



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
Funding Committee
Infrastructure and Jobs Development Council

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

Date: May 15, 2023

Subject: Preston County Public Service Sewer District
Preliminary Application: IJDC No. 2022S-2194
Hazelton WWTP Upgrades

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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 funding should be tabled until technical comments have been resolved.
- d. ___ This project should be referred to the Consolidation Committee.

3. Other remarks:

This project will update the WWTP and address copper and zinc issues that they are having. Hazelton is consistently at or over the WVDEP NPDES limits on copper and zinc and has received a Notice of Violation No. W21-39-019.

The proposed total cost for this project is \$5,500,000 and the PCPSD intends to pursue a \$5,238,000 WV CWSRF Loan (2.75%, 0.25% admin, 20 years), a \$150,000 Preston County Commission ARPA Grant and a \$162,000 WVIJDC Grant.

At the rates mentioned in the application, it appears that the PSD would be eligible for CWSRF loan terms of 1.75% interest, 0.25% admin fee, for up to 30 years.

The Total Engineering Fee is above the ASCE curve and a variance is required.

Attachments: Technical Comments

Engineering Fees:

Estimated construction cost =	\$ 4,232,000.00
Consultant's design fee =	\$ 315,000.00
Consultant's total fee =	\$ 870,000.00
Design fee percentage =	7.4 %
Design fee per ASCE curve =	8.2 %
Total fee percentage =	20.6 %
Total fee per ASCE curve =	19.0 %

Preliminary Project Ratings:

Public Health Benefits:	5
Compliance with Standards:	20
O & M Capabilities	3
Readiness to Proceed	0



STATE OF WEST VIRGINIA
DEPARTMENT OF HEALTH AND HUMAN RESOURCES

Bureau for Public Health
Office of Environmental Health Service

Jeffrey H. Coben, MD
Interim Cabinet Secretary

Matthew Q. Christiansen, MD, MPH
Commissioner & State Health Officer

MEMORANDUM

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

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

DATE: May 13, 2023

SUBJECT: Preston PSD
Preliminary Application **Project No.: 2022S-2194**
Hazelton WWTP Upgrades
Preston 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 make upgrades to the Hazelton WWTP and to add metals removal equipment (copper & zinc). Major work will consist of headworks improvement (new mechanical bar screen & influent lift station mechanical trash screen), a new metal removal & non-potable water building; a new metals removal filtration system; a non-potable water system; a new sludge transfer station with wet well, pumps and controls; new plant wide SCADA and Monitoring Auto-Dialer System; and repair/replacement of numerous controls, ventilation fixtures, piping, valves, pumps, equipment parts, building fixtures and appurtenances.

The cost per customer is **\$13,075**. Total estimated project cost is **\$5,400,000** (IJDC District 1 Grant: **\$162,000**; and CWSRF Loan: **\$5,238,000 @ 3% for 20 years**).

NEED FOR PROJECT:

The Preliminary Engineering Report indicates much of the Hazelton WWTP's equipment is nearing the end of its useful life and is in need of repair/replacement. The WWTP's effluent discharge routinely exceeds the copper and zinc discharge limits and DEP has issued a Notice of Violation regarding this exceedance.

CONCERNS:

None.

PERMITS:

A permit **will not be** required from the WV Bureau for Public Health since CWSRF are being proposed.



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Harold D. Ward, Cabinet Secretary
dep.wv.gov

MEMORANDUM

TO: Katheryn Emery, P.E., Director, DWWM

FROM: Paul Daniels, P.E., DWWM

DATE: May 16, 2023

SUBJECT: Preston County Public Service Sewer District
Preliminary Application: IJDC No. 2022S-2194
Hazelton WWTP Upgrades

RECOMMENDATION

The IJDC Application and Preliminary Engineering Report prepared by Civil & Environmental Consultants, Inc. for the above referenced project has been reviewed and is technically feasible.

PROJECT DESCRIPTION

The Preston County Public Service Sewer District (PCPSD) owns and operates three (3) sewage collection systems and wastewater treatment plants (WWTP) at or near Bruceton Mills, Valley Point, and Hazelton, all in Preston County, West Virginia. The Hazelton WWTP is rated for an average daily flow of 750,000 gallons per day (GPD) and serves 10 commercial customers and a large prison system owned and operated by the Federal Bureau of Prisons(FBOP) under NPDES Permit Number WV0025101, Outfall 002.

