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ADMITTED IN KY AND WV

RECEIVED

MAY 17 2017

Public Service
Commission

May 15, 2017

Public Service Commission
ATTN: David Spenard
P.O. Box 615
Frankfort, KY 40602

RE: Martin County Water District
PSC Case No. 2016-00142

Dear Mr. Spenard:

Enclosed please find an original and five (5) copies of Martin County Water District's Response to information requested in the Appendix of the Public Service Commission's May 2, 2017 Order.

Thank you for your attention to this matter.

Very truly yours,

BRIAN CUMBO

BC/ld
Enclosure
cc: Martin County Water District

COMMONWEALTH OF KENTUCKY

RECEIVED

MAY 17 2017

Public Service
Commission

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

INVESTIGATION OF THE OPERATING)
CAPACITY OF MARTIN COUNTY WATER) CASE NO. 2016-00142
DISTRICT PURSUANT TO KRS 278.280)

**MARTIN COUNTY WATER
DISTRICT'S RESPONSE TO
INFORMATION REQUESTED IN
APPENDIX OF MAY 2, 2017 ORDER**

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

INVESTIGATION OF THE OPERATING
CAPACITY OF MARTIN COUNTY WATER
DISTRICT PURSUANT TO KRS 278.280

CASE NO. 2016-00142

ORDER

On April 11, 2016, the Commission entered an Order opening this investigation into deficiencies identified in the Commission Staff's December 12, 2014 Utility Inspection Report ("Inspection Report") of Martin County Water District's ("Martin District") facilities and records. The investigation also includes Martin District's compliance with the Required Action plan set forth in Appendix A of the Commission's April 2, 2008 Order in Case No. 2006-00303 ¹ and allegations of service quality deficiencies identified by Gary Ball, a customer of Martin District, through his complaint to the Commission. ²

On February 22, 2017, the Commission conducted a hearing to take evidence on these issues and, in particular, on Martin District's water loss reduction planning and efforts, leak reduction planning and efforts, including the prioritization of finding and repairing major leaks, unmetered service and theft of water, bad-debt expense, and whether Martin District plans to pursue a surcharge. ¹

An Investigation into the Management and Operation of Martin County Water District (Ky. PSC Apr. 2, 2008).

² Order (Ky. PSC Apr. 11, 2016) at 8.

The Commission finds that Martin District should respond to the requests for information contained in the Appendix to this Order. Additionally, the Commission

¹ Order (Ky. PSC Dec. 16, 2016) at 2.

finds that a hearing should be held, pursuant to 807 KAR 5:001, Section 9(3), to take evidence on all issues subject to this investigation. Martin District should be prepared to discuss at the hearing all of the issues within the scope of this investigation, including: 1) its responses to the requests for information made during the February 22, 2017 hearing; 2) its responses to the requests for information contained in the Appendix to this Order; and 3) the First Amendment to Joint Operating Agreement between Martin

District and Prestonsburg City's Utilities Commission.

IT IS THEREFORE ORDERED that:

1. Martin District shall file the information requested in the Appendix of this Order within 14 days from the date of the Order.

2. a. Responses to requests for information shall be appropriately bound, tabbed and indexed and shall include the name of the witness responsible for responding to the questions related to the information provided.

b. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

c. Martin District shall make timely amendment to any prior response

if it obtains information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect.

d. For any request to which Martin District fails or refuses to furnish all or part of the requested information, Martin District shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

e. A party filing a paper containing personal information shall, in accordance with 807 KAR Section 4(10), encrypt or redact the paper so that personal information cannot be read.

3. A hearing for the purpose of taking evidence on the issues within the scope of this investigation in the instant case shall be held on June 1, 2017, at 9:30 a.m. Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky.

4. The June 1, 2017 hearing shall be recorded by digital video recording only.

5. Martin District shall appear at the formal hearing scheduled on June 1, 2017, and shall present witnesses who are prepared to discuss the issues within the scope of this proceeding and the information filed into the record through Martin District's responses to requests for information.

6. Martin District shall file with the Commission, no later than May 18, 2017, a list of witnesses and exhibits to be presented at the June 1, 2017 hearing. Martin District shall provide six copies of any exhibit it intends to introduce into evidence at the hearing.

7. Martin District shall publish notice of the scheduled hearing in accordance with 807 KAR 5:001, Section 9(2)(b), no more than 21 days and no less than seven days before the day of the scheduled hearing in all areas in which it provides water service. In addition, the notice of hearing shall include the following statement: "This hearing will be streamed live and may be viewed on the PSC website, psc.ky.gov."

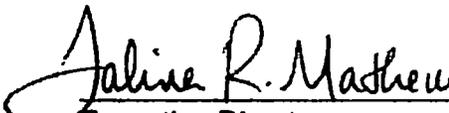
8. The Commission shall serve a copy of this Order to the Kentucky Division of Water.

By the Commission

ENTERED
MAY 02 2017
KENTUCKY PUBLIC
SERVICE COMMISSION
SERVICE

Chairman Michael Schmitt did not participate in the deliberations or decision concerning this case.

ATTEST:


Executive Director

tuo.---

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2016-00142 DATED

MAY 02 2017

1. Refer to Martin District's Response to Commission Staffs Post-Hearing Request for Information ("Response to Post-Hearing Request"), Item 1, Exhibit 1, and provide the following:

a. For each Annual Water Use Report ("Report") supplied in Exhibit 1, provide a revised Report that removes from Line 17 all gallons associated with leaks that have not been repaired and adds those gallons to Line 19 — Line Breaks and, based upon this revision, recalculates all of the information appearing on Lines 13 through 25;

RESPONSE: See Exhibit #1 – Revised Water Loss Report 2016

and

b. Explain why Martin District classified leaks not repaired as other unsold water used rather than water lost.

RESPONSE: I should have checked with PSC first. The gallons per minute was non-revenue water that was accounted for.

2. Refer to Martin District's Response to Post-Hearing Request, Item 2, and provide the following:

a. The total length of service line replaced in 2016;

RESPONSE: Estimate of 3,000 to 5,000 linear feet.

b. The total length of service line replaced through March 31, 2017;

RESPONSE: Estimate of 2,000 linear feet.

and

c. The total length of service line estimated to be replaced during the period of April 11 2017, through December 31 , 2017.

RESPONSE: Estimate of 2000 to 12000 linear feet.

3. Refer to Martin District's Response to Post-Hearing Request, Item 3, and provide the following:

a. Explain the difference between a zone meter and a monitor meter;

RESPONSE: A Zone Meter covers a large area to identify water leaks and a monitor meter will isolate water leaks in a smaller area within a Zone.

b. Explain why there are no zone meters or monitor meters between the tanks in the Middle Fork Zone;

RESPONSE: A Zone Meter is in place in the Middle Fork Zone area. However, the Zone Meter is before the tank. The mapping system is a work in progress and all zone meters are not all identified on the zone map. Kentucky Rural Water has informed the District that a Zone Meter should be located after the Tank within the Zone. As funding becomes available the District will upgrade the infrastructure of the system.

c. Explain why there are no zone meters or monitor meters in the Buffalo Horn Zone; and

RESPONSE: A Zone Meter is in place in the Buffalo Horn Zone area. However, the Zone Meter is before the tank. The mapping system is a work in progress and all zone meters are not all identified on the zone map. Kentucky Rural Water has informed the District that a Zone Meter should be located after the Tank within the Zone. As funding becomes available the District will upgrade the infrastructure of the system.

d. Explain why there are no zone meters or monitor meters in the Big Elk Zone.

Response: A Zone Meter is in place in the Big Elk Zone area. However, the Zone Meter is before the tank. The mapping system is a work in progress and all zone meters are not all identified on the zone map. Kentucky Rural Water has informed the District that a Zone Meter should be located after the Tank within the Zone. As funding becomes available the District will upgrade the infrastructure of the system.

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4. Refer to Martin District's Response to Post-Hearing Request, Item 4, and provide the following:

a. State whether any component of Project Rejuvenate was presented to the Water Management Counsel during the March 28, 2017 meeting referenced in the response;

RESPONSE: WX21159006, WX21159007, and WX21159009 have been approved, but not funded.

See Exhibit #2 – WX #s

b. Provide a revised schedule for Project Rejuvenate using the total project cost amounts from the Drinking Water Project Profiles; and

RESPONSE: Until the above projects are funded, the District cannot present a schedule at this time.

c. Provide an estimate of the water loss reduction that Martin District expects to achieve through project WX21 159006.

RESPONSE: When this Project is funded and completed the District's estimate of 20 – 30% reduction in water loss.

