

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**ELECTRONIC APPLICATION OF)
MOUNTAIN WATER DISTRICT FOR A) CASE NO. 2022-00366
GENERAL ADJUSTMENT OF WATER)
RATES)**

**ELECTRONIC MOUNTAIN WATER)
DISTRICT UNACCOUNTED-FOR WATER) CASE NO. 2023-00351
LOSS REDUCTION PLAN, SURCHARGE AND)
MONITORING)**

NOTICE OF COMPLIANCE

Mountain Water District (“Mountain District” or “the District”) gives notice of its compliance with the Public Service Commission’s Orders of October 31, 2023 in the above-styled matters. Attached to this Notice are a qualified infrastructure improvement plan and a detailed listing of the uses of funds that District has or is scheduled to receive under the American Rescue Plan Act (“ARPA”) and the Kentucky Cleaner Water Program

Mountain District’s **Qualified Infrastructure Improvement Plan**, which is attached as **Exhibit A**, is a two-page document that lists the proposed projects for which the proceeds from the Water Loss Reduction Surcharge will be spent. The first page of the plan lists and describes each project, the year in which the project will commence, the project’s cost, and whether utility or contractor personnel will perform the construction. The second page provides a detailed breakdown of the components of each project and each component’s cost. The total cost of the proposed projects is \$1,365,474. The District will not commence work on any project during the first year in which the surcharge is assessed and collected to allow for sufficient accumulation of

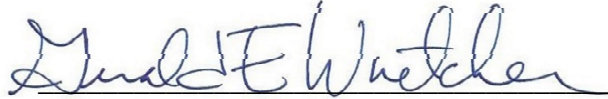
funds to fund proposed Year 2 projects. Surcharge collections from each year will fund proposed projects scheduled in the following year.

Pike County Fiscal Court in 2022 allocated to the District \$1,331,000 of **ARPA funds** which House Bill 1 allocated to Pike County Fiscal Court to use at its discretion. The District has used these monies to fund the Water Loss Prevention Program Phase I – Contract #1 Project (WRIS No. WX21195027). The profile for this project is attached as **Exhibit B-1**. The project involves telemetry installation for 22 water storage tanks and pump stations, and tank road work and fencing to secure those tanks. It will also involve the installation of 22 master meters to quantify and facilitate identification of water loss zones. A detailed project budget is attached as **Exhibit B-2**. Work on the project began in Spring 2023 and is continuing. Based upon the current project budget, approximately all of the ARPA funds will be used for the project.

The Kentucky Infrastructural Authority (“KIA”) has awarded the District a grant of \$1,926,262 under the **Kentucky Cleaner Water Program**. The grant (Grant No. 22CWW069) will be used for multiple water line replacements throughout the District’s territory. Approximately 20,365 linear feet of six-inch ductile iron water main, and 1,982 linear feet of six-inch polyvinyl chloride water main. The profile for this project is attached as **Exhibit C-1** and a detailed project budget is attached as **Exhibit C-2**. As of this date, KIA has yet to disburse any grant funds for the project. The starting date for the project will not be established under the Division of Water completes its review of the plans for the proposed water main replacements and KIA advises that grant funds are available for disbursement.

Dated: February 28, 2024

Respectfully submitted,

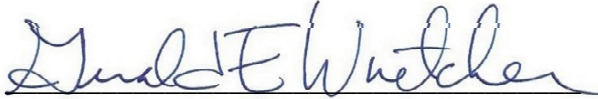


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Counsel for Mountain Water District

CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8 and the Commission's Order of July 22, 2021 in Case No. 2020-00085, I certify that this document was transmitted to the Public Service Commission on February 28, 2024 and that no parties have been excused from electronic filing procedures.



Counsel for Mountain Water District

EXHIBIT A

**MOUNTAIN WATER DISTRICT
QUALIFIED WATER INFRASTRUCTURE IMPROVEMENT SURCHARGE PLAN**

YEAR SCHEDULED	ITEM NO.	ITEM	DESCRIPTION	IN-HOUSE CONST.	CONTRACTOR OR VENDOR	COST ESTIMATE
YEAR 4	1	WATER STORAGE TANK TELEMETRY SYSTEM - STANDARDIZING SYSTEM	INSTALL TELEMETRY TO MONITOR TANK LEVELS FOR LEAKS OR LINE BREAKS. CONTROL TANK LEVELS TO AVOID OVERFLOWING. INSTALL 6" BARBED WIRE SECURITY FENCING TO PROTECT EQUIPMENT. PREVENT THEFT. DETER DOMESTIC TERRORISM, AND PERFORM TANK ACCESS ROAD MAINTENANCE	X		\$301,140
	2	BOOSTER PUMP STATION TELEMETRY SYSTEM - STANDARDIZING SYSTEM	INSTALL TELEMETRY TO MONITOR PUMP STATION ACTIVITY AND TANK LEVELS FOR LEAKS OR LINE BREAKS. CONTROL TANK LEVELS TO AVOID OVERFLOWING	X		\$64,500
YEAR 5	3	BOOSTER PUMP STATION REPLACEMENT	REPLACEMENT OF AGING BOOSTER PUMP STATIONS CONTRIBUTING TO WATER LOSS DUE TO LEAKS AND INEFFICIENT PUMP AND MOTOR EQUIPMENT. LONG FORK, GRAVEYARD, FOREST HILLS	X		\$205,000
	4	PRESSURE REDUCING VALVE STATION REPLACEMENT	REPLACEMENT OF AGING PRV STATIONS CONTRIBUTING TO WATER LOSS DUE TO LEAKS, WATER HAMMER, AND INEFFICIENT EQUIPMENT. WIDOW'S BRANCH, BLACKBERRY #2, LYNN TROUGH, DORTON PITSTOP	X		\$80,000
YEAR 2	5	WATER MAIN REPLACEMENT - BURNING FORK	4" WATER MAIN LINE REPLACEMENT IN AREA OF REPETITIVE LEAKAGE - BURNING FORK		X	\$252,500
YEAR 3	6	WATER MAIN REPLACEMENT - US 460 (OASIS PAVN SHOP)	8" WATER MAIN LINE REPLACEMENT IN AREA OF REPETITIVE LEAKAGE - US 460		X	\$308,700
YEARS 2&3	7	MISCELLANEOUS EASEMENTS / PERMITS / PAVEMENT REPLACEMENT	MISCELLANEOUS EASEMENTS OR PERMITS NEEDED FOR MAIN LINE REPLACEMENTS AND PAVEMENT REPLACEMENT THAT MAY BE NEEDED.		X	\$29,500
<p>NOTE: YEAR 1 WILL BE AN ACCRUAL YEAR IN ORDER TO HAVE MONEY AVAILABLE TO BEGIN THE WORK IN YEAR 2. WORK COMPLETED IN YEAR 5 WILL UTILIZE SURCHARGE PROCEEDS ACCRUED IN YEAR 4.</p>						
					ESTIMATED COST	\$1,241,340
					10% CONTINGENCY	\$124,134
					TOTAL ESTIMATED COST	\$1,365,474

