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: Dr. Mark Sarver, Executive Director, Water Development Authority

From: Katheryn Emery, P.E., SRF Program Manager
Sewer Technical Review Committee

Date: October 21, 2026

Subject: McDowell Co. PSD
Preliminary Application: IJDC No. 2026S-2832
Northfork-Keystone Phase 1

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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 water 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 proposed project is the first of four phases to to serve approximately 242 potential customers throughout Northfork, Keystone, and Algoma. Phase 1 will serve 55 customers in Keystone areas 1 through 3, with later phases serving the remaining areas of Keystone, Brick Row Street, Northfork, and Algoma. Phase 1 also includes the proposed 35,000 gallons per day (GPD) aerated moving bed biofilm reactor (MBBR) package wastewater treatment plant (WWTP), with modular additions to be constructed as needed during future phases up to a capacity of 70,000 GPD.

The proposed total cost for this project is $9,409,000. The PSD intends to fund this project using a $1,000,000 USDA-RUS Grant, a $75,000 USDA-SEARCH Grant, a $30,000 EPA Real Water Technical Assistance Grant, a $3,304,000 CDS Grant, a $1,000,000 WVDEP AMLER Grant, a $1,000,000 Community Development Block Grant, a $2,000,000 WVDEP CWSRF Principal Forgiveness Loan, and a $1,000,000 WVIJDC Grant.

The PSC review memo noted that the proposed rate needs to be increased to $58.81 (greater than 2% MHI) for 3,400 gallons to provide a cash flow surplus of $23.

Preliminary Project Ratings:
Public Health Benefits: 20
Compliance with Standards: 20

WEST VIRGINIA DEPARTMENT OF HEALTH
Bureau for Public Health

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

Mark E. McDaniel, DO, FAAFP
Acting Commissioner & State Health Officer

MEMORANDUM

TO: Katheryn Emery, PE, Program Manager
DWWM

FROM: Meredith J. Vance, Director
Environmental Engineering Division

DATE: September 28, 2026

SUBJECT: McDowell County PSD
IJDC Application- **2026S-2832**
Sewer Line Improvements
McDowell County

Recommendation: This preliminary application and Preliminary Engineering Report has been reviewed and is technically feasible.

Project Scope: The project scope is to construct a new MMBR wastewater treatment facility and installation of new gravity and pressure collection lines.

The total project cost is **$9,408,860.00.**

Need for the Project: The need for the project is to address lack of adequate public sanitary sewer in Keystone, Algoma and Northfork communities within McDowell County.

Concerns: There are no concerns with this project.

Permits: A permit **will be** required from the WV Bureau for Public Health prior to construction. Other permits and/or consultations that are anticipated for this project include: WVDEP, WVDOT, WVDNR, USF&W, WVSHPO, and USCOE.

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Harold D. Ward, Cabinet Secretary
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MEMORANDUM

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

FROM: Justin Moffitt, P.E., DWWM

DATE: October 9, 2026

SUBJECT: McDowell Co PSD
IJDC Application – 2026S-2832
Northfork-Keystone Phase 1

RECOMMENDATION

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

PROJECT DESCRIPTION

The McDowell County Public Service District (PSD) owns and operates public wastewater collection and treatment systems in McDowell County, West Virginia, serving approximately 177 customers within the communities of Coalwood, Ashland, Crumpler, and Iaeger operating under NPDES Permits No.'s WV0103110 and WV0106241. In addition to these areas, the PSD actively maintains the wastewater system of the Town of Bradshaw under an operational agreement after receiving approval from the Public Service Commission of West Virginia (PSC) on August 20, 2025.

