

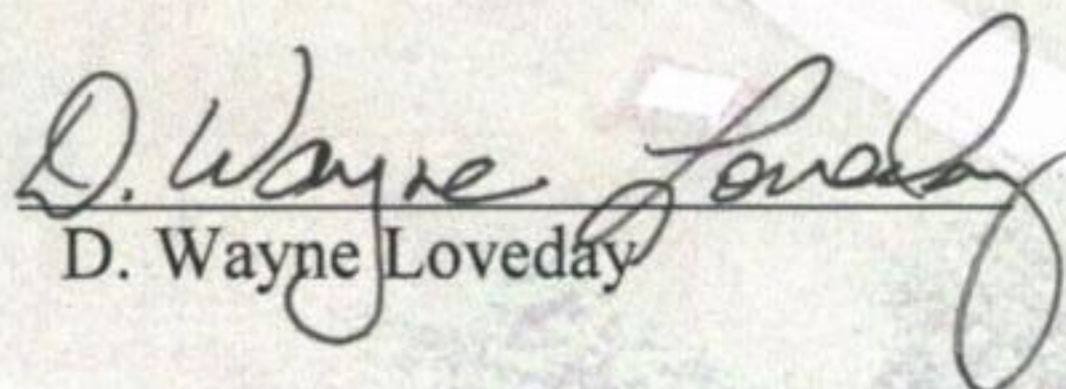


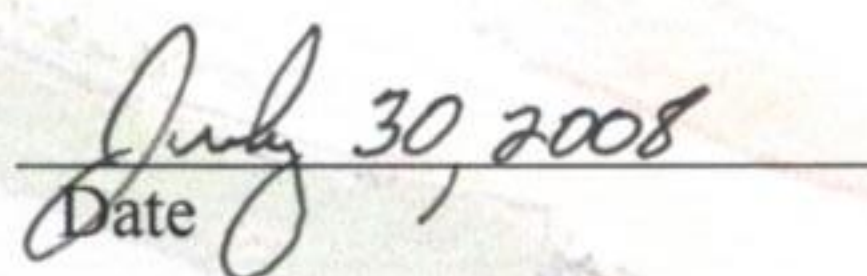
# Phase 1 CAP/ER

## 2008 Annual Report

Submitted to EPA July 30, 2008

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.