**MOUNTAIN WATER DISTRICT
QUALIFIED WATER INFRASTRUCTURE IMPROVEMENT SURCHARGE PLAN**

ITEM NO.	PROJECT DESCRIPTION	UNIT	QUANTITY	COST PER ITEM	TOTAL COST PER ITEM	COST ESTIMATE
1 WATER STORAGE TANK TELEMETRY SYSTEM - STANDARDIZING SYSTEM						
A	TELEMETRY W/LCD INTERFACE & SOLAR PANELS TO MONITOR & CONTROL WATER STORAGE TANKS	EA	15	\$2,776	\$41,640	
B	MODEM	EA	15	\$600	\$9,000	
C	BATTERY	EA	15	\$200	\$3,000	
D	OVERSIZE SOLAR PANELS / LARGER POWER TRANSMITTER	EA	6	\$1,000	\$6,000	\$301,140
E	MISCELLANEOUS PARTS	LS	15	\$1,000	\$15,000	
F	6' BARBED WIRE SECURITY FENCING W/DOUBLE GATE	EA	15	\$11,000	\$165,000	
G	TANK ACCESS ROAD MAINTENANCE	EA	15	\$4,100	\$61,500	
2 BOOSTER PUMP STATION TELEMETRY SYSTEM - STANDARDIZING SYSTEM						
A	TELEMETRY W/LCD INTERFACE TO CONTROL BOOSTER PUMP STATIONS	EA	15	\$3,400	\$51,000	
B	MODEM	EA	15	\$600	\$9,000	\$64,500
C	MISCELLANEOUS PARTS	LS	15	\$300	\$4,500	
3 BOOSTER PUMP STATION REPLACEMENT						
A	LONG FORK	LS	1	\$60,000	\$60,000	
B	GRAVEYARD	LS	1	\$60,000	\$60,000	\$205,000
C	FOREST HILLS	LS	1	\$85,000	\$85,000	
4 PRESSURE REDUCING VALVE STATION REPLACEMENT						
A	WIDOWS BRANCH	LS	1	\$20,000	\$20,000	
B	BLACKBERRY #2	LS	1	\$20,000	\$20,000	\$80,000
C	LYNNROUGH	LS	1	\$20,000	\$20,000	
D	DORTON PITSTOP	LS	1	\$20,000	\$20,000	
5 WATER MAIN LINE REPLACEMENT / REPTITIVE LEAKAGE AREA - BURNING FORK						
A	4" SDR 17 PVC CL 250 WATER LINE	LF	3750	\$40	\$150,000	
B	CONNECT TO EXISTING 4" WATER MAIN LINE	EA	2	\$2,750	\$5,500	
C	4" GATE RESILIENT WEDGE GATE VALVE, M1, 250 PSI	EA	2	\$2,500	\$5,000	\$252,500
D	3/4" CUSTOMER SERVICE LINE RECONNECTS	EA	20	\$2,000	\$40,000	
E	ENGINEERING / DESIGN	LS	1	\$30,075	\$30,000	
F	ENGINEERING / INSPECTION	LS	1	\$22,055	\$22,000	
6 WATER MAIN LINE REPLACEMENT / REPTITIVE LEAKAGE AREA - US 460 (OASIS PAVN SHOP)						
A	8" DUCTILE IRON PIPE CL 350 WATER LINE	LF	2600	\$80	\$208,000	
B	CONNECT TO EXISTING 8" WATER MAIN LINE	EA	2	\$3,000	\$6,000	
C	8" GATE RESILIENT WEDGE GATE VALVE, M1, 250 PSI	EA	2	\$3,000	\$6,000	
D	JACK AND BORE FOR 8" DUCTILE IRON PIPE CL 350 WATER LINE / PRICE INCLUDES WATER LINE	LF	100	\$250	\$25,000	\$308,700
E	ENGINEERING / DESIGN	LS	1	\$36,750	\$36,750	
F	ENGINEERING / INSPECTION	LS	1	\$26,950	\$26,950	
G	MISCELLANEOUS EASEMENTS / PERMITS / PAVEMENT REPLACEMENT	LS	1	\$29,500	\$29,500	\$29,500
<p>NOTE: THIS IS AN ESTIMATE THAT COULD FLUCTUATE UPWARD AT ANY TIME DUE TO MATERIAL PRICING, CONTRACTOR PRICING, OR ADDITIONAL PROFESSIONAL OR CONTRACTED SERVICES PRICING OVER THE 48 MONTH PERIOD.</p>						
			ESTIMATED COST	\$1,241,340		
			10% CONTINGENCY	\$124,134		
			TOTAL ESTIMATED COST	\$1,365,474		
TOTAL ESTIMATED COST		CURRENT CUSTOMER COUNT	TERM / MONTHS	TOTAL COST PER CUSTOMER	ANNUAL COST PER CUSTOMER	
\$1,365,474		16520	48	\$82.66	\$20.66	
					MONTHLY COST PER CUSTOMER	\$1.72

