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: Town of Carpendale
Wastewater Collection and Pump Station Upgrade Phase I
IJDC Application - 2025S-2696

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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. 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 replace and rehabilitate the Millerdale II area of the collection system. A new pump station will be installed and three existing pump stations will be eliminated. This project will address unreliable and deteriorating pump stations, reduce I&I, and reduce the amount of flow that they are paying for Cumberland to treat.

The total cost for this project is $6,136,000 and the PSD intends to pursue a $1,000,000 IJDC Grant, $1,600,000 USACE Grant, $1,736,000 CWSRF Loan, $1,500,000 CWSRF Principal Forgiveness, and $300,000 of Mineral County Commission funding.

<u>Preliminary Project Ratings:</u>
Public Health Benefits: 5
Compliance with Standards: 5

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: Town of Carpendale
IJDC Application- **2024S-2696**
Wastewater Collection and Pump Station Upgrade
Mineral County

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

Project Scope: The scope of this project proposes the replacement and rerouting of sanitary sewer infrastructure to include the installation of approximately 8,900 linear feet of 8-inch gravity sewer main, 635 linear feet of 8-in force main and replacement of sewer laterals.

The total project cost is **$6,136,000.00**

Need for the Project: The aging/deteriorating condition of some of Carpendale's sewerage facilities along with I&I issues are concerning and if not resolved could result in sanitary sewer overflows (SSO's), further deterioration of the system, continued costly treatment bills from Cumberland, potential WVDEP Fines, and/or no way to convey sewage from Carpendale. During rain events and snow melt, the I&I is causing high treatment costs and high Operational and Maintenance (O&M) costs to Carpendale, straining their budget. The pump station issues could also result in SSO's due to improper pump performance, loss of power, and loss of control.

Concerns: No concerns were noted.

Permits: Permits and/or consultation can be expected by the following:

- WV Bureau of Public Health Permit
- WV Department of Environmental Protection
- WV Department of Highways

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MEMORANDUM

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

FROM: Cali Carter, P.E., DWWM

DATE: September 23, 2025

SUBJECT: Town of Carpendale
Wastewater Collection and Pump Station Upgrade Phase I
IJDC Application - 2025S-2696

RECOMMENDATION

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

PROJECT DESCRIPTION

The Town of Carpendale (Town) owns and operates a wastewater collection system in Mineral County, West Virginia serving approximately 378 customers. Carpendale collects and conveys wastewater to the City of Cumberland, Maryland for treatment. The Town operates under National Pollutant Discharge Elimination System (NPDES) permit number WV0101567.

The proposed project focuses on replacement and rehabilitation of the Millerdale II area of the collection system. 8,950 LF of 8" gravity sewer, 635 LF of 8" force main sewer, and associated customers sewer laterals will be replaced. A new pump station will be installed and three existing pump stations will be eliminated.

The proposed total cost for this project is \$6,136,000 and the PSD intends to pursue a \$1,000,000 IJDC Grant, \$1,600,000 USACE Grant, \$1,736,000 CWSRF Loan, \$1,500,000 CWSRF Principal Forgiveness, and \$300,000 of Mineral County Commission funding. The proposed monthly rate for 3,400 gallons is \$66.70 (1.55% MHI).

NEED FOR PROJECT

The Town has experienced an increase in sanitary sewer flow during stormwater events, particularly in the oldest area of the system, Millerdale II. This section of the system consists of approximately 10,000 LF of sanitary sewer lines and three pump stations. The pump stations in this area are unreliable and deteriorating. Camera and physical inspection of the area showed cracked piping, root intrusions, sections of pipe underwater, and leaking joints. Flow and rain data show a correlation between high rainfall and high sewage flows, indicating rainfall induced Inflow and Infiltration (I&I). The Town has incurred higher costs from Cumberland as well as high operation and maintenance costs due to the I&I.

DEFICIENCIES/COMMENTS

- Using the Combined Application, the Design, and Total Engineering Fees appear to be within the ASCE Curves.
- The Town should perform a cybersecurity vulnerability assessment if it hasn't already done so, and incorporate applicable cybersecurity upgrades into the project.
- The PER will need to be developed into a CWSRF Facility Plan if CWSRF is used.

Preliminary Project Ratings:
Public Health Benefits: 5
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

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-2696
Carpendale, Town 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:

__X__ 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 10, 2025

PROJECT SPONSOR: **TOWN OF CARPENDALE - (SEWER)**

PROJECT SUMMARY: The Town of Carpendale is proposing to make improvements to its existing sewer collection system.

