	From South Belt Line Road (FM 1382) upstream to the upper end of the creek south of West Bardin Road (NHD RC 12030102000107) in Arlington, Tarrant County. From South Belt Line Road (FM 1382) upstream to the upper end of creek south of West Bardin Road.	10724, 10725, 15294, 17677, 17679, 20342	CS-DO grab screening level	NC	NS-E. coli Geomean-5b	FS	
0841L	Johnson Creek	01	From the confluence wit the Lower West Fork Trinity River, upstream to just south of Mayfield Road in Arlington, Tarrant, Co..	10718, 10719, 10721, 17664, 17665, 18311	CS-DO grab screening level	NC	NS-E. coli Geomean-4a	FS	
0841M	Kee Branch	01	Entire Segment.	10792, 15103, 16896	FS		NS-E. coli Geomean-4a	FS	
0841N	Kirby Creek	01	Entire segment	17675	CS-DO grab screening level		NS-E. coli Geomean-5b		
0841O	Mountain Creek	01	Entire segment.	10815, 13672, 17681, 17682	CS-DO grab screening level	NC	FS	FS	
0841P	North Fork Cottonwood Creek	01	Entire segment.	10722, 17673, 20836	CS-DO grab screening level	NC	CN-E. coli Geomean	FS	
0841Q	North Fork Fish Creek	01	Entire segment.	17678, 20838	CS-DO grab screening level	NC	CN-E. coli Geomean	NC	
0841R	Rush Creek	01	Entire segment.	10788, 10790, 10791, 17190, 17191	FS	CS-Chlorophyll-a	NS-E. coli Geomean-4a	FS	
0841S	Vilbig Lakes	01	A 5 acre area in NW corner of Vilbig Lakes, near confluence with unnamed creek, approx. 100 m south of intersection of Rusdell Rd./Marvel Dr. in Irving, Dallas, Co.	15624, 20793, 20794, 20795, 20796	FS		FS		
0841T	Village Creek	01	A 7 mile stretch of Village Creek running upstream from confluence with West Fork Trinity River to SH 303 approx. 0.75 mi. downstream of Lake Arlington.	10778, 17189	FS		NS-E. coli Geomean-4a	FS	
0841U	West Irving Creek	01	A 4 mile stretch of West Irving Branch running upstream from approx. 0.4 mi. downstream of Oakdale Rd. to just south of Sowers Road in Irving, Dallas Co.	17179	NA		NS-E. coli Geomean-4a		
0841V	Crockett Branch	01	Entire Segment.	15295, 17683	CS-DO grab screening level	NC	NS-E. coli Geomean-5c	NC	



MAIN STEM SUBWATERSHED (CONTINUED)

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0805	Upper Trinity River	01	From confluence of the Cedar Creek Reservoir discharge canal upstream to confluence of Smith Creek.	10924	NC	CS-Chlorophyll-a CS-nitrate CS-TP		NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
		02	From confluence of Smith Creek upstream to confluence of Tenmile Creek.	10925, 10926, 10927, 10928, 16121	FS	CS-Chlorophyll-a CS-nitrate CS-TP	FS	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
		03	From the confluence of Fivemile Creek upstream to the confluence of Cedar Creek.	10934, 10935, 13614, 17161, 20444, 20567	FS	CS-Chlorophyll-a CS-nitrate CS-TP	NS-E. coli Geomean-4a	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
		04	From confluence of Cedar Creek upstream to confluence of Elm Fork Trinity River	10936, 10937, 16088	FS	CS-nitrate CS-TP	NS-E. coli Geomean-4a	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
		06	From confluence of Tenmile Creek upstream to confluence of Fivemile Creek	10929, 10930, 10931, 10932, 20566	NC	CS-nitrate CS-TP	NC	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	
0805A	Red Oak Creek	01	Entire Segment	17506, 18569			NC		
0805B	Parsons Slough	01	Entire Segment	10839			NC		
0804	Trinity River Above Lake Livingston	01	From the lower end of the segment up to just above the confluence with Hurricane Bayou in Houston County.	10918, 13690	FS	CS-Chlorophyll-a CS-nitrate CS-TP	FS	FS	
		02	From just upstream of the confluence with Hurricane Bayou up to just above the confluence with Boons Creek.	NA		CS-Chlorophyll-a CS-nitrate CS-TP		FS	
		03	From just upstream of the confluence with Boons Creek up to just above the confluence with Caney Creek.	NA		CS-nitrate		FS	
		04	From the confluence with Caney Creek up to just above the confluence with Indian Creek in Anderson County.	10919	FS	CS-Chlorophyll-a CS-nitrate CS-TP	FS	FS	
		05	From just above the confluence with Indian Creek in Anderson County up to just above the confluence with Tehuacana Creek.	NA		FS		FS	
		06	From just above the confluence with Tehuacana Creek to just above the confluence with Richland Creek.	NA		FS		FS	
		07	From just above the confluence with Richland Creek in Henderson County, up to the upper end of the segment.	10920, 10921, 10922	FS	CS-Chlorophyll-a CS-nitrate CS-TP	FS	NS-dioxin in edible tissue-5a NS-PCBs in edible tissue-5a	



