COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF HARRISON COUNTY SANITATION DISTRICT FOR APPROVAL OF TRANSFER OF THE CEDARBROOK SUBDIVISION WASTEWATER TREATMENT PLANT TO HARRISON COUNTY SANITATION DISTRICT

CASE NO. 2016-00164

ORDER

Harrison County Sanitation District ("HCSD") has applied for approval of transfer to HCSD of the Cedarbrook Subdivision Wastewater Treatment Plant and Collection System and Appurtenances ("Cedarbrook") serving the Cedarbrook Subdivision in Harrison County. Having reviewed the application and being otherwise advised, the Commission finds that:

 HCSD is a sanitation district created on July 22, 2014, pursuant to KRS Chapter 67, by ordinance #284 of the Harrison County Fiscal Court.¹

 Cedarbrook's wastewater system serves approximately 52 customers in Harrison County, Kentucky.²

¹ Amended Application for Approval of Transfer ("Amended Application") (filed May 13, 2016), Exhibit C.

3. R.A. Williams Construction Co., Inc. was granted approval to abandon Cedarbrook by Commission Order entered March 13, 2015, in Commission Case No. 2014-00091.³

 On April 21, 2015, the Commission initiated an action in the Franklin Circuit Court for the attachment of assets and for the appointment of a receiver to operate Cedarbrook.

 On May 7, 2015, the Franklin Circuit Court entered an Agreed Order appointing HCSD receiver to operate Cedarbrook.

6. HCSD has operated Cedarbrook as receiver since May 1, 2015.⁴

7. HCSD does not operate any facility other than Cedarbrook at this time.⁵

8. For the partial year ending from its appointment as receiver on May 1, 2015, to December 28, 2015, HCSD had total operating revenues of \$31,440.21.⁶

9. For the partial year ending from its appointment as receiver on May 1, 2015, to December 28, 2015, HCSD was the recipient of a Community Development Block Grant in the amount of \$1,000,000 and a loan through the Kentucky Infrastructure Authority ("KIA") in the amount of \$1,567,885.⁷ Per publicly-available information from the KIA, the grant and loan are stated to be used to, among other things, replace the existing collection and treatment system at the Cedarbrook Subdivision; replace

7 Id.

³ Case No. 2014-00091, *Cedarbrook Wastewater Treatment Plant Request to Cease Operations* (Ky. PSC Mar. 13, 2015).

⁴ Amended Application at 2.

⁵ Id.

⁶ Id. at 3.

approximately 3,100 linear feet of gravity sewer and 500 linear feet of 4 inch polyvinyl chloride force main; and install a new 25,000-gallon-per-day package treatment plant to serve the existing subdivision customers.⁸

10. For the partial year ending from its appointment as receiver on May 1, 2015, to December 28, 2015, HCSD had total operating expenses of \$24,155.72.⁹

11. As of the date of the Amended Application, HCSD had no employees. HCSD had contracted with Professional Wastewater Services, LLC to provide a certified waste water treatment plant operator to operate Cedarbrook by agreement dated May 1, 2015. Said contract is for one year and is renewable for an additional 12 months.¹⁰

12. HCSD stated that it intends to extend the contract with Professional Wastewater Services, LLC to operate Cedarbrook through May 1, 2017.¹¹

13. Under the terms of the Agreed Order entered on May 7, 2015, Franklin Circuit Court, by and through its trustee, HCSD, will transfer to HCSD the Cedarbrook assets, described fully therein and to include the treatment plant, collection system, and appurtenances.¹²

14. The previous owner of Cedarbrook, R. A. Williams Construction Co., Inc., has converted all real estate and collection system to HCSD and conveyed all title and

- ¹⁰ Id.
- ¹¹ Id.
- ¹² Id.

⁸ Kentucky Infrastructure Authority, Clean Water Project Profile for Harrison County Sanitation District, Project No. SX21097015 available at <u>https://wris.ky.gov/Portal/CwPrjData/SX21097015</u>, and attached as the Appendix to this Order.

