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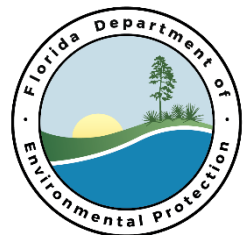
***2016 Progress Report for the
Lower St. Johns River Tributaries
Basin Management Action Plans I and II***

**Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection**

May 2017

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Acknowledgments

This annual progress report was prepared as part of a statewide watershed management approach to restore and protect Florida's water quality. It was prepared by the Florida Department of Environmental Protection with participation from the Lower St. Johns River Tributaries Basin Management Action Plans I and II stakeholders.



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List of Acronyms and Abbreviations

ARV	Air Release Valve
BMAP	Basin Management Action Plan
BMP	Best Management Practice
CARE	Citizen Action Response Effort
CCTV	Closed-Circuit Television
cfu	Colony-Forming Unit
CIPP	Cured In Place Pipe
CMOM	Capacity, Management, Operations, and Maintenance
CMP	Corrugated Metal Pipe
COJ	City of Jacksonville
CWA	Clean Water Act
DBPR	Department of Business and Professional Regulation
DCP	Drainage Connection Program
DEP	Florida Department of Environmental Protection
<i>E. coli</i>	<i>Escherichia coli</i>
EHD	Environmental Health Database
EQD	Environmental Quality Division
EPA	U.S. Environmental Protection Agency
ERC	Environmental Regulatory Commission
F	Fresh (water)
F.A.C.	Florida Administrative Code
FDACS	Florida Department of Agriculture and Consumer Services
FDOH	Florida Department of Health
FDOT	Florida Department of Transportation
FIB	Fecal Indicator Bacteria
FLWMI	Florida Water Management Inventory
FOG	Fats, Oils, and Grease
FY	Fiscal Year
GIS	Geographic Information System
HDPE	High Density Polyethylene
IA	Implementation Assurance
IDDE	Illicit Discharge Detection and Elimination
IMZ	Industrial/Manufacturing Zone
IWR	Impaired Surface Waters Rule
lbs	Pounds
LF	Linear Feet
LOC	Lateral Only Connection
LS	Lift Station
LSJR	Lower St. Johns River
M	Marine (water)
MAPS	Managed Aquatic Plant System

MCC	Motor Control Center
MGM	Monthly Geometric Mean
mL	Milliliter
M&LM	Mowing and Landscape Maintenance
MS4	Municipal Separate Storm Sewer System
MSMP	Master Stormwater Management Plan
N/A	Not Applicable
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NS	Naval Station
OAWP	Office of Agricultural Water Policy
O&M	Operations and Maintenance
OSTDS	Onsite Sewage Treatment and Disposal System
PBTS	Performance-Based Treatment and Disposal System
PIC	Potential Illicit Connection
POR	Period of Record
PSA	Public Service Announcement
PVC	Polyvinyl Chloride
RSF	Regional Stormwater Facility
RTU	Remote Terminal Unit
SCADA	Supervisory Control and Data Acquisition
SJRWMD	St. Johns River Water Management District
SSO	Sanitary Sewer Overflow
STORET	Storage and Retrieval (Database)
SWAT	Stormwater Action Team
SWIM	Surface Water Improvement and Management
SWPPP	Stormwater Pollution Prevention Plan
TAT	Tributary Assessment Team
TMDL	Total Maximum Daily Load
TPTV	Ten Percent Threshold Value
TV	Television
WAV	Watershed Action Volunteers
WBID	Waterbody Identification
WTW	Walk the WBID
WWTF	Wastewater Treatment Facility
WWTP	Wastewater Treatment Plant
yr	Year

Section 1: Introduction and Background

This 2016 annual progress report summarizes the activities associated with the implementation of the [Lower St. Johns River \(LSJR\) Tributaries Basin Management Action Plans \(BMAPs\) I and II](#). Section 2 describes the projects and activities implemented by stakeholders that occurred during the past year as well as planned projects for the next reporting period. **Section 3** contains an evaluation of the water quality data through October 2016. **Appendix A** lists important web addresses embedded throughout the report. **Appendix B** contains tables of stakeholder projects and activities that were completed, continued (i.e., ongoing), or planned during the reporting period. **Appendix C** includes supplemental information for the City of Jacksonville (COJ) project and activity records listed in. Appendix D contains updates from the Florida Department of Agriculture and Consumer Services (FDACS). **Appendix E** contains a Florida Department of Health (FDOH) septic system summary for the LSJR Tributaries BMAP areas. **Appendix F** contains a list and maps of the BMAP monitoring stations, as well as a statistical summary of the BMAP monitoring station data.

Fecal coliform bacteria were identified as the primary pollutant causing impairment in portions of the LSJR Basin. In 2006, 2009, and 2010 the Florida Department of Environmental Protection (DEP) adopted [fecal coliform total maximum daily loads](#) (TMDLs¹) for 25 verified impaired waterbodies in the LSJR Basin.

DEP adopted two BMAPs to implement the fecal coliform TMDLs in the basin. BMAP I was adopted in December 2009 and addresses the 10 most impaired tributaries. BMAP II was adopted in August 2010 and addresses the remaining 15 impaired tributaries. **Figure 1** and **Figure 2** show maps of these impaired watersheds.

The second iteration (five-year period) of the BMAPs began in 2015. Through the original BMAPs and the second iteration updates, DEP is tracking efforts to assess current and future strategies.

¹ TMDLs are water quality targets for specific pollutants established for impaired waterbodies that do not meet their designated uses based on Florida water quality standards.

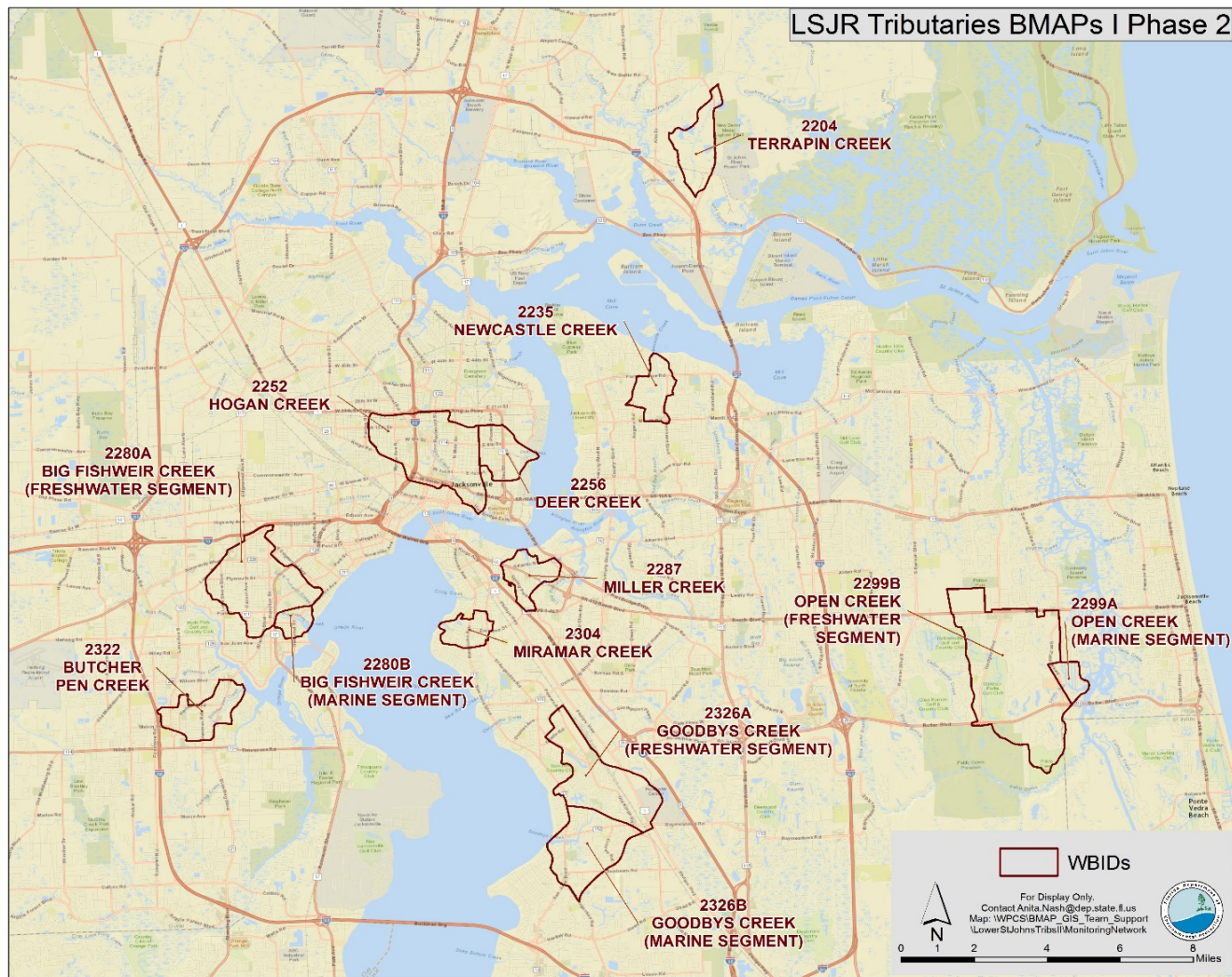


Figure 1. LSJR Tributaries BMAP I WBIDs²

² DEP uses the acronym "WBID" or "waterbody identification," to identify the watersheds of tributaries, lakes, estuaries, beaches, and segments of large rivers. The state is divided into approximately 6,600 WBIDs for the purpose of watershed management.

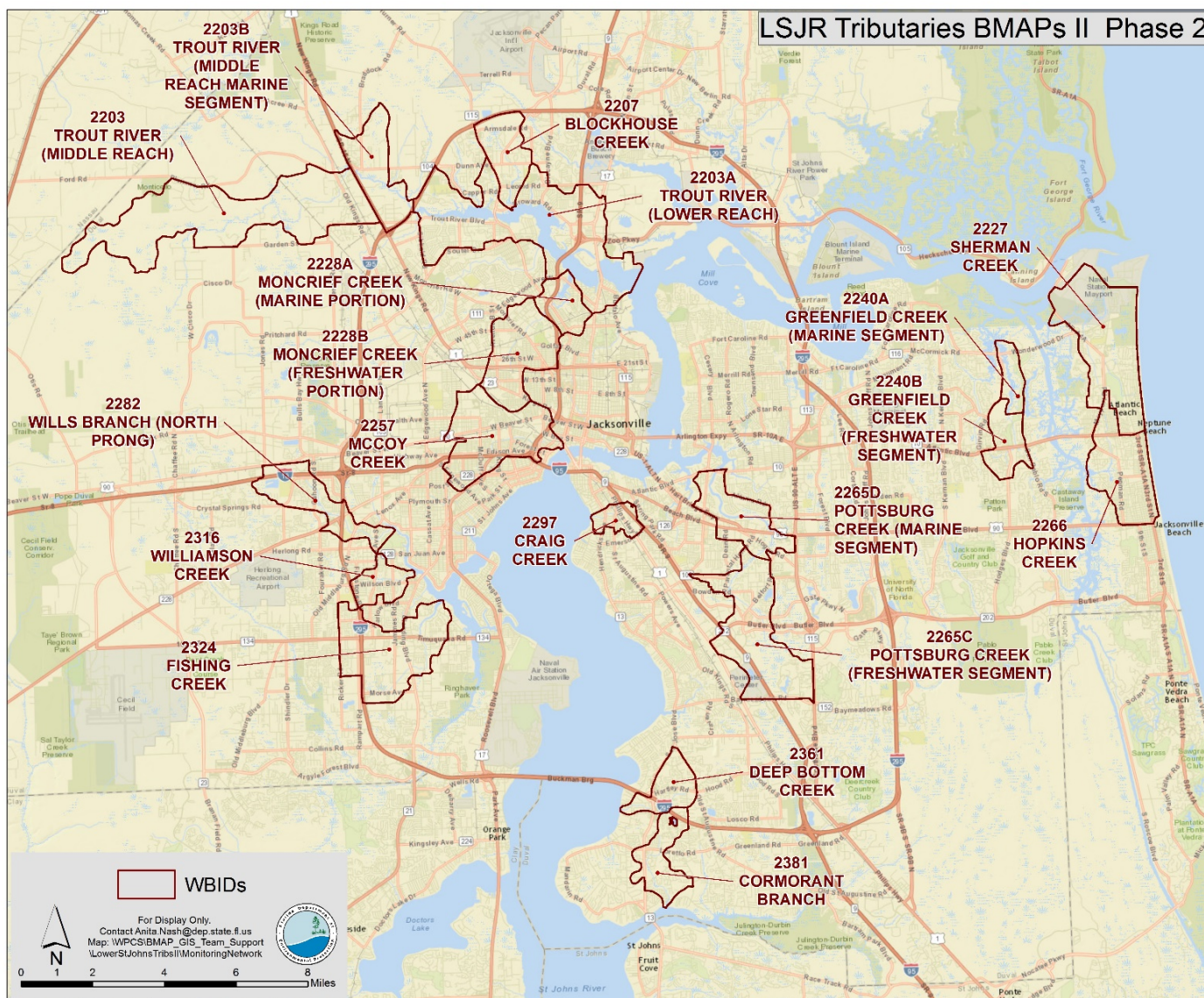


Figure 2. LSJR Tributaries BMAP II WBIDs

Section 2: Activities During the Reporting Period

Stakeholders continue to implement ongoing maintenance programs and planned projects. DEP and stakeholders continue to work together to identify the sources of fecal indicator bacteria (FIB) through field investigations and the monitoring of source indicator parameters. The Tributary Assessment Team (TAT) continues to participate in monthly teleconferences and follow up on FIB counts that exceed the high-count thresholds.

Appendix B contains detailed tables of BMAP projects and activities that were completed, continued, or planned during the reporting period. **Appendix C** includes supplemental information for the COJ project and activity records listed in **Table B-2**. **Appendix D** contains updates from FDACS.

Section 3: Water Quality Evaluation

3.1 Revised FIB Criteria

In December 2015, the Environmental Regulation Commission (ERC) approved proposed revisions to Florida's water quality standards that included revised bacteria criteria. DEP adopted the U.S. Environmental Protection Agency (EPA) bacteriological criteria for *Escherichia coli* (*E. coli*) bacteria (Class I and III fresh water) and *Enterococci* bacteria (Class III marine water) to replace the existing criteria for fecal coliform bacteria. These new bacterial fecal indicators are based on the same recreational bather illness rate as the fecal coliform criteria, but they correlate better with bather illness than fecal coliforms and are thus more protective. Class II fecal coliform criteria are retained, since the federal and state shellfish harvesting programs continue to use this indicator.

The new criteria include a monthly geometric mean (MGM) and upper value not to be exceeded in 10 % or more of the samples during any 30-day period (Ten Percent Threshold Value or TPTV), with units of colony-forming units per 100 milliliters (cfu/100mL). For *E. coli*, the MGM is 126 and the TPTV is 410. For *Enterococci*, the MGM is 35 and the TPTV is 130. The MGM is based on a minimum of either 5 samples (Class I) or 10 samples (Class III) taken over a 30-day period. The waterbodies addressed in the LSJR Tributaries BMAPs are a combination of Class III marine and fresh waters.

While the criteria were approved for adoption by the ERC in December 2015 and went into effect for state purposes on February 17, 2016, they will need EPA approval before going into effect for Clean Water Act (CWA) purposes (impaired waters assessments and National Pollutant Discharge Elimination System [NPDES] permits). For more information about the criteria, contact [Ken Weaver](#) of the DEP Standards Development Section.

To transition to the new state FIB criteria, the BMAP efforts will continue to implement the fecal coliform TMDLs while integrating sampling for *E. coli* and *Enterococci*. The *E. coli* and/or *Enterococci* data will be used to assess the water quality of the tributaries during the next Impaired Surface Waters Rule (IWR) assessment and to guide future restoration efforts. In the meantime, high-magnitude fecal coliform exceedances remain a good tool to direct field investigations and management strategies.

3.2 Water Quality Monitoring

The LSJR Tributaries monitoring plan supports the implementation of the BMAPs by providing water quality data and other information that can be used to document status and track trends in FIB water quality conditions in the 25 BMAP WBIDs. The information collected through the monitoring plan is used to evaluate progress toward achieving BMAP objectives, demonstrate progress toward meeting the TMDLs, facilitate comparisons of water quality in the BMAP watershed before and after the implementation of best management practices (BMPs), and provide information to help guide the selection of future BMPs.

The monitoring plan consists of approximately 70 ambient water quality sampling stations that are sampled monthly or quarterly by the COJ, JEA, DEP Northeast District, Naval Station (NS) Mayport, and City of Jacksonville Beach. These entities regularly upload their monitoring data to the DEP [Storage and Retrieval \(STORET\) Database](#). **Appendix D** lists the current stations in the monitoring network and includes maps of the station locations. Monitoring stations may be moved to different locations, but participants will carry out the same level of effort so that the impairments in the basin can be identified and addressed.

In addition to the monitoring plan, sampling will occur as needed to follow up on results that are greater than 5,000 cfu/100mL for fecal coliform, 4,100 cfu/100mL for *E. coli*, and 1,300 cfu/100mL for *Enterococci*. The TAT adopted the fecal coliform benchmark of 5,000 cfu/100mL based on information in *Watershed Protection Techniques*, Volume 3, No. 1, April 1999, Implications for Watershed Managers. The benchmarks for *E. Coli* and *Enterococci* were set one order of magnitude higher than the 10 % threshold values.

3.3 Fecal Coliform Reductions Since BMAP Adoption

DEP determines progress towards meeting the fecal coliform criteria for the 25 LSJR Tributaries WBIDs by assessing the frequency with which the criterion for each tributary is exceeded. This approach mirrors the IWR methodology in Chapter 62-303, Florida Administrative Code (F.A.C.). The prior Class III IWR criterion was set so that if more than 10 % of the data were to exceed 400 cfu/100mL during each verified period, the water was verified as impaired. As *E. coli* and *Enterococci* data become available, the frequency of exceedance of the new state criterion will be used in conjunction with the frequency of exceedance of the old state criterion for BMAP progress assessments. This approach will allow for a smooth transition and provide the ability to assess progress as datasets of the new FIB parameters grow.

This section includes data from the BMAP monitoring network and other stations that together make up the IWR monitoring network. **Table 1** lists each WBID's total number of fecal coliform samples, total number of exceedances, minimum number of exceedances to be considered impaired, and the percent exceedance for assessment Cycles 1 through 3. To continue comparing progress each year until the next IWR assessment (Cycle 4), a rolling 7.5-year data period is evaluated. Each year, the oldest 12 months of data are dropped from the data period reviewed the previous year, and the most recent 12 months of data are added to the dataset. Since the end of the Cycle 3 data period, 2 7.5-year data periods have been evaluated (**Table 1**).

Column 6 in **Table 1** shows the minimum number of exceedances needed to place a waterbody on the Verified List with at least a 90 % confidence level. The minimum number of exceedances is compared with the number of observed exceedances to determine if the IWR criterion is being met. The last column in the table lists each WBID's percent exceedance, which is based on the number of exceedances (Column 5) relative to the total number of data points (Column 4) The tributaries are listed in order of lowest to highest percent exceedance based on the current 7.5-year dataset.

A review of the data shows continuous improvement (reduction) in the frequency of exceedance for Trout River Middle Reach (freshwater segment), Deep Bottom Creek, and Big Fishweir Creek (marine segment). Greenfield Creek (freshwater segment), Blockhouse Creek, Goodbys Creek (marine segment), and Hogan Creek decreased in the frequency of exceedance for the current 7.5-year period after, in most cases, having increased in the previous cycle or cycles.

Conversely, Pottsburg Creek (freshwater and marine segments), Goodbys Creek (freshwater segments), Hopkins Creek, and Miller Creek all experienced recent moderate increases in the frequency of exceedance. The other waterbodies listed in **Table 1** are holding steady for the current 7.5-year period compared with the previous 7.5-year period.

Table 1. Comparison of FIB exceedances by WBID

¹ F = Fresh water; M = Marine water

² The Cycle 1 verified period data period is January 1, 1996–June 30, 2003; the Cycle 2 verified period data period is January 1, 2001–June 30, 2008; the Cycle 3 verified period data period is January 1, 2007–June 30, 2014; the first 7.5-year data period is January 1, 2008–June 30, 2015; and the second 7.5-year data period is January 1, 2009–June 30, 2016.

³ Subsection 62-303.420(2), F.A.C., Table 3.

N/A= Not applicable

WBID Number	Waterbody Name	Fresh or Marine Waters ¹	Cycle ²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired ³	% Exceedance
2240A	Greenfield Creek	M	1	19	0	4	0
2240A	Greenfield Creek	M	2	12	2	3	17
2240A	Greenfield Creek	M	3	3	2	Need at least 10 samples	67
2240A	Greenfield Creek	M	1st 7.5-year rolling period	0	0	Need at least 10 samples	N/A
2240A	Greenfield Creek	M	2nd 7.5-year rolling period	0	0	Need at least 10 samples	N/A
2203A	Trout River Lower Reach	M	1	32	8	6	25
2203A	Trout River Lower Reach	M	2	67	14	11	21
2203A	Trout River Lower Reach	M	3	56	12	10	21
2203A	Trout River Lower Reach	M	1st 7.5-year rolling period	57	16	10	28
2203A	Trout River Lower Reach	M	2nd 7.5-year rolling period	59	15	10	25
2265C	Pottsburg Creek	F	1	23	6	5	26
2265C	Pottsburg Creek	F	2	55	15	9	27
2265C	Pottsburg Creek	F	3	30	8	6	27
2265C	Pottsburg Creek	F	1st 7.5-year rolling period	28	9	6	32

WBID Number	Waterbody Name	Fresh or Marine Waters¹	Cycle²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired³	% Exceedance
2265C	Pottsburg Creek	F	2nd 7.5-year rolling period	26	9	6	35
2203	Trout River Middle Reach	F	1	6	3	Need at least 10 samples	50
2203	Trout River Middle Reach	F	2	54	24	9	44
2203	Trout River Middle Reach	F	3	93	37	14	40
2203	Trout River Middle Reach	F	1st 7.5-year rolling period	163	69	22	42
2203	Trout River Middle Reach	F	2nd 7.5-year rolling period	131	46	19	35
2240B	Greenfield Creek	F	1	18	7	4	39
2240B	Greenfield Creek	F	2	42	20	8	48
2240B	Greenfield Creek	F	3	38	18	7	47
2240B	Greenfield Creek	F	1st 7.5-year rolling period	34	11	7	32
2240B	Greenfield Creek	F	2nd 7.5-year rolling period	29	11	6	38
2265D	Pottsburg Creek	M	1	32	16	6	50
2265D	Pottsburg Creek	M	2	57	20	10	35
2265D	Pottsburg Creek	M	3	45	13	8	29
2265D	Pottsburg Creek	M	1st 7.5-year rolling period	26	10	6	38
2265D	Pottsburg Creek	M	2nd 7.5-year rolling period	27	12	6	44
2227	Sherman Creek	M	1	58	25	10	43
2227	Sherman Creek	M	2	106	38	16	36
2227	Sherman Creek	M	3	181	62	24	34
2227	Sherman Creek	M	1st 7.5-year rolling period	306	129	38	42
2227	Sherman Creek	M	2nd 7.5-year rolling period	407	182	50	45
2381	Cormorant Branch	F	1	21	8	5	38
2381	Cormorant Branch	F	2	77	43	12	56

WBID Number	Waterbody Name	Fresh or Marine Waters¹	Cycle²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired³	% Exceedance
2381	Cormorant Branch	F	3	99	51	15	52
2381	Cormorant Branch	F	1st 7.5-year rolling period	143	64	20	45
2381	Cormorant Branch	F	2nd 7.5-year rolling period	180	86	24	48
2324	Fishing Creek	F	1	42	12	8	29
2324	Fishing Creek	F	2	197	127	26	64
2324	Fishing Creek	F	3	209	110	28	53
2324	Fishing Creek	F	1st 7.5-year rolling period	314	155	39	49
2324	Fishing Creek	F	2nd 7.5-year rolling period	361	174	44	48
2326B	Goodbys Creek	M	1	23	9	5	39
2326B	Goodbys Creek	M	2	34	21	7	62
2326B	Goodbys Creek	M	3	54	32	6	59
2326B	Goodbys Creek	M	1st 7.5-year rolling period	59	33	10	56
2326B	Goodbys Creek	M	2nd 7.5-year rolling period	62	30	10	48
2203B	Trout River Middle Reach	M	1	22	11	5	50
2203B	Trout River Middle Reach	M	2	39	26	7	67
2203B	Trout River Middle Reach	M	3	42	26	8	62
2203B	Trout River Middle Reach	M	1st 7.5-year rolling period	48	26	9	54
2203B	Trout River Middle Reach	M	2nd 7.5-year rolling period	57	28	10	49
2256	Deer Creek	F	1	44	39	8	89
2256	Deer Creek	F	2	106	64	16	60
2256	Deer Creek	F	3	163	81	22	50
2256	Deer Creek	F	1st 7.5-year rolling period	195	100	26	51
2256	Deer Creek	F	2nd 7.5-year rolling period	171	91	23	53

WBID Number	Waterbody Name	Fresh or Marine Waters¹	Cycle²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired³	% Exceedance
2282	Wills Branch (North Prong)	F	1	47	29	8	62
2282	Wills Branch (North Prong)	F	2	108	55	16	51
2282	Wills Branch (North Prong)	F	3	75	43	12	57
2282	Wills Branch (North Prong)	F	1st 7.5-year rolling period	62	38	10	61
2282	Wills Branch (North Prong)	F	2nd 7.5-year rolling period	56	30	10	54
2299A	Open Creek	M	1	18	9	4	50
2299A	Open Creek	M	2	37	20	7	54
2299A	Open Creek	M	3	60	31	10	52
2299A	Open Creek	M	1st 7.5-year rolling period	75	39	12	52
2299A	Open Creek	M	2nd 7.5-year rolling period	82	47	13	57
2228B	Moncrief Creek	F	1	29	21	6	72
2228B	Moncrief Creek	F	2	94	51	14	54
2228B	Moncrief Creek	F	3	154	79	21	51
2228B	Moncrief Creek	F	1st 7.5-year rolling period	156	79	21	51
2228B	Moncrief Creek	F	2nd 7.5-year rolling period	159	94	22	59
2207	Blockhouse Creek	F	1	20	14	5	70
2207	Blockhouse Creek	F	2	51	33	9	65
2207	Blockhouse Creek	F	3	40	23	7	58
2207	Blockhouse Creek	F	1st 7.5-year rolling period	28	18	6	64
2207	Blockhouse Creek	F	2nd 7.5-year rolling period	28	17	6	61
2326A	Goodbys Creek	F	1	3	1	Need at least 10 samples	33
2326A	Goodbys Creek	F	2	35	16	7	46
2326A	Goodbys Creek	F	3	145	82	13	57

WBID Number	Waterbody Name	Fresh or Marine Waters¹	Cycle²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired³	% Exceedance
2326A	Goodbys Creek	F	1st 7.5-year rolling period	138	79	19	57
2326A	Goodbys Creek	F	2nd 7.5-year rolling period	134	82	19	61
2257	McCoy Creek	F	1	49	35	9	71
2257	McCoy Creek	F	2	125	84	18	67
2257	McCoy Creek	F	3	161	97	22	60
2257	McCoy Creek	F	1st 7.5-year rolling period	234	149	30	64
2257	McCoy Creek	F	2nd 7.5-year rolling period	244	153	31	63
2299B	Open Creek	F	1	0	0	Need at least 10 samples	N/A
2299B	Open Creek	F	2	11	8	3	73
2299B	Open Creek	F	3	86	59	13	69
2299B	Open Creek	F	1st 7.5-year rolling period	76	51	12	67
2299 B	Open Creek	F	2nd 7.5-year rolling period	79	52	12	66
2266	Hopkins Creek	M	1	21	9	5	43
2266	Hopkins Creek	M	2	53	33	9	62
2266	Hopkins Creek	M	3	80	36	13	45
2266	Hopkins Creek	M	1st 7.5-year rolling period	261	172	33	66
2266	Hopkins Creek	M	2nd 7.5-year rolling period	335	234	42	70
2304	Miramar Creek	F	1	24	20	5	83
2304	Miramar Creek	F	2	54	51	9	94
2304	Miramar Creek	F	3	99	81	15	82
2304	Miramar Creek		1st 7.5-year rolling period	137	100	19	73
2304	Miramar Creek	F	2nd 7.5-year rolling period	162	115	22	71
2235	Newcastle Creek	F	1	25	23	5	92

WBID Number	Waterbody Name	Fresh or Marine Waters¹	Cycle²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired³	% Exceedance
2235	Newcastle Creek	F	2	50	40	9	80
2235	Newcastle Creek	F	3	117	90	17	77
2235	Newcastle Creek	F	1st 7.5-year rolling period	149	106	21	71
2235	Newcastle Creek	F	2nd 7.5-year rolling period	185	132	25	71
2204	Terrapin Creek	F	1	28	19	6	68
2204	Terrapin Creek	F	2	62	44	10	71
2204	Terrapin Creek	F	3	81	68	13	84
2204	Terrapin Creek	F	1st 7.5-year rolling period	123	81	18	66
2204	Terrapin Creek	F	2nd 7.5-year rolling period	105	77	16	73
2361	Deep Bottom Creek	F	1	24	23	5	96
2361	Deep Bottom Creek	F	2	51	45	9	88
2361	Deep Bottom Creek	F	3	81	69	13	85
2361	Deep Bottom Creek	F	1st 7.5-year rolling period	161	122	22	76
2361	Deep Bottom Creek	F	2nd 7.5-year rolling period	188	138	25	73
2228A	Moncrief Creek	M	1	18	11	4	61
2228A	Moncrief Creek	M	2	41	26	8	63
2228A	Moncrief Creek	M	3	80	59	13	74
2228A	Moncrief Creek	M	1st 7.5-year rolling period	87	65	13	75
2228A	Moncrief Creek	M	2nd 7.5-year rolling period	81	62	13	77
2280B	Big Fishweir Creek	M	1	27	23	6	85
2280B	Big Fishweir Creek	M	2	59	52	10	88
2280B	Big Fishweir Creek	M	3	101	86	13	85
2280B	Big Fishweir Creek	M	1st 7.5-year rolling period	105	84	16	80

WBID Number	Waterbody Name	Fresh or Marine Waters¹	Cycle²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired³	% Exceedance
2280B	Big Fishweir Creek	M	2nd 7.5-year rolling period	106	82	16	77
2252	Hogan Creek	F	1	24	19	5	79
2252	Hogan Creek	F	2	74	58	12	78
2252	Hogan Creek	F	3	170	143	23	84
2252	Hogan Creek	F	1st 7.5-year rolling period	228	195	30	86
2252	Hogan Creek	F	2nd 7.5-year rolling period	264	211	34	80
2316	Williamson Creek	F	1	23	15	5	65
2316	Williamson Creek	F	2	79	58	12	73
2316	Williamson Creek	F	3	119	101	17	85
2316	Williamson Creek	F	1st 7.5-year rolling period	179	153	24	85
2316	Williamson Creek	F	2nd 7.5-year rolling period	175	145	24	83
2287	Miller Creek	F	1	20	15	5	75
2287	Miller Creek	F	2	85	73	13	86
2287	Miller Creek	F	3	181	151	24	83
2287	Miller Creek	F	1st 7.5-year rolling period	199	170	26	85
2287	Miller Creek	F	2nd 7.5-year rolling period	254	226	33	89
2322	Butcher Pen Creek	F	1	22	21	5	95
2322	Butcher Pen Creek	F	2	48	44	9	92
2322	Butcher Pen Creek	F	3	161	148	22	92
2322	Butcher Pen Creek	F	1st 7.5-year rolling period	191	178	25	93
2322	Butcher Pen Creek	F	2nd 7.5-year rolling period	191	174	25	91
2297	Craig Creek	F	1	24	20	5	83
2297	Craig Creek	F	2	69	57	11	83

WBID Number	Waterbody Name	Fresh or Marine Waters ¹	Cycle ²	Total Number of FIB Data Points	Number of Exceedances	Minimum No. of Exceedances to be Considered Impaired ³	% Exceedance
2297	Craig Creek	F	3	171	159	23	93
2297	Craig Creek	F	1st 7.5-year rolling period	181	169	36	93
2297	Craig Creek	F	2nd 7.5-year rolling period	210	197	28	94
2280A	Big Fishweir Creek	F	1	30	25	6	83
2280A	Big Fishweir Creek	F	2	116	95	17	82
2280A	Big Fishweir Creek	F	3	182	164	22	90
2280A	Big Fishweir Creek	F	1st 7.5-year rolling period	172	161	23	94
2280A	Big Fishweir Creek	F	2nd 7.5-year rolling period	189	179	25	95

3.4 Water Quality Data Plots

The data plots in **Figure 3** through **Figure 27** depict the fecal coliform data at each BMAP monitoring station in each BMAP tributary, and how they compare with the fecal coliform state water quality criterion of 400 cfu/100mL. It is important to note that the BMAP progress assessment, as presented in **Section 3.3**, is based on the IWR assessment methodology. This methodology uses a larger dataset, which is achieved by evaluating data from additional monitoring sites in the watershed within the specified time for each 7.5-year rolling period. This section only includes data from the BMAP monitoring network and a few other key stations that are a subset of the IWR monitoring network.

The period of record (POR) used for the data plots varies by station. Most of the WBIDs had stations with data through the early to middle part of the fourth quarter of 2016. The BMAP monitoring station data plots help decision makers gain a basic understanding of the water quality in the BMAP watersheds, provide a visual way to detect increases or decreases in the magnitude of the monitoring results, and assist in determining seasonal influences on water quality.

Note that sample data below detection levels were assigned a value of 1 cfu/100mL, so that the magnitude of the result value could be represented on the data plot. Along the same lines, the sample data above the quantification limit (i.e., considerably greater than the criteria) were assigned a value of 1,000 cfu/100mL and are noted in the appropriate figures. "Too numerous to count" qualifiers occur at various magnitudes of exceedance. Whether the actual counts are in the thousands, tens of thousands, or hundreds of thousands is unknown because the laboratory was

unable to estimate the necessary dilution in advance of running the samples. This is not an unusual occurrence when natural stream water is expected to have lower counts than the actual number of counts.

