

Florida Department of Environmental Protection



Bayou Chico Basin Management Action Plan 2013 Annual Report Overview

January 8, 2014
Steve Cioccia



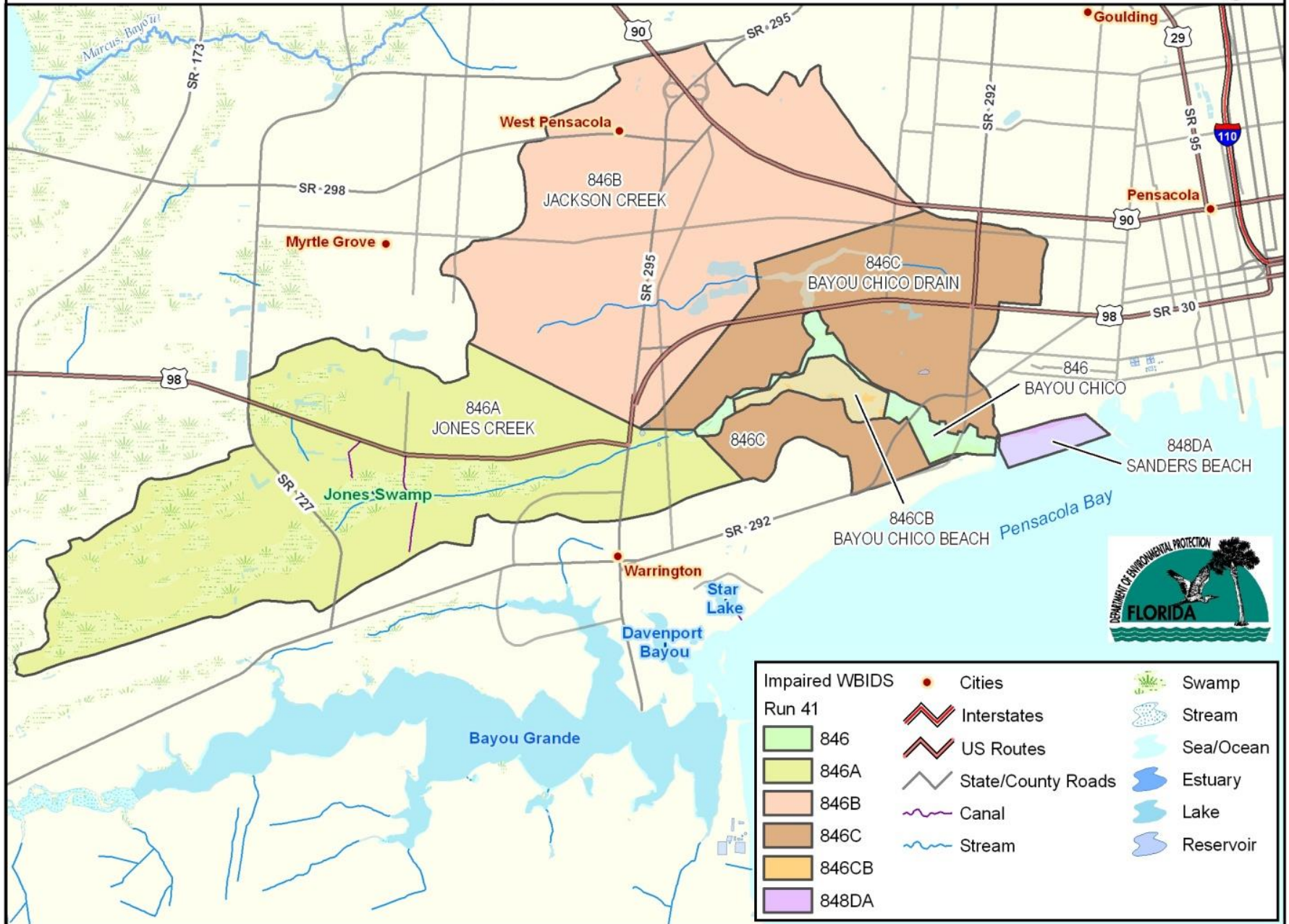


Report Overview

- This is the second annual report for the Bayou Chico Basin Management Action Plan (BMAP).
- The report period is from January 1, 2013 through October 31, 2013.
 - Next annual report period will be November 1, 2013 through October 31, 2014.
- The report includes:
 - Summary on the activities during the reporting period by stakeholder.
 - Overview of water quality monitoring during the reporting period, and fecal coliform trends.

