

2012 PROGRESS REPORT

For the Lower St. Johns River Basin Tributaries Basin Management Action Plan II

*Developed by the
Lower St. Johns River Tributaries Basin Working Group*

*In cooperation with the
Florida Department of Environmental Protection
Division of Environmental Assessment and Restoration
Bureau of Watershed Restoration
Tallahassee, Florida 32399*

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LIST OF ACRONYMS

ARV	Air Release Valve
BMAP	Basin Management Action Plan
BMP	Best Management Practice
CARE	Citizen Action Response Effort
CFU	Colony Forming Unit
CIPP	Cured In Place Pipe
CMOM	Capacity, Management, Operations, and Maintenance
COJ	City of Jacksonville
DCHD	Duval County Health Department
DCP	Drainage Connection Program
EQD	Environmental Quality Division
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
FDOT	Florida Department of Transportation
FOG	Fats, Oils, and Grease
F.S.	Florida Statutes
FY	Fiscal Year
GIS	Geographic Information System
HDPE	High Density Polyethylene
I&I	Inflow and Infiltration
IMZ	Industrial/Manufacturing Zone
LF	Linear Feet
LSJR	Lower St. Johns River
MAPS	Managed Aquatic Plant Systems
MF	Membrane Filter
mL	Milliliter
MPN	Most Probable Number
MS4	Municipal Separate Storm Sewer System
MSMP	Master Stormwater Management Plan
NPDES	National Pollutant Discharge Elimination System
NS	Naval Station
OSTDS	Onsite Sewage Treatment and Disposal System
PBTS	Performance-Based Treatment and Disposal System
PIC	Potential Illicit Connection
SCADA	Supervisory Control and Data Acquisition
SSO	Sanitary Sewer Overflow
SWIM	Surface Water Improvement and Management
TAT	Tributary Assessment Team
TMDL	Total Maximum Daily Load
WBID	Waterbody Identification

EXECUTIVE SUMMARY

TOTAL MAXIMUM DAILY LOADS

Total Maximum Daily Loads (TMDLs) are water quality targets for specific pollutants (such as fecal coliform) that are established for impaired waterbodies that do not meet designated uses based on Florida water quality standards. The Florida Department of Environmental Protection (FDEP) identified 75 tributaries in the Lower St. Johns River (LSJR) Basin as verified impaired for fecal coliforms. The LSJR Tributaries Basin Management Action Plan (BMAP) II includes 15 of these 75 impaired tributaries. FDEP adopted TMDLs in 2006 for Williamson Creek, Moncrief Creek, and Wills Branch. FDEP adopted TMDLs in 2009 for McCoy Creek, Deep Bottom Creek, Blockhouse Creek, Sherman Creek, Pottsburg Creek, Middle Trout River, and Lower Trout River. In addition, FDEP adopted TMDLs in 2010 for Craig Creek, Fishing Creek, Hopkins Creek, Cormorant Branch, and Greenfield Creek.

The LSJR Tributaries BMAP II was adopted by Secretarial Order in August 2010 as a plan to implement these TMDLs. This 2012 Progress Report is the second annual progress report for the LSJR Tributaries BMAP II, and it describes the activities implemented by the stakeholders during the reporting period of September 1, 2011 through December 31, 2012.

WATER QUALITY MONITORING AND TRENDS

The Tributaries Assessment Team (TAT) implemented the BMAP monitoring plan over the last year. Data collected from 2008 through 2012 were assessed to determine water quality trends in the 15 BMAP II tributaries. McCoy Creek, Fishing Creek, Deep Bottom Creek, Moncrief Creek, Blockhouse Creek, Cormorant Branch, Wills Branch, Sherman Creek, Greenfield Creek, Pottsburg Creek, Middle Trout River, and Lower Trout River are currently exceeding this 50% improvement milestone for the BMAP. Improvements in fecal coliform concentrations have also occurred in Craig Creek, Hopkins Creek, and Williamson Creek.

PROJECT AND PROGRAM IMPLEMENTATION

All of the entities continued to implement their countywide or city-wide programs. These programs include the maintenance and repair of infrastructure, which helps to reduce fecal coliform loading that can occur with faulty systems.

The Duval County Health Department (DCHD) implemented the intensive inspection program in Deep Bottom Creek, Cormorant Branch, Pottsburg Creek, and Middle Trout River watersheds.

The City of Jacksonville (COJ) completed drainage improvement projects in Craig Creek, McCoy Creek, Williamson Creek, Moncrief Creek, and Sherman Creek. COJ also followed up on outstanding potential illicit connection (PIC) cases in Pottsburg Creek. In addition, COJ connected septic tanks in Williamson Creek, Deep Bottom Creek, Moncrief Creek, Wills Branch, and Pottsburg Creek.

The Florida Department of Transportation (FDOT) completed the wet detention pond at the intersection of Interstate 10 and Interstate 95.

The City of Atlantic Beach completed sewer line upgrades in the Donner Subdivision and along Plaza Road, manhole rehabilitation in the Donner Subdivision and on Plaza Road, and cleaned and televised the sanitary sewer mains and cleaned the lift station and manholes near Donner Road in the Hopkins Creek watershed. In the Sherman Creek watershed, the city completed phase-outs of 4 septic tanks, sewer line upgrades along multiple roads, manhole rehabilitation on East Coast Drive with Spectrashield, and cleaned and televised the sewer mains on Dudley Road, Dutton Island Road, and near the Mimosa Cove lift station.

The City of Jacksonville Beach cleaned 19,000 linear feet of gravity sewer mains, coated the interior of 25 sewer manholes, and continued routine inspections and maintenance of the sewer and stormwater systems.

The City of Neptune Beach completed the upgrades and rehabilitation of the Summer Sands and Penman Terrace Lift stations. The city also replaced and repaired the gravity sewer main behind Fletcher High School with cured in place pipe (CIPP). In addition, the city lined a portion of the gravity sewer main in the Bal Harbour subdivision and lined a portion of the storm sewer pipe in the Driftwood subdivision using CIPP.

SECTION 1: INTRODUCTION

1.1 PURPOSE OF THE REPORT

This is the second annual progress report for the Lower St. Johns River (LSJR) Tributaries Basin Management Action Plan (BMAP) II and contains information for the period of September 1, 2011 through December 31, 2012. **Section 2** provides information on BMAP water quality monitoring and trends in each of the 15 BMAP II tributaries. **Section 3** describes ongoing programs implemented by the responsible stakeholders in the LSJR Basin. **Section 4** through **Section 18** provide status updates for the activities conducted by each entity in each of the BMAP tributaries.

1.2 TOTAL MAXIMUM DAILY LOADS IN THE TRIBUTARIES OF THE LSJR BASIN

The LSJR Tributaries BMAP II includes the 15 tributaries (see **Figure 1**) with adopted total maximum daily loads (TMDLs) identified as the waterbody identification numbers (WBIDs) with the worst-case condition for fecal coliforms, after those tributaries included in BMAP I. This worst-case determination was made using a ranking method that establishes the severity of water quality impairment based on the number of exceedances of fecal coliform colony counts. The water quality ranking method uses the total number of fecal coliform samples in the waterbody during the period of record to categorize how many samples were over 800, 5,000, and 10,000 colony forming units (CFU). A combined rank is then created based on the number of exceedances in each category. The WBIDs are sorted from worst to best to provide a guideline for assessment priorities, with the worst-case waterbody ranked as number 1.

The water quality criteria for fecal coliform bacteria are detailed in Rule 62-302, Florida Administrative Code (F.A.C.). The requirements for exceeding maximum fecal coliform concentrations in a Class III waterbody are stated as follows: *The most probable number (MPN) or membrane filter (MF) counts per 100 milliliters (mL) of fecal coliform bacteria shall not exceed a monthly average of 200, nor exceed 400 in 10% of samples, nor exceed 800 on any one day.* The criteria states that monthly averages shall be expressed as geometric means based on a minimum of 10 samples taken over a 30-day period. However, there were insufficient data (less than 10 samples in a given month) available to evaluate the geometric mean criterion for fecal coliform bacteria. Therefore, the criterion selected for the TMDLs was not to exceed 400 CFU in 10% of the samples.

The fecal coliform TMDLs for Williamson Creek, Moncrief Creek, and Wills Branch were adopted by the Florida Department of Environmental Protection (FDEP) in 2006. In 2009, FDEP adopted the TMDLs for McCoy Creek, Deep Bottom Creek, Blockhouse Creek, Sherman Creek, Pottsburg Creek, Middle Trout River, and Lower Trout River. In 2010, FDEP adopted the TMDLs for Craig Creek, Fishing Creek, Hopkins Creek, Cormorant Branch, and Greenfield Creek. **Table 1** lists the TMDLs adopted by rule and the pollutant load allocations for the 15 BMAP II tributaries.

TABLE 1: TMDLS FOR THE LSJR TRIBUTARIES INCLUDED IN BMAP II

WBID NUMBER	WBID NAME	WATERBODY TYPE	WASTELOAD ALLOCATION FOR WASTEWATER	WASTELOAD ALLOCATION FOR NPDES STORMWATER (% REDUCTION)	LOAD ALLOCATION (% REDUCTION)
2297	Craig Creek	Stream	Not applicable	87%	87%
2257	McCoy Creek	Stream	Not applicable	84%	84%
2316	Williamson Creek	Stream	Not applicable	83%	83%
2324	Fishing Creek	Stream	Must meet permit limits	69%	69%
2361	Deep Bottom Creek	Stream	Not applicable	82%	82%
2228	Moncrief Creek	Stream	83%	83%	83%
2207	Blockhouse Creek	Stream	Not applicable	82%	82%
2266	Hopkins Creek	Stream	Not applicable	67%	67%
2381	Cormorant Branch	Stream	Not applicable	73%	73%
2282	Wills Branch	Stream	Not applicable	80%	80%
2227	Sherman Creek	Stream	Not applicable	71%	71%
2240	Greenfield Creek	Stream	Not applicable	70%	70%
2265B	Pottsburg Creek	Stream	Not applicable	50%	50%
2203	Trout River	Stream	Not applicable	66%	66%
2203A	Trout River	Stream	Not applicable	60%	60%

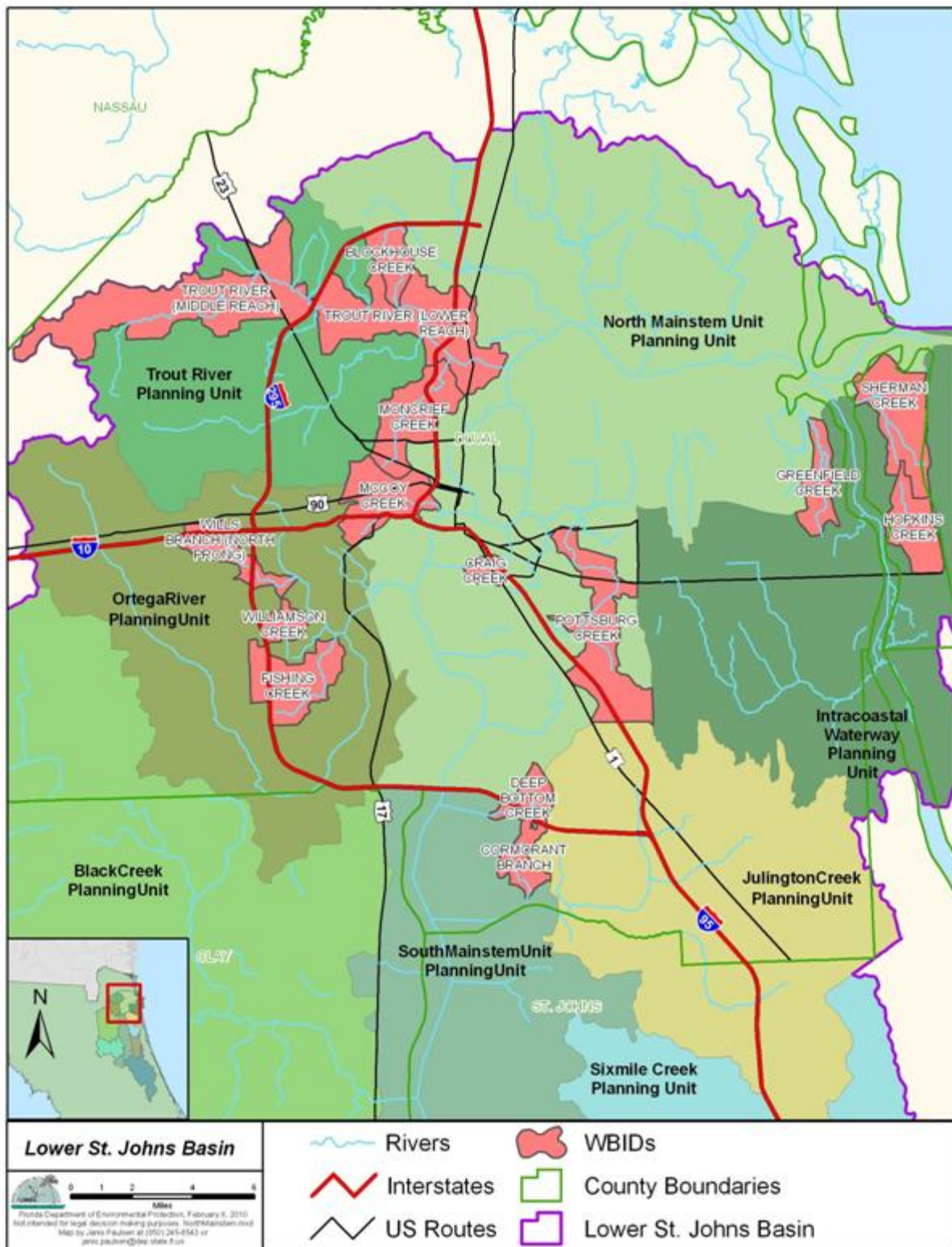


FIGURE 1: LSJR BASIN TRIBUTARIES INCLUDED IN BMAP II

1.3 RESPONSIBLE PARTIES AND KEY STAKEHOLDERS

Sources of fecal coliform loading in the 15 tributaries include wastewater, septic tanks, and stormwater. The entities responsible for addressing these sources in the BMAP tributaries include the City of Atlantic Beach, City of Jacksonville (COJ), City of Jacksonville Beach, City of Neptune Beach, Duval County Health Department (DCHD), Florida Department of Transportation (FDOT), JEA, and Naval Station (NS) Mayport. In addition to these entities, FDEP is also essential to the implementation of BMAP activities.

1.4 SUFFICIENCY OF EFFORT APPROACH

Fecal coliform can be highly variable and easily transported, making it difficult, in many cases, to identify the source of the bacteria. For this reason, detailed allocations were not made to each of the BMAP stakeholders. Instead, based on the potential sources in each WBID, the stakeholders were asked to identify their activities to reduce or remove bacteria sources that have been implemented since 1996 (the start of the TMDL verified period) and additional efforts that were underway or planned in 5 years from BMAP adoption. The stakeholders all submitted project sheets and program descriptions for the prevention, reduction, and source removal activities they conduct in each of the 15 WBIDs or on a countywide basis. FDEP then used a “sufficiency of effort” approach to conduct a WBID-specific assessment of the potential sources, and cumulative projects and activities that address or eliminate fecal coliform loading. This sufficiency of effort evaluation was not an assessment of each agency's individual activities; instead, it focused on whether the activities submitted by all the entities corresponded to the potential sources identified in the watershed and whether the total efforts were adequate to eliminate the known sources, assess unknown sources, and prevent the development of new sources.

During the sufficiency of effort evaluation, FDEP reviewed the information about each WBID including the documentation of the most likely sources, a Geographic Information System (GIS) database to determine the spatial and temporal distribution of the sources, permit and water quality information, relevant field information, and the completed corrective actions. For each waterbody evaluation, FDEP used the source summary for each tributary and compared it with the restoration activities to ensure that appropriate programs and activities were being implemented for the most likely sources to either decrease or eliminate the known sources, or further assess fecal coliform loadings. If any of the likely sources was not sufficiently addressed, FDEP identified the need for additional actions and the appropriate stakeholder was required to implement the actions as part of the BMAP.

SECTION 2: WATER QUALITY MONITORING AND TRENDS

2.1.1 MODIFICATIONS TO THE BMAP MONITORING PLAN

The BMAP monitoring plan included 8 of the 15 BMAP WBIDs to focus source assessment in the worst case WBIDs. After the first annual progress report, the Tributaries Assessment Team (TAT) decided to add monitoring in an additional 2 BMAP WBIDs, which resulted in an updated monitoring plan that included 10 of the 15 BMAP WBIDs. During the reporting period, the TAT assessed the existing sampling locations to determine where changes to the monitoring plan should be made. The TAT reviewed the available water quality data to identify stations where the fecal coliform counts have been low, and assessed the conditions near the stations, such as water depth and salinity concentrations, to ensure the stations were located in appropriate areas to identify fecal coliform sources. Based on this evaluation, the TAT determined which stations should remain in the current locations and sampled at the current frequency, where an increase in sampling frequency would provide useful information, where an existing station should be moved to another location in the watershed, and if some of the sampling resources in a watershed should be moved to another to help with source assessment.

Table 2 through **Table 7** show the updated monitoring plans for the WBIDs in which the stations were changed. The remaining sampling locations outlined in the original BMAP monitoring plan will continue, along with the new stations in Cormorant Branch and Middle Trout River that were included in the first annual progress report.

TABLE 2: REVISED 2012 MONITORING STATIONS IN CRAIG CREEK

MONITORING STATION	STATION TYPE	FREQUENCY	LOCATION	RESPONSIBLE ENTITY
21FLJXWQSS63	Trend	Quarterly	Craig Creek in Park at Hendricks Avenue	FDEP
21FLA 20030957	Source assessment	Monthly	Craig Creek at Lorimer	FDEP
21FLA 20030800	Source assessment	Monthly	Craig Creek at Hendricks	FDEP

TABLE 3: REVISED 2012 MONITORING STATIONS IN FISHING CREEK

MONITORING STATION	STATION TYPE	FREQUENCY	LOCATION	RESPONSIBLE ENTITY
21FLJXWQOR4	Trend	Quarterly	Timuquana Road and Fishing Creek	COJ
21FLJXWQOR94	Source assessment	Monthly	Fishing Creek at Ortega River Confluence	COJ

TABLE 4: REVISED 2012 MONITORING STATIONS IN DEEP BOTTOM CREEK

MONITORING STATION	STATION TYPE	FREQUENCY	LOCATION	RESPONSIBLE ENTITY
21FLJXWQSS18	Trend	Quarterly	Scott Mill Road	COJ
21FLJXWQDBHARTW	Source assessment	Monthly	Northern branch at Hartley Road, west of Cypresswood Drive	COJ
21FLJXWQDBHARTE	Source assessment	Monthly	Hood Road	COJ

TABLE 5: REVISED 2012 MONITORING STATIONS IN MONCRIEF CREEK

MONITORING STATION	STATION TYPE	FREQUENCY	LOCATION	RESPONSIBLE ENTITY
21FLA20030316	Trend	Quarterly	Tributary to Moncrief at Kenmore	FDEP
21FLA20030726	Trend	Quarterly	Moncrief Creek at Moncrief Road	FDEP
21FLA20030896	Source assessment	Monthly	Moncrief Creek at Kings	FDEP

MONITORING STATION	STATION TYPE	FREQUENCY	LOCATION	RESPONSIBLE ENTITY
21FLA20030959	Source assessment	Monthly	Northeastern branch at West 63 rd Street	FDEP

TABLE 6: REVISED 2012 MONITORING STATIONS IN HOPKINS CREEK

MONITORING STATION	STATION TYPE	FREQUENCY	LOCATION	RESPONSIBLE ENTITY
IWWH	Trend	Monthly	Kings Road	COJ
COAB1	Source assessment	Monthly	Hopkins Creek at Atlantic Boulevard	Atlantic Beach
SW-BT03	Source assessment	Monthly	Southeastern branch at 20 th Avenue North	Jacksonville Beach
SW-BT06	Source assessment	Monthly	Southwestern branch at Tallwood Road	Jacksonville Beach

TABLE 7: REVISED 2012 MONITORING STATIONS IN SHERMAN CREEK

MONITORING STATION	STATION TYPE	FREQUENCY	LOCATION	RESPONSIBLE ENTITY
SC1	Trend	Quarterly	Puckett Creek at Wonderwood Dr	COJ
COAB3	Source assessment	Monthly	Assisi Lane and Puckett Creek intersection	Atlantic Beach
COAB2	Source assessment	Monthly	Sherman Creek at Fleet Landing Blvd	Atlantic Beach
COAB4-LS	Source assessment	Monthly	Lift station on north side of neighborhood	Atlantic Beach
SHERCRK2	Source assessment	Monthly	Everglades Street upstream of weir	NS Mayport

2.1.2 PROGRESS TOWARDS IMPLEMENTATION MILESTONES

The BMAP includes a 5-year milestone, which will be used to assess progress towards the TMDLs. The goal is that during the fifth year following the BMAP adoption (2015), the water quality data will show that the median value for the fecal coliform counts in the first 4 years of BMAP implementation is at least 50% of the median in the TMDL in each WBID. If this 50% reduction is not achieved for each waterbody by the time of this year 5 analysis, additional efforts may be required in that WBID.

For this annual report, the monitoring data from January 1, 2008 through December 31, 2012 were used to determine the median for each WBID. Data included in this assessment were collected as part of the BMAP monitoring plan and municipal separate storm sewer system (MS4) sampling. This period of data was compared to the TMDL medians to determine what reductions have been made thus far. As reflected in **Table 8**, McCoy Creek, Fishing Creek, Deep Bottom Creek, Moncrief Creek, Blockhouse Creek, Cormorant Branch, Wills Branch, Sherman Creek, Greenfield Creek, Pottsburg Creek, Middle Trout River, and Lower Trout River are currently exceeding this 50% improvement milestone. Improvements in fecal coliform concentrations have also occurred in Craig Creek, Hopkins Creek, and Williamson Creek.

TABLE 8: PERCENT FECAL COLIFORM REDUCTION SINCE THE TMDL VERIFIED PERIOD

WBID NUMBER	WBID NAME	MEDIAN IN TMDL (#/100mL)	MEDIAN (2008-2012) (#/100mL)	% REDUCTION
2297	Craig Creek	3,000	2,400	20.0%
2257	McCoy Creek	2,510	780	68.9%
2316	Williamson Creek	2,400	2,200	8.3%

WBID NUMBER	WBID NAME	MEDIAN IN TMDL (#/100ML)	MEDIAN (2008-2012) (#/100ML)	% REDUCTION
2324	Fishing Creek	1,300	400	69.2%
2361	Deep Bottom Creek	2,200	890	59.5%
2228	Moncrief Creek	2,600	500	80.8%
2207	Blockhouse Creek	2,200	660	70.0%
2266	Hopkins Creek	1,200	650	45.8%
2381	Cormorant Branch	1,500	320	78.7%
2282	Wills Branch	4,000	480	88.0%
2227	Sherman Creek	1,400	200	85.7%
2240	Greenfield Creek	1,354	200	85.2%
2265B	Pottsburg Creek	800	260	67.5%
2203	Middle Trout River	1,184	345	70.9%
2203A	Lower Trout River	1,000	90	91.0%

2.1.3 CRAIG CREEK

Fecal coliform concentrations in Craig Creek have increased slightly from 2008 through 2012 (see **Figure 2**). The highest median concentrations occurred in 2008 and 2011, as shown in **Table 9**, and all of the 2012 samples exceeded the state standard. Station 21FLA 20030957, which is located along the 1st tributary south of Lorimer, had the highest median concentration of 5,400 CFU. The next highest concentration was found at station 21FLA 20030793 (Hendricks Avenue) with a median concentration of 3,300 CFU.

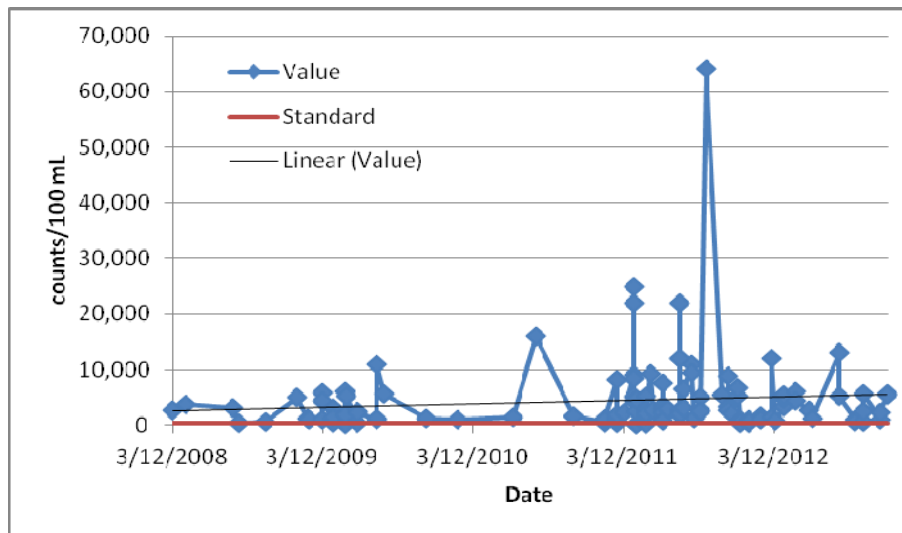


FIGURE 2: FECAL COLIFORM TRENDS IN CRAIG CREEK, 2008-2012

TABLE 9: SUMMARY OF CRAIG CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	5	400	3,700	2,600	2,072	4	80%
2009	22	155	11,000	1,568	2,850	20	91%
2010	4	960	16,000	1,550	5,015	4	100%
2011	64	90	64,000	2,650	5,427	59	92%
2012	26	430	13,000	2,350	3,446	26	100%

2.1.4 MCCOY CREEK

Overall, there has been an increase in fecal coliform concentrations in the McCoy Creek watershed over the period of 2008-2012 (see **Figure 3**). The highest median concentration and percent exceedance occurred in 2012 (see **Table 10**). The station with the highest median fecal coliform concentration is 21FLJEAMCS2, which had a median concentration of 2,550 CFU, and is located at Dellwood Avenue and Myra Street.

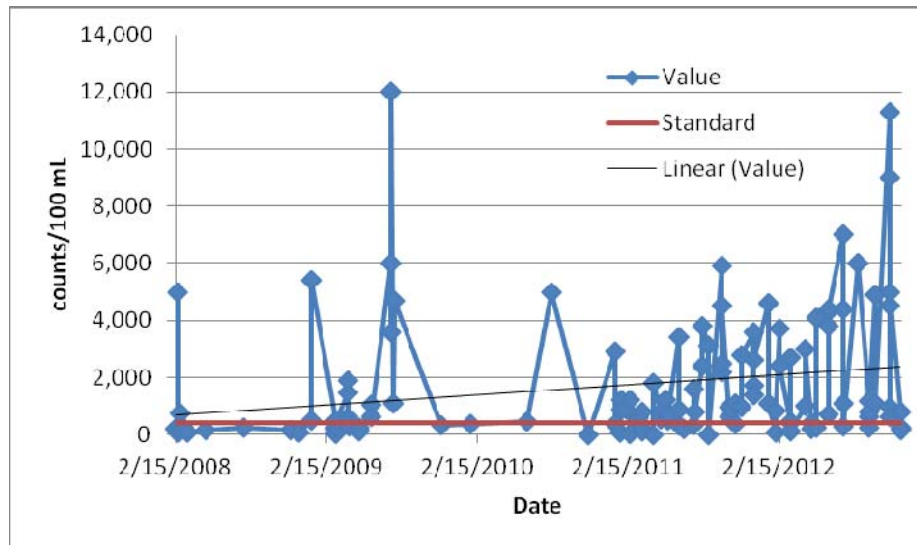


FIGURE 3: FECAL COLIFORM TRENDS IN MCCOY CREEK, 2008-2012

TABLE 10: SUMMARY OF MCCOY CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	15	75	5,000	167	556	3	20%
2009	29	31	12,000	500	1,594	15	52%
2010	4	0	5,000	400	1,450	2	50%
2011	48	0	5,900	870	1,353	35	73%
2012	42	90	11,300	1,100	2,496	32	76%

2.1.5 WILLIAMSON CREEK

There has been a slight decrease in the fecal coliform concentrations in Williamson Creek over the period of 2008 to 2012 (see **Figure 4**). The highest fecal coliform count of 200,000 CFU occurred in April 2008; however, fecal coliform counts have increased over the last 2 years of the data period (see **Table 11**). Stations 21FLJEAWCS2 and 21FLJEAWCS1 had the highest median values of 3,350 CFU and 2,700 CFU, respectively. Station 21FLJEAWCS2 is located south of Wilson Boulevard and East of Lane Avenue, and station 21FLJEAWCS1 is located at Wilson Boulevard.

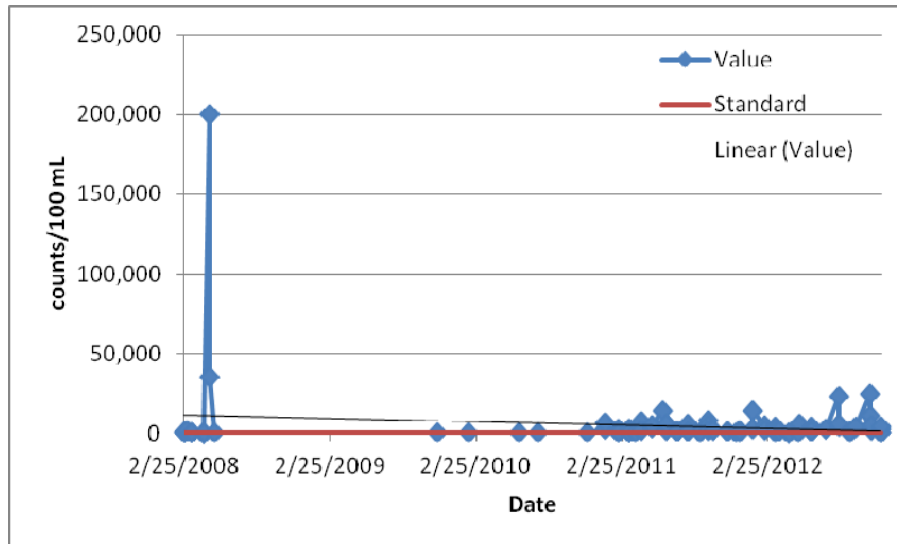


FIGURE 4: FECAL COLIFORM TRENDS IN WILLIAMSON CREEK, 2008-2012

TABLE 11: SUMMARY OF WILLIAMSON CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	19	0	200,000	580	12,875	13	68%
2009	4	16	390	126	164	0	0%
2010	4	320	790	585	570	2	50%
2011	56	240	14,000	2,250	3,246	54	96%
2012	39	17	24,800	3,100	4,267	37	95%

2.1.6 FISHING CREEK

Fecal coliform counts over the period of 2008 to 2012 in Fishing Creek have increased slightly (see Figure 5). However, the median values are all below 500 CFU during this period (see Table 12). All of the stations in the basin have median counts below 800 CFU.