This proposed project is the first of four phases to serve approximately 242 potential customers throughout Northfork, Keystone, and Algoma. Phase 1 will serve 55 customers in Keystone areas 1 through 3, with later phases serving remaining areas of Keystone, Brick Row Street, Northfork, and Algoma. Phase 1 also includes the proposed 35,000 gallons per day (GPD) aerated moving bed biofilm reactor (MBBR) package wastewater treatment plant (WWTP), with modular additions to be constructed as needed during future phases up to a capacity of 70,000 GPD. Phase 1 includes the installation of approximately 8,610 LF of gravity sewers, 4,215 LF of force

mains, eight (8) force main cleanouts, six (6) air release valves, 65 manholes, three (3) lift stations, two (2) grinder pump stations, restoration, and all necessary appurtenances.

The proposed total cost for this project is $9,409,000. The PSD intends to fund this project using $1,000,000 USDA-RUS Grant, a $75,000 USDA-SEARCH Grant (committed), a $30,000 EPA Real Water Technical Assistance Grant (committed), a $3,304,000 CDS Grant, a $1,000,000 WVDEP AMLER Grant, a $1,000,000 Community Development Block Grant, a $2,000,000 WVDEP CWSRF Principal Forgiveness Loan, and a $1,000,000 WVIJDC Grant. The proposed monthly rate for 3,400 Gallons is $55.59 (2.11% MHI) for McDowell County.

NEED FOR PROJECT

This project has been proposed to resolve public health and sanitation concerns in the communities of Northfork, Keystone, and Algoma attributable to a lack of sanitary sewer services. Presently, public wastewater utilities do not exist at these locations. Most occupied dwellings in these communities use deteriorating laterals to openly discharge untreated sewage into surface waters or failing private septic systems to process wastewater. These conditions pose significant risks to the public welfare of local residents and increase the likelihood of public exposure to untreated sewage. In addition, the inadequate processing of sanitary waste can cause significant environmental concerns. Stream health can be severely affected by increased concentrations of fecal coliform and other water quality impairments originating from discharges of untreated wastewater. The health and stability of local wildlife and marine life can also experience detrimental impacts from these discharges.

DEFICIENCIES/COMMENTS

- No mention of flood insurance.
- PER states that Straw Bales will be used as E&S Controls. All E&S Controls should comply with the DEP's BMP Manual.
- Using the Combined Application, the Total Engineering Fees appear to be within the ASCE Curves.

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

October 14, 2026

Mark Sarver, Chair
Water Development Authority, Executive Director
Katheryn Emery, P.E., Program Manager
CWSRF & DWTRF, Division of Water and Waste Management, WVDEP
Meredith Vance, Director
Environmental Engineering Division, WVBPH

Re: Public Service Commission Staff Review Comments
Application No. 2026S-2832
McDowell County PSD – New WWTP & Collection System
Northfork-Keystone (Phase I)
Infrastructure Preliminary Application

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 14, 2026

PROJECT SPONSOR: **MCDOWELL COUNTY**
PUBLIC SERVICE DISTRICT – (SEWER)

PROJECT SUMMARY: The McDowell County PSD is proposing to pursue Phase I of its Northfork-Keystone Wastewater Collection and Treatment Project, which includes a new 35,000-GPD package WWTP and a new collection system to provide sewer service to approximately 55 new customers.

PROPOSED FUNDING:

USDA Grant	$1,000,000
USDA Grant	$ 75,000
USEPA Grant	$ 30,000
CDS Grant	$3,304,000
AMLER Grant	$1,000,000
CDBG Grant	$1,000,000
CWSRF Principal Forgiveness	$2,000,000
IJDC Grant	$1,000,000
Total	$9,409,000

CURRENT/
PROPOSED RATES:

$55.59	3,400 gallons
$65.40	4,000 gallons

Application No. 2026S-2832

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

FINANCIAL: Stephen Edens

1. Current rates ($55.59 for 3,400 gallons) are above the rates attributable to 1.25% ($32.87), 1.5% ($39.45), 1.75% ($46.02) and 2.0% ($52.60) of the Median Household Income.