MAIN STEM SUBWATERSHED (CONTINUED)

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0804F	Tehuacana Creek	01	A 27 mile stretch of Tehuacana Creek extending from the confluence with 0804 of the Trinity River up to the confluence with Caney Creek (NHD RC 120302010000226).	10705, 20770	FS	NC	NC	FS	
		02	A 28.4 mile (45.7 KM) stretch of Tehuacana Creek extending from the confluence with Caney Creek to the upper end (NHD RC 120302010000225) of Tehuacana Creek.	18572	NA	NA	NA	FS	
0804G	Catfish Creek	01	Entire Segment	10717, 18596, 18597	NS-DO 24hr avg-5b CS-DO grab screening level CN-impaired macrobenthic community	NC	FS		
0804H	Upper Keechi Creek	01	From the confluence with segment 0804 Trinity River up to confluence with Twin Branch (NHD RC 12030201027099)	18401, 20771	NS-DO 24hr avg-5b NS-DO 24hr min-5b	CS-Chlorophyll-a	NC		
0804J	Fairfield Lake	01	Entire segment	17951	CS-DO grab screening level	CN-fish kill report CS-Chlorophyll-a CS-TP	FS	FS	

MAIN STEM SUBWATERSHED (CONTINUED)

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0803	Lake Livingston	01	Lowermost portion of reservoir, adjacent to dam	10899, 14003, 14004	FS	NS-sulfate-5b CS- Chlorophyll-a	FS	FS	FS
		02	Lower portion of reservoir, East Wolf Creek	14005	NA	NS-sulfate-5b		FS	FS
		03	Lower portion of reservoir, East Willow Springs	14006	FS	NS-sulfate-5b		FS	FS
		04	Middle portion of reservoir, East Pointblank	14007, 14008	FS	NS-sulfate-5b		FS	FS
		05	Middle portion of reservoir, downstream of Kickapoo Creek	10909, 14009	FS	NS-sulfate-5b CS- Chlorophyll-a	NC	FS	FS
		06	Middle portion of reservoir, centering on US 190	10911, 14010	FS	NS-sulfate-5b CS- Chlorophyll-a CS-nitrate CS-TP	FS	FS	FS
		07	Upper portion of reservoir, west of Carlisle	10913, 14013	FS	NS-sulfate-5b CS- Chlorophyll-a CS-nitrate CS-TP	NC	FS	FS
		08	Cove off upper portion of reservoir, East Trinity	14014	NC	NS-sulfate-5b CS-nitrate		FS	FS
		09	West Carolina Creek cove, off upper portion of reservoir	14011	CS-DO grab screening level	NS-sulfate-5b		NC	
		10	Upper portion of reservoir, centering on SH 19	10914	FS	NS-sulfate-5b CS- Chlorophyll-a CS-nitrate CS-TP	FS	FS	FS
		11	Riverine portion of reservoir, centering on SH 21	10917	FS	NS-sulfate-5b CS- Chlorophyll-a CS-nitrate CS-TP	FS	FS	FS
				12	Remainder of reservoir	NA		NS-sulfate-5b	
0803A	Harmon Creek	01	A 16 mile (25.7 KM) stretch of Harmon Creek extending from Lake Livingston (normal pool elevation of 131 feet) upstream to the confluence of East Fork Harmon Creek.	10698	FS	CS-nitrate CS-TP	NC		
0803B	White Rock Creek	01	lower 25 miles of segment	10696	FS	CS- Chlorophyll-a	NC		
0803E	Nelson Creek	01	Entire water body.	10700, 10701	FS	NC	CN-E. coli Geomean	NA	



MAIN STEM SUBWATERSHED (CONTINUED)

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0803F	Bedias Creek	01	From the confluence with segment 0803 Trinity River up to confluence with Poole Creek (NHD RC 12030202000572)	10702	FS	NC	CN-E. coli Geomean		
		02	From the confluence with Poole Creek (NHD RC 12030202000572) to upper end of NHD RC Bedias Creek (NHD RC 12030202000350)	10703	CN-Acute & Chronic Zn in water				
0803G	Lake Madisonville	01	Entire water body	16953	NC	CS-Chlorophyll-a	NC	NS-mercury in edible tissue-5c	
0827	White Rock Lake	01	Entire segment	11038	FS	CS-Chlorophyll-a	NC		
0827A	White Rock Creek above White Rock Lake	01	From the headwaters of White Rock Lake upstream to the upper end of the water body at NHD RC 12030105001118.	15280, 18517, 20289		CS-nitrate	CN-E. coli Geomean		
0813	Houston County Lake	01	Entire reservoir	10973	FS	FS	FS		FS



