



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Phone: 304-926-0495 / Fax: 304-926-0463

Harold D. Ward, Cabinet Secretary
dep.wv.gov

MEMORANDUM

To: Marie Prezioso, Chair

From: Katheryn Emery, P.E. Engineer Chief
Sewer Technical Review Committee

Date: November 19, 2024

Subject: Kanawha Public Service District
IJDC Application - 2024S-2589
Kanawha Flood Damage Repairs

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1. This committee has reviewed the preliminary application and engineering report submitted for the above referenced project in accordance with Chapter 31, Article 15A. It has been determined that the proposed project is:
 - a. Consistent with the intent of the Infrastructure and Jobs Development Act and is the most cost-effective, environmentally sound alternative for solving the wastewater needs in this area.
 - b. Not consistent with the Act and may not be the most cost effective, environmentally sound alternative for solving the wastewater needs in this area.
 - c. Same as (a) above except that certain issues need to be addressed prior to design and construction as the attached comments indicate.
 2. Our recommendation is that:
 - a. The Funding Committee needs to review the proposed sources of funding to determine the best mix of grant and/or loan funds in accordance with applicable guidelines.
 - b. The Funding Committee should recommend that the Council approve the proposed project and its funding plan.

- c. ___ The Funding Committee does not need to review the funding assumptions on this project because of deficiencies in the engineering report. The proposed project should be tabled for the consultant to address technical comments.
- d. ___ This project should be referred to the Consolidation Committee.

3. Other remarks:

The project will replace the collection system in the flood damaged communities of Coopers Hollow, Little Creek, and Winifrede. In August of 2023, these areas experienced rainfall as much as 4" per hour leaving many sections of sewer lines unearthed, full of debris, and damaged.

The proposed total cost for this project is \$2,040,000 and the Town intends to pursue a \$487,500 WVIJDC Grant and a \$1,552,500 FEMA grant.

Using the Combined Application, the Engineering Fees appear to be within the ASCE curve.

Preliminary Project Ratings:

Public Health Benefits: 15
Compliance with Standards: 15



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Harold D. Ward, Cabinet Secretary
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MEMORANDUM

TO: Katheryn Emery, P.E., Engineer Chief, DWWM

FROM: Chantz Rankin, E.I., DWWM

DATE: November 11, 2024

SUBJECT: Kanawha Public Service District
IJDC Application - 2024S-2589
Kanawha Flood Damage Repairs

RECOMMENDATION

The IJDC Application and Preliminary Engineering Report (PER) prepared by New River Engineering, Inc. for the above referenced project has been reviewed and is technically feasible.

PROJECT DESCRIPTION

Kanawha Public Service District (PSD) operates a wastewater collection system under National Pollutant Discharge Elimination System (NPDES) Permit #WV0038776 in Kanawha County, West Virginia. The PSD serves the several areas including Chelyan, Cabin Creek, Carroll Branch, Witcher Creek, Diamond, Shrewsbury, Winifrede Hollow, London, Hugheston, Hughes Creek, Hansford, Holley Grove, Livingston, Gallagher, Standard, and the WV Turnpike's Morton Plaza. The PSD also accepts sanitary sewage flows from the Town of Cedar Grove and the Town of East Bank; and operates the Town of Handley and the Town of Pratt's treatment plants. The PSD's collection system includes approximately 60 miles of 6" to 18" gravity sewer lines, 1,406 manholes, 67 pump stations, and approximately 15.4 miles of 1-1/4" to 10" force mains.

This project proposes to address the damage in the communities of Coopers Hollow, Little Creek, and Winifrede. In Coopers Hollow the proposed project will include the replacement of approximately 600 linear feet (LF) of gravity sewer line; the replacement of three (3) manholes; and lateral reconnections. In Little Creek the project will include the replacement of approximately 200 LF of 8" Vitrified Clay Pipe (VCP); replacement of an 8" creek crossing; and the replacement of two (2) manholes; In Winifrede the project will include the replacement of approximately 300 LF of gravity sewer line; the replacement of a 4" forcemain creek crossing;

lateral reconnections; and filling in the area around previously buried manholes. The Cooper Hollow and Little Creek portions of the project will also include surface repairs with the associated roadways.

The proposed total cost for this project is \$2,040,000 and the Town intends to pursue a \$487,500 WVJDC Grant and a \$1,552,500 FEMA grant. The proposed monthly rate for 3,400 gallons is \$74.76 (2.04% MHI).