2. Using Scenario 1, the preferred funding package consisting of an USDA Grant of $1,000,000, a USDA Grant of $75,000, an USEPA Grant of

$30,000, a Congressionally Directed Spending Grant of $3,304,000, a AMLER Grant of $1,000,000, a CDB Grant of $1,000,000, a CWSRF Principal Forgiveness Loan of $2,000,000, and an IJDC Grant of $1,000,000, proposed rates ($55.59 for 3,400 gallons) will provide a cash flow deficit of $8,947. An additional 5.8% (for a total of $58.81 for 3,400 gallons) increase in proposed rates would be required to provide a cash flow surplus of $23. The District has no current debt.

3. Using the Scenario 2 alternate loan package of $9,304,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), and committed funds consisting of a USDA Grant of $75,000, and a $30,000 USEPA Grant of $2,000,000, proposed rates ($269.61 for 3,400 gallons) will provide a cash flow deficit of $7,192 and debt service coverage of 115.47%. An additional 1% (for a total of $272.31 for 3,400 gallons) increase in proposed rates will be required in order to provide a cash flow surplus of $120 and debt service coverage of 116.83%.

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, 2025, and the applicant's Cash Flow Exhibit submitted with the application.

   D. The Applicant has requested a waiver of the Rule 42 Exhibit requirement, as the project is 100% grant funded and will have no impact on rates.

   E. Staff notes, the Project Sponsor has outside commitment letters for an USDA Grant of $75,000 and a $30,000 USEPA Grant.

   F. The cash flow provided by the project sponsor shows a Going-Level and Proforma deficit. The District needs to carefully evaluate its current financial position and may need to consider filing for a rate increase

unless its operating costs have significantly decreased from the fiscal year ended June 30, 2025.

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: 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 McDowell County PSD is proposing to pursue Phase I of its Northfork-Keystone Wastewater Collection and Treatment Project, which includes a new 35,000-GPD package WWTP and a new collection system to provide sewer service to approximately 55 new customers. The proposed project scope includes: mobilization/demobilization, pre-construction video, erosion and sediment control, 5340 LF of 6-inch gravity sewer main, 465 LF of 8-inch gravity sewer main, 2805 LF of 10-inch gravity sewer main, 2350 LF of 4-inch sewer lateral, 55 wye connections, 225 LF of 1-1/4-inch forcemain pipe, 420 LF of 1-1/2-inch forcemain pipe, 3570 LF of 6-inch forcemain pipe, 8 forcemain cleanouts, 6 air release valves, 100 LF of 12-inch steel casing (bore & jack), 40 LF of 16-inch steel casing (bore & jack), 50 LF of 24-inch steel casing (bore & jack), 65 manholes, 3 lift stations, 2 grinder pump stations, 95 tons of 2-inch asphalt pavement overlay, 6000 LF of Type B Trench Repair, 2750 LF of Type C Trench Repair, 2250 LF of Type D Trench Repair, 4000 LF of surface restorations, 2 horizontal directional drill stream crossings, a 35,000-GPD package WWTP (site development, earthwork, treatment equipment, disinfection equipment, flow meter, electrical work, emergency generator, yard piping, fencing, effluent outfall, site access), and necessary appurtenances. The estimated construction cost is $7,889,860 (includes 10% construction contingency), and the estimated total project cost is $9,408,860.

Need: The PER indicates that public sewer service is not currently available in the communities of Northfork, Keystone, and Algoma. Additionally, the communities use aged/deteriorating laterals that discharge untreated sewage into creeks, streams, or failing private septic systems.

Customer Density: Based upon the provided sewer main pipe quantities (12,825 LF), the proposed sewer main length is approximately 2.43 miles and will provide service to 55 potential customers. This is approximately equivalent to 23 customers per mile.