⁹ Amended Application at 2.

interest in the real estate by deeds dated June 3, 2015, and June 4, 2015, related to Cedarbrook to HCSD.¹³

15. HCSD has requested the proposed transfer be effective December 28, 2015, *nunc pro tunc*, and that HCSD not be required to submit any additional reports or accounts to the Commission for the time prior to the effective transfer date.¹⁴

16. HCSD has further requested the Commission to authorize and permit the Harrison County Water Association ("HCWA") to recognize disconnect requests from HCSD for non-payment and make said water service disconnects without Commission approval.¹⁵

Based upon these findings, the Commission makes the following conclusions of law:

HCSD is a "corporation" and a "person" for purposes of KRS Chapter
 278.¹⁶

2. KRS 278.020(6) provides that "[n]o person shall acquire or transfer ownership of, or control, or the right to control, any utility under the jurisdiction of the commission . . . without prior approval by the commission." As HCSD is a person and is acquiring ownership of Cedarbrook, this statute is applicable to and requires prior Commission approval of the proposed acquisition.

¹⁴ Id. at 5.

¹⁵ *Id*.

¹⁶ KRS 278.015.

¹³ Id. at 3-4.

3. HCSD has the legal authority to provide wastewater service to the Cedarbrook Subdivision.¹⁷

4. The transfer of the Cedarbrook assets to HCSD from the Franklin Circuit Court, by and through its trustee, HCSD (acting as receiver), is a transaction subject to the jurisdiction of the Commission and requires Commission approval.¹⁸

5. In view of its financial assets and its status as a sanitation district, HCSD has sufficient financial integrity to ensure the continuity of service.

6. HCSD has the financial, technical, and managerial abilities to provide reasonable service to those persons located in the Cedarbrook Subdivision.

7. The transfer of ownership and control of Cedarbrook to HCSD is consistent with regional planning efforts. KRS 224A.300(1) provides that the regionalization and consolidation of water and wastewater systems should be encouraged.

8. The transfer is in accordance with the law, for a proper purpose, and is consistent with the public interest.

 Upon HCSD's acquisition of the sewage treatment and collection facilities presently serving the Cedarbrook Subdivision, the facility and its customers will no longer be subject to Commission jurisdiction.

10. The Commission has no authority to grant a transfer *nunc pro tunc* in this instance. The rationale of *nunc pro tunc* Orders is to correct obvious clerical errors in

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¹⁷ Amended Application at 2. HCSD states they have legal authority to acquire land and existing facilities pursuant to KRS 76.070 and KRS 278.010(3)(f).

¹⁸ KRS 278.020(5).

Orders issued by an administrative agency.¹⁹ There has been no prior Order issued by the Commission granting transfer of the Cedarbrook assets; therefore, a *nunc pro tunc* Order is not available as a vehicle for HCSD to request a retroactive transfer date.

11. 807 KAR 5:006, Sections 4(1)(a) and (b), requires each utility to file its annual operating revenue report before March 31 of each year, with no permission for extension requests. In this instance, in lieu of filing an annual report with the Commission, the Commission will instead require HCSD to file a final accounting of its revenues and expenses, for the period it acted as receiver of Cedarbrook, with the Franklin Circuit Court. The Commission finds that said final accounting to the Court will satisfy the requirements under Commission regulations.

12. KRS 220.510(1) addresses, among other things, the ability of and method for a sanitation district to direct the discontinuance of water service by the water provider for nonpayment of services rendered by the sanitation district. That statute appears to authorize HCSD to enter into an agreement with HCWA regarding HCSD's enforcement of its rights pursuant to KRS 220.510(1).²⁰ The Commission recognizes that, in an analogous situation, such an agreement between a municipal utility and a public water utility is authorized under KRS Chapter 96.²¹ While HCSD's authority and HCWA's duties pursuant to KRS 220.510(1) regarding disconnect requests by HCSD appear to be matters outside the scope of our jurisdiction, we note that KRS 220.510(1),

¹⁹ Mike Little Gas Co., Inc. v. Public Service Commission, 574 S.W.2d 926.

²⁰ Amended Application at 3. (HCSD "shall have the powers stated in KRS Chapter 220 including the power to sue and be sued, contract and be contracted with . . . and to perform all acts necessary and proper for carrying out the purposes for which the District is created.").

