



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: July 16, 2024

Subject: Berkeley PSSD
Preliminary Application: 2024S-2570
Northwinds-Potomac Park WWTP Decommissioning and
Sewer Extension Project

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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 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 consists of decommissioning of the Northwinds development package plant, the Potomac Park development lagoon and extending sanitary sewer service to 237 residential customers and 14 commercial customers along US Route 11. The proposed total cost for this project is \$6,870,000 and the PSSD intends to pursue a \$2,282,250 Economic Enhancement Grant funding (EEGF) and utilize \$4,587,750 of their own funding.

It should be noted that under the PSC's Scenario 2 cash flow, the PSSD can fund this project with all loan funding with no rate impact to their customers.

Using the Combined Application, the Design and Total Fees appear to be within the ASCE curves.

Preliminary Project Ratings:

Public Health Benefits: 0
Compliance with Standards: 5



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

Justin J. Davis
Interim Commissioner

MEMORANDUM

TO: Jason Billups, P.E.
DEP/Infrastructure Sewer Technical Review Committee

FROM: William S. Herold, Jr., P.E.
I/CD/Environmental Engineering Division

DATE: July 15, 2024

SUBJECT: Berkeley County PSSD
Preliminary Application **Project No.: 2024S-2570**
Replace WWTP & Add Pump Station
Berkeley County

RECOMMENDATION:

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

PROJECT SCOPE:

This preliminary application is to decommission the existing Northwinds and Potomac Park WWTP systems and send the existing flow by two (2) pump stations & force mains and sewer gravity line to the existing Berkeley County PSSD sewage facilities. The project will consist of two (2) duplex submersible sewage pump stations; approximately 4,000 LF of 6" and 2,000 LF of 4" PVC force main; approximately 5,500 LF of 12" and 2,500 LF of 8" PVC sewer line; 30 manholes; and demolition of the existing sewage treatment lagoons and packaged WWTP.

The cost per customer is **\$27,480**. Total estimated project cost is **\$6,870,000** (WDA Economic Enhancement Grant Fund: **\$1,374,000**; and Local/City/Council: **\$5,496,000**).

NEED FOR PROJECT:

The Preliminary Engineering Report indicates the construction of these facilities will eliminate existing problematic septic tanks, package treatment plants & lagoons and will allow for a safe & reliable sewage system for existing and future residents and businesses.

CONCERNS:

None.

PERMITS:

A permit to construct will be required from the WV Bureau for Public Health, prior to construction.





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Harold D. Ward, Cabinet Secretary
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MEMORANDUM

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

FROM: Justin Moffitt, P.E., DWWM

DATE: June 3, 2024

SUBJECT: Berkeley PSSD
Preliminary Application: 2024S-2570
Northwinds-Potomac Park WWTP Decommissioning and
Sewer Extension Project

RECOMMENDATION

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

PROJECT DESCRIPTION

The Berkeley County Public Service Sewer District (BCPSSD) owns and operates the wastewater collection and treatment systems throughout Berkeley County, West Virginia and currently serves 28,372 customers. The collection systems consist of approximately 450 miles of gravity main sewer line, 50 miles of force main, and 191 pumping stations. These wastewater lines feed four (4) major treatment plants owned and operated by BCPSSD according to the NPDES #WV0082759. The plant that will be utilized to treat collected wastewater for the proposed project is the North Area Wastewater Treatment Plant (WWTP). All four (4) WWTP's discharge at various locations into Opequon Creek.

The proposed project consists of decommissioning the wastewater treatment package plant at the Northwinds development, decommissioning the lagoon system at the Potomac Park development and extending sanitary sewer service along US Route 11 to further service Berkeley County. The estimated number of new customers by the proposed project are 237 residential customers and 14 commercial customers. The proposed project will increase flow projections by approximately 23,000 gallons per day (GPD). The North Area WWTP is permitted to discharge two (2) million

Promoting a healthy environment.

gallons per day (MGD) and has an average daily discharge of 1.2 MGD. It is not anticipated that the flow increase will adversely affect the WWTP.

