



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: July 21, 2025

Subject: Shady Spring PSD
IJDC Application - 2025S-2664
Cool Ridge Community Sewer 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. 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:

The project will extend sewer service from their existing line on Route 19 to 48 new customers in the Ridgewood Subdivision and end at the Route 19/Mount View Road intersection. This area relies on septic systems for wastewater disposal and the health department has documented many failures due to the presence of rock in the soil, soil types and drainage patterns. This project will address these issues.

The total cost for this project is \$1,664,050.00 and the PSD intends to pursue a \$1,500,000 Corp. of Engineers Grant, and a \$164,050 Raleigh County Commission Grant.

Preliminary Project Ratings:

Public Health Benefits: 15

Compliance with Standards: 5



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

Russel Crane
Interim Cabinet Secretary of Health

Jason R. Frame
OEHS Director

MEMORANDUM

TO: Meredith J. Vance, Director
Environmental Engineering Division

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

A handwritten signature in blue ink, appearing to read "P. Murphy", is written over the "FROM:" line.

DATE: May 12, 2025

SUBJECT: Shady Spring PSD
IJDC Application- **2025S-2664**
Cool Ridge Sewer Extension Study
Raleigh County

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

Project Scope: The purpose of this study is to analyze the proposed project area for the potential of wastewater service to be provided by the PSD's Cool Ridge/Flat Top Wastewater System.

The total project cost is **\$1,664,050.00**

Need for the Project: The residents in the project area all rely on septic systems for wastewater disposal. The area soils and depth to bedrock have caused ongoing issues with slow absorption of gray water from the tank by the drain fields. During rain events or high-water usage, many residents have complained about large areas of wet lawns and gray water flowing across the surface to local ditches and streams. The areas studied in this report have had a slow steady growth over time and will likely continue that trend.

Concerns: No concerns were noted.

Permits: WVDEP NPDES, WVDEP Construction Stormwater; US Army Corps of Engineers and WV Department of Health.





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MEMORANDUM

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

FROM: Dominique Madison, E.I., DWWM

DATE: July 11, 2025

SUBJECT: Shady Spring PSD
IJDC Application - 2025S-2664
Cool Ridge Community Sewer Project

RECOMMENDATION

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

PROJECT DESCRIPTION

The Shady Spring Public Service District (PSD) is located in the southeastern end of Raleigh County. The PSD operates two separate wastewater collection and treatment systems. The initial system known as the Core System was constructed in 1984. It consists of a conventional gravity/grinder pump pressure sewer collection system and a 1.2 million gallon per day (MGD) extended aeration-type wastewater treatment facility at Glen Morgan. The second collection and treatment system is the Cool Ridge-Flat Top Wastewater System. It includes a grinder pump pressure collection system and a 0.21 MGD sequencing batch reactor (SBR) treatment facility constructed in 2007 in Ghent.

The proposed project will extend sewer service to 48 customers in the Ridgewood Subdivision and end at the Route 19/Mount View Road intersection. The proposed extension will connect to the existing line on Route 19 and the flow will be sent to the Cool Ridge-Flat Top Wastewater Treatment Plant.

The proposed total cost for this project is \$1,664,050.00. Shady Spring PSD intends to pursue a \$1,500,000 Corp. of Engineers Grant, and a \$164,050 Raleigh County Commission Grant. The monthly rate for 3,400 gallons is \$62.40 (1.73% MHI).

NEED FOR PROJECT

The proposed project area currently does not have access to public wastewater treatment. The residents in the project area rely on septic systems for wastewater disposal. Beckley-Raleigh Health Department stated in their letter dated June 2, 2025 “ The residents utilize septic tanks with leach fields to treat their wastewater. However, with the presence of rock in the soil, soil types and drainage patterns are not conducive to many of these systems, and as a result, this area has been experiencing failures.”. It has been reported that during rain events or high water usage, many residents have complained about large areas of wet lawns and gray water flowing across the surface to local ditches and streams. The areas studied have had slow steady growth over time and will likely continue that trend. Public wastewater collection would minimize the contaminants from entering neighboring streams.

DEFICIENCIES/COMMENTS

- 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 facilities plan that meets CWSRF requirements if CWSRF is used.

Preliminary Project Ratings:

Public Health Benefits: 15
Compliance with Standards: 5

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



July 16, 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-2664
Shady Spring PSD – Sewer Extension (Cool Ridge)
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

Please advise if you have any questions.