Cost per Customer: Based upon the estimated total project cost is $9,408,860, and having approximately 55 customers, the cost per customer will be approximately $171,071. However, the cost per customer in terms of proposed borrowing is $0, as the proposed funding is 100% grant. *The PER indicates that the proposed 35,000-GPD package WWTP is capable of treating the estimated volume of sewage anticipated from the Phase II (future) project, which is planned to extend service to an additional 67 potential customers.*

3. Project Alternatives: The PER indicates that 3 Alternatives were considered: Alternative No. 1 – Collection System and Package Wastewater Treatment Plant, Alternative No. 2 – Connection to Existing Wastewater System, and Alternative No. 3 – Do Nothing. The PER indicates that Alternative No. 1 was selected as "…offers a sustainable solution regarding O&M demands, changes in available customers, and sanitary concerns currently present in the area."

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

5. Operation and Maintenance (O&M) Expenses: The PER did include a detailed breakdown of anticipated changes to O&M expenses. The PER indicates that O&M expenses are anticipated to increase $37,000 annually. The increase is related to purchased power, sludge disposal, materials and supplies, and maintenance. The proposed Phase I project results in 74.62% increase to O&M expenses.

6. Engineering Agreement: The application includes information to determine compliance with West Virginia Code §5G-1-1, *et seq*. Engineering design fees for the project are $468,000, which is equal to 5.93% of the construction cost of $7,889,860 (includes 10% construction contingency). Total technical

services (engineering) fees for the project are $1,153,000, which is equal to 14.61% of the construction cost.

7. Deficiencies/Comments:
   - McDowell County has experienced an approximate 30% loss in population in the last 20 years, and an approximate 14% loss in the last 10 years. A declining population results in a declining revenue for a utility, which results in rate increases to address O&M expenses over time.
   - The proposed Phase I project results in 74.62% increase to O&M expenses. Although the proposed project is comprised of 100% grant funding and indicates that a rate increase is not necessary, the declining population and nature of increasing O&M expenses over time indicates rates may need to increase in the very near future to sustain O&M expenses.
   - The PER indicates that the proposed 35,000-GPD package WWTP is capable of treating the estimated volume of sewage anticipated from the Phase II (future) project, which is planned to extend service to an additional 67 potential customers.
   - Based on the estimated construction costs for Phases I, II, III, and IV, the total estimated construction costs to serve an estimated 242 customers is approximately $25,500,000. This cost does not reflect soft costs, such as engineering fees, accounting services, land acquisitions, rights of way, professional services, and other soft costs.
   - The project requires physical land to be acquired for the WWTP site, and the IJDC Application does not include funding for Land Acquisition, but does include $50,000 for easements. Therefore, it is unclear how the WWTP site is planned to be financially acquired. Additionally, the PER states “Land acquisitions and easements may be required during the proposed construction of wastewater facilities.”.

MCDOWELL COUNTY PUBLIC SERVICE DISTRICT - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2025
APPLICATION NO. 2026S-2832
October 14, 2026

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		123,282	159,971	(8,946)	(1)	151,025
Other Operating Revenue		2,143	2,143	-		2,143
SB 234 Annual Working Cash Collections				18,146	(2)	18,146
Interest Income & Other Misc.		4	4	-		4
Total Cash Available		125,429	162,118	9,200		171,318
OPERATING DEDUCTIONS						
Operating Expenses		109,114	145,169	-		145,169
Taxes		4,151	4,151	-		4,151
Total Cash Requirements Before Debt Service		113,265	149,320	-		149,320
Cash Available for Debt Service	(A)	12,164	12,798	9,200		21,998
DEBT SERVICE REQUIREMENTS						
Principal & Interest	(B)			-		-
Other Debt				-		-
Reserve Account @ 10%				-		-
Renewal & Replacement Fund (2.5%)		3,136	4,053	(224)	(3)	3,829
Total Debt Service Requirement		3,136	4,053	(224)		3,829
SB 234 Cash Working Capital		13,639	18,146	-		18,146
Remaining Cash		(4,611)	(9,401)	9,424		23
Percent Coverage	(A) / (B)					
Average rate for 3,400 gallons		$ 55.59	$ 55.59	$ 3.22		$ 58.81
Average rate for 4,000 gallons		$ 65.40	$ 65.40	$ 3.79		$ 69.19