EXHIBIT B-1



Drinking Water Project Profile

Legal Applicant: **Mountain Water District**
 Project Title: **Water Loss Prevention Program Phase I – Contract #1**
 Project Number: **WX21195027** [View Map](#) Submitted By: **BSADD**
 Funding Status: **Not Funded** Primary County: **Pike**
 Project Status: **Approved** Planning Unit: **Pike**
 Project Schedule: **0-2 Years** Multi-County: **No**
 E-Clearinghouse SAI: ECH Status:
 Applicant Entity Type: **Water District (KRS 74)** ADD WMC Contact: **Matt Scofield**
 Date Approved (AWMPC): **12-04-2015**

Project Description:

Project consists of addressing multiple items for compliance related matters. The District is under order from the Public Service Commission to curtail and decrease the volume of water loss, as well an Agreed Order from the Division of Water requiring the reduction of Trihalomethanes within the distribution system.

Phase 1 – Contract #1 project will include the installation of new master meters throughout the District’s distribution system to quantify and facilitate identification of water loss zones. This project will also include telemetry to enable the District to remotely monitor master meter flow rates to increase response time to potential leak areas.

In addition, Phase I-Contract #1 will also include the research of possible solutions or methods (tank aeration / sprinkler system, in-line skid, treatment methods or infrastructure at water treatment plant) to reduce the TTHMs within the District’s distribution system.

Beginning replacement of aging infrastructure to assist in combating the water loss is also included in this phase, with remaining funds, and will continue into Phase II of the project.

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 help determine water loss

Project Alternatives:

Alternate A:

Don't install Master meters

Alternate B:

Legal Applicant:

Entity Type: **Water District (KRS 74)** PSC Group ID: **25605**

Entity Name: **Mountain Water District**

Web URL: www.mountainwaterdistrictky.com

Office EMail: tolson@mtwater.org

Office Phone: **606-631-4000**

Toll Free:

Fax: **606-631-3087**

Mail Address Line 1: **PO Box 3157**

Phys Address Line 1:

Mail Address Line 2:

Phys Address Line 2:

Mail City, State Zip: **Pikeville, KY 41502**

Phys City, State Zip:

Contact: **Tammy Olson**

Financial Contact:

Auth Official: **Randy Tackett**

Contact Title: **Acting General Manager**

Financial Contact Title:

Auth Official Title: **Chair Person**

Contact EMail: tolson@mtwater.org

Financial Contact EMail:

Auth Official EMail: randytackett55@gmail.com

Contact Phone: **606-631-4000**

Financial Contact Phone:

Auth Official Phone: **606-432-4019**

Data Source: [Kentucky Infrastructure Authority](#)

Date Last Modified: 05.23.2023



Drinking Water Project Profile

WX21195027 - Mountain Water District
Water Loss Prevention Program Phase I – Contract #1

Project Administrator (PA) Information

Name: **Paul D Kincheloe**
 Title: **Water Management Coordinator**
 Organization: **Big Sandy Area Development District**
 Address Line 1: **110 Resource Court**
 Address Line 2:
 City: **Prestonsburg** State: **KY** Zip: **41653**
 Phone: **606-886-2374** Fax: **606-886-3382**

Applicant Contact (AC) Information

Name: **Tammy Olson**
 Title: **Executive Assistant**
 Organization: **Mountain Water District**
 Address Line 1: **6332 Zebulon Hwy**
 Address Line 2: **PO Box 3157**
 City: **Pikeville** State: **KY** Zip: **41502**
 Phone: **606-631-9162 Ext. 303** Fax: **606-631-3087**

Project Engineer (PE) Information:

- This project requires a licensed Professional Engineer.
 A Professional Engineer has been procured for this project.

Estimated Budget

Project Cost Categories:	
Cost Category	Cost
Administrative Expenses:	\$ 8,000
Legal Expenses:	\$ 2,000
Land, Appraisals, Easements:	\$ 30,000
Relocation Expenses & Repayments:	
Planning:	
Engineering Fees - Design:	\$ 76,357
Engineering Fees - Construction:	\$ 21,816
Engineering Fees - Inspection:	\$ 68,163
Engineering Fees - Other:	\$ 10,908
Construction:	\$ 1,281,500
Equipment:	
Miscellaneous:	\$ 1,256
Contingencies:	
Total Project Cost:	\$ 1,500,000

Construction Cost Categories:	
Cost Category	Cost
Treatment:	
Transmission & Distribution:	\$ 1,281,500
Lead Remediation:	
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Categorized:	
Total Construction Cost:	\$ 1,281,500

Total Sustainable Infrastructure Costs:

Note: Total Sustainability Infrastructure Costs are included within construction and other costs reported in this section. This breakout is provided for SRF review purposes.

