



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: February 19, 2025

Subject: Ravencliff-McGraws-Saulsville PSD
Preliminary Application: IJDC No. 2023S-2384
Glen Rogers Sewer System Improvements Project

-
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:

This project is the first phase of a multiphase project that will upgrade the sewer system. This phase will install a new 75,000 GPD SBR system to replace the existing plant that was constructed in 1972. The condition of the plant is beyond repair and received DEP Consent Order 10172 which outlined 56 violations in the past 21 months. This project will address these issues.

Using the Combined Application, the Total Engineering Fee and the Design Fee appear to be within the ASCE curve.

The proposed total cost for this project is \$5,725,000 and the City intends to pursue an ARC Grant for \$1,900,000, Congressionally Directed Spending for \$800,000, an IJDC Grant for \$1,000,000, CWSRF Principle Forgiveness Design Loan for \$500,000, CWSRF Principle Forgiveness Loan for \$1,500,000, and a grant for the Wyoming County Commission for \$25,000.

Preliminary Project Ratings:

Public Health Benefits: 20
Compliance with Standards: 20



Sherrri A. Young, DO, MBA, FAAFP
Cabinet Secretary

Jason R. Frame
OEHS Director

MEMORANDUM

TO: Meredith J. Vance, Director
Environmental Engineering Division

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

DATE: February 6, 2025

SUBJECT: Ravencliff-McGraws-Saulsville Public Service District
IJDC Application- **2023S-2384**
Plant and Sewer Line Upgrades
Wyoming 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 a complete replacement of the collection system, including the pump station, and construction of a 0.075 MGD wastewater treatment plant (Alternative 1).

The total project cost is **\$5,725,000.00**

Need for the Project:

The Ravencliff-McGraws-Saulsville Public Service District (RMS PSD) operates the Glen Rogers sanitary sewer collection system and wastewater treatment plant under WV NPDES Permit Number WV0080390. In 2023 the District received a Consent Order from the WV DEP. The wastewater plant is currently failing and in need of significant upgrading to return it to compliance with the DEP Consent Order and the WV NPDES permit. The collection system is also deteriorated and has an Infiltration / Inflow rate of over 80%. The equipment and many of the components have exceeded their useful lives (or have already failed outright) and need to be replaced to ensure long-term permit compliance. The current discharges of untreated or partially treated effluent to Laurel Fork is creating a public health hazard (Laurel Fork is the raw water source for the Town of Oceana) and degrading water quality of a high-quality trout stream.



Concerns:

No concerns were noted.

Permits:

The following permits, certificates, and coordination may be required for this project.

- West Virginia Department of Transportation, Division of Highways, Permit
- West Virginia Department of Environmental Protection, NPDES Permit Modification
- West Virginia Department of Environmental Protection, NPDES Construction Storm Water Permit
- West Virginia Division of Natural Resources – Public Lands Corporation
- West Virginia Public Service Commission (PSC) Certificate of Convenience and Necessity



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MEMORANDUM

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

FROM: Spencer Fultineer, DWWM

DATE: February 5, 2025

SUBJECT: Ravencliff-McGraws-Saulsville PSD
Preliminary Application: IJDC No. 2023S-2384
Glen Rogers Sewer System Improvements Project

RECOMMENDATION

The IJDC Application and Preliminary Engineering Report prepared by The Thrasher Group, for the above referenced project has been reviewed and is technically feasible.

PROJECT DESCRIPTION

The Ravencliff-McGraws-Saulsville PSD owns and operates the existing Glen Rogers sewer collection and treatment system operating under NPDES Permit# WVG0080390. The PSD's collection and treatment system currently serves approximately 88 customers. These customers include 84 residential, 3 commercial, and 1 resale.

This project proposes to replace the existing oxidation ditch with a 75,000 GPD SBR system and replace/rehabilitate the rest of the treatment plant. (Ex: Holding tanks, drying beds, screen, etc.)

This project is the first phase of what will be a multiphase project. The following phases will address the necessary updates and rehabilitation of the collection system. They will also aim to extend sewer service to unserved customers in the area.

The proposed total cost for this project is \$5,725,000 and the City intends to pursue an ARC Grant for \$1,900,000, Congressionally Directed Spending for \$800,000, an IJDC Grant for \$1,000,000, CWSRF Principle Forgiveness Design Loan for \$500,000, CWSRF Principle Forgiveness Loan for \$1,500,000, and a grant for the Wyoming County Commission for \$25,000.

