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October 16, 2023

Ms. Linda C. Bridwell, P.E. Executive Director Kentucky Public Service Commission P.O. Box 615 Frankfort, KY 40602-0615

#### Re: Case No. 2021-00063 East Logan Water District

Dear Ms. Bridwell:

Enclosed for filing in the above-referenced matter is East Logan Water District's ("the District") Water Loss Report for the Third Quarter of Calendar Year 2023 (July 1 – September 30).

Regarding its efforts to fund and construct the projects identified in its 2021 Capital Improvement Plan, the District provides the following:

**System-wide Meter and Tubing Replacement.** The District has completed work on this project, which involved the replacement of all meters, setters, boxes, and service tubing within the SCADA zone area near the intersection of KY Highway 79 and the Russellville Bypass. Work on the project began June 12, 2023, and was completed on or about September 25, 2023.

<u>Billing Computers and Software Upgrade.</u> The upgrade of the District's billing computers and software remains on schedule and is expected to be completed by December 2023.

<u>System-Wide SCADA Improvements Project.</u> The District has replaced all existing master meters and has connected each meter to its SCADA system. It is currently installing a master meter for its Dennis Zone. Upon installation, this master meter will be connected to the District's SCADA system. The District has used internal funds to finance these improvements.

<u>New Service Extension Project.</u> In its last report, the District mistakenly reported that this project lacked funding. This project, which involves the construction of approximately 40,000 linear feet of water main to serve unserved areas of Logan County, is identified in the

Ms. Linda Bridwell, P.E. October 16, 2023 Page 2

Water Resource Information System ("WRIS") as Project No. WX21141072 and was awarded a Cleaner Water Grant of \$625,000 in 2022. The District, however, has now determined that higher priority should be given to a revised version of the Main Line Upgrade and Replacement Project and has requested that the Kentucky Infrastructure Authority ("KIA") permit the use of the Cleaner Water Grant funds for that project.

<u>Main Line Upgrade and Replacement Project.</u> In its last report, the District incorrectly described this project and reported that KIA had awarded a \$625,000 Cleaner Water Grant to finance the project. In its present form, this project involves the replacement of 83,000 linear feet of water main at an estimated cost of \$2.8 million and is listed as WRIS Project No. WX21141073. Its current project profile is enclosed. The District is revising the project to address only the replacement of the District's Cemetery Tank Water Line, a six-inch water main that has experienced several major leaks and contributes significantly to the District's water loss. Depending upon the final construction option selected, the revised project will involve the construction of between 11,000 linear feet and 19,500 linear feet of 10-inch water main and and is estimated to cost between \$935,000 and \$1,620,000. A preliminary budget for the revised project is enclosed. The District has discussed with KIA reallocating the Clean Water Grant of \$625,000 for the New Service Extension Project to this project. The District is actively seeking additional sources of funding to cover the remainder of the estimated project cost.

Sincerely,

Stoll Keenon Ogden PLLC Whether

Gerald E. Wuetcher

Enclosures

- 1. 3d Quarter 2023 Water Loss Report
- 2. WRIS Project No. WX21141073 Profile
- 3. Preliminary Project Budget for Cemetery Tank Line Upgrade