PROPOSED FUNDING:

IJDC Grant	$1,000,000
USACE Grant	$1,600,000
CWSRF Loan (.25%, .25% AF, 40 yrs.)	$1,736,000
CWSRF Principal Forgiveness Loan	$1,500,000
Mineral County Commission Grant	$ 300,000
Total	$6,136,000

CURRENT RATES:

$58.90	3,400 gallons
$64.60	4,000 gallons

PROPOSED RATES:

$66.70	3,400 gallons
$73.16	4,000 gallons

Application No. 2025S-2696

RECOMMENDATION: __X__ Forward to the Funding Committee
____ Forward to the Consolidation Committee
____ Return to the Applicant

FINANCIAL: Stephen Edens

1. Current rates ($58.90 for 3,400 gallons) are above the rate attributable to 1.25% ($41.67), 1.5% ($50.00) and 1.75% ($58.33) of the Median Household Income (MHI), but below the rates attributable to 2.0% ($66.67) of the MHI. Increasing current rates to 2.0% of the MHI would provide additional revenues of $34,133.

2. Using Scenario 1, the preferred funding package consisting of an IJDC Grant of $1,000,000, a USACE Grant of $1,600,000, a CWSRF Loan of $1,736,000 at .25%, .25% Admin. Fee for 40 years (paid back over 38 years), a CWSRF Principal Forgiveness Loan of $1,500,000, and a Mineral County Commission Grant of $300,000, proposed rates ($66.70 for 3,400

gallons) will provide a cash flow surplus of $30,164 and debt service coverage of 144.11%.

3. Using the Scenario 2 alternate loan package of $4,536,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), and committed funds consisting of an USACE Grant of $1,600,000, proposed rates ($145.19 for 3,400 gallons) will provide a cash flow surplus of $125,805 and debt service coverage of 152.39%.

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 Rule 42 Exhibit submitted with the application.

   D. Staff used the MHI based off a 2022 Income Survey filed with the IJDC of $40,000 versus the MHI of $70,172 that was listed on the 2020 US Census for Carpendale. Staff reflected the 2022 Income Survey for its analysis.

   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 Town of Carpendale 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: 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 Town of Carpendale is proposing to make improvements to its existing sewer collection system. The proposed project scope includes: a new pump station, 635 LF of 8-inch forcemain pipe, 8950 LF of 8-inch gravity sewer pipe, 9 lampholes, 40 manholes, elimination of Pump Station 2, elimination of Pump Station 3, elimination of Pump Station 4, and all necessary appurtenances. The estimated construction cost is $4,502,149 (includes 10% construction contingency), and the estimated total project cost is $6,136,000 (includes 25.02 % project contingency).

   Need: The PER indicates that the existing collection system piping has aged and is experiencing high amounts of I&I due to root intrusions, leaking joints, cracked pipes, etc. As Carpendale pays another utility for sewage treatment, increased sewer flows due to I&I creates increased treatment expenses. It appears the proposed scope of work will help alleviate some of the I&I issues experienced on Carpendale's collection system.

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

   Cost per Customer: Based upon the estimated total project cost is $6,136,000, and having approximately 381 customers, the cost per customer will be approximately $16,105. However, the cost per customer in terms of proposed borrowing is $4,556, as the proposed funding is 71.7% grant.

3. Project Feasibility: The project appears to be technically feasible and poses little technical risk.

4. Project Alternatives: The PER evaluated two (2) alternates: Option 1 – Rehab Gravity System & Replace Pump Station 2, and Option 2 – Replace Gravity System. The PER states that Option 2 was selected by Carpendale as this will address a large portion of the excess I&I and allow the Millerdale area to utilize the existing system as a stormwater system after construction of the proposed project is completed.

5. Consolidation: There are no consolidation opportunities presented by this project.

6. Operation and Maintenance (O&M) Expenses: The PER did not include a discussion or breakdown of changes to O&M.

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 $824,500, which is equal to 18.31% of the construction cost of $4,502,149 (includes 10% construction contingency).

8. Deficiencies/Comments:
   - The PER did not include a discussion or breakdown of changes to O&M.

TOWN OF CARPENDALE - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
2025S-2696
October 14, 2025

PREFERED FUNDING PACKAGE
SCENARIO 1

		Rule 42 Going Level Per Application Before Project	Rule 42 Proforma Per Application with Project	Staff Adjustments		Per Staff Analysis
		1	2	3		4
		$	$	$		$
AVAILABLE CASH						
Operating Revenues		258,853	293,167	(14,592)	(1)	278,575
Other Operating Revenue				-		-
SB 234 Annual Working Cash Collections				14,592	(2)	14,592
Interest Income & Other Misc.		8,787	8,787	-		8,787
Total Cash Available		267,640	301,954	-		301,954
OPERATING DEDUCTIONS						
Operating Expenses		123,528	116,737	55	(3)	116,792
Taxes		512	512	-		512
Total Cash Requirements Before Debt Service		124,040	117,249	55		117,304
Cash Available for Debt Service	(A)	143,600	184,705	(55)		184,650
DEBT SERVICE REQUIREMENTS						
Principal & Interest	(B)	80,189	128,082	53	(4)	128,135
Other Debt				-		-
Reserve Account @ 10%			4,789	6	(5)	4,795
Renewal & Replacement Fund (2.5%)		6,691	7,549	(585)	(6)	6,964
Total Debt Service Requirement		86,880	140,420	(527)		139,894
SB 234 Cash Working Capital		15,441	14,592	-		14,592
Remaining Cash		41,279	29,693	472		30,164
Percent Coverage	(A) / (B)	179.08%	144.21%			144.11%
Average rate for 3,400 gallons		$ 58.90	$ 66.70	$ -		$ 66.70
Average rate for 4,000 gallons		$ 64.60	$ 73.16	$ -		$ 73.16