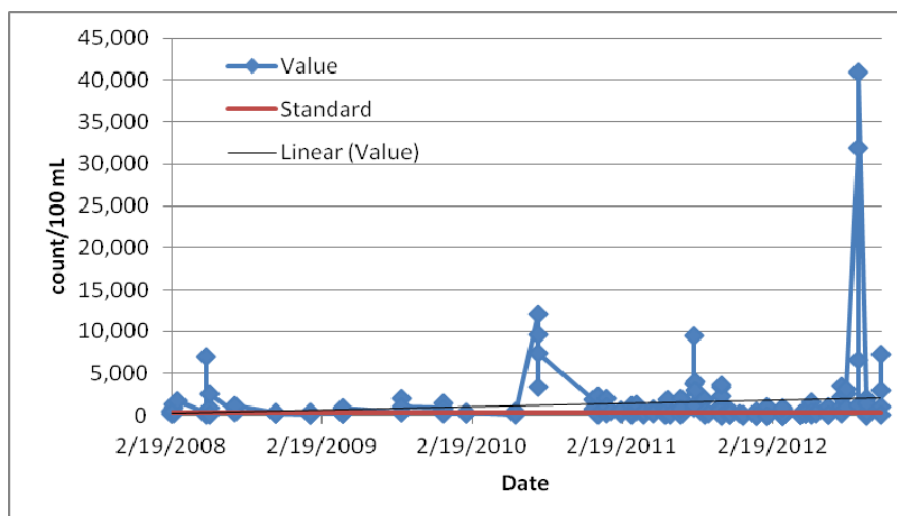


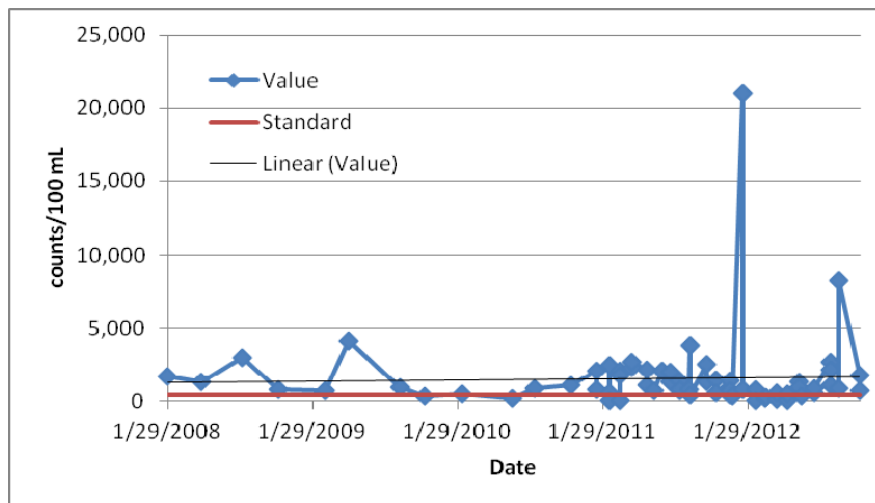
FIGURE 5: FECAL COLIFORM TRENDS IN FISHING CREEK, 2008-2012

TABLE 12: SUMMARY OF FISHING CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	25	20	7,000	400	875	12	48%
2009	16	49	2,000	330	596	6	38%
2010	16	27	12,000	400	2,465	8	50%
2011	61	0	9,500	480	979	36	59%
2012	55	0	41,000	300	2,192	39	71%

2.1.7 DEEP BOTTOM CREEK

Fecal coliform concentrations in Deep Bottom Creek have very slightly increased over the period of 2008 to 2012 (see **Figure 6**). The median values have decreased from 1,500 CFU in 2008 to 800 CFU in 2012 (see **Table 13**). Station 21FLJXWQDBHARTW had the highest median count of 1,500 CFU.

**FIGURE 6: FECAL COLIFORM TRENDS IN DEEP BOTTOM CREEK, 2008-2012****TABLE 13: SUMMARY OF DEEP BOTTOM CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012**

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	4	800	3,000	1,500	1,700	4	100%
2009	4	327	4,100	855	1,534	3	75%
2010	4	220	1,100	695	678	3	75%
2011	30	20	3,800	1,351	1,376	27	90%
2012	22	17	21,000	800	2,066	16	73%

2.1.8 MONCRIEF CREEK

Concentrations of fecal coliforms have very slightly increased in Moncrief Creek (see **Figure 7**). The median counts have remained low during this period (see **Table 14**). All of the stations had low median values except station 21FLA 20030959, which had a median count of 1,500 CFU, and is located on the northeastern branch at West 63rd Street.

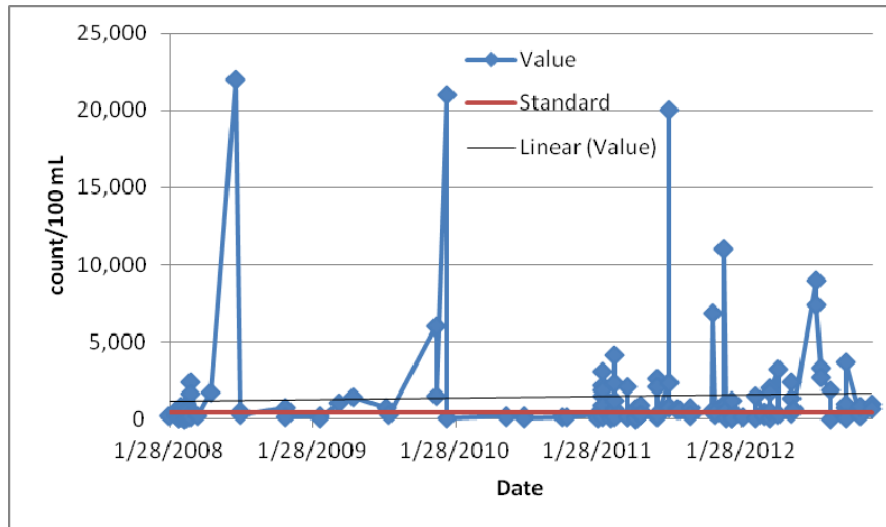


FIGURE 7: FECAL COLIFORM TRENDS IN MONCRIEF CREEK, 2008-2012

TABLE 14: SUMMARY OF MONCRIEF CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	32	0	22,000	268	1,141	12	38%
2009	8	49	6,000	880	1,404	5	63%
2010	8	16	21,000	145	2,738	1	13%
2011	59	0	20,000	580	1,419	35	59%
2012	33	0	9,000	710	1,477	22	67%

2.1.9 BLOCKHOUSE CREEK

Fecal coliform concentrations in Blockhouse Creek have increased (see **Figure 8**) from 2008 to 2012. Higher counts were found in 2012 as compared to past years (see **Table 15**). All of the data for this watershed are from station 21FLJXWQTR37, and this station had a median count of 660 CFU.

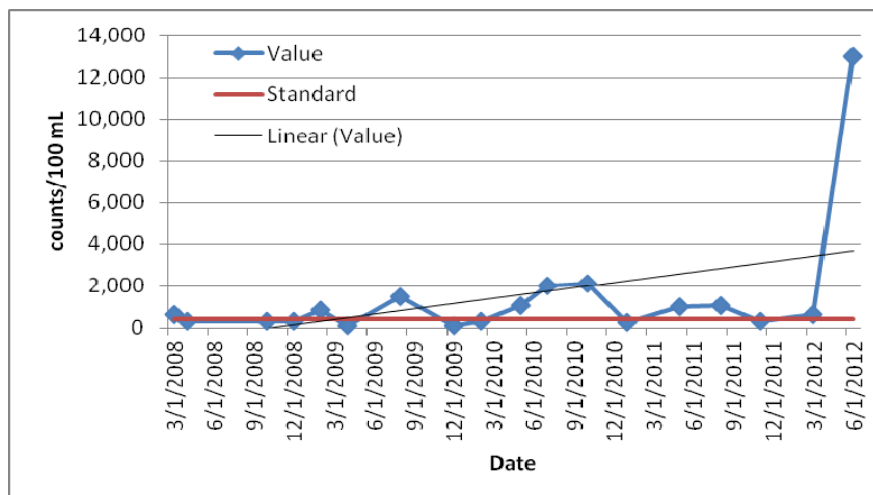


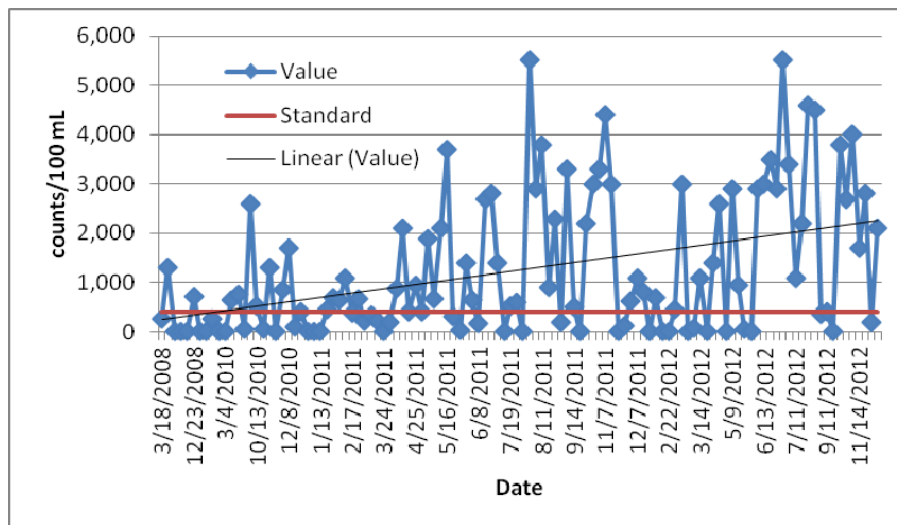
FIGURE 8: FECAL COLIFORM TRENDS IN BLOCKHOUSE CREEK, 2008-2012

TABLE 15: SUMMARY OF BLOCKHOUSE CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	4	300	660	330	405	1	25%
2009	4	93	1,500	485	641	2	50%
2010	4	300	2,100	1,540	1,370	3	75%
2011	4	270	1,081	655	665	2	50%
2012	3	631	13,000	4,600	6,077	3	100%

2.1.10 HOPKINS CREEK

There has been an increase in fecal coliform concentrations in the Hopkins Creek watershed from 2008 to 2012 (see **Figure 9**). The median counts increased in 2012 to 1,400 CFU (see **Table 16**). Station 21FLCOJB SW-BT03 had the highest median count of 2,200 CFU. This station is located at the southeastern branch at 20th Avenue North.

**FIGURE 9: FECAL COLIFORM TRENDS IN HOPKINS CREEK, 2008-2012****TABLE 16: SUMMARY OF HOPKINS CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012**

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	6	0	1,300	145	388	2	33%
2009	4	0	262	20	76	0	0%
2010	11	0	2,600	640	772	7	64%
2011	56	0	5,500	640	1,200	36	64%
2012	37	0	5,500	1,400	1,756	24	65%

2.1.11 CORMORANT BRANCH

There was a slight decline in fecal coliform counts in the Cormorant Branch watershed (see **Figure 10**). The highest median count of 1,850 CFU occurred in 2010, with the rest of the years having median values below 600 CFU (see **Table 17**). All of the stations in this watershed had low medians, below 500 CFU.

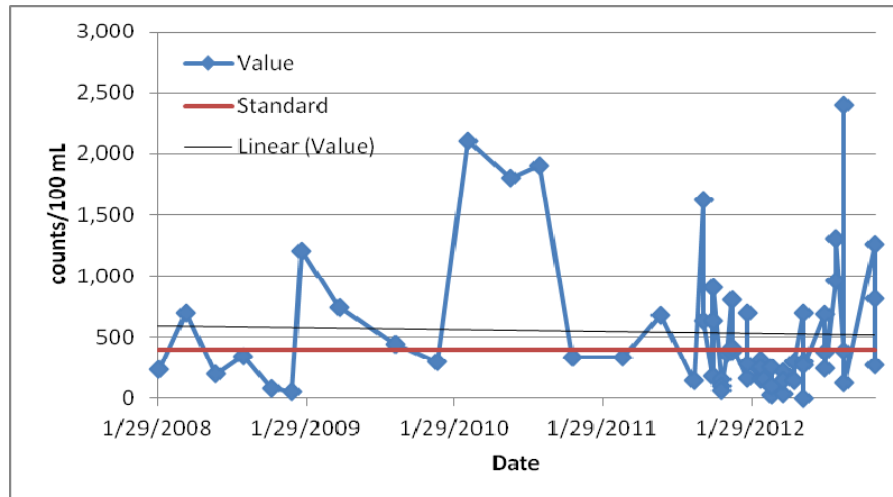


FIGURE 10: FECAL COLIFORM TRENDS IN CORMORANT BRANCH, 2008-2012

TABLE 17: SUMMARY OF CORMORANT BRANCH FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	6	49	700	215	267	1	17%
2009	4	300	1,200	590	670	3	75%
2010	4	330	2,100	1,850	1,533	3	75%
2011	15	56	1,622	380	491	7	47%
2012	31	0	2,400	270	471	9	29%

2.1.12 WILLS BRANCH

For the period of 2006 to 2011, the fecal coliform concentrations have increased in the Wills Branch watershed (see **Figure 11**). The median values were 550 CFU or below for all years except 2011, which had a value of 1,300 CFU (see **Table 18**). The station with the highest median was 21FLJXWQCR430, which had a count of 1,750 CFU. However, this median value is based on only two samples. The medians at the other stations in the watershed were 500 CFU or below.

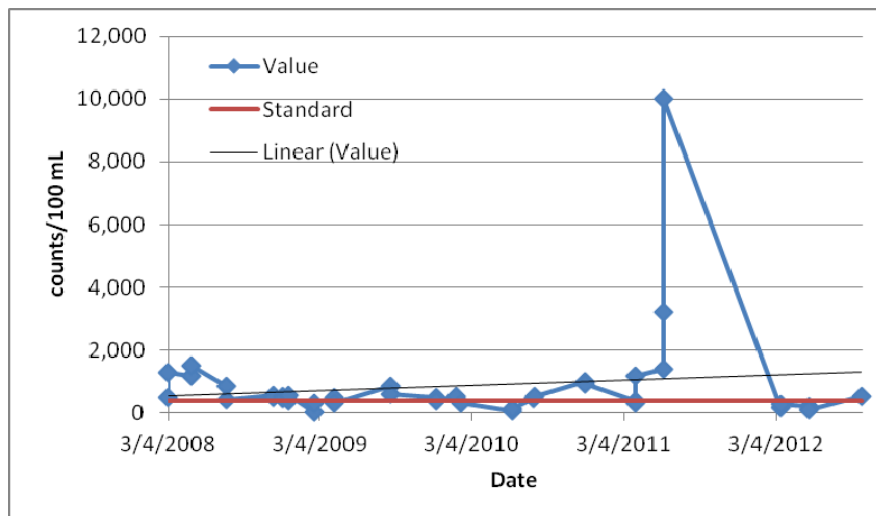


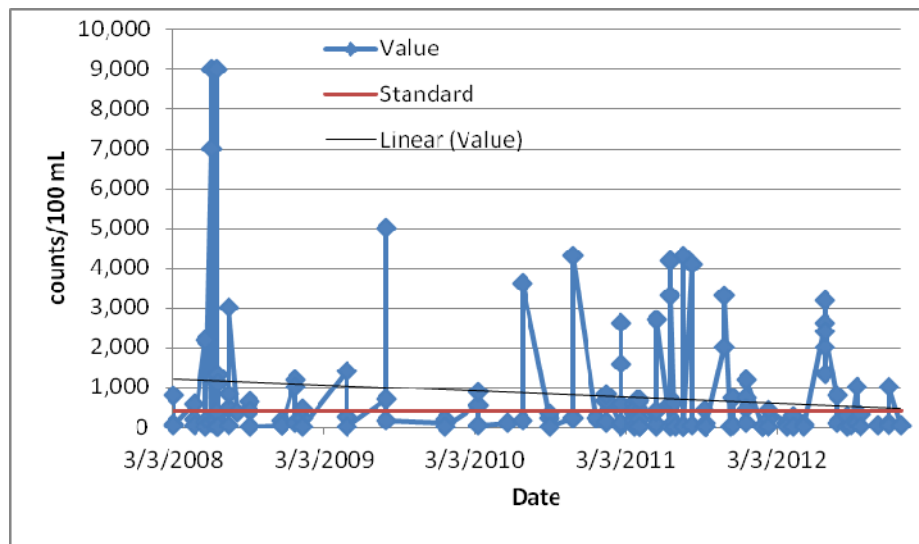
FIGURE 11: FECAL COLIFORM TRENDS IN WILLS BRANCH, 2008-2012

TABLE 18: SUMMARY OF WILLS BRANCH FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	12	400	1,500	550	732	11	92%
2009	8	12	860	440	434	4	50%
2010	8	58	1,000	485	494	5	63%
2011	6	300	10,000	1,300	2,745	4	67%
2012	5	88	541	200	256	1	20%

2.1.13 SHERMAN CREEK

There was a slight decrease in the fecal coliform counts in the Sherman Creek watershed from 2008 to 2012 (see **Figure 12**). The median values have been consistently low (380 CFU or lower) for the entire period of 2008 to 2012 (see **Table 19**). The median values at each of the stations in the watershed are 840 CFU or lower.

**FIGURE 12: FECAL COLIFORM TRENDS IN SHERMAN CREEK, 2008-2012****TABLE 19: SUMMARY OF SHERMAN CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012**

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	33	10	9,000	380	1,227	14	42%
2009	12	0	5,000	205	708	4	33%
2010	12	0	4,300	220	886	4	33%
2011	55	0	4,300	180	745	24	44%
2012	32	0	3,200	95	528	10	31%

2.1.14 GREENFIELD CREEK

Fecal coliform concentrations in the Greenfield Creek watershed have slightly increased over the period from 2008 to 2012 (see **Figure 13**). The median counts have been below 300 CFU. Data were not collected in this watershed in 2012 (see **Table 20**). The majority of the data for this watershed were collected at station 21FLJXWQGC1, which had a median concentration of 220 CFU.

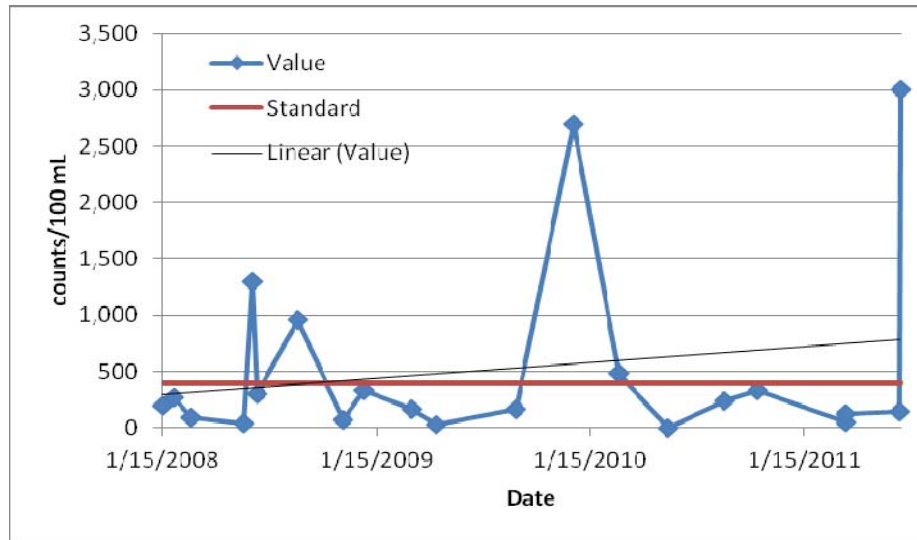


FIGURE 13: FECAL COLIFORM TRENDS IN GREENFIELD CREEK, 2008-2012

TABLE 20: SUMMARY OF GREENFIELD CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	9	40	1,300	272	395	2	22%
2009	4	33	2,700	164	765	1	25%
2010	4	0	480	285	263	1	25%
2011	4	45	3,000	130	826	1	25%
2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2.1.15 POTTSBURG CREEK

There was a slight decrease in fecal coliform concentrations in Pottsburg Creek from 2008 to 2012 (see **Figure 14**), and the median counts for all years has been 420 CFU or below (see **Table 21**). The median counts at the stations in this watershed were all 300 CFU or less.

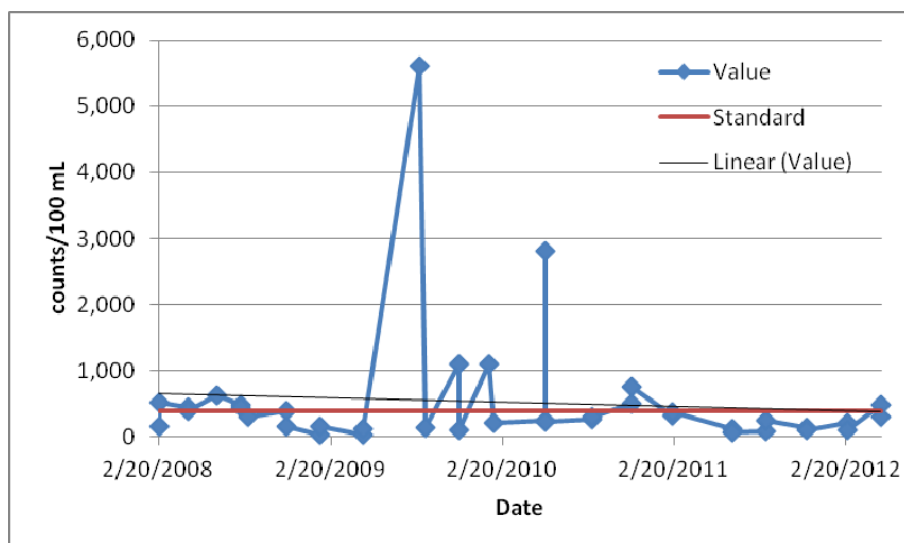


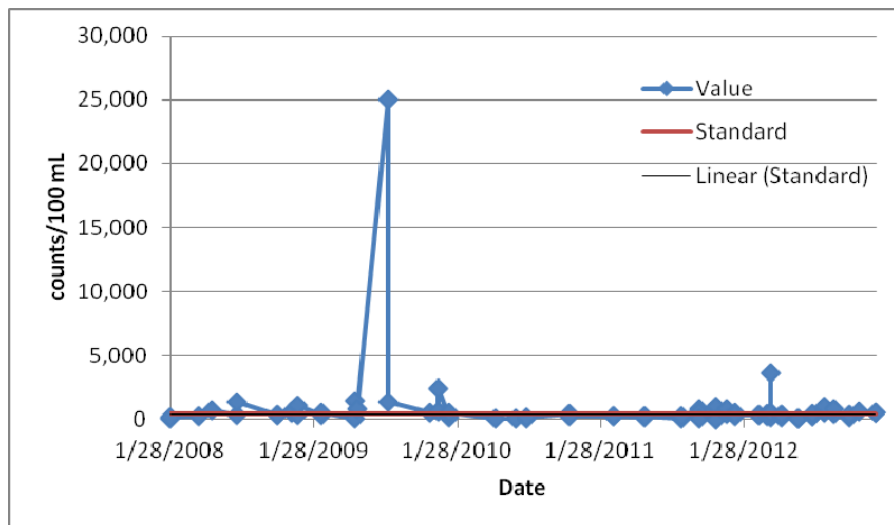
FIGURE 14: FECAL COLIFORM TRENDS IN POTTSBURG CREEK, 2008-2012

TABLE 21: SUMMARY OF POTTSBURG CREEK FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	10	150	620	420	392	5	50%
2009	8	33	5,600	126	909	2	25%
2010	9	220	2,800	300	712	4	44%
2011	8	72	380	125	184	0	0%
2012	4	110	490	255	278	1	25%

2.1.16 MIDDLE TROUT RIVER

Fecal coliform counts in the Middle Trout River slightly decreased from 2008 to 2012 (see **Figure 15**). The median counts have remained consistently low in the watershed ranging from 685 CFU in 2009 to 120 CFU in 2010 (see **Table 22**). All of the monitoring stations in the watershed had median values at or below 480 CFU.

**FIGURE 15: FECAL COLIFORM TRENDS IN MIDDLE TROUT RIVER, 2008-2012****TABLE 22: SUMMARY OF MIDDLE TROUT RIVER FECAL COLIFORM DATA BY YEAR, 2008-2012**

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	12	40	1,300	350	493	5	42%
2009	10	49	25,000	685	3,290	8	80%
2010	8	58	500	120	193	1	13%
2011	15	0	991	280	371	6	40%
2012	31	62	3,600	350	500	14	45%

2.1.17 LOWER TROUT RIVER

Fecal coliform counts in the Lower Trout River slightly decreased from 2008 to 2012 (see **Figure 16**). The median counts have remained consistently low; all below 400 CFU (see **Table 23**). All of the monitoring stations in the watershed had median values below 300 CFU.

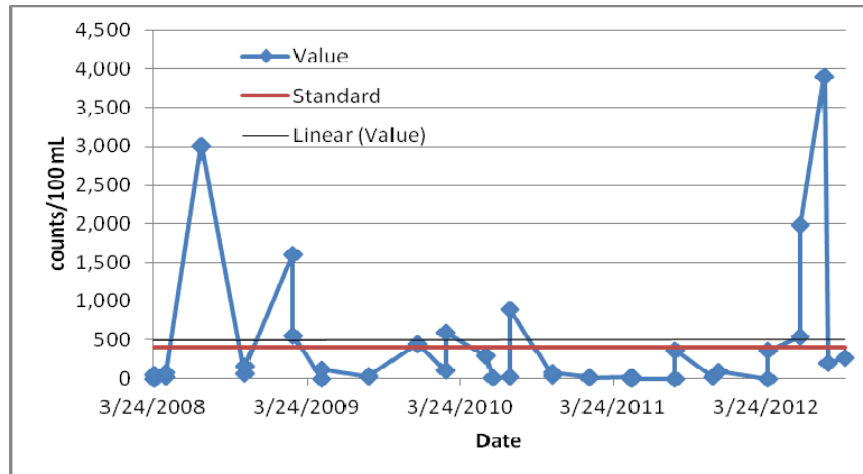


FIGURE 16: FECAL COLIFORM TRENDS IN LOWER TROUT RIVER, 2008-2012

TABLE 23: SUMMARY OF LOWER TROUT RIVER FECAL COLIFORM DATA BY YEAR, 2008-2012

YEAR	NUMBER	MINIMUM (#/100 mL)	MAXIMUM (#/100 mL)	MEDIAN (#/100 mL)	MEAN (#/100 mL)	NUMBER OF EXCEEDANCES	% EXCEEDANCES
2008	8	0	3,000	73	797	2	25%
2009	8	0	1,600	280	401	4	50%
2010	8	10	890	96	256	2	25%
2011	8	0	360	19	65	0	0%
2012	7	0	3,900	360	1,036	3	43%

SECTION 3: COUNTYWIDE PROGRAMS IN THE LSJR BASIN

There are several programs and projects that the entities conduct on countywide level. These activities are summarized below and waterbody-specific efforts associated with these programs are described in the WBID chapters.

3.1 JEA PROGRAMS

JEA continues to implement a number of countywide specific improvement programs, as follows, to address the sanitary sewer system as a source of fecal coliform contamination: (1) Fats, Oil, and Grease (FOG) Reduction Program; (2) SSO Root Cause Program; (3) Pop-Top Program; (4) Non-Destructive Testing and Air Release Valve (ARV) Programs; (5) Supervisory Control and Data Acquisition (SCADA); (6) Third Party Education and Enforcement Program; (7) Manhole Monitoring; (8) Force Main Discharge Manholes; and (9) Capacity, Management, Operations, and Maintenance (CMOM) Program.

3.2 DCHD PROGRAMS

In the LSJR Tributaries BMAP II, discrete portions of the Fishing Creek, Moncrief Creek, Blockhouse Creek, Hopkins Creek, Wills Branch, Greenfield Creek, and Lower Trout River watersheds were identified as having a higher probability of onsite sewage treatment and disposal systems (OSTDS) related problems. This determination was made based on the number of repair permit applications and the year they were issued, water quality information, and the site conditions of these areas. DCHD was required to inspect these areas during the 5-year BMAP period. In the last year, DCHD performed the inspections in Williamson Creek, Fishing Creek, Moncrief Creek, Hopkins Creek, Wills Branch, and Lower Trout River. The purpose of these investigations was to inspect existing septic systems that have the potential for direct or indirect pollution, evaluate the condition of each septic system, facilitate repairs as necessary, and track such inspections and results.

In addition, DCHD implements a variety of countywide specific improvement programs and restoration activities to address OSTDS as sources of fecal coliform contamination. These include the OSTDS Program, training programs, and the designation of septic tank failure and nuisance areas for transfer to central sewer.

3.3 COJ PROGRAMS

COJ has established a monitoring plan to evaluate the effectiveness of the Stormwater Management Program and the associated pollutant reduction from MS4 systems to waters of the state. The monitoring plan is a requirement of Part V.B. of the COJ/FDOT National Pollutant Discharge Elimination System (NPDES) MS4 permit and supported by Title 40 of the Code of Federal Regulations, Part 122.26(d)(2)(iii). In addition to the routine monitoring, COJ Environmental Quality Division (EQD) is part of the TAT and conducts sampling to help identify potential sources of fecal coliform contamination.

COJ Public Works Department's Streets and Drainage Division is responsible for maintaining its stormwater conveyance systems in Jacksonville. In addition to routine maintenance activities, work orders for maintenance are generated from the Citizen Action Response Effort (CARE) database. COJ also implements the Potential Illicit Connection (PIC) Program. COJ EQD keeps a record of reported PICs in a database and a determination is made to identify where site visits are necessary. COJ inspectors conduct the site visits and talk to both the people who live on the site, as well as their neighbors, to verify the nature of the issue. If there is a known

discharge, the inspector investigates in order to direct the resolution of the discharge to the appropriate entity (COJ, DCHD, or FDEP). If necessary, a sample is collected to determine the nature of the discharge. COJ may assist the individual in remedying the situation and return to ensure that the connection has been removed.

Educational outreach is a vital part of the PIC Program. COJ EQD primarily provides this outreach by distributing materials to the public such as educational pamphlets and informational door hangers, and through a storm drain–stenciling program. COJ also has several continuing public service announcements to address pet waste management and septic tank maintenance.

3.4 FDOT PROGRAMS

Under Subsection 334.044(15), Florida Statutes (F.S.), and Rule 14-86, F.A.C., FDOT implements a Drainage Connection Program (DCP). The program does not issue water quality permits but requires the connecting entity to certify that the discharge is of acceptable water quality. Connecting entities are required to maintain the discharge of acceptable water quality for the duration of the FDOT DCP permit. If connecting entities fail to meet this requirement after sufficient warning by FDOT, they will be reported to FDEP, the St. Johns River Water Management District, and, if applicable, to the local municipality; these entities regulate stormwater quality through state rules, ordinances, and codes.

FDOT also works with COJ on several efforts related to the MS4 permit. FDOT participates in the PIC Program in conjunction with COJ. FDOT has instructed staff to be alert for illicit connections during routine maintenance activities, and investigates observances found in the right of way. Those located outside the right of way are reported to the applicable municipality for further investigation and enforcement action. FDOT maintains a toll-free number to be used for reporting illicit connections.

SECTION 4: CRAIG CREEK (WBID 2297)

4.1 JEA ACTIVITIES IN THE CRAIG CREEK WATERSHED

During the last year, JEA pipe burst 0.15% of the lines, open cut 0.01% of the sanitary sewer pipes in the watershed, repaired 1 manhole liner, inspected 0.31% of the pipes with closed-circuit television, and cleaned 0.19% of the lines. JEA also inspected 39 manholes as part of the Pop-Top Program. JEA's activities in the Craig Creek watershed are shown in **Table 24**.