## PUBLIC SERVICE COMMISSION Monthly Water Loss Report

Water Utility:		Ea	st Logan V	Water District	PWSID:	KY0710951
For the M	For the Month of:		ly	l	Year:	2023
LINE #		I	TEM		GALLO	ONS (Omit 000's)
1	WATER P	RODUCED A	AND PURC	HASED		
2	Water Proc	duced				0
3	Water Pure	chased				28,168
4			TOTAL	PRODUCED AND PUF	RCHASED	28,168
5						
6	WATER SA	ALES				
7	Residentia					20,505
8	Commercia	al				0
9	Industrial	<b>O</b> ( );				0
10	Bulk Loadii	ng Stations				0
11	Wholesale					0
12	Public Autr			0		0
13	Other Sale	s (explain)				20 505
14					R SALES	20,505
16	OTHER W					
10	Litility and/	or Water Tre	, atment Pla	nt		0
18	Wastewate	er Plant				0
19	System Flu	ishina				25
20	Fire Depar	tment				0
21	Other Usad	ne (explain)		0		0
22		<b>5</b> - (		TOTAL OTHER WAT	ER USED	25
23						
24	WATER LO	DSS				
25	Tank Over	flows				0
26	Line Break	S				2,767
27	Line Leaks					0
28	Excavation	Damages				0
29	Theft					0
30	Other Loss	(explain)		Unknown Loss		4,870
31				TOTAL L	INE LOSS	7,638
32 33 34	Note: Line	14 + Line 22	+ Line 31	Must Equal Line 4		
35	WATER LO	<b>DSS PERCE</b>	NTAGE			
36	(Line 31 D	ivided by Li	ne 4)			27.11%

## PUBLIC SERVICE COMMISSION Monthly Water Loss Report

Water Utility:		Ea	st Logan W	ater District		KY0710951
For the M	onth of:	Septe	mber		Year:	2023
LINE #			TEM		GALLO	NS (Omit 000's)
1	WATER PI	RODUCED A	AND PURCH	IASED		, , , , , , , , , , , , , , , , , , ,
2	Water Proc	duced				0
3	Water Purc	chased				26,981
4			TOTAL	PRODUCED AND PL	JRCHASED	26,981
5	•					
6	WATER SA	ALES				
7	Residentia					22,224
8	Commercia	al				0
9	Industrial					0
10	Bulk Loadii	ng Stations				0
11	Wholesale					0
12	Public Auth	norities				0
13	Other Sale	s (explain)		0		0
14				TOTAL WAT	FER SALES	22,224
15						
16	OTHER W	ATER USED	)			
17	Utility and/o	or Water Tre	atment Plar	t		0
18	Wastewate	er Plant				0
19	System Flu	ishing				45
20	Fire Depar	tment		_		0
21	Other Usag	ge (explain)		0		0
22				IOTAL OTHER WA	TER USED	45
23		200				
24		<u> 155</u>				0
20	Line Drock	nows				2 205
20	Line Looko	5				2,203
21	Line Leaks	Domogoo				0
20	Thoft	Damayes				0
29	Other Loss	(ovolain)		Linknown Loss		2 507
30						2,307 <b>/ 713</b>
32				TOTAL		4,710
33 34	Note: Line	14 + Line 22	+ Line 31 N	lust Equal Line 4		
35	WATER LO	DSS PERCE	NTAGE			
36	(Line 31 D	ivided by Li	ne 4)			17.47%

## PUBLIC SERVICE COMMISSION Monthly Water Loss Report

Water Utility:		Ea	st Logan V	Vater District	PWSID:	KY0710951
For the M	For the Month of:		ust		Year:	2023
LINE #			ITEM		GALLO	NS (Omit 000's)
1	WATER PI	RODUCED	AND PURC	HASED		· · · · ·
2	Water Proc	duced				0
3	Water Purc	chased				27,650
4			TOTAL	PRODUCED AND PUP	RCHASED	27,650
5						
6	WATER SA	ALES				
7	Residentia					20,237
8	Commercia	al				0
9	Industrial					0
10	Bulk Loadii	ng Stations				0
11	Wholesale					0
12	Public Auth	orities				0
13	Other Sale	s (explain)		0		0
14				TOTAL WATE	ER SALES	20,237
15						
16				-1		0
17	Utility and/o	or vvater i re	eatment Pla	nt		0
18	Suctor El	er Plant				0
19	System Fit	sning				04
20	Other Lice			0		0
21	Other Usag	je (explain)				64
22						
23	WATERIO	oss				
25	Tank Over	lows				0
26	Line Break	S				2.061
27	Line Leaks	-				0
28	Excavation	Damages				0
29	Theft	Ũ				0
30	Other Loss	(explain)		Unknown Loss		5,288
31		,		TOTAL L	INE LOSS	7,349
32 33 34	Note: Line	14 + Line 22	2 + Line 31	Must Equal Line 4		
35	WATER LO	DSS PERCE	NTAGE			
36	(Line 31 D	ivided by Li	ine 4)			26.58%