Sincerely,

Brandon Crace

Brandon Crace
Engineering Division

Enclosures
BC

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: July 16, 2025

**PROJECT SPONSOR: SHADY SPRING PUBLIC SERVICE DISTRICT -
SEWER**

PROJECT SUMMARY: Shady Spring Public Service District is proposing to extend sewer service to approximately 48 potential customers.

PROPOSED FUNDING: Raleigh County Commission Grant	\$ 182,505
U.S. COE Grant	<u>1,500,000</u>
Total	\$1,682,505

CURRENT RATES:

Schedule 1	\$40.46	3,400 gallons
	\$47.60	4,000 gallons
Schedule 2	\$65.46	3,400 gallons
	\$72.60	4,000 gallons

PROPOSED RATES:

Schedule 1	\$42.50	3,400 gallons
	\$50.00	4,000 gallons
Schedule 2	\$67.50	3,400 gallons
	\$75.00	4,000 gallons

Application No. 2025S-2664

RECOMMENDATION: X Forward to the Funding Committee.
 Forward to the Consolidation Committee.
 Return to the Applicant.

FINANCIAL: William Nelson

1. Current average rates (\$52.96 for 3,400 gallons) are above the rate attributable to 1.25% (\$45.09) of the Median Household Income (MHI), but below the rates attributable to 1.5% (\$54.10), 1.75% (\$63.12) and 2.0% (\$72.14) of the MHI. Increasing current rates to 1.5%, 1.75% and 2.0% of

the MHI would provide additional revenues of \$73,195, \$650,265 and \$1,227,334 respectively.

2. Using Scenario 1, the preferred funding package consisting of a \$182,505 Raleigh County Commission Grant and a U.S. Army Corps of Engineers Grant of \$1,500,000, proposed average rates (\$55.00 for 3,400 gallons) will provide a cash flow surplus of \$35,113 and debt service coverage of 127.61%.
3. Using the Scenario 2 alternate loan package of \$1,682,505 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed average rates (\$55.00 for 3,400 gallons) will provide a cash flow deficit of \$74,608 and debt service coverage of 120.04%. An additional 2.2% (for a total average of \$56.21 for 3,400 gallons) increase in proposed rates will be required in order to provide a cash flow surplus of \$467 and debt service coverage of 124.62%.

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. Staff used the MHI for Raleigh County of \$43,283 from the 2020 U.S. Census versus the MHI of \$69,432 that was listed in the application.
- 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 Statements submitted with the application.
- D. Staff notes the project sponsor has requested a waiver of the Rule 42 Exhibit requirement.
- E. The Schedule 2 (Non-Project Step B Rates) rates of \$65.46 (3,400 gallons) became effective January 1, 2024. The applicant did not reflect the current rate in its application, but Staff used the current rate in its cash flow statements.

- F. The Schedule 2 (Post Project Rates) rates of \$67.50 (3,400 gallons) are effective upon substantial completion of the Glen Morgan Wastewater Treatment Plant project.
- G. Because the proposed max rate in the District's application is lower than its current rate, Staff used its Scenario 1 analysis as the basis for Scenario 2. Staff then adjusted for the additional debt associated with the Scenario 2 analysis.
- 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.
- I. The Public Service District should carefully evaluate its revenue requirements before pursuing a rate increase in order to ensure that rates are sufficient to provide a reasonable surplus and meet coverage requirements. Staff notes that the District is a political subdivision of the state and it has at least 4,500 customers and annual gross revenues of \$3 million or more. Therefore, in accordance with Senate Bill 234, effective June 12, 2015, the Commission has no jurisdiction regarding the District's rates pursuant to WV Code 24-2-4a and WV Code 16-13A-9. However, the Commission does have jurisdiction pursuant to WV Code 24-2-1 (b)(6) for the investigation and resolution of disputes involving political subdivisions of the state regarding inter-utility agreements, rates, fees and charges, service areas and contested utility combinations.