The proposed 3,400 gallon rate is \$68.49.

NEED FOR PROJECT

The project will replace and upgrade the failing WWTP that was constructed in 1972. This will return the WWTP to compliance following a DEP Consent Order (Order No. 10172) after multiple violations of the NPDES permit. Over a period of 21 months, this plant experienced 56 violations.

DEFICIENCIES/COMMENTS

- Using the Combined Application, the Total Engineering Fee and the Design Fee appear to be within the ASCE curve.
- Sludge disposal not in PER (Engineer states it will be taken to Raleigh County Landfill)
- The PER will need to be developed into a facilities plan that meets CWSRF requirements if CWSRF is used.

Preliminary Project Ratings:

Public Health Benefits: 20
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



February 12, 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. 2023S-2384
RMS PSD, WWTP Improvements, Phase 1
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,

Jonathan M Fowler
Jonathan M. Fowler, P.E.
Engineering Division

Enclosures
JMF:vb

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: February 5, 2025

PROJECT SPONSOR: RAVENCLIFF-MCGRAWS-SAULSVILLE PSD - SEWER

PROJECT SUMMARY: To provide improved wastewater treatment and collection service to the Glen Rogers Community.

PROPOSED FUNDING: ARC Grant	\$1,900,000
Wyoming County Commission Grant	\$ 25,000
CWSRF Principal Forgiveness	\$1,500,000
Congressionally Directed Grant	\$ 800,000
IJDC Grant	\$1,000,000
CWSRF Principal Forgiveness	<u>\$ 500,000</u>
Total	<u>\$5,725,000</u>

CURRENT RATES:	\$46.56	3,400 gallons
	\$54.46	4,000 gallons

PROPOSED RATES:	\$68.49	3,400 gallons
	\$80.11	4,000 gallons

Application No. 2023S-2384

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

FINANCIAL: Stephen Edens

1. Current rates (\$46.56 for 3,400 gallons) are above the rates attributable to 1.25% (\$45.93) of the Median Household Income (MHI), but below the rates attributable to 1.5% (\$55.12), 1.75% (\$64.31) and 2.0% (\$73.49) of the MHI. Increasing current rates to 1.5%, 1.75% and 2.0% of the MHI would provide additional revenues of \$14,286, \$29,620 and \$44,953 respectively.

2. Using Scenario 1, the preferred funding package consisting of an ARC Grant of \$1,900,000, a Wyoming County Commission Grant of \$25,000, a CWSRF Principal Forgiveness of \$1,500,000, a Congressionally Directed Spending Grant of \$800,000, an IJDC Grant of \$1,000,000 and an additional CWSRF Principal Forgiveness of \$500,000, proposed rates (\$68.49 for 3,400 gallons) will provide a cash flow surplus of \$2,459. No outstanding debt.
3. Using the Scenario 2 alternate loan package of \$5,725,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed rates (\$351.78 for 3,400 gallons) will provide a cash flow deficit of \$8,543 and debt service coverage of 113.72%. An additional 2% (for a total of \$358.82 for 3,400 gallons) increase in proposed rates will be required in order to provide a cash flow surplus of \$37 and debt service coverage of 116.31%.

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 applicant's Cash Flow Exhibit submitted with the application.
- D. The Project Accountant noted the financial information for the Annual Report ending June 30, 2024, was incomplete and used the General Ledger for the Per Books data listed on the Cash Flow Exhibit. Staff accepted this financial information and reflected this in its analyses.
- E. Staff notes the Applicant is requesting a waiver of Rule 42 Exhibit requirement. We have no objection to this request.
- F. Staff notes there was no long-term debt listed on the Cash Flow Exhibit, therefore, the R&R Reserve was reflected as part of the cash flow surplus.