TABLE 24: JEA ACTIVITIES IN THE CRAIG CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-1	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total footage of pipe burst in watershed fiscal year (FY11/12) - 492 linear feet (LF)	\$73,800	JEA	Ongoing
JEA-2	Cured In Place Pipe (CIPP)–Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Total footage of CIPP in watershed FY11/12 - 0 LF	Not applicable	JEA	Ongoing
JEA-198	Open Cut–Removal and Replacement	Replace failing/leaking infrastructure	Total footage of open cut replacement in watershed FY11/12 26 feet	\$5,200	JEA	Ongoing
JEA-3	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	1 liner	\$750	JEA	Ongoing
JEA-4	Pump Station SCADA Upgrades	Retrofit completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-5	Inspect Force Main Discharge Manholes, Repair/ Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehab as necessary	Not applicable	Unknown	JEA	Completed
JEA-6	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	Not applicable	Not applicable	JEA	Ongoing
JEA-7	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (S5 Gen on Basil Road)	Unknown	JEA	Completed – All in WBID
JEA-8	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	1,000 feet in 2012	\$2,000	JEA	Ongoing
JEA-9	Pipe Cleaning– JEA	Clean existing pipes to avoid blockages	626 feet in 2012	\$12,520	JEA	Ongoing
JEA-10	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-11	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-12	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-13	Pop-Top Program	Pop-Top Program	39 surveyed in 2012	\$1,950	JEA	Ongoing
JEA-14	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	Not applicable	Not applicable	JEA	Ongoing
JEA-15	Walk the WBID–Chronic Exceedances and Human Markers near CC2, TCC2, and TCC2A	Dye testing found no leaks, and additional inspections found no sewer problems	Not applicable	Unknown	JEA	Completed
JEA-16	Walk the WBID–Elevated Levels at TCC1	Investigated and found no sanitary sewer in area	Not applicable	Unknown	JEA	Completed
JEA-17	Walk the WBID–SSO at 2750 Hendricks Avenue Manhole	No problems during inspection but will regularly check manhole to determine cause of SSOs	Not applicable	Unknown	JEA	Planned

4.2 DCHD ACTIVITIES IN THE CRAIG CREEK WATERSHED

In 2012, DCHD issued 3 repair permits and 1 annual operating permit, conducted 3 plan reviews and site evaluations, performed 11 complaint investigations, and began the intensive inspection program in the watershed. The programs and activities DCHD conducts in the Craig Creek watershed are shown in **Table 25**.

TABLE 25: DCHD ACTIVITIES IN THE CRAIG CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-1	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 3 repair permits issued	\$1,275	Florida Department of Health (FDOH)	Ongoing
DCHD-2	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in industrial/manufacturing zones (IMZs), and commercial systems	1 annual operating permit issued for IMZ property	\$350	FDOH	Ongoing
DCHD-3	Surface Water Improvement and Management (SWIM) Project	Implement broad-ranging septic tank ordinance	Approximately 9.4% of Emerson failure area and 19.6% of Freeman/Inwood failure area located in this WBID	Not applicable	FDOH	Ongoing
DCHD-4	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-5	Application/ Plan Review/ Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 3 plan reviews and site evaluations performed based on permitting history	\$600	FDOH	Ongoing
DCHD-6	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-7	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	11 complaint investigations performed in WBID	\$1,650	FDOH	Ongoing
DCHD-107	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 15 inspections have been performed within this WBID	\$2,250	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Ongoing

4.3 COJ ACTIVITIES IN THE CRAIG CREEK WATERSHED

4.3.1 COMPLETED COJ PROJECTS

COJ completed a road drainage project at Kingswood/Berwick Road. This project provides stormwater treatment, which should reduce fecal coliform loadings from this area to Craig Creek.

4.3.2 ONGOING COJ PROGRAMS AND PROJECTS

During the reporting period, COJ had 21 work orders for ditch and creek regrading, 1 work order for ditch clean out, 36 work orders for structures, and 2 inspections of illicit water discharges. These inspections are initiated through information from the CARE database. COJ also followed up on 2 PICs in the watershed. In addition, COJ collected 5 routine water quality samples and 7 follow up samples to try and identify sources. COJ's efforts in the Craig Creek watershed are shown in **Table 26**. Additional details about COJ projects are included in **Appendix A**.

TABLE 26: COJ ACTIVITIES IN THE CRAIG CREEK WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-1	St Augustine Road. (Emerson to U.S. Highway 1) (Main Stem COJ-7)	Construct regional pond	167 acres	Unknown	COJ	Completed
COJ-2	Vale Orchard Lane Street Improvements	Address area where previous street repair has settled and damaged side curbing	Unknown	Unknown	COJ	Completed
COJ-308	Harbor Cove/Inwood Terrace	Drainage improvements	Unknown	\$1,342	COJ	Completed
COJ-309	Kingswood/Berwick Road	Road drainage design	Unknown	\$1,102	COJ	Completed
COJ-310	Kingswood/Berwick Road	Road drainage construction	Unknown	\$23,060	COJ	Completed
COJ-311	Berwick Road	Drainage improvements	Unknown	\$25,149	COJ	Design
COJ-312	Phillips Highway Pond	Wet detention pond	Unknown	\$1,100,000	COJ	Planned
COJ-313	Pine Forest	Wet detention pond	Unknown	\$5,882,478	COJ	Construction
COJ-314	Inwood Terrace	Drainage improvements	Unknown	\$650,000	COJ	Completed
COJ-346	1633 Berwick	Road drainage design	Unknown	\$48,222	COJ	Construction
COJ-3	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	21	\$10,217	COJ	Ongoing
COJ-347	Ditch Hazardous Contaminated	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-4	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	0	\$0	COJ	Ongoing
COJ-5	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	36	\$2,761	COJ	Ongoing
COJ-6	Illicit Water Discharge	CARE initiated inspection	2	\$758	COJ	Ongoing
COJ-7	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-8	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-9	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-10	Private Lift Station Inspection	Inspect 1 private lift station in WBID	0	\$0	COJ	Ongoing
COJ-11	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing
COJ-12	Illicit Discharge Detection and Elimination	Follow on PICs	2	\$800	COJ	Ongoing
COJ-13	Follow Up on Outstanding PICs	Follow up on 2 open PICs in watershed; not found to be illicit	2	\$800	COJ	Completed
COJ-14	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5	\$680	COJ	Ongoing
COJ-15	TAT Sampling	Conducted by EQD to assess bacteria levels in creek and help identify potential fecal bacteria sources; ended in 2009	19 (for 2008–09)	Unknown	COJ	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-315	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted, to attempt to identify sources.	7	\$952	COJ	Ongoing
COJ-16	Freeman Road/Inwood Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	3 tanks, 0 connected	Unknown	COJ	Ongoing
COJ-17	Emerson Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	87 tanks, 0 connected	Unknown	COJ	Ongoing
COJ-18	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	5 tanks, 0 connected	Unknown	COJ	Ongoing
COJ-19	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-20	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

4.4 FDOT ACTIVITIES IN THE CRAIG CREEK WATERSHED

During 2012, FDOT collected 43.2 tons of debris through street sweeping 16 miles of roadways. FDOT helps to fund 1 monitoring station in the Craig Creek watershed that is sampled quarterly as part of the MS4 routine monitoring program. At this station 5 routine water quality samples were taken during the reporting period. In addition, 7 follow up samples were collected to try and identify sources. **Table 27** lists FDOT's activities in the Craig Creek watershed.

TABLE 27: FDOT ACTIVITIES IN THE CRAIG CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-1	PIC Program	Search for illicit connections	Effort is continuous in this WBID	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-2	PIC Program	Identify and remove illicit connections if found to be truly illicit	No illicit connections/ discharge found this reporting period	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-3	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-4	TAT Sampling	Conducted by COJ EQD to further assess bacteria levels in stream and to help identify potential fecal bacteria sources	19 (for 2008–09)	Countywide - \$22,546	FDOT/ COJ	Completed
FDOT-5	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
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	About 8 miles of roadways and associated stormwater conveyance systems currently maintained in this WBID; approximately 16 miles of roadways swept with 43.2 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-105	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	7 re-samplings were performed	Countywide - \$27,900	FDOT/ COJ	Ongoing

SECTION 5: MCCOY CREEK (WBID 2257)

5.1 JEA ACTIVITIES IN THE MCCOY CREEK WATERSHED

During the last year, JEA pipe burst 0.05% of the lines, open cut 0.11% of the sanitary sewer pipes in the watershed, repaired 5 manhole linings, inspected 6 ARVs and replaced 3 ARVs, inspected 1 force main discharge manhole, repaired 1 lift station, inspected 0.36% of the pipes with closed-circuit television, cleaned 2.24% of the lines, and cleaned 27.33% of the high density polyethylene (HDPE) pipe. In addition, JEA inspected 156 manholes as part of the Pop-Top Program. JEA's activities in the McCoy Creek watershed are shown in **Table 28**.

TABLE 28: JEA ACTIVITIES IN THE MCCOY CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-18	Pipe Bursting–Increase Carrying Capacity	Replace failing/leaking infrastructure	915 LF burst in 2012	\$137,250	JEA	Ongoing
JEA-19	CIPP–Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Total footage of CIPP in watershed FY11/12 0 LF	Not applicable	JEA	Ongoing
JEA-20	Open Cut–Removal and Replacement	Replace failing/leaking infrastructure	Total footage of open cut replacement in watershed FY11/12 1,947 feet	\$389,400	JEA	Ongoing
JEA-21	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	5 linings rehabbed in 2012	\$3,750	JEA	Ongoing
JEA-22	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	6 inspected, 3 replaced in 2012	\$4,050	JEA	Ongoing
JEA-23	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-24	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	1 inspection and 0 rehabs in 2012	\$300	JEA	Ongoing
JEA-25	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	1 in 2012	\$173,104	JEA	Ongoing
JEA-26	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	3 stations (Westbrook, McCoys, 3113 Plum Street)	Unknown	JEA	Complete for FY11-Ongoing
JEA-27	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-28	Pipe TV Inspection	Inspect existing infrastructure using CCTV system	6,547 in 2012	\$13,094	JEA	Ongoing
JEA-29	HDPE Pipe Cleaning–Contractor	Clean existing HDPE pipes to avoid blockages	9,946 feet of HDPE pipe cleaned by contractor	\$198,920	JEA	Ongoing
JEA-30	Pipe Cleaning	Clean existing pipes to avoid blockages	40,972 feet cleaned in 2012	\$819,440	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-31	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-32	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-33	Pop-Top Program	Pop-Top Program	156 surveyed in 2012	\$7,800	JEA	Ongoing
JEA-34	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	0 sites in FY11/12	Not applicable	JEA	Ongoing
JEA-35	Walk the WBID–Inspect Drop Inlet at Nelson and Plum	Inspections showed no problems with manholes	Implement quarterly sampling to determine source	Unknown	JEA	Planned
JEA-36	Walk the WBID–SSO at Manhole at Cherokee Street and Edison Avenue	Repair manhole	Look at SCADA and pump times of stations upstream of manhole to determine cause of overflows	Unknown	JEA	Planned

5.2 DCHD ACTIVITIES IN THE MCCOY CREEK WATERSHED

In 2012, DCHD issued 1 repair permit, 2 abandonment permits, and 8 annual operating permits. DCHD has started the intensive inspection program and has conducted 89 inspections in the watershed. The programs and activities DCHD conducts in the McCoy Creek watershed are shown in **Table 29**.

TABLE 29: DCHD ACTIVITIES IN THE MCCOY CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-8	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 1 repair permit and 2 abandonment permits issued	\$700	FDOH	Ongoing
DCHD-9	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	8 annual operating permits issued for IMZ and commercial properties	\$3,000	FDOH	Ongoing
DCHD-10	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-11	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 1 plan review and site evaluation performed based on permitting history	\$250	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-12	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-13	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	None	Not applicable	FDOH	Ongoing
DCHD-108	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 89 inspections have been performed within this WBID	\$13,350	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Ongoing

5.3 COJ ACTIVITIES IN THE MCCOY CREEK WATERSHED

5.3.1 COMPLETED COJ PROJECTS

COJ completed the drainage improvements projects on the roads Superior and Carter, which should help reduce fecal coliform loading to McCoy Creek from this area.

5.3.2 ONGOING COJ PROGRAMS AND ACTIVITIES

COJ has an outfall improvement at Orchard Street under construction and drainage improvements at 2980 Ernest Street in design. These projects would provide stormwater treatment, which should reduce fecal coliform loadings to McCoy Creek.

In the McCoy Creek watershed during the reporting period, COJ had 135 work orders for ditch and creek regrading, 5 work orders for a lake or pond problem, 136 work orders for repair/clearing of structures, 1 inspection of an illicit water discharge, 1 inspection of illegal pollution discharges, 1 inspection of a sewer that drains to a yard or ditch, and 2 inspections of sewer overflows. These inspections are initiated through information from the CARE database. In addition, COJ collected 10 routine water quality samples. COJ's efforts in the McCoy Creek watershed are shown in **Table 30**. Additional details about COJ projects are included in **Appendix A**.

TABLE 30: COJ ACTIVITIES IN THE MCCOY CREEK WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-21	Lenox Avenue (Highway to McDuff) (Main Stem COJ-32)	Construct wet detention pond	108 acres	Unknown	COJ	Completed
COJ-22	McCoy Creek (Main Stem COJ-3)	Construct Ponds A and B	680 acres	Unknown	COJ	Completed
COJ-23	McCoy Creek (Main Stem COJ-4)	Construct Pond F	11 acres	Unknown	COJ	Completed
COJ-24	McCoy Creek (Main Stem COJ-22)	Construct Pond D	27 acres	Unknown	COJ	Completed
COJ-25	McCoy Creek–Air Liquid Site	Retrofit pond and drainage	8 acres	\$1,000,000	COJ	Design
COJ-26	McCoy Creek Pond C	Construct pond, Hollybrook Park	Unknown	\$3,400,000	COJ	Construction
COJ-27	Melba Street and Green Street	Construct wet detention pond	278 acres	\$2,701,500	COJ	Completed
COJ-28	McCoy Creek	Construct Broward/Smith Pond	14 acres	\$97,000	COJ	Completed
COJ-316	McCoy Creek Blvd	Channel Improvements	Unknown	\$2,800,000	COJ	Planned
COJ-317	Newtown Drainage Improvements	Wet Detention Pond	Unknown	\$5,791,000	COJ	Planned
COJ-318	Superior and Carter	Drainage Improvements	Unknown	\$40,583	COJ	Completed
COJ-29	Ontario Street Drainage Improvements	Implement drainage improvements to address flooding at 795 Ontario	Unknown	Unknown	COJ	Completed
COJ-30	Spruce/Price Drainage Improvements	Implement drainage improvements to address flooding at intersection during heavy rains	Unknown	Unknown	COJ	Completed
COJ-31	Correct Drainage at Westbrook Circle West	Implement drainage improvements to address flooding at 1025 Westbrook	Unknown	Unknown	COJ	Completed
COJ-32	Correct Road Flooding at Labelle Street	Implement drainage improvements to address inadequate underdrain system that allows flooding	Unknown	Unknown	COJ	Completed
COJ-33	Winter Street	Implement drainage improvements to address ponding water	Unknown	Unknown	COJ	Completed
COJ-34	Barber Street and Broadway Avenue	Implement drainage improvements to address flooding at intersection	Unknown	Unknown	COJ	Completed
COJ-35	Dignan Street/Day Avenue	Reconstruct ditches and culverts to provide positive drainage	Unknown	\$63,408	COJ	Completed
COJ-36	Acorn Street S/W and Drainage	Replace sidewalks, install new curbing, and construct new drainage infrastructure on Acorn between McQuade Street and Windle Street	Unknown	\$100,507	COJ	Completed
COJ-348	Orchard Street	Outfall improvement	Unknown	\$9,436	COJ	Construction

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-349	2980 Ernest Street	Drainage improvements	Unknown	\$20,662	COJ	Design
COJ-37	Ditch/Creek Regrade/Erosion/ Clean	All maintenance activities presented were completed in response to CARE requests.	135	\$58,345	COJ	Ongoing
COJ-38	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	5	Unknown	COJ	Ongoing
COJ-39	Structure Blocked/Repair/ General Flooding	All maintenance activities presented were completed in response to CARE requests.	136	\$78,422	COJ	Ongoing
COJ-40	Illicit Water Discharge	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-41	Pollution–Water– Illegal Discharge	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-42	Sewer Drains into Yard/Ditch	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-43	Sewer Overflow	CARE initiated inspection	2	\$758	COJ	Ongoing
COJ-44	Private Lift Station Inspection	Inspect 3 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-45	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing
COJ-46	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (20016 Druid /4121 Dylan Street)	Unknown	COJ	Completed – Not in WBID
COJ-47	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	2 stations (CSX Warehouse 334, 1315 Canal Street)	Unknown	COJ	Completed
COJ-48	Illicit Discharge Detection and Elimination	Completed inspections of open PICs; none found to be illicit	0	\$0	COJ	Ongoing
COJ-49	Follow Up on Outstanding PICs	Follow up on 2 remaining open PICs in watershed	2	\$758	COJ	Ongoing
COJ-50	Routine Surface Water Sampling	NPDES permit-related quarterly water quality sampling, 2 stations in WBID	10	\$1,360	COJ	Ongoing
COJ-51	TAT Sampling	Conducted by EQD to assess bacteria levels in creek and help identify potential fecal bacteria sources	13 (for 2009)	Unknown	COJ	Completed
COJ-52	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	0	\$0	COJ	Ongoing
COJ-53	Follow Up on Thermal Anomalies	Using thermal imagery, followed up on anomalies in WBID; none were fecal coliform source	2009	Unknown	COJ	Completed
COJ-54	Murray Hill A Failure Area– Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	58 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-55	Septic Tanks Outside Failure Area– Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	287 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-56	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-57	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

5.4 FDOT ACTIVITIES IN THE MCCOY CREEK WATERSHED

5.4.1 COMPLETED FDOT PROJECTS

During the reporting period, FDOT completed the wet detention pond at the intersection of Interstates 10 and 95. This project will help to reduce fecal coliform loads to McCoy Creek from this area.

5.4.2 ONGOING FDOT PROGRAMS AND ACTIVITIES

FDOT collected 21.6 tons of debris through street sweeping on 8 miles of roadways. FDOT helps to fund 2 monitoring stations in the McCoy Creek watershed that are sampled quarterly as part of the MS4 monitoring program. A total of 10 routine water quality samples were collected during the reporting period. **Table 31** lists FDOT's activities in the McCoy Creek watershed.

TABLE 31: FDOT ACTIVITIES IN THE MCCOY CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-7	PIC Program	Search for illicit connections	Effort is continuous in this WBID	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-8	PIC Program	Identify and remove illicit connections if found to be truly illicit	No illicit connection/ discharge found this reporting period	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-9	Follow Up on Outstanding PICs	Follow up on 2 open PICs in watershed	2 PICs found not to be illicit	Countywide - \$37,605	FDOT/ COJ	Completed
FDOT-10	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	10 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-11	TAT Sampling	Conducted by EQD to assess bacteria levels in creek and help identify potential fecal bacteria sources	13 (for 2009)	Countywide - \$22,546	FDOT/ COJ	Completed
FDOT-12	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-13	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-14	Stormwater Management Systems	Construct wet detention pond at intersection of Interstates 10 and 95	119 acres, wet pond	Unknown	FDOT	Completed
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	About 4 miles of roadways and associated stormwater conveyance systems currently being maintained in this WBID; approximately 8 miles of roadways swept with 21.6 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing

SECTION 6: WILLIAMSON CREEK (WBID 2316)

6.1 JEA ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

During the last year, JEA inspected 4 ARVs and replaced 3 ARVs, inspected 0.21% of the sanitary sewer pipes with closed-circuit television, and cleaned 2.47% of the lines. JEA also inspected 34 manholes as part of the Pop-Top Program. JEA's activities in the Williamson Creek watershed are shown in **Table 32**.

TABLE 32: JEA ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-37	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total footage of pipe burst in watershed in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-38	CIPP–Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Total footage of CIPP in watershed in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-39	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	0 rehabbed in 2012	Not applicable	JEA	Ongoing
JEA-40	ARV Inspection and Rehabilitation	ARV inspection and rehabilitation	4 of 13 ARVs inspected and 3 replaced in 2012	\$3,450	JEA	Ongoing
JEA-41	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-42	Inspect Force Main Discharge Manholes, Repair/ Rehabilitate as Necessary	Inspect force main discharge manholes, repair/ rehabilitate as necessary	Not applicable	Unknown	JEA	Ongoing
JEA-43	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-44	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	845 feet of pipe inspected in 2012	\$1,690	JEA	Ongoing
JEA-45	HDPE Pipe Cleaning– Contractor	Clean existing HDPE pipes to avoid blockages	84,262 feet of HDPE pipe in watershed; 0 feet cleaned	\$0	JEA	Ongoing
JEA-46	Pipe Cleaning	Clean existing pipes to avoid blockages	9,900 feet of pipe in FY11/12	\$198,000	JEA	Ongoing
JEA-47	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-48	Manhole Monitoring	Manhole Monitoring	2 monitors in watershed	\$10,000	JEA	Ongoing
JEA-49	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-50	Pop-Top Program	Pop-Top Program	34 surveyed in 2012	Unknown	JEA	Ongoing
JEA-51	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-52	Walk the WBID–Manhole SSO at Wilson Boulevard	Repaired manhole riser section; CIPP along Wilson Boulevard.; dye testing showed no problems	Not applicable	Unknown	JEA	Completed
JEA-53	Walk the WBID–Inspections at Aldington Road	Inspection showed no problems; past SSOs in areas that had been addressed	Not applicable	Unknown	JEA	Completed
JEA-54	Walk the WBID–Investigations on Blanco Court	Investigate residential area on Blanco Court that has shallow lines and manhole problems	Complete inspection and report in first annual BMAP report	Unknown	JEA	Planned

6.2 DCHD ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

In 2012, DCHD issued 1 new permit, 1 repair permit, and 3 annual operating permits. DCHD also conducted 2 plans reviews and site evaluations and performed 1 complaint investigation. The programs and activities DCHD conducts in the Williamson Creek watershed are shown in Table 33.

TABLE 33: DCHD ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-14	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 1 new and 1 repair permit issued	\$950	FDOH	Ongoing
DCHD-15	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	3 annual operating permits issued for IMZ and commercial properties	\$1,500	FDOH	Ongoing
DCHD-16	SWIM Project	Implement broad-ranging septic tank ordinance	Approximately 25.6% of Cedar Creek failure area is located in WBID	Not applicable	FDOH	Ongoing
DCHD-17	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-18	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 2 plan reviews and site evaluations performed based on permitting history	\$400	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-19	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-20	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	1 complaint investigation performed	\$250	FDOH	Ongoing
DCHD-106	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 113 inspections performed within WBID	\$10,700	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation grant	Completed

6.3 COJ ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

6.3.1 COMPLETED COJ PROJECTS

COJ completed a drainage improvement project at 6700 Jack Horner Lane. COJ also connected 1 septic tank-service property to sewer located in the Cedar Creek failure area in the watershed.

6.3.2 ONGOING COJ PROGRAMS AND ACTIVITIES

COJ has a drainage improvement project at Wilson Boulevard under construction. Over the reporting period, COJ had 47 work orders for ditch and creek regrading, 1 work order for a lake or pond problem, and 23 work orders for repair/clearing of structures. These inspections are initiated through information from the CARE database. In addition, COJ followed up on PIC and collected 5 routine water quality samples. COJ's efforts in the Williamson Creek watershed are shown in **Table 34**. Additional details about COJ projects are included in **Appendix A**.

TABLE 34: COJ ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-319	Regional Stormwater Facility w/MAPs	Regional Stormwater Facility w/MAPs	Unknown	\$366,429	COJ	Planned
COJ-320	Hugh Edwards Drainage	Wet Detention Pond	Unknown	Unknown	COJ	Completed
COJ-321	6700 Jack Horner Lane	Drainage Improvement	Unknown	\$48,853	COJ	Completed
COJ-350	Wilson Boulevard	Culvert replacement	Unknown	Unknown	COJ	Construction
COJ-351	6700 Jack Horner Lane	Drainage improvement	Unknown	\$48,853	COJ	Completed
COJ-58	Ditch/Creek Regrade/Erosion/ Clean	All maintenance activities presented were completed in response to CARE requests.	47	\$9,927	COJ	Ongoing
COJ-59	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-60	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	23	\$969	COJ	Ongoing
COJ-61	Illicit Water Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-62	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-63	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-64	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-65	Private Lift Station Inspection	Inspect 2 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-66	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing
COJ-67	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (6561 San Juan Avenue)	Unknown	COJ	Completed – Not in WBID
COJ-68	Illicit Discharge Detection and Elimination	Follow up on PICs	1	\$379	COJ	Ongoing
COJ-69	Follow Up on Outstanding PICs	Follow up on 5 open PICs in watershed; all closed, none illicit	5	\$2,500	COJ	Completed
COJ-70	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling, 1 station in WBID	5	\$680	COJ	Ongoing
COJ-71	TAT Sampling	Conducted by EQD to assess bacteria levels in creek and help identify potential fecal bacteria sources	19 (for 2008–09)	Unknown	COJ	Completed
COJ-352	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	0	\$0	COJ	Ongoing

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-72	Walk the WBIDS	Participated in Walk the WBID reconnaissance efforts and TAT sampling	2008–09	Unknown	COJ	Completed
COJ-73	Cedar Creek Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	128 tanks, 1 connected	Unknown	COJ	Ongoing
COJ-74	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	136 tanks, 0 connected	Unknown	COJ	Ongoing
COJ-75	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-76	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

6.4 FDOT ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

FDOT collected 10.8 tons of debris through street sweeping on 4 miles of roadways. The Adopt-A-Highway Program collected 80 pounds of trash along 2 miles of roadways. FDOT helps to fund 1 monitoring station in the Williamson Creek watershed that is sampled quarterly as part of the MS4 routine monitoring program. Five routine water quality samples were collected during the reporting period. **Table 35** lists FDOT's activities in the Williamson Creek watershed.

TABLE 35: FDOT ACTIVITIES IN THE WILLIAMSON CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-16	PIC Program	Search for illicit connections	Effort is continuous; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-17	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-18	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-19	TAT Sampling	Conducted by EQD to assess bacteria levels in the creek and help identify potential fecal bacteria sources	19 (for 2008–09)	Countywide - \$22,546	FDOT/ COJ	Completed
FDOT-20	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	80 pounds of trash collected, trash collection area is 2 miles	Unavailable	Not applicable	Ongoing
FDOT-21	Stormwater Management Systems	Lane Ave.	7 acres, wet ponds	Unknown	FDOT	Completed
FDOT-22	Stormwater Management Systems	Wilson Ave.	72 acres, wet ponds	Unknown	FDOT	Completed
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	About 2 miles of roadways and associated stormwater conveyance systems currently maintained in this WBID; approximately 4 miles of roadways swept with 10.8 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-24	Maintain Stormwater Systems	Maintain pond at 3613 Lane Avenue	Trash found in pond during Walk the WBID was removed	Countywide - \$2,750,735	FDOT	Completed
FDOT-106	Source Identification Sampling	Resampling conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$22,546	FDOT/ COJ	Ongoing
FDOT-107	Stormwater Management Systems	Construct wet detention pond at Lane Avenue and at Wilson Avenue	85 acres, wet pond	Unknown	FDOT	Completed

SECTION 7: FISHING CREEK (WBID 2324)

7.1 JEA ACTIVITIES IN THE FISHING CREEK WATERSHED

During the last year, JEA pipe burst 0.05% of the lines, open cut 0.08% of the sanitary sewer pipes in the watershed, inspected 33 ARVs and installed 6 ARVs, inspected 1 force main discharge manhole, repaired 3 pump stations, inspected 0.11% of the pipes with closed-circuit television, cleaned 3.75% of the HDPE pipes, and cleaned 3.14% of the lines. JEA also inspected 111 manholes as part of the Pop-Top Program. JEA's activities in the Fishing Creek watershed are shown in **Table 36**.

TABLE 36: JEA ACTIVITIES IN THE FISHING CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-55	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total footage of pipe burst 579 LF in 2012	\$86,850	JEA	Ongoing
JEA-56	CIPP–Install an New Inner Lining	Rehabilitate failing/leaking infrastructure	Total footage of CIPP in watershed FY11/12 0 LF	Not applicable	JEA	Ongoing
JEA-57	Open Cut– Removal and Replacement	Replace failing/leaking infrastructure	Total footage of open cut replacement in watershed FY11/12 950 feet	\$190,000	JEA	Ongoing
JEA-58	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	0 relined in 2012	Not applicable	JEA	Ongoing
JEA-59	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	33 ARVs inspected, 6 installed of 45 ARVs in 2012	\$14,400	JEA	Ongoing
JEA-60	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-61	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	1 inspection, 0 rehabs	\$300	JEA	Ongoing
JEA-62	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	3 projects in watershed 2012	\$31,793	JEA	Ongoing
JEA-63	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	3 stations (Somerton Court, Bricker Road, Sharbeth Road)	Unknown	JEA	Complete – all in WBID
JEA-64	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	4 stations (Wescon Elementary, 5940 Perrine Drive, Para Woods, Rossie LA)	Unknown	JEA	Complete for FY11-ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-65	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-66	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	1,278 feet of pipe in 2012	\$2,556	JEA	Ongoing
JEA-209	HDPE Pipe Cleaning– Contractor	Clean existing HDPE pipes to avoid blockages	1,120 feet of HDPE cleaned by contractor	Unknown	JEA	Ongoing
JEA-67	Pipe Cleaning	Clean existing pipes to avoid blockages	36,609 feet of pipe in 2012	\$792,180	JEA	Ongoing
JEA-68	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-69	Manhole Monitoring	Manhole Monitoring	3 monitors in watershed	\$15,000	JEA	Ongoing
JEA-70	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-71	Pop-Top Program	Pop-Top Program	111 surveyed in 2012	\$5,550	JEA	Ongoing
JEA-72	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

7.2 DCHD ACTIVITIES IN THE FISHING CREEK WATERSHED

In 2012, DCHD issued 1 new permit, 4 repair permits, 5 abandonment permits, and 23 annual operating permits; conducted 5 plan reviews and site evaluations; and completed 8 complaint investigations. The programs and activities DCHD conducts in the Fishing Creek watershed are shown in **Table 37**.

TABLE 37: DCHD ACTIVITIES IN THE FISHING CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-21	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 1 new permit, 4 repair permits, and 5 abandonment permits issued	\$2,650	FDOH	Ongoing
DCHD-22	SWIM Project	Implement broad-ranging septic tank ordinance	100% of Pernecia failure area is located in this WBID	Not applicable	FDOH	Ongoing
DCHD-23	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	23 annual operating permits issued for IMZ/commercial properties; 1 PBTS monitored annually	\$9,700	FDOH	Ongoing
DCHD-24	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-25	Application/ Plan Review/ Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 5 plan reviews and site evaluations performed based on permitting history	\$2,500	FDOH	Ongoing
DCHD-26	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-27	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	8 complaint investigations performed	\$1,200	FDOH	Ongoing
DCHD-28	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 1,073 inspections performed within WBID	\$40,000	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation grant	Completed

7.3 COJ ACTIVITIES IN THE FISHING CREEK WATERSHED

COJ has an outfall repair project under construction at Antoinette Lane, a drainage improvement project under construction at Timawatha Avenue, and drainage improvement project in design at Tampico Road. These projects would provide stormwater treatment, which should reduce fecal coliform loadings to Fishing Creek.

Over the last year, COJ had 111 work orders for ditch and creek regrading, 9 work orders for a lake or pond problem, 82 work orders for repair/clearing of structures, 3 inspections of sewers that drain to yard or ditch, and 2 inspections of a sewer overflow. These inspections are initiated through information from the CARE database. The city also inspected 4 private lift stations in the WBID. In addition, COJ collected 18 routine samples and 63 BMAP samples. COJ's efforts in the Fishing Creek watershed are shown in **Table 38**. Additional details about COJ projects are included in **Appendix A**.