VILLAGE CREEK SUBWATERSHED

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0828	Lake Arlington	01	Lowermost portion of lake along western half of dam	11040, 13905		FS		NA	FS
		02	Lowermost portion of lake along eastern half of dam	13904	FS	CS-Chlorophyll-a	FS	NA	FS
		03	Western half of lower portion of lake	13903		FS		NA	FS
		04	Eastern half of lower portion of lake	13901	NA	FS		NA	FS
		05	Western half of upper portion of lake	13899	FS	CS-Chlorophyll-a	FS	NA	FS
		06	Eastern half of upper portion of lake	11042, 13898	FS	CS-Chlorophyll-a	FS	NA	FS
		07	Uppermost portion of lake	13897	FS	CS-nitrate	FS	NA	FS
		08	Remainder of lake	13900		FS		NA	FS
0828A	Village Creek	01	From Lake Arlington to the headwaters	10780, 10786	FS	NC	NS-E. coli Geomean-5c	FS	

**MOUNTAIN CREEK SUBWATERSHED**

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0838	Joe Pool Lake	01	Lowermost portion of reservoir adjacent to the dam	11073, 13890, 13891, 13893, 13894	FS	FS		FS	FS
		02	Mountain Creek arm	11071, 13896, 17684	FS	CS-Chlorophyll-a	FS	FS	FS
		03	Walnut Creek arm	11072, 13892	FS	FS		FS	FS
0838A	Mountain Creek	01	Entire segment.	13622	FS	NC		NA	
0838B	Sugar Creek	01	Entire segment.	17680	FS	NC	FS	FS	
0838C	Walnut Creek	01	From the confluence with Joe Pool Lake up to the headwaters at Spring Street in Burleson.	13621, 20790	FS	NC	NS-E. coli Geomean-5b	FS	
0838D	Hollings Branch	01	Hollings Branch from the confluence of the Mountain Creek arm of Joe Pool Lake upstream to the headwater 500 m downstream of US 67 in Midlothian	16433	FS	NC	FS		
0838E	Soap Creek	01	Soap Creek from the confluence of the Mountain Creek arm of Joe Pool Lake upstream to the headwater 6.6 km (3.98 miles) upstream of US 67 in Midlothian	16435	FS	NC	FS		



**RICHLAND CHAMBERS SUBWATERSHED**

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0816	Lake Waxahachie	01	Entire reservoir	10980	FS	CS-Chlorophyll-a	NC		FS
0815	Bardwell Reservoir	01	Entire reservoir	10979, 16700, 17582, 18437, 18549, 18550	FS	FS	NC	NA	FS
0815A	Waxahachie Creek	01	Entire creek	13686, 18519		CS-nitrate			
0814	Chambers Creek Above Richland-Chambers Reservoir	01	From the lower end of the segment up to just above the confluence with Cummins Creek.	10975	CS-DO grab screening level	NS-chloride-5c CS-Chlorophyll-a CS-TP	FS	FS	FS
		02	From just above the confluence with Cummins Creek up to just above the confluence with Waxahachie Creek.	10977, 20000	FS	NS-chloride-5c		FS	FS
		03	From just above the confluence with Waxahachie Creek up to just above the confluence with Mill Branch.	NA	CS-DO grab screening level	NS-chloride-5c CS-Chlorophyll-a CS-TP		FS	FS
		04	From just above the confluence with Mill Branch to the upper end of the segment.	10978		NS-chloride-5c		FS	FS
0817	Navarro Mills Lake	01	Entire reservoir	10981, 17442, 18545, 18546, 18547, 18548, 20633	CS-DO grab screening level	FS	NC		FS
0837	Richland Creek Above Richland-Chambers Reservoir	01	Entire segment	11070, 18344	CS-DO grab screening level	CS-Chlorophyll-a	NC		FS
0836	Richland-Chambers Reservoir	01	Lowermost portion of reservoir, adjacent to dam	11065, 15168	FS	FS	FS	NA	FS
		02	Confluence of Richland and Chambers Creek arms	15169	FS	FS	FS	NA	FS
		03	Lower portion of Chambers Creek arm	15170, 18720	FS	FS	FS	NA	FS
		04	Upper portion of Chambers Creek arm	15199, 18724	FS	CS-Chlorophyll-a	FS	NA	FS
		05	Lower portion of Richland Creek arm	11068	FS	CS-Chlorophyll-a	FS	NA	FS
		06	Upper portion of Richland Creek arm	15172, 18727	FS	FS	FS	NA	FS
		07	Remainder of reservoir	18725, 18726		FS		NA	FS
		08	Post Oak Creek Arm off of Chambers Creek Arm of Richland Chambers Reservoir.	18723		FS		NA	FS
0836B	Cedar Creek	01	Entire segment.	18716, 18718, 18719	NS-DO 24hr avg-5b CS-DO grab screening level				
0836C	Grape Creek	01	Entire segment.	18721	CN-DO 24hr avg CN-DO 24hr min CS-DO grab screening level				
0836D	Post Oak Creek	01	Entire segment.	18722	CS-DO grab screening level				