²¹ See Case No. 95-238, An Agreement Between Lexington-Fayette Urban Government and Kentucky-American Water Company for the Billing, Accounting and Collection of Sanitary Sewer Charges (Ky. PSC June 30, 1995).

in pertinent part, states that payment of "a reasonable charge for turning off and on the water service" is a requirement for the resumption of water service. Thus, any agreement between HCSD and HWCA establishing a charge upon HWCA customers for turning off and on water service must be in writing and be filed within ten days of its execution by HCWA for Commission review. No evidence of any existing agreement between HCSD and HCWA has been presented. We also find that HCWA should likewise be placed on notice that HCWA should file any corresponding revisions to HCWA's tariff at the time the agreement is filed.

IT IS THEREFORE ORDERED that:

 The proposed transfer of ownership and control of Cedarbrook's facilities that serve the Cedarbrook Subdivision is approved.

2. The Commission shall petition the Franklin Circuit Court, Division II, in Civil Action No. 15-CI-00417, for an order confirming the transfer of the Cedarbrook facilities approved herein, terminating the existing receivership under which HCSD has had control of those facilities, and requiring a final accounting to the Court of the revenues and expenses of HCSD while acting as receiver.

3. Within ten days of the Franklin Circuit Court confirming the transfer of the Cedarbrook facilities from HCSD as receiver to HCSD as owner, HCSD shall notify the Commission in writing that the proposed transfer has occurred.

4. Any documents filed pursuant to ordering paragraph 3 shall reference this case number and shall be retained in Cedarbrook's general correspondence file.

 The Commission's Executive Director shall forward a copy of this Order to HCWA.

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Any written agreement between HCSD and HCWA regarding 6. discontinuance of water service pursuant to KRS 220.510(1), and any necessary corresponding revisions to HCWA's tariff, shall be filed with the Commission within ten days of its execution using the Commission's electronic Tariff Filing System.

By the Commission 1X ENTERED JUN 2 9 2015 KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

Carron D. Drunnell Acting Executive Director

Case No. 2016-00164

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2016-00164 DATED JUN 2 9 2016



•	Harrison County Sanitation Distric HCSD - Northend Sewer Extension	t n and Cedarbrook Replacement Proje	ect
Project Number:	SX21097015 View Map	Submitted By:	BGADD
Funding Status:	Fully Funded	Primary County:	Harrison
Project Status:	Approved	Planning Unit:	Unit 2
Project Schedule:	0-2 Years	Multi-County:	No
E-Clearinghouse SAI:	KY201504280414	ECH Status:	Endorse With Condition
Applicant Entity Type:	Sewer and Sanitation District	ADD WMC Contact:	Karyn Leverenz
Date Approved (AWMPC):	09-12-2012		

Project Description:

This project has two components. The Northend component will eliminate two existing package treatment plants (PTP) and will provide sewer service to the Northside Elementary School and the Northside Mobile Home Park. A new collection system consisting of 2,800 LF of 8-inch gravity sewer will also be constructed to replace the existing system at the Northside Mobile Home Park. All flows will be pumped south along US 27 to Cynthiana for treatment through approximately 16,500 linear feet of 3 and 4-inch force main.

The Cedarbrook component will consist of replacing the existing collection and treatment system at the Cedarbrook Subdivision located along US 27 south of Cynthiana near the Harrison/Bourbon border. Approximately 3,100 linear feet of gravity sewer and 500 LF of 4" PVC force main will be replaced and a new 25,000 gallon per day PTP will be installed to serve the existing subdivision customers. Funding for both components of the project will be sought from SRF and the CDBG Programs.

This project will also include three new 60 gpm lift stations.

Need for Project:

Briefly describe how this project promotes public health or achieves and/or maintains compliance with the Clean Water Act or Safe Drinking Water Act:

This project will eliminate two existing PTP's that currently serve the Northside Elementary School and the Northside Mobile Home Park. The Northside Mobile Home Park PTP is in constant violation of its KPDES Permit. The Cedarbrook Subdivision collection system has severe Infiltration/Inflow problems which causes the existing PTP to be come overloaded during rain events. This PTP is also at the end of its design life and needs to be replaced to maintain compliance with the KPDES Permit.

Project Alternatives:

Alternate A:

Replace portion of force main with gravity sewer to make it easier for businesses located along main road.