ENGINEERING: Brandon Crace

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 Shady Spring Public Service District (SS PSD) is proposing to extend sewer service to approximately 48 potential customers. The

proposed project scope includes: 2600 LF of 6-inch forcemain, 4500 LF of 2-inch forcemain, 240 LF of 4-inch service laterals, 250 LF of 12-inch steel casing, 100 LF of 6-inch steel casing, 2 pressure sewer flushing connections, 48 residential grinder pumps, one (1) forcemain air release valves, five (5) 2-inch isolation valves, two (2) 6-inch isolation valves, 1 connection to existing sewer, 2 forcemain cleanouts, 250 LF of WVDOT Trench Repair (Asphalt), 200 LF of WVDOT Trench Repair (Stone), 600 LF of driveway repair (asphalt/concrete), erosion and sediment control, and all necessary appurtenances. The estimated construction cost is \$1,420,705 (includes 10.0% construction contingency), and the estimated total project cost is \$1,682,505 (includes \$23,800 project contingency).

Need: The PER indicates that residents of Cool Ridge utilize personal septic systems in several moderately populated areas, and some residents are experiencing failing septic systems and drain fields overflowing during wet conditions.

Cost per Customer: Based upon the estimated total project cost of \$1,682,505, and proposing to have 48 new customers, the cost to serve each new customer is \$35,052. However, the proposed 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: The PER did include an evaluation of alternatives: Alternative #1 – Wastewater Collection with Individual Grinder Pumps, Alternative #2 – Wastewater Collection with Convention Gravity System, and Alternative #3 – Do Nothing. The PER indicates that Alternative #1 was selected as “Shallow bedrock and topographic features make this project not conducive to implementation of a conventional gravity system.”
5. Consolidation: There are no consolidation opportunities presented by this project.
6. Operation and Maintenance (O&M) Expenses: The PER indicates the proposed project scope will increase O&M expenses by approximately \$17,950 annually. A breakdown of changes to O&M was included with the PER, and suggests that costs are estimated to increase primarily due to the labor, materials and supplies, treatment, and general expenses.

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 \$193,000, which is equal to 13.58% of the construction cost of \$1,420,705 (includes 10.0% construction contingency).
8. Deficiencies/Comments:
- The PER indicates that the proposed potential customers are experiencing failure of their private septic systems; however, of the 5 surveys attached to the PER: 3 indicate their existing septic system in “Good” condition, 1 in “Excellent” condition, and only 1 indicated “Poor” condition. Therefore, 80% of the attached surveys indicate a “Good”, or “Excellent”, private septic system.
 - The PER indicates \$45,000 for Construction Inspection; however, the IJDC Application has \$0 for Resident Project Representative (RPR) and \$45,000 for Engineering During Construction.

SHADY SPRING PUBLIC SERVICE DISTRICT - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
APPLICATION NO: 2025S-2664
July 16, 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
		\$	\$	\$	\$
<u>AVAILABLE CASH</u>					
Operating Revenues		3,482,842	3,576,405	(210,089) (1)	3,366,316
Other Operating Revenue		109,907	109,907	-	109,907
SB 234 Annual Working Cash Collections				210,089 (2)	210,089
Interest Income & Other Misc.		68,571	68,571	-	68,571
Total Cash Available		3,661,320	3,754,883	-	3,754,883
<u>OPERATING DEDUCTIONS</u>					
Operating Expenses		1,639,776	1,680,713	-	1,680,713
Taxes		57,195	57,195	-	57,195
Total Cash Requirements Before Debt Service		1,696,971	1,737,908	-	1,737,908
Cash Available for Debt Service	(A)	1,964,349	2,016,975	-	2,016,975
<u>DEBT SERVICE REQUIREMENTS</u>					
Principal & Interest	(B)	1,369,113	1,580,562	-	1,580,562
Other Debt		-	-	-	-
Reserve Account @ 10%		83,161	104,306	-	104,306
Renewal & Replacement Fund (2.5%)		91,533	93,872	(6,966) (3)	86,906
Total Debt Service Requirement		1,543,807	1,778,740	(6,966)	1,771,774
SB 234 Cash Working Capital		204,972	210,089	-	210,089
Remaining Cash		215,570	28,146	6,966	35,113
Percent Coverage	(A) / (B)	143.48%	127.61%		127.61%
Average rate for 3,400 gallons		\$ 52.96	\$ 55.00	\$ -	\$ 55.00
Average rate for 4,000 gallons		\$ 60.10	\$ 62.50	\$ -	\$ 62.50
Schedule 1					
Rate for 3,400 gallons		\$ 40.46	\$ 42.50	\$ -	\$ 42.50
Rate for 4,000 gallons		\$ 47.60	\$ 50.00	\$ -	\$ 50.00
Schedule 2					
Rate for 3,400 gallons		\$ 65.46	\$ 67.50	\$ -	\$ 67.50
Rate for 4,000 gallons		\$ 72.60	\$ 75.00	\$ -	\$ 75.00