Legal Applicant:	East Logan Water District					
Project Title:	System-wide Waterline Upgrade & R					
Project Number:	WX21141073 View Map	Submitted By:	BRADD			
Funding Status:	Not Funded	Primary County:	Logan			
Project Status:	Approved	Planning Unit:	Logan			
Project Schedule:	0-2 Years	Multi-County:	No			
E-Clearinghouse SAI:		ECH Status:				
Applicant Entity Type:	Water District (KRS 74)	ADD WMC Contact:	Morgan Hershey			
Date Approved (AWMPC):	06-02-2021					

#### Project Description:

The proposed project involves replacement of 83,500 LF of waterline and 600 LF of directional boring in the East Logan Water District.

#### 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: The proposed waterline replacements will cut water losses within the distribution system and the bore replacements at difficult intersections will alleviate growing pains placed on some of the original piping infrastructure.

Project Alternatives:	
Alternate A:	
Do nothing.	
Alternate B:	
Legal Applicant:	

Entity Type: Water District (KRS 74)	PS	SC Group ID: 21100
Entity Name: East Logan Water Distr	ict	
Web URL: http://www.eastloganwa	ater.com	
Office EMail: eastlogan@logantele.co	om	
Office Phone: 270-717-0991	Toll Free:	Fax: 270-717-0958
Mail Address Line 1: 333 S Franklin St		Phys Address Line 1: 333 S Franklin St
Mail Address Line 2:		Phys Address Line 2:
Mail City, State Zip: Russellville, KY 42276		Phys City, State Zip: Russellville, KY 42276
Contact: Earn Brown	Financial Contact:	Auth Official: Harris Dockins
Contact Title: Office Manager	Financial Contact Title:	Auth Official Title: Chairman
Contact EMail: earn@eastloganwater.com	Financial Contact EMail:	Auth Official EMail: earn@eastloganwater.com
Contact Phone: 270-717-0991	Financial Contact Phone:	Auth Official Phone: 270-717-0991
Data Source: Kentucky Infrastructure Auth	ority	Date Last Modified: 04.18.2023
Project Administrator (PA) Information		Applicant Contact (AC) Information
Name: Jacob Barker		Name: Linda Alexander
Title: Infrastructure Management	Planner	Title: Office Manager
Organization: Barren River Area Developi	ment District	Organization: East Logan Water District
Address Line 1: 177 Graham Ave		Address Line 1: 399 E Main St
Address Line 2:		Address Line 2:
City: Bowling Green State: KY Zip: 42103		City: Russellville State: KY Zip: 42276
Phone: 270-781-2381 Fax:		Phone: 270-717-0991 Fax:



## **Drinking Water Project Profile**

WX21141073 - East Logan Water District System-wide Waterline Upgrade & Replacements

#### **Project Engineer (PE) Information:**

✓ This project requires a licensed Professional Engineer.

✓ A Professional Engineer has been procured for this project.

Project Engineer Information:	Engineering Firm Information:		
License No: PE 14440	Permit No: 1363		
PE Name: Michael Wayne McGhee	Firm Name: McGhee Engineering, Inc.		
Phone: 270-483-9985 Fax: 270-483-9986	Phone: 270-483-9985 Fax:		
E-Mail: mike.mcghee@mcgheeengineering.com	Web URL: http://www.mcgheeengineering.com/		
Firm Name: McGhee Engineering, Inc.	EMail: mike.mcghee@mcgheeengineering.com		
Addr Line 1: McGhee Engineering, Inc.	Addr Line 1: 202 South Ewing St		
Addr Line 2: 202 S. Ewing St	Addr Line 2: PO Box 267		
Addr Line 3: PO Box 267	City: Guthrie State: KY Zip: 42234		
City: Guthrie State: KY Zip: 42234	Status: Current Disciplinary Actions: NO		
Status: Current Disciplinary Actions: NO	Issued: 07-13-1998 Expires: 12-31-2024		
Issued: 09-20-1985 Expires: 06-30-2024			

