



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., Program Manager
Sewer Technical Review Committee

Date: October 16, 2025

Subject: City of Salem
IJDC Application - 2025S-2694
Wastewater Collection System Upgrade - Phase III

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. This project will need to be tabled to give time for the PSC to complete the review.
- d. ____ This project should be referred to the Consolidation Committee.

3. Other remarks:

This project will separate the sewer and storm collection system in area #2(Main street). An estimated 79% of the water treated at the plant is the result of I&I. The City currently has three sanitary sewer overflows and under Consent Order No.8235 issued by the WVDEP on March 25, 2015. This project will address the I&I and Order.

The total cost for this project is \$3,500,000 and the City intends to pursue a \$1,000,000 WVIJDC Grant, a \$2,000,000 CWSRF Principal Forgiveness Loan, and a \$500,000 CWSRF Green Infrastructure.

However, the project appears to be eligible for only \$1,500,000 in CWSRF Principal Forgiveness and does not appear to be eligible for Green Project Reserve funds for Stormwater.

Preliminary Project Ratings:

Public Health Benefits: 10

Compliance with Standards: 20



STATE OF WEST VIRGINIA
DEPARTMENT OF HEALTH
BUREAU FOR PUBLIC HEALTH
OFFICE OF ENVIRONMENTAL HEALTH SERVICES

Arvin Singh, EdD, MBA, MS, FACHE
Secretary of Health

Jason R. Frame
OEHS Director

MEMORANDUM

TO: Meredith J. Vance, Director
Environmental Engineering Division

FROM: Patrick Murphy, P.E. *PM*
Environmental Engineering Division

DATE: October 6, 2025

SUBJECT: City of Salem
IJDC Application- **2025W2694 (Prior 2021S-2024)**
Plant Upgrade / Line Upgrade
Harrison County

Recommendation: We have reviewed this preliminary application and recommend that it be forwarded to the Funding Committee for review.

Project Scope: This project proposes to construct and install approximately 3075 linear feet (LF) of 10-inch and smaller diameter gravity sewer main line, 16 manholes, 660 LF of 30-inch and smaller diameter stormwater line, 11 stormwater catch basins, 2 stormwater outfalls, surface restoration, and related appurtenances.

The total project cost is **\$3,500,000.00**

Need for the Project: This project is needed to address inflow and infiltration issues with the existing sewage mains.

Concerns: There are no details in the PER addressing the Plant Upgrade; otherwise none.

Permits: Permits and/or consultation from the following may be expected to be required:

- WV Bureau of Public Health Permit
- WVDEP NPDES Permit
- US Army Corps of Engineers





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oMEMORANDUM

TO: Katheryn Emery, P.E., Program Manager, DWWM

FROM: Justin Moffitt, P.E., DWWM

DATE: October 10, 2025

SUBJECT: City of Salem
IJDC Application - 2025S-2694
Wastewater Collection System Upgrade - Phase III

RECOMMENDATION

The IJDC Application and Preliminary Engineering Report (PER) prepared by E.L. Robinson Engineering for the above referenced project has been reviewed and is technically feasible.

PROJECT DESCRIPTION

The City of Salem (City) owns and operates a collect system and 0.40 million gallons per day (MGD) wastewater treatment plant (WWTP) operating under National Pollutant Discharge Elimination System (NPDES) Permit No. WV0020257 in Harrison County, West Virginia. The City serves approximately 675 customers with sewer service in this Class B sewer utility. The system has three sanitary sewer overflows that are located at the WWTP, SSO-001 (near City Hall), and SSO-002 (near the WWTP).

This project proposes to separate the storm and sanitary system by installing approximately 3,075 linear feet (LF) of 10-inch and smaller diameter gravity sewer main line, 16 manholes, 660 LF of 30-inch and smaller diameter stormwater line, 11 stormwater catch basins, 2 stormwater outfalls, surface restoration and related appurtenances.

The proposed total cost for this project is \$3,500,000 and the City intends to pursue a \$1,000,000 WVIJDC Grant, a \$2,000,000 CWSRF Principal Forgiveness Loan, and a \$500,000 CWSRF Green Infrastructure. The current monthly rate for 3,400 gallons is \$68.58 (2.05 % MHI).