TOWN OF CARPENDALE - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
2025S-2696

Attachment A
PREFERED FUNDING PACKAGE
SCENARIO 1

Staff Adjustments

Adjustment Description			$	Increase <Decrease>
(1)	**Operating Revenues**	**Per Staff Analysis**	**278,575**	**(14,592)**
		Per Application with Project	**293,167**	
	Adjust revenues in accordance with PSC General Order 183.11.			
(2)	**SB 234 Annual Working Cash Collections**	**Per Staff Analysis**	**14,592**	**14,592**
		Per Application with Project	**-**	
	Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.			
(3)	**Operating Expenses**	**Per Staff Analysis**	**116,792**	**55**
		Per Application with Project	**116,737**	
	Staff's calculation included a difference in an Administrative Fee associated with the CWSRF loan.			
(4)	**Principal & Interest**	**Per Staff Analysis**	**128,135**	**53**
		Per Application with Project	**128,082**	
	The difference in P&I is related to Staff's calculation of a loan of $1,736,000 for 40 years (paid back over 38 years) at .25%.			
(5)	**Reserve Account @ 10%**	**Per Staff Analysis**	**4,795**	**6**
		Per Application with Project	**4,789**	
	Staff assumed a 10% reserve on the new debt.			
(6)	**Renewal & Replacement Fund (2.5%)**	**Per Staff Analysis**	**6,964**	**(585)**
		Per Application with Project	**7,549**	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			

TOWN OF CARPENDALE - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
2025S-2696
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		258,853	638,235	(14,592)	(1)	623,643
Other Operating Revenue				-		-
SB 234 Annual Working Cash Collections				14,592	(2)	14,592
Interest Income & Other Misc.		8,787	8,787	-		8,787
Total Cash Available		267,640	647,022	-		647,022
OPERATING DEDUCTIONS						
Operating Expenses		123,528	116,737	(2,209)	(3)	114,528
Taxes		512	512	-		512
Total Cash Requirements Before Debt Service		124,040	117,249	(2,209)		115,040
Cash Available for Debt Service	(A)	143,600	529,773	2,209		531,982
DEBT SERVICE REQUIREMENTS						
Principal & Interest	(B)	80,189	435,240	(86,138)	(4)	349,102
Other Debt				-		-
Reserve Account @ 10%			35,505	(8,614)	(5)	26,891
Renewal & Replacement Fund (2.5%)		6,691	16,176	(585)	(6)	15,591
Total Debt Service Requirement		86,880	486,921	(95,336)		391,585
SB 234 Cash Working Capital		15,441	14,592	-		14,592
Remaining Cash		41,279	28,260	97,545		125,805
Percent Coverage	(A) / (B)	179.08%	121.72%			152.39%
Average rate for 3,400 gallons		$ 58.90	$ 145.19	$ -		$ 145.19
Average rate for 4,000 gallons		$ 64.60	$ 159.24	$ -		$ 159.24

TOWN OF CARPENDALE - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2024
2025S-2696

Attachment B
LOAN PACKAGE
SCENARIO 2

Staff Adjustments

	Adjustment Description		$	Increase <Decrease>
(1)	**Operating Revenues**	**Per Staff Analysis**	**623,643**	**(14,592)**
		Per Application with Project	**638,235**	
	Adjust revenues in accordance with PSC General Order 183.11.			
(2)	**SB 234 Annual Working Cash Collections**	**Per Staff Analysis**	**14,592**	**14,592**
		Per Application with Project	**-**	
	Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.			
(3)	**Operating Expenses**	**Per Staff Analysis**	**114,528**	**(2,209)**
		Per Application with Project	**116,737**	
	Staff's calculation omits the Administrative Fee associated with a the CWSRF loan.			
(4)	**Principal & Interest**	**Per Staff Analysis**	**349,102**	**(86,138)**
		Per Application with Project	**435,240**	
	The difference in P&I is related to Staff's calculation of a loan of $4,536,000 for 40 years (paid back over 38 years) at 5%.			
(5)	**Reserve Account @ 10%**	**Per Staff Analysis**	**26,891**	**(8,614)**
		Per Application with Project	**35,505**	
	Staff assumed a 10% reserve on the new debt.			
(6)	**Renewal & Replacement Fund (2.5%)**	**Per Staff Analysis**	**15,591**	**(585)**
		Per Application with Project	**16,176**	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			