Project Funding Sources:

Total Project Cost: **\$ 1,500,000**
 Total Committed Funding: **\$ 0**
 Funding Gap: **\$ 1,500,000**

- This project will be requesting SRF funding for fiscal year 2024.

Estimated Project Schedule:

Est. Environmental Review Submittal Date:
 Estimated Bid Date: **06-15-2022**
 Estimated Construction Start Date: **07-15-2022**
 Estimated Construction Completion Date: **01-11-2023**

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
KIA SRF Fund F Loan (DW)	F17-052	2017	\$ 1,500,000	Expired	06-21-2016
KIA SRF Fund F Loan (DW)	F19-016	2019	\$ 1,500,000	Withdrawn	01-14-2019
Total Committed Funding:					

Funding Source Notes:

The following systems are beneficiaries of this project:

KY0980575 Mountain Water District

Note: Check mark indicates primary system for this project.

Project Ranking by AWMPC:

Regional Ranking(s):



Drinking Water Project Profile

WX21195027 - Mountain Water District
Water Loss Prevention Program Phase I – Contract #1

- Planning Unit Ranking: Plans and specs have been sent to DOW.
 Total Points: Plans and specs have been reviewed by DOW.
 Plans and specs have been sent to PSC.
 Plans and specs have been reviewed by PSC.

Economic, Demographic and Geographic Impacts

Economic Impacts	
Jobs Created:	
Jobs Retained:	

*Demographic Impacts (GIS Census Overlay)			
Serviceable Demographic	Project Area	Included Systems	Included Utilities
Population:		35,094	35,092
Households:		17,453	17,453
MHI:		\$37,514	*\$37,514
MHI MOE		\$10,917	*\$10,917
MOE as Pct:		29.0%	29.0%
**NSRL:		2	2

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

Geographic Impacts For Project Area

Counties
Pike

Legislative Districts

District Name	Legislator
House 092	John Blanton
House 094	Jacob Justice
House 097	Bobby McCool
Senate 31	Phillip Wheeler
Congressional 5	Hal Rogers

Groundwater Sensitivity Zones

HUC 10 Watersheds

HUC Code	Watershed Name
0507020103	Knox Creek-Tug Fork
0507020105	Wolf Creek-Tug Fork
0507020202	Fishtrap Lake-Levisa Fork
0507020206	Shelby Creek
0507020207	Russell Fork-Levisa Fork

Geographic Impacts For Included System(s)

Counties
Letcher
Pike

Legislative Districts

District Name	Legislator
House 092	John Blanton
House 094	Jacob Justice
House 095	Ashley Tackett Laferty
House 097	Bobby McCool
Senate 29	Johnnie Turner
Senate 31	Phillip Wheeler
Congressional 5	Hal Rogers

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:	16,066	
To Total Households:	16,066	
** Cost Per Household:		\$93

* 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.



Drinking Water Project Profile

WX21195027 - Mountain Water District
Water Loss Prevention Program Phase I – Contract #1

DW Specific Impacts

- This project relates to a public health emergency.
- This project will assist a non-compliant system to achieve compliance.
- This project will assist a compliant system to meet future requirements.
- This project will provide assistance not compliance related.
- 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:

- 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 Point Features

DOW Permit ID	Count	FeatureType	Purpose	Status	Existing Capacity	Proposed Capacity	Units
KY0980575	26	SCADA	ENERGY EFF - SCADA	NEW			EA

Administrative Components:

- Planning
 Design
 Construction
 Management

Regionalization Components and Eliminated Systems/Plants:

Public Water Systems Eliminated:

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

Water Treatment Plants Eliminated:

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

Supplementation of Raw Water Supply:

- This project includes supplementing the existing raw water supply.

Supplementation of Potable Water Supply:

- This project includes supplementing the existing potable water supply.

Supplementation of Emergency Water Supply:

- This project includes supplementing the existing emergency water supply.

Water Source Protection

- This project will preventatively address PFAS or other emerging contaminants of the source water.



Drinking Water Project Profile
 WX21195027 - Mountain Water District
 Water Loss Prevention Program Phase I – Contract #1

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

Water Treatment Components

- This project includes water treatment components.

Water Distribution and Storage Components:

- This project includes water distribution and/or storage components.

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
- Trees
- Green Roofs
- Permeable Pavement
- Cisterns

Total Green Infrastructure Cost: \$0

There are no Green Infrastructure components specified for this project.



Drinking Water Project Profile

WX21195027 - Mountain Water District
Water Loss Prevention Program Phase I – Contract #1

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
<input type="checkbox"/> Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals).	
<input type="checkbox"/> Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement).	
<input type="checkbox"/> Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	
<input type="checkbox"/> Retrofitting/adding AMR capabilities or leak equipment to existing meters.	
<input checked="" type="checkbox"/> 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.	\$218,500
<input type="checkbox"/> 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.	
<input type="checkbox"/> 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).	
<input type="checkbox"/> Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems.	
<input type="checkbox"/> Water meter replacement with traditional water meters.*	
<input type="checkbox"/> Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks.*	
<input type="checkbox"/> Storage tank replacement/rehabilitation to reduce water loss.*	
<input type="checkbox"/> New water efficient landscape irrigation system, where there currently is not one.*	
Total Water Efficiency Cost:	\$218,500

** Indicates a business case may be required for this item.*

This project will help determine water loss

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
<input type="checkbox"/> 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.	
<input type="checkbox"/> Utility-owned or publicly-owned renewable energy projects.	
<input type="checkbox"/> Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas.	
<input type="checkbox"/> Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs)).*	
<input type="checkbox"/> Pump refurbishment to optimize pump efficiency.*	
<input type="checkbox"/> Projects that result from an energy efficient related assessment.*	
<input type="checkbox"/> Projects that cost effectively eliminate pumps or pumping stations.*	
<input type="checkbox"/> Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.*	
<input type="checkbox"/> Upgrade of lighting to energy efficient sources.*	
<input type="checkbox"/> Automated and remote control systems (SCADA) that achieve substantial energy savings.*	
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.