NEED FOR PROJECT

The City of Salem has been plagued with Inflow and Infiltration (I&I) issues for years and this project focuses on major sources of I&I. With the City's aging infrastructure comes disconnected pipe joints, cracked pipe sections, broken pipe sections, manhole wall cracks, and various other issues that have been identified. The project area, known as Area #2, contain the bulk of the infractions that are causing the WWTP to routinely exceed its discharge limits. With the installation of dedicated stormwater infrastructure, the elimination of cross-connections, and new sewer infrastructure, this project is the result of Consent Order No.8235 issued by the WVDEP on March 25, 2015. An estimated 79% of the flow that reaches the plant is a result of I&I.

DEFICIENCIES/COMMENTS

- The project appears to be eligible for \$1,500,000 in CWSRF Principal Forgiveness. Additionally, based on the available information, the project scope does not appear to be eligible for the CWSRF Green Project Reserve funds for Stormwater work.
- Using the Combined Application, the Design, and Total Engineering Fees appear to be within the ASCE Curves.
- The PER will need to be developed into a CWSRF Facility Plan if CWSRF is used.

Preliminary Project Ratings:

Public Health Benefits: 10
Compliance with Standards: 20

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



October 14, 2025

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. 2025S-2694
Salem, City of – 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:

- ☒ Forwarded to the Funding Committee
- ☐ Forwarded to the Consolidation Committee
- ☐ Returned to the Applicant

Please advise if you have any questions.

Sincerely,

Brandon Crace

Brandon Crace
Engineering Division

Enclosures

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: October 6, 2025

PROJECT SPONSOR: CITY OF SALEM (SEWER)

PROJECT SUMMARY: The City of Salem is proposing to replace a dilapidated section of its existing sewer line along East Main Street, relocate a portion which is in a stream, and create dedicated storm lines.

PROPOSED FUNDING: IJDC Grant	\$1,000,000
CWSRF Principal Forgiveness Loan	\$2,000,000
CWSRF Green Funding Forgiveness Loan	<u>\$ 500,000</u>
Total	<u>\$3,500,000</u>

CURRENT/ PROPOSED RATES:	\$68.58	3,400 gallons
	\$79.12	4,000 gallons

	Application	No.	2025S-2694
RECOMMENDATION:	☒ X	Forward to the Funding Committee	
	☐	Forward to the Consolidation Committee	
	☐	Return to the Applicant	

FINANCIAL: Stephen Edens

1. Current rates (\$68.58 for 3,400 gallons) are above the rate attributable to 1.25% (\$41.79), 1.5% (\$50.14), 1.75% (\$58.50) and 2.0% (\$66.86) of the Median Household Income.
2. Using Scenario 1, the preferred funding package consisting of an IJDC Grant of \$1,000,000, a \$2,000,000 CWSRF Principal Forgiveness Loan, and a CWSRF Green Funding Forgiveness Loan of \$500,000, current/proposed rates (\$68.58 for 3,400 gallons) will provide a cash flow surplus of \$22,476 and debt service coverage of 134.83%.
3. Using the Scenario 2 alternate loan package of \$3,500,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed rates (\$87.17

for 3,400 gallons) will provide a cash flow surplus of \$6,582 and debt service coverage of 122.55%.

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, 2024, and the applicant's Cash Flow Exhibit submitted with the application.
- D. Staff notes the Applicant is requesting a waiver of Rule 42 Exhibit requirement.
- E. 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.
- F. Senate Bill 234 (2015) required, pursuant to WV Code 24-2-4b (b), that municipally operated utilities shall consider a reasonable plant-in-service depreciation expense for rates and charges. The project sponsor should take this into consideration when preparing its Rule 42. Municipals that do not provide for a reasonable depreciation expense risk delays in Certificate of Convenience and Necessity filings if rates are determined to not be sufficient.
- G. The City of Salem should carefully evaluate its revenue requirements before passing a rate ordinance in order to ensure that rates are sufficient to provide a reasonable surplus and meet coverage requirements.

Calculations to support the revenue projections should also be provided.

ENGINEERING: Jim Spurlock

1. Pursuant to House Bill 2742 passed in the 2025 Legislative Session this project will not require a Certificate of Convenience and Necessity from the PSC.
2. Scope: The City of Salem proposes to install approximately 3,075 feet of 10-inch and smaller gravity sewer line, and 660 feet of 30-inch and smaller stormwater line, and related appurtenances. The project will replace a dilapidated section of sewer line along East Main Street, relocate a portion which is in a stream, and create dedicated storm lines.

Customer Density: N/A

Cost per Customer: \$5,185

Taken from the total project cost estimate of \$3,500,000 spread over 675 existing customers.