Alternate B:

Replace the two existing PTP's with new PTP facilities. This would not achieve the long term KDOW goal of eliminating all PTP's.

Legal Applicant:

Entity Type:	Sewer and Sanitation District		PSC Group ID:
Entity Name:	Harrison County Sanitation Dist	rict	
Web URL:			
Office EMail:	northfield@bellsouth.net		
Office Phone:	859-221-2432	Toll Free:	Fax: 859-234-6647
Mail Address Line 1:	111 S Main St		Phys Address Line 1:
Mail Address Line 2:			Phys Address Line 2:
Mail City, State Zip:	Cynthiana, KY 41031		Phys City, State Zip:
Contact:	Scott McCauley		Auth Official: Scott McCauley
Contact Title:	Chairman		Auth Official Title: Chairman
Contact EMail:	northfield@bellsouth.net		Auth Official EMail: northfield@bellsouth.net
Contact Phone:	859-221-2432		Auth Official Phone: 859-234-7136
Contact Cell:			Auth Official Cell:
Data Source:	Kentucky Infrastructure Authorit	ty	Date Last Modified: 04.15.2015



Project Administrato	or (PA) Information		
Name:	Karyn Leverenz		
Title:	Water Management Planner		
Organization:	Bluegrass Area Development District		
Address Line 1:	699 Perimeter Dr		
Address Line 2:			
City:	Lexington State: KY Zip: 40517		
Phone:	859-269-8021 Fax: 859-269-7917		
Applicant Contact (A	AC) Information		
	Scott McCauley		
Title:	Chairperson		
Organization:	Harrison County Sanitation District		
Address Line 1:	111 S Main St		
Address Line 2:			
City:	Cynthiana State: KY Zip: 41031		
Phone:	859-221-2432 Fax:		
Project Engineer (PE) Information:		
	ires a licensed Professional Engineer.		
License No: PE 157			
PE Name: Phillip	Benton Hanson	Engineering F	irm Information:
Phone: 859-22	3-3755 Fax:	Permit No: 1	157
E-Mail: benton	.hanson@hdrinc.com	Firm Name: 0	Quest Engineers, Inc.
Firm Name: Quest	Engineers, Inc.	Phone: 4	402-399-1000 Fax: 402-399-1339
Addr Line 1: Quest	Engineers	Web URL: h	http://www.hdrinc.com/
Addr Line 2: 881 Co	rporate Dr., Ste. 100	EMail: t	bonnie.kudron@hdrinc.com

Addr Line 1: 8404 Indian Hills Drive

City: Omaha

Status: Current Issued: 03-29-1993 State: NE

Disciplinary Actions: NO

Zip: 68114

Expires: 12-31-2016

Addr Line 2:

Addr Line 3:

City: Lexington

Status: Current

Issued: 02-06-1989

State: KY

Disciplinary Actions: NO

Zip: 40503

Expires: 06-30-2017



Estimated Budget

Project Cost Classification:		Construction Cost Categories:	
Administrative Exp.:	\$ 60,000	WWTP Secondary Portion:	
Legal Exp.:	\$ 10,000	WWTP Advanced Portion:	\$ 332,000
Land, Appraisals, Easements:	\$ 10,000	Inflow & Infiltration Correction:	
Relocation Exp. & Payments:		Major Sewer Rehabilitation:	
Planning:	\$ 10,000	Collector Sewers:	\$ 935,400
Engineering Fees - Design:	\$ 123,900	Interceptor Sewers, including Pump Stations:	\$ 750,000
Engineering Fees - Construction:	\$ 30,995	Combined Sewer Overflow Correction:	
Engineering Fees - Inspection:	\$ 92,850	NPS Urban:	
Engineering Fees - Other:	\$ 10,000	Non-Categorized Cost:	
Construction:	\$ 2,017,400	Total Construction:	\$ 2,017,400
Equipment:		Total Sustainable Infrastructure Costs:	
Miscellaneous:			are included within
Contingencies:	\$ 202,740	Note: Total Sustainability Infrastructure Costs construction and other costs reported in this s breakout is provided for SRF review purposes	ection. This
Total Project Cost:	\$ 2,567,885	breakburts provided for SKE Teview purposes	

Project Funding Sources:

Total Project Cost: **\$2,567,885** Total Committed Funding: **\$2,567,885** Funding Gap: **\$0 (Fully Funded)**

This project will be requesting SRF funding for fiscal year 2017.