MCDOWELL COUNTY PUBLIC SERVICE DISTRICT - SEWER | **Attachment A**
CASH FLOW ANALYSIS | **PREFERED FUNDING PACKAGE**
YEAR ENDED: June 30, 2025 | **SCENARIO 1**
APPLICATION NO. 2026S-2832

Staff Adjustments

	Adjustment Description		$	Increase <Decrease>
(1)	**Operating Revenues**	**Per Staff Analysis**	**151,025**	**(8,946)**
		Per Application with Project	**159,971**	

Adjust revenues in accordance with PSC General Order 183.11. Staff projected an additional $9,200 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**	**18,146**	**18,146**

Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.

(3)	**Renewal & Replacement Fund (2.5%)**	**Per Staff Analysis**	**3,829**	**(224)**
		Per Application with Project	**4,053**	

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

MCDOWELL COUNTY PUBLIC SERVICE DISTRICT - SEWER
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2025
2026S-2832
October 14, 2026

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		123,282	775,859	(10,646)	(1)	765,213
Other Operating Revenue		2,143	10,351	-		10,351
SB 234 Annual Working Cash Collections				18,146	(2)	18,146
Interest Income & Other Misc.		4	4	-		4
Total Cash Available		125,429	786,214	7,500		793,714
OPERATING DEDUCTIONS						
Operating Expenses		109,114	145,169	-		145,169
Taxes		4,151	4,151	-		4,151
Total Cash Requirements Before Debt Service		113,265	149,320	-		149,320
Cash Available for Debt Service	(A)	12,164	636,894	7,500		644,394
DEBT SERVICE REQUIREMENTS						
Principal & Interest	(B)		544,440	7,140	(3)	551,580
Other Debt				-		-
Reserve Account @ 10%			54,444	714	(4)	55,158
Renewal & Replacement Fund (2.5%)		3,136	19,655	(266)	(5)	19,389
Total Debt Service Requirement		3,136	618,539	7,589		626,128
SB 234 Cash Working Capital		13,639	18,146	-		18,146
Remaining Cash		(4,611)	209	(89)		120
Percent Coverage	(A) / (B)		116.98%			116.83%
Average rate for 3,400 gallons		$ 55.59	$ 269.61	$ 2.70		$ 272.31
Average rate for 4,000 gallons		$ 65.40	$ 317.19	$ 3.17		$ 320.36

MCDOWELL COUNTY PUBLIC SERVICE DISTRICT - SEWER **Attachment B**
CASH FLOW ANALYSIS **LOAN PACKAGE**
YEAR ENDED: June 30, 2025 **SCENARIO 2**
2026S-2832

Staff Adjustments

	Adjustment Description		$	Increase <Decrease>
(1)	**Operating Revenues**	**Per Staff Analysis**	**765,213**	**(10,646)**
		Per Application with Project	**775,859**	

Adjust revenues in accordance with PSC General Order 183.11. Staff projected an additional $7,500 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**	**18,146**	**18,146**
		Per Application with Project	**-**	

Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.

(3)	**Principal & Interest**	**Per Staff Analysis**	**551,580**	**7,140**
		Per Application with Project	**544,440**	

The difference in P&I is related to Staff's calculation of a loan of $9,304,000 for 40 years (paid back over 38 years) at 5%.

(4)	**Reserve Account @ 10%**	**Per Staff Analysis**	**55,158**	**714**
		Per Application with Project	**54,444**	

Staff assumed a 10% reserve on the new debt.

(5)	**Renewal & Replacement Fund (2.5%)**	**Per Staff Analysis**	**19,389**	**(266)**
		Per Application with Project	**19,655**	

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