3. Project Feasibility: The project is technically feasible. The cost per customer is reasonable. The project will address a major source of I/I, and help address D.E.P. violations.
4. Project Alternatives: The nature of the project does not lend itself to alternatives besides “do nothing”.
5. Consolidation: No consolidation opportunities are presented by the project.
6. Inconsistencies: None were noted.
7. Operation and Maintenance (O & M) Expenses: O & M costs are not projected to change as a result of the project. It stands to reason that an unquantified reduction in treatment costs will be realized with reduction of I&I.
8. Engineering Agreement: The application includes information to determine apparent compliance with West Virginia Code §5G-1-1, et seq. Total technical services (engineering) costs for the project are \$517,000 which is equal to 18.71% of the construction cost of \$2,763,000 (including contingency).

CITY OF SALEM - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
APPLICATION NO. 2025S-2694
October 14, 2025

**PREFERRED 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
	\$	\$	\$	\$
AVAILABLE CASH				
Operating Revenues	742,255	742,255	-	742,255
Other Operating Revenue	18,260	18,260	-	18,260
SB 234 Annual Working Cash Collections	53,194	53,194	-	53,194
Interest Income & Other Misc.	24,694	24,694	-	24,694
Total Cash Available	838,403	838,403	-	838,403
OPERATING DEDUCTIONS				
Operating Expenses	438,511	438,511	-	438,511
Taxes	16,818	16,818	-	16,818
Total Cash Requirements Before Debt Service	455,329	455,329	-	455,329
Cash Available for Debt Service (A)	383,074	383,074	-	383,074
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	284,125	284,125	-	284,125
Other Debt	4,266	4,266	-	4,266
Reserve Account @ 10%	-	-	-	-
Renewal & Replacement Fund (2.5%)	32,402	32,402	(13,389) (1)	19,013
Total Debt Service Requirement	320,793	320,793	(13,389)	307,404
SB 234 Cash Working Capital	53,194	53,194	-	53,194
Remaining Cash	9,087	9,087	13,389	22,476
Percent Coverage (A) / (B)	134.83%	134.83%		134.83%
Average rate for 3,400 gallons	\$ 68.58	\$ 68.58	\$ -	\$ 68.58
Average rate for 4,000 gallons	\$ 79.12	\$ 79.12	\$ -	\$ 79.12

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>	
(1)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis Per Application with Project	19,013 32,402	(13,389)

Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.

CITY OF SALEM - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
APPLICATION NO. 2025S-2694
October 14, 2025

**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	742,255	956,200	-	956,200
Other Operating Revenue	18,260	22,110	-	22,110
SB 234 Annual Working Cash Collections	53,194	54,814	-	54,814
Interest Income & Other Misc.	24,694	24,694	-	24,694
Total Cash Available	838,403	1,057,818	-	1,057,818
OPERATING DEDUCTIONS				
Operating Expenses	438,511	438,511	-	438,511
Taxes	16,818	16,818	-	16,818
Total Cash Requirements Before Debt Service	455,329	455,329	-	455,329
Cash Available for Debt Service (A)	383,074	602,489	-	602,489
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	284,125	490,046	1,574 (1)	491,620
Other Debt	4,266	4,266	-	4,266
Reserve Account @ 10%		20,592	157 (2)	20,749
Renewal & Replacement Fund (2.5%)	32,402	32,402	(7,944) (3)	24,458
Total Debt Service Requirement	320,793	547,306	(6,213)	541,093
SB 234 Cash Working Capital	53,194	54,814	-	54,814
Remaining Cash	9,087	369	6,213	6,582
Percent Coverage (A) / (B)	134.83%	122.95%		122.55%
Average rate for 3,400 gallons	\$ 68.58	\$ 87.17	\$ -	\$ 87.17
Average rate for 4,000 gallons	\$ 79.12	\$ 100.57	\$ -	\$ 100.57

**CITY OF SALEM - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
APPLICATION NO. 2025S-2694**

**Attachment B
LOAN PACKAGE
SCENARIO 2**

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>	
(1)	Principal & Interest	Per Staff Analysis	491,620	1,574
		Per Application with Project	490,046	
The difference in P&I is related to Staff's calculation of a loan of \$3,500,000 for 40 years (paid back over 38 years) at 5%.				
(2)	Reserve Account @ 10%	Per Staff Analysis	20,749	157
		Per Application with Project	20,592	
Staff assumed a 10% reserve on the new debt.				
(3)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	24,458	(7,944)
		Per Application with Project	32,402	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.				