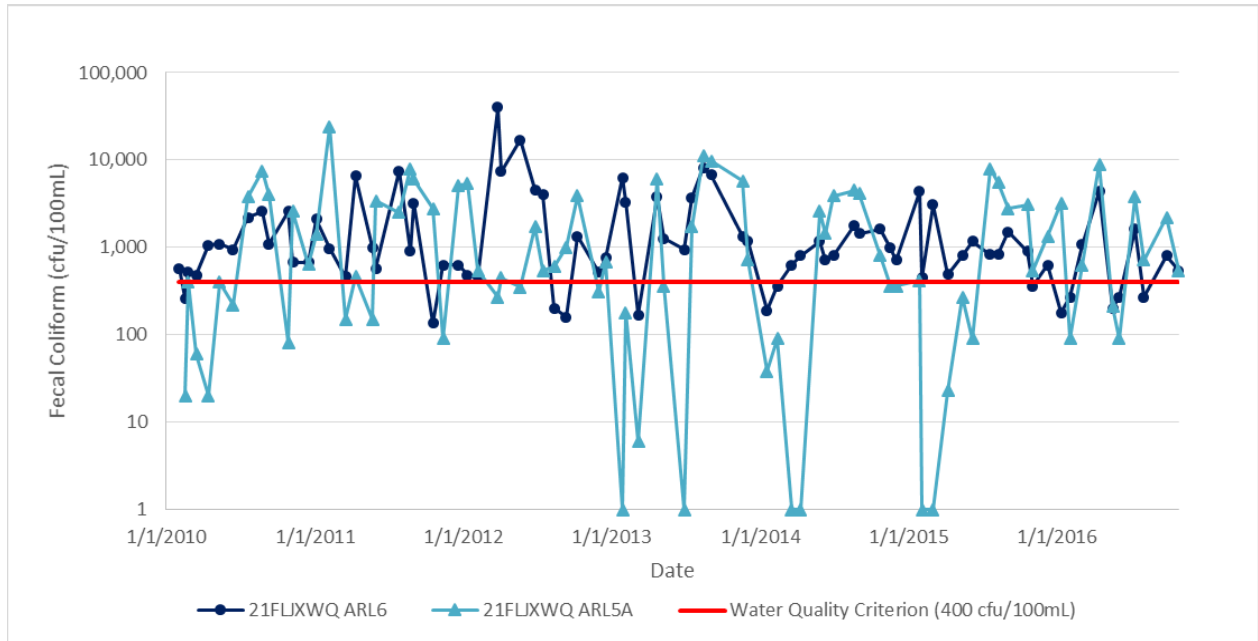


Figure 3. 2010–16 fecal coliform counts in Newcastle Creek

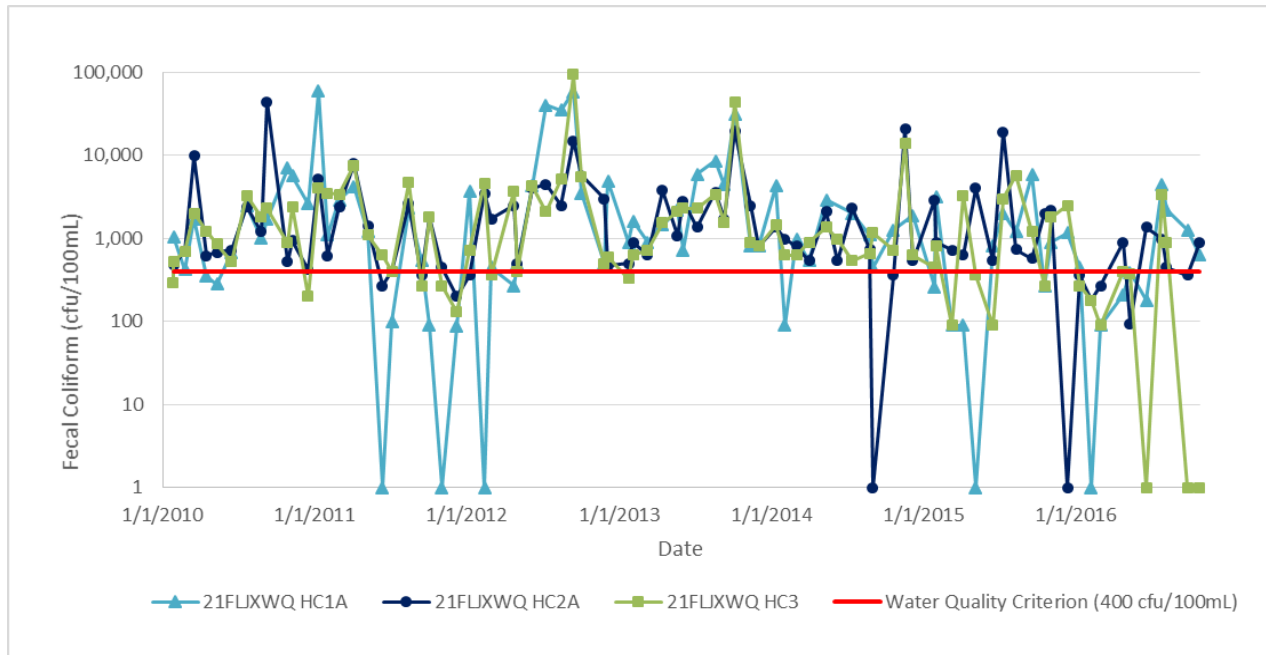


Figure 4. 2010–16 fecal coliform counts in Hogan Creek

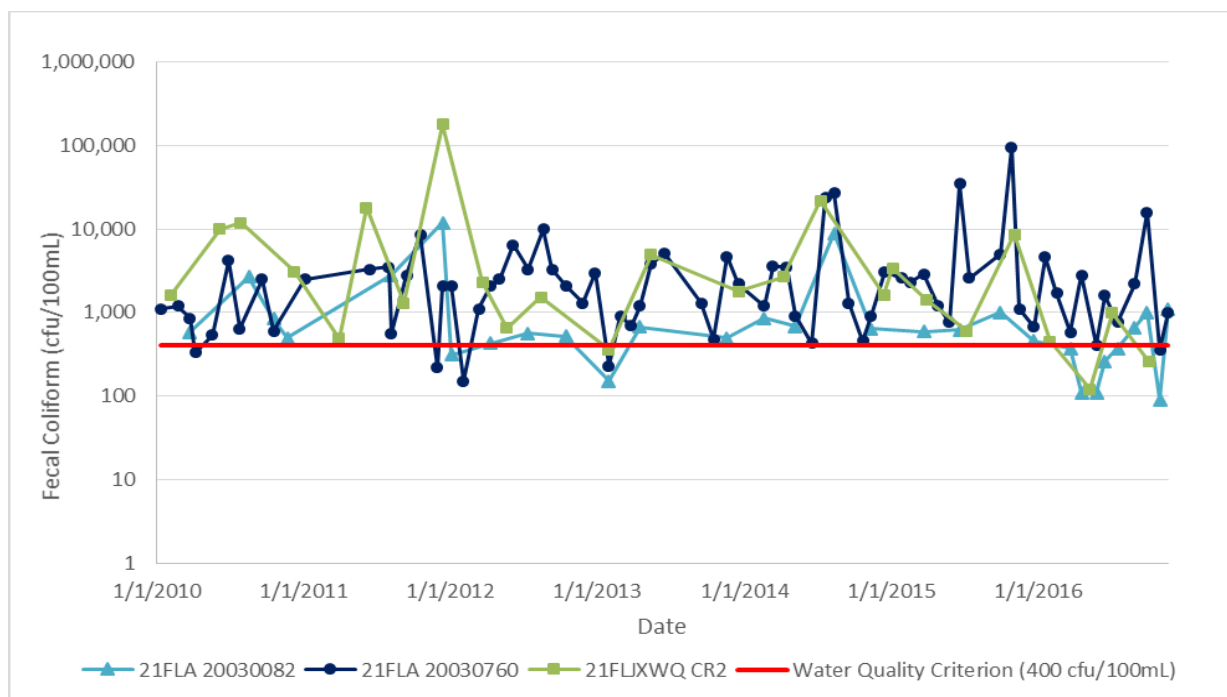


Figure 5. 2010–16 fecal coliform counts in Butcher Pen Creek

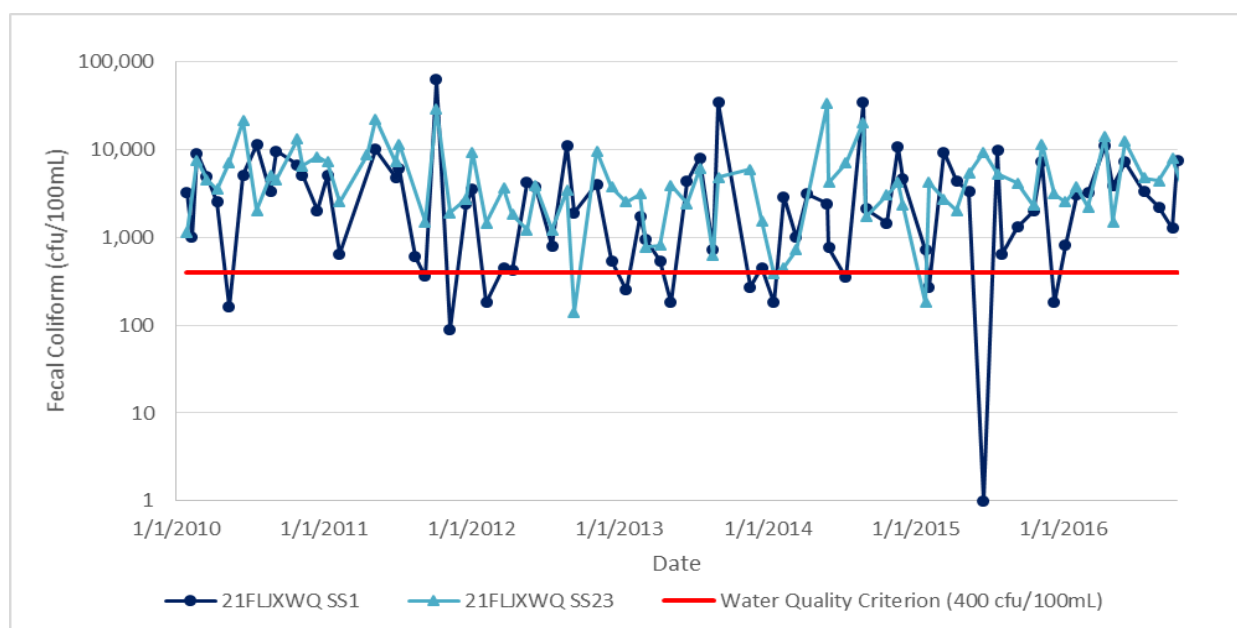


Figure 6. 2010–16 fecal coliform counts in Miller Creek

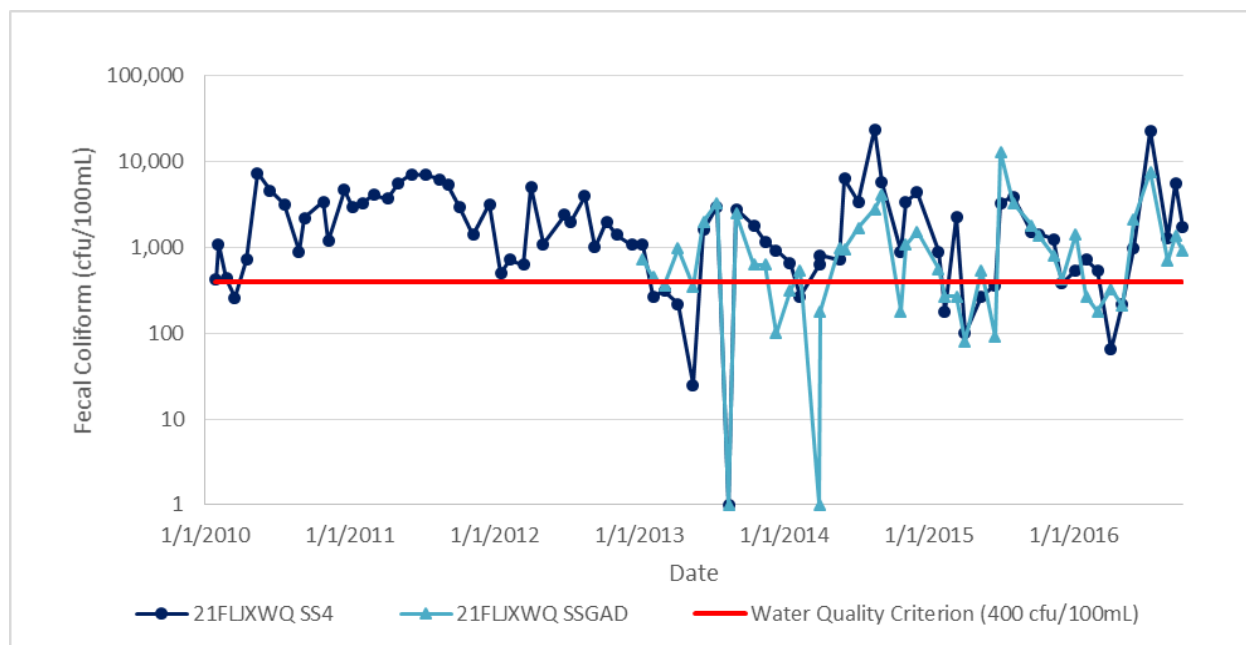


Figure 7. 2010–16 fecal coliform counts in Miramar Creek

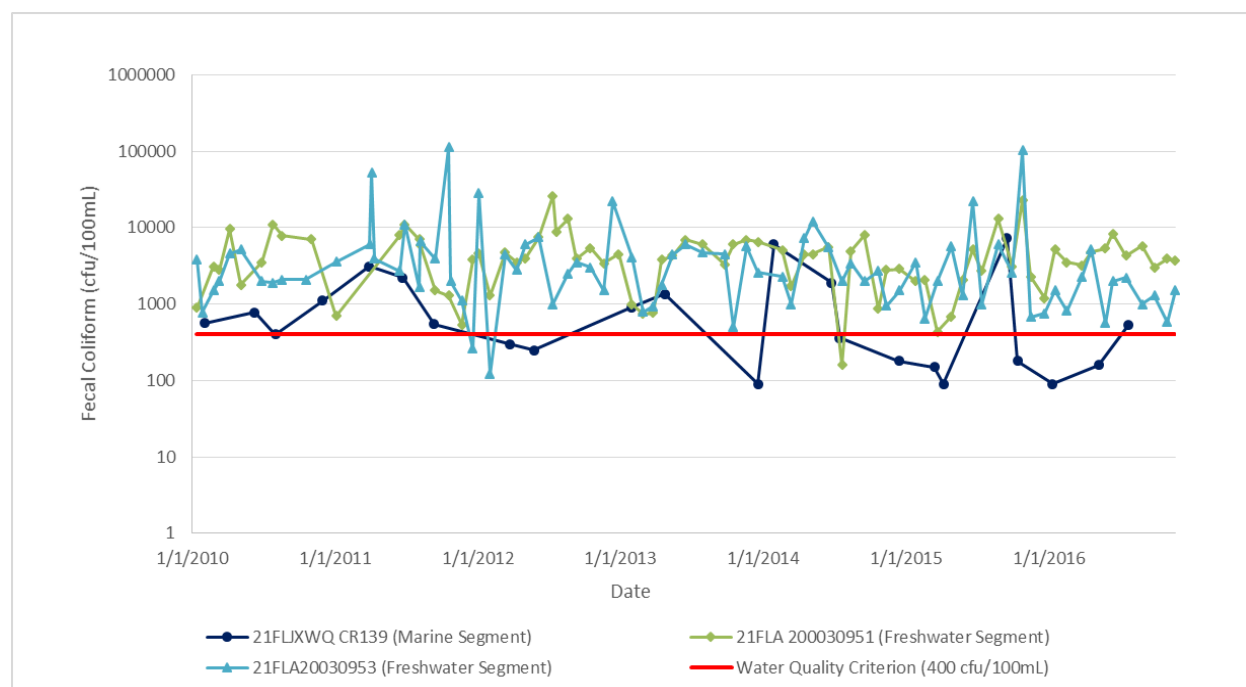


Figure 8. 2010–16 fecal coliform counts in Big Fishweir Creek

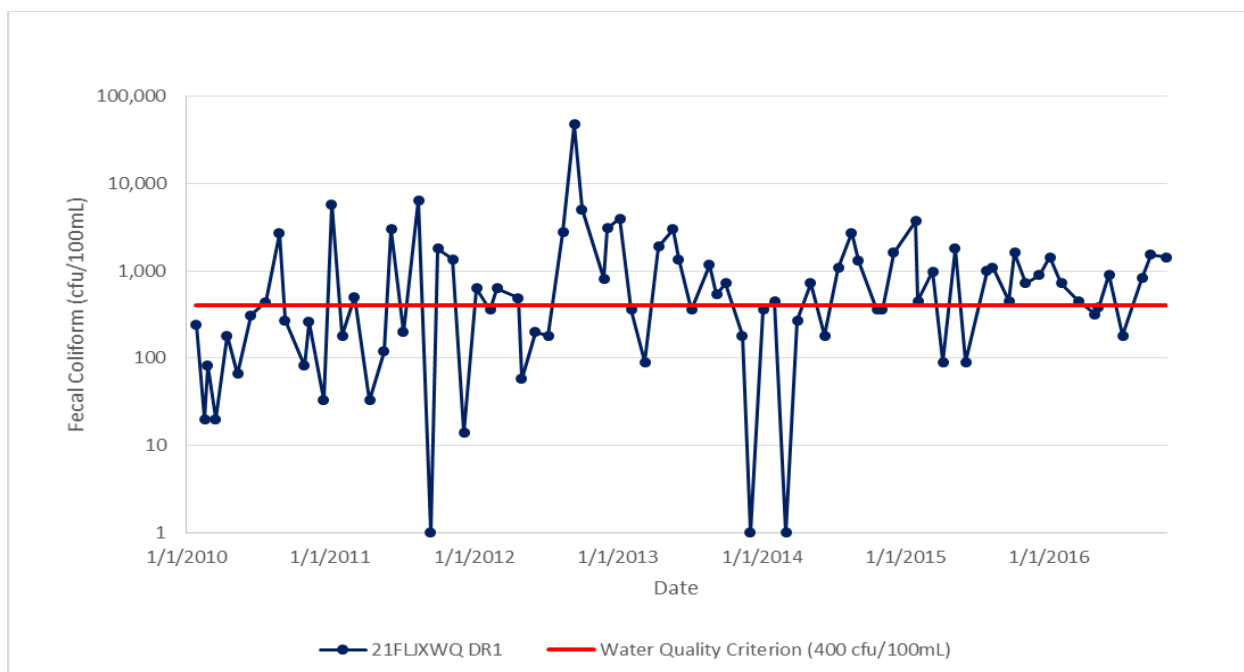


Figure 9. 2010–16 fecal coliform counts in Deer Creek

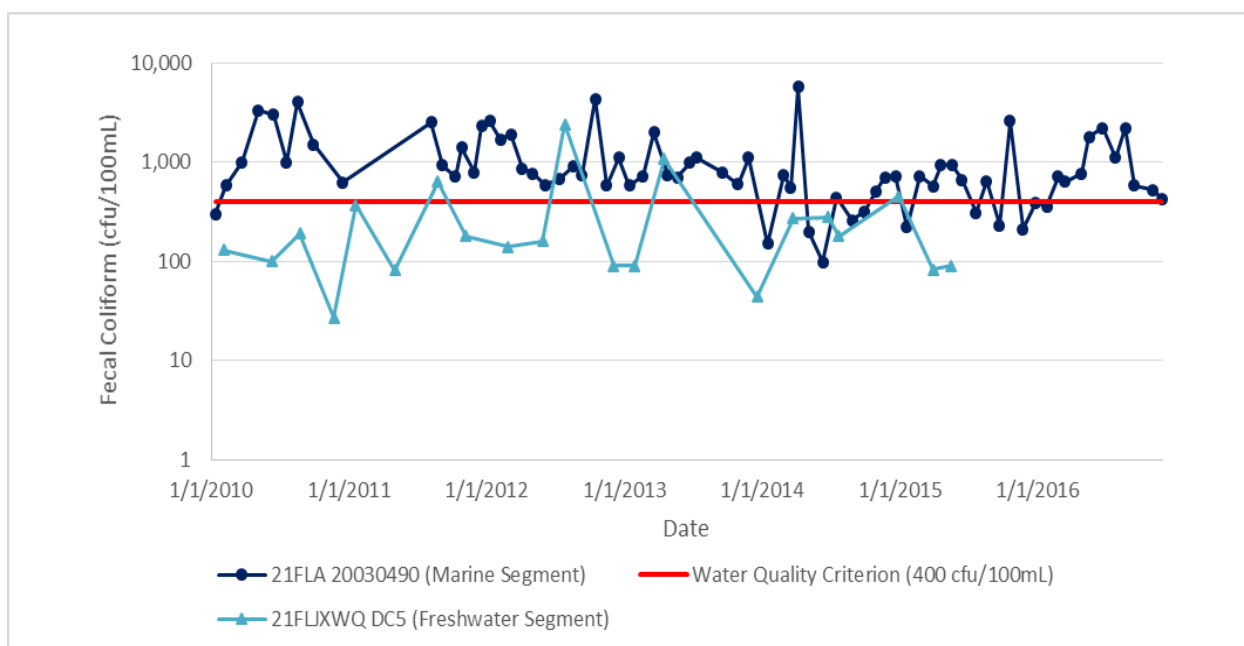


Figure 10. 2010–16 fecal coliform counts in Terrapin Creek

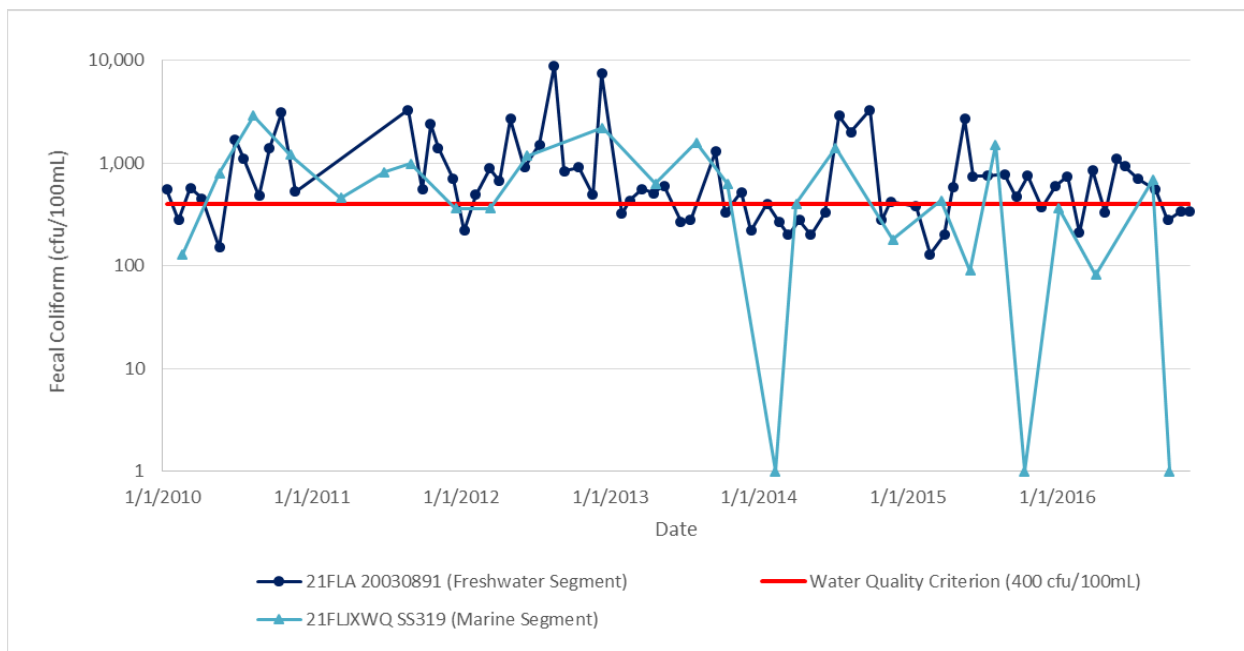


Figure 11. 2010–16 fecal coliform counts in Goodbys Creek

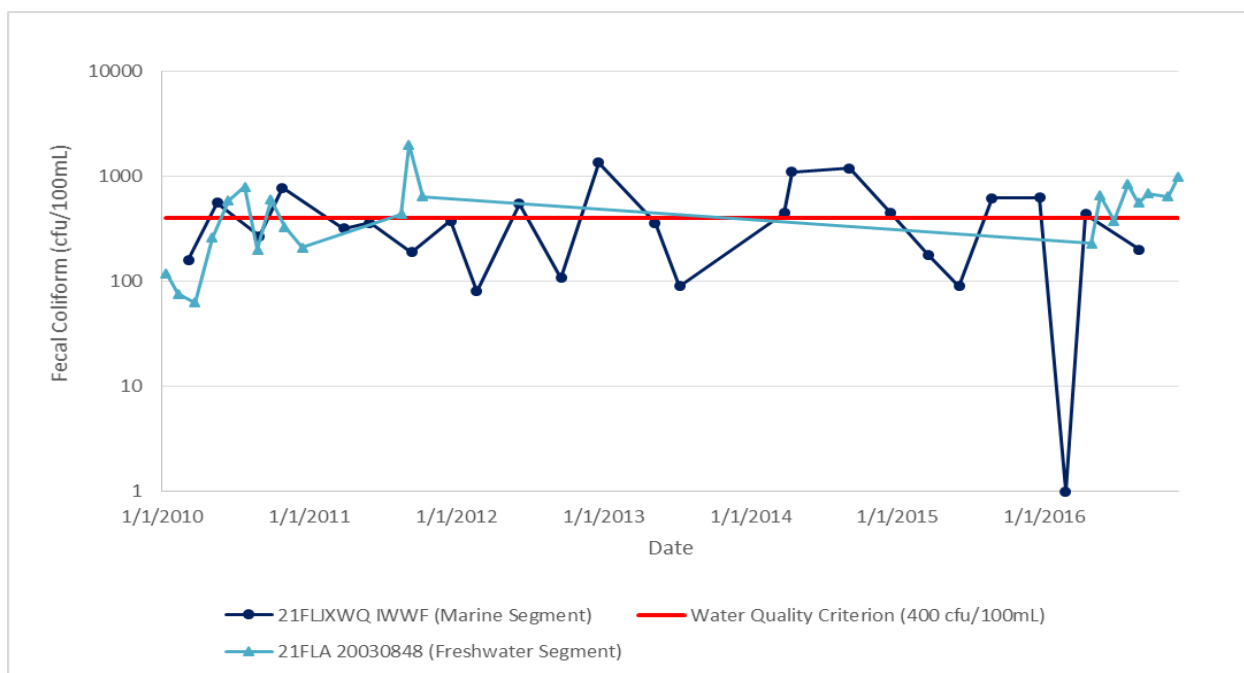


Figure 12. 2010–16 fecal coliform counts in Open Creek

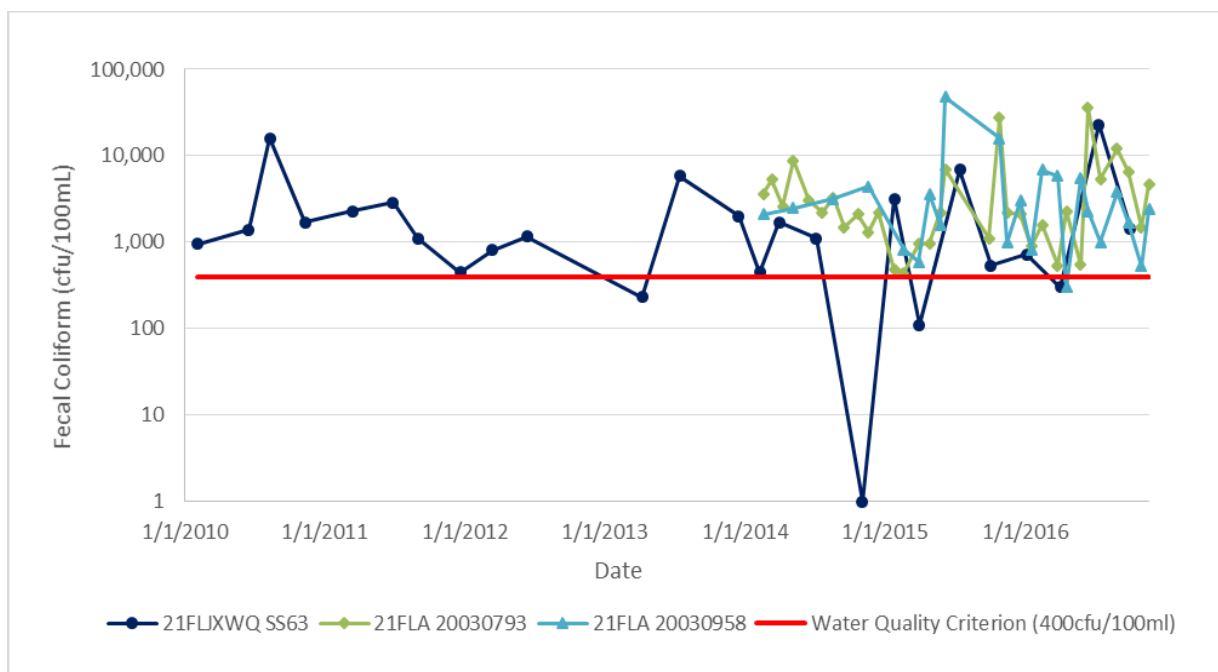


Figure 13. 2010–16 fecal coliform counts in Craig Creek

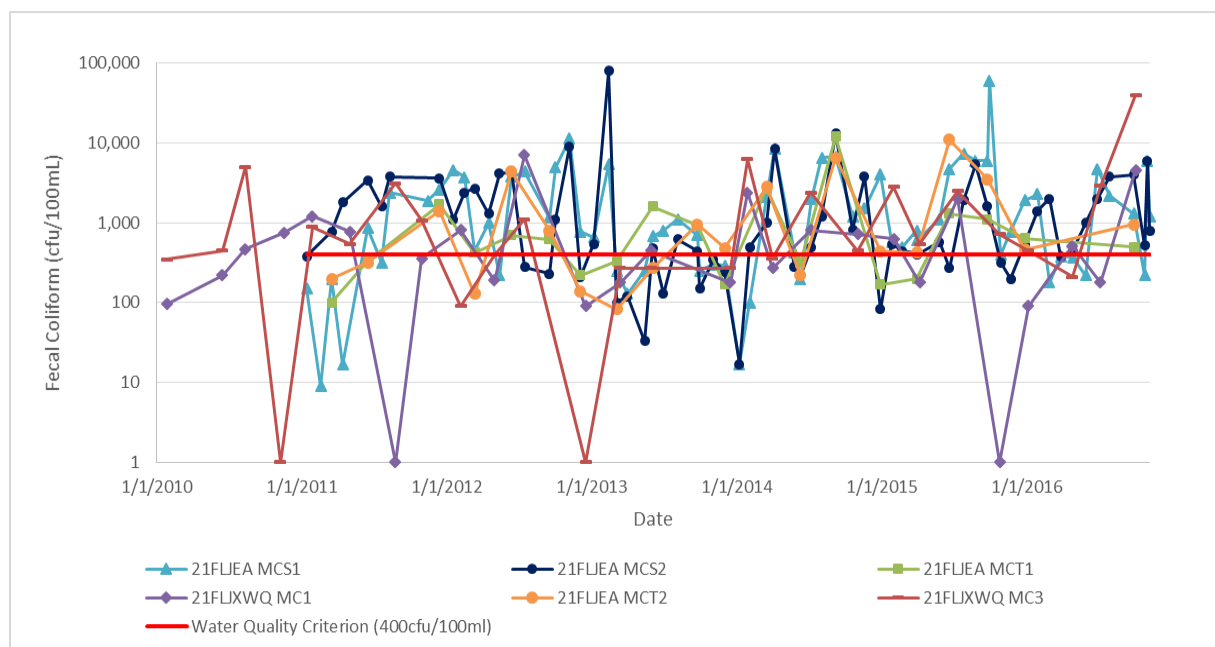


Figure 14. 2010–16 fecal coliform counts in McCoy Creek

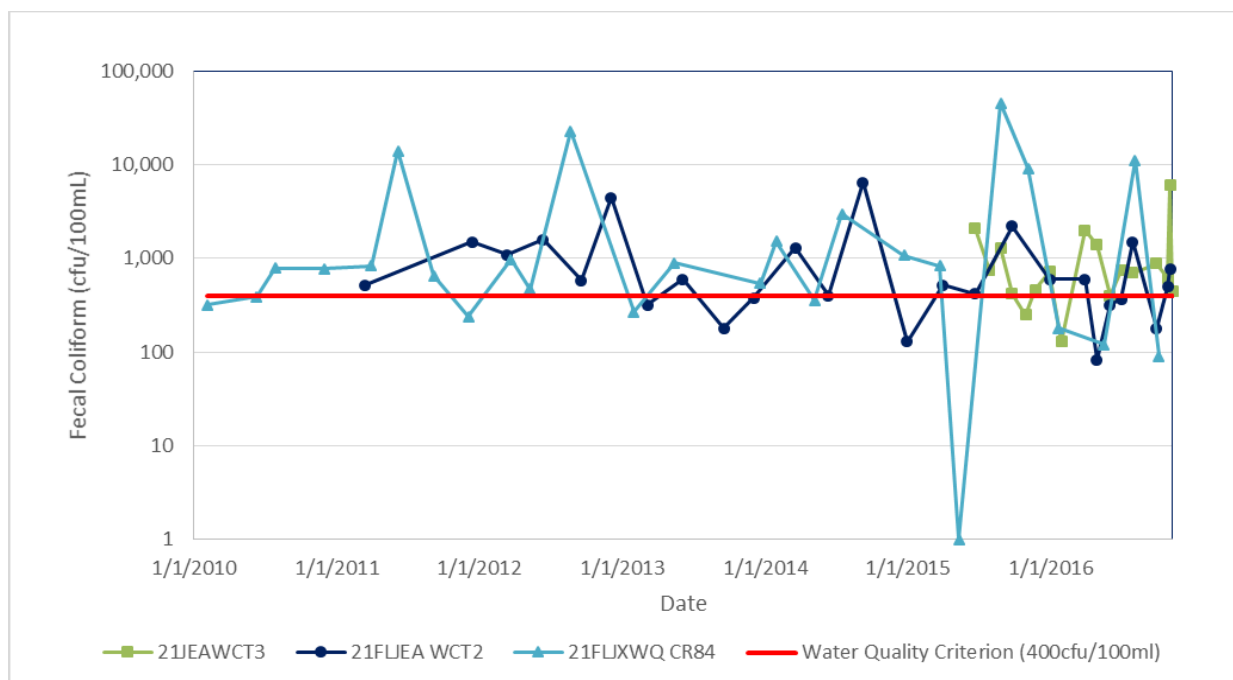


Figure 15. 2010–16 fecal coliform counts in Williamson Creek

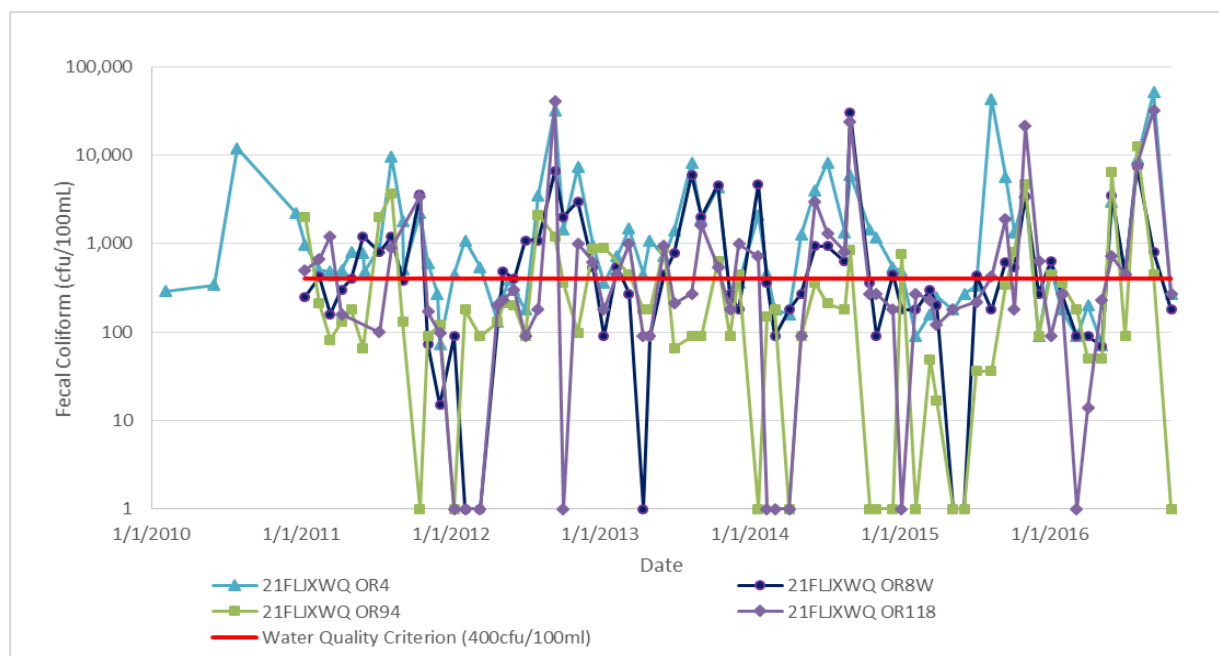


Figure 16. 2010–16 fecal coliform counts in Fishing Creek

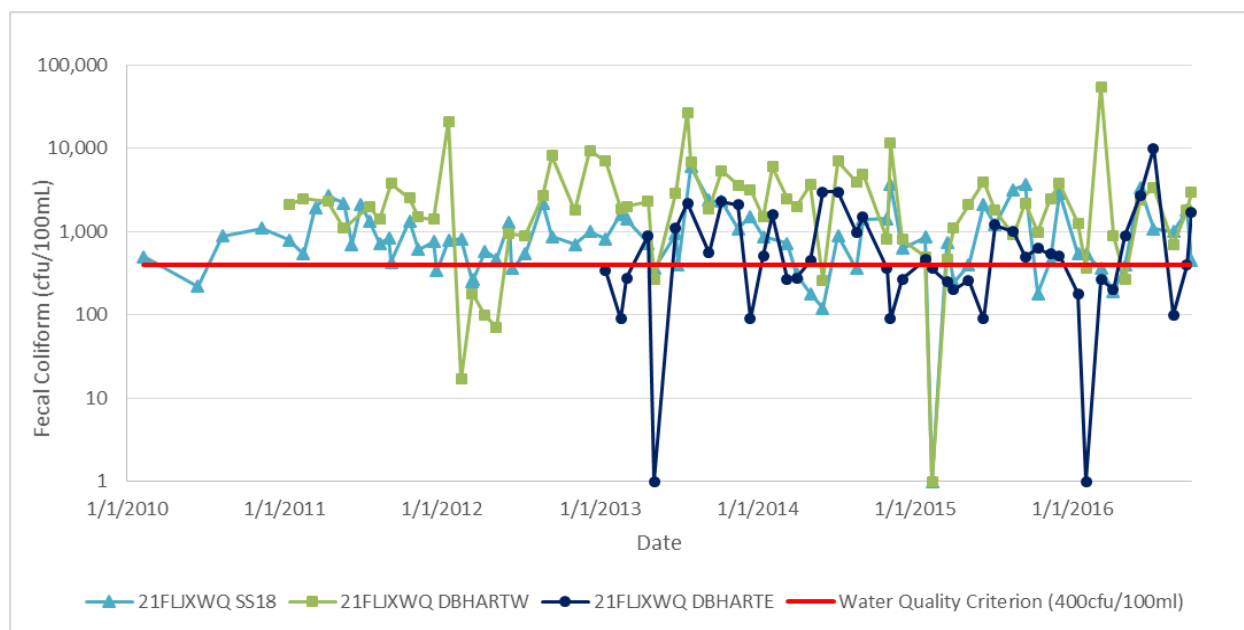


Figure 17. 2010–16 fecal coliform counts in Deep Bottom Creek

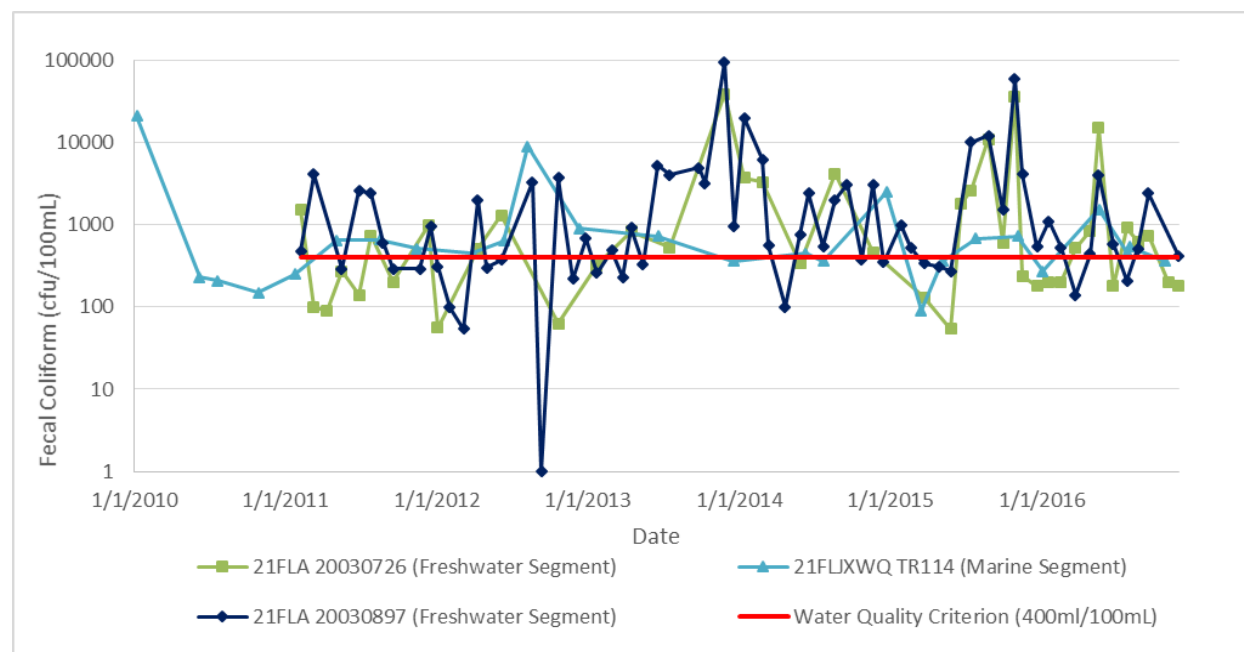


Figure 18. 2010–16 fecal coliform counts in Moncrief Creek

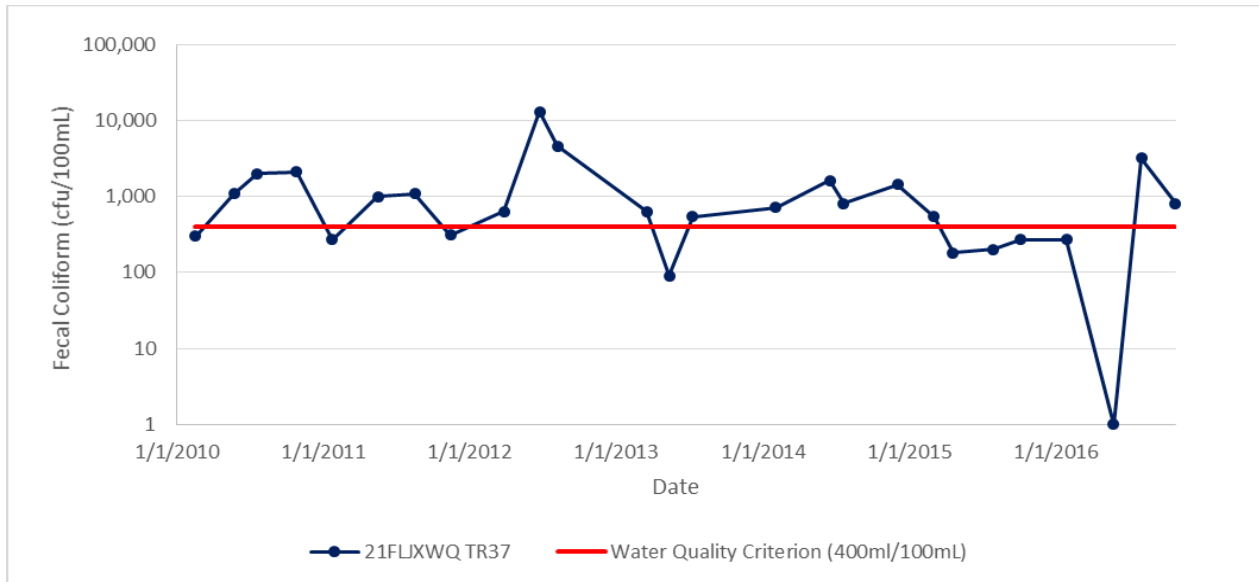
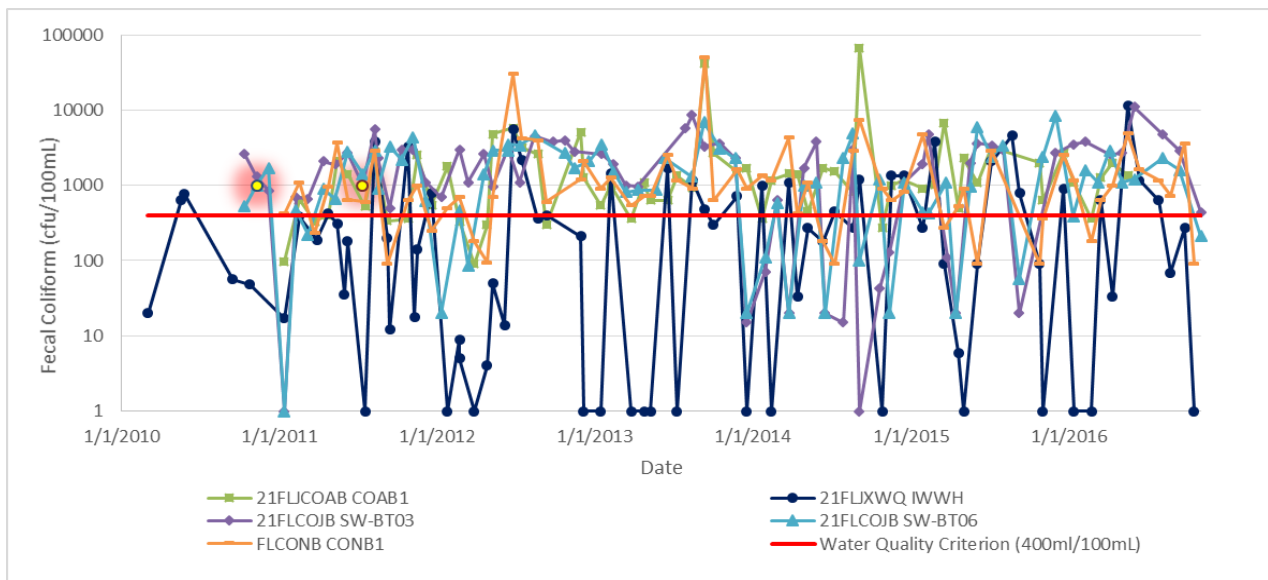


Figure 19. 2010–16 fecal coliform counts in Blockhouse Creek



* Samples above the quantification limit were changed to a fecal count of 1,000 cfu/100mL to plot them correctly and are represented by a yellow point with red shadowing on the figure.