BAYOU CHICO WATERSHED: Project Location

0 0.25 0.5 1 Miles





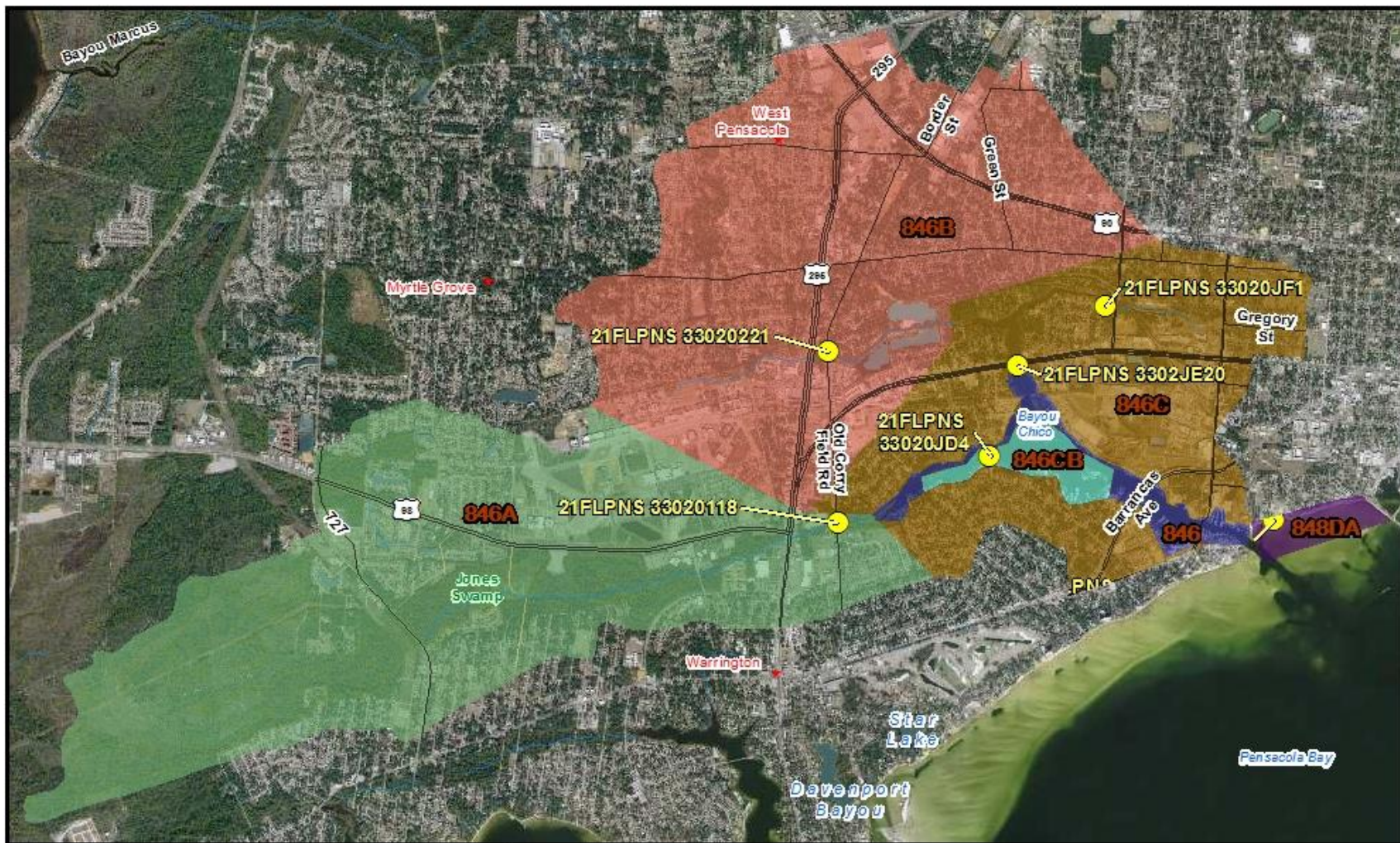
Background on the BMAP

- The BMAP was adopted in October 2011 to address fecal coliform total maximum daily loads (TMDLs) for:
 - Jones Creek.
 - Jackson Creek.
 - Bayou Chico.
 - Bayou Chico Drain.
 - Bayou Chico Beach (North of Mandalay Dr.).
 - Sanders Beach.



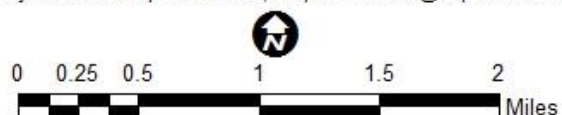
Water Quality Monitoring

- The BMAP monitoring plan consists of monthly ambient fecal coliform monitoring at six stations:
 - Sampling by Escambia County.
 - Sample analysis by University of West Florida Wetland Research Laboratory.
 - Follow up sampling, as needed for FC counts $> 5,000$ cfu.
- FDOH collects Enterococcus samples at two bathing area locations in the basin (Bayou Chico Beach & Sanders Beach).
- Escambia County and the Department are working to relocate the station on Jackson Creek at Old Corry Road to North New Warrington Road, where there are better conditions for monitoring.



**Figure 2-1 BAYOU CHICO
Long Term Sampling Stations
(Revised August 2013)**

Map created August 8, 2013 This map is for display purposes only. Contact Stephen Cioccia; Stephen.Cioccia@dep.state.fl.us



