Phase 1 CAP/ER

2012 Annual Report

Submitted to EPA July 27, 2012

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

7 27 12 Date





Annual CAP/ER Report July 1, 2012 - June 30, 2013

First Creek Projects

	,			End Date		Approved Completion	
		_		Unless		Date as	
Project ID	Project Name	Project Description ¹	Start Date	Revised	Units Installed/Rehabilitated	Revised	Status
	Edgewood Drive Rehabilitation	Find and fix work to identify and address cause of overflow in the vicinity of 1620 Edgewood Avenue.	FY 09/10	FY 10/11	Replaced 519 ft of 8" sewer, 179 ft of 12" sewer; rehabilitated 22,300 ft of 8"sewer, and 60 ft of 12" sewer using CIPP and pipebursting. Project also included rehabilitation of 662 vertical feet and replacement of 10 of manholes.	FY 11/12	COMPLETE
1-19	ir roject	Lugewood Avende.	1 1 09/10	1 1 10/11	Replaced approximately 446 ft	1 1 11/12	CONFECTE
	College Park Rehabilitation	Find and fix work to identify and address cause of overflow in the vicinity of 106 College Park Lane.	FY 10/11	FY 11/12	of 8" PVC, six manholes, and rehabilitated 1,581 ft of 8" sewer using pipebursting.	1/31/2013	COMPLETE
1-22	E. Jackson Avenue Rehabilitation Project	Find and fix work to identify and address cause of overflow in the vicinity of 400 E. Jackson Avenue	FY 11/12	FY 12/13			IN DESIGN
	Oglewood Avenue	Find and fix work to identify and address cause of overflow in the vicinity of 1307 Oglewood Avenue.	FY 11/12	FY 12/13	The summary above for the Edgewood Drive Rehabilitation Project includes the Oglewood Avenue Rehabilitation Project since those projects were combined.		COMPLETE

Second Creek Projects

Project ID	Project Name	Project Description ¹	Start Date	End Date Unless Revised	Units Installed/Rehabilitated	Approved Completion Date as Revised	Status
2-2	Lower Second Creek Replacement/Rehabilitation at	Replace approximately 2,500 lf of existing sewer with 30-in sewer and rehabilitate approximately 1,200 lf of trunk line between replacement segments.	FY 06/07	FY 07/08	Estimated total quantities: 1588 ft gravity sewer replaced; 11 new MHs installed to date		Construction has been completed on the lower trunkline work. Upper portion is currently under construction.
2-11	Burnside Rehabilitation Project	Find and fix work to identify and address cause of overflow in the vicinity of 2523 Burnside Street	FY 12/13	FY 12/13	Replaced 517 ft of 8" sewer and 1651 ft of 12" sewer using pipe bursting. Six manholes were replaced and 3 were rehabbed.		COMPLETE
SCR-1		Find and fix work to identify and address cause of overflow in the vicinity of 4105 Central Avenue Pike.	FY 2013	FY 2015			IN DESIGN