5. For each month from January 1, 2015, through March 31, 2017, provide the following:

a. The amount of water pumped into the Honey Branch Storage Take Line by Prestonsburg City's Utility Commission ("Prestonsburg") for the month;

RESPONSE: The District will research and confer with Prestonsburg to address this item and report to the PSC.

b. The amount of water usage billed to the Federal Prison for the month;

RESPONSE: The District has no records concerning this item. Prestonsburg completes the billing to the Federal Prison. The District receives an invoice informing us what we receive or what we must pay.

See Exhibit #3 – Invoices for 2016

and

c. The amount, if applicable, of water supplied by Prestonsburg that exceeds the amount of water delivered to the Federal Prison for the month.

RESPONSE: The District has no records concerning this item and cannot respond.

6. State whether Martin District's Management team is capable of addressing the excessive unaccounted-for water loss and provide the basis for its position.

RESPONSE: The District's Management team is capable of addressing the excessive unaccounted-for water loss. KRWA personnel are training the District's employees in relationship to finding and repairing leaks, record keeping, mapping the system into Zones and identifying and proper use of all assets in the District to reduce the water loss. This will take time and the funds to tackle the above problems.

7. State the amount of time it will take for Martin District to reduce unaccounted-for water loss to a maximum of 25 percent and thereafter to a maximum of 15 percent. Provide a detailed schedule in support of each attainment date that includes milestone dates for the major steps in reducing unaccounted-for water.

RESPONSE: See Below.

8. State the amount of time it will take for Martin District to complete a viable detailed capital project program that addresses the District's aging infrastructure in the lines and treatment facilities. Provide a detailed schedule in support of the targeted date that contains milestone dates for major steps in completing the capital project program.

Response: See Below.

9. State when Martin District will have an annual budget and operating plan prepared that generates sufficient income for adequately funding future projects identified in the District's capital project program. Provide a detailed schedule in

support of the targeted date that contains milestone dates for major steps in completing the annual budget and operating plan for adequately funding future projects.

Response: The District cannot begin to project how much time it will take to reduce the Water Loss. The District has prepared a Project Rejuvenate Plan with estimated cost for each prioritized section of the list. All the questions 7 thru 9 depends on funding in order to project beginning and ending of the above questions.

Appendix

Case No. 2016-00142

VERIFICATION

I, Joe Hammond, of the Martin County Water District, hereby verify that the responses and exhibits attached hereto are true and correct to the best of my knowledge.



JOE HAMMOND

STATE OF KENTUCKY)

COUNTY OF MARTIN)

SUBSCRIBED, SWORN and ACKNOWLEDGED before me by Joe Hammond
this 15th day of May, 2017.

My Commission Expires: 9-18-18.



NOTARY PUBLIC, STATE AT LARGE

CERTIFICATE OF SERVICE

This will certify that a true and correct copy of the foregoing was mailed, overnight delivery, postage paid, on this the 15 day of May, 2017, to the following:

Public Service Commission
ATTN: David Spenard
P.O. Box 615
Frankfort, KY 40602


BRIAN CUMBO

Exhibit #1
Revised Water Loss Report 2016

Annual Water Use Report

Water Utility: **Martin County Water District**

Year: 2016 2016

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	696.292	99%
3	Water Purchased	10.341	1%
4	TOTAL PRODUCED AND PURCHASED	706.633	

WATER SOLD			
5	Residential	197.826	87%
6	Commercial	6.097	3%
7	Industrial	0.000	0%
8	Bulk Loading Stations	0.000	0%
9	Wholesale	0.000	0%
10	Other Sales (explain) Honey Branch	23.084	10%
11	TOTAL WATER SOLD	227.007	32%
12	TOTAL WATER NOT SOLD	479.626	68%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	5.631	1%
14	Wastewater Plant	0.050	0%
15	System Flushing	30.050	4%
16	Fire Department	3.725	1%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	39.456	6%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	186.774	26%
20	Other Loss	258.566	37%
	TOTAL UNSOLD WATER LOST	445.340	63%

"OTHER LOSS" FLOW RATE CALCULATION:			
21	"Other Loss"	258.566	
22	% "Other Loss"	37%	
23	Number of Days in Period	366	
24	"Other Loss" per Day (1,000's gallons per Day)	0.706	
25	"Other Loss" per Minute (GPM)	0.491	



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: **January**

Year: **2016**

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	58.557	96%
3	Water Purchased	2.528	4%
4	TOTAL PRODUCED AND PURCHASED	61.085	

WATER SOLD			
5	Residential	19.109	92%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain) Honey Branch Industrial Park	1.697	8%
11	TOTAL WATER SOLD	20.806	34%
12	TOTAL WATER NOT SOLD	40.279	66%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.503	1%
14	Wastewater Plant	0.000	0%
15	System Flushing	Estimated 2.500	4%
16	Fire Department	Estimated 0.350	1%
17	Other (explain)	Estimated 0.000	0%
	TOTAL UNSOLD WATER USED	3.353	5%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	21.926	36%
20	Other Loss	15.000	25%
	TOTAL WATER LOST	36.926	60%

"OTHER LOSS" FLOW RATE CALCULATION:

21	"Other Loss"	15.000
22	% "Other Loss"	25%
23	Number of Days in Period	31
24	"Other Loss" per Day (1,000's gallons per Day)	0.484
25	"Other Loss" per Minute (GPM)	0.336



This form approved by: EPPC/DEP/DOW, KY PSC, KRWA

Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: February

Year: 2016

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	56.058	96%
3	Water Purchased Kermit Water	2.430	4%
4	TOTAL PRODUCED AND PURCHASED	58.488	

WATER SOLD			
5	Residential	14.629	95%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain) Honey Branch	0.769	5%
11	TOTAL WATER SOLD	15.398	26%
12	TOTAL WATER NOT SOLD	43.090	74%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.482	1%
14	Wastewater Plant		0%
15	System Flushing	Estimated 2.500	4%
16	Fire Department	Estimated 0.250	0%
17	Other (explain)	Estimated 0.000	0%
	TOTAL UNSOLD WATER USED	3.232	6%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	Estimated 15.256	26%
20	Other Loss	Estimated 24.602	42%
	TOTAL WATER LOST	39.858	68%

"OTHER LOSS" FLOW RATE CALCULATION:

21	"Other Loss"	24.602
22	% "Other Loss"	42%
23	Number of Days in Period	29
24	"Other Loss" per Day (1,000's gallons per Day)	0.848
25	"Other Loss" per Minute (GPM)	0.589



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: **March**

Year: **2016**

LINE #	ITEM	GALLONS (Omit 000's)	%
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1	WATER PRODUCED or PURCHASED		
2	Water Produced	59.366	95%
3	Water Purchased	2.823	5%
4	TOTAL PRODUCED AND PURCHASED	62.189	

WATER SOLD			
5	Residential	17.597	82%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain) Honey Branch Industrial Park	3.858	18%
11	TOTAL WATER SOLD	21.455	34%
12	TOTAL WATER NOT SOLD	40.734	66%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.469	1%
14	Wastewater Plant	0.000	0%
15	System Flushing Estimated	3.000	5%
16	Fire Department Estimated	0.250	0%
17	Other (explain) Estimated	0.000	0%
	TOTAL UNSOLD WATER USED	3.719	6%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks Estimated	14.500	23%
20	Other Loss Estimated	22.515	36%
	TOTAL WATER LOST	37.015	60%

"OTHER LOSS" FLOW RATE CALCULATION:			
21		"Other Loss"	22.515
22		% "Other Loss"	36%
23		Number of Days in Period	31
24		"Other Loss" per Day (1,000's gallons per Day)	0.726
25		"Other Loss" per Minute (GPM)	0.504



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: April

Year: 2016

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	57.406	99%
3	Water Purchased	0.419	1%
4	TOTAL PRODUCED AND PURCHASED	57.825	

WATER SOLD			
5	Residential	17.597	82%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain) Honey Branch	3.832	18%
11	TOTAL WATER SOLD	21.429	37%
12	TOTAL WATER NOT SOLD	36.396	63%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.404	1%
14	Wastewater Plant	0.000	0%
15	System Flushing	3.500	6%
16	Fire Department	0.350	1%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	4.254	7%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks (Elk Creek, Petercave, Railroad) Estimated	24.142	42%
20	Other Loss	8.000	14%
	TOTAL WATER LOST	32.142	56%