Drinking Water Project Profile
 WX21195027 - Mountain Water District
 Water Loss Prevention Program Phase I – Contract #1

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
<input type="checkbox"/> 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.	
<input type="checkbox"/> Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.	
<input type="checkbox"/> Source water protection planning (delineation, monitoring, modeling).	
<input type="checkbox"/> Planning activities to prepare for adaptation to the long-term effects of climate change and/or extreme weather.	
<input type="checkbox"/> Utility sustainability plan consistent with EPA’s sustainability policy.	
<input type="checkbox"/> 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.	
<input type="checkbox"/> Construction of US Building Council LEED certified buildings, or renovation of an existing building.	
<input type="checkbox"/> Projects that significantly reduce or eliminate the use of chemicals in water treatment.*	
<input type="checkbox"/> 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.*	
<input type="checkbox"/> Trenchless or low impact construction technology.*	
<input type="checkbox"/> Using recycled materials or re-using materials on-site.*	
<input type="checkbox"/> Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).*	
<input type="checkbox"/> Projects that achieve the goals/objectives of utility asset management plans.*	
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.

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: 12-11-2022 Download Fee Schedule
Rate Adjustment Age: 13 months
System’s monthly water bill, based on 4,000 gallons, as a percentage of MHI: 1.32%
<input type="checkbox"/> The system(s) has an Asset Management Plan (AMP).
<input type="checkbox"/> 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: 12-04-2015 Date Revised:

EXHIBIT B-2



Lexington, KY | 859.278.5412
 Hopkinsville, KY | 270.886.5466
 Asheville, NC | 828.774.5499

OPINION OF PROBABLE PROJECT COST/PROJECT BUDGET

Project: MOUNTAIN WATER DISTRICT - WATER LOSS REDUCTION PROJECT
Date: FEB 2024
Est. By: ELL

Client: MWD
Contract No.:
Checked By: SHC

- No Design Completed
- Preliminary
- Final Design

SHEET: _____ **OF:** _____

Drawing No.: _____

ITEM NO.	ITEM DESCRIPTION	QUANTITY		PRICE		TOTAL COST
		NO.	UNIT	PER UNIT	TOTAL	
CONSTRUCTION						
1	CELL TELEMETRY FOR 22 TOTAL TANK/PUMP STATION SITES	1	LS	\$ 289,396.80	\$ 289,396.80	\$ 289,396.80
2	RADIO TELEMETRY	1	LS	\$ 199,900.00	\$ 199,900.00	\$ 199,900.00
3	MASTER METERS FOR 22 TOTAL SITES	1	LS	\$ 149,649.80	\$ 149,649.80	\$ 149,649.80
4	DOZER WORK FOR 22 TANK SITES	1	LS	\$ 91,520.00	\$ 91,520.00	\$ 91,520.00
5	SECURTIY FENCING AT 22 TANK SITES	1	LS	\$ 216,400.80	\$ 216,400.80	\$ 216,400.80
6	SEED DISTURBED AREAS BY HYDROSEEDING	1	LS	\$ 57,200.00	\$ 57,200.00	\$ 57,200.00
7	REHAB, MAINTENANCE & PAINTING OF POORBOTTOM TANK	1	LS	\$ 36,500.00	\$ 36,500.00	\$ 36,500.00
8	REHAB, MAINTENANCE & PAINTING OF OLD HOUSE TANK	1	LS	\$ 47,450.00	\$ 47,450.00	\$ 47,450.00
9	WATER STORAGE TANK INSTALLATION - GREASY CREEK	1	LS	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00
10	WATER STORAGE TANK INSTALLATION - KENDRICK FORK	1	LS	\$ 5,750.00	\$ 5,750.00	\$ 5,750.00
TOTAL OPINION OF PROBABLE CONSTRUCTION COST						\$ 1,101,267.40
PROJECT COST						
	ADMINISTRATIVE EXPENSES					\$ 1,400.00
	LEGAL EXPENSES					\$ -
	LAND, APPRAISALS, EASEMENTS					\$ -
	RELOCATION EXPENSE & PAYMENTS					\$ -
	PLANNING					\$ -
	ENGINEERING FEES - DESIGN					\$ 54,910.00
	ENGINEERING FEES - BIDDING					\$ 7,850.00
	ENGINEERING FEES - CONSTRUCTION ADMINISTRATION					\$ 15,691.00
	ENGINEERING FEES - INSPECTION					\$ 49,475.00
	CONSTRUCTION					\$ 1,101,267.40
	EQUIPMENT					\$ -
	CONTINGENCIES					\$ 110,127.00
	ENGINEERING FEES - OTHER					\$ -
	OTHER ITEMS					\$ -
TOTAL OPINION OF PROBABLE PROJECT COST						\$ 1,340,720.40

EXHIBIT C-1



Drinking Water Project Profile

Legal Applicant: **Mountain Water District**

Project Title: **MWD - Capital Infrastructure Water Main Replacement**

Project Number: **WX21195063** [View Map](#)