Figure 20. 2010–16 fecal coliform counts* in Hopkins Creek

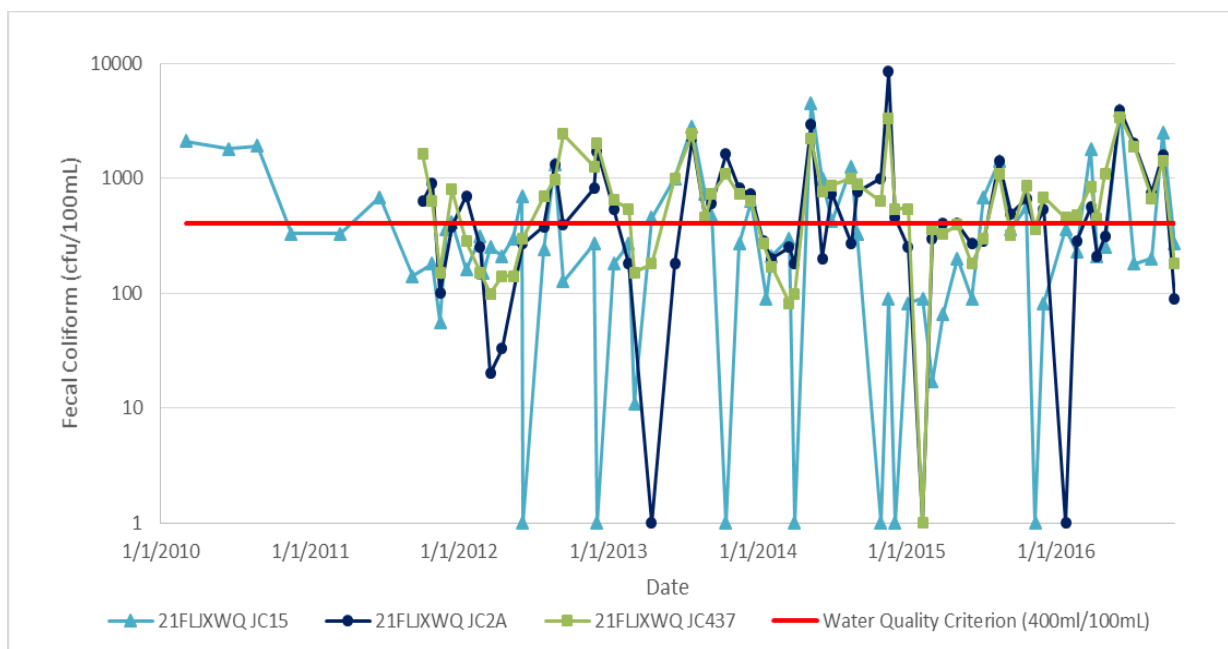


Figure 21. 2010–16 fecal coliform counts in Cormorant Branch

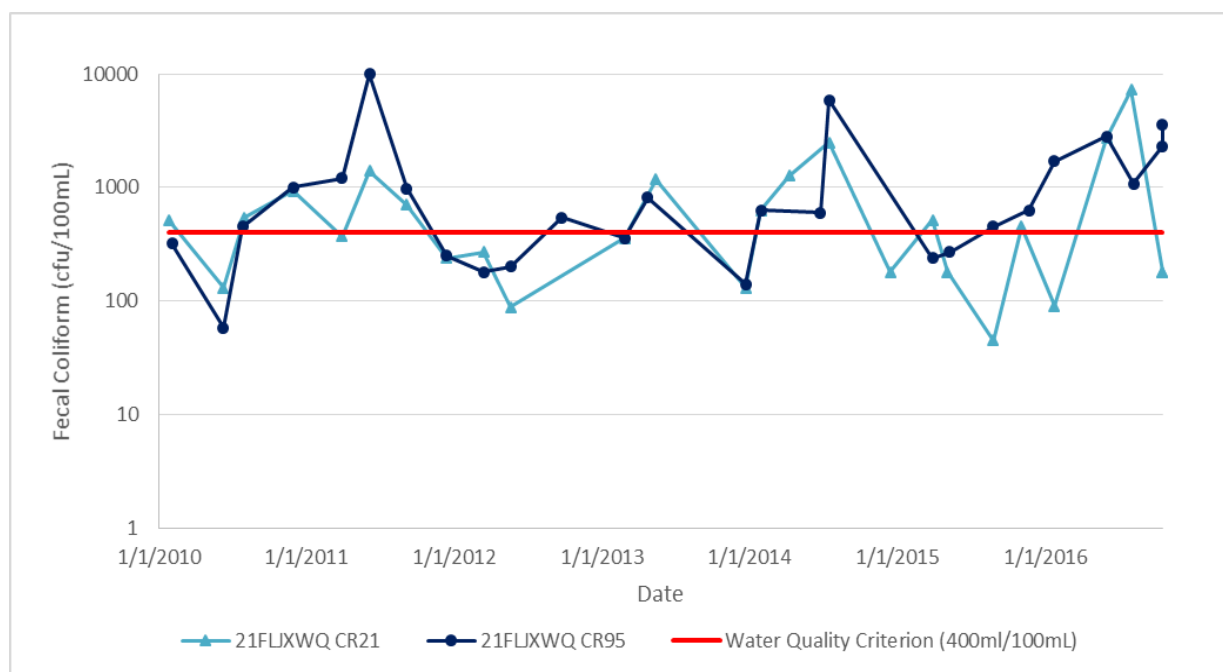


Figure 22. 2010–16 fecal coliform counts in Wills Branch

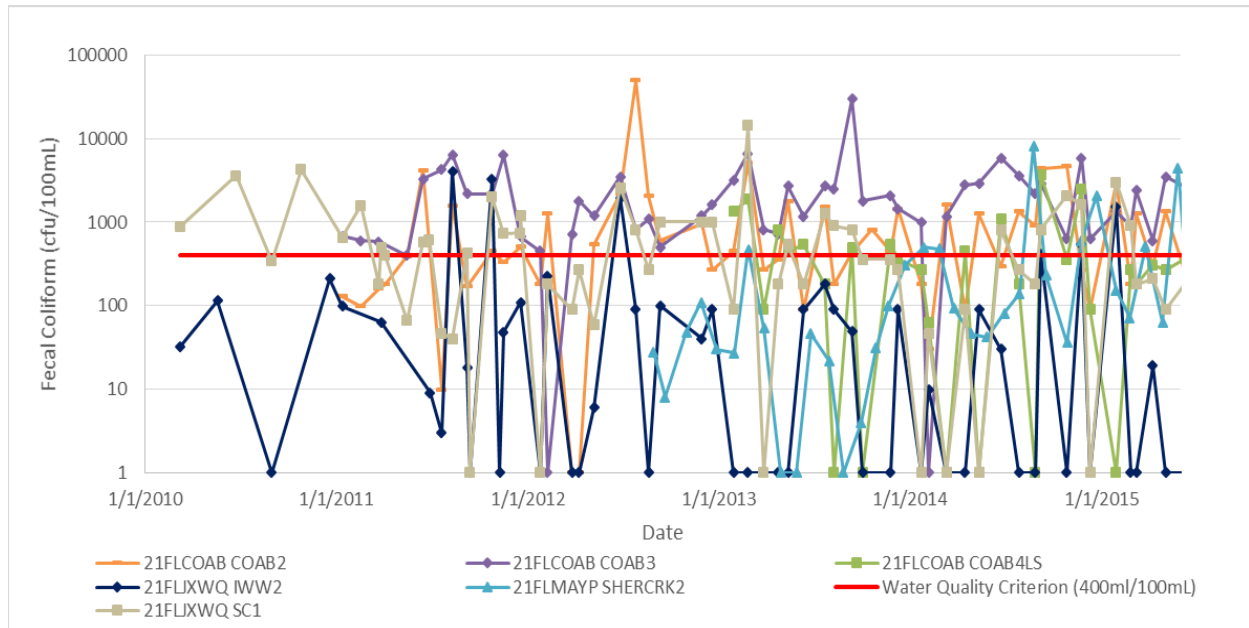


Figure 23. 2010–16 fecal coliform counts in Sherman Creek

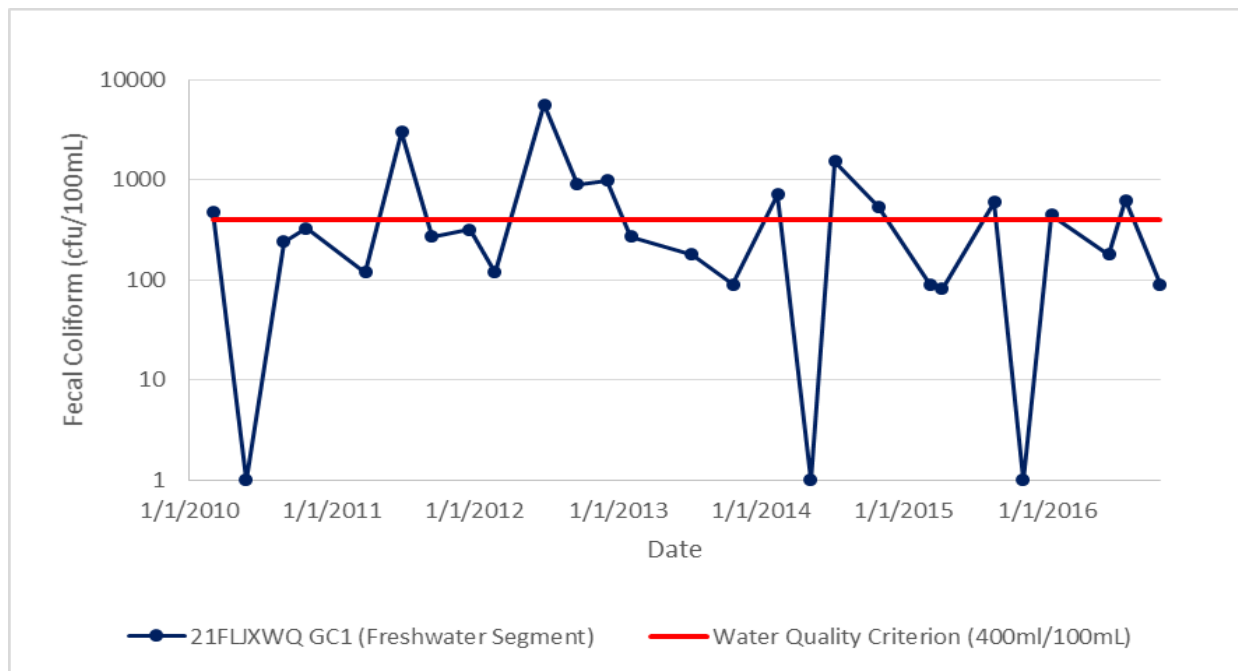


Figure 24. 2010–16 fecal coliform counts in Greenfield Creek

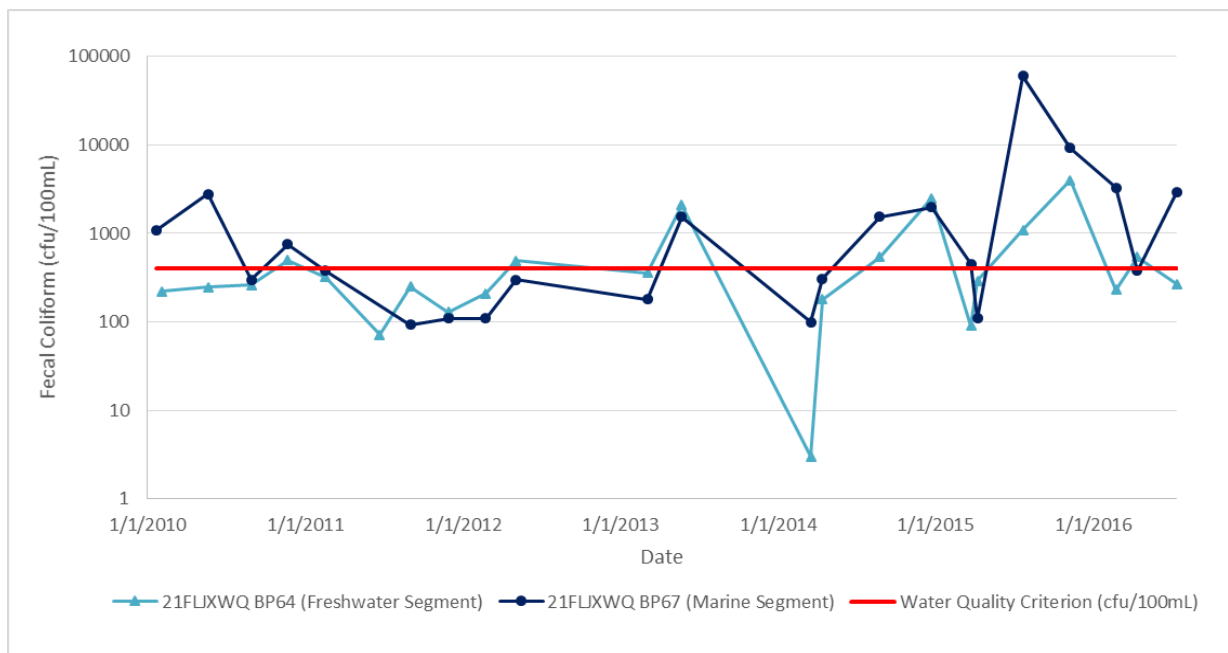


Figure 25. 2010–16 fecal coliform counts in Pottsburg Creek

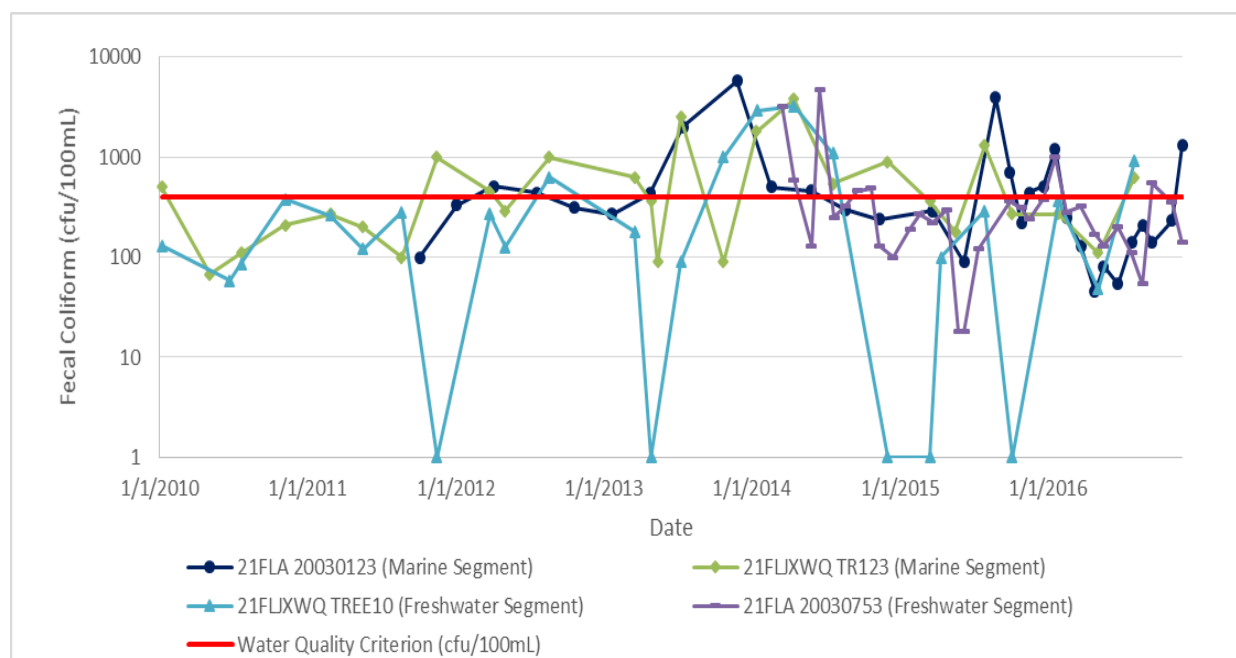


Figure 26. 2010–16 fecal coliform counts in Middle Trout River

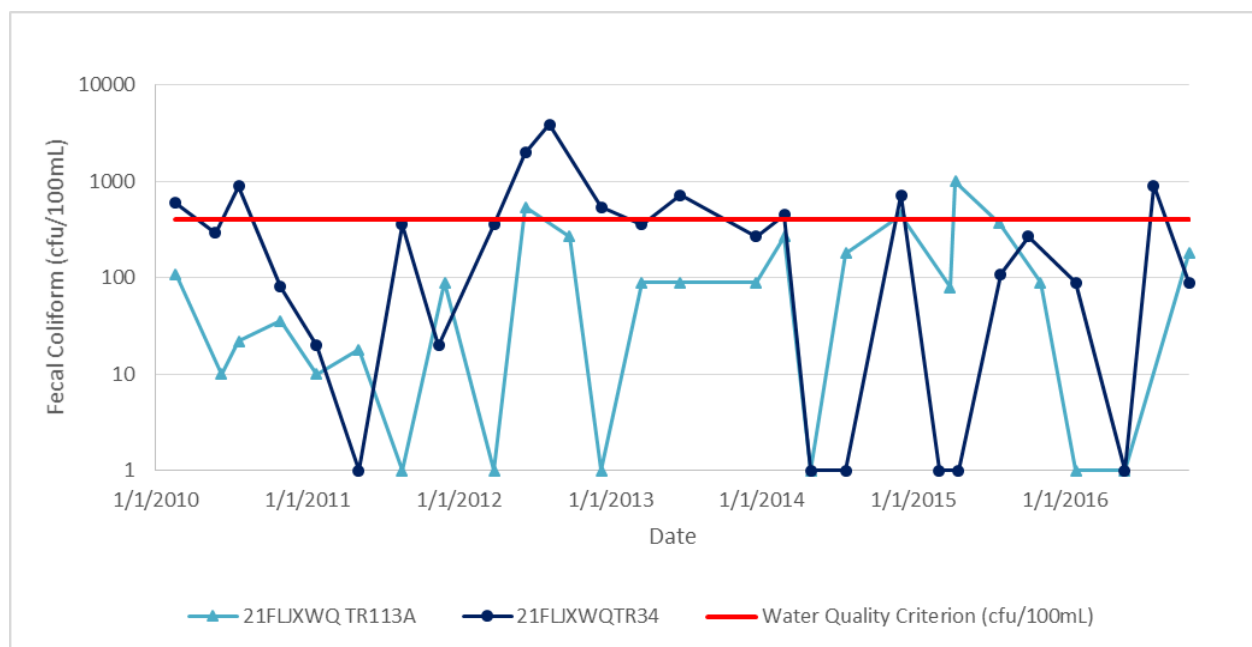


Figure 27. 2010–16 fecal coliform counts in Lower Trout River

Appendices

Appendix A: Important Links

The following lists the complete addresses for websites in this document, in the order in which they appear in the text:

- **Cover page:** DEP website – www.dep.state.fl.us
- **Acknowledgments:** Anita Nash email address – anita.nash@dep.state.fl.us
- **Section 1:** LSJR Tributaries BMAPs I and II and annual progress reports – <http://www.dep.state.fl.us/water/watersheds/bmap.htm>
- **Section 1:** LSJR Tributaries TMDLs – <http://www.dep.state.fl.us/water/tmdl/index.htm>
- **Section 3:** Ken Weaver email address – ken.weaver@dep.state.fl.us
- **Section 3:** STORET public access database – <http://prodenv.dep.state.fl.us/DearSpa/public/welcome>
- **Appendix D:** FDACS BMP manuals – <http://www.freshfromflorida.com/Divisions-Offices/Agricultural-Water-Policy/Enroll-in-BMPs/BMP-Rules-Manuals-and-Other-Documents>
- **Appendix E:** FDOH Florida Water Management Inventory (FLWMI) – <http://floridahealth.gov/flwmi>
- **Appendix E:** EPA publication – *A Homeowner's Guide to Septic Systems* – https://www3.epa.gov/npdes/pubs/homeowner_guide_long.pdf

Appendix B: Stakeholder Projects Completed, Ongoing, or Planned During the Reporting Period

Updated project information, including new projects, for the reporting period is identified by the red, boldface, italicized font (*example*). Projects with a status of ongoing are thought to have occurred during the reporting period and should continue to occur in subsequent years, unless DEP is notified that the project has been discontinued. Additional project information, including a complete list of projects, can be acquired by contacting DEP.

Table B-1. Cities of Atlantic Beach, Jacksonville Beach, Neptune Beach and NS Mayport project table

Note: The reporting period for the City of Jacksonville Beach and NS Mayport is January 1 to December 31, which corresponds with the BMAP reporting period. The reporting period for the City of Neptune Beach and City of Atlantic Beach is June 1 through May 31, which corresponds with the cities' municipal separate storm sewer system (MS4) reporting periods.
N/A = Not applicable; TBD = To be determined

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Atlantic Beach	2226	Hopkins Creek	AB-015	Pump Station Inspections and Maintenance	Inspect and maintain daily Monday–Friday; all monitored by Supervisory Control and Data Acquisition (SCADA) system with automatic callout 24 hours/day, 7 days/week, with technician on call; stations designed with redundancy; large stations have onsite emergency generators with automatic transfer switch; portable generator and pumps available for smaller stations; all mechanical/electrical problems are addressed immediately	<i>3 lift stations (LS): LS "C" (Donner Rd.), LS "E" (Mayport Rd.), LS "F" (Cavalla Rd.)</i>	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-023	Sanitary Sewer Overflow (SSO) Investigations – Preventive	Implement Fats, Oils, and Grease (FOG) Program to monitor grease trap maintenance at restaurants	25 food service establishments	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-027	Hopkins Creek Regional Stormwater Facility	Carry out water sampling – Section 319 grant requires 1 year of inlet and outlet water grab samples taken monthly; includes fecal coliform	Monthly sampling and laboratory testing	Unknown	Required sampling complete; quarterly fecal sampling continuing
Atlantic Beach	2226	Hopkins Creek	AB-028	Public Education through Contract with Felicia M. Boyd	Stormwater water quality BMPs; public education through contract for stormwater and sewer	4,021 participants	\$5,000/year (yr)	Ongoing

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Atlantic Beach	2226	Hopkins Creek	AB-029	Stormwater System Ditch and Canal Inspections	Visually inspect weekly, take corrective action taken as needed; mow, use weed-eater, and pick up litter weekly during growing season, and as needed in colder months	796,164 linear feet (LF)	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-030	Stormwater System Ditch and Canal Maintenance	Routinely clean and maintain ditches as required by MS4 permit	733,158 LF	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-031	Stormwater Treatment Ponds Inspections	Routinely inspect ponds as required by MS4 permit	394 pond inspections	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-032	Stormwater Treatment Ponds Cleaning and Maintenance	Carry out routine pond maintenance as required by MS4 permit	288 pond maintenance events	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-033	Stormwater Treatment Ponds, Ditch and Canal Aquatic Weed Control	Weed control by Bluewater Environmental	N/A	Annual budget – \$36,000	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-034	Stormwater Control Structure Inspections	Conduct routine control structure inspections as required by MS4 permit	270 structures	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-035	Stormwater Control Structure Cleaning and Maintenance	Do only when inspection shows additional effort required; carry out routine cleaning and maintenance as required by MS4 permit	198 structures	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-036	Stormwater Pump Station Inspections	Routinely inspect Town Center pump station as required by MS4 permit	1 station	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-037	Stormwater Pump Station Maintenance	Routinely maintain Town Center pump station as required by MS4 permit	1 pump station	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-038	Stormwater Inlets/Catch Basins/Grates Inspections	Routinely inspect inlets and catch basins as required by MS4 permit	14,456 inspections of inlets/catch basins/grates	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-039	Stormwater Inlets/Catch Basins/Grates Maintenance	Maintain as required by MS4 permit	14,456 maintenance actions on inlets/catch basins/grates	Unknown	Ongoing

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Atlantic Beach	2226	Hopkins Creek	AB-040	Stormwater Pipe Inspection and Maintenance	Schedule stormwater pipe cleaning routinely, and in response to complaints; required by MS4 permit	1,968 LF	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-041	Stormwater Pipe Maintenance (Repair/Replacement)	Repair or replace stormwater pipe	1 catch basin	\$1,760	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-042	Total Miles of Right-of-Way Maintenance	Maintain right-of-way	13.08 miles	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-043	Litter Collection	Collect litter	26,295 pounds (lbs)/yr	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-047	Pet Feces Control	Install, maintain, and stock Dogi-Pot stations throughout city	More than 30 installed to date	\$5,000	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-048	Pet Feces Control	City Code 12.(b).14 requires removal and proper disposal of pet waste	As needed	Unknown	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-049	Street Sweeping	Sweep streets throughout city	Bimonthly sweeping	\$19,500	Ongoing
Atlantic Beach	2226	Hopkins Creek	AB-050	Identification and Removal of Illicit Connections	Conduct field inspections to identify and remove illicit connections	As needed	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-051	Septic Tank Inspections and Enforcement	When septic tanks fail, city code requires connection to sewer system if available	Ongoing	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-104	SSO Investigations – Preventive	Implement FOG Program to monitor grease trap maintenance at restaurants	40 food service establishments	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-112	Public Education Through Contract with Felicia M. Boyd	Implement stormwater water quality BMPs; carry out public education for stormwater and sewer	4,021 participants	\$5,000/yr	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-113	Stormwater System Ditch and Canal Inspections	Visually inspect stormwater systems weekly and take corrective action as needed; mow, use weed-eater, and pick up litter weekly during growing season, and as needed during colder months	1,133,404 LF	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-114	Stormwater System Ditch and Canal Maintenance	Routinely clean and maintain ditches as required by MS4 permit	797,026 LF	Unknown	Ongoing

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Atlantic Beach	2226	Sherman Creek	AB-115	Stormwater Treatment Ponds Inspections	Routinely inspect ponds as required by MS4 permit	141 pond inspections	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-116	Stormwater Treatment Ponds Cleaning and Maintenance	Routinely maintain ponds as required by MS4 permit	119 pond maintenance events	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-117	Stormwater Treatment Ponds, Ditch and Canal Aquatic Weed Control	Weed control by Bluewater Environmental	N/A	Annual budget – \$36,000	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-118	Stormwater Control Structure Inspections	Carry out routine control structure inspections required by MS4 permit	141 structures	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-119	Stormwater Control Structure Cleaning and Maintenance	Do only when inspection shows additional effort required; carry out routine cleaning and maintenance as required by MS4 permit	107 structures	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-120	Stormwater Inlets/Catch Basins/Grates Inspected	Routinely inspect as required by MS4 permit	61,152 inspections of inlets/catch basins/grates	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-121	Stormwater Inlets/Catch Basins/Grates Maintained	Maintain as required by MS4 permit	79,968 maintenance actions on inlets/catch basins/grates	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-122	Stormwater Pipe Inspection and Maintenance	Carry out stormwater pipe cleaning routinely and in response to complaints, as required by MS4 permit	3,674 LF	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-123	Stormwater Pipe Maintenance (Repair/Replacement)	Repair or replace stormwater pipe	20 LF	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-124	Total Miles of Right-of-Way Maintained	Maintain right-of way	39.23 miles	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-125	Collect Litter	Collect litter	118,027.5 lbs/yr	Unknown	Ongoing
Atlantic Beach	2226	Sherman Creek	AB-133	Pet Feces Control	Install, maintain, and stock Dogi-Pot stations throughout city	More than 30 installed to date	\$5,000	Ongoing

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Atlantic Beach	2226	Hopkins Creek	AB-160	Effluent Gravity Outfall Inspection and Maintenance	Perform cleaning and closed-circuit television (CCTV) inspection of 21" gravity outfall on Donner Rd.; perform needed repairs if identified and root-cutting	5,500 +/- LF (1,600+/- LF in watershed)	\$50,000	In progress
Atlantic Beach	2226	Hopkins Creek	AB-161	Vac Truck Cleaning of Stormwater Pipes and Sanitary Sewer Clogs	Purchase of Vac-Con truck for in-house cleaning of storm sewers and sanitary sewer facilities to more effectively prevent stormwater backups and SSOs	Improved maintenance of total system	\$330,000	<i>Delete. Not approved by Commission</i>
Atlantic Beach	2226	Sherman Creek	AB-163	Sewer Line Upgrades	Rehabilitate sanitary sewer mains on Sea Oats Dr., Park Ter. E, Park Ter. W, and 17th St. using cured-in-place pipe (CIPP)	4,300 LF of 8" and 12" sewer main	\$150,000	<i>Completed</i>
Atlantic Beach	2226	Sherman Creek	AB-164	Manhole Inspections and Rehabilitation	Rehabilitate manholes on Sea Oats Dr., Park Ter. E, Park Ter. W, and 17th St. using Spectrashield	12 manholes	\$50,000	<i>Not required</i>
Atlantic Beach	2226	Sherman Creek	AB-165	Vacuum Truck Cleaning of Stormwater Pipes and Sanitary Sewer Clogs	Purchase of Vac-Con truck for in-house cleaning of storm sewers and sanitary sewer facilities to more effectively prevent stormwater backups and SSOs	Improved maintenance of total system	\$330,000	<i>Delete. Not approved by Commission</i>
Atlantic Beach	2226	<i>Hopkins Creek</i>		<i>Stormwater Master Plan Update</i>	<i>Updating model and citywide capital needs to address recent storm events and level-of-service expectations</i>	<i>TBD</i>	<i>TBD</i>	<i>In progress</i>
Atlantic Beach	2226	<i>Hopkins Creek</i>		<i>Aquatic Pond Improvements</i>	<i>Adding control structure and bulkhead/bank restoration</i>		<i>\$25,000</i>	<i>In progress</i>
Atlantic Beach	2226	<i>Sherman Creek</i>		<i>Stormwater Master Plan Update</i>	<i>Updating model and citywide capital needs to address recent storm events and level-of-service expectations</i>	<i>TBD</i>	<i>TBD</i>	<i>In progress</i>

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Atlantic Beach	2226	Sherman Creek		Pump Station Inspections and Maintenance	Inspect and maintain daily Monday–Friday; all monitored by SCADA system with automatic callout 24 hours/day, 7 days/week, with technician on call; stations designed with redundancy; large stations have onsite emergency generators with automatic transfer switch; portable genset and pumps available for smaller stations; all mechanical/electrical problems are addressed immediately	5 lift stations: David St. LS Palm Ave. LS 11th St. LS Courtyards LS 20th St. LS	Unknown	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-049	Noncontributing Basins	Areas in WBID that do not flow to Hopkins Creek: (1) Bentin Drive North south to Beach Boulevard, east to 11th Street and west to WBID boundary; (2) Rosewood Drive, Oakwood Road, Pinewood Road to west WBID boundary; (3) 3rd Street east to 1st Street and 13th Avenue North south to Beach Boulevard	N/A	N/A	N/A
Jacksonville Beach	2266	Hopkins Creek	JB-050	Sewer System Inspection	Maintain existing sewer system	Cleaning of 44,965 LF	\$62,000	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-051	Sewer Manhole Inspections and Rehabilitation	Maintain existing sewer manholes	Inspected 413; coated interior of 106 manholes; replaced 2	\$185,000	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-052	Sewer Pump Station Inspections and Maintenance	Routinely inspect existing pump stations	Inspect weekly and maintain as necessary	\$72,000	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-053	Restaurant Grease Trap Inspections	Routinely inspect restaurant grease traps	Inspect restaurant grease traps as necessary on average: (1) interior type monthly; (2) exterior type bimonthly	\$35,000	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-054	Stormwater System Ditch and Canal Maintenance	Routinely inspect drainage ditch at 12 th Avenue North and 22 nd Street North, Pinewood ditch, and spray for aquatic weeds	Inspect routinely and ditch spray for aquatic weeds quarterly)	\$550 annually	Ongoing

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Jacksonville Beach	2266	Hopkins Creek	JB-055	Stormwater System Pond Maintenance	Routinely inspect ponds after significant rainfall event and annually	Inspect routinely and maintain as necessary	Unknown	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-056	Stormwater System Pond Maintenance	Inspect annually as required by MS4 NPDES permit	Carry out annual inspection as required by MS4 NPDES permit	Unknown	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-057	Stormwater Pump Stations	Inspect stormwater pumps after significant rainfall event	Inspect weekly and after significant rainfall event and clean as necessary	Unknown	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-058	Street sweeping	Routinely sweep curbed and guttered streets citywide (Mon. 17 miles; Fri. – Sun. and holidays 7 miles)	Sweep curbed and guttered streets routinely citywide (97 miles monthly)	\$26,000 +	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-059	Identification and Removal of Illicit Connections	Field observations to identify and coordinate removal of illicit connections	Illicit discharge training held biannually, every January and June. Any observed illicit discharges are reported for follow-up, illicit connections are removed, and reports are maintained electronically	Unknown	Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-061	Ocean Forest Drainage Imps	Ocean Forest area	4,332 LF of 15" to 36" storm sewer pipe, inlets, manholes, and related work	\$1,276,202	Completed
Jacksonville Beach	2266	Hopkins Creek	JB-062	Sewer Manhole Rehabilitation	Hopkins Creek watershed	Rehabilitation of 27 sewer manholes	\$40,000	Completed/ Ongoing
Jacksonville Beach	2266	Hopkins Creek	JB-063	4th St. N. Sewer Imps.	4th St. N. from 13th to 18th Ave. N.	Replacement of 1,800 LF of 8" to 12" sewer main, manholes, services, and related work	\$566,000	Under design
Jacksonville Beach	2266	Hopkins Creek	JB-064	Effluent Outfall Modifications	Repairs to effluent outfall at St. Johns River	Repairs to effluent outfall at St. Johns River (JB portion)	\$220,031	Under construction
Jacksonville Beach	2266	Hopkins Creek	JB-065	Lift Station No. 7 Imps.	3rd St. and 18th Ave. N.	Relocation and construction of new Lift Station No. 7	\$945,000	Under design
Jacksonville Beach	2266	Hopkins Creek	JB-066	Lift Station No. 20 Abandonment	4th St. and 15th Ave. N.	Abandonment of Lift Station No. 20. Gravity flow to Lift Station No. 7	\$500,000	Under design

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Jacksonville Beach	2266	Hopkins Creek	JB-067	Lift Station No.8 Abandonment	8th St. and 18th Ave. N.	Abandonment of Lift Station No. 8; gravity flow to Lift Station No. 7	\$550,000	<i>Under design</i>
Neptune Beach	2266	Hopkins Creek	NB-003	Gravity Sanitary Sewer Collection System Operation and Maintenance	Carry out normal operation and maintenance of gravity sewer collection system in city	Citywide	\$350,000/yr	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-004	SSO Investigations	Investigate SSOs as needed	<i>June 1, 2015 – May 31, 2016</i>	\$1,000/yr	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-021	Daily Inspection of Lift Stations	Visually inspect lift station	13 lift stations; 4,749 inspections <i>June 1, 2015 – May 31, 2016</i>	\$65,000/yr	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-031	FOG Program	Routinely inspect grease traps and downstream sanitary sewer primarily at restaurant locations in city	<i>24 inspections of restaurants in city June 1, 2015 – May 31, 2016</i>	\$5,000/yr	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-032	Stormwater System Ditch and Canal Maintenance	Continually inspect and maintain city ditches; routinely inspect, mow, pick up litter, and repair as needed	<i>106.8 miles inspected; 25 miles of maintenance June 1, 2015 – May 31, 2016</i>	\$90,000	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-033	Stormwater System Pond Maintenance	Continually inspect and maintain city's 4 ponds; routinely inspect, mow, pick up litter, and repair as needed	<i>63 inspections, 22 maintenance activities June 1, 2015 – May 31, 2016</i>	\$2,500/yr	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-034	Stormwater Education and Outreach Efforts	Use city newsletter for public education and outreach	3,300 newsletters mailed out <i>June 1, 2015 – May 31, 2016</i>	\$1,000/yr	Ongoing

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Neptune Beach	2266	Hopkins Creek	NB-035	Pet Waste Management/ Ordinance	Sec. 6-30. Defecation disposal. It shall be a violation for any owner of a dog to allow such dog to defecate on any property within the city other than the owner's private property without immediately removing such defecation with some sort of material, utensil or suitable container and depositing the defecation in a trash container. When walking a dog on any property within the city, other than the owner's property, the owner of that dog shall carry some sort of material, utensil or suitable container with which to depose of the defecation. The owner in violation of this chapter shall pay a civil penalty to the department [DEP] of public safety as set forth in section 6-5. (Ord. No. 1998-01, § 1, 4-6-98; Ord. No. 2005-09, § 5, 5-2-05)	Citywide	\$5,000/yr	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-036	Street sweeping	Sweep roads with curb and gutter inside city limits	<i>198.1 miles swept, 356 cubic yards of material collected June 1, 2015 – May 31, 2016</i>	\$35,000/yr	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-037	Public Works Employee Training	Conduct annual training covering topics such as stormwater, illicit discharges, and Stormwater Pollution Prevention Plan (SWPPP)	<i>28 people trained June 1, 2015 – May 31, 2016</i>	Unknown	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-038	Testing and Sampling	Increase water sampling of Hopkins Creek	COJ	Unknown	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-039	Stormwater Pollution Prevention Plan	Inspect Public Works facility	<i>3 inspections June 1, 2015 – May 31, 2016</i>	\$5,000	Ongoing
Neptune Beach	2266	Hopkins Creek	NB-040	Stormwater Education and Outreach Efforts	Participate in Watershed Action Volunteers (WAV) Program	Public Works and wastewater treatment plant (WWTP) facilities		
Neptune Beach	2266	Hopkins Creek	NB-043	Right-of-Way Maintenance and Litter Collection	Routinely mow, maintain, and pick up litter in rights-of-way	1,638 cubic yards of material removed <i>June 1, 2015 – May 31, 2016</i>	\$65,000/yr	

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Neptune Beach	2266	Hopkins Creek	NB-059	Bal Harbour Sanitary Sewer Improvements	Sewer rehabilitation and replacement in Bal Harbour neighborhood	Bal Harbour Estates neighborhood	\$1,000,000	
Neptune Beach	2266	Hopkins Creek	NB-060	400 and 500 Block Sanitary Sewer Improvements	Sewer rehabilitation and replacement of 50% of 400 and 500 block area south of Florida Blvd.	50 % of 400 and 500 block area south of Florida Blvd.	\$1,500,000	
Neptune Beach	2266	Hopkins Creek	NB-061	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and other TAT efforts.	Ongoing	Unknown	
Neptune Beach	2266	Hopkins Creek	NB-062	Source Identification Follow Up	Assist DEP in following up on source identification results that indicate human source.	Ongoing	Unknown	
NS Mayport	2227	Sherman Creek	NSM-007	Pump Station Inspections and Maintenance	Inspect, maintain, and, clean sewage pump stations	14 pump stations	Unknown	
NS Mayport	2227	Sherman Creek	NSM-008	SSO Investigations	Investigate and document all SSOs	Entire sewage collection system	Unknown	
NS Mayport	2227	Sherman Creek	NSM-009	Cooking Oil and Grease Recycling Program	Recycle oil and grease from all cooking facilities on station; through contractual agreement with DARPRO Solutions. DARPRO removes used cooking oil and grease and recycles it; NS Mayport has constructed spill containment	All food handling establishments and ships	\$28,600	
NS Mayport	2227	Sherman Creek	NSM-010	Stormwater System Maintenance	Maintain vegetation and structures in stormwater system; remove trash and debris	Entire stormwater conveyance system	Contract sensitive	
NS Mayport	2227	Sherman Creek	NSM-012	Debris Removal	Remove trash and debris from grounds	All NS grounds	Contract sensitive	Ongoing
NS Mayport	2227	Sherman Creek	NSM-013	Illicit Discharge Detection and Elimination	Systematically survey for and eliminate illicit connections/discharges to stormwater system	Entire stormwater collection system	Unknown	Ongoing
NS Mayport	2227	Sherman Creek	NSM-014	Stormwater Public Education and Outreach Efforts	Publish quarterly articles in NS Mayport newspaper and housing newsletter; publish resident brochure	Entire station	Unknown	Ongoing
NS Mayport	2227	Sherman Creek	NSM-015	Pet Waste Management/ Ordinance	Regulate pets in housing areas	All housing areas	Unknown	Ongoing

Lead Entity	WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
NS Mayport	2227	Sherman Creek	NSM-016	Pet Waste Collection Stations	Install and maintain pet waste collection stations in recreational areas	2 recreational vehicle parks, beach access, and housing areas	\$1,417	Ongoing
NS Mayport	2227	Sherman Creek	NSM-019	Storm Drain Markers	Install storm drain markers on street and parking lot stormwater inlets	Entire station	Unknown	Ongoing
NS Mayport	2227	Sherman Creek	NSM-020	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and other TAT efforts.	Ongoing	Unknown	Ongoing
NS Mayport	2227	Sherman Creek	NSM-021	Sample Analysis	Continue BMAP monitoring, with adjustments made as needed, and follow up on high results per TAT protocol; add <i>E. coli</i> and <i>Enterococci</i> , as appropriate	Ongoing	Unknown	Ongoing

Table B-2. COJ project table

Notes: The reporting period for COJ is June 1, 2015, through May 31, 2016, which corresponds with the city's MS4 reporting period. Projects were listed in the Phase 1 BMAP documents by WBID. The table lists a project or program only once if it applies to every WBID. A cross-reference table is available (upon request) that lists all the individual WBID-related projects associated with the citywide projects.

N/A = Not applicable.

Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Citywide	COJ-253	Drainage System Repair and Rehabilitation	MS4 repair/replacement, CCTV inspections, CIPP, structure cleaning and miscellaneous design, and construction projects citywide	Multiple contracts	\$4,238,585	Ongoing
Citywide	COJ-04	Drainage Ditch Maintenance	Citizen Action Response Effort (CARE) response and proactive MS4 maintenance work orders	2,142 work orders	\$1,019,763	Ongoing
Citywide	COJ-276	MS4 Drainage Ditch Vegetation Management	Contractor vegetation spraying and litter removal	1,191 miles of MS4 ditch	\$391,749	Ongoing
Citywide	COJ-193	Ditch Hazardous/Contaminated	CARE response and proactive MS4 maintenance work orders	Included in COJ-04 Drainage Ditch Maintenance	\$0	N/A
Citywide	COJ-	Flooding	CARE response and proactive roadway/building flooding and general drainage problems	513	\$730,278	Ongoing
Citywide	COJ-05	Pond Maintenance	CARE response and proactive MS4 pond maintenance work orders	113 work orders (also see COJ 291 for Contractor Pond Maintenance)	\$2,360	Ongoing
Citywide	COJ-291	Contractor Pond Maintenance	Manage vegetation, remove litter, and mow	242 ponds (Also see COJ-05)	\$725,013	Ongoing
Citywide	COJ-06	Structure Repair	CARE response and proactive MS4 maintenance work orders	367 work orders	\$265,735	Ongoing
Citywide	COJ-	Structure Cleaning	CARE response and proactive MS4 maintenance work orders	1,433 work orders	\$678,064	Ongoing
Citywide	COJ-277	Stormwater Action Team (SWAT) Proactive Maintenance Program	Roadside and outfall ditch regrade, vegetation removal, illegal dumping clean-up, and illicit discharge detection and elimination (IDDE) source removal. (200.3 miles drainage ditch and 142.71 miles of culvert and closed conveyance)	513 work orders	\$1,366,242	Ongoing
Citywide	COJ-09	Sewer Overflow	Number of SSOs closed by COJ or referred to Duval FDOH or JEA	305	\$115,595	Ongoing

Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Citywide	COJ-10	Private Lift Station Inspection and Update Geographic Information System (GIS) Coverage	There are 2,069 lift stations in city inventory of identified private lift stations; 16 private lift station inspections completed in BMAP I tributaries; 76 private lift station inspections completed in BMAP II tributaries.	226 lift stations inspected citywide	\$85,654	Ongoing
Citywide	COJ-11	Illicit Discharge Detection and Elimination	Proactive and reactive investigation of illicit discharge and dumping issues not related to private lift stations and municipal SSOs (53 IDDE inspections in Tributaries I BMAP, with 2 confirmed as illicit and removed, and 106 IDDE inspections in Tributaries II BMAP, with none found to be illicit)	812 investigations with 18 confirmed to be illicit and removed	\$307,748 cost to complete inspections + \$88,760 in fines issued	Ongoing
Citywide	COJ-12	Routine Surface Water Sampling	Citywide NPDES permit-related water quality sampling (93 sites not also sampled as BMAP sites; all sampled quarterly)	361	\$276,165	Ongoing
Citywide	COJ-14	Septic Tank Phase Out	Phase out program as provided by COJ ordinance	72 total citywide (4 in Tributaries I BMAP and 17 in Tributaries II BMAP)	Unknown	Ongoing
Citywide	COJ-16	Septic Tank Maintenance Public Education	Public service announcements (PSAs)	Ongoing	Unknown	Ongoing
Citywide	COJ-17	Pet/Animal Management Public Education	PSAs	Ongoing	Unknown	Ongoing
Hogan Creek	COJ-19	Newtown Area	Flood improvement	N/A	\$5,375,000	Complete
Deer Creek	COJ-126	Lower East Side Drainage Improvements Phase 3	Eliminate flooding area bordered by 7th Street, MLK Jr. Expressway, 1st Street, and Spearing Street	N/A	\$6,500,000	Design
Deer Creek	COJ-127	Lower East Side Pond Expansion	Pond expansion to provide compensating treatment for library, courthouse, and other downtown improvements	See COJ-126	N/A	N/A
Newcastle Creek	COJ-191	Regional Stormwater Facility (RSF)	RSF planned under Master Stormwater Management Plan (MSMP); construction subject to funding	N/A	\$110,000	Planned
Miramar Creek	COJ-209	Conveyance Under San Jose	Planned under MSMP; construction schedule subject to funding	N/A	\$150,000	Complete
Big Fishweir Creek	COJ-214	In-line Dry Pond and Widen Downstream Channel	Planned under MSMP; construction schedule subject to funding	N/A	\$2,500,000	Planned

Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
Goodbys Creek	COJ-235	Berm, New Ponds with Managed Aquatic Plant Systems (MAPS), Existing Ponds with MAPS	Planned under MSMP; construction schedule subject to funding	N/A	\$4,300,000	Planned
Open Creek	COJ-241	Conveyance Improvements Under Power Easement Near Deer Chase Place and Danforth Drive	Planned under MSMP; construction schedule subject to funding	N/A	\$296,000	Planned
Craig Creek	COJ-312	Phillips Hwy Pond	Wet detention pond	N/A	\$1,100,000	Planned
Craig Creek	COJ-313	Pine Forest	Wet detention pond	N/A	\$5,882,476	Construction
McCoy Creek	COJ-25	McCoy Creek – Air Liquide site	Retrofit site and drainage	N/A	\$1,000,000	Construction
McCoy Creek	COJ-316	McCoy Creek Blvd.	Channel improvements	N/A	\$2,800,000	Planned
McCoy Creek	COJ-317	Newtown Drainage Phase I Improvements	Wet detention pond	N/A	\$5,791,000	Complete
Williamson Creek	COJ-319	Regional Stormwater Facility with MAPS	Regional stormwater facility	N/A	\$366,429	Planned
Deep Bottom Creek	COJ-328	Wet Detention Pond Near Senior Center	Planned under MSMP; construction subject to funding	N/A	\$2,100,000	Planned
Moncrief Creek	COJ-330	RSF	Planned under MSMP; construction subject to funding	N/A	\$6,700,000	Planned
Cormorant Branch	COJ-335	RSF 2 acre RSF + 2-5 feet Corrugated Metal Pipe (CMP) + Bank	Planned under MSMP; construction subject to funding	N/A	\$6,700,000	Planned
Sherman Creek	COJ-339	RSF 5 acre RSF + Conveyance Improvements	Planned under MSMP; construction subject to funding	N/A	\$1,800,000	Planned
Pottsburg Creek	COJ-342	RSF 8 acre RSF + 7.5 acre RSF + MAPS in existing ponds	Planned under MSMP; construction subject to funding	N/A	\$11,112,000	Planned
BMAP I Tributaries	COJ-13	Tributaries BMAP Monitoring	11 total sites (all 11 BMAP I sites are sampled monthly)	130	\$20,123	Ongoing
BMAP I Tributaries	COJ-39	Number of Tributaries BMAP Resamples	Conducted when high levels of fecal coliform bacteria are noted, to attempt to identify sources	25	\$3,870	Ongoing
BMAP I Tributaries	COJ-284	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and efforts	Ongoing	Unknown	Ongoing
BMAP I Tributaries	COJ-285	Source Identification Follow-up	Assist DEP in following up on source identification results that indicate human source	See COJ-39	See COJ-39	Ongoing

Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Cost Estimate	Project Status
BMAP I Tributaries	COJ 286	Sample Analysis	Continue BMAP monitoring, with adjustments made as needed, and follow up on high results per TAT protocol; add <i>E. coli</i> and <i>Enterococci</i> as appropriate	See COJ-13 and COJ-39	See COJ-13 and COJ-39	Ongoing
BMAP I Tributaries	COJ-287	Dumpster Inspection Program	Develop inspection program for dumpster areas behind restaurants, convenience stores, and grocery stores	Ongoing	Unknown	Ongoing
BMAP I Tributaries	COJ-288	Tributary Clean Up and Search for Illicit Connections	Promote community awareness of waterbody health, organize annual community cleanups, and inspect for illicit connections in 10 WBIDs over next 5 years	Ongoing	Unknown	Ongoing
BMAP I Tributaries	COJ-289	Investigate Rerouted Stormwater	Investigate stormwater projects in each BMAP waterbody that may have diverted stormwater away from tributaries	Ongoing	Unknown	Ongoing
BMAP I Tributaries	COJ-290	Walk the WBID (WTW) Follow-Up	Address any action items identified as result of 2014 WTW	Ongoing	Unknown	Ongoing
BMAP II Tributaries	COJ-327	Tributaries BMAP Monitoring	18 total sites (all sites sampled monthly)	216	\$33,435	Ongoing
BMAP II Tributaries	COJ-52	Number of Tributaries BMAP Re-Samples	Conducted when high levels of fecal coliform bacteria are noted, to attempt to identify sources	11	\$1,703	Ongoing
BMAP II Tributaries	COJ-422	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and efforts	Ongoing	Unknown	Ongoing
BMAP II Tributaries	COJ-423	Source Identification Follow-up	Assist DEP in following up on source identification results that indicate human source	See COJ-52	See COJ-52	Ongoing
BMAP II Tributaries	COJ-424	Sample Analysis	Continue BMAP monitoring, with adjustments made as needed, and follow up on high results per TAT protocol; add <i>E. coli</i> and <i>Enterococci</i> as appropriate	See COJ-327 and COJ-52	See COJ-327 and COJ-52	Ongoing
BMAP II Tributaries	COJ-425	Dumpster Inspection Program	Develop inspection program for dumpster areas behind restaurants, convenience stores, and grocery stores	Ongoing	Unknown	Ongoing
BMAP II Tributaries	COJ-426	Tributary Clean Up and Search for Illicit Connections	Promote community awareness of waterbody health, organize annual community cleanups, and inspect for illicit connections in 2 WBIDs per year	Ongoing	Unknown	Ongoing
BMAP II Tributaries	COJ-427	Investigate Rerouted Stormwater	Investigate stormwater projects in each BMAP waterbody that may have diverted stormwater away from tributaries	Ongoing	Unknown	Ongoing
BMAP II Tributaries	COJ-428	WTW Follow-Up	Address any action items identified as result of 2014 Walk The WBID	Ongoing	Unknown	Ongoing

Table B-3. Florida Department of Transportation (FDOT) project table

Note: The FDOT reporting period is January 1 through December 31, which corresponds with the BMAP reporting period.

N/A = Not applicable

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
Countywide	Countywide	BMAP I: FDOT-79 BMAP II: FDOT-139	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and other TAT efforts	Ongoing	Unknown	Ongoing
Countywide	Countywide	BMAP I: FDOT-80 BMAP II: FDOT-140	Source Identification Follow up	Assist DEP in following up on source identification results that indicate human source discharging into its MS4 or rights-of-way	Ongoing	Unknown	Ongoing
Countywide	Countywide	BMAP I: FDOT-81 BMAP II: FDOT-141	WTW Follow up	Address any mutually agreed-on action items identified as result of 2014 WTW	Ongoing	Unknown	Ongoing
Countywide	Countywide	BMAP I: FDOT-100	Proactive IDDE Program	Continue to implement mandatory IDDE training for staff and contractors working in FDOT rights-of-way	Ongoing	Unknown	Ongoing
2252	Hogan Creek	FDOT-4	Potential Illicit Connection (PIC) Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2252	Hogan Creek	FDOT-5	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	2 PICs found this reporting period; corrective action taken; issue resolved and closed	Included in FDOT-4	Ongoing
2252	Hogan Creek	FDOT-6	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2252	Hogan Creek	FDOT-71	BMAP Monitoring	N/A	See COJ Report	Cost included in FDOT-6	Ongoing
2252	Hogan Creek	FDOT-72	Source Identification Sampling – Conducted When High Levels of Coliform Bacteria Counts Are Noted and Source Identification is Necessary	N/A	See COJ Report	Cost included in FDOT-6	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2252	Hogan Creek	FDOT-8	Drainage Connection Program (DCP) – Connecting Entity Must Certify that All Discharges to FDOT MS4 Are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing
2252	Hogan Creek	FDOT-9	Adopt-A-Highway Program	N/A	181 lbs of trash collected; trash collection area is 2.6 miles	Unknown	Ongoing
2252	Hogan Creek	FDOT-10	Sediment Accumulation, Trash, and Debris Removed As Needed	N/A	350 inlets/catch basins and 12 miles of piping	Cost included in FDOT-12	Ongoing
2252	Hogan Creek	FDOT-11	Street Sweeping Program	N/A	25 miles of roadway swept monthly; 1,575 lbs of debris collected	Cost included in FDOT-12	Ongoing
2252	Hogan Creek	FDOT-12	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2322	Butcher Pen Creek	FDOT-13	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2322	Butcher Pen Creek	FDOT-14	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	2 PICs found this reporting period; corrective action taken; issue resolved and closed.	Included in FDOT-13	Ongoing
2322	Butcher Pen Creek	FDOT-15	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2322	Butcher Pen Creek	FDOT-16	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 Are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2322	Butcher Pen Creek	FDOT-17	Street Sweeping Program	N/A	12 miles of roadway swept monthly; 756 lbs of debris collected	Cost included in FDOT-18	Ongoing
2322	Butcher Pen Creek	FDOT-18	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2287	Miller Creek	FDOT-19	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2287	Miller Creek	FDOT-20	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	No illicit connection found to date	Included in FDOT-19	Ongoing
2287	Miller Creek	FDOT-21	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2287	Miller Creek	FDOT-73	BMAP Monitoring	N/A	See COJ Report	Included in FDOT-21	Ongoing
2287	Miller Creek	FDOT-74	Source Identification Sampling – Conducted When High Levels of Coliform Bacteria Counts are Noted and Source Identification is Necessary	N/A	See COJ Report	Included in FDOT-21	Ongoing
2287	Miller Creek	FDOT-22	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 Are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing
2287	Miller Creek	FDOT-23	Adopt-A-Highway Program	N/A	378 lbs of trash collected; trash collection area is 6 miles	Unknown	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2287	Miller Creek	FDOT-24	Sediment Accumulation, Trash, and Debris Removed as Needed	N/A	130 inlets/catch basins and 5 miles of piping	Included in FDOT-26	Ongoing
2287	Miller Creek	FDOT-25	Street Sweeping Program	N/A	28 miles of roadway swept monthly; 1,765 lbs of debris collected	Included in FDOT-26	Ongoing
2287	Miller Creek	FDOT-26	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide - \$3,344,284	Ongoing
2304	Miramar Creek	FDOT-27	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2304	Miramar Creek	FDOT-28	PIC Program - Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	0 potential illicit connections found this reporting period; corrective action taken	Included in FDOT-27	Ongoing
2304	Miramar Creek	FDOT-29	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2304	Miramar Creek	FDOT-75	BMAP Monitoring	N/A	See COJ Report	Cost included in countywide MS4 monitoring	Ongoing
2304	Miramar Creek	FDOT-76	Source Identification Sampling – Conducted When High Levels of Coliform Bacteria Counts are Noted and Source Identification is Necessary	N/A	See COJ Report	Cost included in countywide MS4 monitoring	Ongoing
2304	Miramar Creek	FDOT-30	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 Are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2304	Miramar Creek	FDOT-31	Adopt-A-Highway Program	N/A	327 lbs of trash collected; trash collection area is 4.7 miles	Unknown	Ongoing
2304	Miramar Creek	FDOT-32	Sediment Accumulation, Trash, and Debris Removed as Needed	N/A	98 inlets/catch basins and 2.5 miles of piping	Cost included in FDOT-34	Ongoing
2304	Miramar Creek	FDOT-33	Street Sweeping Program	N/A	10 miles of roadway swept monthly; 630 lbs of debris collected	Cost included in FDOT-34	Ongoing
2304	Miramar Creek	FDOT-34	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2280	Big Fishweir Creek	FDOT-35	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2280	Big Fishweir Creek	FDOT-36	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	1-potential illicit connection found this reporting period; corrective actions taken	Included in FDOT-35	Ongoing
2280	Big Fishweir Creek	FDOT-37	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2280	Big Fishweir Creek	FDOT-38	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 Are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing
2280	Big Fishweir Creek	FDOT-39	Sediment Accumulation, Trash, and Debris Removed as Needed	N/A	269 inlets/catch basins and 14 miles of piping	Cost included in FDOT-41	Ongoing
2280	Big Fishweir Creek	FDOT-40	Street Sweeping Program	N/A	21 miles of roadway swept monthly; 1,324 lbs of debris collected	Cost included in FDOT-41	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2280	Big Fishweir Creek	FDOT-41	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2256	Deer Creek	FDOT-42	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2256	Deer Creek	FDOT-43	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	No true illicit connection identified to date	Included in FDOT-42	Ongoing
2256	Deer Creek	FDOT-44	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2256	Deer Creek	FDOT-77	BMAP Monitoring	N/A	See COJ Report	Included in FDOT-44	Ongoing
2256	Deer Creek	FDOT-78	Source Identification Sampling – Conducted When High Levels of Coliform Bacteria Counts are Noted and Source Identification is Necessary	N/A	0 additional samples were collected	Included in FDOT-44	Ongoing
2256	Deer Creek	FDOT-45	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 Are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing
2256	Deer Creek	FDOT-46	Sediment Accumulation, Trash, and Debris Removed as Needed	N/A	81 inlets/catch basins and 4 miles of piping	Cost included in FDOT-48	Ongoing
2256	Deer Creek	FDOT-47	Street Sweeping Program	N/A	8 miles of roadway swept monthly; 504 lbs of debris collected	Cost included in FDOT-48	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2256	Deer Creek	FDOT-48	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2204	Terrapin Creek	FDOT-49	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2204	Terrapin Creek	FDOT-50	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	No truly illicit connection identified to date	Included in FDOT-49	Ongoing
2204	Terrapin Creek	FDOT-51	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2204	Terrapin Creek	FDOT-52	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing
2204	Terrapin Creek	FDOT-53	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2326	Goodbys Creek	FDOT-54	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2326	Goodbys Creek	FDOT-55	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	No potential illicit found this reporting period	Included in FDOT-54	Ongoing
2326	Goodbys Creek	FDOT-56	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,194	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2326	Goodbys Creek	FDOT-58	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing
2326	Goodbys Creek	FDOT-59	Adopt-A-Highway Program	N/A	486 lbs of trash collected along 7 miles of roadway	Unknown	Ongoing
2326	Goodbys Creek	FDOT-60	Sediment Accumulation, Trash, and Debris Removed as Needed	N/A	195 inlets/catch basins and 8 miles of piping	Cost included in FDOT-62	Ongoing
2326	Goodbys Creek	FDOT-61	Street Sweeping Program	N/A	18 miles of roadway swept monthly; 1,134 lbs of debris collected	Cost included in FDOT-62	Ongoing
2326	Goodbys Creek	FDOT-62	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2299	Open Creek	FDOT -63	PIC Program – Search for Illicit Connections	N/A	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2299	Open Creek	FDOT-64	PIC Program – Illicit Connections Identified and Removed in WBID if Found To Be Truly Illicit	N/A	No true illicit connection identified to date	Included in FDOT-63	Ongoing
2299	Open Creek	FDOT-65	Routine Tributary Monitoring as Part of MS4 Permit	N/A	See COJ Report	Countywide – \$197,794	Ongoing
2299	Open Creek	FDOT-67	DCP – Connecting Entity Must Certify that All Discharges to FDOT MS4 are Treated Prior to Connection	N/A	Ongoing effort	Countywide – \$11,492	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2299	Open Creek	FDOT-68	Sediment Accumulation, Trash, and Debris Removed on As-Needed Basis	N/A	0 inlets/catch basins and 0 miles of piping	Cost included in FDOT-69	Ongoing
2299	Open Creek	FDOT-69	Maintain FDOT Stormwater Systems	N/A	Clean drainage structures, replace/ repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mowing, roadside litter removal, respond to citizen complaints	Countywide – \$3,344,284	Ongoing
2299	Open Creek	FDOT-70	Street Sweeping Program	N/A	6 miles of roadway swept monthly; 378 lbs of debris collected	Cost included in FDOT-69	Ongoing
2299	Open Creek	FDOT-71	Maintain Wet Stormwater Management System – Drainage Area 22 acres	N/A	Keep pond functioning as designed	Cost included in FDOT-69	Ongoing
2297	Craig Creek	FDOT-1	PIC Program	Search for illicit connections	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2297	Craig Creek	FDOT-2	PIC Program	Identify and remove illicit connections if found to be truly illicit	No illicit connections/ discharge found this reporting period	Included in FDOT-1	Ongoing
2297	Craig Creek	FDOT-3	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2297	Craig Creek	FDOT-5	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2297	Craig Creek	FDOT-6	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	6 miles of roadways and associated stormwater conveyance systems currently maintained in WBID; 12 miles of roadways swept, with 756 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2297	Craig Creek	FDOT-105	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-3	Ongoing
2257	McCoy Creek	FDOT-7	PIC Program	Search for illicit connections	Continuous effort in WBID	Countywide – \$45,394	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2257	McCoy Creek	FDOT-8	PIC Program	Identify and remove illicit connections if found to be truly illicit	9 PICs found; on investigation, 1 determined not to be illicit	Included in FDOT-7	Ongoing
2257	McCoy Creek	FDOT-10	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ report	Countywide – \$197,794	Ongoing
2257	McCoy Creek	FDOT-12	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Included in FDOT-10	Ongoing
2257	McCoy Creek	FDOT-13	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2257	McCoy Creek	FDOT-15	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	4 miles of roadways and associated stormwater conveyance systems currently being maintained in WBID; 8 miles of roadways swept, with 504 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2316	Williamson Creek	FDOT-16	PIC Program	Search for illicit connections	Continuous effort in WBID; none identified	Countywide – \$45,394	Ongoing
2316	Williamson Creek	FDOT-121	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-16	Ongoing
2316	Williamson Creek	FDOT-17	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2316	Williamson Creek	FDOT-18	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2316	Williamson Creek	FDOT-20	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	70 lbs of trash collected along 1 mile of roadway	Unavailable	Ongoing
2316	Williamson Creek	FDOT-23	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	2 miles of roadways and associated stormwater conveyance systems currently maintained in WBID; 4 miles of roadways swept, with 252 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2316	Williamson Creek	FDOT-106	Source Identification Sampling	Resampling conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-18	Ongoing
2324	Fishing Creek	FDOT-25	PIC Program	Search for illicit connections	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2324	Fishing Creek	FDOT-26	PIC Program	Identify illicit connections and remove if found to be truly illicit	No illicit connection/discharge found this reporting period	Included in FDOT-25	Ongoing
2324	Fishing Creek	FDOT-28	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2324	Fishing Creek	FDOT-29	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-28	Ongoing
2324	Fishing Creek	FDOT-31	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2324	Fishing Creek	FDOT-32	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	417 lbs of trash collected along 6 miles of roadway	Unavailable	Ongoing
2324	Fishing Creek	FDOT-33	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	7 miles of roadways and associated stormwater conveyance systems currently maintained; 14 miles of roadways swept, with 883 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2324	Fishing Creek	FDOT-108	BMAP Sampling	Routine BMAP II monitoring began December 2010	See COJ Report	Included in FDOT-28	Ongoing
2361	Deep Bottom Creek	FDOT-34	PIC Program	Search for illicit connections	Continuous effort in WBID; none identified	Countywide – \$45,394	Ongoing
2361	Deep Bottom Creek	FDOT-122	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-34	Ongoing
2361	Deep Bottom Creek	FDOT-35	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2361	Deep Bottom Creek	FDOT-36	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-35	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2361	Deep Bottom Creek	FDOT-38	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2361	Deep Bottom Creek	FDOT-39	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	139 lbs of trash collected along 2 miles of roadway	Unavailable	Ongoing
2361	Deep Bottom Creek	FDOT-40	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	2.5 miles of roadways and associated stormwater conveyance systems currently being maintained; 5 miles of roadways swept, with 315 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2361	Deep Bottom Creek	FDOT-109	BMAP Sampling	Routine BMAP II monitoring began December 2010	See COJ Report	Included FDOT-35	Ongoing
2361	Deep Bottom Creek	FDOT-135	I-295 Managed Lanes	Construct stormwater management systems to treat areas of improvement	Construction ongoing	Total project cost \$88,950,000	Construction ongoing; to be completed December 2017
2228	Moncrief Creek	FDOT-41	PIC Program	Search for illicit connections		Countywide – \$45,394	Ongoing
2228	Moncrief Creek	FDOT-42	PIC Program	Identify and remove illicit connections if found to be truly illicit	1 PIC found and corrective action taken	Included in FDOT-41	Ongoing
2228	Moncrief Creek	FDOT-44	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2228	Moncrief Creek	FDOT-46	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	FDOT-44	Ongoing
2228	Moncrief Creek	FDOT-47	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2228	Moncrief Creek	FDOT-48	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	145 lbs of trash collected along 2.1 miles of roadway	Unavailable	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2228	Moncrief Creek	FDOT-49	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	5 miles of roadways and associated stormwater conveyance systems currently being maintained; 10 miles of roadways swept, with 630 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2207	Blockhouse Creek	FDOT-50	PIC Program	Search for illicit connections	Continuous effort in WBID; none identified	Countywide – \$45,394	Ongoing
2207	Blockhouse Creek	FDOT-123	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-50	Ongoing
2207	Blockhouse Creek	FDOT-51	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2207	Blockhouse Creek	FDOT-52	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2207	Blockhouse Creek	FDOT-53	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	153 lbs of trash collected along 2.2 miles of roadway	Unavailable	Ongoing
2207	Blockhouse Creek	FDOT-54	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	3.75 miles of roadways and associated stormwater conveyance systems currently being maintained; 7.5 miles of roadways swept, with 473 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2207	Blockhouse Creek	FDOT-111	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	FDOT-52	Ongoing
2266	Hopkins Creek	FDOT-55	PIC Program	Search for illicit connections	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2266	Hopkins Creek	FDOT-56	PIC Program	Identify and remove illicit connections if found to be truly illicit	No illicit connection/discharge found this reporting period	Included in FDOT-55	Ongoing
2266	Hopkins Creek	FDOT-57	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2266	Hopkins Creek	FDOT-59	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2266	Hopkins Creek	FDOT-60	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	695 lbs of trash collected along 10 miles of roadway	Unavailable	Ongoing
2266	Hopkins Creek	FDOT-61	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	8 miles of roadways and associated stormwater conveyance systems currently being maintained; 16 miles of roadways swept, with 1,009 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2266	Hopkins Creek	FDOT-112	BMAP Sampling	Routine BMAP II monitoring began December 2010	See COJ Report	Included in FDOT-57	Ongoing
2266	Hopkins Creek	FDOT-113	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-57	Ongoing
2381	Cormorant Branch	FDOT-62	PIC Program	Search for illicit connections	Continuous effort in WBID; none identified	Countywide – \$45,394	Ongoing
2381	Cormorant Branch	FDOT-124	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-62	Ongoing
2381	Cormorant Branch	FDOT-63	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2381	Cormorant Branch	FDOT-65	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2381	Cormorant Branch	FDOT-66	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	139 lbs of trash collected along 2 miles of roadway	Unavailable	Ongoing
2381	Cormorant Branch	FDOT-67	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	2 miles of roadways and associated stormwater conveyance systems currently being maintained; 4 miles of roadways swept, with 252 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2381	Cormorant Branch	FDOT-114	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-63	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2381	Cormorant Branch	FDOT-125	BMAP Sampling	Routine BMAP II monitoring began October 2011	See COJ Report	Included in FDOT-63	Ongoing
2282	Wills Branch	FDOT-68	PIC Program	Search for illicit connections	Continuous effort in WBID; 1 PIC identified	Countywide – \$45,394	Ongoing
2282	Wills Branch	FDOT-126	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-68	Ongoing
2282	Wills Branch	FDOT-69	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2282	Wills Branch	FDOT-70	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2282	Wills Branch	FDOT-71	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	139 lbs of trash collected along 2 miles of road of roadway	Unavailable	Ongoing
2282	Wills Branch	FDOT-73	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	2 miles of roadways and associated stormwater conveyance systems currently maintained in WBID; 4 miles of roadways swept, with 252 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2282	Wills Branch	FDOT-115	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-69	Ongoing
2282	Wills Branch	FDOT-133	I-10 Marietta Interchange Improvement	Construct 3 wet detention ponds to treat area of improvement	Construction ongoing	Total project cost \$26,880,000	Construction ongoing; to be completed May 2016
2227	Sherman Creek	FDOT-74	PIC Program	Search for illicit connections	Continuous effort in WBID; none identified	Countywide – \$45,394	Ongoing
2227	Sherman Creek	FDOT-127	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-74	Ongoing
2227	Sherman Creek	FDOT-75	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2227	Sherman Creek	FDOT-76	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-75	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2227	Sherman Creek	FDOT-78	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2227	Sherman Creek	FDOT-79	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	4 miles of roadways and associated stormwater conveyance systems currently being maintained; 8 miles of roadways swept, with 504 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2227	Sherman Creek	FDOT-117	BMAP Sampling	Routine BMAP II monitoring began December 2010	See COJ Report	Included in FDOT-75	Ongoing
2240	Greenfield Creek	FDOT-80	PIC Program	Search for illicit connections	Continuous effort in WBID; none identified	Countywide – \$45,394	Ongoing
2240	Greenfield Creek	FDOT-128	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-80	Ongoing
2240	Greenfield Creek	FDOT-81	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2240	Greenfield Creek	FDOT-82	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-81	Ongoing
2240	Greenfield Creek	FDOT-83	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2240	Greenfield Creek	FDOT-85	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	1 mile of roadways and associated stormwater conveyance systems currently maintained in WBID; 2 miles of roadways swept, with 126 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2240	Greenfield Creek	FDOT-131	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-80	Ongoing
2240	Greenfield Creek	FDOT-132	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-80	Ongoing
2265B	Pottsburg Creek	FDOT-86	PIC Program	Search for illicit connections	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2265B	Pottsburg Creek	FDOT-87	PIC Program	Identify illicit connections and remove if found to be truly illicit	0 PICs found	Included in FDOT-86	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2265B	Pottsburg Creek	FDOT-88	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2265B	Pottsburg Creek	FDOT-89	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2265B	Pottsburg Creek	FDOT-91	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints, and sweep roadways	6 miles of roadways and associated stormwater conveyance systems currently maintained in WBID; 12 miles of roadways swept, with 756 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2265B	Pottsburg Creek	FDOT-119	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-88	Ongoing
2265B	Pottsburg Creek	FDOT-136	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-88	Ongoing
2265B	Pottsburg Creek	FDOT-137	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-88	Ongoing
2265B	Pottsburg Creek	FDOT-138	I-95 Interchange Operational Improvements at SR 201 (JTB)	Construct stormwater management systems to treat areas of improvement	Construction ongoing	Total project cost \$66,720,000	Construction ongoing; to be completed April 2017
2203	Middle Trout River	FDOT-92	PIC Program	Search for illicit connections	Continuous effort in WBID; none identified	Countywide – \$45,394	Ongoing
2203	Middle Trout River	FDOT-129	PIC Program	Identify and remove illicit connections if found to be truly illicit	1 illicit connection found; corrective action ongoing	Included in FDOT-92	Ongoing
2203	Middle Trout River	FDOT-93	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2203	Middle Trout River	FDOT-94	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	See COJ Report	Included in FDOT-93	Ongoing
2203	Middle Trout River	FDOT-95	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2203	Middle Trout River	FDOT-96	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	278 lbs of trash collected along 4 miles of roadway	Unavailable	Ongoing
2203	Middle Trout River	FDOT-97	Maintain FDOT Stormwater Systems	Clean catch basin/inlet and other drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints and roadways sweeping	2.5 miles of roadways and associated stormwater conveyance systems currently maintained in WBID; 5 miles of roadways swept, with 315 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2203A	Lower Trout River	FDOT-98	PIC Program	Search for illicit connections	Continuous effort in WBID	Countywide – \$45,394	Ongoing
2203A	Lower Trout River	FDOT-130	PIC Program	Identify and remove illicit connections if found to be truly illicit	Ongoing	Included in FDOT-98	Ongoing
2203A	Lower Trout River	FDOT-99	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	See COJ Report	Countywide – \$197,794	Ongoing
2203A	Lower Trout River	FDOT-100	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide – \$11,492	Ongoing
2203A	Lower Trout River	FDOT-101	Adopt-A-Highway Program	Allows individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	452 lbs of trash collected along 6.5 miles of roadway	Unavailable	Ongoing
2203A	Lower Trout River	FDOT-104	Maintain FDOT Stormwater Systems	Clean drainage structures, replace/repair storm/cross/side drains, clean/reshape roadside ditches, clear/repair outfall ditches, mow, remove roadside litter, respond to citizen complaints and roadway sweeping	6 miles of roadways and associated stormwater conveyance systems currently maintained in WBID; 12 miles of roadways swept, with 756 lbs of debris collected and properly disposed of	Countywide – \$3,344,284	Ongoing
2203A	Lower Trout River	FDOT-120	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	Ongoing	Included in FDOT-99	Ongoing

Table B-4. JEA project table

Note: JEA's reporting period is primarily January 1 through December 31, except for lift station rehabilitation work, which is completed based on JEA's fiscal year.