● STAs_BMAP_LONG-TERMrev8-2013

★ Cities

~ Secondary Highways

~ Primary and US Highways

Verified Impaired WBIDs

846

846A

846B

846C

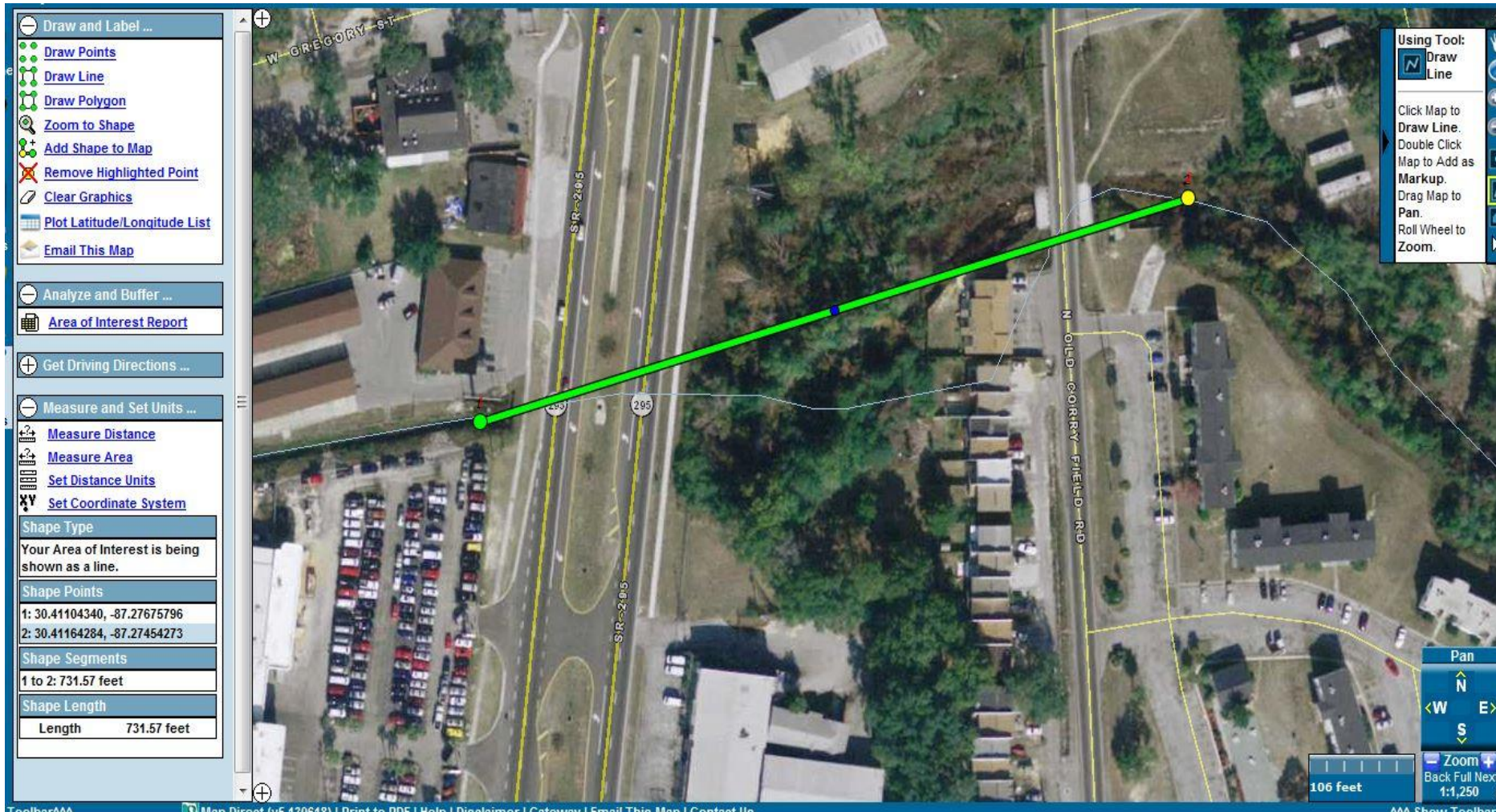
846C.B

848DA





Water Quality Monitoring, Proposed Station Change





Water Quality Monitoring, Jackson Cr. @ Old Corry Road





Water Quality Monitoring, Jackson Cr. @ New Warrington Rd



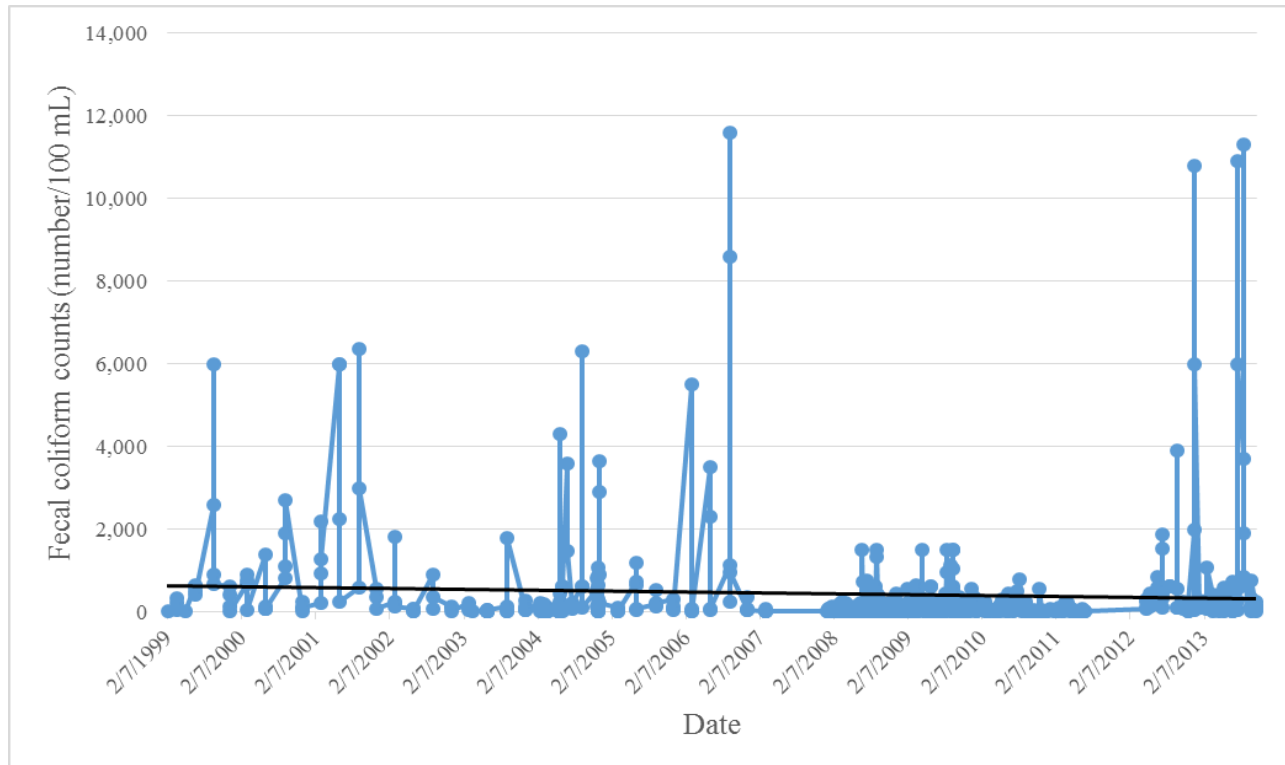


Water Quality Monitoring, continued

- Two very high counts were found during the reporting period:
 - 10,900 CFU on July 22, 2013 at Bayou Chico at the “W” Street Bridge.
 - 11,300 CFU on August 19, 2013 at the southwest arm of Bayou Chico, north of Mandalay Drive.
- The stakeholders were unable to determine the sources of these high counts; however, one of these spikes in fecal coliform counts may be related to a rain event.

Water Quality Trends

- Since the period used in the TMDL (January 1, 1998 through June 30, 2005), there has been a slight declining trend in fecal coliform counts.