Submitted By: **BSADD**

Funding Status: **Fully Funded**

Primary County: **Pike**

Project Status: **Approved**

Planning Unit: **Pike**

Project Schedule: **0-2 Years**

Multi-County: **No**

E-Clearinghouse SAI: **KY202303070349**

ECH Status: **Approved**

Applicant Entity Type: **Water District (KRS 74)**

ADD WMC Contact: **Matt Scofield**

Date Approved (AWMPC): **10-06-2022**

Project Description:

The Mountain Water District is proactive in combating water loss in an attempt to reach the goal of the Kentucky Public Service Commission's benchmark of fifteen percent (15%). This project consists of multiple water main replacement locations that are susceptible to repetitive leaks due to the age of infrastructure, method of installation, poor conditions of topsoil, and the geographical challenges of the mountainous terrain in eastern Kentucky that results in high pressure zones. The repetitive leaks at these locations cause interruption of service that impacts our residential, business, and commercial customers, schools, governmental facilities, clinics, and fire departments. The cost to the Mountain Water Districts to perform repairs and daily maintenance is a financial burden to our ratepayers.

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:

These project areas are susceptible to repetitive leaks due to age of infrastructure, method of installation, poor conditions of topsoil, and the geographical challenges of the mountainous terrain in eastern Kentucky.

Project Alternatives:

Alternate A:

Do nothing

Alternate B:

Continue to experience leaks and interruption of service from repetitive leaks.

Legal Applicant:

Entity Type: **Water District (KRS 74)**

PSC Group ID: **25605**

Entity Name: **Mountain Water District**

Web URL: www.mountainwaterdistrictky.com

Office EMail: tolson@mtwater.org

Office Phone: **606-631-4000**

Toll Free:

Fax: **606-631-3087**

Mail Address Line 1: **PO Box 3157**

Phys Address Line 1:

Mail Address Line 2:

Phys Address Line 2:

Mail City, State Zip: **Pikeville, KY 41502**

Phys City, State Zip:

Contact: **Tammy Olson**

Financial Contact:

Auth Official: **Randy Tackett**

Contact Title:

Financial Contact Title:

Auth Official Title: **Chair Person**

Contact EMail: tolson@mtwater.org

Financial Contact EMail:

Auth Official EMail: randytackett55@gmail.com

Contact Phone: **606-631-4000**

Financial Contact Phone:

Auth Official Phone: **606-794-6494**

Data Source: **Kentucky Infrastructure Authority**

Date Last Modified: 09.08.2023

Project Administrator (PA) Information

Name: **Sharon Hall**

Title: **Grants Administrator**

Organization: **Pike County Fiscal Court**

Address Line 1: **146 Main St**

Address Line 2:

City: **Pikeville** State: **KY** Zip: **41501**

Phone: **606-432-6369** Fax:

Applicant Contact (AC) Information

Name: **Tammy Olson**

Title: **Executive Assistant**

Organization: **Mountain Water District**

Address Line 1: **6332 Zebulon Hwy**

Address Line 2: **PO Box 3157**

City: **Pikeville** State: **KY** Zip: **41502**

Phone: **606-631-9162 Ext. 303** Fax: **606-631-3087**



Drinking Water Project Profile

WX21195063 - Mountain Water District
MWD - Capital Infrastructure Water Main Replacement

Project Engineer (PE) Information:

- This project requires a licensed Professional Engineer.
- A Professional Engineer has been procured for this project.

Estimated Budget

Project Cost Categories:	
Cost Category	Cost
Administrative Expenses:	\$ 57,787
Legal Expenses:	
Land, Appraisals, Easements:	
Relocation Expenses & Repayments:	
Planning:	
Engineering Fees - Design:	\$ 91,000
Engineering Fees - Construction:	\$ 26,000
Engineering Fees - Inspection:	\$ 80,000
Engineering Fees - Other:	\$ 13,000
Construction:	\$ 1,587,000
Equipment:	
Miscellaneous:	
Contingencies:	\$ 71,475
Total Project Cost:	\$ 1,926,262

Construction Cost Categories:	
Cost Category	Cost
Treatment:	
Transmission & Distribution:	\$ 1,587,000
Lead Remediation:	
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Categorized:	
Total Construction Cost:	\$ 1,587,000
Total Sustainable Infrastructure Costs:	

Note: Total Sustainability Infrastructure Costs are included within construction and other costs reported in this section. This breakout is provided for SRF review purposes.

Project Funding Sources:

Total Project Cost: **\$ 1,926,262**
 Total Committed Funding: **\$ 1,926,262**
 Funding Gap: **\$ 0**

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

Estimated Project Schedule:

Est. Environmental Review Submittal Date: **04-01-2023**
 Estimated Bid Date: **06-01-2023**
 Estimated Construction Start Date: **08-01-2023**
 Estimated Construction Completion Date: **08-01-2024**

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
22HB001 Cleaner Water Program (FY 2023)	22CWW069	2023	\$ 1,926,262	Committed	11-19-2022
Total Committed Funding:			\$ 1,926,262		

Funding Source Notes:

MWD is requesting to use \$1,926,262 of the Pike County allocation from CWP Round 2

The following systems are beneficiaries of this project:

- KY0980575 Mountain Water District**

Note: Check mark indicates primary system for this project.

Project Ranking by AWWPC:

- Regional Ranking(s): Plans and specs have been sent to DOW.
- Planning Unit Ranking: Plans and specs have been reviewed by DOW.
- Total Points: Plans and specs have been sent to PSC.
- Plans and specs have been reviewed by PSC.