NEED FOR PROJECT

During the time period between August 26, 2023 and August 29, 2023 the eastern part of Kanawha County experienced excessive rainfall. In several areas the rainfall was as much as 4” per hour. As a result, many of the streams in the area overflowed their existing banks causing damage to the existing sewers in the area. The communities of Winifrede, Coopers Hollow, and Little Creek sustained significant damage during this severe weather event leaving many sections of their sewer lines unearthed, full of debris, and damaged.

The proposed project will eliminate the potential threat of discharging untreated sewer into Coopers Hollow Creek, as well as resupply customers with reliable sewage service that was disrupted by the flood event. This project will preserve the public health of residents in the communities of Winifrede, Little Creek, and Coopers Hollow.

DEFICIENCIES/COMMENTS

- Using the Combined Application, the Design, and Total Engineering Fees appear to be within the ASCE Curves.
- The application and PER funding scenarios do not match.

Preliminary Project Ratings:

Public Health Benefits: 15
Compliance with Standards: 15

Public Service Commission of West Virginia

201 Brooks Street, P.O. Box 812
Charleston, West Virginia 25323

Phone: (304) 340-0300
Fax: (304) 340-0325



November 19, 2024

Ms. Kathy Emery, P. E.
Office of Water Resources
Department of Environmental Protection
601 57th St.
Charleston, West Virginia 25304

Re: Public Service Commission Staff Review Comments
Application No. 2024S-2589
Kanawha PSD - Sewer System Improvements
Infrastructure Preliminary Application

Dear Ms. Emery:

As requested, the Technical Staff of the Public Service Commission of West Virginia has completed its review of the above-referenced Infrastructure application. In light of Technical Staff's comments enclosed herewith, we are recommending the application be:

- Forward the Application
 Return the Application
 Returned to the Applicant

Please advise if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Jonathan M. Fowler".

Jonathan M. Fowler, P.E.
Engineering Division

Enclosures
JMF:vb

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: November 19, 2024

PROJECT SPONSOR: KANAWHA PUBLIC SERVICE DISTRICT

PROJECT SUMMARY: This project will rebuild portions of the PSD's sanitary sewer collection system serving Winifred, Coopers Hollow, and Little Creek that was damaged due to flooding.

PROPOSED FUNDING: FEMA Grant	\$1,552,500
IJDC District 1 Grant	<u>\$ 487,500</u>
Total	<u>\$2,040,000</u>

CURRENT RATES:

Schedule 1	\$70.05	3,400 gallons
	\$81.48	4,000 gallons
Schedule 2	\$70.05	3,400 gallons
	\$81.48	4,000 gallons

PROPOSED RATES:

Schedule 1	\$74.76	3,400 gallons
	\$86.96	4,000 gallons
Schedule 2	\$74.76	3,400 gallons
	\$86.96	4,000 gallons

Application No. 2024S-2589

RECOMMENDATION: forward to the Funding Committee.
 forward to the Consolidation Committee.
 return to the Applicant.

FINANCIAL: Stephen Edens

1. Current average rates (\$70.05 for 3,400 gallons) are above the rates attributable to 1.25% (\$49.09), 1.5% (\$58.90) and 1.75% (\$68.72) of the Median Household Income (MHI), but below the rates attributable to 2.0% (\$78.54) of the MHI. Increasing current average rates to 2.0% of the MHI would provide additional revenues of \$309,081 respectively.

2. Using Scenario 1, the preferred funding package consisting of a FEMA Grant of \$1,552,500, and a \$487,500 IJDC District 1 Grant, proposed rates (\$74.76 for 3,400 gallons) will provide a cash flow surplus of \$114,721 and debt service coverage of 148.45%.
3. Using the Scenario 2 alternate loan package of \$2,040,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed rates (\$78.50 for 3,400 gallons) will provide a cash flow surplus of \$88,979 and debt service coverage of 141.80%.
4. NOTES TO COMMENTS:
 - A. Staff's detailed adjustments are listed on Attachment A for Scenario 1 (Preferred Funding Package) and Attachment B for Scenario 2 (Loan Package).
 - B. The Going Level and Proforma adjustments included in the Applicant's Cash Flow Analyses for Scenarios 1 and 2 were used in Staff's Cash Flow Analyses, except as noted on Attachments A and B.
 - C. Staff prepared the attached Cash Flow Analysis utilizing information from the Annual Report for the Fiscal Year Ended June 30, 2023, and the applicant's Cash Flow Statement submitted with the application.
 - D. Staff notes the Applicant is requesting a waiver of Rule 42 Exhibit requirement.
 - E. Staff notes the Project Applicant based Step 1 and Step 2 Rates for both Going Level and Proforma adjustments on the Cash Flow Exhibit from prior WVIJDC Application No. 2016S-1625 and Case No. 21-0521-PSD-CN. The Project at this point, is currently in the pre-construction phase. Staff reflected the Step 2 Rates from the Cash Flow as Proforma in its analysis.
 - F. Staff notes the Project Accountant listed an USDA Loan of \$250,000 at 1.125% for 40 years (paid back over 38 years) and a CWSRF Loan of \$10,223,042 at 0.25%, 0.25% Admin Fee, for 40 years (paid back over 38 years), as Proforma Adjustments (Step 2 Rates) based on WVIJDC Application No. 2016S-1625 and Case No. 21-0521-PSD-CN. Staff reflected this adjustment in its analysis.