**CEDAR CREEK SUBWATERSHED**

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0818	Cedar Creek Reservoir	01	Lowermost portion of the reservoir, adjacent to the dam.	13845, 16745, 16748	FS	NS-High pH-5b CS- Chlorophyll-a	FS		FS
		02	Caney Creek cove	16744		NS-High pH-5b CS-ammonia			FS
		03	Clear Creek cove	16743		NS-High pH-5b			FS
		04	Lower portion of reservoir east of Key Ranch Estates	13848, 16749	FS	NS-High pH-5b CS- Chlorophyll-a	FS		FS
		05	Cove off lower portion of reservoir adjacent to Clearview Estates	16746		NS-High pH-5b CS-ammonia			FS
		06	Middle portion of reservoir downstream of Twin Creeks cove	15812, 16741, 16747, 16750, 17090, 18472, 18473	FS	NS-High pH-5b CS- Chlorophyll-a	FS		FS
		07	Twin Creeks cove	16739		NS-High pH-5b			FS
		08	Prairie Creek cove	16751, 16752		NS-High pH-5b CS-ammonia CS- Chlorophyll-a			FS
		09	Upper portion of reservoir adjacent to Lacy Fork cove	13854, 16753, 18471	FS	NS-High pH-5b CS- Chlorophyll-a	FS		FS
		10	Lacy Fork cove	16771		CS- Chlorophyll-a			FS
		11	Upper portion of reservoir east of Tolosa	16772	FS	NS-High pH-5b CS- Chlorophyll-a	FS		FS
		12	Uppermost portion of reservoir downstream of Kings Creek	16774, 18469, 18470	NA	NS-High pH-5b			FS
		13	Cedar Creek cove	16773	CS-DO grab screening level	CS-ammonia CS- Chlorophyll-a CS-TP			FS
		14	Remainder of reservoir	NA		FS			FS



**TRINITY BELOW LIVINGSTON SUBWATERSHED**

Segment	Segment Description	AU	Assessment Unit (AU) Description	Sites in Assessment Unit	Aquatic Life Use	General Use	Recreation Use	Fish Consumption	Public Water Supply
0802	Trinity River Below Lake Livingston	01	Lower 17 miles of segment	10894	FS	CS-Chlorophyll-a	FS	FS	FS
		02	Approx. 9 miles upstream to approx. 15 miles downstream of SH 105	10895		CN-High pH		FS	FS
		03	11 miles upstream to approx. 9 miles downstream of FM 787	10896	FS	CS-Chlorophyll-a	FS	FS	FS
		04	5 miles upstream to 11 miles downstream of US 59	10897	FS	CS-Chlorophyll-a	NC	FS	FS
		05	Upper 6 miles of segment	16998	FS	CS-Chlorophyll-a	FS	FS	FS
0802B	Long King Creek	02	From just upstream of the confluence with unnamed tributary (NHD RC 12030202001817) up to the confluence with Mud Creek, in Polk County.	10689	NC	NC	NC		
0802D	Menard Creek	01	Entire water body	10688		NC	FS		
0801	Trinity River Tidal	01	Lower 25 miles of segment	10892, 20839	FS	CS-Chlorophyll-a	FS		
0801B	Old River	01	Entire Segment	18360	FS	CS-Chlorophyll-a			
0801C	Cotton Bayou	01	Entire Segment	17628, 17629, 17632, 17633, 18696, 18697, 20003	CN-DO grab min CS-DO grab screening level	CS-Chlorophyll-a CS-nitrate CS-TP	NS-E. coli Geomean-5c NS-Enterococcus Geomean-5c		
0801D	Lynchburg Canal	01	From confluence with Trinity River Tidal upstream to confluence with Big Caney Creek.	16148	FS	NC	NC	FS	

**Definitions:**

FS – Fully Supporting

NC – No Concern

CS – Screening Level Concern

CN – Standard Concern

NS – Not Supporting

NA – Not Assessed

4a – Total Maximum Daily Load (TMDL) has been completed and approved by EPA.



4b – Other pollution control requirements are reasonably expected to result in the attainment of the water quality standard in the near future.

4c – Nonsupport of the water quality standard is not caused by a pollutant.

5a – A TMDL is underway, scheduled, or will be scheduled.

5b – A review of the water quality standards for this water body will be conducted before a TMDL is scheduled.

5c – Additional data and information will be collected before a TMDL is scheduled.