Third Creek Projects

						Approved	-
				End Date		Completion	
				Unless		Date as	
Project ID	Project Name	Project Description ¹	Start Date	Revised	Units Installed/Rehabilitated	Revised	Status
		Replace approximately 400 lf of existing					
	Interstate 40 and Middlebrook	sewer with 15-in sewer, 750 lf with 24-in					
	Pike Trunk Replacement	sewer, 2,000 If with 30-in sewer, and 7,000					Phase 1 is complete, phase 2 is under
3-6	Project	If with 36-in sewer.	FY 08/09	FY 09/10		FY 12/13	construction, and phase 3 is currently in bid phase
					Sliplined 685 If of existing trunk		
					sewer, replaced 4,600 lf of 48"		
	Neyland Drive Trunk	Replace approximately 5,900 lf of existing			trunk sewer and replaced 34		
3-7	Replacement Project	sewer with 48-in sewer	FY 08/09	FY 10/11	manholes.	FY 12/13	COMPLETE
					Dia alcumat and market 47 000		
					Pipeburst approximately 17,800		
	Painter Avenue Rehabilitation	Find and fix work in mini-basins 28B1 and			ft of existing sewer, rehabilitated 550 ft and replaced/rehabbed 61		
3-16	Project ²	34A2	FY 10/11	FY 11/12	manholes.		COMPLETE
3-10	Floject	Find and fix work to identify and address	F1 10/11	F1 11/12	Pipeburst approximately 600 ft		COMPLETE
	Deerfield Road Rehabilitation	cause of overflow in the vicinity of 4428			of existing gravity sewer and		
	Project	Deerfield Road.	FY 10/11	FY 11/12	replaced two manholes.		COMPLETE
		Find and fix work to identify and address					
	Citico Street Rehabilitation	cause of overflow in the vicinity of 600 and					
3-20	Project	605 Citico Street.	FY 11/12	FY 12/13			COMPLETE
		Find and fix work to identify and address			1		
	Hillvale Circle Rehabilitation	cause of overflow in the vicinity of the SSO					
3-23	Project	at Hillvale Circle.	FY 12/13	FY 12/13			COMPLETE
		Find and fix work to identify and address			Projects were combined.		
	Montgomery Avenue	cause of overflow in the vicinity of 3624			Replaced approximately 22,500		
3-24	Rehabilitation Project	Montgomery Avenue.	FY 11/12	FY 12/13	ft of 8" sewer and 28 manholes		COMPLETE
		Find and fix work to identify and address					
	Mantaganani Avanus	cause of overflow in the vicinity of 1811 and 1816 Sterchi Street and 3608 and 3618					
3-27	Montgomery Avenue Rehabilitation Project	Montgomery Avenue.	FY 11/12	FY 12/13			COMPLETE
3-21	Teriabilitation Froject	Find and fix work to identify and address	r i 11/12	F1 12/13	-		CONFECTE
	Highland Hills Road	cause of overflow in the vicinity of 409, 411,					
	Rehabilitation Project	and 419 Highland Hills Road.	FY 12/13	FY 12/13			COMPLETE
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²The original scope of this project called for replacement of 2,200 lf of existing 42" sewer with 48" and 54" sewer to correct slight surcharging during a two-year rain event (no overflows currently occur and none are predicted). Subsequent modeling and analysis showed that rehabilitation of the collector sewer upstream will be more effective in reducing peak flows to this trunk sewer. This approach will prevent digging and replacing the trunk sewer along Third Creek that extends under a four-lane road and through a wetland area. KUB received approval to change the scope of the project to rehabilitation (find and fix) of collection system in mini-basins 28B1 and 34A2. The project will be completed in the same time frame as approved for the original Painter Avenue trunk project but will now be referred to as 3-16 Painter Avenue Rehabilitation Project.

Fourth Creek Projects

						Approved	
				End Date		Completion	
		4		Unless		Date as	
Project ID	Project Name	Project Description ¹	Start Date	Revised	Units Installed/Rehabilitated	Revised	Status
					Installed approximately 3,375 ft		
					of 36" trunk sewer, 260 ft of		
		Replace approximately 3,600 If of existing			smaller diameter trunk sewer,		
4-4	Replacement Project	sewer with 36-in sewer (IAP 2).	FY 07/08	FY 08/09	and replaced 29 manholes.	FY 11/12	COMPLETE
		Find and fix work to identify and address			Raised manholes 6, 7, and 8 to		
		cause of overflow in the vicinity of 5501 and			create additional storage in the		
	Northshore Drive	6410 Northshore Drive and Lyons Bend			trunkline upstream of the Fourth		
4-19	Rehabilitation Project	Road.	FY 11/12	FY 12/13	Creek WWTP.		COMPLETE
					The terminal manhole for the		
					Queensbury force main has		
					been replaced and the piping		
					configuration for this manhole		
					was also adjusted to lessen		
					pressure restrictions allowing		
					access to the force main for		
	Queensridge (Queensbury)				cleaning. Both pumps were also		
4-28	Pump Station Upgrade Project	Upsize Queensridge Pump Station	FY 10/11	FY 10/11	replaced.	FY 11/12	COMPLETE
				•			Overflow will be addressed through construction of
		Decommission Ten Mile Pump Station to					a new pump station by First Utility District. Once
	Ten Mile Pump Station	eliminate flows from adjacent utility districts					their pump station is complete, KUB will shut down
4TH-2	Removal	while retaining current KUB connections	FY 2013	FY 2015			the existing station.