TABLE 38: COJ ACTIVITIES IN THE FISHING CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-77	La Moya Roadway Project (Main Stem COJ-42)	Construct wet detention pond	17 acres	Unknown	COJ	Completed
COJ-78	Wesconnett Blvd. (Blanding to Blanding) (Main Stem COJ-33)	Construct wet detention pond	396 acres	Unknown	COJ	Completed
COJ-79	Replace Cross Drain at Perrine Drive	Replace cross drain—too small to handle drainage area	Unknown	Unknown	COJ	Completed
COJ-80	Redstone Drive Drainage	Install cross drain and improve ditches	Unknown	\$150,000	COJ	Completed
COJ-323	Regional Stormwater Facility - MSMP	Regional stormwater facility w/MAPs + channel lining	Unknown	\$1,812,527	COJ	Planned
COJ-324	4922 Ricker Road	Drainage improvement	Unknown	\$75,853	COJ	Construction
COJ-325	7560 Melvin Road	Drainage improvement	Unknown	\$51,991	COJ	Construction
COJ-326	Antoinette Lane	Outfall repair	Unknown	\$30,321	COJ	Construction
COJ-353	Timawatha Avenue	Drainage improvement	Unknown	\$27,837	COJ	Construction
COJ-354	Tampico Road	Drainage improvement	Unknown	\$25,662	COJ	Design
COJ-81	Ditch/Creek Regrade/Erosion/ Clean	All maintenance activities presented were completed in response to CARE requests.	111	\$21,222	COJ	Ongoing
COJ-82	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	9	\$2,797	COJ	Ongoing
COJ-83	Structure Blocked/Repair/ General Flooding	All maintenance activities presented were completed in response to CARE requests.	82	\$19,689	COJ	Ongoing
COJ-84	Illicit Water Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-85	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-86	Sewer Drains into Yard/Ditch	CARE initiated inspection	3	\$1,137	COJ	Ongoing
COJ-87	Sewer Overflow	CARE initiated	2	\$758	COJ	Ongoing
COJ-88	Septic Tank Inspection	CARE initiated	0	\$0	COJ	Ongoing
COJ-89	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (103 rd Street and Bricker Road)	\$500	COJ	Completed – In WBID
COJ-90	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	1 station (5951 Wilmar Road)	\$500	COJ	Completed

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-91	Private Lift Station Inspection	Inspect 13 private lift stations in WBID	4	\$1,516	COJ	Ongoing
COJ-92	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing
COJ-93	Illicit Discharge Detection and Elimination	Follow up on PICs	0	\$0	COJ	Ongoing
COJ-94	Follow Up on Outstanding PICs	All open PICs were closed, none were illicit	10	\$8,000	COJ	Completed
COJ-95	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling, 4 stations in WBID	18	\$2,448	COJ	Ongoing
COJ-96	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	63	\$11,151	COJ	Ongoing
COJ-327	BMAP Monitoring	COJ EQD is responsible for 4 sites (2 sampled monthly and 2 sampled quarterly), began 12/2010	0	\$0	COJ	Ongoing
COJ-97	Pernecia Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas	186 tanks, 186 connected	Unknown	COJ	Completed
COJ-98	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	923 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-99	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-100	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

7.4 FDOT ACTIVITIES IN THE FISHING CREEK WATERSHED

FDOT collected 37.8 tons of debris through street sweeping 14 miles of roadways. The Adopt-A-Highway Program collected 910 pounds of trash from 7.88 miles of roadways. FDOT helps to fund 4 monitoring stations in the Fishing Creek watershed that are sampled quarterly as part of the MS4 routine monitoring program. A total of 18 routine water quality samples were collected during the reporting period. FDOT also helps to fund the BMAP monitoring at 4 stations, in which a total of 63 samples were collected during the reporting period. **Table 39** lists FDOT's activities in the Fishing Creek watershed.

TABLE 39: FDOT ACTIVITIES IN THE FISHING CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-25	PIC Program	Search for illicit connections	Effort is continuous in this WBID	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-26	PIC Program	Identify illicit connections and remove if found to be truly illicit	No illicit connection/discharge found this reporting period	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-27	PIC Program	Follow up on outstanding PICs	2 were resolved by connection to the sanitary sewer; 1 not illicit	Countywide - \$37,605	FDOT/COJ	Completed
FDOT-28	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	18 routine water quality samplings performed	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-29	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-30	Stormwater Management Systems	Construct Interstate 295 retention/detention systems	72 acres	Not applicable	FDOT	Completed
FDOT-31	Drainage Connection Permit (DCP) Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-32	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	910 pounds of trash collected, trash collection area is 7.88 miles	Unavailable	Not applicable	Ongoing
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	About 7 miles of roadways and associated stormwater conveyance systems currently maintained; approximately 14 miles of roadways swept with 37.8 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-108	BMAP Sampling	Routine BMAP II monitoring began December 2010	63	Countywide - \$27,900	FDOT/COJ	Ongoing

SECTION 8: DEEP BOTTOM CREEK (WBID 2361)

8.1 JEA ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

During the last year, JEA inspected 1 ARV, repaired 2 pump stations, and cleaned 0.03% of the lines. JEA also inspected 2 manholes through the Pop-Top Program. JEA's activities in the Deep Bottom Creek watershed are shown in **Table 40**.

TABLE 40: JEA ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-73	Pipe Bursting–Increase Carrying Capacity	Replace failing/leaking infrastructure	Total footage of pipe burst in watershed in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-199	Open Cut–Removal and Replacement	Replace failing/leaking infrastructure	Total footage of open cut replacement in watershed in 2012 0 feet	\$0	JEA	Ongoing
JEA-74	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	0 relined in 2012	Not applicable	JEA	Ongoing
JEA-75	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	1 of 7 ARVs inspected, 0 replaced in 2012	\$300	JEA	Ongoing
JEA-76	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	1 station (Burger King on San Jose Boulevard)	Unknown	JEA	Complete for FY11-ongoing
JEA-77	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-78	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	Not applicable	Unknown	JEA	Ongoing
JEA-200	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	2 projects in watershed 2012	\$39,315	JEA	Ongoing
JEA-79	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-80	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-81	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-82	Pop-Top Program	Pop-Top Program	2 surveyed in 2012	\$100	JEA	Ongoing
JEA-83	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing
JEA-201	Pipe Cleaning	Clean existing pipes to avoid blockages	53 feet cleaned in 2012	\$1,060	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-202	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	0 feet in 2012	\$0	JEA	Ongoing

8.2 DCHD ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

8.2.1 COMPLETED DCHD PROJECTS

DCHD completed the intensive inspection program in the Deep Bottom Creek watershed over the last year. The purpose of this program is to conduct geospecific investigations of septic tanks in area that are more prone to failures to proactively prevent septic tank problems. This program included 466 inspections of septic tanks and 63 re-inspections.

8.2.2 ONGOING DCHD PROGRAMS AND ACTIVITIES

In 2012, DCHD issued 1 new permit and 3 abandonment permits, conducted 1 plan review and site evaluation, and performed 3 complaint investigations. The programs and activities DCHD conducts in the Deep Bottom Creek watershed are shown in **Table 41**.

TABLE 41: DCHD ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-29	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 1 new and 3 abandonment permits issued	\$750	FDOH	Ongoing
DCHD-30	SWIM Project	Implement broad-ranging septic tank ordinance	Approximately 40% of Scott Mill Hill Septic Tank Failure Area located in this WBID	Not applicable	FDOH	Ongoing
DCHD-31	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-32	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 1 plan review and site evaluation performed based on permitting history	\$200	FDOH	Ongoing
DCHD-33	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-34	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	3 complaint investigations performed	\$450	FDOH/ LSJR SWIM Grant	Ongoing
DCHD-109	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 466 inspections and 63 re-inspections performed within WBID	\$79,350	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Completed

8.3 COJ ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

8.3.1 COMPLETED COJ PROJECTS

COJ connected 3 septic tank-service properties to sewer located in the Scott Mill failure area in the watershed.

8.3.2 ONGOING COJ PROGRAMS AND ACTIVITIES

During the reporting period, COJ had 30 work orders for ditch and creek regrading, 3 work orders for a lake or pond problem, 33 work orders for repair/clearing of structures, 1 investigation of an illicit water discharge, and 1 investigation of a sewer overflow. These inspections are initiated through information from the CARE database. COJ also followed up on 2 PICs in the watershed. In addition, COJ collected 5 routine water quality samples and 34 follow up samples on high counts. COJ's efforts in the Deep Bottom Creek watershed are shown in **Table 42**. Additional details about COJ projects are included in **Appendix A**.

TABLE 42: COJ ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-328	Pond Near Senior Center – MSMP	Wet Detention Pond	Unknown	\$2,100,000	COJ	Planned
COJ-101	Crown Point and Moorings Landing Drainage	Investigate ponds and design sewer across Crown Point	Unknown	Unknown	COJ	Completed
COJ-102	Cypresswood and Silkwood Intersection Improvements	Improve intersection–failing cross drain causing road to wash out	Unknown	\$100,000	COJ	Completed
COJ-103	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests. Costs shown are limited to activities completed after release of work order system.	30	\$14,053	COJ	Ongoing
COJ-104	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	3	Unknown	COJ	Ongoing
COJ-105	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	33	\$9,106	COJ	Ongoing
COJ-106	Illicit Water Discharge	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-107	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-108	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-109	Sewer Overflow	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-110	Private Lift Station Inspection	Inspect 4 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-111	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing
COJ-112	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	2 stations (10210 San Jose Boulevard, 11100 San Jose Boulevard)	Unknown	COJ	Completed – Both not in WBID
COJ-113	Illicit Discharge Detection and Elimination	Follow up on PICs	2	\$758	COJ	Ongoing
COJ-114	Follow Up on Outstanding PICs	Follow up on 5 open PICs in watershed; 4 were determined to be illicit and have been disabled or removed	5	\$1,895	COJ	Completed
COJ-115	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling, 1 station in WBID	5	\$680	COJ	Ongoing
COJ-116	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	34	\$6,018	COJ	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-329	BMAP Monitoring	COJ EQD is responsible for 3 sites (2 sampled monthly, 1 sampled quarterly); began 12/2010	0	\$0	COJ	Ongoing
COJ-117	Scott Mill Failure Area– Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	145 tanks, 3 connected	See Appendix A	COJ	Ongoing
COJ-118	Septic Tanks Outside Failure Area– Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	109 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-119	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-120	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

8.4 FDOT ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

FDOT collected 13.5 tons of debris from street sweeping 5 miles of roadways. FDOT helps to fund the 1 monitoring station in the Deep Bottom Creek watershed that is sampled quarterly as part of the MS4 routine monitoring program. At this station 5 routine water quality samples were collected during the reporting period. In addition, FDOT helps to fund the BMAP monitoring at 3 stations, and 34 samples were collected at these stations. **Table 43** lists FDOT's activities in the Deep Bottom Creek watershed.

TABLE 43: FDOT ACTIVITIES IN THE DEEP BOTTOM CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-34	PIC Program	Search for illicit connections	Effort is continuous in this WBID; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-35	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-36	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-37	Stormwater Management Systems	Implement stormwater improvements as part of San Jose Boulevard widening	105 acres	Not applicable	FDOT	Completed
FDOT-38	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-39	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	210 pounds of trash collected, trash collection area is 2 miles	Unavailable	Not applicable	Ongoing
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	About 2.5 miles of roadways and associated stormwater conveyance systems currently being maintained; approximately 5 miles of roadways swept with 13.5 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-109	BMAP Sampling	Routine BMAP II monitoring began December 2010	34	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-110	Stormwater Management Systems	Construct wet detention pond at San Jose Boulevard	145 acres, wet pond	Unknown	FDOT	Completed

SECTION 9: MONCRIEF CREEK (WBID 2228)

9.1 JEA ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

During the last year, JEA pipe burst 0.05% of the lines, open cut 0.03% of the sanitary sewer pipes in the watershed, repaired 4 manhole linings, inspected 2 force main discharge manholes, repaired 1 pump station, inspected 0.14% of the pipes with closed-circuit television, and cleaned 5.81% of the lines. JEA also inspected 177 manholes as part of the Pop-Top Program. JEA's activities in the Moncrief Creek watershed are shown in **Table 44**.

TABLE 44: JEA ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-84	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total footage of pipe burst in watershed in 2012 771 LF	\$115,650	JEA	Ongoing
JEA-85	CIPP–Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Total footage of CIPP in watershed in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-203	Open Cut–Removal and Replacement	Replace failing/leaking infrastructure	Total footage of open cut replacement in watershed FY11/12 437 feet	\$87,400	JEA	Ongoing
JEA-86	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	4 relined in 2012	\$3,000	JEA	Ongoing
JEA-87	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	0 inspected, 0 installed of 10 ARVs in 2012	Unknown	JEA	Ongoing
JEA-88	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (Lake Forest Elementary)	Unknown	JEA	Completed – All in WBID
JEA-89	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	5 stations (McMillan, Spring Grove Avenue, Public Housing on Golfair Boulevard, Norwood, Lorrain)	Unknown	JEA	Completed for FY11-ongoing
JEA-90	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-91	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	2 inspections, 0 rehabs	\$600	JEA	Ongoing
JEA-212	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	1 project in watershed in 2012	\$59,135	JEA	Ongoing
JEA-92	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-93	HDPE Pipe Cleaning– Contractor	Clean existing HDPE pipes to avoid blockages	137,381 feet of HDPE pipe in watershed; 0 feet cleaned in 2012	\$0	JEA	Ongoing
JEA-94	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	2,385 feet of pipe in 2012	\$4,770	JEA	Ongoing
JEA-95	Pipe Cleaning	Clean existing pipes to avoid blockages	97,914 feet of pipe in 2012	\$1,958,280	JEA	Ongoing
JEA-96	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-97	Manhole Monitoring	Manhole Monitoring	3 monitors in watershed	\$15,000	JEA	Ongoing
JEA-98	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-99	Pop-Top Program	Pop-Top Program	177 surveyed in 2012	\$8,850	JEA	Ongoing
JEA-100	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

9.2 DCHD ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

In 2012, DCHD issued 6 repair permits, 6 abandonment permits, and 9 annual operating permits. DCHD also conducted 6 plan reviews and site evaluations and performed 9 complaint investigations. The programs and activities DCHD conducts in the Moncrief Creek watershed are shown in **Table 45**.

TABLE 45: DCHD ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-35	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 6 repair permits and 6 abandonment permits issued	\$3,150	FDOH	Ongoing
DCHD-36	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	9 annual operating permits issued for IMZ/commercial properties	\$3,150	FDOH	Ongoing
DCHD-37	SWIM Project	Implement broad-ranging septic tank ordinance	Approximately 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 this WBID	Not applicable	FDOH	Ongoing
DCHD-38	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-39	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 6 plan reviews and site evaluations performed based on permitting history	\$1,500	FDOH	Ongoing
DCHD-40	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-41	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	9 complaint investigations performed	\$1,350	FDOH	Ongoing
DCHD-42	Intensive Inspection Program	Approximately 764 inspections performed within WBID	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	\$28,500	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation grant	Completed

9.3 COJ ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

9.3.1 COMPLETED COJ PROJECTS

COJ completed the drainage improvement project on Chestnut Drive. In addition, COJ connected 1 septic tank-serviced property to sewer outside a failure area in the watershed.

9.3.2 ONGOING COJ PROGRAMS AND ACTIVITIES

During the reporting period, COJ had 137 work orders for ditch and creek regrading, 8 work orders for a lake or pond problem, 131 work orders for repair/clearing of structures, 2 work orders for a contaminated ditch, 2 inspections of illicit water discharges, 1 inspection of an illegal water discharge, and 1 inspection of a sewer that drains to a yard or ditch. These inspections are initiated through information from the CARE database. COJ also inspected 2 private lift stations, and followed up on 1 PIC in the watershed. In addition, COJ collected 10 routine water quality samples. COJ's efforts in the Moncrief Creek watershed are shown in **Table 46**. Additional details about COJ projects are included in **Appendix A**.

TABLE 46: COJ ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-330	Regional Stormwater Facility – MSMP	Regional stormwater facility + bank	Unknown	\$6,700,000	COJ	Planned
COJ-121	Moncrief Creek (Main Stem COJ-27)	Construct wet detention pond at 30 th Street West and Leonard Circle West	619 acres	Unknown	COJ	Completed
COJ-122	Royal Terrace Phases A, B, C, D, E, 1, 2, 3, 4 (Main Stem COJ-18)	Construct wet detention pond at 45 th Street West and Avenue B	332 acres	Unknown	COJ	Completed
COJ-123	49th and Pearl	Implement drainage improvements—ponding water floods yard	Unknown	Unknown	COJ	Completed
COJ-331	Chestnut Drive	Drainage improvements	Unknown	\$23,350	COJ	Completed
COJ-124	Ditch/Creek Regrade/Erosion/ Clean	All maintenance activities presented were completed in response to CARE requests.	137	\$8,503	COJ	Ongoing
COJ-125	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	8	Unknown	COJ	Ongoing
COJ-126	Structure Blocked/Repair/ General Flooding	All maintenance activities presented were completed in response to CARE requests.	131	\$12,768	COJ	Ongoing
COJ-373	Hazardous Contaminated Ditch	All maintenance activities presented were completed in response to CARE requests.	2	\$758	COJ	Ongoing
COJ-127	Illicit Water Discharge	CARE initiated inspection	2	\$758	COJ	Ongoing
COJ-128	Pollution–Water–Illegal Discharge	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-129	Sewer Drains into Yard/Ditch	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-130	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-131	Septic Tank Inspection	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-132	Private Lift Station Inspection	Inspect 5 private lift stations in WBID	2	\$758	COJ	Ongoing
COJ-133	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Ongoing	COJ	Ongoing
COJ-134	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	2 stations (4811 Payne Stuart Drive, Stuart and Golfair)	Unknown	COJ	Completed
COJ-135	Illicit Discharge Detection and Elimination	Follow up on PICs	1	\$379	COJ	Ongoing
COJ-136	Follow Up on Outstanding PICs	Follow up on open PICs in watershed from BMAP; none were illicit	10	\$3,790	COJ	Completed

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-137	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling; 2 stations in WBID	10	\$1,360	COJ	Ongoing
COJ-138	TAT Sampling	Conducted by EQD to assess bacteria levels in creek and help identify potential fecal bacteria sources	18 (for 2008–09)	Unknown	COJ	Completed
COJ-139	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	0	\$0	COJ	Ongoing
COJ-140	Lake Forest Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas	136 tanks, 136 connected	Unknown	COJ	Completed
COJ-141	Cristobel Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	164 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-142	Royal Terrace Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	76 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-143	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	793 tanks, 1 connected	See Appendix A	COJ	Ongoing
COJ-144	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-145	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

9.4 FDOT ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

FDOT collected 21.6 tons of debris from street sweeping 8 miles of roadways. The Adopt-A-Highway Program collected 105 pounds of trash from 4.5 miles of roadways. FDOT helps to fund the 2 monitoring stations in the Moncrief Creek watershed that are sampled quarterly as part of the MS4 routine monitoring program. Ten routine samples were collected at these stations during the reporting period. **Table 47** lists FDOT's activities in the Moncrief Creek watershed.

TABLE 47: FDOT ACTIVITIES IN THE MONCRIEF CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-41	PIC Program	Search for illicit connections	Effort is continuous in this WBID	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-42	PIC Program	Identify and remove illicit connections if found to be truly illicit	No illicit connection/discharge found this reporting period	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-43	PIC Program	Follow up on outstanding PICs	1 found not to be illicit	Countywide - \$37,605	FDOT/COJ	Completed
FDOT-44	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	10 routine water quality samplings performed	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-45	TAT Sampling	Conducted by EQD to assess bacteria levels in creek and help identify potential fecal bacteria sources	18 (for 2008–09)	Countywide - \$22,546	FDOT/COJ	Completed
FDOT-46	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-47	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-48	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	105 pounds of trash collected, trash collection area is 4.5 miles	Unavailable	Not applicable	Ongoing
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	About 4 miles of roadways and associated stormwater conveyance systems currently being maintained; approximately 8 miles of roadways swept with 21.6 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing

SECTION 10: BLOCKHOUSE CREEK (WBID 2207)

10.1 JEA ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

During the last year, JEA inspected 12 ARVs and replaced 1 ARV. JEA's activities in the Blockhouse Creek watershed are shown in **Table 48**.

TABLE 48: JEA ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-101	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total footage of pipe burst in watershed in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-102	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	0 relined in 2012	Not applicable	JEA	Ongoing
JEA-103	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	12 inspected of 14 ARVs; 1 ARV replaced in 2012	\$4,350	JEA	Ongoing
JEA-104	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	2 stations (North Ridge, Gladwynne Road)	Unknown	JEA	Completed for FY11- Ongoing
JEA-105	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-106	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	Not applicable	Unknown	JEA	Ongoing
JEA-107	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-108	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	0 feet inspected in 2012	\$0	JEA	Ongoing
JEA-109	Pipe Cleaning	Clean existing pipes to avoid blockages	0 feet of pipe in 2012	\$0	JEA	Ongoing
JEA-110	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-111	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-112	Pop-Top Program	Pop-Top Program	0 surveyed in 2012	Unknown	JEA	Ongoing
JEA-113	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

10.2 DCHD ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

10.2.1 COMPLETED DCHD ACTIVITIES

DCHD completed the intensive inspection program in the Blockhouse Creek watershed over the last year. The purpose of this program is to conduct geospecific investigations of septic tanks in area that are more prone to failures to proactively prevent septic tank problems. This program included 446 inspections of septic tanks and 24 re-inspections.

10.2.2 ONGOING DCHD PROGRAMS AND ACTIVITIES

In 2012, DCHD issued 1 new construction permit, 3 repair permits, 1 abandonment permit, and 14 annual operating permits. DCHD also conducted 4 plan reviews and site evaluations. The programs and activities DCHD conducts in the Blockhouse Creek watershed are shown in Table 49.

TABLE 49: DCHD ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-43	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 1 new construction permit, 3 repair permits, and 1 abandonment permit issued	\$1,825	FDOH	Ongoing
DCHD-44	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	14 annual operating permits issued for IMZ/commercial properties	\$5,000	FDOH	Ongoing
DCHD-45	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-46	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 4 plan reviews and site evaluations performed based on permitting history	\$800	FDOH	Ongoing
DCHD-47	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-48	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	Not applicable	Not applicable	FDOH	Ongoing
DCHD-49	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 446 inspections and 24 re-inspections performed within this WBID	\$70,500	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Completed

10.3 COJ ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

During the reporting period, COJ had 26 work orders for ditch and creek regrading, 1 work order for a lake or pond problem, and 6 work orders for repair/clearing of structures. These inspections are initiated through information from the CARE database. COJ also inspected 1 private lift station in the watershed. In addition, COJ collected 5 routine water quality samples. COJ's efforts in the Blockhouse Creek watershed are shown in **Table 50**. Additional details about COJ projects are included in **Appendix A**.

TABLE 50: COJ ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-146	Jennings Road/Lem Turner Road	Repair failed cross drain	Unknown	\$23,000	COJ	Completed
COJ-147	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	26	\$12,268	COJ	Ongoing
COJ-148	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-149	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	6	\$941	COJ	Ongoing
COJ-150	Illicit Water Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-151	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-152	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-153	Sewer Overflow	CARE initiated	0	\$0	COJ	Ongoing
COJ-154	Private Lift Station Inspection	Inspect 23 private lift stations in WBID	1	\$379	COJ	Ongoing
COJ-155	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Ongoing	COJ	Ongoing
COJ-156	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (2100 Dunn Avenue)	Unknown	COJ	Completed – in Lower Trout River WBID
COJ-157	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	1 station (2631 Dunn Avenue)	Unknown	COJ	Completed
COJ-158	Illicit Discharge Detection and Elimination	0 illicit	1	\$379	COJ	Ongoing
COJ-159	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling; 1 station in WBID	5	\$680	COJ	Ongoing
COJ-332	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform are noted in attempt to find source	0	\$0	COJ	Ongoing
COJ-160	Septic Tanks Outside Failure Area– Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	410 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-161	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-162	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

10.4 FDOT ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

FDOT collected 20.25 tons of debris through street sweeping 7.5 miles of roadways. The Adopt-A-Highway Program collected 140 pounds of trash from 2.2 miles of roadways. FDOT helps to fund 1 monitoring station in the Blockhouse Creek watershed that is sampled quarterly as part of the MS4 routine monitoring program. A total of 5 samples were collected at this station during the reporting period. **Table 51** lists FDOT's activities in the Blockhouse Creek watershed.

TABLE 51: FDOT ACTIVITIES IN THE BLOCKHOUSE CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-50	PIC Program	Search for illicit connections	Effort is continuous in this WBID; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-51	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-52	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-53	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	140 pounds of trash collected, trash collection area is 2.2 miles	Unavailable	Not applicable	Ongoing
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	About 3.75 miles of roadways and associated stormwater conveyance systems currently being maintained; approximately 7.5 miles of roadways swept with 20.25 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-111	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/ COJ	Ongoing

SECTION 11: HOPKINS CREEK (WBID 2266)

11.1 DCHD ACTIVITIES IN THE HOPKINS CREEK WATERSHED

In 2012, DCHD issued 1 abandonment permit and 1 annual operating permit. The programs and activities DCHD conducts in the Hopkins Creek watershed are shown in **Table 52**.

TABLE 52: DCHD ACTIVITIES IN THE HOPKINS CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-50	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 1 abandonment permit issued	\$100	FDOH	Ongoing
DCHD-51	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	1 annual operating permit issued for IMZ property	\$350	FDOH	Ongoing
DCHD-52	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-53	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Not applicable	Not applicable	FDOH	Ongoing
DCHD-54	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-55	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	Not applicable	Not applicable	FDOH	Ongoing
DCHD-56	Intensive Inspection Program	Carry out intensive geospecific inspections in selected BMAP WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 44 inspections performed within WBID	\$4,200	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation grant	Completed

11.2 COJ ACTIVITIES IN THE HOPKINS CREEK WATERSHED

During the reporting period, COJ collected 5 routine water quality samples and 47 samples for the BMAP monitoring. COJ's efforts in the Hopkins Creek watershed are shown in **Table 53**. Additional details about COJ projects are included in **Appendix A**.

TABLE 53: COJ ACTIVITIES IN THE HOPKINS CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-163	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	0	\$0	COJ	Ongoing
COJ-164	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	0	\$0	COJ	Ongoing
COJ-165	Illicit Water Discharge	CARE initiated	0	\$0	COJ	Ongoing
COJ-166	Pollution–Water–Illegal Discharge	CARE initiated	0	\$0	COJ	Ongoing
COJ-167	Sewer Drains into Yard/Ditch	CARE initiated	0	\$0	COJ	Ongoing
COJ-168	Sewer Overflow	CARE initiated	0	\$0	COJ	Ongoing
COJ-169	Private Lift Station Inspection	Inspect 4 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-170	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Ongoing	COJ	Ongoing
COJ-171	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (400 Penman)	Unknown	COJ	Completed – In WBID
COJ-172	Illicit Discharge Detection and Elimination	0 open, 0 illicit	0	\$0	COJ	Ongoing
COJ-173	Routine Surface Water Sampling	Carry out NPDES-related quarterly water quality sampling; 1 station in WBID	5	\$680	COJ, Atlantic Beach	Ongoing
COJ-333	BMAP Monitoring	COJ EQD is responsible for 3 sites, one for Atlantic Beach and one for Neptune Beach (2 sampled monthly and 1 sampled quarterly), began 12/2010	47	\$8,319	COJ, Atlantic Beach, Neptune Beach	Ongoing
COJ-334	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources.	0	0	COJ	Ongoing

11.3 FDOT ACTIVITIES IN THE HOPKINS CREEK WATERSHED

FDOT collected 43.2 tons of debris from street sweeping 16 miles of roadways. The Adopt-A-Highway Program collected 240 pounds of trash along 8 miles of roadways. FDOT helps to fund 1 monitoring station in the Hopkins Creek watershed that is sampled quarterly as part of the MS4 routine monitoring program. Five water quality samples were collected at this station during the reporting period. In addition, FDOT helped to fund the 3 stations for the BMAP

monitoring, and 47 samples were collected at these stations. **Table 54** lists FDOT's activities in the Hopkins Creek watershed.

TABLE 54: FDOT ACTIVITIES IN THE HOPKINS CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-55	PIC Program	Search for illicit connections	Effort is continuous in this WBID	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-56	PIC Program	Identify and remove illicit connections if found to be truly illicit	No illicit connection/discharge found this reporting period	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-57	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5 routine water quality samplings performed	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-58	Stormwater Management Systems	Construct Mayport flyover	14 acres, wet ponds	Not applicable	FDOT	Completed
FDOT-59	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-60	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	240 pounds of trash collected, trash collection area is 8 miles	Unavailable	Not applicable	Ongoing
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	About 8 miles of roadways and associated stormwater conveyance systems currently being maintained; approximately 16 miles of roadways swept with 43.2 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-112	BMAP Sampling	Routine BMAP II monitoring began December 2010	47 BMAP samplings performed	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-113	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	1	Countywide - \$22,546	FDOT/COJ	Ongoing

11.4 ATLANTIC BEACH ACTIVITIES IN THE HOPKINS CREEK WATERSHED

11.4.1 COMPLETED ATLANTIC BEACH PROJECTS

The City of Atlantic Beach completed sewer line upgrades in the Donner Subdivision and along Plaza Road. The city also completed manhole rehabilitation in the Donner Subdivision and on Plaza Road (see **Figure 17**). The city also cleaned and televised the sanitary sewer mains and cleaned the lift station and manholes near Donner Road.



FIGURE 17: CITY OF ATLANTIC BEACH MANHOLE REHABILITATION PROJECT

11.4.2 ONGOING ATLANTIC BEACH PROGRAMS AND ACTIVITIES

Over the last year, the City of Atlantic Beach inspected 935,098 linear feet of stormwater system ditches and canals, maintained 773,692 linear of stormwater ditches and canals, completed 323 pond inspections, completed 199 pond maintenance events, inspected 166 stormwater structures, completed 14,456 inspections of inlets/catch basins/grates, completed 13,344 maintenance actions for inlets/catch basins/grates, inspected and maintained 50 linear feet of stormwater pipe, repaired 20 linear feet of stormwater pipe, and collect 21,846 pounds of litter. The City of Atlantic Beach's activities in the Hopkins Creek watershed are listed in **Table 55**.