Economic, Demographic and Geographic Impacts

Economic Impacts	
Jobs Created:	
Jobs Retained:	



Drinking Water Project Profile

WX21195063 - Mountain Water District
MWD - Capital Infrastructure Water Main Replacement

*Demographic Impacts (GIS Census Overlay)			
Serviceable Demographic	Project Area	Included Systems	Included Utilities
Population:	96	35,094	35,092
Households:	39	17,453	17,453
MHI:	\$32,853	\$37,514	*\$37,514
MHI MOE	\$9,586	\$10,917	*\$10,917
MOE as Pct:	29%	29.0%	29.0%
**NSRL:		2	2

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:	39	39
To Underserved Households:	12	
To Total Households:	51	39
** Cost Per Household:	\$37,770	

* 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.

Geographic Impacts For Project Area	
Counties	
Pike	
Legislative Districts	
District Name	Legislator
House 092	John Blanton
House 094	Jacob Justice
House 095	Ashley Tackett Laferty
Senate 31	Phillip Wheeler
Congressional 5	Hal Rogers
Groundwater Sensitivity Zones	
HUC 10 Watersheds	
HUC Code	Watershed Name
0507020103	Knox Creek-Tug Fork
0507020206	Shelby Creek
0507020207	Russell Fork-Levisa Fork
0507020302	Mud Creek-Levisa Fork
0507020303	Johns Creek

Geographic Impacts For Included System(s)	
Counties	
Letcher	
Pike	
Legislative Districts	
District Name	Legislator
House 092	John Blanton
House 094	Jacob Justice
House 095	Ashley Tackett Laferty
House 097	Bobby McCool
Senate 29	Johnnie Turner
Senate 31	Phillip Wheeler
Congressional 5	Hal Rogers



Drinking Water Project Profile

WX21195063 - Mountain Water District
MWD - Capital Infrastructure Water Main Replacement

DW Specific Impacts

- This project relates to a public health emergency.
- This project will assist a non-compliant system to achieve compliance.
- This project will assist a compliant system to meet future requirements.
- This project will provide assistance not compliance related.
- 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:

- 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 Point Features

DOW Permit ID	Count	FeatureType	Purpose	Status	Existing Capacity	Proposed Capacity	Units
KY0980575	5	HYDRANT	FLUSH HYDRANT	NEW			EA
KY0980575	9	VALVE	6" GATE VALVE	NEW			EA

Project Components - Mapped Line Features

DOW Permit ID	Line Type	Purpose	Activity	Size (in.)	Material	Length (LF)
KY0980575	WATER LINE: FINISHED	DISTRIBUTION	EXTENSION	6.00	DUCTILE IRON	19,947
KY0980575	WATER LINE: FINISHED	DISTRIBUTION	EXTENSION	6.00	PVC	1,802
Total Length						21,749

Administrative Components:

- Planning
 Design
 Construction
 Management

Audits on Record Associated With Applicant

Audit Year	Entity Name	Entity Relationship
2022	Mountain Water District	Parent
2021	Mountain Water District	Parent
2020	Mountain Water District	Parent

Regionalization Components and Eliminated Systems/Plants:

Public Water Systems Eliminated:

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



Drinking Water Project Profile
WX21195063 - Mountain Water District
MWD - Capital Infrastructure Water Main Replacement

Water Treatment Plants Eliminated:

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

Supplementation of Raw Water Supply:

- This project includes supplementing the existing raw water supply.

Supplementation of Potable Water Supply:

- This project includes supplementing the existing potable water supply.

Supplementation of Emergency Water Supply:

- This project includes supplementing the existing emergency water supply.
-

Water Source Protection

- 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.
- This project rehabilitates a water source dam or reservoir.
- This project includes land acquisition for water source protection.
-

Water Treatment Components

- This project includes water treatment components.
-

Water Distribution and Storage Components:

- This project includes water distribution and/or storage components.



Drinking Water Project Profile
WX21195063 - Mountain Water District
MWD - Capital Infrastructure Water Main Replacement

Water Line Extensions:

This project includes water line extension(s).

Length of extensions (LF): **21,749**

Number of new connections: -

This projects extends service to unserved rural areas.

Redundancy Components:

This project includes emergency power generators for distribution and/or storage activities.

This project includes redundant distribution and/or storage processes.

Finished Water Quality:

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

Service Line Inventory:

This project includes implementation of a service line inventory.

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.

In-line or in-situ repair methods 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): **116.059**

Water Loss Percent (%): **10.000**

Water Storage and Pressure Components:

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

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

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

This project includes the construction of new pump station(s).

This project includes the rehabilitation of existing pump station(s).

Security:

This project includes security components for water distribution infrastructure.



Drinking Water Project Profile
 WX21195063 - Mountain Water District
 MWD - Capital Infrastructure Water Main Replacement

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
<input type="checkbox"/> Bioretention	\$0
<input type="checkbox"/> Trees	\$0
<input type="checkbox"/> Green Roofs	\$0
<input type="checkbox"/> Permeable Pavement	\$0
<input type="checkbox"/> Cisterns	\$0
Total Green Infrastructure Cost:	\$0

There are no Green Infrastructure components 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
<input type="checkbox"/> Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals).	\$0
<input type="checkbox"/> Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement).	\$0
<input type="checkbox"/> Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	\$0
<input type="checkbox"/> Retrofitting/adding AMR capabilities or leak equipment to existing meters.	\$0
<input type="checkbox"/> 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
<input type="checkbox"/> 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
<input type="checkbox"/> 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
<input type="checkbox"/> Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems.	\$0
<input type="checkbox"/> Water meter replacement with traditional water meters.*	\$0
<input type="checkbox"/> Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks.*	\$0
<input type="checkbox"/> Storage tank replacement/rehabilitation to reduce water loss.*	\$0
<input type="checkbox"/> 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.