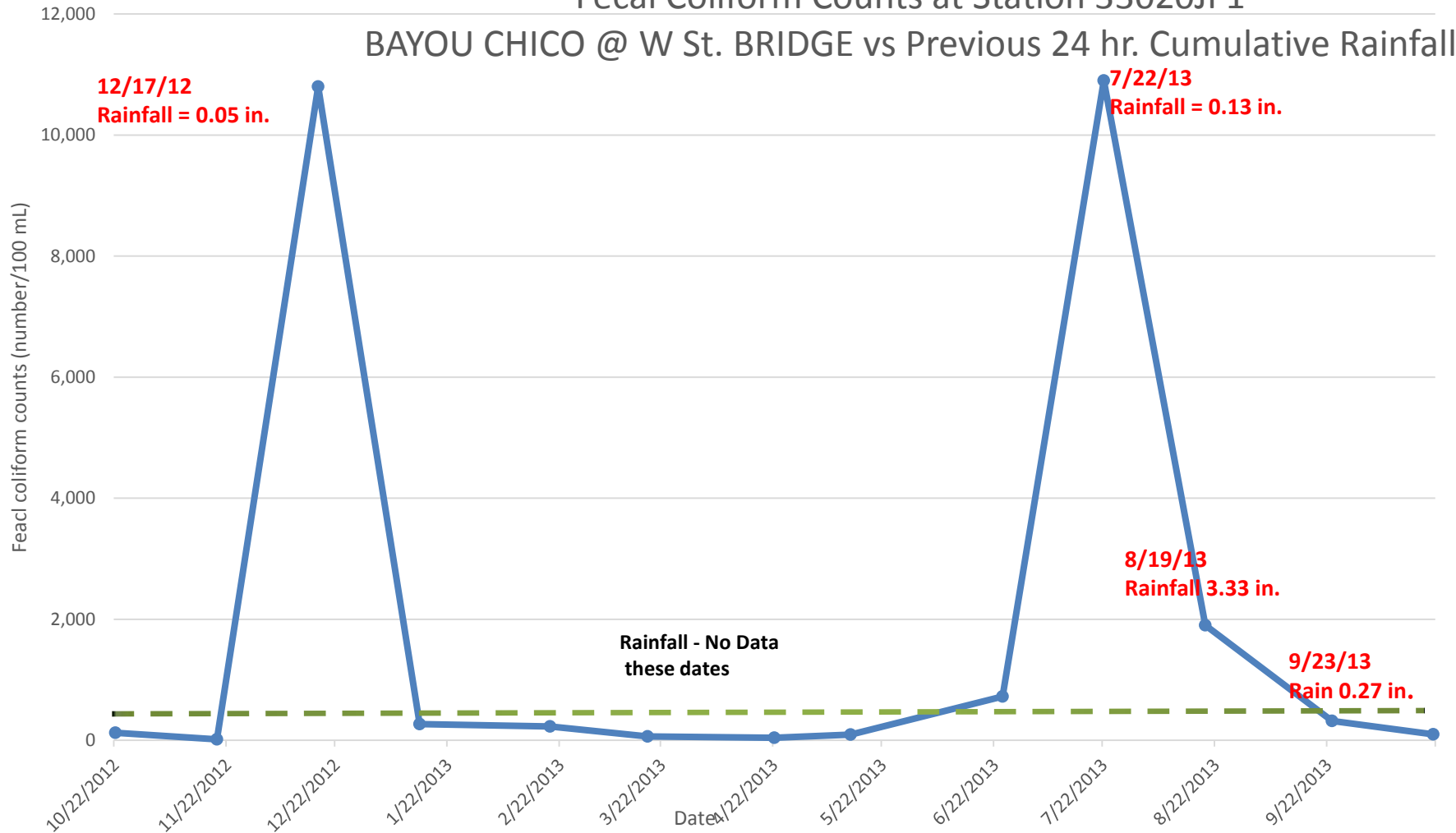




FC Data 10/2012 -10/2013

Fecal Coliform Counts at Station 33020JF1

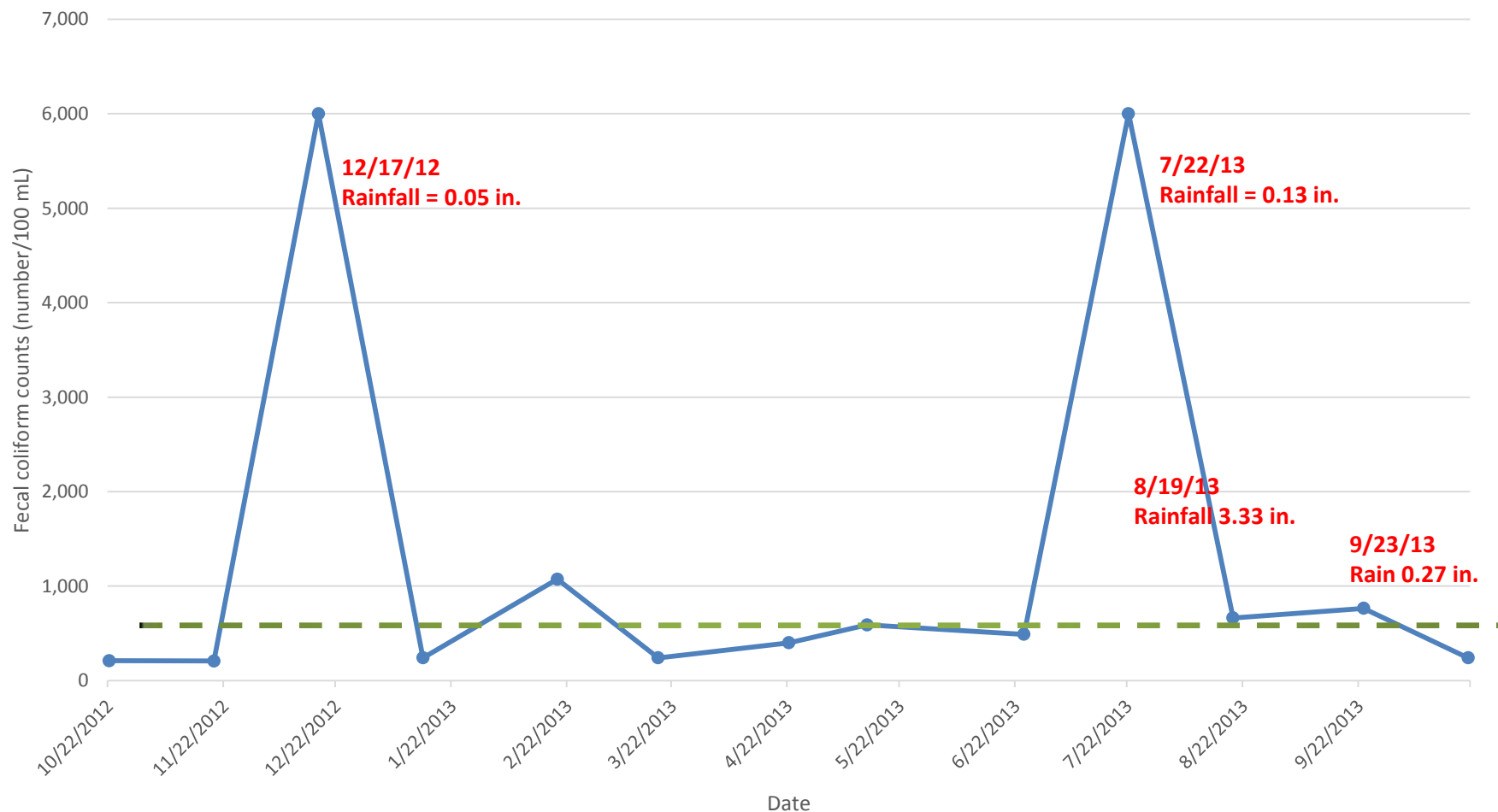
BAYOU CHICO @ W St. BRIDGE vs Previous 24 hr. Cumulative Rainfall





FC Data 10/2012 -10/2013 (cont.)