"OTHER LOSS" FLOW RATE CALCULATION:			
21		"Other Loss"	8.000
22		% "Other Loss"	14%
23		Number of Days in Period	30
24		"Other Loss" per Day (1,000's gallons per Day)	0.267
25		"Other Loss" per Minute (GPM)	0.185



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: **May**

Year: **2016**

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	58.563	99%
3	Water Purchased	0.348	1%
4	TOTAL PRODUCED AND PURCHASED	58.911	

WATER SOLD			
5	Residential	14.214	84%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain) Honey Brach	2.782	16%
11	TOTAL WATER SOLD	16.996	29%
12	TOTAL WATER NOT SOLD	41.915	71%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.481	1%
14	Wastewater Plant	0.000	0%
15	System Flushing	2.250	4%
16	Fire Department	0.250	0%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	2.981	5%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	12.250	21%
20	Other Loss	26.684	45%
	TOTAL WATER LOST	38.934	66%

"OTHER LOSS" FLOW RATE CALCULATION:

21	"Other Loss"	26.684
22	% "Other Loss"	45%
23	Number of Days in Period	31
24	"Other Loss" per Day (1,000's gallons per Day)	0.861
25	"Other Loss" per Minute (GPM)	0.598



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: June

Year: 2016

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	58.356	100%
3	Water Purchased	0.285	0%
4	TOTAL PRODUCED AND PURCHASED	58.641	

WATER SOLD			
5	Residential	18.160	84%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain) Honey Branch Industrial Park	3.481	16%
11	TOTAL WATER SOLD	21.641	37%
12	TOTAL WATER NOT SOLD	37.000	63%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.461	1%
14	Wastewater Plant	Estimated 0.000	0%
15	System Flushing	Estimated 2.750	5%
16	Fire Department	Estimated 0.350	1%
17	Other (explain)	Estimated 0.000	0%
	TOTAL UNSOLD WATER USED	3.561	6%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	Estimated 0.000	0%
19	Line Breaks	Estimated 14.600	25%
20	Other Loss	18.839	32%
	TOTAL WATER LOST	33.439	57%

"OTHER LOSS" FLOW RATE CALCULATION:

21		"Other Loss"	18.839
22		% "Other Loss"	32%
23		Number of Days in Period	30
24		"Other Loss" per Day (1,000's gallons per Day)	0.628
25		"Other Loss" per Minute (GPM)	0.436



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: July

Year: 2016

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	58.102	99%
3	Water Purchased	0.668	1%
4	TOTAL PRODUCED AND PURCHASED	58.77	

WATER SOLD			
5	Residential	18.16	90%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain)	2.090	10%
	Honey Branch		
11	TOTAL WATER SOLD	20.25	34%
12	TOTAL WATER NOT SOLD	38.52	66%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.480	1%
14	Wastewater Plant	0.000	0%
15	System Flushing	1.300	2%
16	Fire Department	0.350	1%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	2.130	4%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	14.500	25%
20	Other Loss	21.890	37%
	TOTAL WATER LOST	36.390	62%

"OTHER LOSS" FLOW RATE CALCULATION:

21	"Other Loss"	21.890
22	% "Other Loss"	37%
23	Number of Days in Period	31
24	"Other Loss" per Day (1,000's gallons per Day)	0.706
25	"Other Loss" per Minute (GPM)	0.490



Monthly Water Use Report

Water Utility:	Martin County Water District		
For the Month of:	August	Year:	2016

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	56.347	99%
3	Water Purchased	0.762	1%
4	TOTAL PRODUCED AND PURCHASED	57.109	

WATER SOLD			
5	Residential	14.344	82%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain)	3.080	18%
	Honey Branch		
11	TOTAL WATER SOLD	17.424	31%
12	TOTAL WATER NOT SOLD	39.685	69%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.483	1%
14	Wastewater Plant	0.000	0%
15	System Flushing	1.500	3%
16	Fire Department	0.325	1%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	2.308	4%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	10.800	19%
20	Other Loss	26.577	47%
	TOTAL WATER LOST	37.377	65%

"OTHER LOSS" FLOW RATE CALCULATION:			
21		"Other Loss"	26.577
22		% "Other Loss"	47%
23		Number of Days in Period	31
24		"Other Loss" per Day (1,000's gallons per Day)	0.857
25		"Other Loss" per Minute (GPM)	0.595



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: **September**

Year: **2016**

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	57.596	100%
3	Water Purchased	0.078	0%
4	TOTAL PRODUCED AND PURCHASED	57.674	

WATER SOLD			
5	Residential	17.760	95%
6	Commercial	0.927	5%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain)		0%
11	TOTAL WATER SOLD	18.687	32%
12	TOTAL WATER NOT SOLD	38.987	68%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.499	1%
14	Wastewater Plant	Estimated 0.000	0%
15	System Flushing	Estimated 2.500	4%
16	Fire Department	Estimated 0.250	0%
17	Other (explain)	Estimated 0.000	0%
	TOTAL UNSOLD WATER USED	3.249	6%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	Estimated 0.000	0%
19	Line Breaks	Estimated 14.500	25%
20	Other Loss	21.238	37%
	TOTAL WATER LOST	35.738	62%

"OTHER LOSS" FLOW RATE CALCULATION:			
21		"Other Loss"	21.238
22		% "Other Loss"	37%
23		Number of Days in Period	30
24		"Other Loss" per Day (1,000's gallons per Day)	0.708
25		"Other Loss" per Minute (GPM)	0.492



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: **October**

Year: **2016**

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	60.697	100%
3	Water Purchased	0	0%
4	TOTAL PRODUCED AND PURCHASED	60.697	

WATER SOLD			
5	Residential	16.134	95%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain)	0.850	5%
11	TOTAL WATER SOLD	16.984	28%
12	TOTAL WATER NOT SOLD	43.713	72%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.468	1%
14	Wastewater Plant	0.000	0%
15	System Flushing	3.250	5%
16	Fire Department	0.300	0%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	4.018	7%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	14.500	24%
20	Other Loss	25.195	42%
	TOTAL WATER LOST	39.695	65%

"OTHER LOSS" FLOW RATE CALCULATION:

21	"Other Loss"	25.195
22	% "Other Loss"	42%
23	Number of Days in Period	31
24	"Other Loss" per Day (1,000's gallons per Day)	0.813
25	"Other Loss" per Minute (GPM)	0.564



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: **November**

Year: **2016**

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	55.721	100%
3	Water Purchased	0	0%
4	TOTAL PRODUCED AND PURCHASED	55.721	

WATER SOLD			
5	Residential	14.723	100%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain)	Honey Branch	0%
11	TOTAL WATER SOLD	14.723	26%
12	TOTAL WATER NOT SOLD	40.998	74%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.437	1%
14	Wastewater Plant	0.000	0%
15	System Flushing	2.500	4%
16	Fire Department	0.300	1%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	3.237	6%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0	0%
19	Line Breaks	Estimated	15.500 28%
20	Other Loss	22.261	40%
	TOTAL WATER LOST	37.761	68%

"OTHER LOSS" FLOW RATE CALCULATION:

21	"Other Loss"	22.261
22	% "Other Loss"	0.400
23	Number of Days in Period	30.000
24	"Other Loss" per Day (1,000's gallons per Day)	0.742
25	"Other Loss" per Minute (GPM)	0.515



Monthly Water Use Report

Water Utility: **Martin County Water District**

For the Month of: **December** Year: **2016**

LINE #	ITEM	GALLONS (Omit 000's)	%
1	WATER PRODUCED or PURCHASED		
2	Water Produced	59.523	100%
3	Water Purchased	0	0%
4	TOTAL PRODUCED AND PURCHASED	59.523	

WATER SOLD			
5	Residential	15.399	96%
6	Commercial		0%
7	Industrial		0%
8	Bulk Loading Stations		0%
9	Wholesale		0%
10	Other Sales (explain) Honey Branch	0.645	4%
11	TOTAL WATER SOLD	16.044	27%
12	TOTAL WATER NOT SOLD	43.479	73%

BREAKDOWN OF UNSOLD WATER USED			
13	Utility and/or Water Treatment Plant	0.464	%
14	Wastewater Plant	0.050	0%
15	System Flushing	2.500	4%
16	Fire Department	0.400	1%
17	Other (explain)	0.000	0%
	TOTAL UNSOLD WATER USED	3.414	6%

BREAKDOWN OF WATER LOST			
18	Tank Overflows	0.000	0%
19	Line Breaks	14.300	24%
20	Other Loss	25.765	43%
	TOTAL WATER LOST	40.065	67%

"OTHER LOSS" FLOW RATE CALCULATION:		
21	"Other Loss"	25.765
22	% "Other Loss"	43%
23	Number of Days in Period	31.000
24	"Other Loss" per Day (1,000's gallons per Day)	0.831
25	"Other Loss" per Minute (GPM)	0.577



Exhibit #2

WX #s



Drinking Water Project Profile

Legal Applicant: **Martin County Water District**

Project Title: **Martin County Rehab Aging Infrastructure**

Project Number: **WX21169006** [View Map](#)

Submitted By: **BSADD**

Funding Status: **Not Funded**

Primary County: **Martin**

Project Status: **Approved**

Planning Unit: **Martin**

Project Schedule: **0-2 Years**

Multi-County: **No**

E-Clearinghouse SAI:

ECH Status:

Applicant Entity Type: **Water District (KR8 74)**

ADD WMC Contact: **Tracy Wireman**

Date Approved (AWMPC): **12-09-2014**

Project Description:

This project will replace aging mains and service lines in areas of the District that have been identified as having water lines in very poor condition. The primary areas are: KY 2032 - Little Rockcastle, KY 1714 - Pigeon Roost, KY 1439 - Wolf Creek/Meathouse, Lovely, Warfield and Turkey Creek. This project will also replace the main water line along KY 40 and KY 292 from Buck Creek Hill to Warfield/Lovely.