#### **Estimated Budget**

Project Cost Categories:		Construction Cost Categories:		
Cost Category	Cost	Cost Category	Cost	
Administrative Expenses:	\$ 5,000	Treatment:		
Legal Expenses:	\$ 20,000	Transmission & Distribution:	\$ 2,250,000	
Land, Appraisals, Easements:		Lead Remediation:		
Relocation Expenses & Repayments:		Source:		
Planning:	\$ 20,000	Storage:		
Engineering Fees - Design:	\$ 120,000	Purchase of Systems:		
Engineering Fees - Construction:	\$ 50,000	Restructuring:		
Engineering Fees - Inspection:	\$ 100,000	Land Acquisition:		
Engineering Fees - Other:		Non-Categorized:		
Construction:	\$ 2,250,000	Total ConstructionCost:	\$ 2,250,000	
Equipment:				
Miscellaneous:		l otal Sustainable Infrastructure Costs:		
Contingencies: \$235,000		Note: Total Sustainability Infrastructure Costs are included		
Total Project Cost:	\$ 2,800,000	within construction and other costs reported in this section. This breakout is provided for SRF review purposes.		

#### **Project Funding Sources:**

Total Project Cost:	\$ 2,800,000
Total Committed Funding:	<b>\$ 0</b>
Funding Gap:	\$ 2,800,000

This project will be requesting SRF funding for fiscal year 2025.

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
unknown		2022	\$ 2,800,000	Anticipated	
	Total Comitted F	unding:			

**Funding Source Notes:** 

The following systems are beneficiaries of this project:						
$\checkmark$	KY0710951	East Logan Water District				
Not	e: Check mark	indicates primary system for this project.				

**Estimated Project Schedule:** 

Estimated Construction Start Date:

Estimated Bid Date:

Est. Environmental Review Submittal Date: 08-15-2021

Estimated Construction Completeion Date: 05-15-2023

03-15-2022

05-15-2022



#### **Drinking Water Project Profile**

WX21141073 - East Logan Water District

#### System-wide Waterline Upgrade & Replacements

#### Project Ranking by AWMPC:

Regional Ranking(s):

Planning Unit Ranking:

Total Points:

- Plans and specs have been sent to DOW.
- Plans and specs have been reviewed by DOW.
  - Plans and specs have been sent to PSC.
  - O Plans and specs have been reviewed by PSC.

#### Economic, Demographic and Geographic Impacts

**Geographic Impacts** 

Economic Impacts					
Jobs Created:					
Jobs Retained:					

#### \*Demographic Impacts (GIS Census Overlay)

Servceable Demographic	Project Area	Included Systems	Included Utilities
Population:	2,596	8,364	8,362
Households:	1,048	3,323	3,323
MHI:	\$49,204	\$52,556	*\$52,556
MHI MOE	\$9,895	\$8,743	*\$8,743
MOE as Pct:	20%	17.0%	17.0%
**NSRL:		1	1

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

MHI Source is from the American Community Survey 2017-2021 5 Yr 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 = \$55,454

- 80% KHMI = \$44,363

## 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:					
To Underserved Households:	90	1,048			
To Total Households:	90	1,048			
** Cost Per Household:	\$31	,111			

\* 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.