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
KIA SRF Fund A Loan (CW)	A15-053	2015	\$968,285	Expired	9/5/2014
CDBG	15-043	2015	\$1,000,000	Committed	11/24/2015
KIA SRF Fund A Loan (CW)	A16-016	2016	\$1,567,885	Committed	9/3/2015
CDBG			\$1,000,000	Anticipated	
Total Committed			\$2,567,885		1

Funding Source Notes:

Estimated Project Schedule:

Facility Plan Approval Date:	10-01-2002
Est. Environmental Review Submittal Date:	
Estimated Bid Date:	10-15-2015
Estimated Construction Start Date:	12-15-2015
Estimated Construction Completion Date:	06-15-2017



Clean Water Project Profile

SX21097015 - Harrison County Sanitation District HCSD - Northend Sewer Extension and Cedarbrook Replacement Project

The following systems are beneficiaries of this project:

KY0105856 Cynthiana Sewer Department

KYPENDIN Harrison County Sanitation District G0015

Note: Check mark indicates primary system for this project.

Project Ranking by AWMPC: Regional Ranking(s):

Total Points:

Planning Unit Ranking:

Plans and specs have been sent to DOW.

Plans and specs have been reviewed by DOW.

- Plans and specs have been sent to PSC.

Congressional 6

) Plans and specs have been reviewed by PSC.

Economic, Demographic and Geographic Impacts

Economic Impacts Jobs Created Jobs Retained:

*Demographic Impacts (GIS Census Overlay)				
Servceable Demographic	Project Area	Included Systems	Included Utilities	
Population:	402			
Households:	150			
MHI:	\$35,897		*	
MHI MOE	\$10,243		•	
MOE as Pct:	29%	1		
**NSRL:				

Population and household counts are based on 2010 census block values from the SF1 (100%) dataset.

MHI Source is from the American Community Survey 2010-2014 5Yr Estimates (Table B19013) *(for the primary system operated by the above listed beneficiary utilities).

MHI MOE = Med HH Income Margin of Error.

- ** NSRL (Non-Standard Rate Levels):
- 0 = Income above Kentucky MHI (KMHI).
- 1 = Income between 80% KMHI and KMHI.
- 2 = Income less than or equal to 80% KMHI.
- KMHI = \$43,342

- 80% KHMI = \$34,674

New Customers New Residential Customers: New Commercial Customers:

New Institutional Customers: New Industrial Customers:

New or Improved	Service	
Service Demographic	Survey Based	Census Overlay*
To Unserved Households:		100
To Underserved Households:	114	50
To Total Households:	114	150
** Cost Per Household:	\$22	.525

GIS Census block overlay figures are estimates of population and households potentially served by systems and projects based on a proximity analysis of relevant service lines to census block boundaries.

Counties Harrison **Legislative Districts District Name** Legislator House 078 Tom McKee Senate 27 Stephen West Congressional 4 **Thomas Massie**

Geographic Impacts For Project Area

	raphic Impacts luded System(s)
Counties	
Harrison	
Legis	lative Districts
District Name	Legislator
House 078	Tom McKee
Senate 27	Stephen West
Congressional 4	Thomas Massie
Congressional 6	Andy Barr

	3, 4
HU	C 10 Watersheds
HUC Code	Watershed Name
0510010204	Raven Creek-South Fork Licking River

Andy Barr **Groundwater Sensitivity Zones**

			SWAPP Areas		
PWSID	WWD	Zone		System Name	
KY0490096	0256	3	Cynthiana Municipal	Water Works	
		Potential	Impaired Watershed	Designations	
303d		305Ь	Priority Watershed	Special Use Waters	Exceptional Use Waters
Yes		Yes	Yes	No	No

Note: Impaired Watershed Designations only indicate that mapped components for this project lie within a HUC-14 watershed boundary containing impaired waterbody features. An affirmative indication for any designation will require a detailed analysis of the project to determine if any of the proposed project components will actually have a positive impact on the relevant impaired features.