- G. Staff notes the Applicant's cash flow analyses include per books rates of \$46.56 (3,400 gallons), which were approved and became effective with the finalization of the acquisition of the Glen Rogers PSD, (February 21, 2024). In addition, the cash flow analyses include going level rates of \$58.29 (3,400 gallons), however, as of this date, no rate filing proposing these rates has been submitted to the Commission. The Staff included these rates in its analyses.
- H. 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: Brandon Crace

1. This project may not require a Certificate of Convenience and Necessity from the PSC. The project sponsor should consult with Commission Staff pursuant to the requirements of General Order No. 246 for such determination. Should a Certificate be required, the sponsor 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. Staff notes that an affirmative determination of need for the project must be established in a Certificate filing at the PSC.
2. Scope: The Ravencloft-McGraws-Saulsville Public Service District (RMS PSD) is proposing a 3-Phase Project approach to make improvements to its Glen Rogers Wastewater Treatment Plant (WWTP), Sewer Collection System Improvements, and Sewer Line Extensions. However, this review will only evaluate Phase I, as the PER states that Phase I needs to be completed prior to pursuing Phases II or III. The Phase I project scope includes making upgrades, repairs, and replacements at its Glen Rogers Wastewater Treatment Plant (WWTP). The proposed project scope includes: a influent pump station upgrade, mechanical screen (w/1/4-inch openings), a SBR Tank (31 ft x 19 ft) with stairs and walkway, SBR equipment (coarse bubble diffusers and single decanter), site electrical

upgrades, replacement of existing generator and transfer switch, chlorination equipment replacement, sludge digester upgrades (aeration, decanter, pump), site piping (plumbing), demolition/cleaning (clarifiers, aeration ditch, and sludge holding tank), sitework/grading, flow meter replacement, telemetry/SCADA system, refurbish sludge drying beds (piping, media, and new roof), effluent pumping station upgrade, control building improvements, restoration of disturbed areas, and all necessary appurtenances. The estimated construction cost is \$4,250,000 (includes 14.86% construction contingency), and the estimated total project cost is \$5,725,000 (includes 2.43% project contingency).

Need: The PER indicates that RMS PSD operates the Glen Rogers WWTP, which is currently failing and in need of significant upgrading to meet compliance standards with DEP Consent Orders and WV NPDES permit parameters. The discharges of untreated or partially treated WWTP effluent to Laurel Fork is creating a public health hazard. Additionally, Laurel Fork is the raw water source for the Town of Oceana.

Customer Density: This project is an upgrade project; therefore, customer density will remain unchanged.

Cost per Customer: Based upon the estimated total project cost of \$5,725,000, and proposing to have 83 new customers, the cost to serve each new customer is \$68,976. However, the project is 100% grant and contribution funded; therefore, the proposed borrowing is \$0.

3. Project Feasibility: The project appears to be technically feasible and poses little technical risk.
4. Project Alternatives: RMS PSD is proposing a 3-Phase Project approach to make improvements to its Glen Rogers Wastewater Treatment Plant (WWTP), Sewer Collection System Improvements, and Sewer Line Extensions. However, this review will only evaluate Phase I, as the PER states that Phase I needs to be completed prior to pursuing Phases II or III. The PER evaluated three (3) alternates related to the WWTP improvements: #1 – Repair Existing Facility, #2 – Sequencing Batch Reactor (SBR) Treatment Process, #3 – Consolidation with Existing Sewer Utilities, and #4 – No Action. The PER states Alternate #2 was recommended as it is the most cost effective and implementable alternative, and upgrade the remainder of the treatment works.

5. Consolidation: There are no consolidation opportunities presented by this project.
6. Operation and Maintenance (O&M) Expenses: The PER included a breakdown of changes to O&M, and suggests that costs are estimated to increase by approximately \$12,000, due to the estimated electrical costs, sludge hauling and disposal, pump and blower maintenance, generator maintenance and fuel, telemetry/SCADA, insurance, etc.
7. Engineering Agreement: The application includes information to determine compliance with West Virginia Code §5G-1-1, et seq. Total technical services (engineering) costs for the project are \$1,185,000, which is equal to 27.88% of the construction cost is \$4,250,000 (includes 14.86% construction contingency).
8. Deficiencies/Comments:
 - a. RMS PSD is proposing a 3-Phase Project approach to make improvements to its Glen Rogers Wastewater Treatment Plant (WWTP), Sewer Collection System Improvements, and Sewer Line Extensions. However, this review will only evaluate Phase I, as the PER states that Phase I needs to be completed prior to pursuing Phases II or III.
 - b. Staff notes that in the event that the project cost increases, then additional funding must be secured or, the project scope will need to be revised to accommodate the new project budget. Therefore, we strongly advise the applicant to plan for the likelihood of increased construction costs.