The line replacements will replace lines size ranging from 4 inch to 6 inch. The existing sub-standard PVC lines will be replaced with 4" and 6" SDR PVC pipe.

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 lines in these areas are old, in poor condition, and too small for the volume needed to serve the customers in the area. These are areas with high water loss due to the condition of the existing water lines.

Project Alternatives:

Alternate A:

Continue to repair sections of line

Alternate B:

Legal Applicant:

Entity Type: **Water District (KR8 74)**

PSC Group ID: **25000**

Entity Name: **Martin County Water District**

Web URL:

Office EMail: **jhammond58@belleouth.net**

Office Phone: **606-298-3885**

Toll Free:

Fax: **606-298-4913**

Mail Address Line 1: **387 E Main St**

Phys Address Line 1:

Mail Address Line 2:

Phys Address Line 2:

Mail City, State Zip: **inez, KY 41224**

Phys City, State Zip:

Contact: **Joe Hammond**

Auth Official: **Kelly Callahan**

Contact Title: **Business Manager**

Auth Official Title: **Judge Executive**

Contact EMail: **jhammond58@belleouth.net**

Auth Official EMail: **kcallahan@suddenlinkmail.com**

Contact Phone: **606-298-3885**

Auth Official Phone: **606-298-2800**

Contact Cell: **606-626-7748**

Auth Official Cell: **606-626-5901**

Data Source: **Kentucky Infrastructure Authority**

Date Last Modified: **03.03.2017**



Drinking Water Project Profile
WX21169006 - Martin County Water District
Martin County Rehab Aging Infrastructure

Project Administrator (PA) Information

Name: **Holly L Nicholas**
Title: **Project Developer**
Organization: **Kentucky Engineering Group, Plc**
Address Line 1: **P.O. Box 1034**
Address Line 2:
City: **Versailles** State: **KY** Zip: **40383**
Phone: **859-333-9742** Fax: **859-251-4137**

Applicant Contact (AC) Information

Name: **Joe Hammond**
Title: **Business Manager**
Organization: **Martin County Utilities**
Address Line 1: **38 7 E Main St**
Address Line 2:
City: **Inez** State: **KY** Zip: **41224**
Phone: **606-626-7748** Fax: **606-298-4913**

Project Engineer (PE) Information:

This project requires a licensed Professional Engineer.

License No: **PE 24022**

PE Name: **James C. Thompson**

Phone: **859-251-4127** Fax: **859-251-4137**

E-Mail: **jthompson@kyengr.com**

Firm Name: **Kentucky Engineering Group PLLC**

Addr Line 1: **Kentucky Engineering Group PLLC**

Addr Line 2: **161 North Locust Street**

Addr Line 3:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **01-05-2005** Expires: **06-30-2018**

Engineering Firm Information:

Permit No: **2889**

Firm Name: **Kentucky Engineering Group PLLC**

Phone: **859-251-4127** Fax: **859-251-4137**

Web URL: **http://www.kyengr.com/**

E-Mail: **jthompson@kyengr.com**

Addr Line 1: **161 N. Locust St.**

Addr Line 2:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **02-19-2009** Expires: **12-31-2017**



Drinking Water Project Profile
 WX21159006 - Martin County Water District
 Martin County Rehab Aging Infrastructure

Estimated Budget

Project Cost Classification:

Administrative Exp.:	\$ 25,000
Legal Exp.:	\$ 10,000
Land, Appraisals, Easements:	
Relocation Exp. & Payments:	
Planning:	
Engineering Fees - Design:	\$ 170,000
Engineering Fees - Construction:	\$ 42,610
Engineering Fees - Inspection:	\$ 118,490
Engineering Fees - Other:	\$ 7,500
Construction:	\$ 4,400,000
Equipment:	
Miscellaneous:	
Contingencies:	\$ 400,000
Total Project Cost:	\$ 5,173,600

Construction Cost Categories:

Treatment:	
Transmission & Distribution:	\$ 4,400,000
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Catagorized:	
Total Construction:	\$ 4,400,000

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: **\$5,173,600**
 Total Committed Funding: **\$0**
 Funding Gap: **\$5,173,600 (Not Funded)**

This project will be requesting SRF funding for fiscal year 2018.

Estimated Project Schedule:

Est. Environmental Review Submittal Date:
 Estimated Bid Date: **02-06-2017**
 Estimated Construction Start Date: **04-10-2017**
 Estimated Construction Completion Date:

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
KIA SRF Fund F Loan (DW)	F16-030	2016	\$2,760,960	Invited	9/16/2015
KIA SRF Fund F Loan (DW)		2017	\$3,599,900	Invited	10/28/2016
Total Committed					

Funding Source Notes:

The following systems are beneficiaries of this project:

KY0800273 Martin County Water District

Note: Check mark indicates primary system for this project.

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.
- Plans and specs have been reviewed by PSC.



Drinking Water Project Profile

WX21159006 - Martin County Water District
Martin County Rehab Aging Infrastructure

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:	640	12,175	12,170
Households:	286	5,093	5,093
MHI:	\$23,783	\$25,814	*\$25,814
MHI MOE	\$6,630	\$6,163	*\$6,163
MOE as Pct:	28%	24.0%	24.0%
**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 2011-2015 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 = \$43,740
- 80% KMHI = \$34,992

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:	3,335	286
To Total Households:	3,335	286
** Cost Per Household:	\$1,551	

* 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	
Martin	
Legislative Districts	
District Name	Legislator
House 093	Chris Harris
Senate 31	Ray S. Jones II
Congressional 5	Hal Rogers
Groundwater Sensitivity Zones	
HUC 10 Watersheds	
HUC Code	Watershed Name
0507020105	Wolf Creek-Tug Fork
0507020106	Rockcastle Creek-Tug Fork

Geographic Impacts For Included System(s)	
Counties	
Johnson	
Lawrence	
Martin	
Legislative Districts	
District Name	Legislator
House 093	Chris Harris
House 096	Jill York
House 097	Scott Wells
Senate 30	Brandon Smith
Senate 31	Ray S. Jones II
Congressional 5	Hal Rogers



Drinking Water Project Profile
 WX21159006 - Martin County Water District
 Martin County Rehab Aging Infrastructure

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).

Project Inventory (Mapped Features):

Mapped Line Features						
DOW Permit ID	Line Type	Purpose	Activity	Size (in.)	Material	Length (LF)
KY0800273	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE UNDERSIZED LINES	6.00	PVC	86,425
KY0800273	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE UNDERSIZED LINES	8.00	PVC	9,753
					Total Length	96,178

Administrative Components:

- Planning
- Design
- Construction
- Management

Regionalization Components:

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) through Interconnect(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.

Emergency Only Water Supply:

- This project provides emergency only water supply.

Water Source Protection:

- This project includes land acquisition for water source protection.



Drinking Water Project Profile
WX21159006 - Martin County Water District
Martin County Rehab Aging Infrastructure

Water Treatment Components:

- This project includes water treatment components

Treatment Activities:

- This project includes a new water treatment plant.
- This project includes an expansion of an existing water treatment plant.
- This project includes rehabilitation of an existing water treatment plant.
- This project includes upgrades to an existing water treatment plant.
- This project includes emergency power generators for treatment activities.
- This project includes redundant treatment processes.