SHADY SPRING PUBLIC SERVICE DISTRICT - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
APPLICATION NO: 2025S-2664

Attachment A
PREFERRED FUNDING PACKAGE
SCENARIO 1

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Revenues	Per Staff Analysis	3,366,316	(210,089)
		Per Application with Project	3,576,405	
Adjust revenues in accordance with PSC General Order 183.11.				
(2)	SB 234 Annual Working Cash Collections	Per Staff Analysis	210,089	210,089
		Per Application with Project	-	
Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.				
(3)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	86,906	(6,966)
		Per Application with Project	93,872	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.				

SHADY SPRING PUBLIC SERVICE DISTRICT - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
APPLICATION NO: 2025S-2664
July 16, 2025

**LOAN PACKAGE
SCENARIO 2**

		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		3,482,842	3,576,405	(133,089) (1)	3,443,316
Other Operating Revenue		109,907	109,907	-	109,907
SB 234 Annual Working Cash Collections				210,089 (2)	210,089
Interest Income & Other Misc.		68,571	68,571	-	68,571
Total Cash Available		3,661,320	3,754,883	77,000	3,831,883
<u>OPERATING DEDUCTIONS</u>					
Operating Expenses		1,639,776	1,680,713	-	1,680,713
Taxes		57,195	57,195	-	57,195
Total Cash Requirements Before Debt Service		1,696,971	1,737,908	-	1,737,908
Cash Available for Debt Service	(A)	1,964,349	2,016,975	77,000	2,093,975
<u>DEBT SERVICE REQUIREMENTS</u>					
Principal & Interest	(B)	1,369,113	1,678,466	1,842 (3)	1,680,308
Other Debt		-	-	-	-
Reserve Account @ 10%		83,161	114,096	185 (4)	114,281
Renewal & Replacement Fund (2.5%)		91,533	93,872	(5,041) (5)	88,831
Total Debt Service Requirement		1,543,807	1,886,434	(3,014)	1,883,419
SB 234 Cash Working Capital		204,972	210,089	-	210,089
Remaining Cash		215,570	(79,548)	80,014	467
Percent Coverage	(A) / (B)	143.48%	120.17%		124.62%
Average rate for 3,400 gallons		\$ 52.96	\$ 55.00	\$ 1.21	\$ 56.21
Average rate for 4,000 gallons		\$ 60.10	\$ 62.50	\$ 1.38	\$ 63.88
Schedule 1					
Rate for 3,400 gallons		\$ 40.46	\$ 42.50	\$ 0.94	\$ 43.44
Rate for 4,000 gallons		\$ 47.60	\$ 50.00	\$ 1.10	\$ 51.10
Schedule 2					
Rate for 3,400 gallons		\$ 65.46	\$ 67.50	\$ 1.49	\$ 68.99
Rate for 4,000 gallons		\$ 72.60	\$ 75.00	\$ 1.65	\$ 76.65

SHADY SPRING PUBLIC SERVICE DISTRICT - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
APPLICATION NO: 2025S-2664

Attachment B
LOAN PACKAGE
SCENARIO 2

Staff Adjustments

<u>Adjustment Description</u>			
		\$	Increase <Decrease>
(1) Operating Revenues	Per Staff Analysis	3,443,316	(133,089)
	Per Application with Project	3,576,405	
Adjust revenues in accordance with PSC General Order 183.11. Staff also projected that an additional \$77,000 in revenues would be needed to achieve 115% debt coverage and a positive cash surplus.			
(2) SB 234 Annual Working Cash Collections	Per Staff Analysis	210,089	210,089
	Per Application with Project	-	
Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.			
(3) Principal & Interest	Per Staff Analysis	1,680,308	1,842
	Per Application with Project	1,678,466	
The difference in P&I is related to Staff's calculation of a loan of \$1,682,505 for 40 years (paid over 38 years) at 5%.			
(4) Reserve Account @ 10%	Per Staff Analysis	114,281	185
	Per Application with Project	114,096	
Staff assumed a 10% reserve on the new debt.			
(5) Renewal & Replacement Fund (2.5%)	Per Staff Analysis	88,831	(5,041)
	Per Application with Project	93,872	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			