The proposed total cost for this project is \$6,870,000 and the PSSD intends to pursue a \$2,282,250 Economic Enhancement Grant funding (EEGF) and utilize \$4,587,750 of In-House Funding. The current monthly rate for 3,400 gallons is \$56.28 (1.03%MHI). No rate increase is proposed for this project.

NEED FOR PROJECT

There is currently a consent decree in place for BCPSSD as a result of a civil action by the United States of America and West Virginia Department of Environmental Protection (WVDEP). As specified in the consent decree, in lieu of submission of a “Comprehensive Performance Evaluation” (CPE) and “Corrective Action Plan” (CAP) for any package plant or lagoon system, the Sewer District may submit written notice to EPA that the Sewer District intends to undertake a project to eliminate the discharge from such package plants by diverting the wastewater flow to a different WWTP.

In the area of the proposed extension there is currently no wastewater collection infrastructure in place by BCPSSD to service its residents and businesses. There are concerns with the sustainability, capabilities, and the maintenance with the current wastewater systems used by Berkeley County’s residences. Septic tanks do not allow for existing businesses to expand, limits the potential for new businesses, and limits the number of residents the area can support. Berkeley County has experienced an 8% population increase from 2015 to 2020 and if the proposed infrastructure is provided there could be an economic influx from new residents/businesses moving into the area. The implementation of this project will eliminate the need for all existing septic tanks, package plants, and lagoons in the proposed areas. The wastewater line extensions will ensure safe and reliable sanitary sewer to existing residents/businesses and will provide necessary infrastructure for Berkeley County to expand.

DEFICIENCIES/COMMENTS

- The Thrasher Group did not provide any alternatives other than “Do Nothing”.
- Using the Combined Application, the Design and Total Fees appear to be within the ASCE curves.

Preliminary Project Ratings:

Public Health Benefits: 0

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, 2024

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. 2024S-2570
Berkeley County PSSD, 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:

- Forward the Application
 Return the Application
 Returned to the Applicant

Please advise if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Jonathan M. Fowler".

Jonathan M. Fowler, P.E.
Engineering Division

Enclosures
JMF:vb

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: July 16, 2024

**PROJECT SPONSOR: BERKELEY COUNTY PUBLIC SERVICE SEWER
DISTRICT**

PROJECT SUMMARY: Install pump stations at Northwinds and Potomac Park residential neighborhoods to eliminate the current package plant and lagoon systems and convey the flows into the existing BCPSSD system.

PROPOSED FUNDING: WDA EE Grant	\$2,282,250
BCPSSD Funds	<u>4,587,750</u>
Total	\$6,870,000

**CURRENT/PROPOSED
RATES:**

Schedule I	\$56.28	3,400 gallons
	\$63.89	4,000 gallons
Schedule II	\$44.97	3,400 gallons
	\$52.00	4,000 gallons

Application No. 2024S-2570

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

FINANCIAL: William Nelson

1. Current average rates (\$50.63 for 3,400 gallons) are below the rates attributable to 1.25% (\$68.01), 1.5% (\$81.61), 1.75% (\$95.21) and 2.0% (\$108.81) of the of the Median Household Income (MHI). Increasing current rates to 1.25%, 1.5%, 1.75% and 2.0% of the MHI would provide additional revenues of \$8,551,157, \$15,244,571, \$21,937,985, and \$28,631,398 respectively.
2. Using Scenario 1, the preferred funding package consisting of a WDA Economic Enhancement Grant of \$2,282,250 and a Berkeley County Public Service Sewer District contribution of \$4,587,750, proposed

average rates (\$50.63 for 3,400 gallons) will provide a cash flow surplus of \$523,376 and debt service coverage of 145.96%.

3. Using the Scenario 2 alternate loan package of \$6,870,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed average rates (\$50.63 for 3,400 gallons) will provide a cash flow surplus of \$75,365 and debt service coverage of 139.10%.