Acute Public Health Risk:

- This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements.
- This project includes infrastructure options to meet CT inactivation requirements.

Chronic Public Health Risk:

- This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.
- This project will provide treatment modifications for VOCs, IOCs, SOC, or Radionuclides.

Secondary Contaminants:

- This project includes treatment modifications to address Secondary Contaminants.

Security:

- This project includes security components for water treatment facilities.

Water Distribution and Storage:

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

Water Line Extensions:

- This project includes water line extension(s).

Redundancy Components:

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

Number of units provided: 0

- 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).
- This project includes infrastructure to address inability to maintain disinfection residual.



Drinking Water Project Profile
 WX21159006 - Martin County Water District
 Martin County Rehab Aging Infrastructure

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.

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 new pump stations for boosting pressure .
 - This project includes new pump stations for filling water tanks.
- This project includes the rehabilitation of existing pump station(s).

Security:

- This project includes security components for water distribution infrastructure.

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

There are no Green Infrastructure components specified for this project.



Drinking Water Project Profile
 WX21169006 - Martin County Water District
 Martin County Rehab Aging Infrastructure

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 checked="" type="checkbox"/> Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	\$765,000
<input type="checkbox"/> Retrofitting/adding AMR capabilities or leak equipment to existing meters.	
<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.	
<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 checked="" type="checkbox"/> Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks.*	\$2,228,000
<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:	\$2,993,000

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

This project will replace existing waterlines and help with water losses occurring in the distribution system.

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
 WX21159006 - Martin County Water District
 Martin County Rehab Aging Infrastructure

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: 07-07-2011 Download Fee Schedule
Rate Adjustment Age: 66 months
System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: 0.15%
<input type="checkbox"/> The system(s) has a Capital Improvement Plan or similar planning document.
<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: 12-09-2014

Date Revised:



Drinking Water Project Profile

Legal Applicant: **Martin County Water District**
 Project Title: **Water Treatment Plant Clarifier Rehab**
 Project Number: **WX21169007** View Map
 Funding Status: **Not Funded**
 Project Status: **Approved**
 Project Schedule: **0-2 Years**
 E-Clearinghouse SAI: **KY201606080681**
 Applicant Entity Type: **Water District (KRS 74)**
 Date Approved (AWMPC): **12-09-2014**

Submitted By: **BBADD**
 Primary County: **Martin**
 Planning Unit: **Martin**
 Multi-County: **No**
 ECH Status: **Approved**
 ADD WMC Contact: **Tracy Wireman**

Project Description:

This project will rehab the existing clarifier unit (No. 1) at the water treatment plant. The clarifier unit was constructed in the late 1960; renovated in the late 1980 and is in need of rehabilitation again.

The clarifier unit is a combination upflow clarifier and settling basin with peripheral filters. The unit has a treatment capacity of 0.7 to 1.0 MGD (depending on raw water turbidity). The unit is in the need of having the metal support bridge repainted; the clarifier rake mechanism is in the need of repair with damaged or broken supports replaced and structurally reinforced; the motor gear box and drive unit needs to be replaced. The filter underdrain is the original underdrain system with ceramic spheres, which several are missing or have worn down. Several underdrain hoppers are in poor or failing condition causing the filter media to fall into the filter chase.

Additional work will be done to relocate the filter effluent, filter drain, filter-to-waste, and effluent valves to a new valve vault similar to the existing two units that was constructed in 2010. Tube settlers will be installed in this unit similar to the two existing units. The portions or parts of the clarifier that will be rehabilitated or replaced: The metal support bridge repainted, clarifier rake mechanism replaced, motor gear box and drive unit replaced. The filter underdrains will be replaced. This project will impact the finished water by improving filtration by reducing the filtration. This will not impact potential DBP formation at the water plant. This project is not needed to meet CT and/or cryptosporidium removal requirements.

This project will also replace remainder of district's water meters to radio read meters, residential and commercial.

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 rehabilitation of this unit will allow the WTP to remove from service any of the three treatment units for repairs, cleaning, maintenance, or back washing of the filters without reducing the overall treatment plant capacity of 2.4 MGD.

Project Alternatives:

Alternate A:

Construct a new clarifier.

Alternate B:

Legal Applicant:

Entity Type: **Water District (KRS 74)** PSC Group ID: **26000**
 Entity Name: **Martin County Water District**
 Web URL:
 Office EMail: **jhammond58@bellsouth.net**
 Office Phone: **606-298-3885** Toll Free: Fax: **606-298-4913**

Mail Address Line 1: **387 E Main St** Phys Address Line 1:
 Mail Address Line 2: Phys Address Line 2:
 Mail City, State Zip: **Inez, KY 41224** Phys City, State Zip:

Contact: **Joe Hammond** Auth Official: **Kelly Calaham**
 Contact Title: **Business Manager** Auth Official Title: **Judge Executive**
 Contact EMail: **jhammond58@bellsouth.net** Auth Official EMail: **kcalaham@suddenlinkmail.com**
 Contact Phone: **606-298-3885** Auth Official Phone: **606-298-2800**
 Contact Cell: **606-626-7748** Auth Official Cell: **606-626-6901**
 Data Source: **Kentucky Infrastructure Authority** Date Last Modified: **03.03.2017**



Drinking Water Project Profile
WX21159007 - Martin County Water District
Water Treatment Plant Clarifier Rehab

Project Administrator (PA) Information

Name: **Holly L Nicholas**

Title: **Project Developer**

Organization: **Kentucky Engineering Group, PLLC**

Address Line 1: **P.O. Box 1034**

Address Line 2:

City: **Versailles** State: **KY** Zip: **40383**

Phone: **859-333-8742** Fax: **859-251-4137**

Applicant Contact (AC) Information

Name: **John Mills**

Title: **General Manager**

Organization: **Martin County Water District**

Address Line 1: **Hc 69 Box 875**

Address Line 2:

City: **Inez** State: **KY** Zip: **41224**

Phone: **606-298-3885** Fax:

Project Engineer (PE) Information:

This project requires a licensed Professional Engineer.

License No: **PE 24022**

PE Name: **James C. Thompson**

Phone: **859-251-4127** Fax: **859-251-4137**

E-Mail: **jthompson@kyengr.com**

Firm Name: **Kentucky Engineering Group PLLC**

Addr Line 1: **Kentucky Engineering Group PLLC**

Addr Line 2: **161 North Locust Street**

Addr Line 3:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **01-05-2005** Expires: **06-30-2018**

Engineering Firm Information:

Permit No: **2889**

Firm Name: **Kentucky Engineering Group PLLC**

Phone: **859-251-4127** Fax: **859-251-4137**

Web URL: **http://www.kyengr.com/**

E-Mail: **jthompson@kyengr.com**

Addr Line 1: **161 N. Locust St.**

Addr Line 2:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **02-19-2009** Expires: **12-31-2017**



Drinking Water Project Profile
 WX21159007 - Martin County Water District
 Water Treatment Plant Clarifier Rehab

Estimated Budget

Project Cost Classification:

Administrative Exp.:	\$ 39,875
Legal Exp.:	\$ 5,000
Land, Appraisals, Easements:	
Relocation Exp. & Payments:	
Planning:	\$ 25,000
Engineering Fees - Design:	\$ 141,158
Engineering Fees - Construction:	
Engineering Fees - Inspection:	\$ 89,320
Engineering Fees - Other:	
Construction:	\$ 1,595,000
Equipment:	
Miscellaneous:	\$ 3,500
Contingencies:	\$ 159,500
Total Project Cost:	\$ 2,058,353

Construction Cost Categories:

Treatment:	\$ 1,295,000
Transmission & Distribution:	
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Catagorized:	\$ 300,000
Total Construction:	\$ 1,595,000

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: **\$2,058,353**
 Total Committed Funding: **\$0**
 Funding Gap: **\$2,058,353 (Not Funded)**

This project will be requesting SRF funding for fiscal year 2018.

Estimated Project Schedule:

Est. Environmental Review Submittal Date: **02-01-2017**
 Estimated Bid Date: **01-01-2017**
 Estimated Construction Start Date: **04-01-2017**
 Estimated Construction Completion Date: **05-01-2018**

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
KIA SRF Fund F Loan (DW)		2017	\$1,011,600	Ranked	6/21/2016
KIA SRF Fund F Loan (DW)		2018	\$2,058,353	Anticipated	
Total Committed					

Funding Source Notes:

The following systems are beneficiaries of this project:

KY0800273 Martin County Water District

Note: Check mark indicates primary system for this project.

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.
- Plans and specs have been reviewed by PSC.