Clean Water Project Profile SX21097015 - Harrison County Sanitation District HCSD - Northend Sewer Extension and Cedarbrook Replacement Project

** Cost per household is based on surveyed household counts, not GIS overlay values.



CW Specific Impacts:

Wastewater Volumes (MGD):

For this project:	
For included system(s):	6.600
Reduced by this project:	

Other CW Specific Impacts:

- This project provides regionalization and/or consolidation of wastewater treatment systems.
- This project includes an on-site mound, and/or decentralized WW treatment system.
- This project is necessary to achieve full or partial compliance with a court order, agreed order, or a judicial or administrative concent decree.
- Primary system has not received any CWA Notices of Violation within the previous state fiscal year-July through June, i.e. July 2014 June 2015).
- This project is consistent with the approved facility plan.
- This project will have a positive impact on drinking water sources within a 5 mile radius.

Planning Needs:

- Combined Sewer Overflow (CSO) Correction.
- Sanitary Sewer Overflow (SSO) Correction.
- Replacement or Rehabilitation of Aging Infrastructure.
- New Treatment Plant.
- New Collector Sewers and Appurtenances.
- Decentralized Wastewater Treatment Systems.
- Upgrade to Advanced Treatment.
- Rehab/Upgrade/Expansion of Existing Treatment Plant.
- New Interceptor Sewers and Appurtenances.
- Storm Water Control.
- Non-Point Source (NPS) Pollution Control.
- Recycled Water Distribution.
- Planning.
- Other (specify):

Project Inventory (Mapped Features):

			Mapped Point Features	5			
DOW Permit ID	Count	FeatureType	Purpose	Status	Existing Capacity	Proposed Capacity	Units
KYPENDIN G0015	3	LIFTSTATION		NEW		60.00	GPM
KYPENDIN G0015	2	PACKAGE TREATMENT PLANT		ELIMINATE	0.01		MGD
KYPENDIN G0015	1	PACKAGE TREATMENT PLANT		REHAB	0.03		MGD



Clean Water Project Profile

SX21097015 - Harrison County Sanitation District HCSD - Northend Sewer Extension and Cedarbrook Replacement Project

			Mapped Line Features			
DOW Permit ID	Line Type	Purpose	Activity	Size (in.)	Material	Length (LF)
KYPENDIN G0015	FORCE	COLLECTOR	EXTENSION	3.00	PVC	9,016
KYPENDIN G0015	FORCE	COLLECTOR	EXTENSION	4.00	PVC	7,002
KYPENDIN G0015	FORCE	COLLECTOR	REHAB - REPLACE UNDERSIZED LINES	8.00	PVC	500
KYPENDIN G0015	GRAVITY	COLLECTOR	REHAB - REPLACE UNDERSIZED LINES	8.00	PVC	3,565
KYPENDIN G0015	GRAVITY	INTERCEPTOR	REHAB - REPLACE UNDERSIZED LINES	8.00	PVC	2,366
					Total Length	22,449

Administrative	Components:
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D P	lanning	\square	Design	\checkmark	Construction		Management
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Wastewater Treatment Plants Eliminated:

This project includes the elimination of wastewater treatment plant(s).

Sanitary Sewer Components:

- This project includes a new wastewater treatment plant.
 Proposed design capacity (MGD): 0.000
 - This project includes an expansion of an existing wastewater treatment plant.
 - Current design capacity (MGD): 0.000
 - Current treatment volume (MGD): 0.000
 - Proposed design capacity (MGD): 0.000
- This project includes rehabilitation of an existing wastewater treatment plant.
- This project includes upgrades to an existing wastewater treatment plant.
- This project includes rehabilitation or replacement of aging infractructure.
 - Total length of replaced infrastructure (LF): 6,431
- This project includes new collector sewers.
 - Total length of replaced infrastructure (LF): 16,018
- This project includes new interceptor sewers.

Total length of new interceptor sewer (LF): 0

This project includes elimination of existing sewer system components.