G. Senate Bill 234, effective June 12, 2015, required water and sewer utilities that are political subdivisions of the state to maintain a cash working capital reserve in an amount of no less than one-eighth (1/8) of actual annual operation and maintenance expenses. It should be noted that the cash flows provided by the project sponsor include funding for the 1/8 cash working capital reserve. Staff accepted that amount in its analyses. However, this amount may be reviewed by the Commission in future filings in accordance with Public Service Commission General Order 183.11.

ENGINEERING: Mansour Mashayekhi

1. This project may not require a Certificate of Convenience and Necessity from the PSC. The project sponsor should consult with Staff pursuant to General Order 246 for such determination. If a Certificate is required, the utility should reference this application number on the PSC's Form No. 4 when its application is filed at the Commission given the requirement of West Virginia Code §24-2-11 (c) and (e) et seq.
2. *Scope:* the proposed project will address damage & problems as follows: Coopers Hollow (replace approximately 600 LF of gravity sewer line, replace three manholes, and associated roadway, and do lateral installation & /reconnection). Little Creek (replace approximately 200 LF of 8" gravity sewer line with customer connections, replace 8" gravity creek crossing, replace two existing manholes, and associated roadway). Winifred area (replace approximately 300 LF of gravity sewer line, replace 4" force-main creek crossing, reconnect service laterals, and fill the area around previously buried manholes that the flood waters exposed). The proposed project is estimated to cost approximately \$1,437,344 in construction cost with an estimated total project cost of \$2,040,000. The proposed project to be funded through a FEMA Grant of \$1,552,500 and an IJDC District-1 Grant of \$487,500.
3. *Need for Project:* the proposed project will allow wastewater to be properly transported for treatment and will protect the environment and residents from potential pollution. Flooding on August 28, 2023 caused extensive damage to sewer infrastructure in the area. This project will restore sanitary sewer services as existed prior to the flooding event. The Coopers Hollow, Little Creek, and Winifred areas all sustained heavy

damage as a result of the severe weather event and the current condition of these areas poses health and environmental risks.

4. *Customer Density*: this is an improvement and an upgrade project; therefore, customer density will be unchanged.
5. *Cost per Customer*: based upon the estimated project budget of \$2,040,000 and having approximately 2,368 existing customers, cost-per-customer is approximately \$861. However, this project is entirely grant funded, therefore, existing customers are not responsible for capital project related expenses.
6. *Project Feasibility*: the project appears to be technically feasible.
7. *Project Alternatives*: Two alternatives were considered: 1) Replace and Repair Flood Damaged areas in Coopers Hollow, Little Creek, and Winifred and 2) Do nothing. Option-1 was selected. We have no objection to the scope of the work.
8. *Consolidation*: There are no consolidation issues with the selected alternative.
9. *Inconsistencies*: None was noticed for this project.
10. *Project Permits*: the following permits and certificates are anticipated to be required for the project and will be obtained prior to beginning construction of this project: WV/NPDES construction storm water, WV Bureau of Public Health, WVDOH, and WV Public Lands Permit.
11. *Operation and Maintenance (O&M) Expenses*: O&M expenses are estimated to remain unchanged at an annual approximate O&M expense of \$1,667,608.
12. *Engineering Agreement*: the applicant has provided documentation relative to apparent compliance with West Virginia Code §5G-1-1, et seq. Based on the filing, the total design fees for engineering services are \$80,000 at the construction cost of \$1,437,344. This is approximately 5.57% of the construction cost as shown on the application.