TABLE 55: ATLANTIC BEACH ACTIVITIES IN THE HOPKINS CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-1	Septic Tank Inspections and Enforcement	When septic tanks fail, city code requires connection to sewer system if available	Ongoing	Unknown	Paid by property owner	Completed
AB-2	Septic Tank Phase-Out	Septic-to-Sewer Resolution by City Commission requires connection at various dates. Includes Septic Conversion Assistance Policy, passed by City Commission May 2000. Provides city financing of septic-to-sewer conversions and contracting coordination and assistance.	9 septic-to-sewer conversions	\$23,000	Community Development Block Grant (CDBG)/ Homeowners	Completed
AB-3	Sewer Line Upgrades	Repair sewer and manholes close to Lift Station E, near 799 Mayport Road	700 LF of sewer main, 3 manholes	\$49,170	Atlantic Beach	Completed
AB-4	Sewer Line Upgrades	Replace sewer force main at Mayport Road and Forrester	100 LF of force main	\$10,000	Atlantic Beach	Completed
AB-5	Sewer Line Upgrades	Rehabilitate sanitary sewer in entire Royal Palms subdivision using CIPP	30,042 LF of sewer main	\$747,143	Atlantic Beach	Completed
AB-6	Sewer Line Upgrades	Replace sewer main crossing drainage ditch near Lift Station F—behind 720 Aquatic Drive	1,000 LF	\$10,715	Atlantic Beach	Completed
AB-7	Sewer Line Upgrades	Line sewer in easement from Donner Road to Stanley Road, Donner subdivision; includes 12 manholes lined	1,275 LF	\$91,370	Atlantic Beach	Completed
AB-8	Sewer Line Upgrades	Replace force main from Lift Station C to WWTF—Donner Road	1,275 LF	\$94,257	Atlantic Beach	Completed
AB-9	Manhole Inspections and Rehabilitation	Rehabilitate/install Spectrashield coating of all manholes in Royal Palms subdivision	85 manholes	\$81,653	Atlantic Beach	Completed
AB-10	Manhole Inspections and Rehabilitation	Conduct engineering analysis of failing manholes—Donner subdivision	20 manholes	\$2,500	Atlantic Beach	Completed
AB-11	Manhole Inspections and Rehabilitation	Rehabilitate and replace manholes—Ardella Road area	5 manholes	\$36,135	Atlantic Beach	Completed
AB-12	Manhole Inspections and Rehabilitation	Rehabilitate and replace manholes—Donner Subdivision	11 manholes	\$58,205	CDBG	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-13	Manhole Inspections and Rehabilitation	Line manholes in easement from Donner to Stanley	12 manholes	Unknown	Atlantic Beach	Completed
AB-14	Manhole Inspections and Rehabilitation	Replace effluent outfall manhole at Mayport and Donner Road	1 manhole on 21-inch effluent outfall	\$12,800	Atlantic Beach	Completed
AB-15	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 on-site emergency generators with automatic transfer switch; portable genset and pumps available for smaller stations; all mechanical/electrical problems are addressed immediately	3 lift stations	Unknown	Atlantic Beach	Ongoing
AB-16	Pump Station Inspections and Maintenance	Improve valves at Lift Stations C, E, F (65 Donner Road, 799 Mayport Road, 858 Cavalla Road)	3 lift stations	\$40,000	Atlantic Beach	Completed
AB-17	Pump Station Inspections and Maintenance	Replace emergency generator at Cavalla Road Lift Station, 858 Cavalla Road	1 lift station	\$24,000	Atlantic Beach	Completed
AB-18	Pump Station Inspections and Maintenance	Install SCADA system for all lift stations. Those in Hopkins Creek watershed are Lift Stations C, E, and F (65 Donner Road, 799 Mayport Road, 858 Cavalla Road)	3 lift stations	\$19,500	Atlantic Beach	Completed
AB-19	SSO Investigations–Preventive	Clean and inspect, using CCTV, sewer main, ditch crossings near Lift Station E and F–behind 720 Aquatic Drive and behind 39 Saratoga Circle North	2,000 LF	\$1,780	Atlantic Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-20	SSO Investigations– Preventive	Conduct inflow and infiltration (I&I) analysis of entire collection system, prepare GIS system, obtain global positioning system (GPS) locations of all manholes, analyze lift station needs, make Capital Improvement Plan (CIP) recommendations	Not applicable	\$60,000	Atlantic Beach	Completed
AB-21	SSO Investigations– Preventive	Clean and inspect, using CCTV, sewer mains crossing Mayport Road	5,000 LF	\$6,700	Atlantic Beach	Completed
AB-22	SSO Investigations– Preventive	Sewer Master Plan Update– Analyze entire sewer system for prioritizing capital improvement program, including review of I&I analysis	1 update and review	\$58,100	Atlantic Beach	Completed
AB-23	SSO Investigations– Preventive	Implement FOG Program to monitor grease trap maintenance at restaurants	25 food service establishments	Unknown	Atlantic Beach	Ongoing
AB-24	1999 Stormwater Improvements Project	Implement flood control capital projects and stormwater water quality BMPs on Donner Road and Aquatic Gardens	663.5 LF of reinforced concrete pipe (RCP) in various sizes; 4 inlets; 1 mitered end section	\$414,711	Atlantic Beach	Completed
AB-25	Jordan Street Paving and Drainage	Implement flood control capital projects located off Frances Street, north Donners Road	450 LF of pipe; various sizes; 5 inlets; 1 concrete headwall	\$109,129	CDBG	Completed
AB-26	Hopkins Creek Regional Stormwater Facility	Implement stormwater water quality BMPs and flood control project located just north of Atlantic Boulevard, off Aquatic Drive	1.7-acre wet detention pond with 54-acre drainage basin; 1,314 LF of pipe; 7 RCP mitered end section (MES); 6 manholes; 6 inlets; 150 LF box culvert; 1 endwall	\$2,058,694	Atlantic Beach/ Legislative Appropriation	Completed
AB-27	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	Atlantic Beach/ Legislative Appropriation	Required sampling complete. Quarterly fecal sampling continuing.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-28	Public Education Through Contract with Felicia M. Boyd	Stormwater water quality BMPs; public education through for stormwater and sewer	2,633 participants	\$5,000 per year	Atlantic Beach	Ongoing
AB-29	Stormwater System Ditch and Canal Inspections	Visually inspect weekly, take corrective action taken as needed; mow, use weedeater, and pick up litter weekly during growing season, as needed in colder months	935,098 LF	Unknown	Atlantic Beach	Ongoing
AB-30	Stormwater System Ditch and Canal Maintenance	Routinely clean and maintain ditches as required by MS4 permit	773,692 LF	Unknown	Atlantic Beach	Ongoing
AB-31	Stormwater Treatment Ponds Inspections	Routinely inspect ponds as required by MS4 permit	323 pond inspections	Unknown	Atlantic Beach	Ongoing
AB-32	Stormwater Treatment Ponds Cleaning and Maintenance	Carry out routine pond maintenance as required by MS4 permit	199 pond maintenance events	Unknown	Atlantic Beach	Ongoing
AB-33	Stormwater Treatment Ponds, Ditch and Canal Aquatic Weed Control	Weed control by Bluewater Environmental	Not applicable	Annual budget– \$21,000	Atlantic Beach	Ongoing
AB-34	Stormwater Control Structure Inspections	Conduct routine control structure inspections as required by MS4 permit	166 structures	Unknown	Atlantic Beach	Ongoing
AB-35	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	92 structures	Unknown	Atlantic Beach	Ongoing
AB-36	Stormwater Pump Station Inspections	Routinely inspect Town Center pump station as required by MS4 permit	1 station	Unknown	Atlantic Beach	Ongoing
AB-37	Stormwater Pump Station Maintenance	Routinely maintain Town Center pump station as required by MS4 permit	1 pump station	Unknown	Atlantic Beach	Ongoing
AB-38	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	Atlantic Beach	Ongoing
AB-39	Stormwater Inlets/Catch Basins/Grates Maintenance	Maintain as required by MS4 permit	13,344 maintenance actions inlets/catch basins/grates	Unknown	Atlantic Beach	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-40	Stormwater Pipe Inspection and Maintenance	Schedule stormwater pipe cleaning routinely, and in response to complaints; required by MS4 permit	50 LF	Unknown	Atlantic Beach	Ongoing
AB-41	Stormwater Pipe Maintenance (Repair/Replacement)	Repair or replace stormwater pipe	20 LF	Unknown	Atlantic Beach	Ongoing
AB-42	Total Miles of Right-of-Way Maintenance	Maintain right-of-way	13.08 miles	Unknown	Atlantic Beach	Ongoing
AB-43	Litter Collection	Collect litter	21,846 pounds/year	Unknown	Atlantic Beach	Ongoing
AB-44	Ardella Road Drainage Project	Implement drainage improvements; located between Mayport Road and Richardson Lane; pipe bursting because existing pipe crossed two parcels of private property where no drainage easement existed	290 LF HDPE pipe bursting; 1 inlet; 1 box and grate	\$36,332	Atlantic Beach	Completed
AB-45	Royal Palms Drainage Rehabilitation Project	Implement flood control capital project; Royal Palms is major (600-home) subdivision between Mayport Road and Seminole Road; completion 10/2010	13,004 LF RCP various sizes; 35 manholes; 25 inlets; 7 endwalls	\$3,450,000, including engineering and permitting	Atlantic Beach	Completed
AB-46	Royal Palms Drainage System Point Repairs	Implement stormwater system point repairs necessitated by spot failures; anticipate need in Royal Palms to be minimal once above improvements completed	As needed	Unknown	Atlantic Beach	Completed
AB-47	Pet Feces Control	Install, maintain, and stock Dogi-Pot stations throughout city	More than 30 installed to date	\$5,000	Atlantic Beach	Ongoing
AB-48	Pet Feces Control	City Code 12.(b).14 requires removal and proper disposal of pet waste	As needed	Unknown	Atlantic Beach	Ongoing
AB-49	Street Sweeping	Sweep streets throughout city	Bimonthly sweeping	\$18,000	Atlantic Beach	Ongoing
AB-50	Identification and Removal of Illicit Connections	Conduct field inspections to identify and remove illicit connections	As needed	Unknown	Atlantic Beach	Ongoing
AB-134	Pump Station Inspections and Maintenance	Lift Station E Upgrades (799 Mayport Road); new emergency generator, new high efficiency motors	1 lift station	\$49,482	Atlantic Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-142	Sewer Line Upgrades	Rehabilitate sanitary sewer mains in Donner subdivision (portions of Jackson Road, Stanley Road, Francis Avenue, and Jordan Road) using CIPP	3,781 LF	\$146,604	CDBG – Disaster Mitigation	Completed
AB-143	Sewer Line Upgrades	Rehabilitate sanitary sewer mains on Plaza Road from manholes 76-77 using CIPP	206 LF	\$7,800	Atlantic Beach	Completed
AB-144	Manhole Inspections and Rehabilitation	Rehabilitate manholes in Donner Subdivision (on Jackson Road, Stanley Road, Francis Avenue, and Jordan Road) using Spectrashield	17 manholes	\$27,208	CDBG – Disaster Mitigation	Completed
AB-145	Manhole Inspections and Rehabilitation	Rehabilitate manholes 76 and 77 on Plaza Road using Spectrashield	2 Manholes	\$1,560	Atlantic Beach	Completed
AB-146	SSO Investigations – Preventive	Clean and televise sanitary sewer mains near Donner Road lift station and manhole cleaning	300 LF and 3 manholes	\$1,300	Atlantic Beach	Completed

11.5 JACKSONVILLE BEACH ACTIVITIES IN THE HOPKINS CREEK WATERSHED

During the last year, the City of Jacksonville Beach cleaned 19,000 linear feet of gravity sewer mains, coated the interior of 25 sewer manholes, and continued routine inspections and maintenance of the sewer and stormwater systems. The City of Jacksonville Beach's efforts in the Hopkins Creek watershed are listed in **Table 56**.

TABLE 56: JACKSONVILLE BEACH ACTIVITIES IN THE HOPKINS CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JB-1	Septic Tank Phase Out	Phase out Section "A"—16th Street North to 20th Street North to 8th Avenue North to 12th Avenue North	Phase out 85 septic tanks, 5,229 LF of 8 inch PVC sewer pipe, lift station and 673 LF of 4 inch force main	\$337,730	Jacksonville Beach	Completed
JB-2	Sewer System Inspection	Clean existing sanitary sewer system	Cleaned approximately 13,000 LF of existing sanitary sewer system	\$26,000	Jacksonville Beach	Completed
JB-3	Sewer Manhole Inspections and Rehabilitation	Rehabilitate existing sewer manholes	Coated interior of 36 manholes in Hopkins Creek area	\$55,757	Jacksonville Beach	Completed
JB-4	Sewer Pump Station Wetwells Inspections and Rehabilitation	Rehabilitate interior surface of existing sewer lift station wetwells with coating system	Coated interior of existing LS 5, 12, 24, 26 and 27 wetwells	\$34,707	Jacksonville Beach	Completed
JB-5	Sewer Pump Station Inspections and Maintenance	Improve sewer lift station No. 10	Installed new fiberglass wetwell and submersible pumps, controls, odor control equipment, 1 new fiberglass manhole and related piping and equipment	\$736,481	Jacksonville Beach	Completed
JB-6	SSO Investigations	Improve Arden Way sewer system	Installed 7 new sewer manholes, 1,500 LF of gravity sewer main, abandoned and grout filled approximately 800 LF of gravity sewer main and constructed 1,000 LF of new 6-inch force main; eliminated SSO at 1827 Arden Way (3 occurrences)	\$342,000	Jacksonville Beach	Completed
JB-7	SSO Investigations	Investigate 1 occurrence at 2000 3 rd Street North	Minor impact, wet conditions; manhole wet around frame and cover	\$1,000	Jacksonville Beach	Completed
JB-8	SSO Investigations	Investigate 2 occurrences at 300 Palm Tree Road	Minor impact, dry conditions; contractor contained second spill on site	\$5,000	Jacksonville Beach	Completed
JB-9	Sewer Pump Station Inspections and Maintenance	Inspect lift stations Nos. 2, 7, 8, 9, 18, 19, and 23	Coated wetwell	\$47,230	Jacksonville Beach	Completed
JB-10	Sewer Pump Station Inspections and Maintenance	Inspect lift station No. 37 (Jarrett Point Unit II)	New wetwell	\$183,541	Jacksonville Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JB-11	Sewer System Replacement	Improve sewer system from Barbara Lane to 14 th Avenue North and 8 th Street to 13 th Street North	Constructed 6,200 LF of 8-inch sanitary sewer main, 16 sewer manholes, 124 sewer services, 13,800 square yards of asphalt pavement	\$1,065,000	Jacksonville Beach	Completed
JB-12	Sewer System Replacement	Improve sewer system from Patricia Lane to 18 th Avenue North and 4 th Street to 7 th Street North	Constructed 1,200 LF of 10-inch sanitary sewer main, 5,000 LF of 8-inch sanitary sewer main, 16 sewer manholes, 124 sewer services, lift station and force main, 13,800 square yards asphalt pavement	\$1,310,000	Jacksonville Beach	Completed
JB-13	Sewer System Replacement	Improve sewer system from Barbara Lane to 12 th Avenue North and Patricia Lane to 7 th Street North	Constructed 2,000 LF of 8-inch sanitary sewer main, 5 sewer manholes, 40 sewer services, 4,500 square yards asphalt pavement	\$386,000	Jacksonville Beach	Completed
JB-14	Sewer System Replacement	Improve sewer system from 2 nd Street North to 3 rd Street North and from easement to 6 th Avenue North; 3 rd Street North from easement to 7 th Avenue North	Constructed 500 LF of 8-inch sanitary sewer main, 2 sewer manholes, 10 sewer services, 1,100 square yards asphalt pavement	\$88,000	Jacksonville Beach	Completed
JB-15	Flood Control Capital Project	Improve stormwater system at 18 th Street North, Tall Pine Park, perforated stormwater pipe	Installed 35 drainage structures, 5,543 feet of drainage pipes	\$667,472	Jacksonville Beach	Completed
JB-16	Flood Control Capital Project	Improve stormwater system at 1 st Street North and 18 th Avenue North; stormwater piping	Remove/replace existing stormwater drainage system piping, 338 feet of drainage piping, 6 drainage structures	\$128,817	Jacksonville Beach	Completed
JB-17	Flood Control Capital Project	Improve stormwater system at North 2 nd Street between 6 th Avenue North to 13 th Avenue North	Installed new stormwater pump station, force main, drainage piping system and drainage inlets	\$3,500,00	Jacksonville Beach/ EPA Grant	Completed
JB-18	Flood Control Capital Project	Improve stormwater system at 11 th Avenue North—new stormwater pump station, new drainage system piping, new drainage structures	Installed new stormwater pump station, 2,000 feet of drainage pipe, 18 drainage structures	\$450,000	Jacksonville Beach	Completed
JB-19	Flood Control Capital Project	Improve stormwater system at 11 th Street North; swale grading, impervious parking	Reconstructed existing roadways with swale grading along edge of roadways and impervious block parking at Gonzales Park area	\$670,000	Jacksonville Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JB-20	Flood Control Capital Project	Improve retention pond and infrastructure at Jacksonville Beach Golf Course; pond construction associated with construction of the 2 nd Street North stormwater improvement project	Constructed another stormwater retention pond and enlargement of 2 existing retention ponds; treats Beach Boulevard to 13 th Avenue from 1 st Street to 3 rd Street	\$645,754	Jacksonville Beach/ SJRWMD Grant	Completed
JB-21	Flood Control Capital Project	Improve paving, drainage, water and sewer in downtown development area	Reconstructed existing water, drainage system, sewer and paving of downtown area consisting of 15 city blocks east of 3 rd Street, between Beach Blvd and 5 th Avenue North; installed new stormwater pump station, 4,761 feet of drainage pipe, 80 drainage structures, 6,545 feet of 30-inch stormwater force main piping between pump station to golf course retention ponds	\$6,831,192	Jacksonville Beach	Completed
JB-22	Flood Control Capital Project	Implement project at 19 th Street North at 2 nd Avenue North	200 LF of 18-inch PVC pipe, 2 concrete endwalls, asphalt pavement rehab	\$25,000	Jacksonville Beach	Completed
JB-23	Flood Control Capital Project	Implement project at 19 th Street North between 2 nd Avenue North and 5 th Avenue North	30 LF of 15-inch PVC, 1 inlet, asphalt pavement rehab	\$7,000	Jacksonville Beach	Completed
JB-24	Flood Control Capital Project	Implement project at easement west of Penman Road from 6 th Avenue North to 16 th Street North	640 LF of 15-inch PVC, connected to existing structures, asphalt pavement	\$45,000	Jacksonville Beach	Completed
JB-25	Flood Control Capital Project	Implement project at 17 th Street North from 9 th Avenue North to existing ditch	420 LF of 6-inch PVC perforated underdrain; connect to existing structure	\$10,000	Jacksonville Beach	Completed
JB-26	Flood Control Capital Project	Implement project at 11 th Avenue North from 16 th Street North to Penman Road	165 LF of 12-inch PVC; connections to existing structures	\$14,000	Jacksonville Beach	Completed
JB-27	Flood Control Capital Project	Implement project at 16 th Street North from 11 th to 12 th Avenue North	140 LF of 10-inch PVC, 1 inlet	\$10,000	Jacksonville Beach	Completed
JB-28	Flood Control Capital Project	Implement project at 11 th Avenue North from 17 th to 18 th Street North	210 LF of 24-inch RCP, 1 inlet	\$15,000	Jacksonville Beach	Completed
JB-29	Flood Control Capital Project	Implement project at 21 st Street from 9 th Avenue to 12 th Avenue North	515 LF of 15-inch PVC, 3 inlets, asphalt pavement rehab	\$35,000	Jacksonville Beach	Completed
JB-30	Flood Control Capital Project	Implement project at 12 th Avenue North at 20 th Street North	100 LF of 24-inch PVC; asphalt pavement rehab	\$10,000	Jacksonville Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JB-31	Flood Control Capital Project	Implement project at Tanglewood Road from Pinewood Lane to Sable Palm Lane	165 LF of 24-inch PVC, 2 inlets	\$18,000	Jacksonville Beach	Completed
JB-32	Flood Control Capital Project	Implement project at Tanglewood Road at Sable Palm Lane	75 LF of 18-inch PVC, 1 inlet, asphalt pavement rehab	\$10,000	Jacksonville Beach	Completed
JB-33	Flood Control Capital Project	Implement project at Birchwood Road at Coral Way	85 LF of 15-inch PVC, 3 inlets, asphalt pavement	\$14,000	Jacksonville Beach	Completed
JB-34	Flood Control Capital Project	Implement project at Coral Way between Sunset Drive and Birchwood Road	45 LF of 15-inch PVC, 2 inlets, asphalt pavement	\$10,000	Jacksonville Beach	Completed
JB-35	Flood Control Capital Project	Implement project at Pinewood Road between Arden Way and Oakwood Road	60 LF of 42-inch corrugated metal pipe (CMP), asphalt pavement	\$10,000	Jacksonville Beach	Completed
JB-36	Flood Control Capital Project	Implement project at 1 st Avenue North from 3 rd to 4 th Street North	170 LF of 15-inch PVC, 2 inlets	\$10,000	Jacksonville Beach	Completed
JB-37	Flood Control Capital Project	Implement project at 3 rd Avenue North from 4 th to 5 th Street North	50 LF of 12-inch ductile iron pipe, 2 inlets	\$10,000	Jacksonville Beach	Completed
JB-38	Flood Control Capital Project	Implement project at 3 rd Avenue North from 5 th to 6 th Street North	225 LF of 12x18 elliptical reinforced concrete pipe (ERCP), 1 inlet	\$15,000	Jacksonville Beach	Completed
JB-39	Flood Control Capital Project	Implement project at 3 rd Avenue North at 6 th Street North	75 LF of 8-inch PVC underdrain, asphalt pavement	\$4,000	Jacksonville Beach	Completed
JB-40	Flood Control Capital Project	Implement project at Cilewood Court at Tallwood Road	20 LF of 18-inch PVC underdrain, 1 inlet	\$4,000	Jacksonville Beach	Completed
JB-41	Flood Control Capital Project	Implement project at Lois Lane and Seagate Avenue	700 LF of drainage swales	\$14,000	Private Developer	Completed
JB-42	Flood Control Capital Project	Implement project at King Oaks Subdivision-Kings Road and Seagate Avenue	670 LF of drainage swales	\$12,000	Private Developer	Completed
JB-43	Stormwater System Ditch and Canal Maintenance	Install erosion control along ditches and ponds	Install erosion control along ditches and ponds	Unknown	Jacksonville Beach	Completed
JB-44	Identification and Removal of Illicit Connections	Identify and remove illicit connections	Contract training for Water Plant and Stormwater Divisions	Unknown	Jacksonville Beach	Completed
JB-45	Stormwater Education and Outreach Efforts	Carry out public education, inlet marking, public notices, and stormwater flyer for residential and commercial permits	Public education, inlet marking, public notices, and stormwater flyer	Unknown	Jacksonville Beach	Completed
JB-46	Pet Waste Management	Provide dog bags at Gonzales Park, Tallwood Pines Park and Dog Park	Gonzales Park, Tallwood Pines Park and Dog Park	Unknown	Jacksonville Beach	Completed
JB-47	Pet Waste Ordinance	Pass Ordinance No. 7468-32-91, Section 32-106	Prohibits discharge of feces to MS4; establishes right of inspection and fines	Unknown	Jacksonville Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JB-48	Pet Waste Ordinance	Pass Ordinance No. 2005-7903, 24-18-05, Section 5-34	Prohibits leaving pet waste and requires proper disposal; establishes citation base fine	Unknown	Jacksonville Beach	Completed
JB-49	Noncontributing Basins	Areas in WBID that do not flow to Hopkins Creek: (1) Bentin Drive North south to Beach Boulevard, east to 11 th Street and west to WBID boundary; (2) Rosewood Drive, Oakwood Road, Pinewood Road to west WBID boundary; (3) 3 rd Street east to 1 st Street and 13 th Avenue North south to Beach Boulevard	Not applicable	Not applicable	Not applicable	Not applicable
JB-50	Sewer System Inspection	Maintain existing sewer system	Cleaning of approximately 19,000 LF	\$35,000	Jacksonville Beach	Ongoing
JB-51	Sewer Manhole Inspections and Rehabilitation	Maintain existing sewer manholes	Coat interior of approximately 25 manholes	\$20,000	Jacksonville Beach	Ongoing
JB-52	Sewer Pump Station Inspections and Maintenance	Routinely inspect existing pump stations	Inspect weekly and maintain as necessary	\$72,000	Jacksonville Beach	Ongoing
JB-53	Restaurant Grease Trap Inspections	Routinely inspect restaurant grease traps	Inspect restaurant grease traps as necessary on average: (1) interior type monthly; (2) exterior type bi-monthly	\$35,000	Jacksonville Beach	Ongoing
JB-54	Stormwater System Ditch and Canal Maintenance	Routinely inspect drainage ditch at 12 th Avenue North and 22 nd Street North and spray for aquatic weeds	Inspect routinely and ditch spray for aquatic weeds monthly	\$2,248	Jacksonville Beach	Ongoing
JB-55	Stormwater System Pond Maintenance	Routinely inspect ponds after significant rainfall event	Inspect routinely and maintain as necessary	Unknown	Jacksonville Beach	Ongoing
JB-56	Stormwater System Pond Maintenance	Inspect annually as required by MS4 NPDES permit	Carry out annual inspection as required by MS4 NPDES permit	Unknown	Jacksonville Beach	Ongoing
JB-57	Stormwater Pump Stations	Inspect stormwater pumps after significant rainfall event	Inspect weekly and after significant rainfall event and clean as necessary	Unknown	Jacksonville Beach	Ongoing
JB-58	Street sweeping	Routinely sweep curbed and guttered streets citywide	Sweep curbed and guttered streets routinely citywide	Unknown	Jacksonville Beach	Ongoing
JB-59	Identification and Removal of Illicit Connections	Field observations to identify and coordinate removal of illicit connections	Illicit discharge training held annually, every January. Any observed illicit discharges are reported for follow-up, illicit connections are removed, and reports are maintained electronically	Unknown	Jacksonville Beach	Ongoing

11.6 NEPTUNE BEACH ACTIVITIES IN THE HOPKINS CREEK WATERSHED

11.6.1 COMPLETED NEPTUNE BEACH PROJECTS

The City of Neptune Beach completed the upgrades and rehabilitation of the Summer Sands and Penman Terrace lift stations. The city also replaced and repaired the gravity sewer main behind Fletcher High School with CIPP. In addition, the city lined a portion of the gravity sewer main in the Bal Harbour subdivision and lined a portion of the storm sewer pipe in the Driftwood subdivision using CIPP. These efforts should help to reduce fecal coliform loading to Hopkins Creek from these areas.

11.6.2 ONGOING NEPTUNE BEACH PROGRAMS AND ACTIVITIES

The city has continued their stormwater outreach and education efforts through the city's newsletter. The city continued its inspections of public works facilities in the watershed on a quarterly and annual basis, and its lift stations on a daily basis. In addition, the city has continued its sewer system, stormwater system, and MS4 maintenance activities. The City of Neptune Beach's activities in the Hopkins Creek watershed are listed in **Table 57**.

TABLE 57: NEPTUNE BEACH ACTIVITIES IN THE HOPKINS CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
NB-1	Septic Tank Phase-Out	Implement phase-outs along Acacia Road, Bay Road, Florida Boulevard, Marsh Point Road, Oleander Place, Rosewood Drive, Sherwood Lane, and Pine Place	70 tanks	\$105,000	Neptune Beach	Completed
NB-2	Create GIS Mapping System Inventory Remaining Septic Tank Areas	Put together GIS mapping system and collect data to inventory remaining septic tank areas	60 lots on septic	\$5,000	Neptune Beach	Completed
NB-3	Gravity Sanitary Sewer Collection System Operation and Maintenance	Carry out normal operation and maintenance of gravity sewer collection system in city	Citywide	\$350,000/year	Neptune Beach	Ongoing
NB-4	SSO Investigations	Investigate SSOs as needed	Citywide	\$1,000/year	Neptune Beach	Ongoing
NB-5	ARV Replacement	Replace broken ARVs	Citywide	Unknown	Neptune Beach	Completed
NB-6	Light Lane Lift Station Renovation	Upgrade and rehabilitate existing wet well and station piping	1 lift station	\$13,000	Neptune Beach	Completed
NB-7	Fletcher Lift Station	Upgrade and rehabilitate existing wet well and station piping	1 lift station	\$13,000	Neptune Beach	Completed
NB-8	New Tara Court Lift Station	Install new lift station	1 lift station	\$80,000	Developer	Completed
NB-9	New Emma Lane Lift Station	Install new lift station	1 lift station	\$80,000	Developer	Completed
NB-10	Bay Street Lift Station Renovation	Upgrade and rehabilitate existing wet well and station piping	1 lift station	\$13,000	Neptune Beach	Completed
NB-11	Florida Lift Station Renovation	Upgrade and rehabilitate existing pumps	1 lift station	\$11,000	Neptune Beach	Completed
NB-12	Bal Harbor Lift Station Renovation	Upgrade and rehabilitate existing wet well and station piping	1 lift station	\$13,000	Neptune Beach	Completed
NB-13	5 th Street Lift Station renovation	Upgrade and rehabilitate existing station piping	1 lift station	\$8,000	Neptune Beach	Completed
NB-14	Oceanwood Lift Station Renovation	Upgrade and rehabilitate existing station piping	1 lift station	\$8,000	Neptune Beach	Completed
NB-15	Oceanwood Lift Station Renovation	Upgrade and rehabilitate existing wet well	1 lift station	\$5,000	Neptune Beach	Completed
NB-16	Summer Sands Lift Station renovation	Upgrade and rehabilitate existing wet well and station piping	1 lift station	\$13,000	Neptune Beach	Completed
NB-17	Penman Terrace Lift Station renovation	Upgrade and rehabilitate existing station piping	1 lift station	\$8,000	Neptune Beach	Completed

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
NB-18	Penman Terrace Lift Station renovation	Upgrade and rehabilitate existing wet well	1 lift station	\$5,000	Neptune Beach	Completed
NB-19	Leeward Landing Lift Station Renovation	Upgrade and rehabilitate existing pumps and station piping	1 lift station	\$10,000	Neptune Beach	Completed
NB-20	1 st Street Lift Station Renovation	Upgrade and rehabilitate existing station valves	1 lift station	\$3,500	Neptune Beach	Completed
NB-21	Daily Inspection of Lift Stations	Visually inspect lift station	13 lift stations	\$65,000/year	Neptune Beach	Ongoing
NB-22	Pipe Burst Existing Sewer Lines East of 3 rd Street	Replace existing gravity sewer lines east of 3 rd Street by means of pipe bursting, and spray manhole liners on existing manholes in work area to reduce I&I	5 miles gravity sewer mains, 85 manholes, associated service taps	\$3,000,000	FDEP Revolving Fund Loan	Completed
NB-23	Rehabilitation of Manhole #57 on Hamlet Court	Rehabilitate existing manhole to reduce I&I	1 manhole	\$4,500	Neptune Beach	Completed
NB-24	Rehabilitation of Manhole #52 on Hamlet Court	Rehabilitate existing manhole to reduce I&I	1 manhole	\$4,500	Neptune Beach	Completed
NB-25	Rehabilitation of Manhole #119 on Penman Road	Rehabilitate existing manhole to reduce I&I	1 manhole	\$4,500	Neptune Beach	Completed
NB-26	Rehabilitation of Manhole #85 on 3 rd Street and Davis Boulevard	Rehabilitate existing manhole to fix sagging/dropping manhole	1 manhole	\$4,500	Neptune Beach	Completed
NB-27	Rehabilitation of Manhole #23 on 1 st Street at South Street	Rehabilitate existing manhole to reduce I&I	1 manhole	\$4,500	Neptune Beach	Completed
NB-28	Create GIS Mapping System for City Lift Station Inventory	Put together GIS mapping system and collect data for city's sanitary sewer lift station facilities	Citywide	\$2,000	Neptune Beach	Completed
NB-29	Create GIS mapping system for City gravity sanitary sewer inventory	Put together GIS mapping system and collect data for city's gravity sanitary sewer facilities	Citywide	\$5,000	Neptune Beach	Completed
NB-30	Create GIS Mapping System of Private Lift Station Inventory	Put together GIS mapping system and collect data for private lift station facilities in city	Citywide	\$2,500	Neptune Beach	Completed
NB-31	FOG Program	Routinely inspect grease traps and downstream sanitary sewer primarily at restaurant locations in city	Restaurants in city	\$5,000/year	Neptune Beach	Ongoing
NB-32	Stormwater System Ditch and Canal Maintenance	Continually inspect and maintain city's ditches; routinely inspect, mow, pick up litter, and repair as needed	9.3 miles of gravity storm sewer, 351 stormwater inlets	\$90,000	Neptune Beach	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
NB-33	Stormwater System Pond Maintenance	Continually inspect and maintain city's 4 ponds; routinely inspect, mow, pick up litter, and repair as needed	4 ponds	\$2,500/year	Neptune Beach	Ongoing
NB-34	Stormwater Education and Outreach Efforts	Use of City's newsletter for public education and outreach	Citywide stormwater system	\$1,000/year	Neptune Beach	Ongoing
NB-35	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 dispose of the defecation. The owner in violation of this chapter shall pay a civil penalty to the department 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/year	Neptune Beach	Ongoing
NB-36	Street sweeping	Sweep roads with curb and gutter inside city limits	Approximately 10.9 miles of roads	\$35,000/year	Neptune Beach	Ongoing
NB-37	Public Works Employee Training	Conduct annual training covering topics such as stormwater, illicit discharges, and Stormwater Pollution Prevention Plan (SWPPP)	Public Works employees citywide	Unknown	Neptune Beach	Ongoing
NB-38	Testing and Sampling	Increase water sampling of Hopkins Creek	COJ	Unknown	Neptune Beach	Ongoing
NB-39	Stormwater Pollution Prevention Plan	Inspect Public Works facility quarterly and annually	Hopkins Creek in City of Neptune Beach	\$5,000	Neptune Beach	Ongoing
NB-40	Stormwater Education and Outreach Efforts	Use of City's newsletter for public education and outreach	Public Works and WWTP facilities	\$1,00/year	Neptune Beach	Ongoing
NB-41	Organize a Walk the WBID for Hopkins Creek	Organize and participate in Walk the WBID for Hopkins Creek watershed	Walk the WBID	\$6,000	Neptune Beach	Completed
NB-42	Create GIS Mapping System for City Stormwater Related Inventory	Put together GIS mapping system and collect data for city's stormwater facilities; completion in 2010	Citywide	\$5,000	Neptune Beach	Completed
NB-43	Right-of-way maintenance and litter collection	Routinely mow, maintain, and pick up litter in rights-of-way	Citywide	\$65,000/year	Neptune Beach	Ongoing
NB-44	Gravity sanitary sewer point repair behind Fletcher High School	Repair offset 8" gravity sanitary sewer line behind Fletcher High School to facilitate lining the main. The line was near an adjacent ditch.	15 LF of pipe replaced	\$15,907	Neptune Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
NB-45	Gravity sanitary sewer line rehab behind Fletcher High School	Lined the 8" gravity sewer main behind Fletcher High School adjacent to a ditch with Cured In Place Pipe (CIPP).	407 LF	\$14,320	Neptune Beach	Completed
NB-46	Gravity sanitary sewer line rehab in Bal Harbour subdivision	Lined a portion of the 8" gravity main in Bal Harbour subdivision.	890 LF	\$24,920	Neptune Beach	Completed
NB-47	Storm sewer rehab in Driftwood subdivision	Lined a portion of storm sewer in the Driftwood that was found to have offset joints with Cured In Place Pipe (CIPP).	41 LF of 36" & 305 LF of 24"	\$36,916.20	Neptune Beach	Completed

SECTION 12: CORMORANT BRANCH (WBID 2381)

12.1 JEA ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

During the last year, JEA inspected 1 force main discharge manhole and cleaned 0.20% of the lines. JEA also inspected 11 manholes as part of the Pop-Top Program. JEA's activities in the Cormorant Branch watershed are shown in **Table 58**.