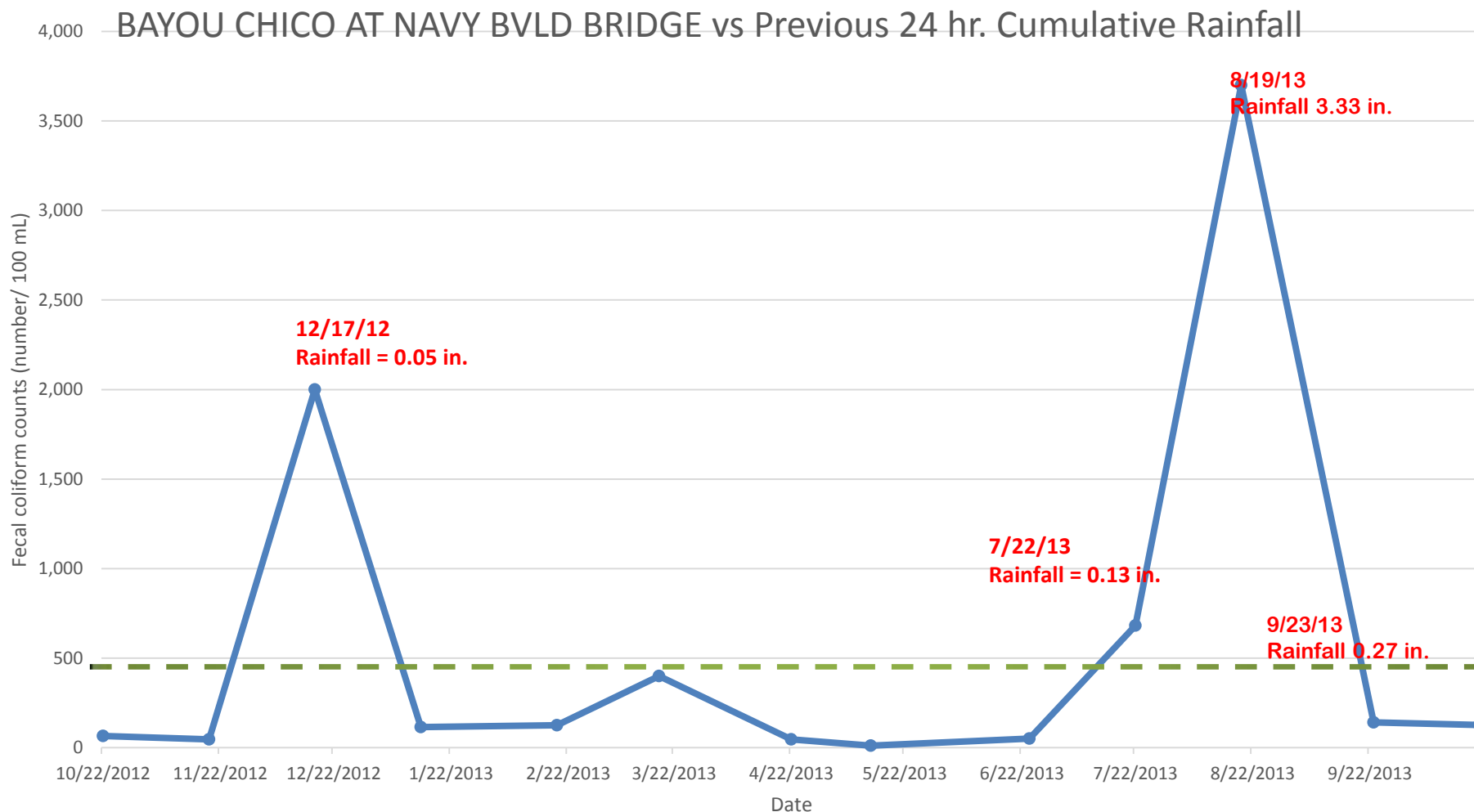
Fecal Coliform Counts at Station 33020221
Jackson Cr @ Old Corry Rd vs Previous 24 hr. Cumulative Rainfall





FC Data 10/2012 -10/2013 (cont.)

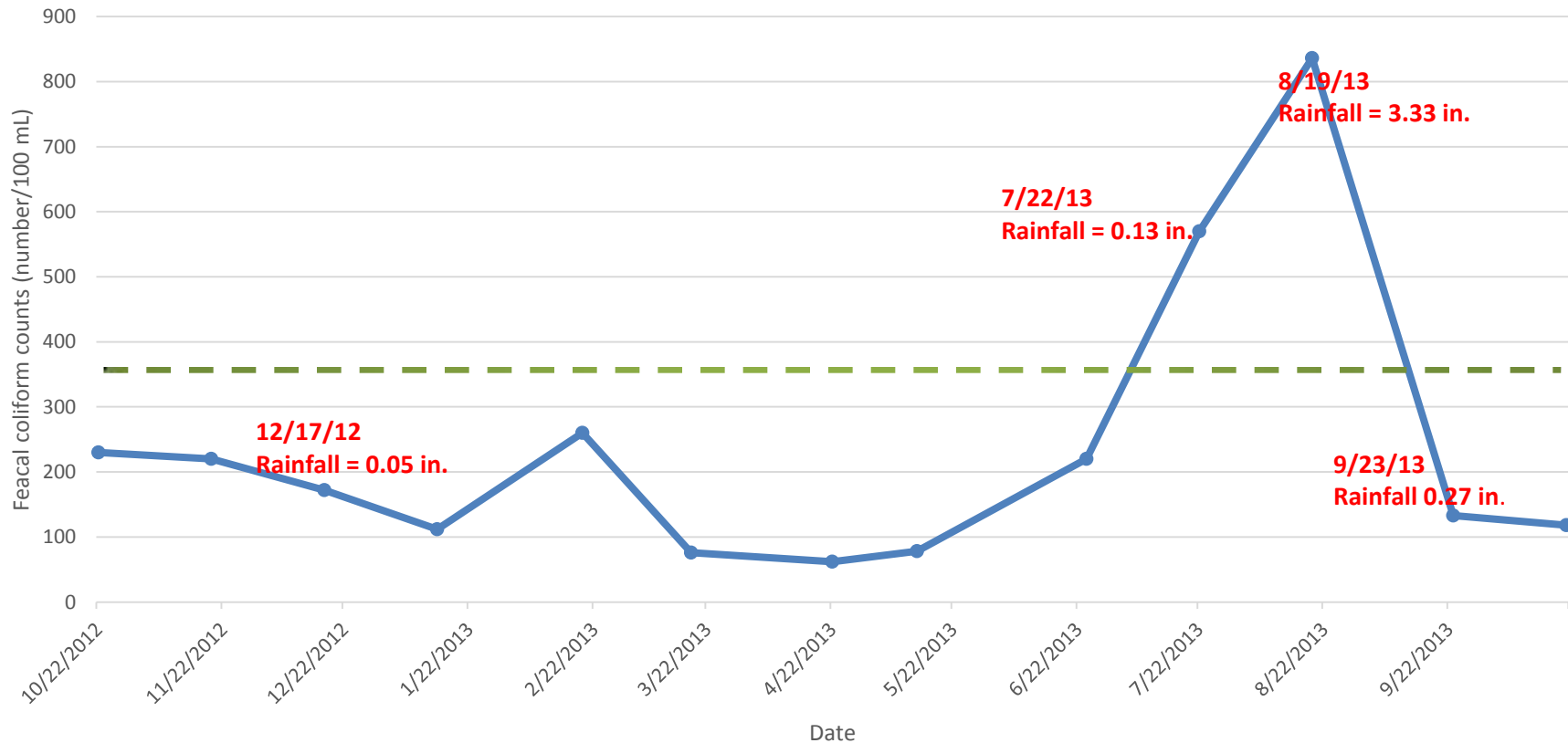
Fecal Coliform Counts at Station 3302JE20





FC Data 10/2012 -10/2013 (cont.)