Drinking Water Project Profile
 WX21195063 - Mountain Water District
 MWD - Capital Infrastructure Water Main Replacement

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
<input type="checkbox"/> 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
<input type="checkbox"/> Utility-owned or publicly-owned renewable energy projects.	\$0
<input type="checkbox"/> Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas.	\$0
<input type="checkbox"/> Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs).*	\$0
<input type="checkbox"/> Pump refurbishment to optimize pump efficiency.*	\$0
<input type="checkbox"/> Projects that result from an energy efficient related assessment.*	\$0
<input type="checkbox"/> Projects that cost effectively eliminate pumps or pumping stations.*	\$0
<input type="checkbox"/> Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.*	\$0
<input type="checkbox"/> Upgrade of lighting to energy efficient sources.*	\$0
<input type="checkbox"/> 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
<input type="checkbox"/> 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
<input type="checkbox"/> Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.	\$0
<input type="checkbox"/> Source water protection planning (delineation, monitoring, modeling).	\$0
<input type="checkbox"/> Planning activities to prepare for adaptation to the long-term effects of climate change and/or extreme weather.	\$0
<input type="checkbox"/> Utility sustainability plan consistent with EPA's sustainability policy.	\$0
<input type="checkbox"/> 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
<input type="checkbox"/> Construction of US Building Council LEED certified buildings, or renovation of an existing building.	\$0
<input type="checkbox"/> Projects that significantly reduce or eliminate the use of chemicals in water treatment.*	\$0
<input type="checkbox"/> 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
<input type="checkbox"/> Trenchless or low impact construction technology.*	\$0
<input type="checkbox"/> Using recycled materials or re-using materials on-site.*	\$0
<input type="checkbox"/> Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).*	\$0
<input type="checkbox"/> 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.



Drinking Water Project Profile
 WX21195063 - Mountain Water District
 MWD - Capital Infrastructure Water Main Replacement

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: **10-31-2023** [Download Fee Schedule](#)

Rate Adjustment Age: **3 months**

System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: **1.18%**

- 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: 10-06-2022

Date Revised:

EXHIBIT C-2



Lexington, KY | 859.278.5412
 Hopkinsville, KY | 270.886.5466
 Asheville, NC | 828.774.5499

OPINION OF PROBABLE PROJECT COST

Project: MOUNTAIN WATER DISTRICT - CAPITAL IMPROVEMENT PROJECT
Date: FEB 2024
Est. By: ELL

Client: MWD
Contract No.:
Checked By: SHC

- No Design Completed
- Preliminary
- Final Design

SHEET: _____ **OF:** _____ **Drawing No.:** _____

ITEM NO.	ITEM DESCRIPTION	QUANTITY		PRICE		TOTAL COST
		NO.	UNIT	PER UNIT	TOTAL	
CONSTRUCTION						
1	6-INCH DI WATERLINE	20365	LF	\$60	\$1,221,900	\$1,221,900
2	6-INCH PVC WATERLINE	1982	LF	\$50	\$99,100	\$99,100
3	6-INCH MJ RESILIENT SEATED GATE VALVE	9	EA	\$2,000	\$18,000	\$18,000
4	3/4-INCH POLYETHYLENE SERVICE PIPE	1800	LF	\$16	\$28,800	\$28,800
5	FIBERGLASS LINE MARKER	9	EA	\$77	\$693	\$693
6	CRUSHED STONE ON TRENCH SURFACE	50	TON	\$60	\$3,000	\$3,000
7	2-INCH THICKNESS BITUMINOUS SURFACE REPLACEMENT	348	LF	\$55	\$19,140	\$19,140
8	CUT & TIE INTO EXISTING 6-INCH WATERLINE	9	EA	\$3,500	\$31,500	\$31,500
9	CRUSHED ROCK FOR TRENCH STABILIZATION	50	TON	\$60	\$3,000	\$3,000
10	BORE & CASE FOR 6-INCH WATERLINE	200	LF	\$370	\$74,000	\$74,000
11	RECONNECT TO EXISTING METER	37	LS	\$800	\$29,600	\$29,600
12	FLUSHING HYDRANT ASSEMBLY	5	EA	\$4,500	\$22,500	\$22,500
TOTAL OPINION OF PROBABLE CONSTRUCTION COST						\$1,551,233

PROJECT COST		
	ADMINISTRATIVE EXPENSES	\$50,000
	LEGAL EXPENSES	\$0
	LAND, APPRAISALS, EASEMENTS	\$0
	RELOCATION EXPENSE & PAYMENTS	\$0
	PLANNING	\$0
	ENGINEERING FEES - DESIGN	\$88,932
	ENGINEERING FEES - BIDDING	\$12,705
	ENGINEERING FEES - CONSTRUCTION ADMINISTRATION	\$25,409
	ENGINEERING FEES - INSPECTION	\$78,337
	CONSTRUCTION	\$1,552,000
	EQUIPMENT	\$0
	CONTINGENCIES	\$118,879
	ENGINEERING FEES - OTHER	\$0
	OTHER ITEMS	\$0
TOTAL OPINION OF PROBABLE PROJECT COST		\$1,926,262