  
D. Wayne Loveday

  
Date July 30, 2008





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**First Creek Projects**

Project ID	Project Name	Project Description <sup>1</sup>	Start Date	End Date	Units Installed/Rehabilitated	Revised Completion Date	Status
1-1	Upper First Creek Collector Project (Mini-basin 1A1, 2A2, and 3D1)	Find and fix work to identify and address cause of overflow in the vicinity of 4811 Beverly Road, 4144 Oakland Drive, and 5511 Dogwood Road.	FY 05/06	FY 06/07 EPA approved extension to FY 07/08		Requested extension to FY 08/09	End date was initially extended from FY 06/07 to FY 07/08. An additional extension is being requested to allow for moving up the investigative and rehab work in sub-basin 19 (Williams Creek), which involved over 100,000 feet of investigative (TV, smoke test, and manhole inspection) work. Design of corrective action projects are underway and construction will begin in FY 08/09. Sub-basin 19 was originally scheduled to be completed in FY 10/11. Approximately 55,000 feet of rehabilitation or replacement will be completed in this basin by March 2009. Acceleration of this project will have an immediate impact on peak flows at the Kuwahee WWTP in addition to local improvements in the collection system.
1-2	Lower First Creek Collector Project (Mini-basin 8B2)	Find and fix work to identify and address cause of overflow in the vicinity of 2412, 2514, 2528, 2806, 2808, 2900, 2528, 2700, and 2808 Tecoma Drive, 3501 Whittle Springs Road, Islington Avenue, 1800 Linden Avenue, 2524 Underwood Place, and 3008 Valley View Drive.	FY 05/06	FY 07/08	8990 lf of gravity sewer rehab/replaced, 50 MHs, 310 Laterals		COMPLETE
1-4	Lower Fountain City Pipe Replacement	Replace approximately 2,293 lf existing sewer with 36-in sewer.	FY 05/06	FY 07/08	Estimated total quantities: 2,109 lf gravity sewer replaced; 14 new MHs installed; 0 lf CIPP installed; 0 vf MH rehab; 5 private laterals reinstated		COMPLETE
1-5	Upper Fountain City Pipe Replacement	Replace approximately 1,053 lf of existing sewer with 12-in, 1,856 lf with 24-in, and 595 lf with 27-in pipe.	FY 05/06	FY 07/08	Estimated total quantities: 2,715 lf gravity sewer replaced; 20 new MHs installed; 142 lf CIPP installed; 0 vf MH rehab; 13 private laterals reinstated		COMPLETE
1-6	Sub-basin 08A1 Rehabilitation Project (Phase II)	Find and fix work to identify and address cause of overflow in the vicinity of Broadway and Powers Street, and Broadway and Ridgeway Lane	FY 04/05	FY 07/08	1500 lf gravity sewer replace; 5 MHs installed		Phase II COMPLETE
1-20	Vine Middle School Rehabilitation	Find and fix work to identify and address cause of overflow in the vicinity of 214 Bertrand Street.	FY 05/06	FY 06/07	1061 lf of gravity sewer replaced/rehabbed, 6 MHs, 5 laterals	FY 07/08	COMPLETE



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**Second Creek Projects**

Project ID	Project Name	Project Description <sup>1</sup>	Start Date	End Date	Units Installed/Rehab	Revised Completion Date	Status
2-1	Lower Second Creek Replacement/Rehabilitation at I40/I275 Junction	Replace approximately 1,300 lf of existing sewer with 30-in sewer, replace approximately 3100 lf of existing sewer with 36-in sewer, replace approximately 1200 lf of existing sewer with 42-in sewer, and rehabilitate approximately 2,400 lf of trunk line between replacement segments.	FY 06/07	FY 08/09		Requested extension to FY 09/10	The initial scope of projects 2-1 and 2-2 were isolated to a portion of the trunk sewers flowing through Sub-basin 23. We have expanded the preliminary engineering phase of these two projects to include characterization of the entire sub-basin. This scope increase required additional time on both projects to complete the investigative work. Design of the 2-2 scope is nearing completion and construction will commence later this summer. The scope of the 2-1 project will be reevaluated in lieu of CCP storage placed immediate upstream of this section of trunk sewer, assuming the CCP is approved. We will submit additional information for your consideration in the quarterly report.
2-2	Lower Second Creek Replacement/Rehabilitation at Woodland	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		Requested extension to FY 08/09	
2-4	Dutch Valley Collector Rehabilitation (Sub-basin 10B1)	Rehabilitate 10-in collection system piping in Sub-basin 10B1.	FY 05/06	FY 06/07	Estimated total quantities: 290 lf gravity sewer replaced; 8 new MHs installed; 4,540 lf CIPP installed; 24 vf MH rehab; 35 private laterals reinstated	FY 07/08	COMPLETE
2-5	Rickard and Wilson Collector Rehabilitation (Sub-basin 10C1)	Rehabilitate 10-in collection system piping in Sub-basin 10C1.	FY 05/06	FY 06/07	Estimated total quantities: 2,100 lf gravity sewer replaced; 19 new MHs installed; 6,400 lf CIPP installed; 62 vf MH rehab; 60 private laterals reinstated	FY 07/08	COMPLETE