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2280	Big Fishweir Creek	JEA-082	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>No 2016 activities completed in watershed</i>		Ongoing
2280	Big Fishweir Creek	JEA-083	Air Release Valve (ARV) Inspection and Rehabilitation	ARV inspection and rehab	<i>No 2016 activities completed in watershed</i>		Ongoing
2280	Big Fishweir Creek	JEA-086	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	<i>Project completed in previous years</i>		Ongoing
2280	Big Fishweir Creek	JEA-089	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2280	Big Fishweir Creek	JEA-090	Pipe Television (TV) Inspection	Inspect existing infrastructure using CCTV	<i>8,576 feet of pipe in Fiscal Year (FY) 16</i>		Ongoing
2280	Big Fishweir Creek	JEA-091	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>11,916 feet of pipe in FY16</i>		Ongoing
2280	Big Fishweir Creek	JEA-092	Implement Capacity, Management, Operations, and Maintenance (CMOM) Program	CMOM Program	Ongoing		Ongoing
2280	Big Fishweir Creek	JEA-093	Manhole Monitoring	Manhole monitoring	<i>No monitors installed in 2016</i>		Ongoing
2280	Big Fishweir Creek	JEA-094	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2280	Big Fishweir Creek	JEA-095	Pop-Top Program	Pop-Top Program	<i>42 inspections and 27 cleanings in 2016</i>		Ongoing
2280	Big Fishweir Creek	JEA-096	Non-Destructive Testing Program/ Pipe Integrity Testing	Nondestructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2280	Big Fishweir Creek	JEA-154	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>1 project completed in 2016 in watershed</i>	\$46,915	Ongoing
2280	Big Fishweir Creek	JEA-160	Lakeshore Force Main Replacement	Installation of 7,500 LF of 16" polyvinyl chloride (PVC) force main to replace deteriorating 16" ductile iron force main	<i>7,500 LF of pipe</i>	\$1,292,301	Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2207	Blockhouse Creek	JEA-101	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure			Ongoing
2207	Blockhouse Creek	JEA-102	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2207	Blockhouse Creek	JEA-103	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	No 2016 activities completed in watershed		Ongoing
2207	Blockhouse Creek	JEA-106	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2207	Blockhouse Creek	JEA-107	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2207	Blockhouse Creek	JEA-108	Pipe TV Inspection	Inspect existing infrastructure using CCTV	255 feet of pipe in 2016		Ongoing
2207	Blockhouse Creek	JEA-109	Pipe Cleaning	Clean existing pipes to avoid blockages	255 feet of pipe in 2016		Ongoing
2207	Blockhouse Creek	JEA-110	Implement CMOM Program	Implement CMOM Program	Ongoing		Ongoing
2207	Blockhouse Creek	JEA-111	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2207	Blockhouse Creek	JEA-112	Pop-Top Program	Pop-Top Program	2 inspections conducted in 2016		Ongoing
2207	Blockhouse Creek	JEA-113	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
BMAP I Tributaries	BMAP I Tributaries	JEA-162	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and other TAT efforts	Ongoing		Ongoing
BMAP I Tributaries	BMAP I Tributaries	JEA-163	Source Identification Follow Up	Assist DEP in following up on source identification results that indicate human source	Ongoing		Ongoing
BMAP I Tributaries	BMAP I Tributaries	JEA-164	Prioritize Infrastructure Improvements	Give priority to improving/repairing infrastructure close to surface waterbodies and stormwater conveyances	Ongoing		Ongoing
BMAP I Tributaries	BMAP I Tributaries	JEA-165	WTW Follow Up	Address any action items identified as result of 2014 WTW	Complete		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
BMAP I Tributaries	BMAP I Tributaries	JEA-166	Dumpster Inspection Program	Develop inspection program for dumpster areas and behind restaurants, convenience stores, and grocery stores	Implemented in 2015; <i>ongoing</i>		Ongoing
BMAP I Tributaries	BMAP I Tributaries	JEA-167	Sample Analysis	Continue to run analysis on up to 32 samples for the DEP Northeast District Office, and add <i>E. coli</i> and <i>Enterococci</i> sampling, as appropriate	Ongoing		Ongoing
BMAP II Tributaries	BMAP II Tributaries	JEA-232	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and other TAT efforts	Ongoing		Ongoing
BMAP II Tributaries	BMAP II Tributaries	JEA-233	Source Identification Follow Up	Assist DEP in following up on source identification results that indicate human source	Ongoing		Ongoing
BMAP II Tributaries	BMAP II Tributaries	JEA-234	Prioritize Infrastructure Improvements	Give priority to improving/repairing infrastructure close to surface waterbodies and stormwater conveyances	Ongoing		Ongoing
BMAP II Tributaries	BMAP II Tributaries	JEA-235	WTW Follow Up	Address any action items identified result of Phase 2 WTW	Complete		Ongoing
BMAP II Tributaries	BMAP II Tributaries	JEA-236	Dumpster Inspection Program	Develop inspection program for dumpster areas and behind restaurants, convenience stores, and grocery stores	Implemented in 2015; <i>ongoing</i>		Ongoing
BMAP II Tributaries	BMAP II Tributaries	JEA-237	Sample Analysis	Continue BMAP monitoring, with adjustments made as needed, and follow up on high results per TAT protocol. Add <i>E. coli</i> and <i>Enterococci</i> , as appropriate.	Ongoing		Ongoing
2322	Butcher Pen Creek	JEA-032	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2322	Butcher Pen Creek	JEA-033	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2322	Butcher Pen Creek	JEA-034	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2322	Butcher Pen Creek	JEA-035	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>No activities completed in 2016</i>		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2322	Butcher Pen Creek	JEA-037	ARV Inspection and Rehabilitation	ARV inspection and rehab	0 ARVs inspected; 0 ARVs rehabilitateds		Ongoing
2322	Butcher Pen Creek	JEA-038	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed.	Complete		Ongoing
2322	Butcher Pen Creek	JEA-039	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2322	Butcher Pen Creek	JEA-040	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	No 2016 activities completed in watershed		Ongoing
2322	Butcher Pen Creek	JEA-042	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2322	Butcher Pen Creek	JEA-043	Pipe TV Inspection	Inspect existing infrastructure using CCTV	1,451 feet of pipe inspected		Ongoing
2322	Butcher Pen Creek	JEA-044	Pipe Cleaning	Clean existing pipes to avoid blockages	1,088 feet of high-density polyethylene (HDPE) pipe cleaned; 1,034 feet of non-HDPE pipe cleaned		Ongoing
2322	Butcher Pen Creek	JEA-045	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2322	Butcher Pen Creek	JEA-046	Manhole Monitoring	Manhole monitoring	No monitors installed in 2016		Ongoing
2322	Butcher Pen Creek	JEA-047	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2322	Butcher Pen Creek	JEA-048	Pop-Top Program	Pop-Top Program	14 manholes inspected; 5 cleaned		Ongoing
2322	Butcher Pen Creek	JEA-049	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/pipe integrity testing	Ongoing		Ongoing
2381	Cormorant Branch	JEA-114	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2381	Cormorant Branch	JEA-115	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2381	Cormorant Branch	JEA-119	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	<i>Project completed in previous years</i>		Ongoing
2381	Cormorant Branch	JEA-120	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2381	Cormorant Branch	JEA-121	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>662 feet of pipe inspected</i>		Ongoing
2381	Cormorant Branch	JEA-122	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>1,387 feet of HDPE pipe cleaned; 1,565 feet of non-HDPE pipe cleaned</i>		Ongoing
2381	Cormorant Branch	JEA-123	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2381	Cormorant Branch	JEA-124	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2381	Cormorant Branch	JEA-125	Pop-Top Program	Pop-Top Program	<i>12 manholes inspected; 4 cleaned</i>		Ongoing
2381	Cormorant Branch	JEA-126	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2381	Cormorant Branch	JEA-216	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	<i>No 2016 activities completed in watershed</i>		Ongoing
2381	Cormorant Branch	JEA-222	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>2 projects completed in 2016 in watershed</i>	\$112,228	Ongoing
2297	Craig Creek	JEA-001	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2297	Craig Creek	JEA-002	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2297	Craig Creek	JEA-003	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>No activities completed in 2016</i>		Ongoing
2297	Craig Creek	JEA-006	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>No 2016 activities completed in watershed</i>		Ongoing
2297	Craig Creek	JEA-008	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>2,942 feet of pipe inspected</i>		Ongoing
2297	Craig Creek	JEA-009	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>1,011 feet of HDPE pipe cleaned; 5,053 feet of non-HDPE pipe cleaned</i>		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2297	Craig Creek	JEA-010	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2297	Craig Creek	JEA-011	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2297	Craig Creek	JEA-012	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2297	Craig Creek	JEA-013	Pop-Top Program	Pop-Top Program	29 manholes inspected; 19 cleaned		Ongoing
2297	Craig Creek	JEA-014	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2297	Craig Creek	JEA-198	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2297	Craig Creek	JEA-214	ARV Inspection and Rehabilitation	ARV inspection and rehab	No 2016 activities completed in watershed		Ongoing
2361	Deep Bottom Creek	JEA-073	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2361	Deep Bottom Creek	JEA-074	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2361	Deep Bottom Creek	JEA-075	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	No 2016 activities completed in watershed		Ongoing
2361	Deep Bottom Creek	JEA-078	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2361	Deep Bottom Creek	JEA-079	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2361	Deep Bottom Creek	JEA-080	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2361	Deep Bottom Creek	JEA-081	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2361	Deep Bottom Creek	JEA-082	Pop-Top Program	Pop-Top Program	12 manholes inspected; 13 cleaned		Ongoing
2361	Deep Bottom Creek	JEA-083	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2361	Deep Bottom Creek	JEA-199	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2361	Deep Bottom Creek	JEA-200	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	No		Ongoing
2361	Deep Bottom Creek	JEA-201	Pipe Cleaning	Clean existing pipes to avoid blockages	2,362 feet of pipe cleaned		Ongoing
2361	Deep Bottom Creek	JEA-202	Pipe TV Inspection	Inspect existing infrastructure using CCTV	356 feet of pipe inspected		Ongoing
2256	Deer Creek	JEA-097	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2256	Deer Creek	JEA-098	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2256	Deer Creek	JEA-099	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2256	Deer Creek	JEA-100	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2256	Deer Creek	JEA-102	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2256	Deer Creek	JEA-104	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2256	Deer Creek	JEA-105	Pipe TV Inspection	Inspect existing infrastructure using CCTV	3106 feet of pipe inspected		Ongoing
2256	Deer Creek	JEA-106	Pipe Cleaning	Clean existing pipes to avoid blockages	2,453 feet of HDPE pipe cleaned; 4,644 feet of non-HDPE pipe cleaned		Ongoing
2256	Deer Creek	JEA-107	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2256	Deer Creek	JEA-108	Manhole Monitoring	Manhole monitoring	No monitoring in watershed		Ongoing
2256	Deer Creek	JEA-109	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2256	Deer Creek	JEA-110	Pop-Top Program	Pop-Top Program	21 manholes inspected; 8 cleaned		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2256	Deer Creek	JEA-111	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2256	Deer Creek	JEA-154	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>No 2016 activities completed in watershed</i>		Ongoing
2256	Deer Creek	JEA-160	Lakeshore Force Main Replacement	Install 7,500 LF of 16" PVC force main to replace deteriorating 16" ductile iron force main	Ongoing		Ongoing
2256	Deer Creek	JEA-161	Lower East Side Drainage Improvements	Installation of new sewer infrastructure to accommodate stormwater improvements	Ongoing	\$429,000	Ongoing
2324	Fishing Creek	JEA-055	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2324	Fishing Creek	JEA-056	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2324	Fishing Creek	JEA-057	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2324	Fishing Creek	JEA-058	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>1 manhole rehabbed in 2016</i>		Ongoing
2324	Fishing Creek	JEA-059	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	<i>No 2016 activities completed in watershed</i>		Ongoing
2324	Fishing Creek	JEA-061	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	<i>Project completed in previous years</i>		Ongoing
2324	Fishing Creek	JEA-062	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>No 2016 activities completed in watershed</i>		Ongoing
2324	Fishing Creek	JEA-065	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2324	Fishing Creek	JEA-066	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>2,575 feet of pipe inspected</i>		Ongoing
2324	Fishing Creek	JEA-067	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>10,499 feet of non-HDPE pipe cleaned</i>		Ongoing
2324	Fishing Creek	JEA-068	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2324	Fishing Creek	JEA-069	Manhole Monitoring	Manhole monitoring	<i>1 monitor installed in watershed</i>		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2324	Fishing Creek	JEA-070	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2324	Fishing Creek	JEA-071	Pop-Top Program	Pop-Top Program	41 manholes inspected; 63 cleaned		Ongoing
2324	Fishing Creek	JEA-072	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2324	Fishing Creek	JEA-209	HDPE Pipe Cleaning – Contractor	Clean existing HDPE pipes to avoid blockages	1,207 feet of HDPE pipe cleaned		Ongoing
2326	Goodbys Creek	JEA-123	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2326	Goodbys Creek	JEA-124	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2326	Goodbys Creek	JEA-125	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2326	Goodbys Creek	JEA-126	ARV Inspection and Rehabilitation	ARV inspection and rehab	No 2016 activities completed in watershed		Ongoing
2326	Goodbys Creek	JEA-128	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2326	Goodbys Creek	JEA-129	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	2 projects completed in 2016 in watershed	\$60,109	Ongoing
2326	Goodbys Creek	JEA-130	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2326	Goodbys Creek	JEA-131	Pipe TV Inspection	Inspect existing infrastructure using CCTV	1,382 feet of pipe inspected		Ongoing
2326	Goodbys Creek	JEA-132	Pipe Cleaning	Clean existing pipes to avoid blockages	305 feet of HDPE pipe cleaned; 3,217 feet of other pipe cleaned		Ongoing
2326	Goodbys Creek	JEA-133	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2326	Goodbys Creek	JEA-134	Manhole Monitoring	Manhole monitoring	1 manhole monitored in watershed		Ongoing
2326	Goodbys Creek	JEA-135	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2326	Goodbys Creek	JEA-136	Pop-Top Program	Pop-Top Program	19 manholes inspected; 14 cleaned		Ongoing
2326	Goodbys Creek	JEA-137	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2240	Greenfield Creek	JEA-142	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2240	Greenfield Creek	JEA-143	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2240	Greenfield Creek	JEA-144	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	8 ARVs inspected in 2016		Ongoing
2240	Greenfield Creek	JEA-148	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	See Appendix I of the supporting document	Project completed in previous years		Ongoing
2240	Greenfield Creek	JEA-149	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	No 2016 activities completed in watershed		Ongoing
2240	Greenfield Creek	JEA-150	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2240	Greenfield Creek	JEA-151	Pipe TV Inspection	Inspect existing infrastructure using CCTV	734 feet in pipe inspected		Ongoing
2240	Greenfield Creek	JEA-152	Pipe Cleaning	Clean existing pipes to avoid blockages	2,192 feet of non-HDPE pipe cleaned		Ongoing
2240	Greenfield Creek	JEA-153	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2240	Greenfield Creek	JEA-154	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2240	Greenfield Creek	JEA-155	Pop-Top Program	Pop-Top Program	12 manholes inspected		Ongoing
2240	Greenfield Creek	JEA-156	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2240	Greenfield Creek	JEA-210	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2240B	Greenfield Creek	JEA-227	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2240A	Greenfield Creek	JEA-228	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2252	Hogan Creek	JEA-017	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2252	Hogan Creek	JEA-018	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2252	Hogan Creek	JEA-019	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2252	Hogan Creek	JEA-020	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	1 manhole lining rehabilitated		Ongoing
2252	Hogan Creek	JEA-022	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2252	Hogan Creek	JEA-023	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	1 project completed in 2016 in watershed	\$17,350	Ongoing
2252	Hogan Creek	JEA-024	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2252	Hogan Creek	JEA-025	Pipe TV Inspection	Inspect existing infrastructure using CCTV	12,830 LF of pipe inspected		Ongoing
2252	Hogan Creek	JEA-026	Pipe Cleaning	Clean existing pipes to avoid blockages	18,741 LF of HDPE pipe cleaned, 32,280 feet of other pipe cleaned		Ongoing
2252	Hogan Creek	JEA-027	Implement CMOM Program	CMOM Program	N/A		Ongoing
2252	Hogan Creek	JEA-028	Manhole Monitoring	Manhole monitoring	2 manhole monitors installed in watershed		Ongoing
2252	Hogan Creek	JEA-029	SSO Root Cause Program	SSO Root Cause Program	N/A		Ongoing
2252	Hogan Creek	JEA-030	Pop-Top Program	Pop-Top Program	135 manholes inspected; 162 cleaned		Ongoing
2252	Hogan Creek	JEA-031	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2252	Hogan Creek	JEA-156	ARV Inspection and Rehabilitation	ARV inspection and rehab	No 2016 activities completed in watershed		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2252	Hogan Creek	JEA-158	State Street and Union Street Sewer Improvements	JEA existing sewer infrastructure in core city downtown area has reached its useful life expectancy; this project will replace deteriorated sewer mains within project boundaries	4,500 LF of gravity lines; 1,400 LF of 6" force main	\$2,276,000	Ongoing
2252	Hogan Creek	JEA-159	11th and 12th Street Connector	Installation of new sewer infrastructure to accommodate stormwater improvements	Ongoing		Ongoing
2203A	Lower Trout River	JEA-187	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2203A	Lower Trout River	JEA-189	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2203A	Lower Trout River	JEA-190	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	2 projects completed in 2016 in watershed	\$35,450	Ongoing
2203A	Lower Trout River	JEA-193	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2203A	Lower Trout River	JEA-194	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2203A	Lower Trout River	JEA-195	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2203A	Lower Trout River	JEA-196	Pop-Top Program	Pop-Top Program	63 manholes inspected; 40 cleaned		Ongoing
2203A	Lower Trout River	JEA-197	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2203A	Lower Trout River	JEA-207	Pipe Cleaning	Clean existing pipes to avoid blockages	9,810 feet of non-HDPE pipe cleaned		Ongoing
2203A	Lower Trout River	JEA-208	Pipe TV Inspection	Inspect existing infrastructure using CCTV	5,510 feet of pipe inspected		Ongoing
2203A	Lower Trout River	JEA-211	HDPE Pipe Cleaning – Contractor	Clean existing HDPE pipes to avoid blockages	3,901 feet of HDPE pipe cleaned		Ongoing
2203A	Lower Trout River	JEA-220	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2203A	Lower Trout River	JEA-028	Manhole Monitoring	Manhole monitoring	1 monitor installed in watershed		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2203A	Lower Trout River	JEA-221	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	<i>No 2016 activities completed in watershed</i>		Ongoing
2257	McCoy Creek	JEA-018	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2257	McCoy Creek	JEA-019	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2257	McCoy Creek	JEA-020	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2257	McCoy Creek	JEA-021	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>3 manholes relined</i>		Ongoing
2257	McCoy Creek	JEA-022	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	<i>1 ARV rehabbed</i>		Ongoing
2257	McCoy Creek	JEA-024	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	<i>Project completed in previous years</i>		Ongoing
2257	McCoy Creek	JEA-025	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>No 2016 activities completed in watershed</i>		Ongoing
2257	McCoy Creek	JEA-027	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2257	McCoy Creek	JEA-028	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>8057 feet of pipe inspected</i>		Ongoing
2257	McCoy Creek	JEA-029	HDPE Pipe Cleaning – Contractor	Clean existing HDPE pipes to avoid blockages	<i>22,812 feet of HDPE pipe cleaned</i>		Ongoing
2257	McCoy Creek	JEA-030	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>12,292 feet of non-HDPE pipe cleaned</i>		Ongoing
2257	McCoy Creek	JEA-031	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2257	McCoy Creek	JEA-032	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2257	McCoy Creek	JEA-033	Pop-Top Program	Pop-Top Program	<i>146 manholes inspected; 166 cleaned</i>		Ongoing
2257	McCoy Creek	JEA-034	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/pipe integrity testing	Ongoing		Ongoing
2203	Middle Trout River	JEA-171	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>No 2016 activities completed in watershed</i>		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2203	Middle Trout River	JEA-172	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	1 ARV inspected		Ongoing
2203	Middle Trout River	JEA-174	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	See Appendix I of the supporting document	Project completed in previous years		Ongoing
2203	Middle Trout River	JEA-175	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	No 2016 activities completed in watershed		Ongoing
2203	Middle Trout River	JEA-178	FOG Reduction Program	See Appendix I of the supporting document	Ongoing		Ongoing
2203	Middle Trout River	JEA-179	Pipe TV Inspection	Inspect existing infrastructure using CCTV	5,560 feet of pipe inspected		Ongoing
2203	Middle Trout River	JEA-180	Pipe Cleaning	Clean existing pipes to avoid blockages	9,810 feet of pipe cleaned		Ongoing
2203	Middle Trout River	JEA-181	HDPE Pipe Cleaning – Contractor	Clean existing HDPE pipes to avoid blockages	3,901 feet of pipe cleaned		Ongoing
2203	Middle Trout River	JEA-182	Pipe Cleaning	Clean existing pipes to avoid blockages	9,810 feet of pipe cleaned		Ongoing
2203	Middle Trout River	JEA-183	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2203	Middle Trout River	JEA-184	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2203	Middle Trout River	JEA-185	Pop-Top Program	Pop-Top Program	49 manholes inspected; 63 cleaned		Ongoing
2203	Middle Trout River	JEA-186	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2203	Middle Trout River	JEA-219	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2287	Miller Creek	JEA-050	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2287	Miller Creek	JEA-051	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2287	Miller Creek	JEA-052	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	1 manhole relined		Ongoing
2287	Miller Creek	JEA-053	ARV Inspection and Rehabilitation	ARV inspection and rehab	No 2016 activities completed in watershed		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2287	Miller Creek	JEA-055	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary		<i>Project completed in previous years</i>		Ongoing
2287	Miller Creek	JEA-056	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2287	Miller Creek	JEA-057	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>1,640 feet of pipe inspected</i>		Ongoing
2287	Miller Creek	JEA-058	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>3,331 feet of HDPE pipe cleaned; 1,593 feet of non-HDPE pipe cleaned</i>		Ongoing
2287	Miller Creek	JEA-059	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2287	Miller Creek	JEA-060	Manhole Monitoring	Manhole monitoring	<i>No monitoring in watershed</i>		Ongoing
2287	Miller Creek	JEA-061	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2287	Miller Creek	JEA-062	Pop-Top Program	Pop-Top Program	<i>17 manholes inspected; 20 cleaned</i>		Ongoing
2287	Miller Creek	JEA-063	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2304	Miramar Creek	JEA-064	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2304	Miramar Creek	JEA-065	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>No 2016 activities completed in watershed</i>		Ongoing
2304	Miramar Creek	JEA-066	ARV Inspection and Rehabilitation	ARV inspection and rehab	<i>No 2016 activities completed in watershed</i>		Ongoing
2304	Miramar Creek	JEA-068	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	<i>Project completed in previous years</i>		Ongoing
2304	Miramar Creek	JEA-069	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>No 2016 activities completed in watershed</i>		Ongoing
2304	Miramar Creek	JEA-072	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2304	Miramar Creek	JEA-073	Pipe Cleaning	Clean existing pipes to avoid blockages	878 LF of pipe cleaned		Ongoing
2304	Miramar Creek	JEA-074	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2304	Miramar Creek	JEA-075	Manhole Monitoring	Manhole monitoring	No monitors installed in watershed in 2016		Ongoing
2304	Miramar Creek	JEA-076	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2304	Miramar Creek	JEA-077	Pop-Top Program	Pop-Top Program	1 manhole inspected		Ongoing
2304	Miramar Creek	JEA-078	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2304	Miramar Creek	JEA-157	Pipe TV Inspection	Inspect existing infrastructure using CCTV	878 feet of pipe inspected		Ongoing
2228	Moncrief Creek	JEA-084	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2228	Moncrief Creek	JEA-085	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2228	Moncrief Creek	JEA-086	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	3 manholes relined		Ongoing
2228	Moncrief Creek	JEA-087	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	No 2016 activities completed in watershed		Ongoing
2228	Moncrief Creek	JEA-091	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2228	Moncrief Creek	JEA-092	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2228	Moncrief Creek	JEA-093	HDPE Pipe Cleaning – Contractor	Clean existing HDPE pipes to avoid blockages	4,574 feet of HDPE pipe cleaned		Ongoing
2228	Moncrief Creek	JEA-094	Pipe TV Inspection	Inspect existing infrastructure using CCTV	6,880 feet of pipe cleaned		Ongoing
2228	Moncrief Creek	JEA-095	Pipe Cleaning	Clean existing pipes to avoid blockages	24,131 feet of non-HDPE pipe cleaned		Ongoing
2228	Moncrief Creek	JEA-096	Implement CMOM Program	CMOM Program	Ongoing		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2228	Moncrief Creek	JEA-097	Manhole Monitoring	Manhole monitoring	3 monitors installed in watershed in 2016		Ongoing
2228	Moncrief Creek	JEA-098	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2228	Moncrief Creek	JEA-099	Pop-Top Program	Pop-Top Program	104 manholes inspected; 108 cleaned		Ongoing
2228	Moncrief Creek	JEA-100	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2228	Moncrief Creek	JEA-203	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2228	Moncrief Creek	JEA-212	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	No 2016 activities completed in watershed		Ongoing
2228B	Moncrief Creek	JEA-223	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2228B	Moncrief Creek	JEA-224	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	Ongoing		Ongoing
2228A	Moncrief Creek	JEA-225	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2228A	Moncrief Creek	JEA-226	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	Ongoing		Ongoing
2235	Newcastle Creek	JEA-001	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2235	Newcastle Creek	JEA-002	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2235	Newcastle Creek	JEA-003	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2235	Newcastle Creek	JEA-004	ARV Inspection and Rehabilitation		1 ARV inspected; 1 rehabbed		Ongoing
2235	Newcastle Creek	JEA-005	Pump Station SCADA Upgrades	Retrofit completed in 2004; all stations constructed since have SCADA installed. See Appendix E .	Completed		Ongoing
2235	Newcastle Creek	JEA-006	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2235	Newcastle Creek	JEA-007	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>No 2016 activities completed in watershed</i>		Ongoing
2235	Newcastle Creek	JEA-008	FOG Reduction Program		Ongoing		Ongoing
2235	Newcastle Creek	JEA-009	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>1,105 LF of pipe inspected</i>		Ongoing
2235	Newcastle Creek	JEA-010	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>1,152 LF of pipe cleaned</i>		Ongoing
2235	Newcastle Creek	JEA-011	Implement CMOM Program		Ongoing		Ongoing
2235	Newcastle Creek	JEA-012	Manhole Monitoring	Manhole monitoring	<i>2 monitors installed in watershed in 2016</i>		Ongoing
2235	Newcastle Creek	JEA-013	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2235	Newcastle Creek	JEA-014	Pop-Top Program		<i>6 manholes inspected; 5 cleaned</i>		Ongoing
2235	Newcastle Creek	JEA-015	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/pipe integrity testing	Ongoing		Ongoing
2299	Open Creek	JEA-138	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2299	Open Creek	JEA-139	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2299	Open Creek	JEA-140	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	<i>No 2016 activities completed in watershed</i>		Ongoing
2299	Open Creek	JEA-141	ARV Inspection and Rehabilitation	ARV inspection and rehab	<i>9 ARVs inspected</i>		Ongoing
2299	Open Creek	JEA-143	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	<i>Project completed in previous years</i>		Ongoing
2299	Open Creek	JEA-146	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2299	Open Creek	JEA-147	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>1,773 feet of pipe inspected</i>		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2299	Open Creek	JEA-148	Pipe Cleaning	Clean existing pipes to avoid blockages	6,401 feet of HDPE pipe cleaned; 1,316 feet of non-HDPE pipe cleaned		Ongoing
2299	Open Creek	JEA-149	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2299	Open Creek	JEA-150	Manhole Monitoring	Manhole monitoring	1 manhole monitored in watershed		Ongoing
2299	Open Creek	JEA-151	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2299	Open Creek	JEA-152	Pop-Top Program	Pop-Top Program	10 manholes inspected; 4 cleaned		Ongoing
2299	Open Creek	JEA-153	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2299	Open Creek	JEA-155	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	No 2016 activities completed in watershed		Ongoing
2265	Pottsburg Creek	JEA-157	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2265	Pottsburg Creek	JEA-158	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	2 manholes relined		Ongoing
2265	Pottsburg Creek	JEA-159	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	No 2016 activities completed in watershed		Ongoing
2265	Pottsburg Creek	JEA-163	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2265	Pottsburg Creek	JEA-164	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2265	Pottsburg Creek	JEA-165	Pipe TV Inspection	Inspect existing infrastructure using CCTV	1,314 feet of pipe inspected		Ongoing
2265	Pottsburg Creek	JEA-166	Pipe Cleaning	Clean existing pipes to avoid blockages	325 feet of HDPE pipe cleaned; 3,865 feet of non-HDPE pipe cleaned		Ongoing
2265	Pottsburg Creek	JEA-167	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2265	Pottsburg Creek	JEA-168	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2265	Pottsburg Creek	JEA-169	Pop-Top Program	Pop-Top Program	10 manholes inspected; 14 cleaned		Ongoing
2265	Pottsburg Creek	JEA-170	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2265	Pottsburg Creek	JEA-206	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2265	Pottsburg Creek	JEA-213	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	3 projects completed in 2016 in watershed	\$242,084	Ongoing
2265	Pottsburg Creek	JEA-219	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing
2204	Terrapin Creek	JEA-112	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2204	Terrapin Creek	JEA-113	ARV Inspection and Rehabilitation	See Appendix E	No 2016 activities completed in watershed		Ongoing
2204	Terrapin Creek	JEA-116	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2204	Terrapin Creek	JEA-117	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2204	Terrapin Creek	JEA-118	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2204	Terrapin Creek	JEA-119	Manhole Monitoring	Manhole monitoring	No monitoring in watershed		Ongoing
2204	Terrapin Creek	JEA-120	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2204	Terrapin Creek	JEA-121	Pop-Top Program	Pop-Top Program	No 2016 activities completed in watershed		Ongoing
2204	Terrapin Creek	JEA-122	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2316	Williamson Creek	JEA-037	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2316	Williamson Creek	JEA-038	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Table B-6		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2316	Williamson Creek	JEA-039	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2316	Williamson Creek	JEA-040	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	No 2016 activities completed in watershed		Ongoing
2316	Williamson Creek	JEA-042	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes; repair/rehabilitate as necessary	Project completed in previous years		Ongoing
2316	Williamson Creek	JEA-043	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2316	Williamson Creek	JEA-044	Pipe TV Inspection	Inspect existing infrastructure using CCTV	1,417 feet of pipe inspected		Ongoing
2316	Williamson Creek	JEA-045	HDPE Pipe Cleaning – Contractor	Clean existing HDPE pipes to avoid blockages	3,780 feet of HDPE pipe cleaned		Ongoing
2316	Williamson Creek	JEA-046	Pipe Cleaning	Clean existing pipes to avoid blockages	3,398 feet of non-HDPE pipe cleaned		Ongoing
2316	Williamson Creek	JEA-047	Implement CMOM Program	CMOM Program	Ongoing		Ongoing
2316	Williamson Creek	JEA-048	Manhole Monitoring	Manhole monitoring	1 monitor installed in watershed in 2016		Ongoing
2316	Williamson Creek	JEA-049	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2316	Williamson Creek	JEA-050	Pop-Top Program	Pop-Top Program	26 manholes inspected; 28 cleaned		Ongoing
2316	Williamson Creek	JEA-051	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2316	Williamson Creek	JEA-215	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	Table B-6		Ongoing
2282	Wills Branch	JEA-127	Pipe Bursting – Increase Carrying Capacity	Replace failing/leaking infrastructure	Table B-6		Ongoing
2282	Wills Branch	JEA-128	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	No 2016 activities completed in watershed		Ongoing
2282	Wills Branch	JEA-129	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	9 ARVs inspected		Ongoing

WBID Number	Waterbody Name	Project Number	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2282	Wills Branch	JEA-133	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary		<i>Project completed in previous years</i>		Ongoing
2282	Wills Branch	JEA-134	FOG Reduction Program	FOG Reduction Program	Ongoing		Ongoing
2282	Wills Branch	JEA-135	Pipe TV Inspection	Inspect existing infrastructure using CCTV	<i>1,483 feet of pipe inspected</i>		Ongoing
2282	Wills Branch	JEA-136	Pipe Cleaning	Clean existing pipes to avoid blockages	<i>1,769 feet of non-HDPE pipe cleaned</i>		Ongoing
2282	Wills Branch	JEA-137	Implement CMOM Program	CMOM Program	<i>Ongoing</i>		Ongoing
2282	Wills Branch	JEA-138	Manhole Monitoring	Manhole monitoring	<i>2 monitors installed in watershed in 2016</i>		Ongoing
2282	Wills Branch	JEA-139	SSO Root Cause Program	SSO Root Cause Program	Ongoing		Ongoing
2282	Wills Branch	JEA-140	Pop-Top Program	Pop-Top Program	<i>1,917 manholes inspected</i>		Ongoing
2282	Wills Branch	JEA-141	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/ pipe integrity testing	Ongoing		Ongoing
2282	Wills Branch	JEA-204	Open Cut – Removal and Replacement	Replace failing/leaking infrastructure	<i>Table B-6</i>		Ongoing
2282	Wills Branch	JEA-205	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	<i>2 projects completed in 2016 in watershed</i>	\$94,347	Ongoing
2282	Wills Branch	JEA-217	CIPP – Install New Inner Lining	Rehabilitate failing/leaking infrastructure	<i>Table B-6</i>		Ongoing

Table B-5. JEA pump station projects by WBID

WBID Number	Waterbody Name	Project Name	Project Description	Level of Effort	Estimated Cost	Project Status
2235	Big Fishweir Creek	<i>Purchase Diesel Driven Back Up Pumps</i>	<i>Pump stations diesel back-up pumps</i>	<i>Pump replaced</i>	<i>\$46,915.20</i>	<i>Completed</i>
2252	Hogan's Creek	<i>Pumping Stations Capital Equipment Replacement</i>	<i>834 Bay Street Pump #3 rebuild</i>	<i>Pump # 3rebuilt</i>	<i>\$17,350.33</i>	<i>Completed</i>
2282	Willis Branch	<i>Pumping Stations Class I and II Rehabs</i>	<i>505 Addor Lane rehab</i>	<i>Replaced pumps; installed wet well liner; installed new pipe and valves</i>	<i>\$79,218.34</i>	<i>Completed</i>
2282	Willis Branch	<i>SCADA Remote Terminal Unit (RTU) and Control Panel Upgrades</i>	<i>505 Addor Lane rehab</i>	<i>Replaced motor control center (MCC)</i>	<i>\$15,128.33</i>	<i>Completed</i>
2326	Goodbys Creek	<i>Pumping Stations Class I and II Rehabs</i>	<i>7611 Baymeadows Way rehab</i>	<i>Replaced pipes and valves</i>	<i>\$16,050.65</i>	<i>Completed</i>
2326	Goodbys Creek	<i>Purchase Diesel Driven Back Up Pumps</i>	<i>Pump stations diesel back-up pumps</i>	<i>Pump purchased</i>	<i>\$44,057.93</i>	<i>Completed</i>
2381	Cormorant Branch	<i>Pumping Stations Capital Equipment Replacement</i>	<i>10656 Kennedy Lane pump replacement</i>	<i>Pumps replaced</i>	<i>\$68,170.49</i>	<i>Completed</i>
2381	Cormorant Branch	<i>Purchase Diesel Driven Back Up Pumps</i>	<i>Pump stations diesel back-up pumps</i>	<i>Pump purchased</i>	<i>\$44,057.93</i>	<i>Completed</i>
2203A	Lower Trout River	<i>Pumping Stations Class I and II Rehabs</i>	<i>1001 Broward Rd. rehab</i>	<i>Installed wet well liner; installed new pipe and valves</i>	<i>\$23,904.96</i>	<i>Completed</i>
2203A	Lower Trout River	<i>Cost Center HW 30121 Operations and Maintenance (O&M)</i>	<i>9495 Lem Turner Rd. pump replacements</i>	<i>Pumps replaced</i>	<i>\$11,545.24</i>	<i>Completed</i>
2265B	Pottsburg Creek	<i>Pumping Stations Class I and II Rehabs</i>	<i>8621 Blarney Stone Ct. rehab</i>	<i>Installed new wet well, pumps, pipe, valves, MCC</i>	<i>\$207,229.73</i>	<i>Completed</i>
2265B	Pottsburg Creek	<i>Pumping Stations Capital Equipment Replacement</i>	<i>8153 Gate Parkway pump replacements</i>	<i>Pumps replaced</i>	<i>\$20,566.26</i>	<i>Completed</i>
2265B	Pottsburg Creek	<i>Pumping Stations Capital Equipment Replacement</i>	<i>6817 Bowden Rd. pump replacement</i>	<i>Pumps replaced</i>	<i>\$14,288.00</i>	<i>Completed</i>

Table B-6. JEA systemwide CIPP, pipe bursting, and open cut totals

Project	LF of Gravity	LF of Force Main	LF of Gravity and Force Main
Open Cut Totals	2,899	4,103	
CIPP Totals			2,699
Pipe Bursting Totals			6,019

Table B-7. JEA manhole monitoring by WBID

WBID	Waterbody Name	Number of Manhole Monitors in WBID
2324	Fishing Creek	1
2326B	Goodbys Creek (marine segment)	1
2252	Hogan Creek	2
2284B	Little Pottsburg Creek (freshwater segment)	1
2257	McCoy Creek	1
2228B	Moncrief Creek (freshwater segment)	3
2235	Newcastle Creek	2
2299B	Open Creek (freshwater segment)	1
2203A	Trout River Lower Reach	1
2316	Williamson Creek	2
2282	Wills Branch (North Prong)	2
2277	Wills Branch (West Prong)	1

Table B-8. FDOH project table for annual operating permits, application and site reviews, and complaint investigations

Notes: The FDOH reporting period is January 1 through December 31, 2016. All the projects listed below are ongoing projects.

N/A = Not applicable

WBID Number	WBID Name	Annual Operating Permits – Estimated Cost	Annual Operating Permits – Level of Effort (no. of permits issued)	Application/Plan Review/Site Evaluations – Estimated Cost	Application/Plan Review/Site Evaluations – Level of Effort (no. of evaluations performed)	Complaint Investigations – Estimated Cost	Complaint Investigations – Level of Effort (no. of complaints received)
2235	Newcastle Creek	\$400	2 annual operating permits issued for Industrial/Manufacturing Zone (IMZ) in WBID	\$315	1 plan review and site evaluation performed in WBID	N/A	No complaint investigations performed in WBID
2252	Hogan Creek	N/A	No annual operating permit issued in WBID	N/A	No plan reviews or site evaluations performed in WBID	N/A	No complaint investigation performed in WBID
2322	Butcher Pen Creek	\$2,400	12 annual operating permits issued for Performance-Based Treatment and Disposal System (PBTS)/IMZ in WBID	\$945	3 plan reviews or site evaluations performed in WBID	N/A	No complaint investigations performed in WBID
2287	Miller Creek	\$600	6 operating permits issued for PBTS/IMZ in WBID	\$945	2 plan reviews and site evaluations performed in WBID	N/A	No complaint investigation performed in WBID
2304	Miramar Creek	\$6,000	30 annual operating permits issued for PBTS/IMZ in WBID	\$5,680	16 plan reviews and site evaluations performed in WBID	N/A	No complaint investigations performed in WBID
2280	Big Fishweir Creek	N/A	N/A	N/A	N/A	N/A	N/A
2256	Deer Creek	\$800	4 annual operating permits issued for PBTS/IMZ in WBID	N/A	No plan reviews or site evaluations performed in WBID	N/A	No complaints investigated in WBID
2204	Terrapin Creek	\$5,200	26 annual operating permits issued for PBTS/IMZ in WBID	N/A	No plan review or site evaluation performed in WBID	N/A	No complaints investigated in WBID
2326	Goodbys Creek	\$5,400	27 annual operating permits for PBTS/IMZ located in WBID	\$945	3 plan reviews or site evaluations performed in WBID	N/A	No complaint investigations performed in WBID
2299	Open Creek	\$800	4 annual operating permits for PBTS/IMZ located in WBID	\$465	2 plan review or site evaluation performed in WBID	N/A	No complaints received in WBID

WBID Number	WBID Name	Annual Operating Permits – Estimated Cost	Annual Operating Permits – Level of Effort (no. of permits issued)	Application/Plan Review/Site Evaluations – Estimated Cost	Application/Plan Review/Site Evaluations – Level of Effort (no. of evaluations performed)	Complaint Investigations – Estimated Cost	Complaint Investigations – Level of Effort (no. of complaints received)
2297	Craig Creek	\$800	4 annual operating permits issued for IMZ property	\$1,260	4 plan reviews and site evaluations performed	N/A	No complaint investigations performed in WBID
2257	McCoy Creek	\$2,000	10 annual operating permits issued for IMZ and commercial properties	N/A	No plan reviews or site evaluations performed	\$450	3 complaints investigated in WBID
2316	Williamson Creek	\$800	4 annual operating permits issued for IMZ and/or commercial properties	N/A	N/A	N/A	No complaint investigations performed
2324	Fishing Creek	N/A	N/A	N/A	N/A	\$300	2 complaint investigations performed
2361	Deep Bottom Creek	N/A	N/A	N/A	No plan review and site evaluation performed	N/A	No complaints investigated
2228	Moncrief Creek	\$3,200	16 annual operating permits issued for IMZ/commercial properties	\$2,520	8 plan reviews and site evaluations performed	\$600	3 complaints investigated in WBID
2207	Blockhouse Creek	\$4,800	24 annual operating permits issued for IMZ/commercial properties	\$2,205	7 plan reviews and site evaluations performed	N/A	No complaints investigated in WBID
2266	Hopkins Creek	\$200	2 operating permits issued for IMZ properties	\$465	2 plan review and site evaluation performed	\$200	1 complaint investigated in WBID
2381	Cormorant Branch	N/A	N/A	\$315	1 plan review and site evaluation performed	N/A	No complaints investigated
2282	Wills Branch	\$4,000	20 annual operating permits issued for IMZ/commercial properties	\$945	3 plan reviews and site evaluations	N/A	No complaints investigated in WBID
2227	Sherman Creek	\$1,200	6 annual operating permits issued for IMZ/ commercial properties	N/A	No plan review or site evaluation performed	\$200	No complaints investigated
2240	Greenfield Creek	N/A	No annual operating permit issued for IMZ property	N/A	No plan reviews and site evaluations performed in WBID	N/A	No complaints investigated
2265B	Pottsburg Creek	\$8,600	43 annual operating permits issued for IMZ/commercial properties	\$5,985	19 plan reviews and site evaluations performed	\$800	4 complaints investigated

WBID Number	WBID Name	Annual Operating Permits – Estimated Cost	Annual Operating Permits – Level of Effort (no. of permits issued)	Application/Plan Review/Site Evaluations – Estimated Cost	Application/Plan Review/Site Evaluations – Level of Effort (no. of evaluations performed)	Complaint Investigations – Estimated Cost	Complaint Investigations – Level of Effort (no. of complaints received)
2203	Middle Trout River	\$8,600	43 annual operating permits issued for IMZ/commercial properties	\$3,780	12 plan reviews and site evaluations performed	\$300	2 complaints investigated
2203A	Lower Trout River	\$16,400	82 annual operating permits issued for IMZ/commercial properties	\$7,560	24 plan reviews and site evaluations performed	\$300	2 complaints investigated

Table B-9. FDOH project table for training programs, Onsite Sewage Treatment and Disposal System (OSTDS) Program, septic tank failure ranking, and Surface Water Improvement and Management (SWIM) project

Notes: The FDOH reporting period is January 1 through December 31, 2016. All the projects listed below are ongoing projects.

N/A = Not applicable

WBID Number	WBID Name	FDOH-Sponsored Training Programs – Estimated Cost	FDOH-Sponsored Training Programs – Level of Effort (no. of annual trainings)	OSTDS Program – Estimated Cost	OSTDS Program – Level of Effort (no. of permits issued)	Septic Tank Failure Area Ranking – Estimated Cost	Septic Tank Failure Area Ranking – Level of Effort	SWIM Project – Estimated Cost	SWIM Project – Level of Effort
2235	Newcastle Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$585	1 repair and 3 abandonment permits	N/A	Less than 1 year since previous update	N/A	N/A
2252	Hogan Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	N/A	No abandonment permits issued in WBID	N/A	Less than 1 year since previous update	N/A	N/A
2322	Butcher Pen Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$1,500	3 repair permits issued in WBID	N/A	Less than 1 year since previous update	N/A	N/A
2287	Miller Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$1,200	2 new construction permits issued in WBID	N/A	Less than 1 year since previous update	N/A	N/A
2304	Miramar Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$10,020	2 new, 14 repair, and 6 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2280	Big Fishweir Creek	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2256	Deer Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	N/A	No construction permits issued in WBID	N/A	Less than 1 year since previous update	N/A	N/A
2204	Terrapin Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	N/A	No permits issued in WBID	N/A	Less than 1 year since previous update	N/A	N/A
2326	Goodbys Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$2,000	1 new construction, 2 repairs, and 2 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2299	Open Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$1,250	2 construction permits issued in WBID	N/A	Less than 2 years since previous update	N/A	N/A

WBID Number	WBID Name	FDOH-Sponsored Training Programs – Estimated Cost	FDOH-Sponsored Training Programs – Level of Effort (no. of annual trainings)	OSTDS Program – Estimated Cost	OSTDS Program – Level of Effort (no. of permits issued)	Septic Tank Failure Area Ranking – Estimated Cost	Septic Tank Failure Area Ranking – Level of Effort	SWIM Project – Estimated Cost	SWIM Project – Level of Effort
2297	Craig Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$2,420	2 new construction and 2 repair permits issued	N/A	Less than 1 year since previous update	N/A	9.4 % of Emerson Failure Area and 19.6% of Freeman/Inwood Failure Area located in WBID
2257	McCoy Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$200	2 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2316	Williamson Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$2,700	2 new construction and 3 repair permits issued	N/A	Less than 1 year since previous update	N/A	25.6 % of Cedar Creek Failure Area is located in WBID
2324	Fishing Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$4,995	3 new construction, 4 repair and 6 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	100 % of Pernecia Failure Area is located in WBID
2361	Deep Bottom Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$520	3 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	40 % of Scott Mill Hill Septic Tank Failure Area located in WBID
2228	Moncrief Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$6,280	1 new construction, 12 abandonment permits and 7 repair system permits issued	N/A	Less than 1 year since previous update	N/A	77.28 % of Royal Terrace and 62.97 % of Christobel Failure Areas, as well as 22 % of former Lake Forest Nuisance Area, are located in WBID
2207	Blockhouse Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$4,385	3 repair, 1 abandonment, and 4 New construction system permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2266	Hopkins Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$1,210	1 repair and 1 new construction permits issued	N/A	Less than 1 year since previous update	N/A	N/A

WBID Number	WBID Name	FDOH-Sponsored Training Programs – Estimated Cost	FDOH-Sponsored Training Programs – Level of Effort (no. of annual trainings)	OSTDS Program – Estimated Cost	OSTDS Program – Level of Effort (no. of permits issued)	Septic Tank Failure Area Ranking – Estimated Cost	Septic Tank Failure Area Ranking – Level of Effort	SWIM Project – Estimated Cost	SWIM Project – Level of Effort
2381	Cormorant Branch	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$1,885	1 abandonment and 1 repair permits issued	N/A	Less than 1 year since previous update	N/A	50.40 % of Julington Hills Septic Tank Failure Area is located in WBID
2282	Wills Branch	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$1,925	1 new construction, 2 repair, and 1 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2227	Sherman Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$260	2 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2240	Greenfield Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$900	7 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2265B	Pottsburg Creek	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$11,405	4 new, 15 repair, and 1 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2203	Middle Trout River	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$7,100	11 new construction and 1 repair permits issued	N/A	Less than 1 year since previous update	N/A	N/A
2203A	Lower Trout River	\$2,500	1 to 2 training sessions/yr providing up to 12 contact hours	\$14,000	5 new construction, 19 repair and 12 abandonment permits issued	N/A	Less than 1 year since previous update	N/A	N/A

Table B-10. FDOH countywide projects

Notes: The FDOH reporting period is January 1 through December 31, 2016. All the projects listed below are ongoing projects.

WBID Number	Waterbody Name	Project Name	Project Description	Estimated Cost
Countywide	Countywide	Participate in TAT Calls and Efforts	Continue participation in TAT coordination calls and other TAT efforts	Unknown
Countywide	Countywide	Source Identification Follow-Up	Assist DEP in following up on source identification results that indicate human source	Unknown
Countywide	Countywide	WTW Follow-Up	Address any action items identified as result of 2014 WTW	Unknown
Countywide	Countywide	Department of Business and Professional Regulation (DBPR) reporting as appropriate	Develop inspection program for dumpster areas and behind restaurants, convenience stores, and grocery stores	Unknown

Appendix C: COJ Supporting Project Information

The following information supplements the project and activity records listed in **Table B-1**. The annual reporting period for COJ (June 1, 2015, through May 31, 2016) coincides with Year 5 of the city's NPDES permit for all activities.

Septic Tank Phase-Out

Lateral Only Connection (LOC) Program

Starting in 2014, the city and JEA used a combination of customer database information, infrastructure as-built information and spatial processing to evaluate over 2,750 septic tanks for inclusion in the LOC phase of the city's Septic Tank Phase-Out Program.

During the city's reporting period, a total of 72 septic tanks were phased out under the LOC Program or were privately connected. It should be noted that not all phased-out septic tanks provided nutrient reduction improvement to the affected tributary. The following is a breakout of the septic tanks phased out in each BMAP:

- 4 septic tanks in the LSJR Tributaries BMAP I waterbodies.
- 17 septic tanks in the LSJR Tributaries BMAP II waterbodies.

The city sunsetted the LOC Program in July 2016 for inclusion of any additional parcels. Parcels already included will be connected to central sewer, with full completion expected in early 2017. This allows for the rollout of a new Infrastructure Expansion Program being implemented in conjunction with JEA. The new infrastructure expansion program was codified in COJ Ordinances 2015-764 and 2016-490 that resolved the 2015 BMAP Mid-term Report letter caveat related to nutrient credit ownership, as well as authorizing the new program moving forward. The new program is further described below.