TABLE 58: JEA ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-114	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total major pipe project footage of pipe burst in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-115	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	0 rehabbed in 2012	Not applicable	JEA	Ongoing
JEA-116	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	2 stations (Livingston Estates, Beth Shalom)	Unknown	JEA	Completed – Not in WBID
JEA-117	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	4 stations (Paddle Boat, Heather Grove Lane, Mandarin Terrace, Lake Mandarin)	Unknown	JEA	Complete for FY11- Ongoing
JEA-118	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-119	Inspect Force Main Discharge Manholes, Repair/ Rehabilitate as Necessary	Inspect force main discharge manholes, repair/ rehabilitate as necessary	1 inspection, 0 rehabs in 2012	\$300	JEA	Ongoing
JEA-120	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-121	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	0 feet of pipe in 2012	\$0	JEA	Ongoing
JEA-122	Pipe Cleaning	Clean existing pipes to avoid blockages	1,008 feet of pipe in 2012	\$20,160	JEA	Ongoing
JEA-123	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-124	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-125	Pop-Top Program	Pop-Top Program	11 surveyed in 2012	\$550	JEA	Ongoing
JEA-126	Non-Destructive Testing Program/ Pipe Integrity Testing	Non-Destructive Testing Program/ Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

12.2 DCHD ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

12.2.1 COMPLETED DCHD PROJECTS

DCHD completed the intensive inspection program in the Cormorant Branch watershed over the last year. The purpose of this program is to conduct geospecific investigations of septic tanks in area that are more prone to failures to proactively prevent septic tank problems. This program included 473 inspections of septic tanks and 53 re-inspections in the watershed.

12.2.2 ONGOING DCHD PROGRAMS AND ACTIVITIES

In 2012, DCHD issued 5 repair permits, conducted 5 plan reviews and site evaluations, and performed 10 complaint investigations. The programs and activities DCHD conducts in the Cormorant Branch watershed are shown in **Table 59**.

TABLE 59: DCHD ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-57	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 5 repair permits issued	\$2,125	FDOH	Ongoing
DCHD-58	SWIM Project	Implement broad-ranging septic tank ordinance	Approximately 50.40% of Julington Hills Septic Tank Failure Area is located in WBID	Not applicable	FDOH	Ongoing
DCHD-59	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-60	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 5 plan reviews and site evaluations performed based on permitting history	\$1,000	FDOH	Ongoing
DCHD-61	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-62	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	10 complaint investigations performed	\$1,500	FDOH	Ongoing
DCHD-110	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 473 inspections and 53 re-inspections performed within WBID	\$78,900	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Completed

12.3 COJ ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

Over the last year, COJ had 21 work orders for ditch and creek regrading, 1 work order for a lake or pond problem, and 40 work orders for repair/clearing of structures. COJ also followed up on 1 PIC in the watershed that was determined to not be illicit. In addition, COJ collected 5 routine water quality samples, 45 samples for the BMAP monitoring, and 5 samples to follow up on high counts. COJ's efforts in the Cormorant Branch watershed are shown in **Table 60**. Additional details about COJ projects are included in **Appendix A**.

TABLE 60: COJ ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-335	Regional Stormwater Facility – MSMP	2 acre facility + 2-5 foot CMP + bank	Unknown	\$6,700,000	COJ	Planned
COJ-174	Lorretto Road (State Road 13 to Old St. Augustine Road) (Main Stem COJ-16)	Construct wet detention pond	55 acres	Unknown	COJ	Completed
COJ-175	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	21	\$6,511	COJ	Ongoing
COJ-176	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-177	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	40	\$13,056	COJ	Ongoing
COJ-178	Illicit Water Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-179	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-180	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-181	Private Lift Station Inspection	Inspect 7 private lift stations in WBID	1	\$379	COJ	Ongoing
COJ-182	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Ongoing	COJ	Ongoing
COJ-183	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (3740 Burnett Park Road)	Unknown	COJ	Completed – in WBID
COJ-184	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	1 station (12015 San Joe Boulevard)	Unknown	COJ	Completed
COJ-185	Illicit Discharge Detection and Elimination	0 illicit	1	\$379	COJ	Ongoing
COJ-186	PIC Program	Follow up on outstanding PICs; determined to be not illicit	1	\$600	COJ	Completed
COJ-187	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling; 1 station in WBID	5	\$680	COJ	Ongoing
COJ-355	BMAP Monitoring	BMAP monitoring for this WBID was added at end of 2011 as other sites were dropped from BMAP I WBIDs, 3 sites monthly	45	\$7,965	COJ	Ongoing
COJ-336	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted, in attempt to identify sources.	5	\$680	COJ	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-188	Julington Hills Failure Area– Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	303 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-189	Septic Tanks Outside Failure Area– Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	136 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-190	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-191	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

12.4 FDOT ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

FDOT collected 10.8 tons of debris from street sweeping 4 miles of roadways. The Adopt-A-Highway Program collected 220 pounds of trash from 4 miles of roadways. FDOT helps to fund 1 monitoring station in the Cormorant Branch watershed that is sampled quarterly as part of the MS4 routine monitoring program. Five water quality samples were collected at this station during the reporting period. In addition, 5 samples were collected to follow up on high counts in the watershed. **Table 61** lists FDOT's activities in the Cormorant Branch watershed.

TABLE 61: FDOT ACTIVITIES IN THE CORMORANT BRANCH WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-62	PIC Program	Search for illicit connections	Effort is continuous in this WBID; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-63	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-64	Stormwater Management Systems	Construct pond as part of State Road 13 widening	27 acres, wet ponds	Not applicable	FDOT	Completed
FDOT-65	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-66	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	220 pounds of trash collected, trash collected along 4-mile stretch of road	Unavailable	Not applicable	Ongoing
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	About 2 miles of roadways and associated stormwater conveyance systems currently being maintained; approximately 4 miles of roadways swept with 10.8 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-114	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	5 re-samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing

SECTION 13: WILLS BRANCH (WBID 2282)

13.1 JEA ACTIVITIES IN THE WILLS BRANCH WATERSHED

During the last year, JEA open cut 0.33% of the sanitary sewer pipes in the watershed, inspected 2 ARVs, inspected 1 force main discharge manhole, repaired 1 pump station, and cleaned 5.87% of the lines. JEA also inspected 104 manholes as part of the Pop-Top Program. JEA's activities in the Wills Branch watershed are shown in **Table 62**.

TABLE 62: JEA ACTIVITIES IN THE WILLS BRANCH WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-127	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total major pipe project footage of pipe burst in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-204	Open Cut– Removal and Replacement	Replace failing/leaking infrastructure	Total footage of open cut replacement in watershed FY11/12 1,400 feet	\$280,000	JEA	Ongoing
JEA-128	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	0 rehabbed in 2012	Not applicable	JEA	Ongoing
JEA-129	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	2 of 9 ARVs inspected, 0 replaced in 2012	\$600	JEA	Ongoing
JEA-130	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (Racetrack Gas on Normandy Boulevard)	Unknown	JEA	Completed – All in WBID
JEA-131	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	3 stations (Heritage Hills, Knoll Drive, 6927 Hanson Drive South)	Unknown	JEA	Completed for FY11- Ongoing
JEA-132	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-133	Inspect Force Main Discharge Manholes, Repair/ Rehabilitate as Necessary	Inspect force main discharge manholes, repair/ rehabilitate as necessary	1 inspection, 0 rehabs	\$300	JEA	Ongoing
JEA-205	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	1 project in watershed FY11/12	\$40,328	JEA	Ongoing
JEA-134	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-135	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	0 feet of pipe in 2012	\$0	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-136	Pipe Cleaning	Clean existing pipes to avoid blockages	25,089 feet of pipe in 2012	\$501,780	JEA	Ongoing
JEA-137	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-138	Manhole Monitoring	Manhole Monitoring	1 monitor in watershed	\$5,000	JEA	Ongoing
JEA-139	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-140	Pop-Top Program	Pop-Top Program	104 surveyed in 2012	\$5,200	JEA	Ongoing
JEA-141	Non-Destructive Testing Program/ Pipe Integrity Testing	Non-Destructive Testing Program/ Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

13.2 DCHD ACTIVITIES IN THE WILLS BRANCH WATERSHED

In 2012, DCHD issued 2 repair permits, 2 abandonment permits, and 13 annual operating permits. DCHD also conducted 2 plan reviews and site evaluations. The programs and activities DCHD conducts in the Wills Branch watershed are shown in **Table 63**.

TABLE 63: DCHD ACTIVITIES IN THE WILLS BRANCH WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-63	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 2 repair permits and 2 abandonment permits issued	\$1,050	FDOH	Ongoing
DCHD-64	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	13 annual operating permits issued for IMZ/commercial properties	\$4,550	FDOH	Ongoing
DCHD-65	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-66	Application/ Plan Review/ Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 2 plan reviews and site evaluations based on permitting history	\$400	FDOH	Ongoing
DCHD-67	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-68	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations.	Not applicable	Not applicable	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-69	Intensive Inspection Program	Carry out intensive geospecific inspections in selected BMAP WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 381 inspections performed within WBID	\$14,100	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation grant	Completed

13.3 COJ ACTIVITIES IN THE WILLS BRANCH WATERSHED

13.3.1 COMPLETED COJ PROJECTS

COJ connected 2 septic tank-serviced properties to sewer outside of a failure area in the watershed.

13.3.2 ONGOING COJ PROGRAMS AND ACTIVITIES

COJ has a drainage improvement projects under construction at 1121 Cahoon Road, Cahoon and Burma, and Golfview West. COJ also has drainage improvement projects in design on Cahoon north of Homestead Oaks, Cahoon and Burma north of Homestead Oaks Drive, and Golfview West. These projects will provide stormwater treatment, which should reduce fecal coliform loadings to Wills Branch from these areas.

During the reporting period, COJ had 19 work orders for ditch and creek regrading, 27 work orders for repair/clearing of structures, and 1 work order for ditch clean up. These inspections are initiated through information from the CARE database. COJ also inspected 3 private lift stations in the watershed. COJ followed up on 2 PICs in the watershed and determined that 1 was not illicit and the other is under investigation. In addition, COJ collected 9 routine water quality samples. COJ's efforts in the Wills Branch watershed are shown in **Table 64**. Additional details about COJ projects are included in **Appendix A**.

TABLE 64: COJ ACTIVITIES IN THE WILLS BRANCH WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-337	1591 Lane Ave South	Drainage improvement	Unknown	\$67,924	COJ	Construction
COJ-356	1121 Cahoon Road	Drainage improvement	Unknown	\$251,529	COJ	Construction
COJ-357	Cahoon North of Homestead Oaks	Drainage improvement	Unknown	\$22,232	COJ	Design
COJ-358	Cahoon and Burma	Drainage improvement	Unknown	\$64,267	COJ	Construction
COJ-359	Cahoon (Burma North of Homestead Oaks Drive)	Culvert improvement	Unknown	\$1,303	COJ	Design
COJ-360	Golfview West	Drainage improvement	Unknown	\$24,832	COJ	Design
COJ-361	Golfview West	Drainage improvement	Unknown	\$61,174	COJ	Construction
COJ-192	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	19	\$3,279	COJ	Ongoing
COJ-193	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	0	\$0	COJ	Ongoing
COJ-194	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	27	\$1,672	COJ	Ongoing
COJ-362	Hazardous Contaminated Ditch	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-195	Illicit Water Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-196	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-197	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-198	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-199	Private Lift Station Inspection	Inspect 8 private lift stations in WBID	3	\$1,137	COJ	Ongoing
COJ-200	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Ongoing	COJ	Ongoing
COJ-201	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	2 stations (7885 Normandy Blvd, 7242 Normandy Blvd)	Unknown	COJ	Completed – 7885 Normandy not in WBID, 7242 Normandy in WBID
COJ-202	Illicit Discharge Detection and Elimination	Initiated 2 inspections, 1 closed and not illicit, 1 under investigation	1	\$379	COJ	Ongoing
COJ-203	PIC Program	Follow up on outstanding PICs	4	\$1,600	COJ	Completed
COJ-204	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling; 2 stations in WBID	9	\$1,224	COJ	Ongoing
COJ-338	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted, in attempt to identify sources.	0	\$0	COJ	Ongoing
COJ-205	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	405 tanks, 2 connected	See Appendix A	COJ	Ongoing
COJ-206	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-207	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

13.4 FDOT ACTIVITIES IN THE WILLS BRANCH WATERSHED

FDOT collected 10.8 tons of debris through street sweeping on 4 miles of roadways. The Adopt-A-Highway Program collected 200 pounds of trash from 2 miles of roadways. FDOT helps to fund the routine water quality monitoring stations in the Wills Branch watershed, and 9 samples were collected at these stations during the reporting period. **Table 65** lists FDOT's activities in the Wills Branch watershed.

TABLE 65: FDOT ACTIVITIES IN THE WILLS BRANCH WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-68	PIC Program	Search for illicit connections	Effort is continuous in this WBID; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-69	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	9 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-70	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-71	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	200 pounds of trash collected, trash collection area is 2-mile stretch of road	Unavailable	Not applicable	Ongoing
FDOT-72	Stormwater Management Systems	Construct wet ponds at intersection of Interstate 295 and Normandy	21 acres, wet ponds	Not applicable	FDOT	Completed
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	About 2 miles of roadways and associated stormwater conveyance systems currently maintained in this WBID; approximately 4 miles of roadways swept with 10.8 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-115	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-116	Stormwater Management Systems	Construct wet detention pond at intersection of Normandy Boulevard and I-295	9 acres, wet pond	Unknown	FDOT	Completed

SECTION 14: SHERMAN CREEK (WBID 2227)

14.1 DCHD ACTIVITIES IN THE SHERMAN CREEK WATERSHED

In 2012, DCHD issued 3 abandonment permits and 4 annual operating permits and performed 3 complaint investigations. DCHD is planning to conduct 113 intensive inspections in this watershed in the future. The programs and activities DCHD conducts in the Sherman Creek watershed are shown in **Table 66**.

TABLE 66: DCHD ACTIVITIES IN THE SHERMAN CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-70	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 3 abandonment permits issued	\$300	FDOH	Ongoing
DCHD-71	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	4 annual operating permits issued for commercial properties	\$1,400	FDOH	Ongoing
DCHD-72	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-73	Application/Plan Review/Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Not applicable	Not applicable	FDOH	Ongoing
DCHD-74	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-75	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	3 complaint investigations performed	\$450	FDOH	Ongoing
DCHD-111	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 113 inspections will be performed within this WBID	Unknown	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Planned

14.2 COJ ACTIVITIES IN THE SHERMAN CREEK WATERSHED

14.2.1 COMPLETED COJ PROJECTS

COJ completed a drainage improvement project at Renault Drive and Apollo Drive, which should help to reduce fecal coliform loading to Sherman Creek from this area.

14.2.2 ONGOING COJ PROGRAMS AND ACTIVITIES

COJ has the second phase of the drainage improvements project at Renault Drive/Apollo Drive under construction. During the reporting period, COJ had 17 work orders for ditch and creek regrading, 1 work order for a lake or pond problem, 16 work orders for repair/clearing of structures, and 1 inspection of a sewer that drains to a yard or ditch. These inspections are initiated through information from the CARE database. In addition, COJ collected 12 routine water quality samples, 7 follow up samples, and 78 BMAP samples. COJ's efforts in the Sherman Creek watershed are shown in **Table 67**. Additional details about COJ projects are included in **Appendix A**.

TABLE 67: COJ ACTIVITIES IN THE SHERMAN CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-339	Regional Stormwater Facility – MSMP	5 acre facility + conveyance improvements	Unknown	\$1,800,000	COJ	Planned
COJ-340	Renault Drive/Apollo Drive	Drainage improvements	Unknown	\$62,972	COJ	Completed
COJ-363	Renault Drive/Apollo Drive Part 2	Drainage improvements	Unknown	\$13,789	COJ	Construction
COJ-208	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	17	\$1,199	COJ	Ongoing
COJ-209	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-210	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	16	\$7,996	COJ	Ongoing
COJ-211	Illicit Water Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-212	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-213	Sewer Drains into Yard/Ditch	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-214	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-215	Private Lift Station Inspection	Inspect 8 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-216	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Ongoing	COJ	Ongoing
COJ-217	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	7 stations	Unknown	COJ	Completed
COJ-218	Illicit Discharge Detection and Elimination	Follow up on PICs	0	\$0	COJ	Ongoing
COJ-219	PIC Program	Follow up on outstanding PICs; not illicit	1	\$750	COJ	Completed
COJ-220	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling; 3 stations in WBID	12	\$1,632	COJ	Ongoing
COJ-221	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	7	\$952	COJ	Ongoing
COJ-341	BMAP Monitoring	COJ EQD is responsible for 5 sites, 3 for Atlantic Beach (3 sampled monthly and 2 sampled quarterly); began 12/2010	78	\$13,806	COJ, Atlantic Beach	Ongoing
COJ-222	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	11 tanks, 11 connected	Unknown	COJ	Completed
COJ-223	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-224	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

14.3 FDOT ACTIVITIES IN THE SHERMAN CREEK WATERSHED

FDOT collected 21.6 tons of debris from street sweeping 8 miles of roadways. FDOT helps to fund the 3 monitoring stations in the Sherman Creek watershed that are sampled quarterly as part of the MS4 routine monitoring program. A total of 12 routine samples and 7 samples to follow up on high counts were collected during the reporting period. In addition, FDOT helps to fund the 5 stations for the BMAP monitoring, and 78 samples were collected during the reporting period. **Table 68** lists FDOT's activities in the Sherman Creek watershed.

TABLE 68: FDOT ACTIVITIES IN THE SHERMAN CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-74	PIC Program	Search for illicit connections	Effort is continuous in this WBID; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-75	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	12 routine water quality samplings	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-76	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	7 re-samplings were performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-77	Stormwater Management Systems	Wonderwood Connector project—construct wet pond	58 acres, wet ponds	Not applicable	FDOT	Completed
FDOT-78	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
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	About 4 miles of roadways and associated stormwater conveyance systems currently being maintained; approximately 8 miles of roadways swept with 21.6 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-117	BMAP Sampling	Routine BMAP II monitoring began December 2010	78 BMAP samplings were performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-118	Stormwater Management Systems	Construct wet detention pond at Wonderwood Drive	72 acres, wet pond	Unknown	FDOT	Completed

14.4 ATLANTIC BEACH ACTIVITIES IN THE SHERMAN CREEK WATERSHED

14.4.1 COMPLETED ATLANTIC BEACH PROJECTS

The City of Atlantic Beach completed phase-outs of 4 septic tanks; sewer line upgrades in Johns Creek, Mimosa Cove, Cove Landing, Aspen Ridge, Selva Marina Drive, and Seminole Road using CIPP; sewer line upgrades on East Coast Drive; and sewer line upgrades on Willow

Cove Court East. The city also completed manhole rehabilitation on East Coast Drive with Spectrashield (see **Figure 18**) and cleaned and televised the sewer mains on Dudley Road, Dutton Island Road, and near the Mimosa Cove lift station.



FIGURE 18: CITY OF ATLANTIC BEACH MANHOLE REHABILITATION PROJECT

14.4.2 ONGOING ATLANTIC BEACH PROGRAMS AND ACTIVITIES

Over the last year, the City of Atlantic Beach inspected 1,284,341 linear feet of stormwater ditches and canals, maintained 781,645 linear feet of stormwater ditches and canals, completed 134 pond inspections, completed 102 pond maintenance events, inspected 152 structures, clean and maintained 97 structures, completed 43,368 inspections of inlets/catch basins/grates, completed 40,032 maintenance actions for inlets/catch basins/grates, inspected and maintained 8,020 linear feet of stormwater pipe, repaired 20 linear feet of stormwater pipe, and collected 74,460 pounds of litter. The City of Atlantic Beach's activities in the Sherman Creek watershed are listed in **Table 69**.

TABLE 69: ATLANTIC BEACH ACTIVITIES IN THE SHERMAN CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-51	Septic Tank Inspections and Enforcement	When septic tanks fail, city code requires connection to sewer system if available	Ongoing	Unknown	Atlantic Beach	Ongoing
AB-52	Septic Tank Phase-Out	Septic-to-Sewer Resolution by City Commission requiring connection at various dates. Includes Septic Conversion Assistance Policy, passed by Commission in May 2000. Provides city financing of septic-to-sewer conversions and contracting coordination and assistance. Project should be completed in December 2012.	4 conversions	\$16,000	Atlantic Beach/ homeowners	Completed
AB-53	Septic Tank Phase-Out	Carry out septic-to-sewer conversions through CDBG	4 conversions	\$4,900	CDBG	Completed
AB-54	Sewer Line Upgrades	Install new sewer system on Beach Avenue, Seminole Road, Ocean Grove, Dewees areas	4,794 LF sewer, 24 manholes, 155 connections	\$400,000	Atlantic Beach	Completed
AB-55	Sewer Line Upgrades	Replace sewer main in area of Pioneer Drive	234 LF	\$17,000	Atlantic Beach	Completed
AB-56	Sewer Line Upgrades	Slipline sewer on Sherry Drive; replace sewer in part of Salt Air subdivision	1,600 LF lined, 3,175 LF replaced	\$643,000	Atlantic Beach	Completed
AB-57	Sewer Line Upgrades	Repair, line, and rehabilitate sewer in Oak Harbor subdivision	17,200 LF	\$500,000	Atlantic Beach	Completed
AB-58	Sewer Line Upgrades	Repair sewer force main near Renault Drive and Mayport Road	640 LF	\$20,000	Atlantic Beach	Completed
AB-59	Sewer Line Upgrades	Install new sewer line on Church Road (now Dutton Island Road)	Unknown	Unknown	Atlantic Beach	Completed
AB-60	Sewer Line Upgrades	Repair effluent gravity outfall on Levy Road	5 point repairs	\$33,000	Atlantic Beach	Completed
AB-61	Sewer Line Upgrades	Replace sewer lines crossing Levy Road at Orchid, Rose, Violet, and Hibiscus	365 LF	\$28,000	Atlantic Beach	Completed
AB-62	Sewer Line Upgrades	Implement sewer extension on Dudley St.	450 LF	\$25,000	Atlantic Beach	Completed
AB-63	Sewer Line Upgrades	Line sewers near Lift Station A, Palm Avenue	1,400 LF	\$40,000	Atlantic Beach	Completed

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-64	Sewer Line Upgrades	Replace sewer force main and sanitary sewer on Wonderwood Road	3,500 LF force main, 180 LF sewer main	\$604,609	Atlantic Beach	Completed
AB-65	Sewer Line Upgrades	Replace sewer main and manholes in Town Center–Ocean Boulevard from 1 st to 2 nd Street	234 LF sewer and 2 manholes	\$14,177	Atlantic Beach	Completed
AB-66	Sewer Line Upgrades	Line sewer and replace services–Ahern Street through 10 th Street from Sherry Dr./Seminole Rd. to East Coast Drive	12,000 LF sewer lined, 220 services replaced	\$1,079,800	Atlantic Beach/ Hazard Mitigation Grant	Completed
AB-67	Sewer Line Upgrades	Repair effluent force main Sherman Creek crossing pilings	2 crossings	\$54,701	Atlantic Beach	Completed
AB-68	Sewer Line Upgrades	Install new force main from Lift Station B, 465 11 th Street to 1100 Sandpiper Lane	450 LF	\$120,685	Atlantic Beach	Completed
AB-69	Sewer Line Upgrades	Replace sewer main and manholes on 11 th Street and 12 th Street	2,345 LF sewer main and 11 manholes	\$368,425	Atlantic Beach	Completed
AB-70	Sewer Line Upgrades	Clean and inspect (using CCTV) sewer main in Selva Marina subdivision; repair sewer mains, 19 th Street and side streets	5,292 LF	\$70,000	Atlantic Beach	Completed
AB-71	Sewer Line Upgrades	Line sewer and replace services Seminole Road and 11 th Street to Lift Station B	2,965 LF sewer lining and 45 services replaced	\$105,630	Atlantic Beach	Completed
AB-72	Sewer Line Upgrades	Install new sewer line for Sawgrass Chapel Place–Mealy Lane, north of Dutton Island Road	736 LF sewer main	\$66,808	Atlantic Beach	Completed
AB-73	Sewer Line Upgrades	Install new sewer main and abandon old lift station at Shangri La Drive	614 LF	\$146,572	Atlantic Beach	Completed
AB-74	Sewer Line Upgrades	Line sewer main in Seaspray Subdivision	6,604 LF	\$239,997	Atlantic Beach	Completed
AB-75	Manhole Inspections and Rehabilitation	Carry out engineering analysis of failing manholes–Seminole Road area	30 manholes	\$2,500	Atlantic Beach	Completed
AB-76	Manhole Inspections and Rehabilitation	Line 5 manholes near Lift Station A–Palm Avenue	5 manholes	\$15,000	Atlantic Beach	Completed
AB-77	Manhole Inspections and Rehabilitation	Rehabilitate (Spectrashield) manholes on Sherry Drive from Atlantic Boulevard to Plaza Road	8 manholes	\$11,270	Atlantic Beach	Completed

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-78	Manhole Inspections and Rehabilitation	Rehabilitate (Spectrashield) manholes from Ahern through 10 th St. and Sherry Drive to East Coast Drive	60 manholes	\$279,826	Atlantic Beach	Completed
AB-79	Manhole Inspections and Rehabilitation	Rehabilitate (Spectrashield) all manholes in Seaspray subdivision	28 manholes	\$25,597	Atlantic Beach	Completed
AB-80	Pump Station Inspections and Maintenance	Improve valves at Lift Stations A, B, and D (Palm Ave., 11 th Street, Selva Marina Boulevard)	3 lift stations	\$40,000	Atlantic Beach	Completed
AB-81	Pump Station Inspections and Maintenance	Rehabilitate wet well at lift station at Courtyards Apartments	1 lift station	\$19,690	Atlantic Beach	Completed
AB-82	Pump Station Inspections and Maintenance	Line wet well at West End lift station, 2567 West End Street,	1 lift station	\$18,900	Atlantic Beach	Completed
AB-83	Pump Station Inspections and Maintenance	Line wet well at Selva Norte Lift Station, 404 20 th Street	1 lift station	\$21,900	Atlantic Beach	Completed
AB-84	Pump Station Inspections and Maintenance	Construct new master lift station to WWTP #1, 1100 Sandpiper Lane	1 lift station	\$676,500	Atlantic Beach	Completed
AB-85	Pump Station Inspections and Maintenance	Upgrade West End Lift Station– new pumps and electrical, 2567 West End Drive	1 lift station	\$47,000	Atlantic Beach	Completed
AB-86	Pump Station Inspections and Maintenance	Upgrade Lift Station H–2301 Mayport Road; new pumps and electrical	1 lift station	\$120,281	Atlantic Beach	Completed
AB-87	Pump Station Inspections and Maintenance	Upgrade Lift Station I–960 Park Street; new pumps and electrical	1 lift station	\$70,281	Atlantic Beach	Completed
AB-88	Pump Station Inspections and Maintenance	Replace emergency generator at Lift Station C, 65 Donner Road	1 lift station	\$24,000	Atlantic Beach	Completed
AB-89	Pump Station Inspections and Maintenance	Install SCADA system at all 19 lift stations in Sherman Creek watershed	19 lift stations	\$130,000	Atlantic Beach	Completed
AB-90	Pump Station Inspections and Maintenance	Replace emergency generator at Lift Station A, 460 Palm Avenue	1 lift station	\$27,161	Atlantic Beach	Completed
AB-91	Pump Station Inspections and Maintenance	Replace emergency generator at Lift Station B, 469 11 th Street	1 lift station	\$21,507	Atlantic Beach	Completed
AB-92	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	5 stations (2632 State Road A1A, 404 20 th Street, 1799 Selva Marina Drive, 425 11 th Street, 460 Palm Avenue)	\$2,960	Atlantic Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-93	Pump Station Inspections and Maintenance	Replace emergency generator at Mimosa Cove Lift Station, 1030 Mimosa Cove Court	1 lift station	\$32,000	Atlantic Beach	Completed
AB-94	SSO Investigations–Preventive	Clean and inspect (using CCTV) effluent gravity outfall line from WWTP #1	2,000 LF	\$3,000	Atlantic Beach	Completed
AB-95	SSO Investigations–Preventive	Clean and inspect (using CCTV) sewer mains at State Road A1A and Wonderwood Road	2,000 LF	\$1,200	Atlantic Beach	Completed
AB-96	SSO Investigations–Preventive	Clean and inspect (using CCTV) sewer mains in core city from east of East Coast Drive to ocean, from Atlantic Boulevard to 16 th Street	39,600 LF	\$30,834	Atlantic Beach	Completed
AB-97	SSO Investigations–Preventive	Smoke test sewers in core city from Sherry Drive to East Coast Drive from Atlantic Boulevard to 12 th Street	12,000 LF	Unknown	Atlantic Beach	Completed
AB-98	SSO Investigations–Preventive	Carry out I&I analysis of entire collection system; prepare GIS system; determine GPS locations of all manholes; analyze lift station needs; CIPP recommended	Entire system	\$60,000	Atlantic Beach	Completed
AB-99	SSO Investigations–Preventive	Clean and inspect (using CCTV) sewer main on Selva Marina Drive and side streets	7,000 LF	\$9,000	Atlantic Beach	Completed
AB-100	SSO Investigations–Preventive	Implement root removal and tuberculation removal on Seminole Road	700 LF	\$2,400	Atlantic Beach	Completed
AB-101	SSO Investigations–Preventive	Clean and inspect (using CCTV) sewer main on Seminole Road, Selva Linkside, and Selva Lakes Subdivisions	16,500 LF	\$27,094	Atlantic Beach	Completed
AB-102	SSO Investigations–Preventive	Clean and inspect (using CCTV) sewer main at Mayport Road crossings	4,930 LF	\$6,656	Atlantic Beach	Completed
AB-103	SSO Investigations–Preventive	Sewer Master Plan Update–Analyze entire sewer system for prioritizing capital improvement program, including review of I&I analysis	Entire system	\$58,100	Atlantic Beach	Completed