Drinking Water Project Profile

WX21159007 - Martin County Water District
Water Treatment Plant Clarifier Rehab

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:		12,175	12,170
Households:		5,093	5,093
MHI:		\$25,814	*\$25,814
MHI MOE		\$6,163	*\$6,163
MOE as Pct:		24.0%	24.0%
**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 2011-2015 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 = \$43,740
 - 80% KHMI = \$34,992

Geographic Impacts For Project Area	
Counties	
Martin	
Legislative Districts	
District Name	Legislator
House 093	Chris Harris
Senate 31	Ray S. Jones II
Congressional 5	Hal Rogers
Groundwater Sensitivity Zones	
HUC 10 Watersheds	
HUC Code	Watershed Name
0507020106	Rockcastle Creek-Tug Fork

Geographic Impacts For Included System(s)	
Counties	
Johnson	
Lawrence	
Martin	
Legislative Districts	
District Name	Legislator
House 093	Chris Harris
House 096	Jill York
House 097	Scott Wells
Senate 30	Brandon Smith
Senate 31	Ray S. Jones II
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:	3,335	
To Total Households:	3,335	
** Cost Per Household:	\$617	

* 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
 WX21159007 - Martin County Water District
 Water Treatment Plant Clarifier Rehab

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).

Project Inventory (Mapped Features):

Mapped Point Features							
DOW Permit ID	Count	FeatureType	Purpose	Status	Existing Capacity	Proposed Capacity	Units
KY0800273	1	WATER TREATMENT PLANT	CLARIFIER	REHAB	2.00		MGD

Administrative Components:

- Planning
 Design
 Construction
 Management

Regionalization Components:

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) through interconnect(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.

Emergency Only Water Supply:

- This project provides emergency only water supply.

Water Source Protection:

- This project includes land acquisition for water source protection.



Drinking Water Project Profile
WX21159007 - Martin County Water District
Water Treatment Plant Clarifier Rehab

Water Treatment Components:

- This project includes water treatment components

Treatment Activities:

- This project includes a new water treatment plant.
Proposed design capacity (MGD): 0.000
- This project includes an expansion of an existing water treatment plant.
Current design capacity (MGD): 0.000
Proposed design capacity (MGD): 0.000
- This project includes rehabilitation of an existing water treatment plant.
- This project includes upgrades to an existing water treatment plant.
- This project includes emergency power generators for treatment activities.
Number of units provided: 0
- This project includes redundant treatment processes.

Acute Public Health Risk:

- This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements.
- This project includes infrastructure options to meet CT inactivation requirements.

Chronic Public Health Risk:

- This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.
- This project will provide treatment modifications for VOCs, IOC, SOC, or Radionuclides.

Secondary Contaminants:

- This project includes treatment modifications to address Secondary Contaminants.

Security:

- This project includes security components for water treatment facilities.

Water Distribution and Storage:

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

Water Line Extensions:

- This project includes water line extension(s).

Redundancy Components:

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



Drinking Water Project Profile
 WX21159007 - Martin County Water District
 Water Treatment Plant Clarifier Rehab

Finished Water Quality:

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

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.

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.

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.



Drinking Water Project Profile
 WX21159007 - Martin County Water District
 Water Treatment Plant Clarifier Rehab

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 unmetred 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.

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.



Drinking Water Project Profile
 WX21159007 - Martin County Water District
 Water Treatment Plant Clarifier Rehab

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.

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: 07-07-2011 Download Fee Schedule
Rate Adjustment Age: 66 months
System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: 0.15%
<input type="checkbox"/> The system(s) has a Capital Improvement Plan or similar planning document.
<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: 12-09-2014

Date Revised:



Drinking Water Project Profile

Legal Applicant: **Martin County Water District**

Project Title: **Water Intake Upgrades**

Project Number: **WX21169009** [View Map](#)

Funding Status: **Not Funded**

Project Status: **Approved**

Project Schedule: **0-2 Years**

E-Clearinghouse SAI:

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

Date Approved (AWMPC): **12-04-2015**

Submitted By: **BSADD**

Primary County: **Martin**

Planning Unit: **Martin**

Multi-County: **No**

ECH Status:

ADD WMC Contact: **Tracy Wireman**

Project Description:

This project will change out the current configuration of the raw water intake. The intake currently consist of vertical turbine pumps with extremely long shafts that vibrate excessively when the raw water is pumped. When the excessive vibration reaches a certain point, the pumps shut off because of the rapid vibrations. At this point the failure has caused damage to the bearings, bearing retainers, and shafts resulting in these parts having to be replaced. Also, the pump motors are installed below the 100-year floodplain and need to be raised. Raising the pump motors with the current configuration would only increase the length of pump column and shaft, only to make the vibration problem worst.

This project will install submersible pumps and a new river intake structure and screen with the ability to more efficiently blow off the accumulation of sediment that occurs around the intake screen. The existing raw water meter will be replaced with one that will allow for use in temporary flooded situations.

The VFD's will be relocated to the existing building out of the floodplain.

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 existing configuration results in the pumps shutting off prematurely due to the rapid vibration of the shafts. Failure of a pump results in the pumping of raw water taking much longer than it should with only one pump and results in not having any back-up pump. Sediment buildup around the existing intake also restricts the amount of raw water entering the intake wet well and the volume that can be withdrawn from the river.

Project Alternatives:

Alternate A:

Change the pumps and valves, but not the intake.

Alternate B:

Move the VFD's out of the floodplain but do nothing else.

Legal Applicant:

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

PSC Group ID: **26000**

Entity Name: **Martin County Water District**

Web URL:

Office EMail: **jhammond58@bellsouth.net**

Office Phone: **606-298-3885**

Toll Free:

Fax: **606-298-4913**

Mail Address Line 1: **387 E Main St**

Phys Address Line 1:

Mail Address Line 2:

Phys Address Line 2:

Mail City, State Zip: **Inez, KY 41224**

Phys City, State Zip:

Contact: **Joe Hammond**

Auth Official: **Kelly Calaham**

Contact Title: **Business Manager**

Auth Official Title: **Judge Executive**

Contact EMail: **jhammond58@bellsouth.net**

Auth Official EMail: **kcalaham@suddenlinkmail.com**

Contact Phone: **606-298-3885**

Auth Official Phone: **606-298-2800**

Contact Cell: **606-628-7748**

Auth Official Cell: **606-628-5901**

Data Source: **Kentucky Infrastructure Authority**

Date Last Modified: **03.03.2017**



Drinking Water Project Profile
WX21159009 - Martin County Water District
Water Intake Upgrades

Project Administrator (PA) Information

Name: **Holly L Nicholas**
Title: **Project Developer**
Organization: **Kentucky Engineering Group, PLLC**
Address Line 1: **P.O. Box 1034**
Address Line 2:
City: **Versailles** State: **KY** Zip: **40383**
Phone: **859-333-9742** Fax: **859-251-4137**

Applicant Contact (AC) Information

Name: **Joe Hammond**
Title: **Business Manager**
Organization: **Martin County Utilities**
Address Line 1: **38 7 E Main St**
Address Line 2:
City: **Inez** State: **KY** Zip: **41224**
Phone: **606-626-7748** Fax: **606-298-4913**

Project Engineer (PE) Information:

This project requires a licensed Professional Engineer.

License No: **PE 24022**

PE Name: **James C. Thompson**

Phone: **859-251-4127** Fax: **859-251-4137**

E-Mail: **jthompson@kyengr.com**

Firm Name: **Kentucky Engineering Group PLLC**

Addr Line 1: **Kentucky Engineering Group PLLC**

Addr Line 2: **161 North Locust Street**

Addr Line 3:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **01-05-2005** Expires: **06-30-2018**

Engineering Firm Information:

Permit No: **2889**

Firm Name: **Kentucky Engineering Group PLLC**

Phone: **859-251-4127** Fax: **859-251-4137**

Web URL: **http://www.kyengr.com/**

E-Mail: **jthompson@kyengr.com**

Addr Line 1: **161 N. Locust St.**

Addr Line 2:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **02-19-2009** Expires: **12-31-2017**



Drinking Water Project Profile
 WX21159009 - Martin County Water District
 Water Intake Upgrades

Estimated Budget

Project Cost Classification:

Administrative Exp.:	\$ 10,000
Legal Exp.:	
Land, Appraisals, Easements:	
Relocation Exp. & Payments:	
Planning:	
Engineering Fees - Design:	\$ 113,600
Engineering Fees - Construction:	\$ 28,420
Engineering Fees - Inspection:	\$ 86,400
Engineering Fees - Other:	\$ 5,000
Construction:	\$ 1,800,000
Equipment:	
Miscellaneous:	
Contingencies:	\$ 180,000
Total Project Cost:	\$ 2,223,420

Construction Cost Categories:

Treatment:	
Transmission & Distribution:	
Source:	\$ 1,800,000
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Catagorized:	
Total Construction:	\$ 1,800,000

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: **\$2,223,420**
 Total Committed Funding: **\$0**
 Funding Gap: **\$2,223,420 (Not Funded)**

This project will be requesting SRF funding for fiscal year 2018.