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**Third Creek Projects**

Project ID	Project Name	Project Description <sup>1</sup>	Start Date	End Date	Units Installed/Rehab	Revised Completion Date	Status
3-2	Subbasin 11 Rehabilitation Project (approximately 25% rehabilitation)	Find and fix work to identify and address cause of overflow in the vicinity of 5815 Wooded Acres Drive, 6512 Shaftsbury Drive, and 6525 Tewksbury Drive.	FY 04/05	FY 07/08	Estimated total quantities: 10 new MHs installed		COMPLETE
3-4	Upper McKamey and Third Creek Road Replacement	Replace approximately 3,141 lf of existing sewer with 36-in sewer and approximately 1,500 lf with 15-in sewer.	FY 05/06	FY 07/08	Estimated total quantities: 7,792 lf gravity sewer replaced; 41 new MHs installed; 5 private laterals reinstated		COMPLETE
3-5	Third Creek Storage Facility	Design and construction of a storage facility in Third Creek Basin (approximately 4.5 MG storage on Land Parcel # 093GB006)	FY 05/06	FY 07/08	4 MG		COMPLETE
3-6	Interstate 40 and Middlebrook Pike Trunk Replacement Project	Replace approximately 400 lf of existing sewer with 15-in sewer, 750 lf with 24-in sewer, 2,000 lf with 30-in sewer, and 7,000 lf with 36-in sewer.	FY 08/09	FY 09/10			
3-7	Neyland Drive Trunk Replacement Project	Replace approximately 5,900 lf of existing sewer with 48-in sewer	FY 08/09	FY 10/11			
3-8	Third Creek Bike Trail Pipe Replacement Project	Replace approximately 1,200 lf of existing sewer with 24-in sewer.	FY 08/09	FY 10/11			



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**Fourth Creek Projects**

4-1	Chukar Road Rehabilitation (Sub-basin 32A3) Project	Find and fix work to identify and address cause of overflow in the vicinity of 410, 2513, 2621, 2624, 2644, and 2645 Chukar Road.	FY 07/08	FY 08/09			Preliminary engineering to begin Summer 2008
4-2	Gleason Drive Collector Rehabilitation Project	Find and fix work to identify and address cause of overflow in the vicinity of 8013 and 8044 Gleason Drive.	FY 07/08	FY 08/09			
4-3	Middlebrook Pike Rehabilitation (Sub-basin 27C3) Project	Find and fix work to identify and address cause of overflow in the vicinity of 7350, 7351, and 7424 Middlebrook Pike.	FY 07/08	FY 08/09			
4-4	Northshore Drive Trunk Replacement Project	Replace approximately 3,600 lf of existing sewer with 36-in sewer (IAP 2).	FY 07/08	FY 08/09			
4-6	Shadyland Drive Rehabilitation (Sub-basin 36A2) Project	Find and fix work to identify and address cause of overflow in the vicinity of 7000 Rotherwood Drive and 7112 and 7712 Shadyland Drive.	FY 07/08	FY 08/09			



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**South Knoxville / Knob Creek Projects**