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-104	SSO Investigations– Preventive	Implement FOG Program to monitor grease trap maintenance at restaurants	40 food service establishments	Unknown	Atlantic Beach	Ongoing
AB-105	1999 Stormwater Improvements Project	Implement flood control capital project and stormwater water quality BMPs on Pine Street, PW Yard, and Seminole	1990.5 LF of RCP various sizes; 13 inlets; 2 inlet modifications; 2 mitered end sections, 2 dry retention areas	\$414,711	Atlantic Beach	Completed
AB-106	Core City Improvements Project	Implement flood control capital project and stormwater water quality BMPs–area bounded by Sherry Drive and East Coast Drive, 1 st Street and 12 th Street	216 acres: 14,753 LF of piping; 21 manholes; 69 inlets; 3 endwalls; 3 second-generation baffle boxes; 1 weir	\$4,784,008	Atlantic Beach/ FDEP/EPA	Completed
AB-107	Core City Improvements Project	Carry out water sampling and public education	Monthly grab and continuous event monitoring as required by Section 319 grant; results submitted to FDEP with final report; public education	\$81,370	Atlantic Beach/ FDEP/EPA	Completed
AB-108	Levy Rd. Improvements Project	Implement flood control capital project–Levy Road between Mayport Road and Orchid Street	236 LF of pipe; 6 mitered end sections	\$300,284	Atlantic Beach	Completed
AB-109	Sherry Drive Reconstruction Project	Implement flood control capital project–Sherry Drive between Atlantic Blvd. and Seminole Road	3326 LF of pipe; 13 manholes; 24 curb inlets; 9 ditch bottom inlets; 13 junction boxes	\$1,371,530	Atlantic Beach	Completed
AB-110	Flood control capital projects	Implement flood control capital project–Deweese, Coquina, Shell, and Coral Drainage and Paving Project	1080 LF of pipe; 10 inlets; 2 manhole modifications; 1 new manhole with converted drain top	\$120,716	Atlantic Beach	Completed
AB-111	Church Road Extension (now Dutton Island Road)	Implement flood control capital project–between George Street and Mealy Street	2 Type E inlets; 2 end walls; 65 LF of 48-inch RCP; 30 LF of 15-inch HDPE	\$152,180	Atlantic Beach	Completed
AB-112	Public Education Through Contract with Felicia M. Boyd	Implement stormwater water quality BMPs; carry out public education for stormwater and sewer	2,633 participants	\$5,000 per year	Atlantic Beach	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-113	Stormwater System Ditch and Canal Inspections	Visually inspect stormwater systems weekly, and take corrective action as needed; mow, use weedeater, and pick up litter weekly during growing season, and as needed during colder months	1,284,341 LF	Unknown	Atlantic Beach	Ongoing
AB-114	Stormwater System Ditch and Canal Maintenance	Routinely clean and maintain ditches as required by MS4 permit	781,645 LF	Unknown	Atlantic Beach	Ongoing
AB-115	Stormwater Treatment Ponds Inspections	Routinely inspect ponds as required by MS4 permit	134 pond inspections	Unknown	Atlantic Beach	Ongoing
AB-116	Stormwater Treatment Ponds Cleaning and Maintenance	Routinely maintain ponds as required by MS4 permit	102 pond maintenance events	Unknown	Atlantic Beach	Ongoing
AB-117	Stormwater Treatment Ponds, Ditch and Canal Aquatic Weed Control	Weed control by Bluewater Environmental	Not applicable	Annual budget–\$21,000	Atlantic Beach	Ongoing
AB-118	Stormwater Control Structure Inspections	Carry out routine control structure inspections required by MS4 permit	152 structures	Unknown	Atlantic Beach	Ongoing
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	97 structures	Unknown	Atlantic Beach	Ongoing
AB-120	Stormwater Inlets/Catch Basins/Grates Inspected	Routinely inspect as required by MS4 permit	43,368 inspections of inlets/catch basins/grates	Unknown	Atlantic Beach	Ongoing
AB-121	Stormwater Inlets/Catch Basins/Grates Maintained	Maintain as required by MS4 permit	40,032 maintenance actions inlets/catch basins/grates	Unknown	Atlantic Beach	Ongoing
AB-122	Stormwater Pipe Inspection and Maintenance	Carry out stormwater pipe cleaning routinely and in response to complaints, as required by MS4 permit	8,020 LF	Unknown	Atlantic Beach	Ongoing
AB-123	Stormwater Pipe Maintenance (Repair/Replacement)	Repair or replace stormwater pipe	20 LF	Unknown	Atlantic Beach	Ongoing
AB-124	Total Miles of Right-of-Way Maintained	Maintain right-of way	39.23 miles	Unknown	Atlantic Beach	Ongoing
AB-125	Collect Litter	Collect litter	76,460 pounds/year	Unknown	Atlantic Beach	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-126	George and Dudley Drainage Improvements	Implement stormwater water quality BMPs–Dudley Street between Mayport Road and George Street	777 LF of HDPE pipe; 5 Type C inlets; 1 Type C baffle inlet; 3 dry retention areas	\$97,930	CDBG	Completed
AB-127	County Club Lane Storm Pipe lining	Implement flood control capital project–between Johansen Park and Selva Lagoon; no septic tanks in project area	560 LF PVC line 24-inch RCP; 1 curb inlet; 1 headwall	\$83,574	Atlantic Beach	Completed
AB-128	Ocean and 13 th Street Drainage Project	Implement flood control capital project	766 LF of 18-inch RCP; 9 ditch bottom Inlet-C; 1 curb inlet; 20 LF concrete flume	\$138,734	Atlantic Beach	Completed
AB-129	Seminole Ditch Headwall	Implement flood control capital project– 800 block of Seminole Road	Concrete headwall installation	\$12,974	Atlantic Beach	Completed
AB-130	Selva Tierra Ditch Improvements	Implement flood control capital project– north of Saturiba Drive, between Selva Grande and Tierra Verde	Extend 24-inch CMP, 12-inch ADS, and 12-inch PVC pipes going into a new ditch bottom inlet	\$25,953	Atlantic Beach	Completed
AB-131	Ocean Blvd. 14 th –16 th Street Drainage Improvements	Flood Implement flood control capital projects and stormwater water quality BMPs	974 LF of RPC; 1 concrete endwall; 9 inlets; 1 manhole; 1 overflow structure	\$271,693	Atlantic Beach	Completed
AB-132	Orangeburg Pipe Replacement Program	Replace obsolete/failing Orangeburg (fiber) storm sewer pipe; annual funding (\$15,000/year); completion 9/2016	~2,915 LF of Orangeburg remaining in city system	\$75,000	Atlantic Beach	Construction
AB-133	Pet Feces Control	Install, maintain, and stock Dogi-Pot stations throughout city	More than 30 installed to date	\$5,000	Atlantic Beach	Ongoing
AB-135	Sewer Line Upgrades	Line sewer mains in Salt Air Subdivision with cured-in-place pipe	9,008 LF of sewer main	\$335,730	Atlantic Beach & Division of Emergency Mgt.	Completed
AB-136	Sewer Line Upgrades	Line sewer mains in Selva Marina subdivision with cured-in-place pipe	7,700 LF of sewer main	\$264,936	Atlantic Beach	Completed
AB-137	Sewer Line Upgrades	Replace sewer main near Selva Marina Lift Station 1799 Selva Marina Dr.	100 LF of Sewer main	\$27,400	Atlantic Beach	Completed

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
AB-138	Manhole Inspections & Rehabilitation	Rehabilitate manholes in Salt Air Subdivision	66 manholes	\$44,952	Atlantic Beach & Division of Emergency Mgt.	Completed
AB-139	Manhole Inspections & Rehabilitation	Rehabilitate manholes in Selva Marina subdivision	31 manholes	\$21,790	Atlantic Beach	Completed
AB-140	Pump Station Inspections & Maintenance	Mimosa Cove Lift Station Upgrades (1030 Mimosa Cove Ct.) – new pumps, motors, electrical, sitework/grading, building repairs	1 lift station	\$83,023	Atlantic Beach	Completed
AB-141	Pump Station Inspections & Maintenance	Electrical Upgrades at 3 Lift Stations (404 20 th St., 995 Gavagan and 914 Schooners Bay)	3 lift stations	\$24,743	Atlantic Beach	Completed
AB-147	Sewer Line Upgrades	Rehabilitate deteriorated cast iron sanitary sewer mains in Johns Creek, Mimosa Cove, Cove Landing, Aspen Ridge, Selva Marina Drive, and Seminole Road using CIPP	1,505 LF	\$61,700	Atlantic Beach	Completed
AB-148	Sewer Line Upgrades	Rehabilitate vitrified clay sewer mains on East Coast Drive from Plaza Road to 10 th Street	406 LF	\$14,530	Atlantic Beach	Completed
AB-149	Sewer Line Upgrades	Replace cast iron sewer main in easement south of Willow Cove Court East	150 LF	\$86,829	Atlantic Beach	Completed
AB-150	Manhole Inspections and Rehabilitation	Rehabilitate manholes on East Coast Drive with Spectrashield	7 manholes	\$3,300	Atlantic Beach	Completed
AB-151	SSO Investigations – Preventive	Clean and televise sewer mains on Dudley Road and Dutton Island Road	600 LF	\$1,300	Atlantic Beach	Completed
AB-152	SSO Investigations – Preventive	Clean and televise sewer main near Mimosa Cove lift station	1200 LF	\$2,500	Atlantic Beach	Completed

14.5 NS MAYPORT ACTIVITIES IN THE SHERMAN CREEK WATERSHED

NS Mayport awarded a contract to AH Environmental Consultants to perform a comprehensive sanitary sewer evaluation. This project will include an assessment of all lift stations (approximately 38), inspection and mapping of all sanitary manholes (estimated 525), smoke testing the entire sanitary collection system, and cleaning and video inspection of all gravity sanitary lines 6 inches or greater. Work commenced in August 2012, and completion is projected in April 2013. There were no SSOs in NS Mayport's portion of the Sherman Creek watershed during the last year.

NS Mayport collected and recycled 4,525 gallons of cooking oil and grease through a cooperative agreement. In April 2012, St. Johns County replaced COJ as the recycler of the cooking oil. Stormwater related articles published in the station newspaper, *The Mirror*, and in the housing newsletter included subjects such as keeping fats, oil, and grease out of the sanitary system; vehicle washing; and a reminder that water and other substances that go down the storm drains flow directly to nearby creeks and rivers.

Six additional pet waste collection stations and signs were purchased for installation at 3 additional dune boardwalks and other locations around the station. The management company that oversees Navy family housing installed similar pet waste collection stations at 3 additional locations. The stations have been well accepted by pet owners and receive extensive use. To date, 71 markers that state "No Dumping - Drains to River" have been installed on stormwater inlets throughout NS Mayport. Materials to install another 200 have been purchased.

Table 70 lists the NS Mayport activities in the Sherman Creek watershed.

TABLE 70: NS MAYPORT ACTIVITIES IN THE SHERMAN CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
NSM-1	Septic Tank Removal at Building 375	Close septic tank at Building 375 and connect facility to sanitary sewer	1 tank	\$12,000	Navy	Completed
NSM-2	Repair Housing Sewer Mains	Reline housing area sewer main pipes with CIPP	4,562 LF	\$228,100	Navy	Completed
NSM-3	Repair Housing Laterals	Reline housing unit laterals with CIPP	192 connections; 9,475 LF	\$480,000	Navy	Completed
NSM-4	Manhole Rehabilitation	Rehabilitate manhole with cementitious coating	147 manholes	\$86,490	Navy	Completed
NSM-5	Telemetry System	Install telemetry/monitoring system at pump stations	4 pump stations	Unknown	Navy	Completed
NSM-6	Collection System Spill Prevention Program	Clean and inspect (using video) sewage collection system	Entire sewage collection system	\$1,016,625	Navy	Under way; completion in 2013
NSM-7	Pump Station Inspections and Maintenance	Inspect, maintain, and clean sewage pump stations	14 pump stations	Unknown	Navy	Ongoing
NSM-8	SSO Investigations	Investigate and document all SSOs	Entire sewage collection system	Unknown	Navy	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
NSM-9	Cooking Oil and Grease Recycling Program	Recycle oil and grease from all cooking facilities on station; through agreement with St. Johns County, county removes used cooking oil and grease and recycles it; COJ originally provided storage tanks; NS Mayport has constructed spill containments	All food handling establishments and ships	\$28,600	Navy/COJ	Ongoing
NSM-10	Stormwater System Maintenance	Maintain vegetation and structures in stormwater system; remove trash and debris	Entire stormwater conveyance system	Contract sensitive	Navy	Ongoing
NSM-11	Clean Out Swales and Culverts	Excavate stormwater ditches and swales to design elevation and clean out culverts	3,350 LF	\$89,300	Navy	Completed
NSM-12	Debris Removal	Remove trash and debris from grounds	All Naval Station grounds	Contract sensitive	Navy	Ongoing
NSM-13	Illicit Discharge Detection and Elimination	Systematically survey for and eliminate illicit connections/discharges to stormwater system	Entire stormwater collection system	Unknown	Navy	Ongoing
NSM-14	Stormwater Public Education and Outreach Efforts	Publish quarterly articles in NS Mayport newspaper and housing newsletter; publish resident brochure	Entire station	Unknown	Navy	Ongoing
NSM-15	Pet Waste Management/Ordinance	Regulate pets in housing areas	All housing areas	Unknown	Navy	Ongoing
NSM-16	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	Navy	Ongoing
NSM-17	Street Sweeping–Housing	Sweep streets and cul-de-sacs monthly in on-base and off-base housing areas	85,316 square yards/month	Unknown	Public Private Venture	Completed
NSM-18	Street Sweeping–Station	Sweep streets monthly in nonhousing areas	1,462,497 square yards/month	Unknown	Navy	Ongoing
NSM-19	Storm Drain Markers	Install storm drain markers on street and parking lot stormwater inlets	Entire station	\$830	Navy	Ongoing

SECTION 15: GREENFIELD CREEK (WBID 2240)

15.1 JEA ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

During the last year, JEA used CIPP on 0.09% of the lines in the watershed, rehabilitated 10 manhole linings, inspected 2 ARVs, inspected 13 force main discharge manholes, repaired 1 pump station, and inspected 0.18% of the sanitary sewer lines with closed-circuit television. JEA also inspected 593 manholes as part of the Pop-Top Program. JEA's activities in the Greenfield Creek watershed are shown in **Table 71**.

TABLE 71: JEA ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-142	Pipe Bursting– Increase Carrying Capacity	Replace failing/leaking infrastructure	Total major pipe project footage of pipe burst in watershed in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-210	CIPP–Install New Inner Lining	Rehabilitate failing/leaking infrastructure	Total footage of CIPP in watershed 2012 464 LF	Unknown	JEA	Ongoing
JEA-143	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	10 rehabbed in 2012	\$7,500	JEA	Ongoing
JEA-144	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	2 of 13 ARVs inspected, 0 replaced in 2012	\$600	JEA	Ongoing
JEA-145	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	3 stations (Queens Harbor, Bermuda Cove, Indian Springs)	Unknown	JEA	Completed – All in WBID
JEA-146	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	3 stations (581 #2 Queens Harbor Boulevard, 132 Peregrine Court, Woods #1)	Unknown	JEA	Completed for FY11- Ongoing
JEA-147	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-148	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	13 inspections, 0 rehabs	\$3,900	JEA	Ongoing
JEA-149	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	1 project in watershed in 2012	\$7,648	JEA	Ongoing
JEA-150	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-151	Pipe TV Inspection	Inspect existing infrastructure through use of a CCTV system	940 feet of pipe in 2012	\$1,880	JEA	Ongoing
JEA-152	Pipe Cleaning	Clean existing pipes to avoid blockages	0 feet of pipe in 2012	\$0	JEA	Ongoing
JEA-153	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-154	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-155	Pop-Top Program	Pop-Top Program	593 surveyed in 2012	Unknown	JEA	Ongoing
JEA-156	Non-Destructive Testing Program/ Pipe Integrity Testing	Non-Destructive Testing Program/ Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

15.2 DCHD ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

In 2012, DCHD issued 2 abandonment permits, performed 1 complaint investigation, and 13 intensive inspections. The programs and activities DCHD conducts in the Greenfield Creek watershed are shown in **Table 72**.

TABLE 72: DCHD ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-76	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 2 abandonment permits issued	\$200	FDOH	Ongoing
DCHD-77	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	Not applicable	Not applicable	FDOH	Ongoing
DCHD-78	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-79	Application/ Plan Review/ Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Not applicable	Not applicable	FDOH	Ongoing
DCHD-80	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-81	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	1 complaint investigation performed	\$150	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-82	Intensive Inspection Program	Carry out intensive geospecific inspections in selected BMAP WBIDs based on repair permit applications, water quality information, and site conditions; additional WBIDs may be identified in future based on ongoing assessment efforts	Approximately 13 inspections have been performed within this WBID	\$2,000	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Ongoing

15.3 COJ ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

During the reporting period, COJ had 8 work orders for ditch and creek regrading, 1 work order for a lake or pond problem, and 13 work orders for repair/clearing of structures. These inspections are initiated through information from the CARE database. In addition, COJ collected 5 routine water quality samples. COJ's efforts in the Greenfield Creek watershed are shown in **Table 73**. Additional details about COJ projects are included in **Appendix A**.

TABLE 73: COJ ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-225	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	8	\$1,903	COJ	Ongoing
COJ-226	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-227	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	13	\$3,345	COJ	Ongoing
COJ-228	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-229	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-230	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-231	Private Lift Station Inspection	Inspect 3 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-232	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Ongoing	COJ	Ongoing
COJ-233	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	3 stations (San Pablo Road, Atlantic and Girvin Road, 12743 Atlantic Boulevard)	Unknown	COJ	Completed – none in WBID
COJ-234	Illicit Discharge Detection and Elimination	Follow up on PICs	0	\$0	COJ	Ongoing
COJ-235	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling; 1 station in WBID	5	\$680	COJ	Ongoing
COJ-236	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	0	\$0	COJ	Ongoing
COJ-237	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	197 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-238	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-239	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

15.4 FDOT ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

FDOT collected 10.8 tons of debris from street sweeping 4 miles of roadways. FDOT helps to fund 1 monitoring station in the Craig Creek watershed that is sampled quarterly as part of the MS4 routine monitoring program. Five samples were collected at this station during the reporting period. **Table 74** lists FDOT's activities in the Greenfield Creek watershed.

TABLE 74: FDOT ACTIVITIES IN THE GREENFIELD CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-80	PIC Program	Search for illicit connections	Effort is continuous in WBID; none identified	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-81	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	5 routine water quality samplings performed	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-82	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-83	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-84	Stormwater Management Systems	Atlantic Boulevard Widening stormwater project—construct wet ponds	51 acres, wet ponds	Unknown	FDOT	Completed
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	About 2 miles of roadways and associated stormwater conveyance systems currently maintained in this WBID; approximately 4 miles of roadways swept with 10.8 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing

SECTION 16: POTTSBURG CREEK (WBID 2265B)

16.1 JEA ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

During the last year, JEA open cut 0.70% of the sanitary sewer pipes in the watershed, replaced 2 manhole liners, inspected 25 ARVs and replaced 2 ARVs, inspected 10 force main discharge manholes, repaired 4 pump stations, inspected 0.21% of the lines with closed-circuit television, and cleaned 0.08% of the pipes in the watershed. JEA also inspected 561 manholes as part of the Pop-Top Program. JEA's activities in the Pottsburg Creek watershed are shown in **Table 75**.

TABLE 75: JEA ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-157	Pipe Bursting–Increase Carrying Capacity	Replace failing/leaking infrastructure	Total major pipe project footage of pipe burst in watershed in 2012 0 LF	Not applicable	JEA	Ongoing
JEA-206	Open Cut–Removal and Replacement	Replace failing/leaking infrastructure	Total footage of open cut replacement in watershed FY11/12 2,708 feet	\$541,600	JEA	Ongoing
JEA-158	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	2 liners replaced in 2012	\$1,500	JEA	Ongoing
JEA-159	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	25 inspected, 2 replaced of 34 ARVs in 2012	\$9,000	JEA	Ongoing
JEA-160	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	5 stations (ABC Jax Liquors, River Hill Condo, Glynlea Phase 2, Jenkins Brick, San Souci)	Unknown	JEA	Completed – All in WBID
JEA-161	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	7 stations (San Souci, Watson Realty Corp., Murray Hill Condo, Glynlea, South Brook Condo, Pottsburg Land, ACS-7200)	Unknown	JEA	Completed for FY11-Ongoing
JEA-162	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	\$22,000,000*	JEA	Completed
JEA-163	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	10 inspections, 0 rehabs	\$3,000	JEA	Ongoing
JEA-213	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	4 projects in watershed in 2012	\$356,808	JEA	Ongoing
JEA-164	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-165	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	802 feet of pipe in 2012	\$1,604	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-166	Pipe Cleaning	Clean existing pipes to avoid blockages	290 feet of pipe cleaned in 2012	\$1,604	JEA	Ongoing
JEA-167	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-168	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-169	Pop-Top Program	Pop-Top Program	561 surveyed in 2012	\$28,050	JEA	Ongoing
JEA-170	Non-Destructive Testing Program/Pipe Integrity Testing	Non-Destructive Testing Program/Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

16.2 DCHD ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

16.2.1 COMPLETED DCHD PROJECTS

DCHD completed the intensive inspection program in the Pottsburg Creek watershed over the last year. The purpose of this program is to conduct geospecific investigations of septic tanks in area that are more prone to failures to proactively prevent septic tank problems. This program included 1,410 inspections of septic tanks and 169 re-inspections in the watershed.

16.2.2 ONGOING DCHD PROGRAMS AND ACTIVITIES

In 2012, DCHD issued 1 new permit, 18 repair permits, 3 abandonment permits, and 26 annual operating permits. DCHD also conducted 19 plan reviews and site evaluations and performed 53 complaint investigations. The programs and activities DCHD conducts in the Pottsburg Creek watershed are shown in **Table 76**.

TABLE 76: DCHD ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-83	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 1 new, 18 repair permits, and 3 abandonment permits issued	\$8,400	FDOH	Ongoing
DCHD-84	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	26 annual operating permits issued for IMZ/commercial properties; 2 PBTS monitored on an annual basis	\$9,800	FDOH	Ongoing
DCHD-85	SWIM Project	Implement broad-ranging septic tank ordinance	Approximately 34% of Oakhaven failure area and 85% of former Glynlea nuisance area are located in this WBID	Not applicable	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-86	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-87	Application/ Plan Review/ Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 19 plan reviews and site evaluations performed based on permitting history	\$4,000	FDOH	Ongoing
DCHD-88	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing
DCHD-89	Failure Area Evaluation	Work with COJ to evaluate why area south of Glynlea is not ranked as failure area	Consider adding failure area	Unknown	FDOH	Completed as part of DCHD-112
DCHD-90	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	53 complaint investigations performed	\$10,000	FDOH	Ongoing
DCHD-112	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Approximately 1,410 inspections and 169 re-inspections performed within WBID	\$236,850	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Completed

16.3 COJ ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

16.3.1 COMPLETED COJ PROJECTS

COJ completed the follow up on the last 2 of the 21 open PIC cases in the watershed. COJ also connected 2 septic tank properties to sewer outside a failure area in the watershed.

16.3.2 ONGOING COJ PROGRAMS AND ACTIVITIES

COJ has a drainage improvement project in construction at 8602 Emerald Isle Circle South, and 2 drainage improvement projects in design at 3051 Herring Road and Leafy Lanes. During the

reporting period, COJ had 96 work orders for ditch and creek regrading, 1 work order for a lake or pond problem, 45 work orders for repair/clearing of structures, 3 inspections of illicit water discharges, 1 inspection of an illegal water discharge, 2 inspections of sewers that drain to yard or ditch, and 2 inspections of sewer overflows. These inspections are initiated through information from the CARE database. COJ also inspected 3 private lift stations and followed up on 4 PICs in the watershed. In addition, COJ collected 10 routine water quality samples. COJ's efforts in the Pottsburg Creek watershed are shown in **Table 77**. Additional details about COJ projects are included in **Appendix A**.

TABLE 77: COJ ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-240	Barnes Road (University Boulevard to Parental Home) (Main Stem COJ-11)	Construct wet detention pond	97 acres	Unknown	COJ	Completed
COJ-241	Parental Home Road Phase 2 (Beach Boulevard to Ibach Road) (Main Stem COJ-15)	Construct wet detention pond	82 acres	Unknown	COJ	Completed
COJ-242	Parental Home Road Phase 1 (Bowden Road from Salisbury to Dean Road) (Main Stem COJ-14)	Construct wet detention pond	28 acres	Unknown	COJ	Completed
COJ-342	Regional Stormwater Facility - MSMP	8 acre facility + 7.5 acre facility + MAPs in existing ponds	Unknown	\$11,112,000	COJ	Planned
COJ-243	Wren Road Drainage	Implement drainage improvements along Wren Road	Unknown	\$45,000	COJ	Completed
COJ-363	3051 Herring Road	Drainage improvement	Unknown	\$26,162	COJ	Design
COJ-364	8602 Emerald Isle Circle South	Drainage improvement	Unknown	\$64,764	COJ	Construction
COJ-365	Leafy Lanes	Drainage improvement	Unknown	\$3,389	COJ	Design
COJ-244	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	96	\$16,005	COJ	Ongoing
COJ-245	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-246	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	45	\$15,797	COJ	Ongoing
COJ-247	Illicit Water Discharge	CARE initiated inspection	3	\$1,137	COJ	Ongoing
COJ-248	Pollution–Water–Illegal Discharge	CARE initiated inspection	1	\$379	COJ	Ongoing
COJ-249	Sewer Drains into Yard/Ditch	CARE initiated inspection	2	\$758	COJ	Ongoing
COJ-250	Sewer Overflow	CARE initiated inspection	2	\$758	COJ	Ongoing
COJ-251	Septic Tank Inspection	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-252	Private Lift Station Inspection	Inspect 51 private lift stations in WBID	3	\$1,137	COJ	Ongoing
COJ-253	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-254	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	5 stations (Atlantic Boulevard near River Hill Drive, 3500 Southside Boulevard, 3444 Southside Boulevard, 3401 Southside Boulevard, 3332 Southside Boulevard)	Unknown	COJ	Completed – Atlantic Blvd station not found, 3401 Southside Blvd not in WBID, 3 others in WBID
COJ-255	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	3 stations (Atlantic Boulevard near River Hill Drive, 3840 Belfort Road, 7529 Salisbury Road)	Unknown	COJ	Completed
COJ-256	Illicit Discharge Detection and Elimination	Follow up on PICs	4	\$1,516	COJ	Ongoing
COJ-257	PIC Program	Closed 21 open PIC cases	2	\$758	COJ	Completed
COJ-258	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling, stations in WBID	10	\$1,360	COJ	Ongoing
COJ-343	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted, in attempt to identify sources.	0	\$0	COJ	Ongoing
COJ-259	Glynlea Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	354 tanks, 354 connected	Unknown	COJ	Completed
COJ-260	Oakhaven Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	356 tanks, 0 connected	Unknown	COJ	Ongoing
COJ-261	Murray Hill Failure Area–Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	1 tank, 1 connected	Unknown	COJ	Completed
COJ-262	Septic Tanks Outside Failure Area– Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	1,479 tanks, 2 connected	See Appendix A	COJ	Ongoing
COJ-263	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-264	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

16.4 FDOT ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

FDOT collected 32.4 tons of debris from street sweeping 12 miles of roadways. FDOT helps to fund the 2 monitoring stations in the Pottsburg Creek watershed that are sampled quarterly as part of the MS4 routine monitoring program. A total of 10 samples were collected at these stations during the reporting period. **Table 78** lists FDOT's activities in the Pottsburg Creek watershed.

TABLE 78: FDOT ACTIVITIES IN THE POTTSBURG CREEK WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-86	PIC Program	Search for illicit connections	Effort is continuous in this WBID	Countywide - \$9,300	FDOT/COJ	Ongoing
FDOT-87	PIC Program	Identify illicit connections and remove if found to be truly illicit	No illicit connection/ discharge found this reporting period	Not applicable	FDOT/COJ	Ongoing
FDOT-88	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	10 routine water quality samplings performed	Countywide - \$27,900	FDOT/COJ	Ongoing
FDOT-89	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-90	Stormwater Management Systems	Construct stormwater ponds at Southside Blvd. and Beach Blvd. Interchange	33 acres, wet detention systems	Unknown	FDOT	Completed
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	About 6 miles of roadways and associated stormwater conveyance systems currently maintained in this WBID; approximately 12 miles of roadways swept with 32.4 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-119	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/COJ	Ongoing

SECTION 17: MIDDLE TROUT RIVER (WBID 2203)

17.1 JEA ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

During the last year, JEA inspected 12 ARVs and delivered 249 cans as part of the FOG Reduction Program. JEA's activities in the Middle Trout River watershed are shown in **Table 79**.

TABLE 79: JEA ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-171	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	0 lined in 2012	Not applicable	JEA	Ongoing
JEA-172	ARV Inspection and Rehabilitation	ARV Inspection and Rehabilitation	12 of 18 ARVs inspected, 0 replaced in 2012	\$3,600	JEA	Ongoing
JEA-173	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-174	Inspect Force Main Discharge Manholes, Repair/ Rehabilitate as Necessary	Inspect force main discharge manholes, repair/ rehabilitate as necessary	Not applicable	Unknown	JEA	Ongoing
JEA-175	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	Not applicable	Not applicable	JEA	Ongoing
JEA-176	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	2 stations (BIG-6671, Bigby Lane)	Unknown	JEA	Completed – Not in WBID
JEA-177	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	1 station (Rabbit Ridge)	Unknown	JEA	Completed for FY11- Ongoing
JEA-178	FOG Reduction Program	FOG Reduction Program	249 cans delivered in FY11/12	\$1,245	JEA	Ongoing
JEA-179	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	0 feet inspected in 2012	\$0	JEA	Ongoing
JEA-180	Pipe Cleaning	Clean existing pipes to avoid blockages	0 feet in 2012	\$0	JEA	Ongoing
JEA-181	HDPE Pipe Cleaning– Contractor	Clean existing HDPE pipes to avoid blockages	0 feet of HDPE cleaned in watershed	\$0	JEA	Ongoing
JEA-182	Pipe Cleaning	Clean existing pipes to avoid blockages	0 feet in 2012	\$0	JEA	Ongoing
JEA-183	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-184	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-185	Pop-Top Program	Pop-Top Program	0 surveyed in 2012	Not applicable	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-186	Non-Destructive Testing Program/ Pipe Integrity Testing	Non-Destructive Testing Program/ Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing

17.2 DCHD ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

17.2.1 COMPLETED DCHD PROJECTS

DCHD completed the intensive inspection program in the Middle Trout River watershed over the last year. The purpose of this program is to conduct geospecific investigations of septic tanks in area that are more prone to failures to proactively prevent septic tank problems.