Estimated Project Schedule:

Est. Environmental Review Submittal Date:
 Estimated Bid Date:
 Estimated Construction Start Date:
 Estimated Construction Completion Date:

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
ARC		2016	\$300,000	Anticipated	
RD Loan		2017	\$1,300,000	Anticipated	
RD Grant		2017	\$618,420	Anticipated	
Total Committed					

Funding Source Notes:

The following systems are beneficiaries of this project:

KY0800273 Martin County Water District

Note: Check mark indicates primary system for this project.

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.
- Plans and specs have been reviewed by PSC.



Drinking Water Project Profile

WX21159009 - Martin County Water District
Water Intake Upgrades

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:		12,175	12,170
Households:		5,093	5,093
MHI:		\$25,814	*\$25,814
MHI MOE		\$6,163	*\$6,163
MOE as Pct:		24.0%	24.0%
**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 2011-2015 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 = \$43,740
- 80% KHMI = \$34,992

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:	3,335	
To Total Households:	3,335	
** Cost Per Household:	\$667	

* 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	
Legislative Districts	
District Name	Legislator
Groundwater Sensitivity Zones	
HUC 10 Watersheds	
HUC Code	Watershed Name

Geographic Impacts For Included System(s)	
Counties	
Johnson	
Lawrence	
Martin	
Legislative Districts	
District Name	Legislator
House 093	Chris Harris
House 096	Jill York
House 097	Scott Wells
Senate 30	Brandon Smith
Senate 31	Ray S. Jones II
Congressional 5	Hal Rogers



Drinking Water Project Profile
 WX21159009 - Martin County Water District
 Water Intake Upgrades

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).

Project Inventory (Mapped Features):

Mapped Point Features							
DOW Permit ID	Count	FeatureType	Purpose	Status	Existing Capacity	Proposed Capacity	Units
KY0800273	1	SURFACE SOURCE	UPGRADE WATER INTAKE	REHAB			EA

Administrative Components:

- Planning
 Design
 Construction
 Management

Regionalization Components:

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) through interconnect(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.

Emergency Only Water Supply:

- This project provides emergency only water supply.

Water Source Protection:

- This project includes land acquisition for water source protection.



Drinking Water Project Profile

WX21159009 - Martin County Water District
Water Intake Upgrades

Water Treatment Components:

- This project includes water treatment components

Treatment Activities:

- This project includes a new water treatment plant.
- This project includes an expansion of an existing water treatment plant.
- This project includes rehabilitation of an existing water treatment plant.
- This project includes upgrades to an existing water treatment plant.
- This project includes emergency power generators for treatment activities.
- This project includes redundant treatment processes.

Acute Public Health Risk:

- This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements.
- This project includes infrastructure options to meet CT inactivation requirements.

Chronic Public Health Risk:

- This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.
- This project will provide treatment modifications for VOCs, IOCs, SOC, or Radionuclides.

Secondary Contaminants:

- This project includes treatment modifications to address Secondary Contaminants.

Security:

- This project includes security components for water treatment facilities.

Water Distribution and Storage:

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

Water Line Extensions:

- This project includes water line extension(s).

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).
- This project includes infrastructure to address inability to maintain disinfection residual.



Drinking Water Project Profile
 WX21159009 - Martin County Water District
 Water Intake Upgrades

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.

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.

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.



Drinking Water Project Profile
 WX21159009 - Martin County Water District
 Water Intake Upgrades

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 unmetred 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.

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.



Drinking Water Project Profile
 WX21159009 - Martin County Water District
 Water Intake Upgrades

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.

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: 07-07-2011 Download Fee Schedule
Rate Adjustment Age: 66 months
System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: 0.15%
<input type="checkbox"/> The system(s) has a Capital Improvement Plan or similar planning document.
<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: 12-04-2016

Date Revised:



Drinking Water Project Profile

Legal Applicant: **Martin County Water District**

Project Title: **Water Treatment Plant Clarifier and Disinfection byproduct reduction**

Project Number: **WX21159016**

[View Map](#)

Submitted By: **BSADD**

Funding Status: **Not Funded**

Primary County: **Martin**

Project Status: **Pending**

Planning Unit: **Martin**

Project Schedule: **0-2 Years**

Multi-County: **No**

E-Clearinghouse SAI:

ECH Status:

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

ADD WMC Contact: **Tracy Wireman**

Date Approved (AWMPC):

Project Description:

This project will includes clear well aeration and diffusion pipe repair along with a Clarifier cover and a filter at the reservoir intake. This project will improve the water quality by installing clearwell aeration, clarifier cover, filter at reservoir intake and repair clearwell diffusion pipe.

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 reduce the disinfection byproducts

Project Alternatives:

Alternate A:

Distribution aeration

Alternate B:

Legal Applicant:

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

PSC Group ID: **25000**

Entity Name: **Martin County Water District**

Web URL:

Office EMail: **jhammond58@bellsouth.net**

Office Phone: **606-298-3885**

Toll Free:

Fax: **606-298-4913**

Mail Address Line 1: **387 E Main St**

Phys Address Line 1:

Mail Address Line 2:

Phys Address Line 2:

Mail City, State Zip: **inez, KY 41224**

Phys City, State Zip:

Contact: **Joe Hammond**

Auth Official: **Kelly Calaham**

Contact Title: **Business Manager**

Auth Official Title: **Judge Executive**

Contact EMail: **jhammond58@bellsouth.net**

Auth Official EMail: **kcalaham@suddenlinkmail.com**

Contact Phone: **606-298-3885**

Auth Official Phone: **606-298-2600**

Contact Cell: **606-826-7748**

Auth Official Cell: **606-826-5901**

Data Source: **Kentucky Infrastructure Authority**

Date Last Modified: **03.03.2017**



Drinking Water Project Profile
WX21158016 - Martin County Water District
Water Treatment Plant Clarifier and Disinfection byproduct reduction

Project Administrator (PA) Information

Name: **Holly L. Nicholas**
Title: **Project Developer**
Organization: **Kentucky Engineering Group, PLLC**
Address Line 1: **P.O. Box 1034**
Address Line 2:
City: **Versailles** State: **KY** Zip: **40383**
Phone: **859-333-9742** Fax: **859-251-4137**

Applicant Contact (AC) Information

Name: **Joe Hammond**
Title: **Business Manager**
Organization: **Martin County Utilities**
Address Line 1: **38 7 E Main St**
Address Line 2:
City: **Inez** State: **KY** Zip: **41224**
Phone: **606-626-7748** Fax: **606-298-4913**

Project Engineer (PE) Information:

This project requires a licensed Professional Engineer.

License No: **PE 24022**

PE Name: **James C. Thompson**

Phone: **859-251-4127** Fax: **859-251-4137**

E-Mail: **jthompson@kyengr.com**

Firm Name: **Kentucky Engineering Group PLLC**

Addr Line 1: **Kentucky Engineering Group PLLC**

Addr Line 2: **161 North Locust Street**

Addr Line 3:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **01-05-2005** Expires: **06-30-2018**

Engineering Firm Information:

Permit No: **2889**

Firm Name: **Kentucky Engineering Group PLLC**

Phone: **859-251-4127** Fax: **859-251-4137**

Web URL: **http://www.kyengr.com/**

E-Mail: **jthompson@kyengr.com**

Addr Line 1: **161 N. Locust St.**

Addr Line 2:

City: **Versailles** State: **KY** Zip: **40383**

Status: **Current** Disciplinary Actions: **NO**

Issued: **02-19-2009** Expires: **12-31-2017**



Drinking Water Project Profile

WX21159016 - Martin County Water District
Water Treatment Plant Clarifier and Disinfection byproduct reduction

Estimated Budget

Project Cost Classification:

Administrative Exp.:	\$ 10,000
Legal Exp.:	\$ 10,000
Land, Appraisals, Easements:	
Relocation Exp. & Payments:	
Planning:	\$ 10,000
Engineering Fees - Design:	\$ 26,000
Engineering Fees - Construction:	\$ 30,000
Engineering Fees - Inspection:	\$ 15,000
Engineering Fees - Other:	
Construction:	\$ 235,000
Equipment:	
Miscellaneous:	
Contingencies:	\$ 23,500
Total Project Cost:	\$ 359,500

Construction Cost Categories:

Treatment:	\$ 235,000
Transmission & Distribution:	
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Categorized:	
Total Construction:	\$ 235,000

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: **\$359,500**
Total Committed Funding: **\$0**
Funding Gap: **\$359,500 (Not Funded)**

This project will be requesting SRF funding for fiscal year 2018.