Number of failing septic systems eliminated:

Number of non-failing septic systems eliminated:



Sustainable Infrastructure - Green Infrastructure:

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site and neighborhood-specific practices, such as:

	infrastructure consists of site and neighborhood-specific practices, such as:	
	Component	Cost
	Implementation of green streets.	
	Wet Weather management systems for parking areas.	
	Implementation of comprehensive urban forestry programs.	
	Stormwater harvesting and reuse.	
	Downspout disconnection.	
	Comprehensive retrofit programs designed to keep wet weather discharges out of sewer systems.	
	Establishment or restoration of riparian buffers, floodplains, wetlands or other natural features.	
	Management of wetlands.	
	Purchase of land or easements on land that has a direct benefit to water quality.	
	Total Green Infrastructure Cost:	\$0
	* Indicates a business case may be required for this item.	
	There are no Green Infrastructure components specified for this project.	
Su	stainable Infrastructure - Water Efficiency:	
	The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency en conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future include:	ncompasses re. Examples
	Component	Cost
	Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals).	
	Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement).	
	Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	
	Retrofitting/Adding AMR capabilities or leak equipment to existing meters.	
	Developing water audit and conservation plans, which are reasonably expected to result in a capital project.	
	Recycling and water reuse projects that replace potable sources with non-potable sources (Gray water, condensate, and wastewater effluent reuse systems, extra treatment or distribution costs associated with water reuse).	
	Retrofit or replacement of existing landscape irrigation/agricultural systems to more efficient landscape/agricultural irrigation systems (rain and moisture sensing equipment).	
	Water meter replacement with traditional water meters.*	
	Projects that result from a water audit or water conservation plan.*	
	Storage tank replacement/rehabilitation to reduce water loss.*	
	New water efficient landscape/agricultural irrigation system, where there currently is not one.*	

Total Water Efficiency Cost: \$0
 * Indicates a business case may be required for this item
 There are no Water Efficiency components specified for this project.



Sustainable Infrastructure - Energy Efficiency:

Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy. Examples include:

Component	Cost
Renewable energy projects such as wind, solar, geothermal, and micro-hydroelectric, and biogas combined heat and power systems that provide power to a POTW.	
POTW-owned renewable energy projects.	
Collection system infiltration/inflow (I/I) detection equipment.	
POTW energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas.	
Projects that achieve a reduction in energy consumption (pumps, motors).*	
Projects that cost effectively eliminate pumps or pumping stations.*	
I/I correction projects that save energy from pumping and reduced treatment costs.*	
I/I correction where excessive groundwater infiltration is contaminating the influent requiring otherwise unnecessary treatment processes.*	
Replacing old motors with premium energy efficiency motors.*	
Upgrade of POTW lighting to energy efficient sources.*	
SCADA systems where substantial energy savings can be demonstrated.*	
Variable Frequency Drive (VFD) controllers where substantial energy savings can be demonstrated.*	
Total Energy Efficiency Cost:	\$0
* Indicates a business case may be required for this item.	
There are no Energy Efficiency components specified for this project.	



HCSD - Northend Sewer Extension and Cedarbrook Replacement Project

Sustainable Infrastructure - Environmentally Innovative Infrastructure:

Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way. Examples include:

Component	Cost
Total integrated water resources management planning likely to result in a capital project.	
Utility sustainability plan consistent with EPA's sustainability policy.	
Greenhouse gas inventory or mitigation plan and submission of a GHG inventory to a registry as long as it is being done for an SRF eligible facility.	
Planning activities by a POTW to prepare for adaptation to the long-term effects of climate change and/or extreme weather.	
Construction of US Building Council LEED certified buildings, or renovation of an existing building on POTW facilities.	
Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems.	
Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal.*	
Projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are CWSRF eligible.	
Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaption study.*	
POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae.*	
Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment.*	
Treatment technologies that significantly reduce the volume of residuals, generation of residuals, or lower the amount of chemicals in the residuals.*	
Educational activities and demonstration projects for water or energy efficiency.*	
Projects that achieve the goals/objectives of utility asset management plans.*	
Sub-surface land application of effluent and other means for groundwater recharge, such as spray irrigation and overland flow.*	
Total Environmentally Innovative Cost:	\$0
* Indicates a business case may be required for this item.	
There are no Environmentally Innovative components specified for this project.	

Project Status: Approved

Date Approved: 09-12-2012 Date Revised:

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