South Knoxville / Knob Creek Projects

						Approved	
				End Date		Completion	
				Unless		Date as	
Project ID	Project Name	Project Description ¹	Start Date	Revised	Units Installed/Rehabilitated	Revised	Status
		Find and fix work to identify and address					
	Alpine Avenue Rehabilitation	cause of overflow in the vicinity of 3609					
S-21	Project	Alpine Avenue.	FY 11/12	FY 12/13			UNDER CONSTRUCTION
					Replaced 704 ft of 8" sewer and		
	Trunk Sewer Replacement	Replace 700 If of existing sewer with 18"			six manholes. Five laterals were		
S-26	Project in Sub-basin 40F1	sewer.	FY 10/11	FY 11/12	reinstated.		COMPLETE
		Find and fix work to identify and address					
		cause of overflow in the vicinty of 820					
STH-1	Goldfinch Avenue Project	Goldfinch Avenue.	FY 2012	FY 2013			UNDER CONSTRUCTION

Loves Creek and Eastbridge Projects

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						Approved	
				End Date		Completion	
		,		Unless		Date as	
Project ID	Project Name	Project Description ¹	Start Date	Revised	Units Installed/Rehabilitated	Revised	Status
		Replace approximately 4,190 lf of existing					
	Boyds Bridge Pike and Holston	10-in, 500 lf of 12-in, and 330 lf of 15-in			Replaced 4,456 feet of trunkline		
L-2	Hills Trunk Replacement	pipe.	FY 10/11	FY 11/12	and 31 manholes.		COMPLETE
		Find and fix work to identify and address					
	Asheville Highway	cause of overflow in the vicinity of 5411			Rehabilitated 1,560 ft of sewer		
L-4	Rehabilitation	Asheville Highway.	FY 10/11	FY 11/12	mains and 12 manholes.		COMPLETE
		Find and fix work to identify and address					
	Holston Hills Road	cause of overflow in the vicinity of 4716			Rehabilitated 1,356 ft of sewer		
L-6	Rehabilitation	Holston Hills Road.	FY 11/12	FY 12/13	mains.		COMPLETE
		Find and fix work to identify and address					
	Magnolia Avenue	cause of overflow in the vicinity of 3301					
L-7	Rehabilitation	Magnolia Avenue.	FY 11/12	FY 12/13			UNDER CONSTRUCTION
		Find and fix work to identify and address			Rehabilitated 285 ft of sewer		
		cause of overflow in the vicinity of 3415			main, replaced 316 ft of sewer		
L-8	McDonald Drive Rehabilitation	McDonald Drive.	FY 10/11	FY 11/12	main and two manholes.		COMPLETE
		Find and fix work to identify and address					
	Strawberry Plains Pike	cause of overflow in the vicinity of 8616,			Replaced approximately 750 ft		
EB-2	Rehabilitation	8714, and 9005 Strawberry Plains Pike.	FY 10/11	FY 11/12	of 8" PVC and three manholes.		COMPLETE

Williams Creek Projects

						Approved	
				End Date		Completion	
				Unless		Date as	
Project ID	Project Name	Project Description ¹	Start Date	Revised	Units Installed/Rehabilitated	Revised	Status
		Find and fix work to identify and address					
	Groner Avenue Rehabilitation	cause of overflow in the vicinity of 1114					
W-5	Project	Groner Road.	FY 11/12	FY 12/13			UNDER CONSTRUCTION

1Approximate sizing and extents of each project is given for planning level purposes. The exact sizing and extent of each project will be determined during preliminary design. Other modifications to the projects may occur during preliminary design. For example, it may be determined that parallel relief sewers would be more cost effective than replacement sewers for some projects. Any modifications will be explained in the quarterly updates submitted after approval of the Phase 1 CAP/ER.