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

For Project Area			
Counties			
Logan			
Legis	lative Districts		
District Name	Legislator		
House 016	Jason Petrie		
Senate 32	Mike Wilson		
Congressional 1	James Comer		
Congressional 2	Brett Guthrie		

Groundwater Sensitivity Zones

# HUC 10 Watersheds HUC Code Watershed Name 0511000208 Gaspar River 0511000302 Mud River 0513020602 South Fork Red River-Red River

For included System(S)			
Counties	]		
Butler			
Logan			
Simpson			
Warren			
Legis	slative Districts		
District Name	Legislator		
House 015	Rebecca Raymer		
House 016	Jason Petrie		
House 017	Robert Duvall		
House 022	Shawn McPherson		
	Onawit Micr Tierson		
Senate 05	Stephen Meredith		
Senate 05 Senate 09	Stephen Meredith David P. Givens		

James Comer

Brett Guthrie

Congressional 1

Congressional 2

**Geographic Impacts** 



#### **DW Specific Impacts**

- O This project relates to a public health emergency.
- This project will assist a non-compliant system to achieve compliance.
- O This project will assist a compliant system to meet future requirements.
- O This project will provide assistance not compliance related.
- O This project is necessary to achieve full or partial compliance with a court order, agreed order, or a judicial or administrative consent decree.
- 🔘 Primary system has not received any SDWA Notices of Violation within the previous state fiscal year-July through June, i.e. July 2014 June 2015).
- Primary system has had an action level exceedance (lead concentrations exceed an action level of 15 ppb in more than 10% of customer taps sampled) within the last compliance period.
- Primary system has received a lead trigger level exceedance (lead concentrations exceed a trigger level of 10 ppb in more than 10% of customer taps sampled) within the last compliance period.

#### Project Readiness - Lead Inventory and Lead Service Line Replacement:

#### Lead Service Line Inventory:

O A description of goals to be achieved and products to be created (e.g., electronic or GIS database; customer communication tools) when creating a lead service line inventory procedure, including a proposed timeline for achieving each goal.

#### Lead Service Line Replacement:

A strategy for informing customers before a LSLR and a template for an agreement with the private property owner to replace the LSL.

- A process for documenting all property owners declining replacement of privately owned portion of LSL.
- A procedure for customers to flush service lines and premise plumbing of particulate lead.
- A proposed plan for conducting LSL replacement utilizing all requested funding.
- A funding strategy for conducting LSLRs utilizing all requested funding.

Project Components - Mapped Line Features						
DOW Permit ID	Line Type	Purpose	Activity	Size (in.)	Material	Length (LF)
KY0710951	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	6.00	PVC	2,970
KY0710951	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	8.00	PVC	600
KY0710951	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE UNDERSIZED LINES	4.00	PVC	3,729
KY0710951	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE UNDERSIZED LINES	6.00	PVC	11,142
KY0710951	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE UNDERSIZED LINES	10.00	PVC	65,657
					Total Length	84,098

#### Administrative Components:

V Plannin	g 🗸 🗸 Design	✓ Design ✓ Construction	
Audit Year	Entity	Name	Entity Relationship

#### **Regionalization Components and Eliminated Systems/Plants:**

#### Public Water Systems Eliminated:

O This project includes the elimination of public water system(s) through merger or acquisition.

#### Water Treatment Plants Eliminated:

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



#### Supplementation of Raw Water Supply:

O This project includes supplementing the existing raw water supply.

#### Supplementation of Potable Water Supply:

O This project includes supplementing the existing potable water supply.

#### Supplementation of Emergency Water Supply:

O This project includes supplementing the existing emergency water supply.

#### Water Source Protection

- O This project will preventatively address PFAS or other emerging contaminants of the source water.
- This project will address current PFAS or other emerging contaminants of the source water.
- O This project rehabilitates a water source dam or reservior.
- O This project includes land acquisition for water source protection.

#### Water Treatment Components

O This project includes water treatment components.

#### Water Distribution and Storage Components:

This project includes water distribution and/or storage components.



#### Water Line Extensions:

O This project includes water line extension(s).

O This projects extends service to unserved rural areas.

#### **Redundancy Components:**

- O This project includes emergency power generators for distribution and/or storage activities.
- O This project includes redundant distribution and/or storage processes.

#### Finished Water Quality:

O This project includes infrastructure to address inadequate water turnover and disinfection byproducts (DBPs).