Infrastructure Expansion Program

The new program was approved by the Jacksonville City Council on August 23, 2016, and will involve the installation of new water and sewer services in designated areas of our community. The neighborhoods outlined on the map below are the first proposed areas based on community needs and abandoning of septic tanks having a positive environmental impact to waterways. Program rollout to the community began in January 2017. This program's unique attributes include the following:

- Remove the connection deferral option permitted under state law to allow property owners to decline to connect to available water or sewer systems until the property is transferred to new ownership or until FDOH mandates a sewer connection by denying a repair permit for a failing septic tank. In areas where the city has already installed sewer lines and offered to pay the JEA connection fee, less than half of the eligible properties have chosen to make the connection.

- Pay for priority project connections to promote the greatest possible participation. The city will pay the property owner's JEA connection fee in the highest priority neighborhoods, provided property owners elect to hook up within one year of sewer availability.
- Adopt a new "service availability fee" on properties where water and sewer lines are available, but the property owner declines to connect to the service. The recommended fee, to be charged as a separate line item on the JEA electric bill, would be JEA's base monthly charge for sewer service, beginning one year after the availability of the sewer service.
- Modify the septic tank failure area criteria in Ordinance Code Chapter 751 to include additional factors.

Figure C-1 illustrates the location of septic tank phase-out areas based on current prioritization ranking criteria.

IDDE Inspections

Jacksonville Environmental Protection Board Rule 3 (Water Pollution) was revised and made effective May 2, 2011. This rule allows the COJ Environmental Quality Division (EQD) staff to conduct inspections and monitor discharges to the MS4, prohibit discharges and illegal dumping and spills, and give staff authority to take legal actions to eliminate illicit discharges, connections, and spills to the MS4 and surface waters.

The EQD conducts proactive and reactive illicit discharges and connections investigations in Duval County on behalf of both COJ and FDOT. The COJ IDDE Inspection and Enforcement Program contributes considerably to the reduction of stormwater pollutant loads by reporting, eliminating, and enforcing illicit discharges to the MS4.

During the current reporting period COJ carried out the following activities:

- Completed 812 proactive and reactive IDDE. Identified and eliminated 135 illicit connections/discharges and illegal dumping sites citywide.
- Issued 40 notices of violation and \$88,760 in fines.

The following summarizes the IDDE investigations completed in the LSJR Tributaries BMAP I and II WBIDs:

- Tributaries BMAP I – 53 IDDE investigations with 2 confirmed illicit connections/discharges removed.
- Tributaries BMAP II – 106 IDDE investigations with no illicit discharge or connections found.

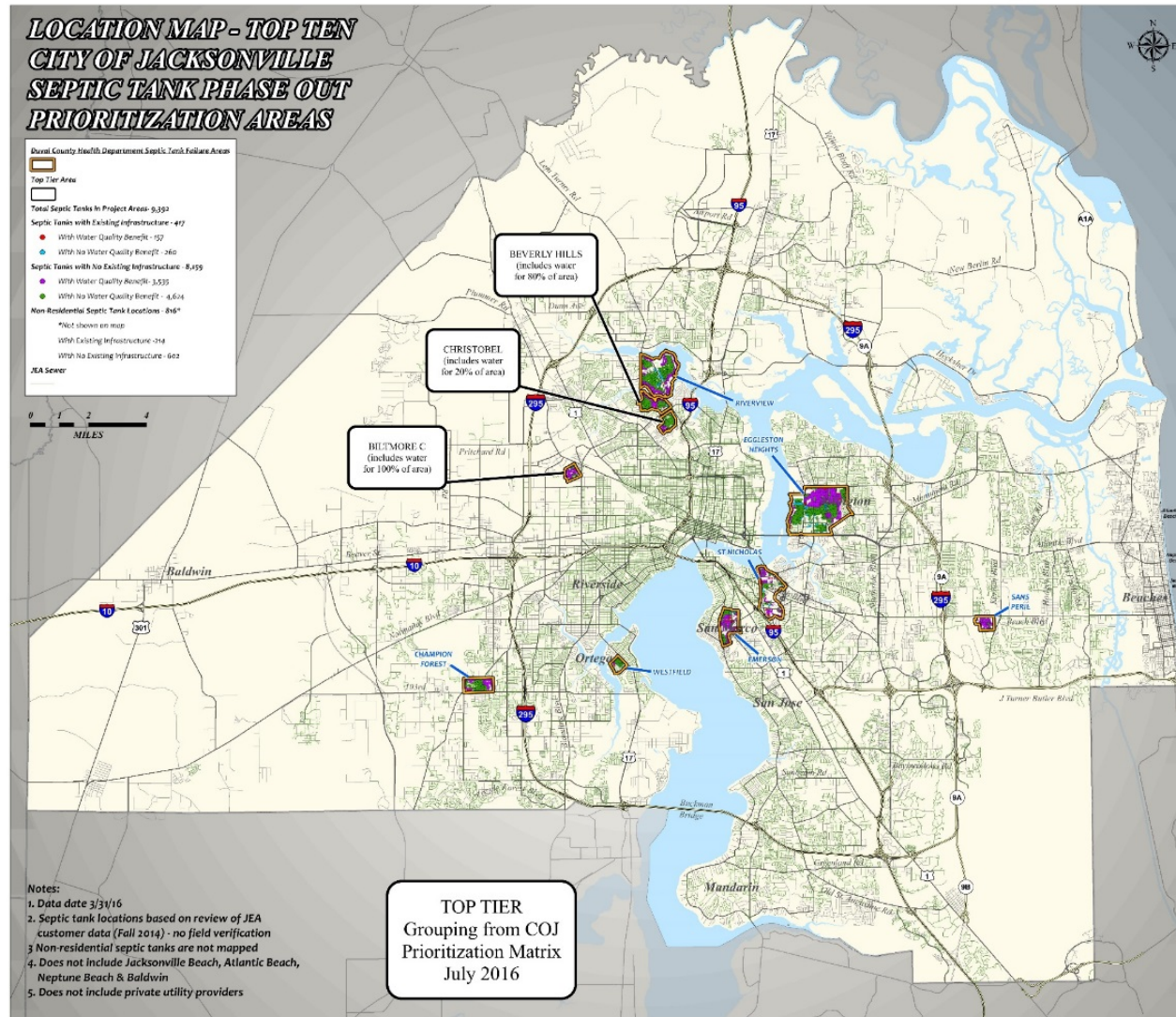


Figure C-1. Location of COJ septic tank phase-out areas

Private Lift Station Inspections

During the current reporting period, EQD inspected a total 226 private lift stations. In addition, the COJ Public Buildings Division contracted with a private certified operator to inspect 129 city-owned lift stations that are not part of JEA's publicly owned treatment works. The following is a breakout of the number of private lift stations inspections and newly identified lift stations within the LSJR Tributaries I and II BMAP WBIDs:

- LSJR Tributaries I BMAP:
 - Total of 16 private lift station inspections.
 - 1 private lift stations added to inventory.
- LSJR Tributaries II BMAP:
 - Total of 76 private lift station inspections.
 - 13 private lift stations added to inventory.

SWAT Proactive Maintenance Program

In late 2013, the COJ stormwater utility completed a review of drainage work orders and citizen complaints. Areas found to have a high number of repeat reactive work orders and citizen complaints were delineated and prioritized for proactive maintenance.

During the current reporting period, the SWAT Proactive Maintenance Program continued to focus on the removal of illegal connections, the removal of debris and excess vegetation from conveyance and outfall ditches, and the repair and cleaning of interconnecting closed conveyances. Targeted work area selection remains based on customer complaint and work order analysis.

Vegetation Management

The Mowing and Landscape Maintenance (M&LM) Division continues to expand its conveyance and outfall ditch vegetation management program. During 2015, EQD assumed vegetation management responsibility for all roadside ditches. When a potential illicit discharge is observed, EQD is informed and a follow-up IDDE investigation including source sampling, if required, is completed.

During the current reporting period, M&LM Division contractors completed 4 cycles of vegetation management spraying and related work for 1,191 miles of MS4 drainage ditch at a total cost of \$391,749.

Pond Maintenance

The M&LM Division is also responsible for routine litter removal, mowing, and vegetation management for all city stormwater ponds. This work requires that contractors and city staff

inspect each pond monthly. When a potential illicit discharge is observed, EQD is informed and a follow-up IDDE investigation including source sampling, if required, is completed.

During the current reporting period, the M&LM Division contractors completed routine maintenance, including litter removal and 4 cycles of vegetation management spraying and related work, for 242 ponds at a total cost of \$725,013.

Public Outreach and Education

The COJ Public Outreach and Education Plan was updated and implemented during the first year of the NPDES Cycle 3 Permit. Additionally, existing programs and record-keeping systems were enhanced and new partner programs developed. During the current reporting period, the percentage of population reached increased from approximately 50 % to 93 %. Moreover, the number of visitors to the city's stormwater-related website pages totaled 552,650 compared with 475,000 the prior year.

Water Quality Monitoring and Sampling

COJ maintains several river and tributary sampling networks. The routine tributary network (Ambient Tributary Program) consists of 103 locations, with each site sampled quarterly. Station locations are often near bridges and roadways to facilitate sampling efforts. The sites are both above and within tidal influence from the St. Johns River or Intracoastal Waterway. The primary objective of the program is to collect a long-term dataset that will enable the city to document water quality trends. Parameters include field observations, weather information, metered parameters (dissolved oxygen, percent saturation of dissolved oxygen, pH, temperature, salinity, and specific conductance), and bacteria (which was primarily fecal coliform in 2016, but is transitioning to *E. coli* for fresh water and *Enterococci* for marine water). Of the 103 sites, 10 are BMAP monitoring sites, which are sampled monthly. Thus the number of routine sites sampled quarterly is 93. A total of 361 routine tributary samples were collected in the 2016 calendar year.

EQD samples additional tributary stations monthly in 5 of the 10 BMAP I streams (currently 11 total sites) as part of the BMAP source assessment sampling obligations. EQD collected 130 samples for BMAP I streams. EQD also samples additional tributary stations monthly in 5 of the 15 BMAP II streams (currently 18 total sites) as part of the BMAP source assessment sampling obligations. EQD collected 216 samples for BMAP II streams and 707 samples in all tributaries in 2016.

Through coordination with the TAT, a protocol was established for investigating high bacteria counts. When a tributary fecal coliform sample exceeds 5,000 cfu/100ml, resampling is conducted upstream and downstream to attempt to determine the source of elevated bacteria levels. Recently EQD transitioned to the new bacteria standards, and the guidelines for resampling are now 10 times the applicable criterion, or 4,100 cfu/100mL for *E. coli* and 1,300 cfu/100ml for *Enterococci*. EQD elected to conduct follow-up sampling on high bacteria counts from the routine ambient tributary network, whenever possible, as well as the BMAP sampling.

In 2016, 25 follow-up samples were collected within the BMAP I tributaries and 11 samples were collected within the BMAP II tributaries.

WTW Follow-up

The following is a summary of WTW action items (short-term issues, such as trash removal) that were identified for COJ action from the 2014 Tributary BMAP I walks and the 2015 Tributary BMAP II WTWs addressed in 2016.

COJ will continue to create and find opportunities to organize community cleanups for the creeks.

In 2016, EQD networked with Citizen Planning Advisory Committees and the Mayor's Fight Blight effort to enhance community participation.

On March 19, 2016, during the annual St. Johns River Cleanup and Celebration, presented by the COJ Keep Jacksonville Beautiful Commission, trash and debris were cleaned up by EQD staff and family members, and other volunteers throughout the city from sites impacting the following tributaries:

- Tributary BMAP I sites – Deer Creek, Goodbys Creek, Big Fishweir Creek, Butcher Pen Creek and Hogan Creek (121 volunteers collected 2,490 lbs of materials).
- Tributary BMAP II sites – Trout River Lower Reach, Sherman Creek, Fishing Creek, Pottsburg Creek, Cormorant Branch Creek, Sherman Creek, and McCoys Creek (238 volunteers collected 5,240 lbs of materials).

On September 19, 2015, during the International Coastal Cleanup presented by the COJ Keep Jacksonville Beautiful Commission, trash and debris were cleaned up from the sites impacting the following tributaries:

- Tributary BMAP I site – Hogan Creek (41 participants collected 660 lbs of materials).
- Tributary BMAP II sites – Sherman Creek, Trout River Lower, Fishing Creek, Hopkins Creek and McCoys Creek (313 participants collected 7,720 lbs of materials).

Monthly cleanups of McCoy's Creek are scheduled annually by Rising Tides (St. Johns Riverkeeper's young professionals group) along with the COJ Keep Jacksonville Beautiful Commission. During the reporting period, 206 volunteers participated in the cleanup of 1,240 lbs of trash and debris, plus 265 bags of materials and 79 tires.

Appendix D: FDACS Updates

BMP Manuals

The FDACS Office of Agricultural Water Policy (OAWP) has BMP manuals for cow/calf, citrus, vegetable and agronomic crops, nurseries, equine, sod, dairy, poultry, and specialty fruit and nut operations. The [FDACS BMP manuals](#) are available online. The statewide nursery manual revision, adopted in 2014, includes practices related to in-ground and cut foliage production methods, in addition to container operations. In 2015, the OAWP adopted a revised vegetable and agronomic crop manual that includes nutrient and irrigation management BMPs for plastic mulch, bare ground, sugar cane, hay/silage, and greenhouse production systems. In early 2016, FDACS adopted a dairy manual targeting dairies that do not have DEP-issued NPDES permits. In June 2016, a poultry manual was adopted.

Implementation Assurance (IA) Program

The OAWP formally established its IA Program in 2005 in the Suwannee River Basin as part of the multi-agency/local stakeholder Suwannee River Partnership. In 2007, the OAWP initiated the IA Program in the Lake Okeechobee Basin and launched a standardized follow-up program for the remaining areas of the state in 2013. In early 2014, the agency began to streamline the IA Program to ensure consistency statewide and across commodities and BMP manuals. In late 2014, it commenced efforts to revise and restructure its current IA Program.

The IA Program to date includes two key components—mail-out surveys and site visits. Site visits are conducted by field staff and technicians, who fill out a standard form developed in 2014. This site visit form focuses on the nutrient management, irrigation management, and water resource protection BMPs common to all the adopted BMP manuals. The paper forms are submitted to OAWP staff and compiled into a Microsoft Excel spreadsheet recording, for example, the number of documented visits, types of BMPs implemented, and areas for improvement.

Mail-out surveys, the second component, were developed by OAWP staff in conjunction with commodity experts. OAWP mailed surveys to producers and asked them to fill them out and to return them. Surveys were completed for nine different BMP manuals, including Ridge citrus, Indian River citrus, Peace River/Manasota citrus, Gulf citrus, vegetable and agronomic crops, container nursery, sod, cow/calf, and specialty fruit and nut. These survey reports typically provided information on the percentage of BMP implementation for irrigation management and nutrient management BMPs. However, the use of surveys has been suspended pending re-development of the IA Program.

Additional emphasis was given to implementation assurance in 2016 legislation, particularly Chapter 2016-1, Laws of Florida. Among its provisions, this law requires the enhancement and formalization of OAWP IA policies and procedures through rulemaking. Rulemaking was initiated prior to January 1, 2017. Once rulemaking is completed, FDACS will implement the

enhanced IA Program and more detailed reporting, as prescribed by the legislation. Onsite visits and surveys will be carried out annually.

The enhanced IA Program, as a component of the FDACS BMP Program, will be designed to achieve the following:

- To provide accurate and timely information on the status of BMP enrollments.
- To provide accurate and timely information on the extent of BMP implementation.
- To provide the information from which reports on BMP enrollment and implementation can be made to BMAP stakeholders and to the annual report required by Chapter 2016-1, Section 34, Laws of Florida.
- To inform educational, research, and technical assistance efforts targeted to strengthen BMP implementation and effectiveness.
- To guide the review and potential revision of BMP manuals.

LSJR Tributaries BMAP I BMP Enrollment

Table D-1 summarizes agricultural land categories in the LSJR Tributaries I Basin, according to the 2009 St. Johns River Water Management District (SJRWMD) land use data. Prominent agricultural land uses are improved pasture and rangeland.

According to 2009 land use data, 92.14 acres of agricultural lands are located within the LSJR Tributaries I Basin. As of September 30, 2016, 54.73 acres of the planning area are covered by 1 agricultural BMP notice of intent (NOI) issued by the OAWP (**Figure D-1**). Per 2009 data, there were 4.06 acres of feeding operations in the LSJR Tributaries I Basin. This operation was previously a dairy that is no longer in operation, and that acreage is now covered under the above-mentioned cow/calf (NOI). The FDACS BMP Program covers 59 % of the agricultural acreage in the LSJR Tributaries I Basin area. The agricultural land use detailed in **Table D-1** was based on SJRWMD 2009 land cover/land use and may not accurately reflect current agricultural land uses in this area.

As such, FDACS enrollment acreages for agricultural BMPs may differ from the agricultural land use acreage totals in this BMAP. FDACS enrollment figures may include nonproduction acres, such as buildings, parking lots, and fallow acres, and include NOIs on lands not classified as agriculture under the 2009 SJRWMD land use coverage. All agricultural nonpoint sources in the BMAP area are statutorily required either to implement FDACS-adopted BMPs or to conduct water quality monitoring that demonstrates compliance with state water quality standards. **Table D-2** lists the BMPs and the acreage covered by NOIs.

To estimate the acreage of FDACS BMPs that overlap the 2009 SJRWMD agricultural land use in the LSJR Tributaries I Basin area, FDACS intersected the OAWP September 2016 BMP enrollment with the 2009 SJRWMD agricultural land use. Per this calculation, 54.68 enrolled acres are in agricultural land use. This figure equates to 59 % of the 2009 SJRWMD agricultural land use acreage in the LSJR Tributaries I Basin area covered by the FDACS BMP Program.

The remaining 37.46 acres of agricultural lands may be eligible for enrollment in the vegetable/ agronomic crops manual and/or the conservation plan rule. Agricultural land use data can contain nonproduction acres (such as buildings, parking lots, and fallow acres) that are not counted on the NOI acreage previously submitted to the OAWP, or may include agricultural lands that are not appropriate for enrollment in OAWP BMPs, such as lands not in commercial production (defined as operations conducted as a business).

Over the next 5 years, the OAWP will work to identify whether these additional lands should be enrolled in the FDACS BMP Program. However, it is unlikely that the remaining unenrolled agricultural acreage shown in GIS-based land use will be eligible for enrollment. FDACS and DEP undertook a compliance assistance effort for the LSJR Basin beginning in 2013. As part of this effort, both FDACS and DEP sent letters to the unenrolled agricultural landowners in the basin. These letters resulted in the enrollment of nearly all eligible landowners. FDACS will continue to determine whether 100 % enrollment of all eligible acreage has been achieved in the LSJR Basin.

Table D-1. 2009 Agricultural land uses in the LSJR Tributaries I Basin

Land Use Code	Code Description	2009 Acres
2110, 3300	Pasture/Rangeland	77.19
2150	Row/Field/Mixed Crops	10.89
2310	Feeding Operations	4.06
	Total Acreage	92.14

Table D-2. Agricultural acreage and BMP enrollment for the LSJR Tributaries I Basin

Related FDACS BMP Programs	Acreage Enrolled	Related NOIs	2009 SJRWMD Land Use Acres with NOIs
Cow/Calf	54.73	1	54.68
Vegetable/Agronomic Crops	0	0	0
Conservation Plan Rule	0	0	0
Total	54.73	1	54.68

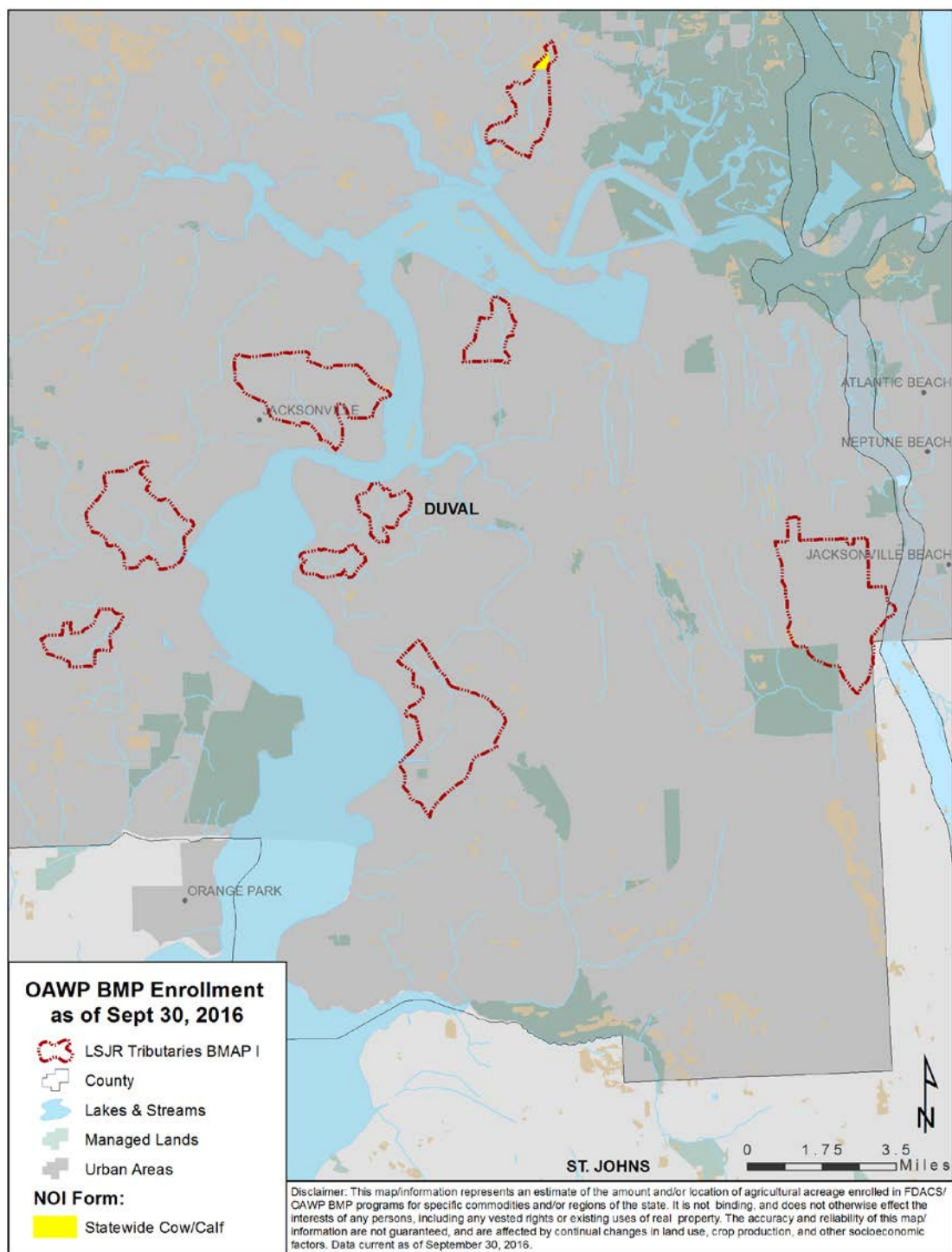


Figure D-1. BMP enrollment in the LSJR Tributaries I Basin as of September 30, 2016

LSJR Tributaries BMAP II BMP Enrollment

Table D-3 summarizes agricultural land categories in the LSJR Tributaries II Basin, according to 2009 SJRWMD land use data. Prominent agricultural land uses are pasture and row crops. The agricultural land use detailed in the table was based on SJRWMD 2009 land cover/land use coverage and may not accurately reflect current agricultural land uses in this planning area. All agricultural nonpoint sources in the BMAP area are statutorily required either to implement FDACS-adopted BMPs or to conduct water quality monitoring that demonstrates compliance with state water quality standards.

Currently, there is no agricultural acreage enrolled in the FDACS BMP Program in the LSJR Tributaries II Basin area (**Figure D-2** and **Table D-4**). To estimate the acreage of FDACS BMPs that overlap the 2009 SJRWMD agricultural land use in the LSJR Tributaries II BMAP area, FDACS intersected the OAWP September 2016 BMP enrollment with the 2009 SJRWMD agricultural land use. Over the next 5 years, the OAWP will work to identify whether the agricultural lands in this area are eligible for the FDACS BMP Program. However, it is unlikely that this acreage will be eligible for enrollment because a compliance assistance effort, described above in the BMAP I section, resulted in the enrollment of nearly all eligible landowners. Similarly, FDACS will continue to determine whether 100 % enrollment of eligible acreage has been achieved in the LSJR Basin.

Table D-3. Agricultural land uses in the LSJR Tributaries II Basin

Land Use Code	Code Description	Total Acres
2110, 2120, 2130, and 3300	Pasture/Rangeland	845.7
2140 and 2150	Row/Field/Mixed Crops	246.1
2320	Poultry Feeding Operations	4.7
2410 and 2430	Nurseries	14.9
2510	Horse Farms	41.1
2520	Dairies	60.6
	Total Acres	1,213.1

Table D-4. Agricultural acreage and BMP enrollment for the LSJR Tributaries II Basin

Related FDACS BMP Programs	Acreage Enrolled	Related NOIs	2009 SJRWMD Land Use Acres with NOIs
Cow/Calf	0	0	0
Vegetable/Agronomic Crops	0	0	0
Poultry	0	0	0
Nursery	0	0	0
Equine	0	0	0
Dairy	0	0	0
Total	0	0	0

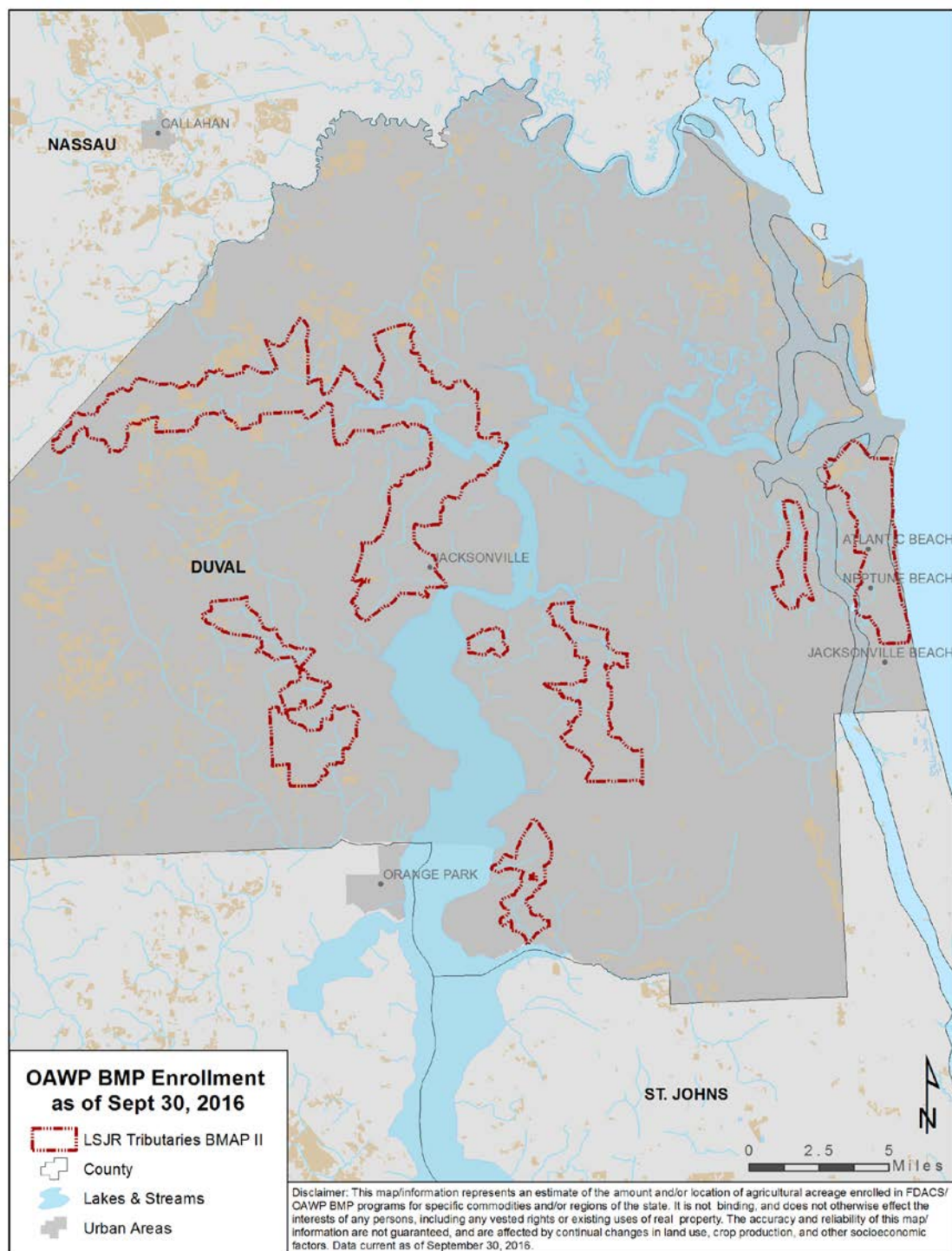


Figure D-2. BMP enrollment in the LSJR Tributaries II Basin as of September 30, 2016

Appendix E: FDOH Septic System Summary for the LSJR Tributaries BMAP Area, January 12, 2017

Nonpoint source pollutants from OSTDS can have significant impacts on surface water and groundwater quality. Approximately 30 % of Florida's population uses an OSTDS as their method of wastewater disposal. In Florida, OSTDS are regulated by the FDOH and cover wastewater from establishments that generate domestic sewage up to 10,000 gallons per day or commercial strength sewage waste up to 5,000 gallons per day. A typical OSTDS consists of a septic tank and drainfield (**Figure E-1**).

The LSJR Tributaries BMAP area contains 30 impaired waterbodies, each with a unique WBID. All these WBIDs are located in Duval County (**Figure E-2**). In these WBIDs, there are an estimated 95,169 built parcels (**Table E-2**). Of these parcels, about 16.6 % (n=15,766) are connected to an OSTDS, 80.9 % (n=77,032) are connected to an EPA-regulated wastewater treatment facility (WWTF), and 2.5 % (n=2,371) are unknown. Of the parcels with OSTDS, 1,370 are known and 14,396 are likely to exist. The known and likely data qualifiers were assigned based on factors related to the level of certainty for the source information.

The information used comes from the FDOH [Florida Water Management](#)

[Inventory \(FLWMI\)](#) project, which is a centralized geographic data map linking each built property in the state with a drinking water source (public water or private domestic well) and wastewater treatment method (central sewer or onsite septic). The spatial distributions of built parcels on different wastewater treatment methods in each WBID or WBID aggregate are demonstrated in **Figure E-3** through **Figure E-12**. These figures are organized in such a way that, all spatially connected BMAP WBIDs are aggregated into one map figure, while BMAP WBIDs not spatially connected to any other BMAP WBIDs are included in separate map figures. **Table E-1** lists the figure number for each WBID or group of WBIDs.

Further analysis was done by linking the data points with the FDOH Environmental Health Database (EHD). EHD is a statewide web-based permitting database that FDOH uses to keep track of Environmental Health Program information (permits issued, facilities regulated, etc.) EHD has electronic permitting and inspection data for onsite wastewater treatment systems covering a period from the mid-1990s onward. Information on the system installation date and type of system installed can be extracted and linked to the FLWMI map.

Table E-3 lists the proportion of permitted OSTDS that were constructed prior to or after 1983. Construction and use standards for OSTDS in Florida began in 1921. A major revision to the

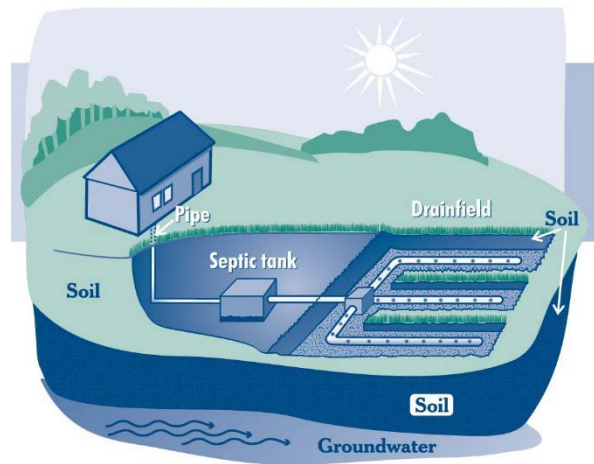


Figure E-1. Illustration of a typical OSTDS

Source: EPA – [A Homeowner's Guide to Septic Systems](#)

standards occurred in 1982 when a separation of 24 inches was required between the bottom of a newly constructed drainfield and the estimated seasonal high groundwater table. Research in Florida and elsewhere has shown that OSTDS installed to the 1982 standards effectively reduce the concentration of pathogens found in normal wastewater and that nitrogen levels are reduced as well. Knowing how many OSTDS were installed prior to this rule, and where they are located, could provide information to assist with future BMAP implementation efforts.

Table E-3 also lists information on the estimated age of systems. This information was assigned to each parcel based on EHD data or from the Florida Department of Revenue for the year the structure was built if EHD data were not available. The average age of all OSTDS in the LSJR Tributary BMAP area is 29 years, with those that are known having an average age of 17 years and those that are likely having an average age of 41 years. Table E-4 breaks out EHD information from 2011 through 2016 for permit types such as new construction, system in need of repair, evaluated existing, or abandoned system. This information may be useful to see any trends in new construction and system failures over time. The red points shown in **Figure E-3** through **Figure E-12** indicate the total number of repairs permitted between 2011 and 2016 in the BMAP area.

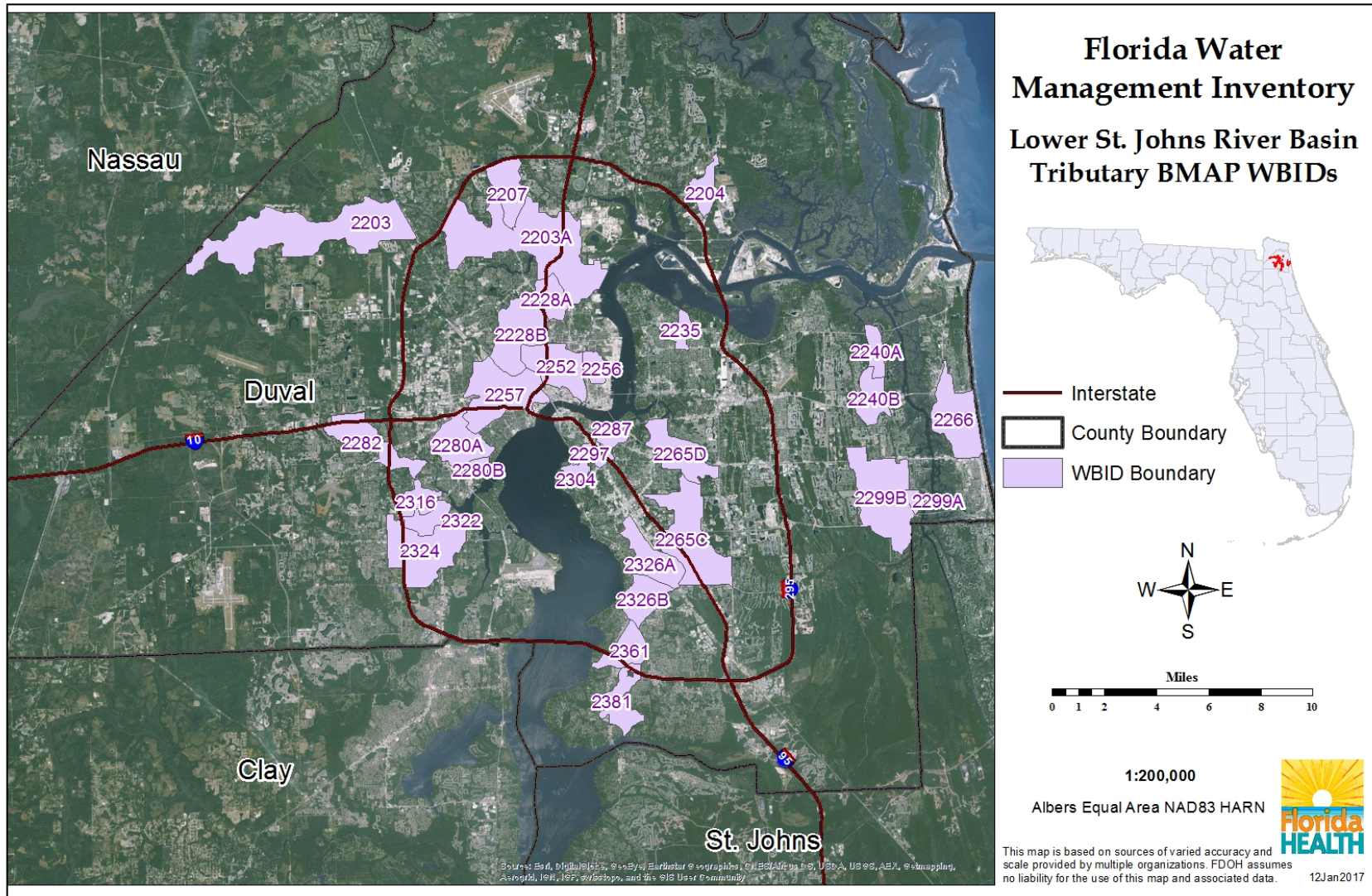


Figure E-2. Location of WBIDs included in the LSJR Tributaries BMAP area

Table E-1. List of BMAP WBIDs included in this appendix, ordered by WBID

WBID	Waterbody Name	Map Figure
2203	Trout River (Middle Reach)	Figure E-3
2203A	Trout River (Lower Reach)	Figure E-5
2204	Terrapin Creek	Figure E-8
2207	Blockhouse Creek	Figure E-5
2228A	Moncrief Creek (Marine Portion)	Figure E-5
2228B	Moncrief Creek (Freshwater Portion)	Figure E-5
2235	Newcastle Creek	Figure E-9
2240A	Greenfield Creek (Marine Segment)	Figure E-10
2240B	Greenfield Creek (Freshwater Segment)	Figure E-10
2252	Hogan Creek	Figure E-5
2256	Deer Creek	Figure E-5
2257	Mccoey Creek	Figure E-5
2265C	Pottsburg Creek (Freshwater Segment)	Figure E-7
2265D	Pottsburg Creek (Marine Segment)	Figure E-7
2266	Hopkins Creek	Figure E-12
2280A	Big Fishweir Creek (Freshwater Segment)	Figure E-5
2280B	Big Fishweir Creek (Marine Segment)	Figure E-5
2282	Wills Branch (North Prong)	Figure E-4
2287	Miller Creek	Figure E-66
2297	Craig Creek	Figure E-66
2299A	Open Creek (Marine Segment)	Figure E-11
2299B	Open Creek (Freshwater Segment)	Figure E-11
2304	Miramar Creek	Figure E-66
2316	Williamson Creek	Figure E-4
2322	Butcher Pen Creek	Figure E-4
2324	Fishing Creek	Figure E-4
2326A	Goodbys Creek (Freshwater Segment)	Figure E-7
2326B	Goodbys Creek (Marine Segment)	Figure E-7
2361	Deep Bottom Creek	Figure E-7
2381	Cormorant Branch	Figure E-7