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 prepared the attached Cash Flow Analysis utilizing information from the Annual Report for the Fiscal Year Ended June 30, 2023, and the applicant's Cash Flow Analysis submitted by the accountant.
- C. The Applicant requested a waiver of the Rule 42 Exhibit requirement.
- D. Staff notes, the cash flow provided by the Applicant's Accountant reflects an additional \$196,857 in Interest Income & Other Miscellaneous at per books than the amount reflected in the Applicant's 2023 Annual Report. Staff accepted this amount in its analysis.
- E. The Applicant did not provide a Cash Flow Analysis or other financial information to support its alternate proposed average rate (\$50.63 for 3,400 gallons) for Scenario 2. However, Staff calculated its Cash Flow Analysis for Scenario 2 using the Applicant's alternate proposed rate.
- F. 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.
- G. The Berkeley County Public Service Sewer 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: Jonathan M. Fowler, P.E.

1. This project will not require a Certificate of Convenience and Necessity from the PSC.
1. Scope: The applicant proposes to install two new pump stations and force mains in order to eliminate the current package plant and lagoon systems and convey the wastewater to the existing system. The proposed project will consist of approximately 8,000 linear feet (LF) of 12" and 8" gravity sewer line, 6,000 LF of 6" and 4" force main, 40 manholes, two (2) pump stations, and all other necessary appurtenances.

Customer Density: N/A (No new customers)

Cost per Customer: \$239 based upon a project cost of \$6.87 million and 28,400 existing customers.

2. Project Feasibility: The project is technically feasible. The cost per customer is reasonable. The project will provide replace failing and outdated treatment facilities and will consolidate treatment with existing facilities.
3. Project Alternatives: The proposed improvements are logical and cost-effective on their face. Small improvements projects do not require an extensive evaluation of alternatives.
4. Consolidation: No external consolidation opportunities are presented by the project. However, this project effectively consolidates treatment with and into existing facilities.

5. Inconsistencies: None were noted.
6. Operation and Maintenance (O & M) Expenses: O & M expenses are not projected to change as a result of the project. This is conservative.
7. 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 \$1.075 million which is equal to 19.4% of the construction cost of \$5.50 million (including contingency).

BERKELEY COUNTY PUBLIC SERVICE SEWER DISTRICT
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2023
APPLICATION NO: 2024S-2570
July 16, 2024

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	24,915,911	25,084,751	(1,893,568) (1)	23,191,183
Other Operating Revenue	1,115,904	1,115,904	-	1,115,904
SB 234 Annual Working Cash Collections		-	1,893,568 (2)	1,893,568
Interest Income & Other Misc.	1,072,085	1,072,085	-	1,072,085
Total Cash Available	27,103,900	27,272,740	-	27,272,740
OPERATING DEDUCTIONS				
Operating Expenses	15,060,201	15,121,878	-	15,121,878
Taxes	88,343	88,343	-	88,343
Total Cash Requirements Before Debt Service	15,148,544	15,210,221	-	15,210,221
Cash Available for Debt Servi (A)	11,955,356	12,062,519	-	12,062,519
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	8,264,241	8,264,241	-	8,264,241
Other Debt	658,630	658,630	-	658,630
Reserve Account @ 10%	115,027	115,027	-	115,027
Renewal & Replacement Fund (2.5%)	622,898	655,016	(47,339) (3)	607,677
Total Debt Service Requirement	9,660,796	9,692,914	(47,339)	9,645,575
SB 234 Cash Working Capital	1,893,568	1,893,568	-	1,893,568
Remaining Cash	400,992	476,037	47,339	523,376
Percent Coverage (A) / (B)	144.66%	145.96%		145.96%
Average rate for 3,400 gallons	\$ 50.63	\$ 50.63	\$ -	\$ 50.63
Average rate for 4,000 gallons	\$ 57.95	\$ 57.95	\$ -	\$ 57.95
Schedule 1				
Rate for 3,400 gallons	\$ 56.28	\$ 56.28	\$ -	\$ 56.28
Rate for 4,000 gallons	\$ 63.89	\$ 63.89	\$ -	\$ 63.89
Schedule 2				
Rate for 3,400 gallons	\$ 44.97	\$ 44.97	\$ -	\$ 44.97
Rate for 4,000 gallons	\$ 52.00	\$ 52.00	\$ -	\$ 52.00