RAVENCLIFF-MCGRAWS-SAULSVILLE PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2024
 APPLICATION NO: 2023S-2384
 February 11, 2025

**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
	\$	\$	\$	\$
AVAILABLE CASH				
Operating Revenues	74,713	87,788	(9,789) (1)	77,999
Other Operating Revenue	2,053	2,874	-	2,874
SB 234 Annual Working Cash Collections			9,789 (2)	9,789
Interest Income & Other Misc.	32	32	-	32
Total Cash Available	76,798	90,694	-	90,694
OPERATING DEDUCTIONS				
Operating Expenses	66,308	78,308	-	78,308
Taxes	138	138	-	138
Total Cash Requirements Before Debt Service	66,446	78,446	-	78,446
Cash Available for Debt Service (A)	10,352	12,248	-	12,248
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)			-	-
Other Debt			-	-
Reserve Account @ 10%			-	-
Renewal & Replacement Fund (2.5%)			-	-
Total Debt Service Requirement	-	-	-	-
SB 234 Cash Working Capital	8,289	9,789	-	9,789
Remaining Cash	2,063	2,459	-	2,459
Percent Coverage (A) / (B)				
Average rate for 3,400 gallons	\$ 58.29	\$ 68.49	\$ -	\$ 68.49
Average rate for 4,000 gallons	\$ 68.18	\$ 80.11	\$ -	\$ 80.11

RAVENCLIFF-MCGRAWS-SAULSVILLE PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2024
 APPLICATION NO: 2023S-2384

Attachment A
 PREFERRED FUNDING PACKAGE
 SCENARIO 1

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Revenues	Per Staff Analysis	77,999	(9,789)
		Per Application with Project	87,788	
	Adjust revenues in accordance with PSC General Order 183.11.			
(2)	SB 234 Annual Working Cash Collections	Per Staff Analysis	9,789	9,789
		Per Application with Project	-	
	Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.			

RAVENCLIFF-MCGRAWS-SAULSVILLE PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2024
 APPLICATION NO: 2023S-2384
 February 11, 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	74,713	450,893	(989) (1)	449,904
Other Operating Revenue	2,053	13,473	-	13,473
SB 234 Annual Working Cash Collections			9,789 (2)	9,789
Interest Income & Other Misc.	32	32	-	32
Total Cash Available	76,798	464,398	8,800	473,198
OPERATING DEDUCTIONS				
Operating Expenses	66,308	78,308	-	78,308
Taxes	138	138	-	138
Total Cash Requirements Before Debt Service	66,446	78,446	-	78,446
Cash Available for Debt Service (A)	10,352	385,952	8,800	394,752
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)		331,269	8,133 (3)	339,402
Other Debt			-	-
Reserve Account @ 10%		33,127	813 (4)	33,940
Renewal & Replacement Fund (2.5%)		11,610	(26) (5)	11,584
Total Debt Service Requirement	-	376,006	8,920	384,927
SB 234 Cash Working Capital	8,289	9,789	-	9,789
Remaining Cash	2,063	157	(120)	37
Percent Coverage (A) / (B)		116.51%		116.31%
Average rate for 3,400 gallons	\$ 58.29	\$ 351.78	\$ 7.04	\$ 358.82
Average rate for 4,000 gallons	\$ 68.18	\$ 411.47	\$ 8.23	\$ 419.70

RAVENCLIFF-MCGRAWS-SAULSVILLE PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2024
 APPLICATION NO: 2023S-2384

Attachment B
 LOAN PACKAGE
 SCENARIO 2

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Revenues	Per Staff Analysis	449,904	(989)
		Per Application with Project	450,893	
Adjust revenues in accordance with PSC General Order 183.11. Staff project an additional \$8,800 in revenues would be needed to achieve 115% debt coverage and a positive cash balance.				
(2)	SB 234 Annual Working Cash Collections	Per Staff Analysis	9,789	9,789
		Per Application with Project	-	
Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.				
(3)	Principal & Interest	Per Staff Analysis	339,402	8,133
		Per Application with Project	331,269	
The difference in P&I is related to Staff's calculation of a loan of \$5,725,000 for 40 years (paid back over 38 years) at 5%.				
(4)	Reserve Account @ 10%	Per Staff Analysis	33,940	813
		Per Application with Project	33,127	
Staff assumed a 10% reserve on the new debt.				
(5)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	11,584	(26)
		Per Application with Project	11,610	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.				