#### Service Line Inventory:

O This project includes implementation of a service line inventory.

- O Incorporates GIS procedures or methods to record the service line inventory.
- Service line inventory replacement will be integrated into asset management planning.

#### Water Line Replacement:

This project replaces problem water lines (breaks, leaks, or restrictive flows due to age), water lines consisting of lead and/or asbestos-cement (AC), and/or inadequately sized water lines.

Total length of line replacement (LF): 84,098

O In-line or in-situ repair medhods will be used in lieu of water line replacement.

Total length of in-place or in-line repair (LF):

This project replaces lead service lines.

#### Water Loss in the past 12 Months:

The system has experienced the following water loss over the past 12 months:

Water Loss Volume (MG): 70.576

Water Loss Percent (%	b): <b>23.000</b>
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#### Water Storage and Pressure Components:

O This project includes the construction of new water tank(s).

O This project includes the replacement of existing water tank(s).

O This project includes the rehabilitation of existing water tank(s).

- O This project includes the construction of new pump station(s).
- O This project includes the rehabilitation of existing pump station(s).

#### Security:

O This project includes security components for water distribution infrastructure.



WX21141073 - East Logan Water District System-wide Waterline Upgrade & Replacements

#### 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:

	Component	Cost
Bioretention		\$0
□ Trees		\$0
Green Roofs		\$0
Permeable Pavement		\$0
Cisterns		\$0
	Total Green Infrastructure Cost:	\$0
There are no Green Infrastructure com	ponents specified for this project.	

#### Sustainable Infrastructure - Water Efficiency:

The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include:

Component	Cost
Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals).	\$0
Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement).	\$0
Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	\$0
Retrofitting/adding AMR capabilities or leak equipment to existing meters.	\$0
Conducting water utility audits, leak detection studies, and water use efficiency baseline studies, which are reasonably expected to result in a capital project or in a reduction in demand to alleviate the need for additional capital investment.	\$0
Developing conservation plans/programs reasonable expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for capital investment.	\$0
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).	\$0
Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems.	\$0
Water meter replacement with traditional water meters.*	\$0
Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks.*	\$0
Storage tank replacement/rehabilitation to reduce water loss.*	\$0
New water efficient landscape irrigation system, where there currently is not one.*	\$0
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, which are part of a public health project, such as wind, solar, geothermal, and micro-hydroelectric that provides power to a utility.	\$0
Utility-owned or publicly-owned renewable energy projects.	\$0
Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas.	\$0
Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs).*	\$0
Pump refurbishment to optimize pump efficiency.*	\$0
Projects that result from an energy efficient related assessment.*	\$0
Projects that cost effectively eliminate pumps or pumping stations.*	\$0
Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.*	\$0
Upgrade of lighting to energy efficient sources.*	\$0
Automated and remote control systems (SCADA) that achieve substantial energy savings.*	\$0
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.

#### Sustainable Infrastructure - Environmentally Innovative:

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, or other planning framework where project life cycle costs are minimized, which enables communities to adopt more efficient and cost-effective infrastructure solutions.	\$0
Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.	\$0
Source water protection planning (delineation, monitoring, modeling).	\$0
Planning activities to prepare for adaptation to the long-term effects of climate change and/or extreme weather.	\$0
Utility sustainability plan consistent with EPA's sustainability policy.	\$0
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.	\$0
Construction of US Building Council LEED certified buildings, or renovation of an existing building.	\$0
Projects that significantly reduce or eliminate the use of chemicals in water treatment.*	\$0
Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals.*	\$0
Trenchless or low impact construction technology.*	\$0
Using recycled materials or re-using materials on-site.*	\$0
Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).*	\$0
Projects that achieve the goals/objectives of utility asset management plans.*	\$0
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.