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Revenues	Per Staff Analysis	23,191,183	(1,893,568)
		Per Application with Project	25,084,751	
Adjust revenues in accordance with PSC General Order 183.11.				
(2)	SB 234 Annual Working Cash Collections	Per Staff Analysis	1,893,568	1,893,568
		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	607,677	(47,339)
		Per Application with Project	655,016	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.				

BERKELEY COUNTY PUBLIC SERVICE SEWER DISTRICT
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2023
 APPLICATION NO: 2024S-2570
 July 16, 2024

**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
	\$	\$	\$	\$
<u>AVAILABLE CASH</u>				
Operating Revenues	24,915,911	25,084,751	(1,893,568) (1)	23,191,183
Other Operating Revenue	1,115,904	1,115,904	-	1,115,904
SB 234 Annual Working Cash Collections		-	1,893,568 (2)	1,893,568
Interest Income & Other Misc.	1,072,085	1,072,085	-	1,072,085
Total Cash Available	27,103,900	27,272,740	-	27,272,740
<u>OPERATING DEDUCTIONS</u>				
Operating Expenses	15,060,201	15,121,878	-	15,121,878
Taxes	88,343	88,343	-	88,343
Total Cash Requirements Before Debt Service	15,148,544	15,210,221	-	15,210,221
Cash Available for Debt Servi (A)	11,955,356	12,062,519	-	12,062,519
<u>DEBT SERVICE REQUIREMENTS</u>				
Principal & Interest (B)	8,264,241	8,264,241	407,283 (3)	8,671,524
Other Debt	658,630	658,630	-	658,630
Reserve Account @ 10%	115,027	115,027	40,728 (4)	155,755
Renewal & Replacement Fund (2.5%)	622,898	655,016	(47,339) (5)	607,677
Total Debt Service Requirement	9,660,796	9,692,914	400,672	10,093,586
SB 234 Cash Working Capital	1,893,568	1,893,568	-	1,893,568
Remaining Cash	400,992	476,037	(400,672)	75,365
Percent Coverage (A) / (B)	144.66%	145.96%		139.10%
Average rate for 3,400 gallons	\$ 56.28	\$ 56.28	\$ -	\$ 56.28
Average rate for 4,000 gallons	\$ 63.89	\$ 63.89	\$ -	\$ 63.89
Schedule 1				
Rate for 3,400 gallons	\$ 56.28	\$ 56.28	\$ -	\$ 56.28
Rate for 4,000 gallons	\$ 63.89	\$ 63.89	\$ -	\$ 63.89
Schedule 2				
Rate for 3,400 gallons	\$ 44.97	\$ 44.97	\$ -	\$ 44.97
Rate for 4,000 gallons	\$ 52.00	\$ 52.00	\$ -	\$ 52.00

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1)	Operating Revenues		
	Per Staff Analysis	23,191,183	(1,893,568)
	Per Application with Project	25,084,751	
	Adjust revenues in accordance with PSC General Order 183.11.		
(2)	SB 234 Annual Working Cash Collections		
	Per Staff Analysis	1,893,568	1,893,568
	Per Application with Project	-	
	Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.		
(3)	Principal & Interest		
	Per Staff Analysis	8,671,524	407,283
	Per Application with Project	8,264,241	
	The difference in P&I is related to Staff's calculation of a Loan of \$6,870,000 for 40 years (paid back over 38 years) at 5%.		
(4)	Reserve Account @ 10%		
	Per Staff Analysis	155,755	40,728
	Per Application with Project	115,027	
	Staff assumed a 10% reserve on the new debt.		
(5)	Renewal & Replacement Fund (2.5%)		
	Per Staff Analysis	607,677	(47,339)
	Per Application with Project	655,016	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.		