Estimated Project Schedule:

Est. Environmental Review Submittal Date:
Estimated Bid Date:
Estimated Construction Start Date:
Estimated Construction Completion Date:

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
Local			\$359,500	Anticipated	
Total Committed					

Funding Source Notes:

The following systems are beneficiaries of this project:

KY0800273 Martin County Water District

Note: Check mark indicates primary system for this project.

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.
- Plans and specs have been reviewed by PSC.

Economic, Demographic and Geographic Impacts

Economic Impacts



Drinking Water Project Profile

WX21159016 - Martin County Water District
 Water Treatment Plant Clarifier and Disinfection byproduct reduction

Jobs Created:	
Jobs Retained:	

*Demographic Impacts (GIS Census Overlay)			
Serviceable Demographic	Project Area	Included Systems	Included Utilities
Population:		12,175	12,170
Households:		5,093	5,093
MHI:		\$25,814	*\$25,814
MHI MOE		\$6,163	*\$6,163
MOE as Pct:		24.0%	24.0%
**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 2011-2015 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 = \$43,740
- 80% KMHI = \$34,992

Geographic Impacts For Project Area	
Counties	
Legislative Districts	
District Name	Legislator
Groundwater Sensitivity Zones	
HUC 10 Watersheds	
HUC Code	Watershed Name

Geographic Impacts For Included System(s)	
Counties	
Johnson	
Lawrence	
Martin	
Legislative Districts	
District Name	Legislator
House 093	Chris Harris
House 096	Jill York
House 097	Scott Wells
Senate 30	Brandon Smith
Senate 31	Ray S. Jones II
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:	3,500	
To Total Households:	3,500	
** Cost Per Household:	\$103	

* 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
WX21159016 - Martin County Water District
Water Treatment Plant Clarifier and Disinfection byproduct reduction

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).

Project Inventory (Mapped Features):

Administrative Components:

- Planning Design Construction Management
-

Regionalization Components:

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) through interconnect(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.

Emergency Only Water Supply:

- This project provides emergency only water supply.
-

Water Source Protection:

- This project includes land acquisition for water source protection.
-



Drinking Water Project Profile
WX21159016 - Martin County Water District
Water Treatment Plant Clarifier and Disinfection byproduct reduction

Water Treatment Components:

- This project includes water treatment components

Treatment Activities:

- This project includes a new water treatment plant.
- This project includes an expansion of an existing water treatment plant.
- This project includes rehabilitation of an existing water treatment plant.
- This project includes upgrades to an existing water treatment plant.
- This project includes emergency power generators for treatment activities.
- This project includes redundant treatment processes.

Acute Public Health Risk:

- This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements.
- This project includes infrastructure options to meet CT inactivation requirements.
This project will enhance the CT capabilities

Chronic Public Health Risk:

- This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.
- This project will provide treatment modifications for VOCs, IOCs, SOC, or Radionuclides.

Secondary Contaminants:

- This project includes treatment modifications to address Secondary Contaminants.

Security:

- This project includes security components for water treatment facilities.

Water Distribution and Storage:

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

Water Line Extensions:

- This project includes water line extension(s).

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).
- This project includes infrastructure to address inability to maintain disinfection residual.



Drinking Water Project Profile

WX21159016 - Martin County Water District
Water Treatment Plant Clarifier and Disinfection byproduct reduction

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.

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.

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.



Drinking Water Project Profile
 WX21169016 - Martin County Water District
 Water Treatment Plant Clarifier and Disinfection byproduct reduction

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 unmetred 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.

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.



Drinking Water Project Profile
 WX21159016 - Martin County Water District
 Water Treatment Plant Clarifier and Disinfection byproduct reduction

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.

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: 07-07-2011 Download Fee Schedule
Rate Adjustment Age: 66 months
System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: 0.15%
<input type="checkbox"/> The system(s) has a Capital Improvement Plan or similar planning document.
<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: Pending

Date Approved:

Date Revised:

Exhibit #3

Invoices for 2016

COPY

Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

INVOICE

JANUARY 26, 2016

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County December 28, 2015 through January 22, 2016

Total Provided	1,697,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	4,834.25
Total due Martin County Water and Sewer Dist.	\$ <u>5,182.75</u>

631.002
189

Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

INVOICE

FEBRUARY 24, 2016

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County January 22, 2016 through February 23, 2016

Total Provided	769,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	2,003.85
Total due Martin County Water and Sewer Dist.	\$ <u>2,352.35</u>

631.002
189

Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

INVOICE

March 28, 2016

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County February 23, 2016 through March 25, 2016

Total Provided	3,858,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	11,425.30
Total due Martin County Water and Sewer Dist.	\$ <u>11,773.80</u>

Note: Martin County Water owes Prestonsburg \$5984.80 from past invoices. After deducting this amount we owe MCW \$5,789.00

Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

INVOICE

April 26, 2016

*701 check
15222
4/26/16*

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County March 25, 2016 through April 25, 2016

Total Provided	3,832,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	11,346.00
Total due Martin County Water and Sewer Dist.	\$ <u>11,694.50</u>

Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

pd check
#15373
5/24/16

INVOICE

May 24, 2016

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County April 25, 2016 through May 24, 2016

Total Provided	921,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	2,467.45
Total due Martin County Water and Sewer Dist.	\$ <u>2,815.95</u>

**Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224**

INVOICE

June 27, 2016

**Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653**

Water Provided by Martin County May 24, 2016 through June 23, 2016

Total Provided	3, 583,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	10,586.55
Total due Martin County Water and Sewer Dist.	\$ <u>10,935.05</u>

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7/25/16
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Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

INVOICE

July 25, 2016

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County June 24, 2016 through July 25, 2016

Total Provided	2,019,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	5,816.35
Total due Martin County Water and Sewer Dist.	\$ <u>6,164.85</u>

Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

INVOICE

August 25, 2016

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County July 25, 2016 through August 25, 2016

Total Provided	148,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	109.80
Total due Martin County Water and Sewer Dist.	\$ <u>458.30</u>

FILE COPY

**Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224**

INVOICE

September 28, 2016

**Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653**

Water Provided by Martin County August 25, 2016 through September 26, 2016

Total Provided	927,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	2,485.75
Total due Martin County Water and Sewer Dist.	\$ <u>2,834.25</u>

Martin County Water and Sewer District
387 East Main Street
Suite 140
Inez, KY 41224

INVOICE

October 26, 2016

Prestonsburg City's Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Water Provided by Martin County September 26, 2016 through October 25, 2016

Total Provided	2,811,000 Gallons
First 112,000 Gallons @ \$348.50 (Min.)	\$ 348.50
Over 112,000 @ \$3.05/1,000 Gallons	8,231.95
Total due Martin County Water and Sewer Dist.	\$ <u>8,580.45</u>

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Invoice

November 29, 2016

Martin County Water and Sewer District

387 East Main Street

Suite 140

Inez, KY 41224

INVOICE

Water Provided to Martin County October 25, 2016 through November 22, 2016:

Total provided 617,000 Gallons

First 112,000 Gallons \$ 348.50

Over 112,000 @ \$3.05/1,000 Gallons 1,540.25

Total due Prestonsburg City's Utilities \$ 1,888.75

Prestonsburg City's Utilities Commission

Water, Waste Water and Natural Gas System
(Municipally Owned)
2560 South Lake Drive
Prestonsburg, Kentucky 41653-1048
Phone (606) 866-8871 • Fax (606) 866-8779
TDD: Ky Relay #711

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MAR 1 2017

Public Service
Commission

Invoice No. 12272016

December 28, 2016

Martin County Water and Sewer District

387 East Main Street

Suite 140

Inez, KY 41224

Water Provided to Martin County November 22, 2016 thru December 27, 2016:

Total Provided	4,867,000 Gallons
First 112,000 Gallons @ \$348.50 (Minimum)	\$ 348.50
Over 112,000 @ \$3.05/1,000 gal	<u>14,502.75</u>
Total due Prestonsburg City's Utilities	<u>\$14,851.25</u>