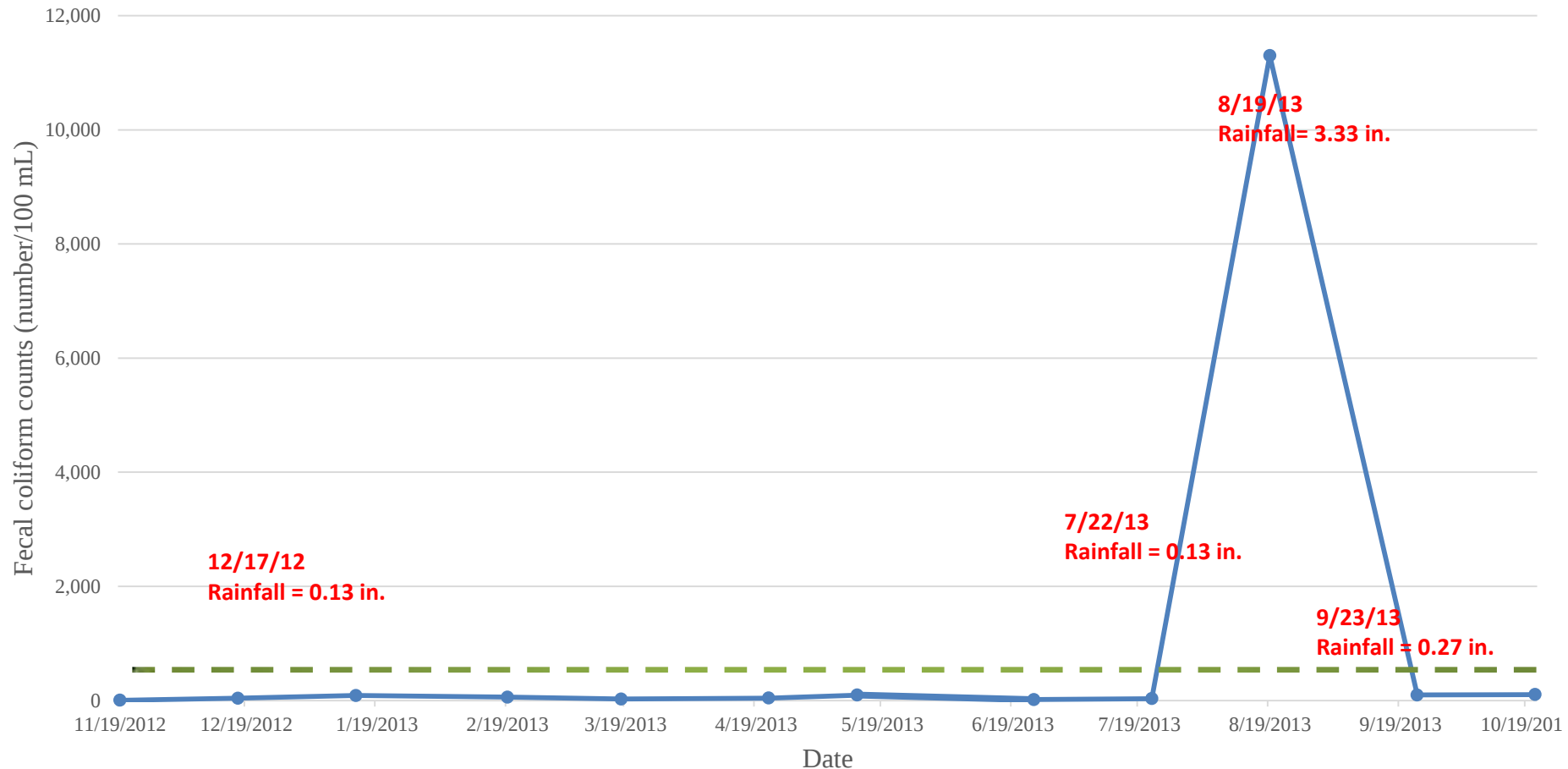
Fecal Coliform Counts at Station 33020118
JONES CREEK AT OLD CORRY ROAD vs Previous 24 hr. Cumulative Rainfall





FC Data 10/2012 -10/2013 (cont.)