KANAWHA PUBLIC SERVICE DISTRICT - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2023
 APPLICATION NO: 2024S-2589
 November 19, 2024

**PREFERED FUNDING PACKAGE
 SCENARIO 1**

	Cash Flow Going Level Per Application Before Project	Cash Flow Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
<u>AVAILABLE CASH</u>				
Operating Revenues	2,432,513	2,608,148	-	2,608,148
Other Operating Revenue	85,272	89,440	-	89,440
SB 234 Annual Working Cash Collections	181,456	181,456	-	181,456
Interest Income & Other Misc.	216,726	216,726	-	216,726
Total Cash Available	2,915,967	3,095,770	-	3,095,770
<u>OPERATING DEDUCTIONS</u>				
Operating Expenses	1,667,608	1,667,608	-	1,667,608
Taxes	57,236	57,236	-	57,236
Total Cash Requirements Before Debt Service	1,724,844	1,724,844	-	1,724,844
Cash Available for Debt Service (A)	1,191,123	1,370,926	-	1,370,926
<u>DEBT SERVICE REQUIREMENTS</u>				
Principal & Interest (B)	619,931	923,485	-	923,485
Other Debt	53,469	53,469	-	53,469
Reserve Account @ 10%		30,355	-	30,355
Renewal & Replacement Fund (2.5%)	62,945	67,440	-	67,440
Total Debt Service Requirement	736,345	1,074,749	-	1,074,749
SB 234 Cash Working Capital	181,456	181,456	-	181,456
Remaining Cash	273,322	114,721	-	114,721
Percent Coverage (A) / (B)	192.14%	148.45%		148.45%
Average rate for 3,400 gallons	\$ 70.05	\$ 74.76	\$ -	\$ 74.76
Average rate for 4,000 gallons	\$ 81.48	\$ 86.96	\$ -	\$ 86.96
Schedule 1				
Rate for 3,400 gallons	\$ 70.05	\$ 74.76		\$ 74.76
Rate for 4,000 gallons	\$ 81.48	\$ 86.96		\$ 86.96
Schedule 2				
Rate for 3,400 gallons	\$ 70.05	\$ 74.76		\$ 74.76
Rate for 4,000 gallons	\$ 81.48	\$ 86.96		\$ 86.96

KANAWHA PUBLIC SERVICE DISTRICT - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2023
APPLICATION NO: 2024S-2589

Attachment A
PREFERRED FUNDING PACKAGE
SCENARIO 1

Staff Adjustments

<u>Adjustment Description</u>		Increase <Decrease>
N/A	\$	

KANAWHA PUBLIC SERVICE DISTRICT - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2023
 APPLICATION NO: 2024S-2589
 November 19, 2024

**LOAN PACKAGE
 SCENARIO 2**

	Max Rate Going Level Per Application Before Project	Max Rate Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
AVAILABLE CASH				
Operating Revenues	2,432,513	2,718,190	-	2,718,190
Other Operating Revenue	85,272	89,440	-	89,440
SB 234 Annual Working Cash Collections	181,456	181,456	-	181,456
Interest Income & Other Misc.	216,726	216,726	-	216,726
Total Cash Available	2,915,967	3,205,812	-	3,205,812
OPERATING DEDUCTIONS				
Operating Expenses	1,667,608	1,667,608	-	1,667,608
Taxes	57,236	57,236	-	57,236
Total Cash Requirements Before Debt Service	1,724,844	1,724,844	-	1,724,844
Cash Available for Debt Service (A)	1,191,123	1,480,968	-	1,480,968
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	619,931	1,041,851	2,574 (1)	1,044,425
Other Debt	53,469	53,469	-	53,469
Reserve Account @ 10%		42,192	257 (2)	42,449
Renewal & Replacement Fund (2.5%)	62,945	70,191	-	70,191
Total Debt Service Requirement	736,345	1,207,703	2,831	1,210,534
SB 234 Cash Working Capital	181,456	181,456	-	181,456
Remaining Cash	273,322	91,809	(2,831)	88,979
Percent Coverage (A) / (B)	192.14%	142.15%		141.80%
Average rate for 3,400 gallons	\$ 70.05	\$ 78.50	\$ -	\$ 78.50
Average rate for 4,000 gallons	\$ 81.48	\$ 91.31	\$ -	\$ 91.31
Schedule 1				
Rate for 3,400 gallons	\$ 70.05	\$ 78.50		\$ 78.50
Rate for 4,000 gallons	\$ 81.48	\$ 91.31		\$ 91.31
Schedule 2				
Rate for 3,400 gallons	\$ 70.05	\$ 78.50		\$ 78.50
Rate for 4,000 gallons	\$ 81.48	\$ 91.31		\$ 91.31

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1) Principal & Interest	Per Staff Analysis Per Application with Project	1,044,425 1,041,851	 2,574
<p>The difference in P&I is related to Staff's calculation of a loan of \$2,040,000 for 40 years (paid back over 38 years) at 5%.</p>			
(2) Reserve Account @ 10%	Per Staff Analysis Per Application with Project	42,449 42,192	 257
<p>Staff assumed a 10% reserve on the new debt.</p>			