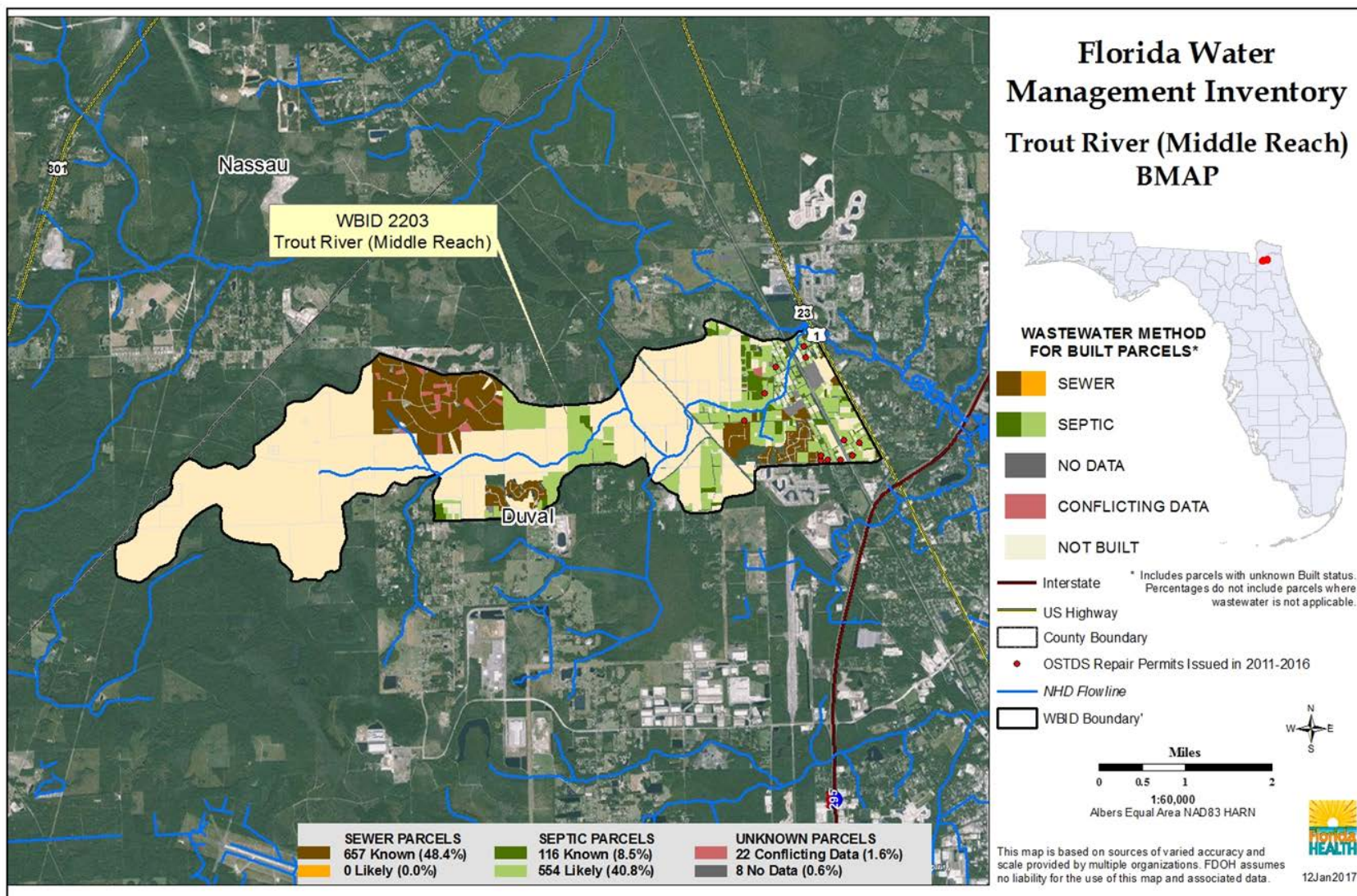


Figure E-3. Wastewater disposal method for parcels in WBID 2203 within the LSJR Tributaries BMAP area as of January 12, 2017

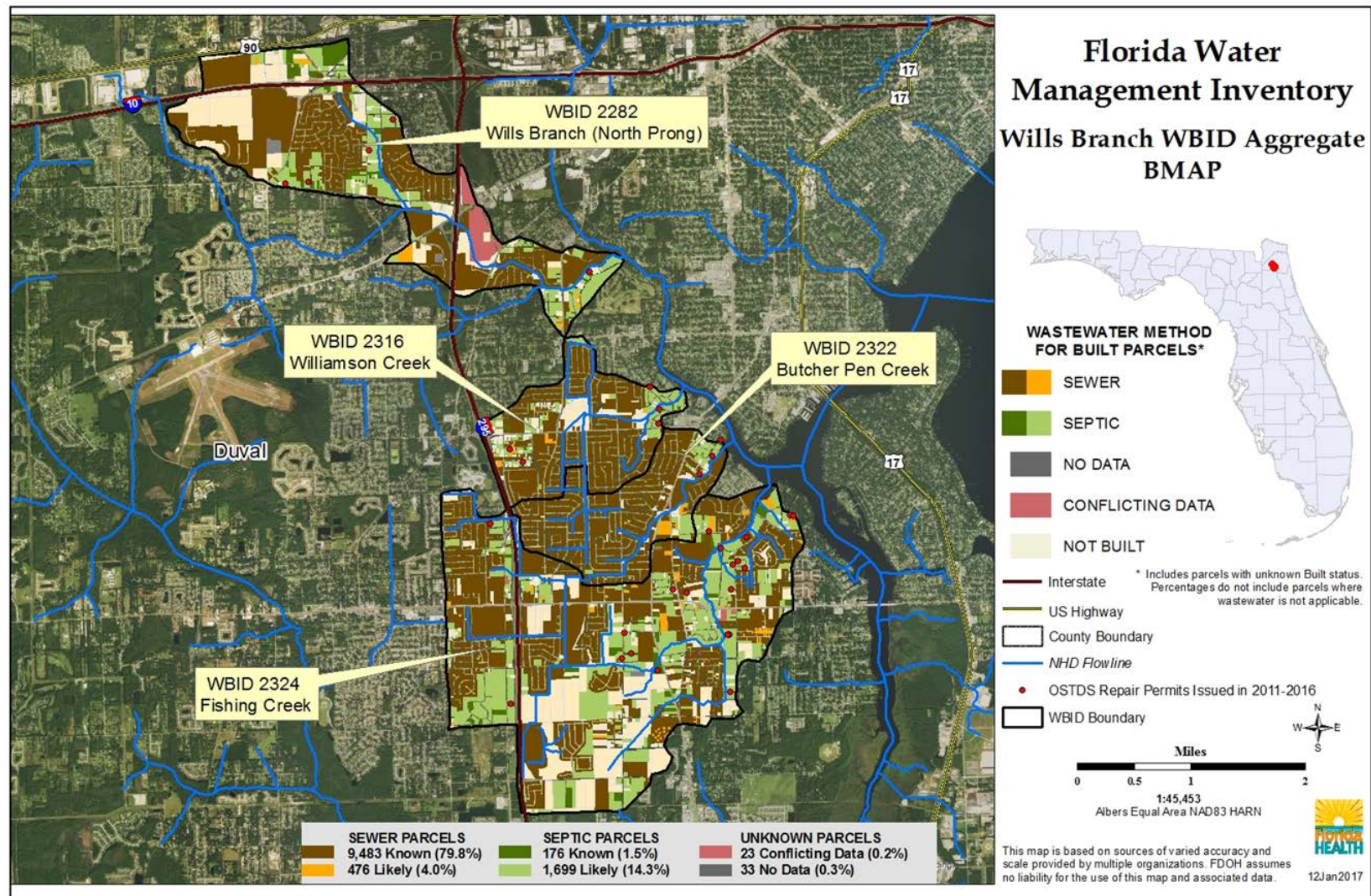


Figure E-4. Wastewater disposal method for parcels in WBIDs 2282, 2316, 2322, and 2324 within the LSJR Tributaries BMAP area as of January 12, 2017

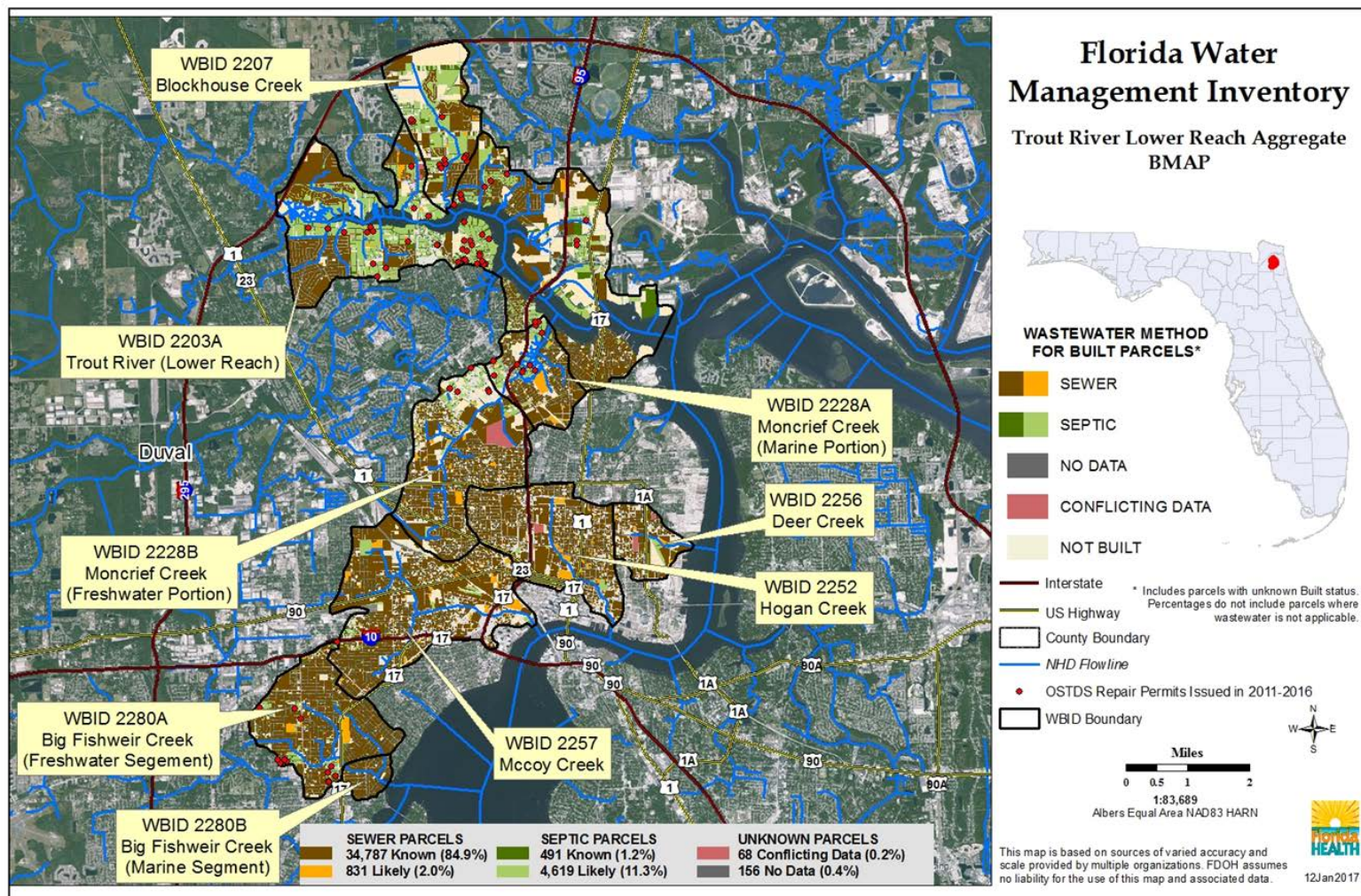


Figure E-5. Wastewater disposal method for parcels in WBIDs 2207, 2203A, 2228A, 2228B, 2252, 2256, 2257, 2280A, and 2280B within the LSJR Tributaries BMAP area as of January 12, 2017

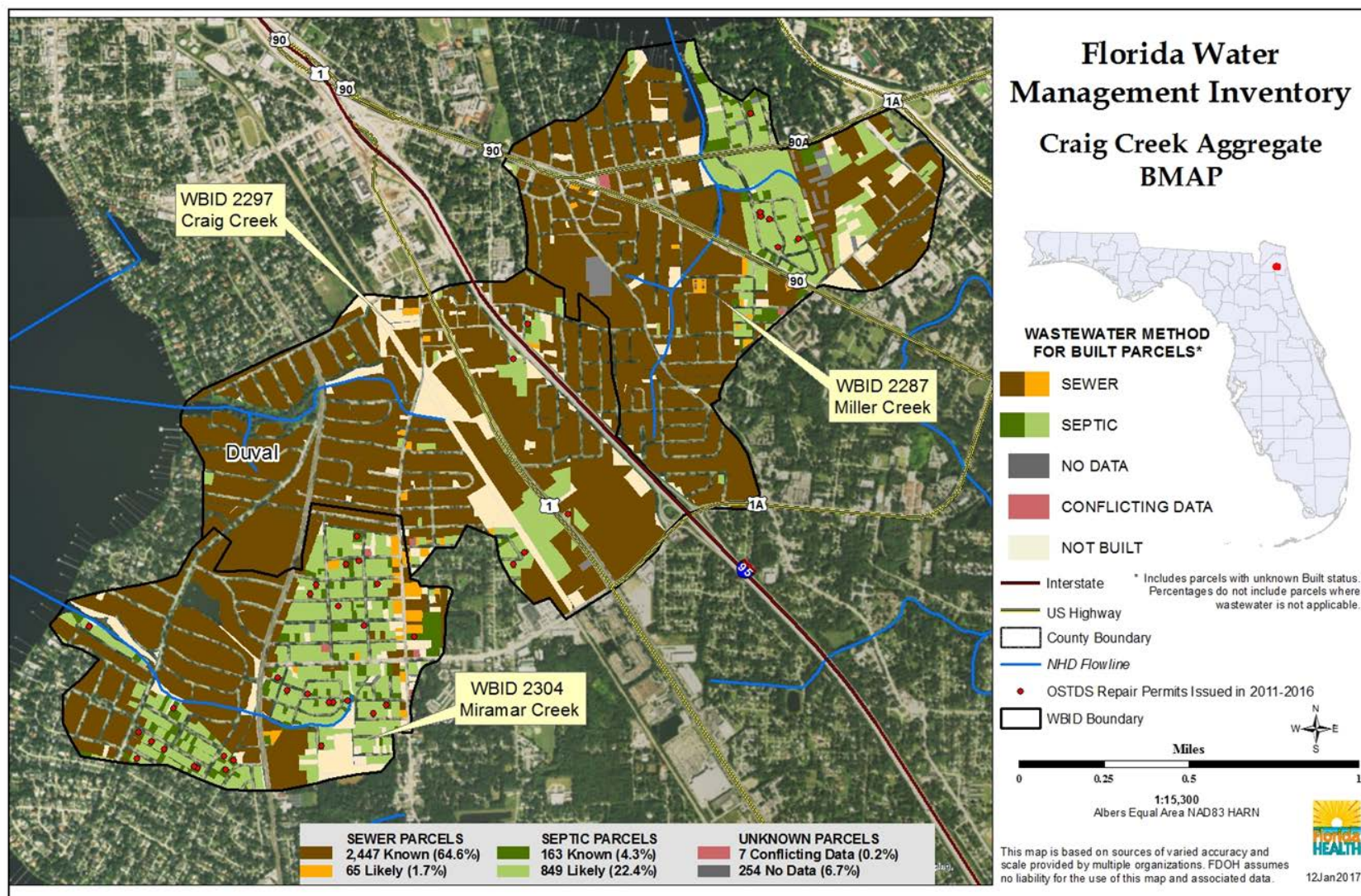


Figure E-6. Wastewater disposal method for parcels in WBIDs 2287, 2297, and 2304 within the LSJR Tributaries BMAP area as of January 12, 2017

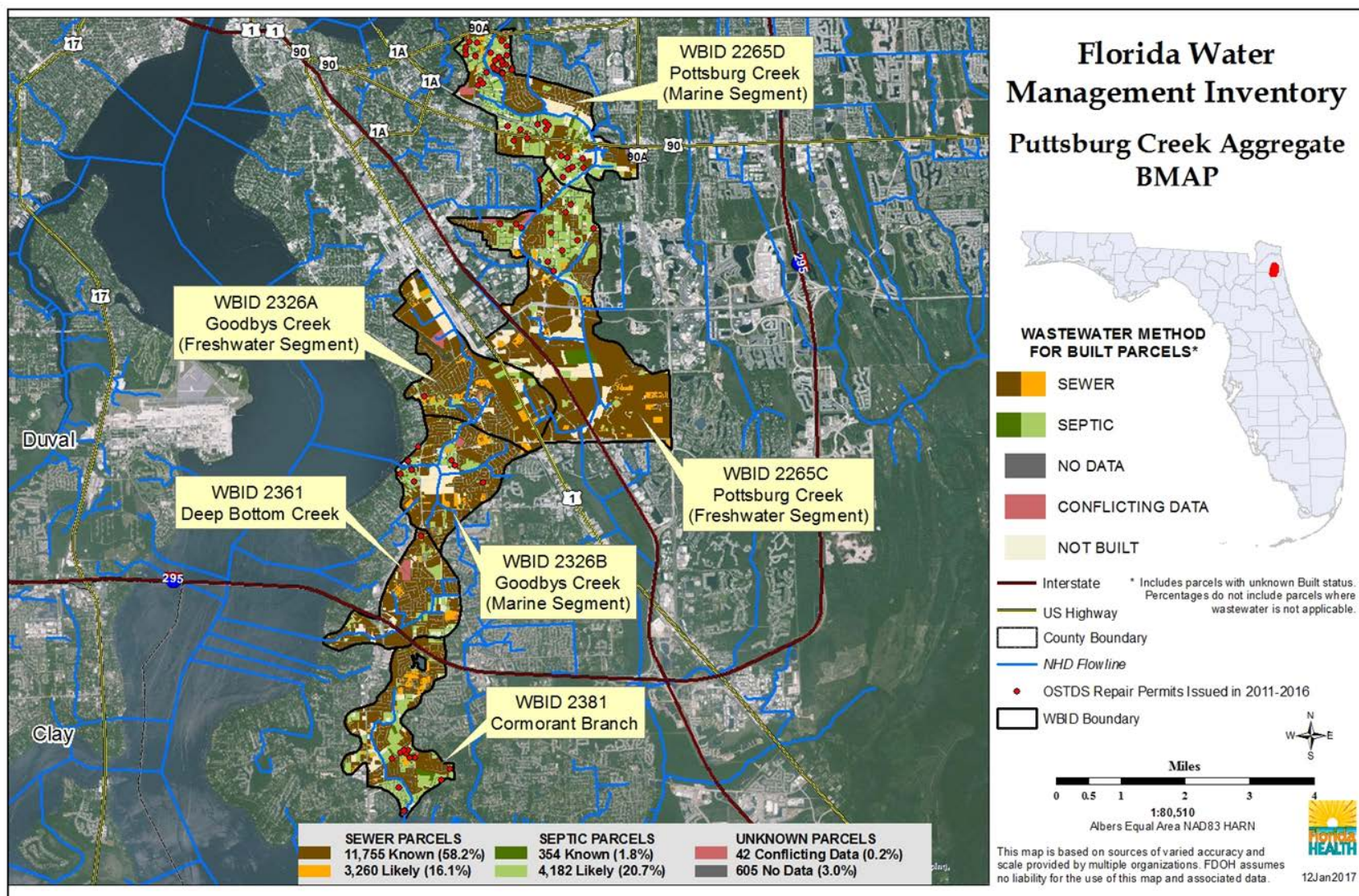


Figure E-7. Wastewater disposal method for parcels in WBIDs 2265C, 2265D, 2326A, 2326B, 2361, and 2381 within the LSJR Tributaries BMAP area as of January 12, 2017

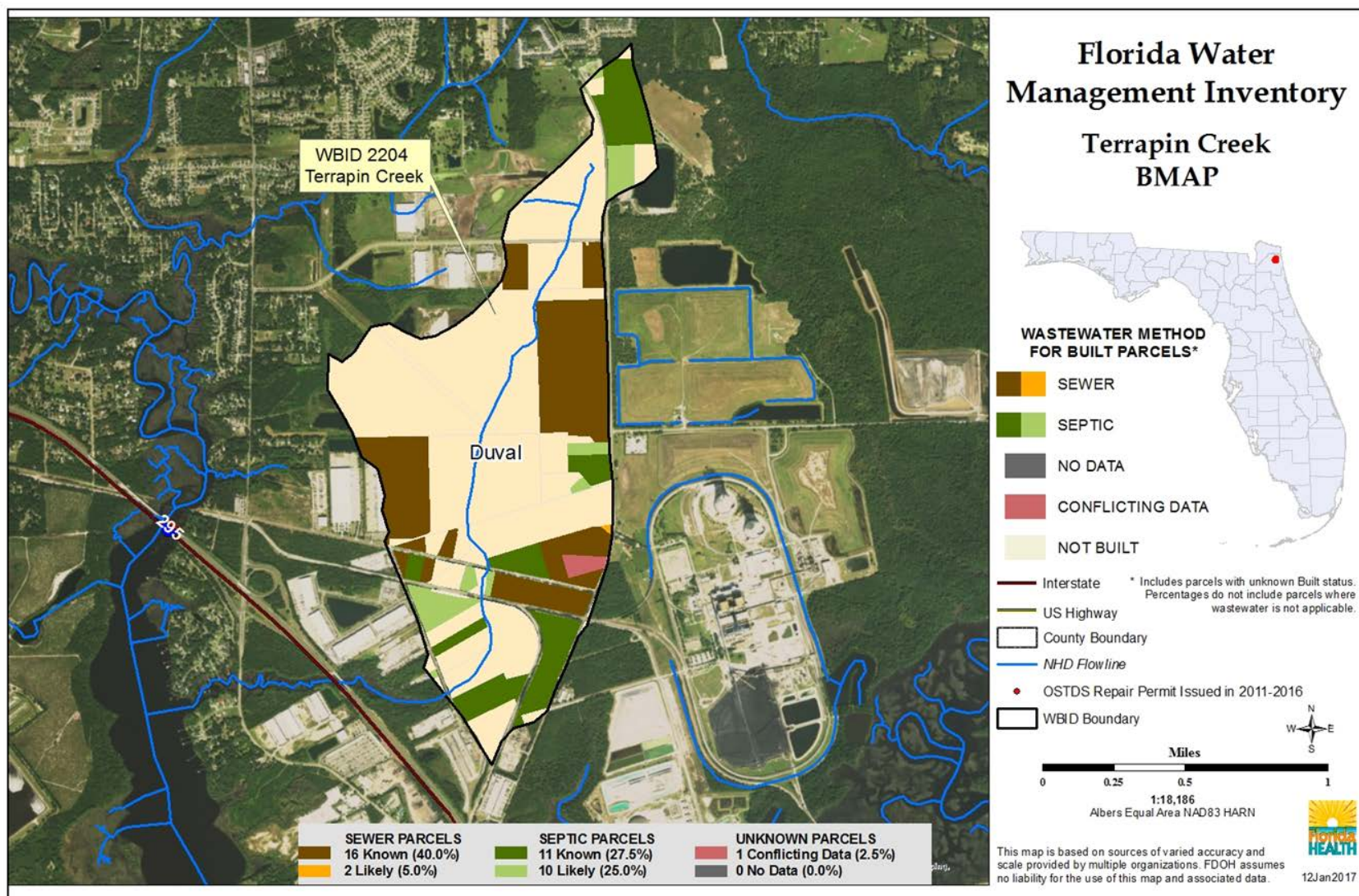


Figure E-8. Wastewater disposal method for parcels in WBID 2204 within the LSJR Tributaries BMAP area as of January 12, 2017 (Note: No OSTDS repair permits were issued in the 2011–16 period)

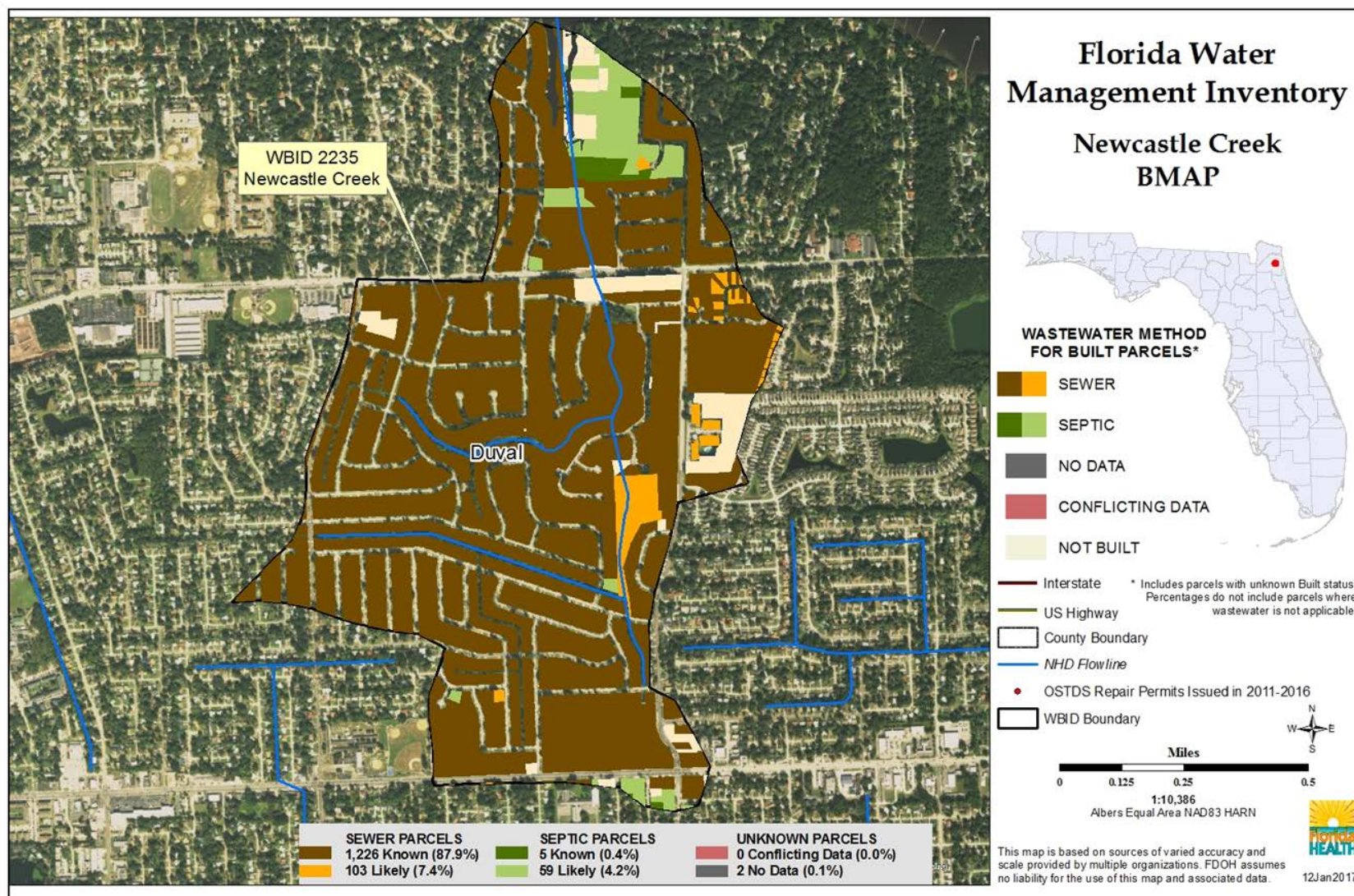


Figure E-9. Wastewater disposal method for parcels in WBID 2235 within the LSJR Tributaries BMAP area as of January 12, 2017 (Note: No OSTDS repair permits were issued in the 2011–16 period)

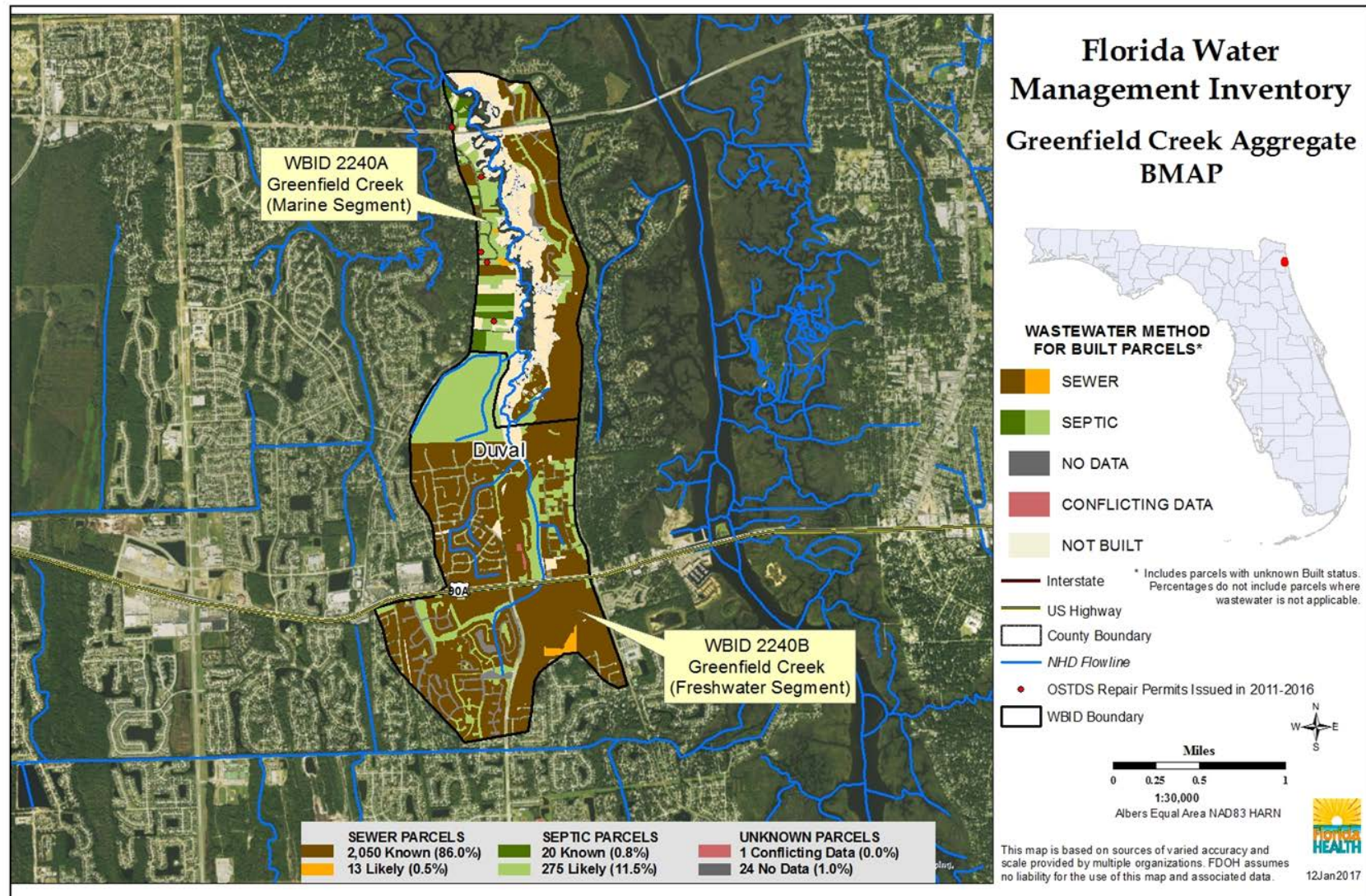


Figure E-10. Wastewater disposal method for parcels in WBIDs 2240A and 2240B within the LSJR Tributaries BMAP area as of January 12, 2017

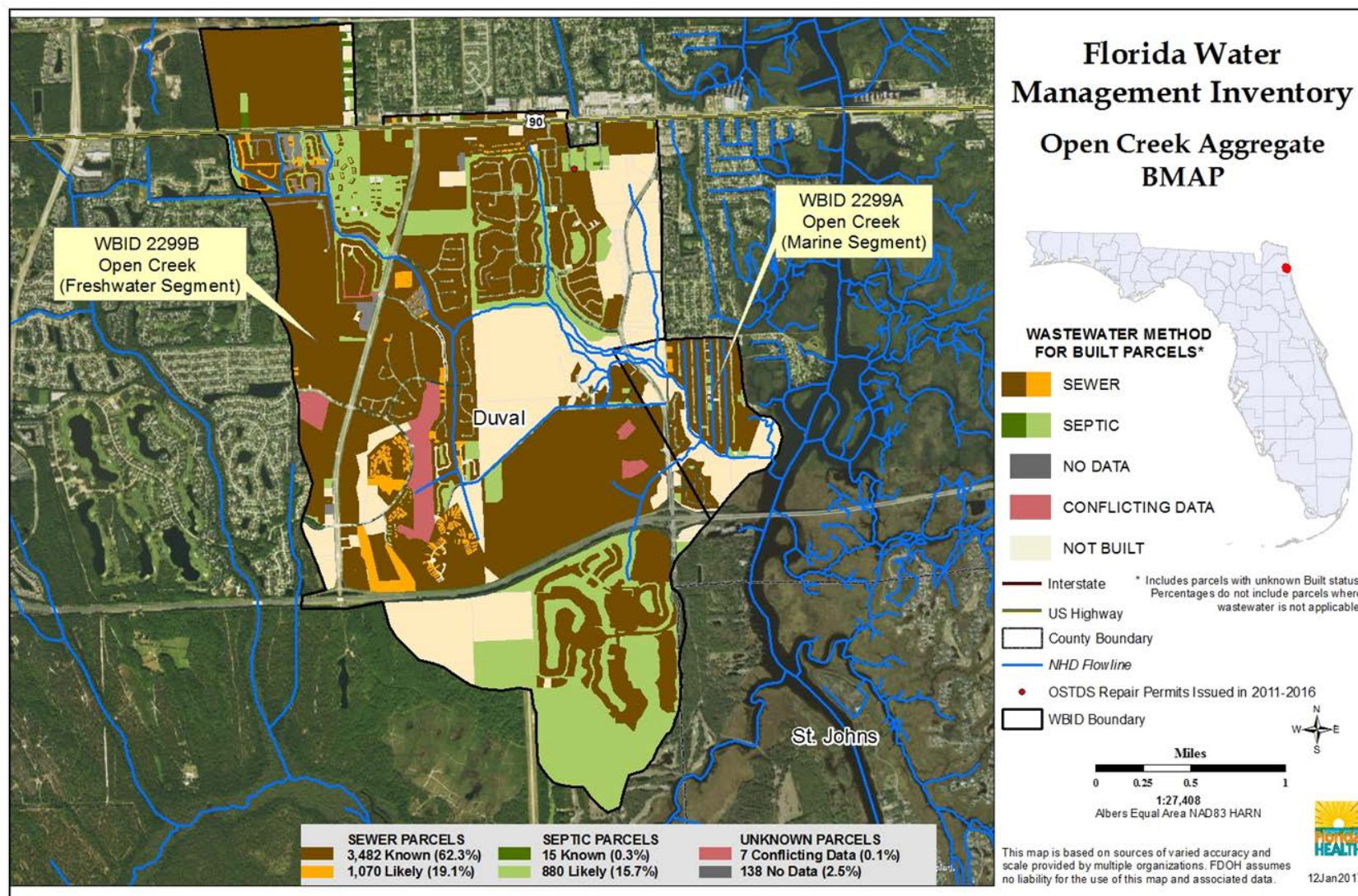


Figure E-11. Wastewater disposal method for parcels in WBIDs 2299A and 2299B within the LSJR Tributaries BMAP area as of January 12, 2017

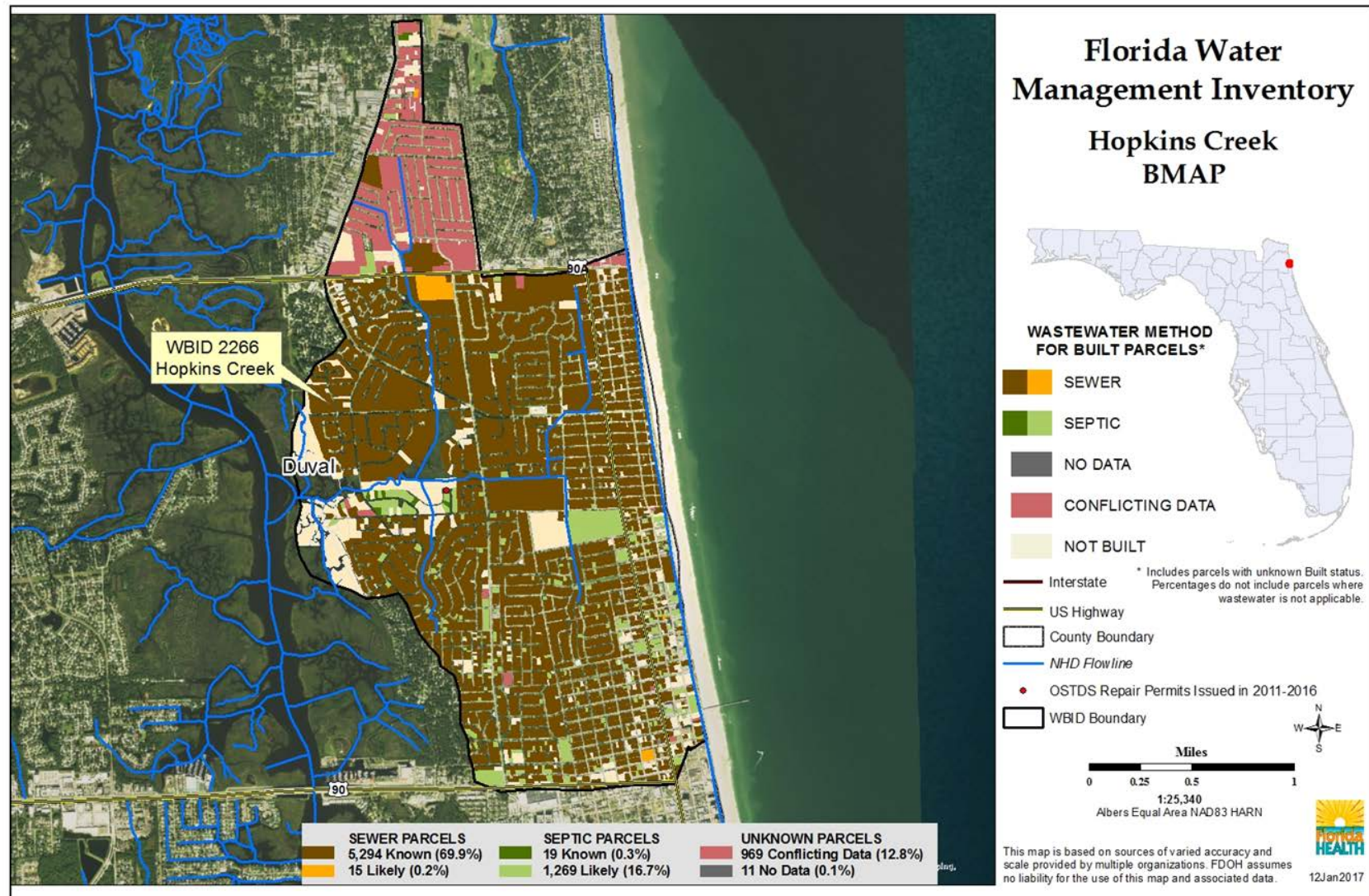


Figure E-12. Wastewater disposal method for parcels in WBID 2266 within the LSJR Tributaries BMAP area as of January 12, 2017

Table E-2. Summary of number of parcels on different wastewater methods by WBID number

Note: "Known" is assigned to parcels where the wastewater is confirmed from the permitting agency, "likely" is assigned to parcels where there is some indication of the wastewater disposal method, "undetermined" is assigned if two different data sources have equal opposing values, "unknown" is assigned for built parcels with no intersecting source information, and "not built" is assigned to parcels with no structure that could generate wastewater.

WBID	Known Septic	Likely Septic	Total Septic	Known Sewer	Likely Sewer	Total Sewer	Undetermined	Unknown	Not Built	Total
2203	116	554	670	657	0	657	22	8	253	1,610
2203A	257	2,250	2,507	6,381	130	6,511	23	69	802	9,912
2204	11	10	21	16	2	18	1	0	39	79
2207	64	433	497	1,024	21	1,045	2	7	157	1,708
2228A	35	354	389	1,708	31	1,739	11	8	194	2,341
2228B	50	616	666	6,249	143	6,392	5	13	1,231	8,307
2235	5	59	64	1,226	103	1,329	0	2	26	1,421
2240A	18	143	161	330	2	332	0	10	66	569
2240B	2	132	134	1,720	11	1,731	1	14	27	1,907
2252	0	240	240	5,443	280	5,723	2	17	1,183	7,165
2256	2	14	16	1,265	26	1,291	2	5	339	1,653
2257	16	262	278	6,873	146	7,019	2	17	1,503	8,819
2265C	61	947	1,008	2,219	1,603	3,822	5	480	179	5,494
2265D	171	1,437	1,608	1,050	90	1,140	16	15	166	2,945
2266	19	1,269	1,288	5,294	15	5,309	969	11	410	7,987
2280A	67	444	511	5,125	47	5,172	21	20	266	5,990
2280B	0	6	6	719	7	726	0	0	13	745
2282	47	399	446	1,583	51	1,634	3	4	151	2,238
2287	51	242	293	936	16	952	2	243	79	1,569
2297	8	106	114	1,027	20	1,047	1	4	114	1,280
2299A	0	21	21	437	6	443	0	1	30	495

WBID	Known Septic	Likely Septic	Total Septic	Known Sewer	Likely Sewer	Total Sewer	Undetermined	Unknown	Not Built	Total
2299B	15	859	874	3,045	1,064	4,109	7	137	168	5,295
2304	104	501	605	484	29	513	4	7	95	1,224
2316	23	281	304	1,909	22	1,931	0	1	173	2,409
2322	15	104	119	1,984	8	1,992	1	0	46	2,158
2324	91	915	1,006	4,007	395	4,402	19	28	332	5,787
2326A	14	552	566	2,236	430	2,666	2	50	72	3,356
2326B	54	388	442	2,048	676	2,724	4	28	112	3,310
2361	7	382	389	1,842	151	1,993	12	9	67	2,470
2381	47	476	523	2,360	310	2,670	3	23	81	3,300
Total	1,370	14,396	15,766	71,197	5,835	77,032	1,140	1,231	8,374	103,543

Table E-3. Percent of OSTDS constructed before or after 1983 and average age of OSTDS from January 2017 by WBID number

N/A = The age of known septic systems could not be calculated because no parcels in the WBID were identified as "known septic."