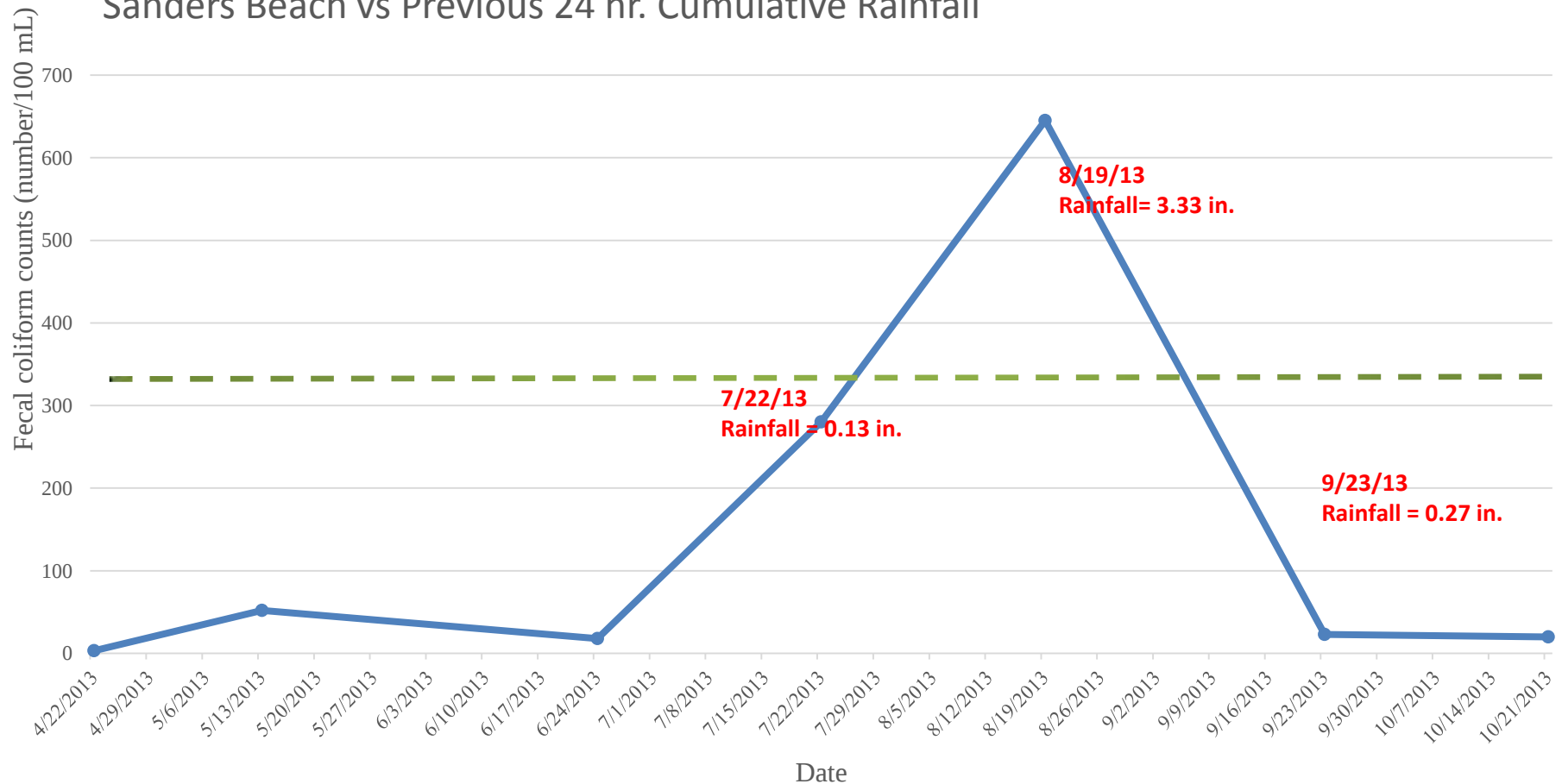
Fecal Coliform Counts at Station 33020JD4
Bayou Chico Beach vs Previous 24 hr. Cumulative Rainfall





FC Data 10/2012 -10/2013 (cont.)

Fecal Coliform Counts at Station 33020J10
Sanders Beach vs Previous 24 hr. Cumulative Rainfall





Future Actions to Determine FC Counts Spike Incidents

- Partnering of DEP, Escambia Co. and other involved stakeholders in evaluating causes of FC counts spike incidents.
- Inclusion of rainfall data for each FC sample event to allow correlation of FC counts with rainfall events.
- Attempt to evaluate sewer system releases correlation with FC counts spikes.

Questions and Discussion on the 2013 Progress Report





Project Activities During the Period October 2012 thru October 2013



Activities During the Reporting Period

- The Bayou Chico Association held its annual cleanup, which removed about two dumpsters worth of debris from the shores of Bayou Chico.
- The City of Pensacola completed the Pace and Gregory Street baffle boxes project, and continued its street sweeping program.
- Emerald Coast Utilities Authority (ECUA) continued the Lakewood Phase IV sewer extensions and continued its fats, oils and grease; inflow and infiltration; sanitary sewer overflow response; and emergency power generator programs.



Activities During the Reporting Period, continued

- Escambia County completed construction of Avery Street Drainage Improvements Phase I, Jones Creek East Stream Restoration, Lexington Terrace Stormwater Retrofit, Maggie's Ditch Wetland Enhancement Phase I and Phase II, "W" Street Sedimentation Basin Improvements, and Southwest Greenway at Pensacola State College Warrington Campus.
- The Florida Department of Transportation (FDOT) continued its municipal separate storm sewer system (MS4) implementation and Drainage Connection Program.



Activities During the Reporting Period, continued

- The Florida Department of Health (FDOH) in Escambia County continued its ongoing county-wide onsite sewage treatment and disposal system (OSTDS) permitting program. As of January 2013, FDOH sent 1,643 notices at part of the Septic to Sewer Enforcement Program. Of these, 218 are still within the connect timeframe, and 413 are in non-compliance.
- The Florida Fish and Wildlife Conservation Commission (FWC) continued its compliance and inspection sweeps for moored and live-aboard vessels.