17.2.2 ONGOING DCHD PROGRAMS AND ACTIVITIES

In 2012, DCHD issued 7 new permits, 5 repair permits, 2 abandonment permits, and 18 annual operating permits. DCHD also conducted 12 plan reviews and site evaluations and performed 10 complaint investigations. The programs and activities DCHD conducts in the Middle Trout River watershed are shown in **Table 80**.

TABLE 80: DCHD ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-91	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 7 new, 5 repair, and 2 abandonment permits issued	\$5,475	FDOH	Ongoing
DCHD-92	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	18 annual operating permits issued for IMZ/ commercial properties; 2 PBTS monitored on an annual basis	\$7,000	FDOH	Ongoing
DCHD-93	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-94	Application/ Plan Review/ Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 12 plan reviews and site evaluations performed based on permitting history	\$2,400	FDOH	Ongoing
DCHD-95	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-96	Failure Area Evaluation	Work with COJ to evaluate if area south of Plummer Road, north of Garden Street and Trout River Boulevard, west to Interstate 295, and east to Messer Road should be designated as failure area	Consider adding new failure area	Unknown	FDOH	Completed as part of DCHD-113
DCHD-97	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	10 complaint investigations performed	\$1,500	FDOH	Ongoing
DCHD-113	Intensive Inspection Program	Carry out intensive geospecific inspections in selected WBIDs based on repair permit applications, water quality information, and site conditions	Not applicable	Not applicable	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation Grant	Completed

17.3 COJ ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

COJ has drainage improvement projects under construction at 10309 Iowa Avenue, 8921 Messer Road, and Sycamore Lane. During the reporting period, COJ had 24 work orders for ditch and creek regrading, 1 work order for a lake or pond problem, and 19 work orders for repair/clearing of structures. These inspections are initiated through information from the CARE database. In addition, COJ collected 10 routine water quality samples. COJ's efforts in the Middle Trout River watershed are shown in **Table 81**. Additional details about COJ projects are included in **Appendix A**.

TABLE 81: COJ ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-265	Messer Area Drainage	Provide positive drainage to eliminate flooding; completion in 2013	Unknown	\$4,750,000	COJ	Planned
COJ-266	Garden Street Drainage Improvements	Address flooding at intersection of Garden Street and Iowa Avenue	Unknown	\$158,170	COJ	Completed
COJ-267	Allene Road Ditch Improvement	Address problem with eroding ditch that is flooding street	Unknown	Unknown	COJ	Completed
COJ-366	10309 Iowa Avenue	Drainage improvement	Unknown	\$65,470	COJ	Construction
COJ-367	8921 Messer Road	Drainage improvement	Unknown	\$25,671	COJ	Construction
COJ-368	Sycamore Lane	Drainage improvement	Unknown	\$51,186	COJ	Construction
COJ-268	Ditch/Creek Regrade/Erosion/Clean	All maintenance activities presented were completed in response to CARE requests.	24	\$5,922	COJ	Ongoing
COJ-269	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	1	Unknown	COJ	Ongoing
COJ-270	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	19	\$4,371	COJ	Ongoing
COJ-271	Illicit Water Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-272	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-273	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-274	Sewer Overflow	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-275	Private Lift Station Inspection	Inspect 5 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-276	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing
COJ-277	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	3 stations (Old Kings Road and Dunn Avenue, 6611 Dunn Avenue, 912 New Kings Road)	Unknown	COJ	Completed
COJ-278	Illicit Discharge Detection and Elimination	Follow up on PICs	0	\$0	COJ	Ongoing
COJ-279	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling; 2 station in WBID	10	\$1,360	COJ	Ongoing
COJ-280	Source Identification Sampling	Conduct source identification sampling when high levels of fecal coliform bacteria are noted	0	\$0	COJ	Ongoing
COJ-281	Septic Tanks Outside Failure Area–Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	878 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-282	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-283	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

17.4 FDOT ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

FDOT collected 13.5 tons of debris from street sweeping 5 miles of roadways. The Adopt-A-Highway Program collected 450 pounds of trash from 4 miles of roadways. FDOT helps to fund the 2 monitoring stations in the Middle Trout River watershed that are sampled quarterly as part of the MS4 routine monitoring program. A total of 10 samples were collected at these stations during the reporting period. **Table 82** lists FDOT's activities in the Middle Trout River watershed.

TABLE 82: FDOT ACTIVITIES IN THE MIDDLE TROUT RIVER WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-92	PIC Program	Search for illicit connections	Effort is continuous in WBID; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-93	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	10 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-94	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-95	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-96	Adopt-A-Highway Program	Allow individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	450 pounds of trash collected, trash collection area is 4 miles	Unavailable	Not applicable	Ongoing
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	About 2.5 miles of roadways and associated stormwater conveyance systems currently maintained in this WBID; approximately 5 miles of roadways swept with 13.5 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing

SECTION 18: LOWER TROUT RIVER (WBID 2203A)

18.1 JEA ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

During the last year, JEA repaired 3 manhole linings, inspected 2 force main discharge manholes, repaired 3 lift stations, inspected 0.28% of the sanitary sewer pipes with closed-circuit television, cleaned 0.93% of the lines, and cleaned 4.54% of the HDPE pipe in the watershed. JEA also inspected 63 manholes as part of the Pop-Top Program. JEA's activities in the Lower Trout River watershed are shown in **Table 83**.

TABLE 83: JEA ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-187	Manhole Linings Rehabilitated	Repair deteriorating manhole linings	3 linings rehabbed	\$2,250	JEA	Ongoing
JEA-188	Pump Station SCADA Upgrades	Retrofitting completed in 2004; all stations constructed since have SCADA installed	Not applicable	Not applicable	JEA	Completed
JEA-189	Inspect Force Main Discharge Manholes, Repair/Rehabilitate as Necessary	Inspect force main discharge manholes, repair/rehabilitate as necessary	2 inspection, 0 rehabs in 2012	\$600	JEA	Ongoing
JEA-190	Pump Station Class I/II Rebuilding	Repair or replace components of existing pump stations	3 projects in watershed in FY11/12	\$131,214	JEA	Ongoing
JEA-191	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	1 station (Northwood Apartments)	Unknown	JEA	Completed – All in WBID
JEA-192	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	13 stations	Unknown	JEA	Completed for FY11- Ongoing
JEA-193	FOG Reduction Program	FOG Reduction Program	Not applicable	Unknown	JEA	Ongoing
JEA-194	Implement CMOM Program	CMOM Program	Not applicable	Unknown	JEA	Ongoing
JEA-195	SSO Root Cause Program	SSO Root Cause Program	Not applicable	Unknown	JEA	Ongoing
JEA-196	Pop-Top Program	Pop-Top Program	63 manholes	\$3,150	JEA	Ongoing
JEA-197	Non-Destructive Testing Program/ Pipe Integrity Testing	Non-Destructive Testing Program/ Pipe Integrity Testing	Not applicable	Unknown	JEA	Ongoing
JEA-207	Pipe Cleaning	Clean existing pipes to avoid blockages	12,719 feet in 2012	\$254,380	JEA	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
JEA-208	Pipe TV Inspection	Inspect existing infrastructure through use of CCTV system	3,800 feet in 2012	\$7,600	JEA	Ongoing
JEA-211	HDPE Pipe Cleaning– Contractor	Clean existing HDPE pipes to avoid blockages	7,398 feet in 2012	Unknown	JEA	Ongoing

18.2 DCHD ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

In 2012, DCHD issued 2 new construction permits, 16 repair permits, 14 abandonment permits, and 40 annual operating permits. DCHD also conducted 18 plan reviews and site evaluations and performed 15 complaint investigations. The programs and activities DCHD conducts in the Lower Trout River watershed are shown in **Table 84**.

TABLE 84: DCHD ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-98	OSTDS Program	Implement programs to address septic systems as potential sources	Approximately 2 new construction permits, 16 repair permits, and 14 abandonment permits issued	\$9,100	FDOH	Ongoing
DCHD-99	Annual Operating Permits	Issue annual operating permits for PBTS, systems located in IMZs, and commercial systems	40 annual operating permits issued for IMZ/commercial properties; 5 PBTS monitored on an annual basis	\$15,750	FDOH	Ongoing
DCHD-100	SWIM Project	Implement broad-ranging septic tank ordinance	About 51% of Riverview failure area and 32% of Lake Forest nuisance area located in this WBID	Not applicable	FDOH	Ongoing
DCHD-101	DCHD-Sponsored Training Programs	Hold annual training programs for septic tank contractors, certified plumbers, maintenance entities, and environmental health professionals	1 to 2 training sessions per year providing up to 12 contact hours	\$2,500	FDOH	Ongoing
DCHD-102	Application/ Plan Review/ Site Evaluations	DCHD performs plan review and site evaluation for each application received for OSTDS new construction, repair, or modification of existing system	Approximately 18 plan reviews and site evaluations performed based on permitting history	\$3,600	FDOH	Ongoing
DCHD-103	Septic Tank Failure Area Ranking	Score and prioritize septic tank failure areas annually	Less than 1 year since previous update	Not applicable	FDOH	Ongoing

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
DCHD-104	Complaint Investigations	DCHD investigates all complaints received, performs site visit, and initiates enforcement action on sanitary nuisance violations	15 complaint investigations performed	\$2,250	FDOH	Ongoing
DCHD-105	Intensive Inspection Program	Carry out intensive geospecific inspections in selected BMAP WBIDs based on repair permit applications, water quality information, and site conditions	Not applicable	Not applicable	FDOH/ FDEP/ EPA Section 319 Nonpoint Source Management Program Implementation grant	Completed

18.3 COJ ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

COJ has drainage improvement projects under construction at 10435 Biscayne Boulevard, 120 Franklin Street, and 904 Brandywine. A drainage improvement project is in design at Gregory Place. During the reporting period, COJ had 221 work orders for ditch and creek regrading, 5 work orders for a lake or pond problem, 106 work orders for repair/clearing of structures, 2 inspections of illicit water discharges, and 2 inspections of sewer overflows. These inspections are initiated through information from the CARE database. In addition, COJ collected 10 routine water quality samples. COJ's efforts in the Lower Trout River watershed are shown in **Table 85**. Additional details about COJ projects are included in **Appendix A**.

TABLE 85: COJ ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

¹ COJ has committed to removing septic tanks in failure areas that are within 300 meters of a surface water in the 2008 LSJR Main Stem BMAP. At a minimum, COJ will accomplish a 50% implementation of the septic tank phase-out projects by July 31, 2015, with the phase-outs completed by December 31, 2023. For the 15 tributaries addressed in this BMAP, the failing tanks within 300 meters of surface waters will be included in the COJ plan and schedule to phase out tanks and will be identified as Tributaries BMAP-related tanks.

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-284	Sherwood Forest Area	Implement project to reduce flooding	Unknown	\$3,190,400	COJ	Completed
COJ-285	La Villa Brooklyn (Broward Road at Smith Road)	Implement flood control project and compensatory treatment for new downtown library	Unknown	\$2,750,000	COJ	Completed
COJ-286	Riverview North	Implement wet detention/flood control project	Unknown	\$1,646,045	COJ	Completed
COJ-344	Riverview Area Drainage Improvements	Drainage improvements	Unknown	\$1,400,000	COJ	Completed
COJ-287	Soutel/Bassett Drainage Improvements	Implement drainage improvements– drain pipe beyond pond is 1 foot too high	Unknown	Unknown	COJ	Completed
COJ-369	10435 Biscayne Boulevard	Drainage improvement	Unknown	\$35,071	COJ	Construction
COJ-370	120 Franklin Street	Drainage improvement	Unknown	\$29,225	COJ	Construction
COJ-371	904 Brandywine	Drainage improvement	Unknown	\$366	COJ	Construction
COJ-372	Gregory Place	Drainage improvement	Unknown	\$18,361	COJ	Design
COJ-288	Ditch/Creek Regrade/Erosion/ Clean	All maintenance activities presented were completed in response to CARE requests.	221	\$24,775	COJ	Ongoing
COJ-289	Lake or Pond Problem	All maintenance activities presented were completed in response to CARE requests.	5	Unknown	COJ	Ongoing
COJ-290	Structure Blocked/Repair/General Flooding	All maintenance activities presented were completed in response to CARE requests.	106	\$14,941	COJ	Ongoing
COJ-291	Illicit Water Discharge	CARE initiated inspection	2	\$758	COJ	Ongoing
COJ-292	Pollution–Water–Illegal Discharge	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-293	Sewer Drains into Yard/Ditch	CARE initiated inspection	0	\$0	COJ	Ongoing
COJ-294	Sewer Overflow	CARE initiated inspection	2	\$758	COJ	Ongoing
COJ-295	Septic Tank Inspection	CARE initiated inspection	0	0	COJ	Ongoing
COJ-296	GIS Coverage Update	Update and verify private lift station GIS coverage	Ongoing	Unknown	COJ	Ongoing
COJ-297	Private Lift Station Inspection	Inspect 9 private lift stations in WBID	0	\$0	COJ	Ongoing
COJ-298	Confirm Locations of Lift Stations on Boundary	Confirm locations of lift stations on boundary for first annual progress report	3 stations (4835 Soutel Drive, 1061 Lem Turner, Lem Turner and Capper)	Unknown	COJ	Completed – All in WBID

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PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	TOTAL COST	FUNDING SOURCE	PROJECT STATUS
COJ-299	Pump Station Inspections	Inspect pump stations near surface waters to ensure they are functioning properly and report status in first annual report	3 stations (8137 Main Street North, 800 Broward Road, 2149 Leonid Road)	Unknown	COJ	Completed
COJ-300	Illicit Discharge Detection and Elimination	Follow up on PICs	0	\$0	COJ	Ongoing
COJ-301	PIC Program	Follow up on outstanding PICs, none determined to be illicit	2	\$1,200	COJ	Completed
COJ-302	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	10	\$1,360	COJ	Ongoing
COJ-345	Source Identification Sampling	Re-sampling effort conducted when high levels of fecal coliform bacteria are noted, in attempt to identify sources.	0	\$0	COJ	Ongoing
COJ-303	Lake Forest Failure Area– Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	389 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-304	Riverview Failure Area– Septic Tank Phase-Out	Phase out septic tanks in failure areas (also listed as part of larger LSJR Main Stem BMAP project) ¹	712 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-305	Septic Tanks Outside Failure Area– Septic Tank Phase-Out	Phase out program as provided by COJ ordinance	1,859 tanks, 0 connected	See Appendix A	COJ	Ongoing
COJ-306	Septic Tank Maintenance Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing
COJ-307	Pet/Animal Management Public Education	Develop PSAs	Ongoing	Unknown	COJ	Ongoing

18.4 FDOT ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

FDOT collected 32.4 pounds of debris from street sweeping 12 miles of roadways. The Adopt-A-Highway Program collected 670 pounds of trash from 81.5 miles of roadways. FDOT helps to fund the 2 monitoring stations in the Lower Trout River watershed that are sampled quarterly as part of the MS4 routine monitoring program. A total of 10 samples were collected at these stations during the reporting period. **Table 86** lists FDOT's activities in the Lower Trout River watershed.

TABLE 86: FDOT ACTIVITIES IN THE LOWER TROUT RIVER WATERSHED

PROJECT NUMBER	PROJECT NAME	PROJECT DESCRIPTION	LEVEL OF EFFORT	ESTIMATED COST	FUNDING SOURCE	PROJECT STATUS
FDOT-98	PIC Program	Search for illicit connections	Effort is continuous in WBID; none identified	Countywide - \$9,300	FDOT/ COJ	Ongoing
FDOT-99	Routine Surface Water Sampling	Carry out NPDES permit-related quarterly water quality sampling	10 routine water quality samplings performed	Countywide - \$27,900	FDOT/ COJ	Ongoing
FDOT-100	DCP Program	Connecting entity must certify that all discharges to FDOT MS4 are treated prior to connection	Ongoing effort	Countywide - \$16,930	FDOT	Ongoing
FDOT-101	Adopt-A-Highway Program	Allows individuals or groups (after receiving FDOT training) to adopt stretch of road and collect trash and debris	670 pounds of trash collected, trash collection area is approximately 81.5 miles	Unavailable	Not applicable	Ongoing
FDOT-102	Interstate 295 from West of Duval to Biscayne Boulevard	Construct stormwater pond to capture and treat runoff	20 acres, wet detention systems	Unknown	FDOT	Completed
FDOT-103	Interstate 95 Improvement from South of Clark Road to Interstate 295	Construct stormwater pond to capture and treat runoff	94 acres, wet detention systems	Unknown	FDOT	Completed
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	About 6 miles of roadways and associated stormwater conveyance systems currently maintained in WBID; approximately 12 miles of roadways swept with 32.4 tons of debris collected and properly disposed	Countywide - \$5,272,132	FDOT	Ongoing
FDOT-120	Source Identification Sampling	Resampling effort conducted when high levels of fecal coliform bacteria are noted to attempt to identify sources	0	Countywide - \$27,900	FDOT/ COJ	Ongoing

APPENDICES

Appendix A: COJ Activities Supporting Information

The following supplemental information is provided in reference to project and activity records contained in the COJ Tributaries BMAP II project tables.

MS4 CAPITAL IMPROVEMENT AND DRAINAGE SYSTEM REPAIR PROJECTS

Capital improvement projects for the City of Jacksonville (COJ) completed, under design, or construction within each of 15 tributaries in the BMAP II watershed areas remain active and have continued progress toward operational goals. The current 5-year Capital Improvement Program lists 18 stormwater system capital improvement projects with a total estimated cost of over \$55 million. The capital improvement projects include 11 in the planning phase, 2 in the design phase, and 5 under construction. The proposed funding for capital improvements beyond fiscal year 2012/2013 was estimated to exceed \$160 million.

The current drainage system restoration and improvement programs include 22 projects with an estimated total cost of \$1 million. The drainage system projects included 4 in the design phase and 14 under construction. COJ anticipates continued investment estimated at approximately \$500,000 annually for drainage system repair projects.

MS4 MAINTENANCE ACTIVITIES

The Department of Public Works Right of Way and Grounds Maintenance Division provides improvements to stormwater systems and ensure conveyances, ponds, control structures, and other elements of the infrastructure are intact and functioning properly. In 2011, a proactive stormwater infrastructure inspection program was implemented. There are 3 stormwater system inspectors dedicated to proactive stormwater system maintenance inspections. The stormwater system inspection program will support NPDES permit requirements and best management practices (BMPs) through existing maintenance programs of the Right of Way and Grounds Maintenance Division. COJ allocates over \$6 million annually for stormwater system activities including street sweeping, structure and closed conveyance cleaning, repair, and replacement projects.

Most Stormwater Systems maintenance requests are received through the COJ Citizens Action Response Effort (CARE) call center system. The Right of Way and Grounds Maintenance Division responds to an average of 10,000 CARE requests per year. The reactive maintenance program provides for ditch repair and cleaning, debris removal, vegetation control, structure repair, and any tasks required to keep the stormwater systems functioning. A total of 2,315 Right of Way and Grounds Maintenance Division CARE system issues were received during the reporting period for reactive repair and maintenance related concerns. The Right of Way and Grounds Maintenance Division records indicated 1,664 repair and maintenance work orders were completed within in the BMAP II watershed areas. During the current reporting year, there were multiple repairs and maintenance activities performed by the Right of Way and Grounds Maintenance Division in BMAP watershed areas. Since some information on these activities is not recorded with references to the BMAP project areas, some of these efforts may not be included in BMAP annual progress reports. COJ continues to improve information gathering and reporting practices in an effort to better support NPDES and BMAP reporting requirements in the future.

SANITARY SEWER OVERFLOWS

The sanitary sewer collection system and related treatment facilities within COJ is operated by JEA, an independent regional authority. The COJ Environmental Quality Division (EQD) staff

receive reports of sanitary sewer overflows (SSOs) through the CARE call center. The SSO and related CARE system issues received by EQD that are not associated with JEA's sanitary sewer system are investigated by EQD staff. The SSO issues confirmed to be associated with JEA sanitary sewer systems are referred to JEA response staff. JEA reports SSO information in accordance with JEA NPDES permit requirements. The SSOs and related issues may be investigated by EQD staff, or referred to the appropriate regulatory agency. The reactive SSO investigations may reveal pollution source issues that are subject to enforcement actions by EQD or another city division, as provided by city ordinance codes.

SPILL REPORTING AND RESPONSE

EQD staff receive reports of pollution spills and environmental concerns through the CARE call center and direct contact from citizens and other government organizations. Environmental concerns related to the BMAP watersheds and overall Duval County NPDES permit requirements are also investigated through EQD's proactive illicit discharge source investigation program.

EQD completed 147 water quality related CARE system inspections city-wide during the current reporting period, of which 57 were located in the BMAP II watershed areas. These inspections are noted on a WBID basis in the project tables. Illicit discharges and spills initially investigated by EQD staff and found to be caused by private septic tanks are referred to the Duval County Health Department (DCHD). COJ has maintained illicit discharge detection elimination programs for many years and, in 1999, began tracking the investigative work in coordination with the NPDES permitting program. Illicit discharge inspections initiated through CARE system requests may include the following issues:

- *Failing septic tanks (referred to DCHD for follow up inspection and enforcement);*
- *Plumbing code violations (referred to the city's Code Enforcement Section);*
- *JEA or other utility SSOs and incidents (referred to FDEP Northeast District);*
- *Private sewage lift stations or other non-NPDES treatment facilities (investigated by EQD staff);*
- *Illicit discharges and connections to the COJ stormwater systems;*
- *Spills or illegal dumping incidents; and*
- *Other surface water pollutant or erosion concerns.*



FIGURE A-1: EQD STAFF PERFORM PROACTIVE INDUSTRIAL COMPLIANCE INSPECTIONS

PRIVATE LIFT STATION INSPECTIONS

Within COJ, there are over 1,400 private sewage lift stations that were permitted and built after 1991. COJ EQD conducts scheduled routine inspections of private lift stations to confirm compliance with local Environmental Protection Board Rule 3 requirements. When an inspection finds a private lift station is not in proper working order, EQD informs the owner and operator and initiates enforcement action when necessary. Inspections of private lift stations are conducted in response to CARE system reports. On March 2011, the city's Environmental Protection Board approved amendments to Rule 3. The amendments included updates to the design standards and performance requirements and most significantly to the operation and maintenance requirements for lift station owners and operators. COJ revised private lift station inspection schedules and standard operating procedures to prioritize private lift stations located within fecal coliform impaired watersheds. The EQD private lift station inspection program activity has been integrated with overall proactive illicit discharge detection and elimination efforts associated with BMAP and NPDES permit requirements.

WATER QUALITY MONITORING AND SAMPLING

COJ maintains several river and tributary sampling networks. The ambient tributary program currently consists of 103 locations and each site is sampled quarterly. Station locations are often near bridges and roadways to facilitate sampling efforts; sites are both above and within tidal influence from the St. Johns River or Intracoastal Waterway. The primary objective of this program is the collection of 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 fecal coliform bacteria.

EQD also samples additional tributary stations monthly in BMAP II streams as part of the BMAP source assessment sampling obligations. EQD collected 410 samples in the BMAP II tributaries in 2012. Through coordination with the Tributary Assessment Team (TAT), a protocol has been established for investigating high bacteria counts. When a tributary site results exceed 5,000 CFU, re-sampling is conducted upstream and downstream to attempt to determine the source of the elevated bacteria levels. EQD has elected to conduct follow-up sampling on high bacteria counts from the routine ambient tributary network as well as the BMAP sampling. In 2012, EQD staff collected 187 follow-up water samples within BMAP II tributaries.



FIGURE A-2: EQD WATER QUALITY SAMPLING PROGRAMS

SEPTIC TANK PHASE OUT PROGRAM

Based on an analysis completed by the Water and Sewer Expansion Authority in 2010, there are over 65,000 septic tanks within the city. Over 23,000 septic tanks are located within 37 on-site treatment and disposal system failure areas designated by the DCHD. Information regarding the number of septic tank connections during the current reporting period was determined by reviewing the COJ building inspection database. The number of septic tanks eliminated and connected to the JEA sanitary sewer collection system in future years is dependent on funding and use of the ArcNLET model being developed by FDEP.

BMAP AND NPDES PERMIT PROGRAMS

The COJ NPDES permit links permit compliance with reductions in surface water contamination. The NPDES permit references the BMAPs and associated tributary total maximum daily loads (TMDLs) in relation to water quality monitoring and reductions in tributary pollutant loading. Watershed improvement practices and recordkeeping associated with the reduction of the TMDL and the overall BMAP include:

- *Inventory and mapping of COJ and FDOT MS4 infrastructure;*
- *Implementation of proactive Illicit Discharge Detection and Elimination Program;*
- *MS4 Structural Control Inspection Program;*
- *Expansion of High Priority Industry Inspection Programs;*
- *Update of its ongoing Water Quality Monitoring Program;*
- *Water quality trend analysis; and*
- *Implementation of a bacteria control plan for 1 TMDL WBID not under a BMAP.*

During the current 5-year NPDES permit period the city estimates it will invest over \$12.5 million to comply with permit requirements and fulfill its Lower St. Johns River main stem and tributaries BMAPs water quality monitoring, and inspection obligations.

PUBLIC EDUCATION OUTREACH AND ORDINANCES

The city public education and outreach activities received significant support during the current reporting period. COJ provides continuing support for BMAPs through several established public education and outreach programs and special events. Support for public education and outreach programs include multiple city organizations:

- *Duval County Agricultural Extension Office;*
- *COJ Environmental Protection Board; and*
- *COJ Environmental Quality and Right of Way Grounds Maintenance Divisions.*

One major goal of the city's outreach program is public and business collaboration. The city conducts programs for water quality protection that focus on educational outreach for irrigation and fertilizer BMPs. The city facilitates this outreach program through town meetings, homeowner association meetings, businesses, civic organizations, and meetings of the Florida Pest Management Association. To date, the city distributed over 40,000 irrigation and fertilizer brochures at these events. To accomplish the intended goals and objectives of the fertilizer ordinance code, the Environmental and Compliance Department maintains an ongoing educational campaign to inform and educate residents about the value of natural water resources and effective fertilizer application practices for home lawns and around commercial properties.

Many public education and outreach events were hosted and supported during the BMAP annual reporting period with several significant annual events including:

- *Annual Museum of Science and History Water Festival;*
- *Annual Earth Day Festival;*
- *Tree Hill Butterfly Festival;*
- *Annual Environmental Protection Board and University of North Florida Environmental Symposium; and*
- *Annual Jacksonville Home and Patio Show;*

In addition to the annual events referenced above, the Planning and Development Department conducts workshops, presentations, and provides informational material related to stormwater and water quality protection and preservation practices. The target audiences for these workshops are schools, homeowner associations, neighborhood planning groups, and other community groups. EQD provides a 24-hour public education and outreach point of contact for the community through direct email to Stormwater Services, NPDES@coj.net, and through COJ's CARE call center.

Appendix B: TAT Data

The TAT protocol requires that if a fecal coliform concentration over 5,000 counts is found during the routine sampling, follow up sampling must be conducted upstream and downstream of the high counts to try and determine the source. The follow up samples collected by FDEP, JEA, and COJ over the last year are included in the tables below.

TABLE B-1: FDEP FOLLOW UP SAMPLING RESULTS

DATE	WBID	STATION DESCRIPTION	FECAL COLIFORM (CFU/100mL)
03/08/2012	2297	Craig at Lorimer	700
03/08/2012	2297	Craig Downstream of 1 st Trib	2,700
04/13/2012	2297	Craig Creek Upstream of 1 st Trib Lorimer	72
05/04/2012	2297	Craig Creek Lorimer	620
05/04/2012	2297	Craig Creek Footbridge Par	4,600

TABLE B-2: JEA FOLLOW UP SAMPLING RESULTS

DATE	WBID	STATION DESCRIPTION	FECAL COLIFORM (CFU/100mL)
05/18/2012	2316	Downstream of WCS1	1,200
05/18/2012	2316	Upstream of WCS1	670
05/18/2012	2316	Downstream of WCS2	2,200
05/18/2012	2316	Upstream of WCS2	1,600
08/23/2012	2257	Downstream of MCS2	940
08/23/2012	2257	Upstream of MCS2	1,300
08/23/2012	2316	Downstream of WCS2	1,500
08/23/2012	2316	Upstream of WCS2	3,300
11/08/2012	2257	Downstream of MCS1	960
11/08/2012	2257	Upstream of MCS1	620
11/08/2012	2257	Downstream of MCS2	4,500
11/08/2012	2257	Upstream of MCS2	5,000
11/08/2012	2316	Downstream of WCS1	2,800
11/08/2012	2316	Upstream of WCS1	2,100
11/08/2012	2316	Downstream of WCS2	4,300
11/08/2012	2316	Upstream of WCS2	4,800

TABLE B-3: COJ FOLLOW UP SAMPLING RESULTS

NAME	WBID	STATION	STATION DESCRIPTION	DATE	TEMP (°C)	CONDUCTIVITY (uS)	SALINITY	PH	FECAL COLIFORM (CFU/100 ML)
Cormorant Branch	2381	JC2A	Heather Grove Lane	10/04/2011	22.68	N/A	N/A	N/A	631
Cormorant Branch	2381	JC15	Julington Creek Road	10/04/2011	21.16	7782	4.35	6.66	N/A
Cormorant Branch	2381	JC437	Marbon Road	10/04/2011	19.31	230.1	0.11	7.45	1,622
Deep Bottom Creek	2361	DB-HART	Hartley Road	01/20/2012	13.57	327	0.16	7.6	250
Deep Bottom Creek	2361	DB-Hart West	Ditch south of fence	01/20/2012	N/A	N/A	N/A	N/A	1,100
Deep Bottom Creek	2361	DBHARTE	Hartley Road East	04/10/2012	21.43	379.4	0.19	6.91	44,000
Deep Bottom Creek	2361	DBHARTE	Hartley Road East	06/05/2012	25.49	385.8	0.19	6.08	1,400
Sherman Creek	2227	COAB2	Fleet Landing Boulevard	07/30/2012	30.23	995.6	0.52	6.91	811
Sherman Creek	2227	PLAZA St	Plaza Drive	07/30/2012	27.49	429.2	0.21	7.01	N/A
Sherman Creek	2227	Atlantic Beach WTP	Treatment Plant	07/30/2012	32.12	1008	0.53	6.77	90
Sherman Creek	2227	COAB22	22 nd Street	09/11/2012	25.55	853.5	0.44	7.39	500
Cormorant Branch	2381	JC5	N/A	12/04/2012	18.48	380.9	0.19	7.03	N/A
Deep Bottom	2361	DBHART	Hartley Road West	12/17/2012	21.37	284.2	0.14	7.45	2,000
Deep Bottom	2361	BHAC&C	Upstream of DBHartW	12/17/2012	18.68	272.3	0.13	7.35	4,100
Deep Bottom	2361	POND@APTS	SW Pond	12/17/2012	19.86	323.4	0.16	7.14	460
Sherman Creek	2227	COAB4-OTP	Old Trailer Park	12/19/2012	14.33	2223	1.19	7.43	180
Sherman Creek	2227	COAB4-LS	At Lift Station	12/19/2012	14.48	1642	0.87	7.12	450
Sherman Creek	2227	COAB22	22 nd Street	12/19/2012	16.19	918.1	0.48	7.75	270