Project ID	Project Name	Project Description <sup>1</sup>	Start Date	End Date	Units Installed/Rehab	Revised Completion Date	Status
S-1	Ginnbrook Pump Station Rehabilitation	Find and fix work to identify and address cause of overflow in the vicinity of Ginnbrook Pump Station	FY 06/07	FY 06/07	Ginnebrook Pumpstation expanded to 620 gpm. Power Park Pumpstation replaced existing pumps and upgrade forcemain 5400 lf. Ginnebrook forcemain replaced 9800 10" forcemain. Eliminate pumping flow from Ginnebrook & Power Park through Woodson Drive Pumpstation. Eight point repairs upstream of Ginnebrook totaling 73 lf and 541 lf of gravity sewer replacement to address structural & I/I issues.	FY 08/09	Find work is complete. List of needed point repairs has been developed and will be scheduled for 07/08. Request to extend completion date to FY 08/09. Project concept has been modified to include upgrades to Ginnbrook and Power Park pump stations and force mains. These improvements have been designed and will be constructed by 08/09. Construction is underway.
S-2	Goose Creek Trunk Sewer Replacement and Siphon Upgrade	Replace approximately 725 lf of existing 8-in sewer with 18-in sewer, replace approximately 418 lf of existing 12-in sewer with 18-in sewer, replace approximately 841 lf of existing 21-in sewer with 36-in, replace approximately 160 lf of existing 24-in sewer with 36-in sewer.	FY 06/07	FY 08/09	Phase I Scope (Blount Avenue) - 1824 lf gravity sewer replaced, 452 lf rehabbed, 12 MHs replaced. Phase II Scope (Blount Avenue) - 2591 lf of gravity sewer replaced, 2369 rehabilitated, 37 MHs replaced.		Phase I (from siphon to MH 11) is complete. Phase II is in construction. Siphon preliminary engineering study is underway.
S-5	South Knoxville/Knob Creek Storage Facility	Design and construction of an approximately 1.7 MG storage facility	FY 05/06	FY 07/08		Project was removed from Phase 1 CAP/ER and replaced with revised S-5 below	ON HOLD; Value engineering indicates additional rehab, along with pipeline improvements in lieu of storage tank construction may be cost effective solution to effectively reducing I/I.
S-5	Revised S-5 Neubert Springs Collector and West Ford Valley Trunk Rehabilitation	In lieu of 1.75 MG storage facility, find and fix rehabilitation will be performed in Sub-basin 41C1, 41C2, and 41A2 on approximately 40,000 lf of sewer lines to significantly reduce peak flows to Neubert Springs pump station. Scope will also include rehabilitation of approximately 10,000 lf of 15" - 18" trunk sewer along West Ford Valley Road.		FY 08/09	West Ford Valley scope - 1170 lf gravity sewer replaced; 9670 gravity sewer rehabilitated, 25 MHs. SB 41 Rehab	FY 08/09	West Ford Valley Trunk is complete. Rehabilitation of SB 41C1, 41C2, and 41A2 is underway.
S-6	Sevier Avenue and Jones Street Collector	Rehabilitate approximately 3,100 lf of existing sewer and reroute approximately 352 lf of 8-in sewer	FY 08/09	FY 09/10	352 lf gravity sewer replaced; two new MHs installed		IN DESIGN



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**South Knoxville / Knob Creek Projects, cont.**

S-10	Mini-basin 41A6 Rehabilitation	Rehabilitate approximately 21,000 lf on sewer in Sub-basin 41A6	FY 05/06	FY 08/09			Project is in construction.
S-11	Ford Valley Pump Station Upgrade Project	Upgrade pump station	FY 08/09	FY 09/10			
S-28	Blount Avenue Trunk Sewer Project Phase II	Replace approximately 1,464 lf of 30-in sewer with 36-in sewer	FY 06/07	FY 08/09			Project combined with project S-2.

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**Loves Creek and Eastbridge Projects**

Project ID	Project Name	Project Description <sup>1</sup>	Start Date	End Date	Units Installed/Rehab	Revised Completion Date	Status
L-9	Shelbourne Road Rehabilitation	Find and fix work to identify and address cause of overflow in the vicinity of 3001 Shelbourne Road.	FY 11/12	FY 12/13	26,900 If gravity sewer replaced; 30 new MHs installed		COMPLETE



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**Williams Creek Projects**

Project ID	Project Name	Project Description <sup>1</sup>	Start Date	End Date	Units Installed/Rehab	Revised Completion Date	Status
W-1	Sub-basin 19A2 Rehabilitation	Rehabilitation to reduce R to 2% in Sub-basin 19A2.	FY 09/10	FY 11/12	Approx. 47000 lf gravity sewer rehabilitated; 25000 lf gravity sewer replaced; 166 MHs replaced, 138 MHs rehabbed; 1172 laterals reinstated		Construction will completed in FY 08/09 (Feb 09).

<sup>1</sup>Approximate 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.