WBID	% of OSTDS Constructed Before 1983	% of OSTDS Constructed After 1983	Age of Known Septic (year)	Age of Likely Septic (year)
2203	45	55	12	41
2203A	79	21	15	55
2204	5	95	20	21
2207	66	34	16	51
2228A	85	15	14	57
2228B	81	19	13	55
2235	58	42	9	40
2240A	52	48	8	35
2240B	38	62	6	33
2252	98	2	N/A	33
2256	73	27	51	56

WBID	% of OSTDS Constructed Before 1983	% of OSTDS Constructed After 1983	Age of Known Septic (year)	Age of Likely Septic (year)
2257	62	38	29	41
2265C	61	39	13	36
2265D	78	22	14	47
2266	26	74	24	22
2280A	79	21	21	53
2280B	50	50	N/A	32
2282	67	33	16	39
2287	72	28	12	56
2297	75	25	8	46
2299A	0	100	N/A	26
2299B	2	98	18	11
2304	73	27	12	61
2316	70	30	13	40
2322	76	24	24	50
2324	78	22	19	48
2326A	46	54	22	24
2326B	51	49	15	34
2361	42	58	12	34
2381	59	41	9	38
Average	58	42	17	41

Table E-4. New, repair, existing, and abandonment construction permits for OSTDS by year

Note: The number of systems permits for new OSTDS, repair OSTDS, existing OSTDS, abandoned OSTDS, and total with permits were obtained from the EHD, which stores permit dates. The total number of parcels with OSTDS in the WBID shown in the last column were obtained from the FLWMI, which indicates whether an OSTDS is present or absent on a parcel, but does not indicate the OSTDS permit date. Therefore, the values in the last column do not have associated date information and the systems constructed each year is designated as N/A, or not applicable. The values in the rows are not intended to be summed across the columns.

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2203	Subtotal	0	15	0	0	15	670
2203	2011	0	7	0	0	7	N/A
2203	2012	0	5	0	0	5	N/A
2203	2013	0	0	0	0	0	N/A
2203	2014	0	2	0	0	2	N/A
2203	2015	0	1	0	0	1	N/A
2203	2016	0	0	0	0	0	N/A
2203A	Subtotal	9	49	3	0	61	2,507
2203A	2011	5	10	3	0	18	N/A
2203A	2012	2	16	0	0	18	N/A
2203A	2013	1	11	0	0	12	N/A
2203A	2014	0	9	0	0	9	N/A
2203A	2015	0	3	0	0	3	N/A
2203A	2016	1	0	0	0	1	N/A
2204	Subtotal	0	0	0	0	0	21
2204	2011	0	0	0	0	0	N/A
2204	2012	0	0	0	0	0	N/A
2204	2013	0	0	0	0	0	N/A
2204	2014	0	0	0	0	0	N/A
2204	2015	0	0	0	0	0	N/A
2204	2016	0	0	0	0	0	N/A
2207	Subtotal	3	12	1	0	16	497
2207	2011	2	3	1	0	6	N/A
2207	2012	0	2	0	0	2	N/A
2207	2013	1	6	0	0	7	N/A

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2207	2014	0	1	0	0	1	N/A
2207	2015	0	0	0	0	0	N/A
2207	2016	0	0	0	0	0	N/A
2228A	Subtotal	0	12	0	0	12	389
2228A	2011	0	4	0	0	4	N/A
2228A	2012	0	5	0	0	5	N/A
2228A	2013	0	0	0	0	0	N/A
2228A	2014	0	3	0	0	3	N/A
2228A	2015	0	0	0	0	0	N/A
2228A	2016	0	0	0	0	0	N/A
2228B	Subtotal	0	7	0	0	7	666
2228B	2011	0	3	0	0	3	N/A
2228B	2012	0	3	0	0	3	N/A
2228B	2013	0	0	0	0	0	N/A
2228B	2014	0	1	0	0	1	N/A
2228B	2015	0	0	0	0	0	N/A
2228B	2016	0	0	0	0	0	N/A
2235	Subtotal	0	0	0	0	0	64
2235	2011	0	0	0	0	0	N/A
2235	2012	0	0	0	0	0	N/A
2235	2013	0	0	0	0	0	N/A
2235	2014	0	0	0	0	0	N/A
2235	2015	0	0	0	0	0	N/A
2235	2016	0	0	0	0	0	N/A
2240A	Subtotal	3	5	0	0	8	161
2240A	2011	0	1	0	0	1	N/A
2240A	2012	2	0	0	0	2	N/A
2240A	2013	1	1	0	0	2	N/A

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2240A	2014	0	1	0	0	1	N/A
2240A	2015	0	2	0	0	2	N/A
2240A	2016	0	0	0	0	0	N/A
2240B	Subtotal	0	0	0	0	0	134
2240B	2011	0	0	0	0	0	N/A
2240B	2012	0	0	0	0	0	N/A
2240B	2013	0	0	0	0	0	N/A
2240B	2014	0	0	0	0	0	N/A
2240B	2015	0	0	0	0	0	N/A
2240B	2016	0	0	0	0	0	N/A
2252	Subtotal	0	0	0	0	0	240
2252	2011	0	0	0	0	0	N/A
2252	2012	0	0	0	0	0	N/A
2252	2013	0	0	0	0	0	N/A
2252	2014	0	0	0	0	0	N/A
2252	2015	0	0	0	0	0	N/A
2252	2016	0	0	0	0	0	N/A
2256	Subtotal	0	0	0	0	0	16
2256	2011	0	0	0	0	0	N/A
2256	2012	0	0	0	0	0	N/A
2256	2013	0	0	0	0	0	N/A
2256	2014	0	0	0	0	0	N/A
2256	2015	0	0	0	0	0	N/A
2256	2016	0	0	0	0	0	N/A
2257	Subtotal	0	0	0	0	0	278
2257	2011	0	0	0	0	0	N/A
2257	2012	0	0	0	0	0	N/A
2257	2013	0	0	0	0	0	N/A

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2257	2014	0	0	0	0	0	N/A
2257	2015	0	0	0	0	0	N/A
2257	2016	0	0	0	0	0	N/A
2265C	Subtotal	6	15	0	0	21	1,008
2265C	2011	2	1	0	0	3	N/A
2265C	2012	0	3	0	0	3	N/A
2265C	2013	0	1	0	0	1	N/A
2265C	2014	0	7	0	0	7	N/A
2265C	2015	4	3	0	0	7	N/A
2265C	2016	0	0	0	0	0	N/A
2265D	Subtotal	2	49	2	0	53	1,608
2265D	2011	2	14	2	0	18	N/A
2265D	2012	0	11	0	0	11	N/A
2265D	2013	0	12	0	0	12	N/A
2265D	2014	0	7	0	0	7	N/A
2265D	2015	0	5	0	0	5	N/A
2265D	2016	0	0	0	0	0	N/A
2266	Subtotal	3	5	0	0	8	1,288
2266	2011	0	1	0	0	1	N/A
2266	2012	2	0	0	0	2	N/A
2266	2013	1	1	0	0	2	N/A
2266	2014	0	1	0	0	1	N/A
2266	2015	0	2	0	0	2	N/A
2266	2016	0	0	0	0	0	N/A
2280A	Subtotal	3	19	0	0	22	511
2280A	2011	0	5	0	0	5	N/A
2280A	2012	2	5	0	0	7	N/A
2280A	2013	0	0	0	0	0	N/A

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2280A	2014	0	8	0	0	8	N/A
2280A	2015	1	1	0	0	2	N/A
2280A	2016	0	0	0	0	0	N/A
2280B	Subtotal	0	0	0	0	0	6
2280B	2011	0	0	0	0	0	N/A
2280B	2012	0	0	0	0	0	N/A
2280B	2013	0	0	0	0	0	N/A
2280B	2014	0	0	0	0	0	N/A
2280B	2015	0	0	0	0	0	N/A
2280B	2016	0	0	0	0	0	N/A
2282	Subtotal	1	6	1	0	8	446
2282	2011	1	3	1	0	5	N/A
2282	2012	0	2	0	0	2	N/A
2282	2013	0	1	0	0	1	N/A
2282	2014	0	0	0	0	0	N/A
2282	2015	0	0	0	0	0	N/A
2282	2016	0	0	0	0	0	N/A
2287	Subtotal	0	8	3	0	11	293
2287	2011	0	2	0	0	2	N/A
2287	2012	0	3	3	0	6	N/A
2287	2013	0	0	0	0	0	N/A
2287	2014	0	2	0	0	2	N/A
2287	2015	0	1	0	0	1	N/A
2287	2016	0	0	0	0	0	N/A
2297	Subtotal	2	7	0	0	9	114
2297	2011	2	0	0	0	2	N/A
2297	2012	0	1	0	0	1	N/A
2297	2013	0	5	0	0	5	N/A

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2297	2014	0	0	0	0	0	N/A
2297	2015	0	1	0	0	1	N/A
2297	2016	0	0	0	0	0	N/A
2299A	Subtotal	0	0	0	0	0	21
2299A	2011	0	0	0	0	0	N/A
2299A	2012	0	0	0	0	0	N/A
2299A	2013	0	0	0	0	0	N/A
2299A	2014	0	0	0	0	0	N/A
2299A	2015	0	0	0	0	0	N/A
2299A	2016	0	0	0	0	0	N/A
2299B	Subtotal	1	1	0	0	2	874
2299B	2011	1	1	0	0	2	N/A
2299B	2012	0	0	0	0	0	N/A
2299B	2013	0	0	0	0	0	N/A
2299B	2014	0	0	0	0	0	N/A
2299B	2015	0	0	0	0	0	N/A
2299B	2016	0	0	0	0	0	N/A
2304	Subtotal	3	31	1	0	35	605
2304	2011	0	7	0	0	7	N/A
2304	2012	2	8	0	0	10	N/A
2304	2013	0	7	0	0	7	N/A
2304	2014	1	7	1	0	9	N/A
2304	2015	0	2	0	0	2	N/A
2304	2016	0	0	0	0	0	N/A
2316	Subtotal	1	6	0	0	7	304
2316	2011	0	1	0	0	1	N/A
2316	2012	0	0	0	0	0	N/A
2316	2013	1	1	0	0	2	N/A

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2316	2014	0	3	0	0	3	N/A
2316	2015	0	1	0	0	1	N/A
2316	2016	0	0	0	0	0	N/A
2322	Subtotal	0	3	0	0	3	119
2322	2011	0	0	0	0	0	N/A
2322	2012	0	0	0	0	0	N/A
2322	2013	0	1	0	0	1	N/A
2322	2014	0	2	0	0	2	N/A
2322	2015	0	0	0	0	0	N/A
2322	2016	0	0	0	0	0	N/A
2324	Subtotal	2	23	1	0	26	1,006
2324	2011	1	6	1	0	8	N/A
2324	2012	1	1	0	0	2	N/A
2324	2013	0	5	0	0	5	N/A
2324	2014	0	6	0	0	6	N/A
2324	2015	0	4	0	0	4	N/A
2324	2016	0	1	0	0	1	N/A
2326A	Subtotal	0	2	0	0	2	566
2326A	2011	0	0	0	0	0	N/A
2326A	2012	0	0	0	0	0	N/A
2326A	2013	0	0	0	0	0	N/A
2326A	2014	0	2	0	0	2	N/A
2326A	2015	0	0	0	0	0	N/A
2326A	2016	0	0	0	0	0	N/A
2326B	Subtotal	3	8	1	0	12	442
2326B	2011	0	1	0	0	1	N/A
2326B	2012	0	0	0	0	0	N/A
2326B	2013	2	2	0	0	4	N/A

WBID Number	Year	New OSTDS	Repair OSTDS	Existing OSTDS	Abandoned OSTDS	Total with Permits	Total Parcels with OSTDS in WBID
2326B	2014	1	4	1	0	6	N/A
2326B	2015	0	1	0	0	1	N/A
2326B	2016	0	0	0	0	0	N/A
2361	Subtotal	1	1	1	0	3	389
2361	2011	0	0	0	0	0	N/A
2361	2012	0	0	1	0	1	N/A
2361	2013	1	0	0	0	1	N/A
2361	2014	0	1	0	0	1	N/A
2361	2015	0	0	0	0	0	N/A
2361	2016	0	0	0	0	0	N/A
2381	Subtotal	2	16	1	0	19	523
2381	2011	2	3	1	0	6	N/A
2381	2012	0	2	0	0	2	N/A
2381	2013	0	5	0	0	5	N/A
2381	2014	0	4	0	0	4	N/A
2381	2015	0	1	0	0	1	N/A
2381	2016	0	1	0	0	1	N/A
All WBIDS	Grand Total	45	300	15	0	360	15,766

Appendix F: Water Quality Monitoring

Table F-1. Water quality monitoring plan

Notes: For the BMAP I tributaries, JEA has committed to processing up to 32 samples per month for COJ and DEP, and FDOT provides partial funding to COJ for monitoring and follow-up sampling. For the BMAP II tributaries, Atlantic Beach, Neptune Beach, and FDOT provide partial funding to COJ for monitoring and follow-up sampling.

* F = Fresh water; M = Marine

Waterbody Name	WBID Number	Parent WBID Number	WBID Classification*	BMAP I or II	Monitoring Entity	Organization ID	Station ID	Station Description	Sampling Frequency
Newcastle Creek	2235	2235	IIIF	I	COJ	21FLJXWQ	ARL5A	Berrywood Lane	Monthly
Newcastle Creek	2235	2235	IIIF	I	COJ	21FLJXWQ	ARL6	Fort Caroline Hills Drive	Monthly
Hogan Creek	2252	2252	IIIF	I	COJ	21FLJXWQ	HC1A	Broad Street	Monthly
Hogan Creek	2252	2252	IIIF	I	COJ	21FLJXWQ	HC2A	Hubbard Street (Confederate Park)	Monthly
Hogan Creek	2252	2252	IIIF	I	COJ	21FLJXWQ	HC3	First Street	Monthly
Butcher Pen Creek	2322	2322	IIIF	I	DEP	21FLA	20030082	Confederate Point Road	Monthly
Butcher Pen Creek	2322	2322	IIIF	I	DEP	21FLA	20030760	Wesconnett Boulevard	Monthly
Butcher Pen Creek	2322	2322	IIIF	I	COJ	21FLJXWQ	CR2	Butcher Penn Creek at Wesconnet Blvd.	Quarterly
Miller Creek	2287	2287	IIIF	I	COJ	21FLJXWQ	SS1	Atlantic Boulevard	Monthly
Miller Creek	2287	2287	IIIF	I	COJ	21FLJXWQ	SS23	Mayfair Road	Monthly
Miramar Creek	2304	2304	IIIF	I	COJ	21FLJXWQ	SSGAD	Gadston Road	Monthly
Miramar Creek	2304	2304	IIIF	I	COJ	21FLJXWQ	SS4	San Jose Boulevard	Monthly
Big Fishweir Creek	2280B	2280	IIIM	I	COJ	21FLJXWQ	CR139	Big Fishweir Creek at Herschel St.	Quarterly
Big Fishweir Creek	2280A	2280	IIIF	I	DEP	21FLA	20030951	Park Street – East Crossing	Monthly

Waterbody Name	WBID Number	Parent WBID Number	WBID Classification*	BMAP I or II	Monitoring Entity	Organization ID	Station ID	Station Description	Sampling Frequency
Big Fishweir Creek	2280A	2280	IIIF	I	DEP	21FLA	20030953	Little Fishweir Creek at Oak	Monthly
Deer Creek	2256	2256	IIIF	I	COJ	21FLJXWQ	DR1	Talleyrand Avenue	Monthly
Terrapin Creek	2204	2204	IIIF	I	DEP	21FLA	20030490	Terrapin Creek at Blasius Road	Monthly
Goodbys Creek	2326B	2326	IIIM	I	COJ	21FLJXWQ	SS319	Goodbys Creek at Sanchez Rd.	Quarterly
Goodbys Creek	2326A	2326	IIIF	I	DEP	21FLA	20030891	Goodbys Creek above west branch at San Clerc	Monthly
Open Creek	2299A	2299	IIIM	I	COJ	21FLJXWQ	IWWF	Open Creek at San Pablo Road	Quarterly
Open Creek	2299B	2299	IIIF	I	DEP	21FLA	20030848	N.W. Tributary to Open Creek at Hodges Blvd.	Monthly
Craig Creek	2297	2297	IIIF	II	COJ	21FLJXWQ	SS63	Craig Creek in Park at Hendricks Avenue	Quarterly
Craig Creek	2297	2297	IIIF	II	DEP	21FLA	20030793	Craig at Hendricks Ave.	Monthly
Craig Creek	2297	2297	IIIF	II	DEP	21FLA	20030958	Craig Creek 100 meters down from footbridge at Hendricks Park	Monthly
McCoy Creek	2257	2257	IIIF	II	JEA	21FLJEA	MCT1	Myrtle Avenue	Quarterly
McCoy Creek	2257	2257	IIIF	II	JEA	21FLJEA	MCT2	Leland Street	Quarterly
McCoy Creek	2257	2257	IIIF	II	JEA	21FLJEA	MCS1	South of Broadway Avenue	Monthly
McCoy Creek	2257	2257	IIIF	II	JEA	21FLJEA	MCS2	Shearer Street between Dellwood Avenue and Myra Street	Monthly
McCoy Creek	2257	2257	IIIF	II	JEA	21FLJXWQ	MC1	McCoy Creek at Myrtle Ave.	Quarterly
McCoy Creek	2257	2257	IIIF	II	JEA	21FLJXWQ	MC3	McCoy Creek at Leland St.	Quarterly
Williamson Creek	2316	2316	IIIF	II	JEA	21FLJEA	WCT2	JEA WCT2 – Hyde Park Rd.	Quarterly
Williamson Creek	2316	2316	IIIF	II	JEA	21FLJEA	WCT3	Upstream Side of Hugh Edwards	Monthly

Waterbody Name	WBID Number	Parent WBID Number	WBID Classification*	BMAP I or II	Monitoring Entity	Organization ID	Station ID	Station Description	Sampling Frequency
Williamson Creek	2316	2316	IIIF	II	COJ	21FLJXWQ	CR84	Williamson Creek at Hyde Park Rd.	Quarterly
Fishing Creek	2324	2324	IIIF	II	COJ	21FLJXWQ	OR4	Timuquana Road and Fishing Creek	Monthly
Fishing Creek	2324	2324	IIIF	II	COJ	21FLJXWQ	OR94	Fishing Creek at Ortega River Confluence	Monthly
Fishing Creek	2324	2324	IIIF	II	COJ	21FLJXWQ	OR118	Fishing Creek south branch at 118th St. east of Jammes Rd.	Monthly
Fishing Creek	2324	2324	IIIF	II	COJ	21FLJXWQ	OR8W	Fishing Creek north branch at Jammes Rd.	Monthly
Deep Bottom Creek	2361	2361	IIIF	II	COJ	21FLJXWQ	SS18	Scott Mill Road	Monthly
Deep Bottom Creek	2361	2361	IIIF	II	COJ	21FLJXWQ	DBHARTW	Northern branch at Hartley Road, west of Cypresswood Drive	Monthly
Deep Bottom Creek	2361	2361	IIIF	II	COJ	21FLJXWQ	DBHARTE	Hood Road	Monthly
Moncrief Creek	2228B	2228	IIIF	II	DEP	21FLA	20030726	Moncrief Creek at Moncrief Road	Monthly
Moncrief Creek	2228B	2228	IIIF	II	DEP	21FLA	20030897	Moncrief Creek at 21st St.	Monthly
Moncrief Creek	2228A	2228	IIIM	II	COJ	21FLJXWQ	TR114	Moncrief Creek at Lem Turner Rd.	Quarterly
Blockhouse Creek	2207	2207	IIIF	II	COJ	21FLJXWQ	TR37	Blockhouse Creek at Leonid Road	Quarterly
Hopkins Creek	2266	2266	IIIM	II	COJ	21FLJXWQ	IWWH	Kings Road	Monthly
Hopkins Creek	2266	2266	IIIM	II	Jacksonville Beach	21FLCOJB	SW-BT03	Southeastern branch at 20th Avenue North	Monthly
Hopkins Creek	2266	2266	IIIM	II	Jacksonville Beach	21FLCOJB	SW-BT06	Southwestern branch at Tallwood Road	Monthly
Hopkins Creek	2266	2266	IIIM	II	COJ	21FLJXWQ	COAB1	Hopkins Creek at Atlantic Boulevard	Monthly
Hopkins Creek	2266	2266	IIIM	II	COJ	21FLJXWQ	CONB1	Hopkins Creek Main Channel at Penman Rd.	Monthly

Waterbody Name	WBID Number	Parent WBID Number	WBID Classification*	BMAP I or II	Monitoring Entity	Organization ID	Station ID	Station Description	Sampling Frequency
Cormorant Branch	2381	2381	IIIF	II	COJ	21FLJXWQ	JC15	Cormorant Branch at Julington Creek Road	Monthly
Cormorant Branch	2381	2381	IIIF	II	COJ	21FLJXWQ	JC437	Cormorant Branch at Marbon Road	Monthly
Cormorant Branch	2381	2381	IIIF	II	COJ	21FLJXWQ	JC2A	Cormorant Branch at Heather Grove Lane	Monthly
Wills Branch	2282	2282	IIIF	II	COJ	21FLJXWQ	CR21	Wills Branch N Branch @ Old Middleburg Rd	Quarterly
Wills Branch	2282	2282	IIIF	II	COJ	21FLJXWQ	CR95	Wills Branch at Lane Ave S	Quarterly
Sherman Creek	2227	2227	IIIM	II	COJ	21FLJXWQ	SC1	Puckett Creek at Wonderwood Drive	Monthly
Sherman Creek	2227	2227	IIIM	II	COJ	21FLJXWQ	IWW2	Sherman Creek at State Road A1A Bridge	Monthly
Sherman Creek	2227	2227	IIIM	II	COJ	21FLCOAB	COAB2	Sherman Creek at Fleet Landing Blvd.	Monthly
Sherman Creek	2227	2227	IIIM	II	COJ	21FLCOAB	COAB3	Assisi Lane and Puckett Creek intersection	Monthly
Sherman Creek	2227	2227	IIIM	II	COJ	21FLCOAB	COAB4-LS	Lift station on north side of neighborhood	Monthly
Sherman Creek	2227	2227	IIIM	II	NS Mayport	21FLMAYP	SHERCRK2	Everglades Street upstream of weir	Monthly
Pottsburg Creek	2265C	2265	IIIF	II	COJ	21FLJXWQ	BP64	Big Pottsburg Creek at Belfort Road South End	Quarterly
Pottsburg Creek	2265D	2265	IIIM	II	COJ	21FLJXWQ	BP67	Big Pottsburg Creek at Hogan Road	Quarterly
Greenfield Creek	2265B	2240	IIIF	II	COJ	21FLJXWQ	GC1	Greenfield Creek at Atlantic Blvd.	Quarterly
Middle Trout River	2203B	2203	IIIM	II	DEP	21FLA	20030123	Trout River at Dinsmore Boat Ramp Boat Dock NR US 1	Monthly
Middle Trout River	2203B	2203	IIIM	II	COJ	21FLJXWQ	TR123	Trout River at U.S. 1 at Boat Ramp	Quarterly
Middle Trout River	2203	2203	IIIF	II	DEP	21FLA	20030753	Trout River at Old Kings Road	Monthly

Waterbody Name	WBID Number	Parent WBID Number	WBID Classification*	BMAP I or II	Monitoring Entity	Organization ID	Station ID	Station Description	Sampling Frequency
Middle Trout River	2203	2203	IIIF	II	COJ	21FLJXWQ	TREE10	Trout River at Old Kings Rd.	Quarterly
Lower Trout River	2203A	2203	IIIM	II	COJ	21FLJXWQ	TR34	Highlands Creek at Broward Rd.	Quarterly
Lower Trout River	2203A	2203	IIIM	II	COJ	21FLJXWQ	TR113A	Trout River at Bert Maxwell Boat Ramp	Quarterly

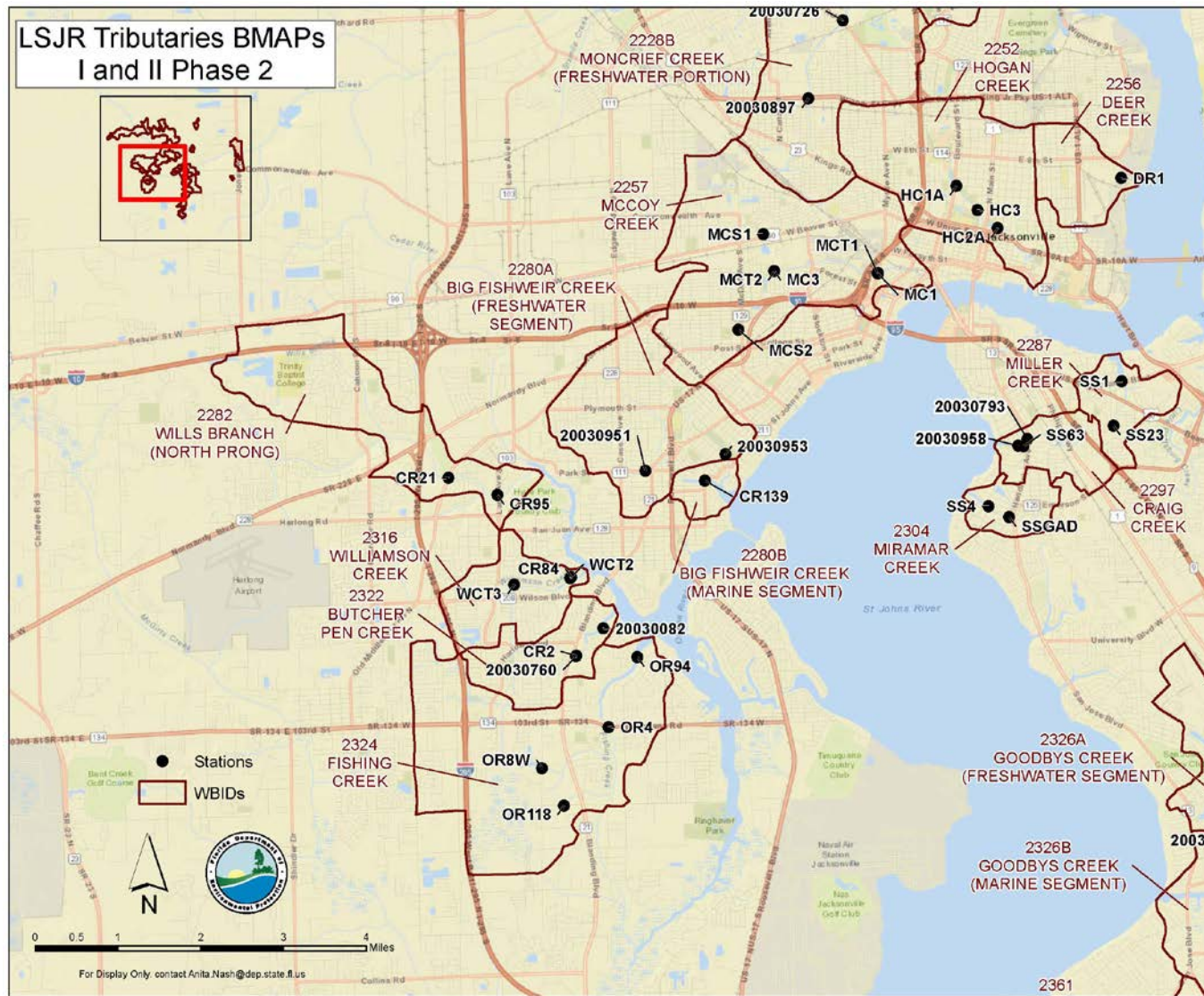


Figure F-2. Map 2 of 5 maps of monitoring stations in the LSJR Tributaries BMAP area



Figure F-3. Map 3 of 5 maps of monitoring stations in the LSJR Tributaries BMAP area

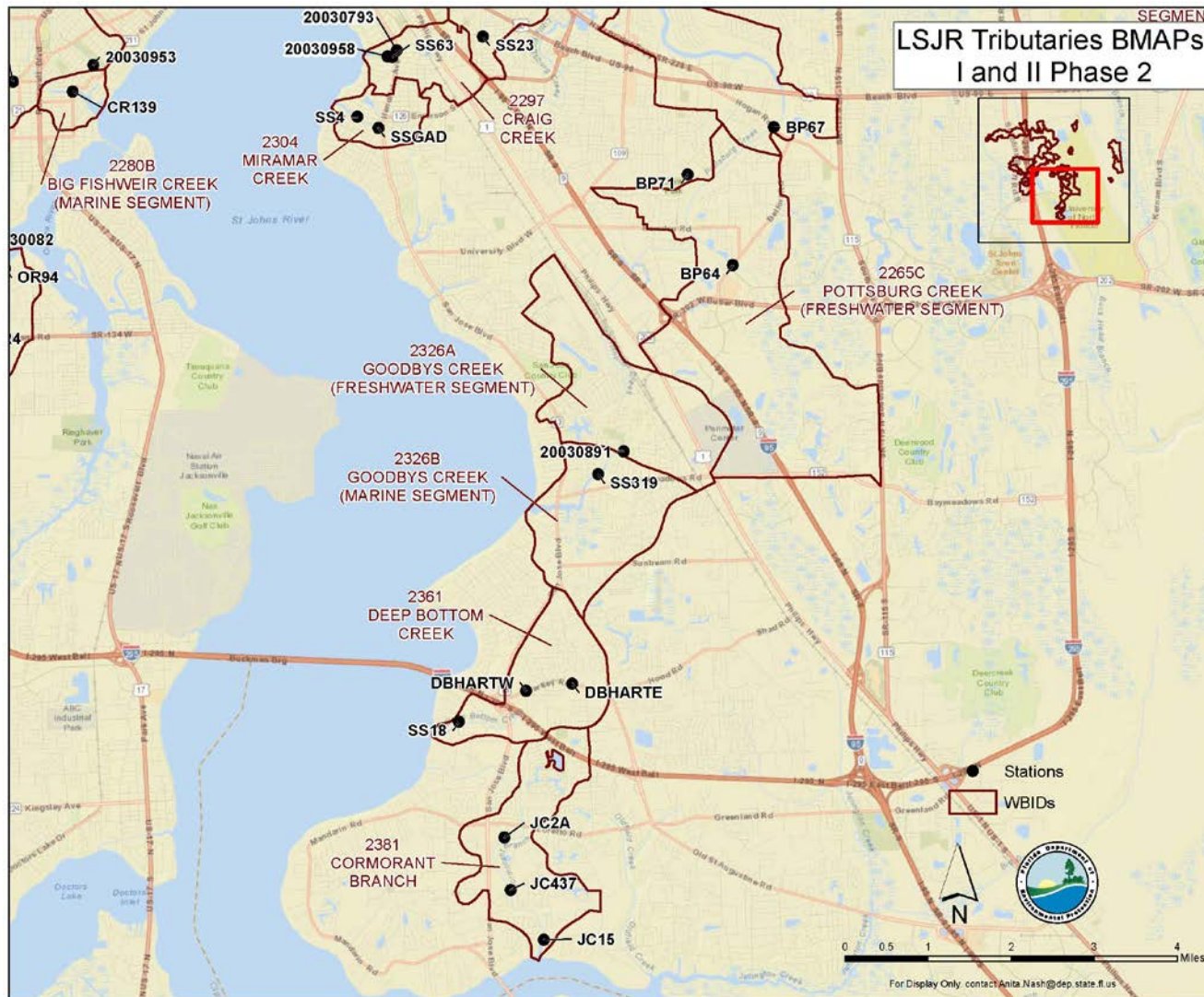


Figure F-4. Map 4 of 5 maps of monitoring stations in the LSJR Tributaries BMAP area

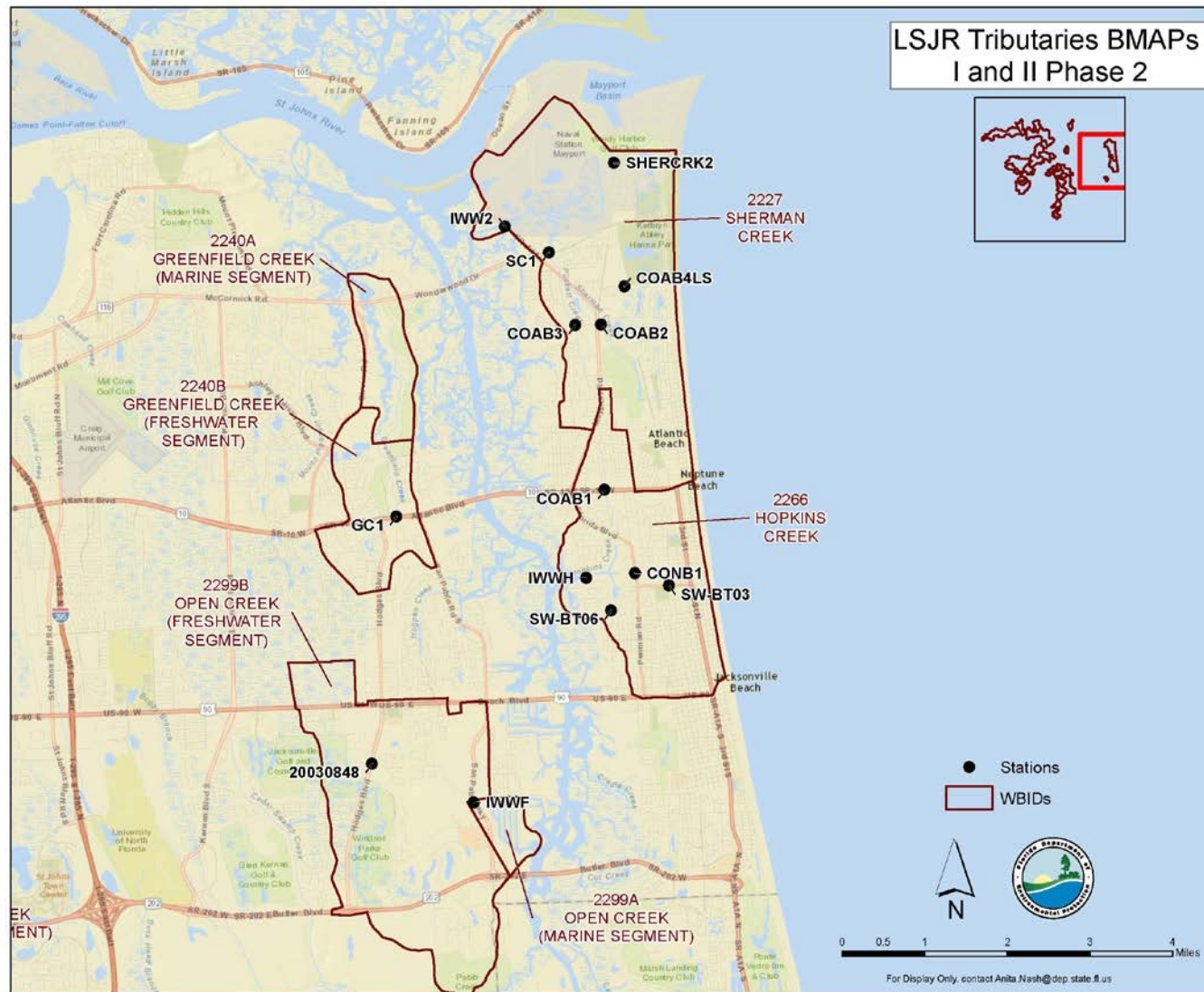


Figure F-5. Map 5 of 5 maps of monitoring stations in the LSJR Tributaries BMAP area

Table F-1. Statistical summary of BMAP monitoring station data

Note: Waterbodies are listed in order from the lowest to highest median value.

WBID Number	Waterbody	Station ID	POR	Number of Samples	Minimum	Median	Mean	Maximum
2227	Sherman Creek	IWW2	2011–16	67	1	1	206	4,100
2227	Sherman Creek	SHERCRK2	2012–16	50	1	68	433	8,200
2203A	Trout River Lower Reach	TR113A	2011–16	22	1	90	174	1,000
2324	Fishing Creek	OR94	2011–16	69	1	150	689	12,462
2266	Hopkins Creek	IWWH	2011–16	74	1	195	790	11,351
2203	Trout River Middle Reach	TREE10	2011–16	22	1	220	538	3,200
2381	Cormorant Branch	JC15	2011–16	65	1	250	534	4,500
2203	Trout River Middle Reach	20030753	2014–16	32	18	260	503	4,700
2324	Fishing Creek	OR118	2011–16	66	1	270	2,352	41,000
2227	Sherman Creek	SC1	2011–16	73	1	270	944	16,667
2240B	Greenfield Creek	GC1	2011–16	23	1	270	734	5,700
2203A	Trout River Lower Reach	TR34	2011–16	23	1	270	486	3,900
2265C	Pottsburg Creek	BP64	2011–16	19	3	290	720	4,000
2203B	Trout River Middle Reach	20030123	2011–16	31	45	300	695	5,700
2280B	Big Fishweir Creek	CR139	2011–16	19	90	360	1,349	7,200
2299A	Open Creek	IWWF	2011–16	21	1	360	436	1,351
2227	Sherman Creek	COAB4LS	2013–16	39	1	360	838	6,937
2203B	Trout River Middle Reach	TR123	2011–16	23	90	360	745	3,800
2282	Wills Branch	CR21	2011–16	22	45	365	951	7,273
2265D	Pottsburg Creek	BP67	2011–16	18	93	380	4,609	60,000
2324	Fishing Creek	OR8W	2011–16	70	1	390	1,402	30,000
2381	Cormorant Branch	JC2A	2011–16	58	1	400	792	8,468
2227	Sherman Creek	COAB2	2011–16	62	1	415	1,692	50,000
2326B	Goodbys Creek	SS319	2011–16	22	1	445	651	2,200
2257	McCoy Creek	MC1	2011–16	23	1	450	1,025	7,000
2361	Deep Bottom Creek	DBHARTE	2013–16	45	1	460	995	10,000
2257	McCoy Creek	MCT2	2011–16	20	83	470	1,774	11,000
2228B	Moncrief Creek	20030726	2011–16	41	54	520	3,192	39,000
2228A	Moncrief Creek	TR114	2011–16	22	90	526	1,021	9,000

WBID Number	Waterbody	Station ID	POR	Number of Samples	Minimum	Median	Mean	Maximum
2257	McCoy Creek	MC3	2011–16	23	1	541	2,937	40,000
2324	Fishing Creek	OR4	2011–16	75	71	541	3,173	51,000
2316	Williamson Creek	WCT2	2011–16	26	83	550	1,065	6,500
2326A	Goodbys Creek	20030891	2011–16	62	130	555	1,049	8,900
2257	McCoy Creek	MCT1	2011–16	20	100	560	1,302	12,000
2322	Butcher Pen Creek	20030082	2011–16	26	90	575	1,379	12,000
2228B	Moncrief Creek	20030897	2011–16	64	1	590	4,375	96,000
2257	McCoy Creek	MCS2	2011–16	65	17	620	2,924	80,000
2207	Blockhouse Creek	TR37	2011–16	22	1	631	1,465	13,000
2381	Cormorant Branch	JC437	2011–16	60	1	631	787	3,400
2282	Wills Branch	CR95	2011–16	22	140	631	1,585	10,000
2299B	Open Creek	20030848	2011–16	11	230	640	735	2,000
2304	Miramar Creek	SSGAD	2013–16	46	1	666	1,390	13,000
2256	Deer Creek	DR1	2011–16	70	1	676	1,801	48,000
2235	Newcastle Creek	ARL5A	2011–16	69	1	680	2,404	24,000
2204	Terrapin Creek	20030490FLA	2011–16	63	99	720	1,028	5,700
2316	Williamson Creek	WCT3	2015–16	17	130	720	1,136	6,000
2361	Deep Bottom Creek	SS18	2011–16	73	1	800	1,144	6,000
2316	Williamson Creek	CR84	2011–16	22	1	840	5,244	46,000
2252	Hogan Creek	HC3	2011–16	70	1	901	3,683	93,000
2266	Hopkins Creek	CONB1	2011–16	66	90	901	2,536	50,000
2235	Newcastle Creek	ARL6	2011–16	69	135	910	2,535	40,000
2257	McCoy Creek	MCS1	2011–16	68	9	930	2,919	60,000
2252	Hogan Creek	HC2A	2011–16	70	1	946	2,542	21,000
2252	Hogan Creek	HC1A	2011–16	68	1	1,046	4,751	59,000
2297	Craig Creek	SS63	2011–16	21	1	1,100	2,678	23,000
2266	Hopkins Creek	COAB1	2011–16	62	90	1,126	3,170	66,000
2266	Hopkins Creek	SW-BT06	2011–16	68	1	1,200	1,772	8,500
2304	Miramar Creek	SS4	2011–16	70	1	1,400	2,714	24,000
2322	Butcher Pen Creek	CR2	2011–16	21	120	1,532	12,075	180,000
2227	Sherman Creek	COAB3	2011–16	61	1	1,802	2,633	30,000
2361	Deep Bottom Creek	DBHARTW	2011–16	67	1	2,000	3,952	55,000
2322	Butcher Pen Creek	20030760	2011–16	63	150	2,100	5,243	96,000

WBID Number	Waterbody	Station ID	POR	Number of Samples	Minimum	Median	Mean	Maximum
2287	Miller Creek	SS1	2011–16	66	1	2,150	4,836	61,818
2297	Craig Creek	20030793	2014–16	32	440	2,200	4,795	36,000
2266	Hopkins Creek	SW-BT03	2011–16	65	1	2,300	2,287	11,000
2297	Craig Creek	20030958	2014–16	23	300	2,400	5,128	48,000
2280A	Big Fishweir Creek	20030953	2011–16	70	120	2,600	7,641	113,000
2287	Miller Creek	SS23	2011–16	64	140	3,650	5,451	33,000
2280A	Big Fishweir Creek	20030951	2011–16	67	160	4,000	4,868	26,000