WX21141073 - East Logan Water District System-wide Waterline Upgrade & Replacements

#### Sustainable Infrastructure - Asset Management:

If a category is selected, the applicant must provide proof to substantiate claims. The documents must be submitted to Anshu Singh (Anshu.Singh@ky.gov) for CW projects

Component

Last Rate Adjustment Date: 08-01-2020 Download Fee Schedule

Rate Adjustment Age: 41 months

System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: 0.96%

The system(s) has an Asset Management Plan (AMP).

The system(s) involved in this project have specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure.

Project Status: Approved

Date Approved: 06-02-2021

Date Revised:

### East Logan Water District

Line Upgrade to Cemetery Tank
Preliminary Project Budget

ltem	Quantity	Units	U	Init Price		Total
Construction - Line Upgrade to Cemete	ry Tank (	Cross	s-C	ountry O	ptic	on)
10" SDR-21 PVC Water Main	10,600	LF	\$	50.00	\$	530,000
10" SDR-21 PVC Yelomine Certa-Lok Water Main	400	EA	\$	60.00	\$	24,000
16" Steel Cased Road/RR Combo Bore	110	LF	\$	350.00	\$	38,500
16" Steel Cased 4-Lane Road Bore	260	LF	\$	350.00	\$	91,000
16" Steel Cased Open Cut Road Crossing	20	LF	\$	250.00	\$	5,000
6"x6" Tapping Sleeve & Valve {Pump}	2	EA	\$	4,600.00	\$	9,200
8"x8" Tapping Sleeve & Valve {Tank}	1	EA	\$	5,400.00	\$	5,400
Plug & Cap Existing 6" Line	3	EA	\$	3,000.00	\$	9,000
Water Meter Reconnections	3	EA	\$	2,500.00	\$	7,500
10" Gate Valve & Box	2	EA	\$	3,500.00	\$	7,000
TOTAL - All Construction						726,600
Non-Construction	on Items					
Administrative Expenses					\$	5,000
Legal Costs		$\frown$			\$	7,500
Land & ROW					\$	1,000
Preliminary Engineering					\$	10,000
Design Engineering					\$	47,700
Construction Phase Engineering Services					\$	20,500
Construction Inspection					\$	45,700
SUBTOTAL - Non-Construction					\$	137,400
Contingency					\$	71,000
TOTAL ESTIMATED PROJECT COST (OPTION 1)						935,000

Item	Quantity	Units	Unit Price		Total	
Construction - Line Upgrade to Cemeter	y Tank (F	Full R	oad	d Route C	pti	on)
10" SDR-21 PVC Water Main	19,000	LF	\$	50.00	\$	950,000
10" SDR-21 PVC Yelomine Certa-Lok Water Main	500	EA	\$	60.00	\$	30,000
16" Steel Cased Road/RR Combo Bore	110	LF	\$	350.00	\$	38,500
16" Steel Cased 4-Lane Road Bore	260	LF	\$	350.00	\$	91,000
16" Steel Cased Road Bore	30	LF	\$	300.00	\$	9,000
Driveway Bore	100	LF	\$	125.00	\$	12,500
Plug & Cap Existing 6" Line	3	EA	\$	3,000.00	\$	9,000
Connect to Existing 3" Line	1	EA	\$	2,000.00	\$	2,000
6"x6" Tapping Sleeve & Valve {Pump}	4	EA	\$	4,600.00	\$	18,400
8"x8" Tapping Sleeve & Valve {Tank}	1	EA	\$	5,400.00	\$	5,400
Water Meter Reconnections	40	EA	\$	2,500.00	\$	100,000
10" Gate Valve & Box	6	EA	\$	3,500.00	\$	21,000
	TOTAL - All Construction				\$	1,286,800
Non-Construction Items						
Administrative Expenses						5,000
Legal Costs						7,500
Land & ROW					\$	2,500
Preliminary Engineering					\$	10,000
Design Engineering					\$	76,600
Construction Phase Engineering Services					\$	32,800
Construction Inspection					\$	68,400
SUBTOTAL - Non-Construction					\$	202,800
Contingency					\$	130,400
TOTAL ESTIMATED PROJECT COST (OPTION 2)					\$	1,620,000