This project includes a new influent lift station mechanical screening system, a new headworks mechanical bar screen, a new metals removal system to meet the copper and zinc limits, a new sludge transfer station to accept sludge from neighboring wastewater treatment facilities, refurbish the belt filter press, a new plant-wide non-potable water system to be used for sludge press or other washdowns, a new plant-wide SCADA and auto-dialer system, replacement of the existing sludge pump that feeds the belt filter press, improvements to the existing WWTP outfall to mitigate stream bank undercutting as well as other miscellaneous upgrades and improvements throughout the WWTP to replace equipment that is approximately 20 years old.

The proposed total cost for this project is \$5,500,000 and the PCPSD intends to pursue a \$5,238,000 WV CWSRF Loan (2.75%, 0.25% admin, 20 years), a \$150,000

Promoting a healthy environment.

Preston County Commission ARPA Grant and a \$162,000 WVIJDC Grant. The current monthly rate for 3,400 gallons is \$75.15 (1.73% MHI). The FBOP bulk rate will increase significantly (from \$2.30 per 1,000 gal. to \$4.83 per 1,000 gal.) as per the Project Accountant's calculations to fully cover the cost of the loan. The remaining customers' rates are not anticipated to increase.

NEED FOR PROJECT

According to the PER, the Hazelton WWTP discharge is consistently at or over the WVDEP NPDES limits on copper and zinc. Notice of Violation No. W21-39-019 was issued on 03/29/21 for exceeding discharge limits covering March 2019 through February 2021. The WWTP has been in service for 20 years under demanding service to a large population from the Hazelton Prison Complex which has resulted in damages to the influent mechanical bar screen, much of which is due to times when the prison's "auger monster" is down causing large amounts of trash and debris to reach the WWTP. Ventilation in both the headworks/lab buildings and the sludge press building, potable water piping near the headworks, and other miscellaneous areas are damaged and have reached the end of their useful life. The belt filter press is in need of a new air regulator valve/aspirator and new belts to insure the continued operation. The sludge pump has also reached the end of its useful life. The plant outfall has experienced stream bank undercutting that is in need of repair to prevent failure. This project should address the aging infrastructure of WWTP and enable the plant to comply with WVDEP NPDES limits.

DEFICIENCIES/COMMENTS

- The PER did not include the Inflow and Infiltration (I&I) rate, but the 2022 PSC Annual Report indicated it is 10.63%.
- The PER and the Application do not agree on the Long Term Bond & Debt. Engineer indicated the debt in the PER was correct.
- The PER indicated the FBOP bulk rate will increase significantly, however the increase was not provided. Rate increase in FBOP bulk rate provided above was from the Engineer and the Draft Rule 42 on the IJDC Dashboard.
- Total Engineering Fee is above the ASCE curve. A Fee Variance request will be required.
- The PER will need to be developed into a facilities plan that meets CWSRF requirements if CWSRF is used.

Engineering Fees:

Estimated construction cost =	\$ 4,232,000.00
Consultant's design fee =	\$ 315,000.00
Consultant's total fee =	\$ 870,000.00
Design fee percentage =	7.4 %
Design fee per ASCE curve =	8.2 %
Total fee percentage =	20.6 %
Total fee per ASCE curve =	19.0 %

Preliminary Project Ratings:

Public Health Benefits:	5
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

May 23, 2023

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. 2022-2194
Preston County PSD - Sewer
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 the District's current financial condition, we are recommending the application be:

- forwarded to the Funding Committee
 forwarded to the Consolidation Committee
 return to the Applicant

Please advise if you have any questions.

Sincerely,

A handwritten signature in red ink, appearing to read "Jonathan M. Fowler".

Jonathan M. Fowler, P.E.
Engineering Division

JMF:vb

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: May 22, 2023

PROJECT SPONSOR: PRESTON COUNTY PUBLIC SERVICE DISTRICT -
(SEWER)

PROJECT SUMMARY: The Hazelton WWTP Upgrades Project provides for significant process and equipment upgrades and replacements throughout the existing WWTP.

PROPOSED FUNDING: CWSRF Loan (2.75%, .25% AF, 20 yrs.)	\$5,238,000
IJDC District 1 Grant	<u>\$ 162,000</u>
Total	<u>\$5,400,000</u>

CURRENT/ PROPOSED RATES:	\$75.14	3,400 gallons
	\$86.14	4,000 gallons

Application No. 2022S-2194

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

FINANCIAL: Stephen Edens

1. Current rates (\$75.14 for 3,400 gallons) are above the rate attributable to 1.25% (\$54.16) and 1.5% (\$64.99) of the Median Household Income (MHI), but below the rates attributable to 1.75% (\$75.82) and 2.0% (\$86.65) of the MHI. Staff notes no increase in revenue from these block rates, since the increase in revenues is to be generated by the Commercial Flat Rate Fee which is applicable to the U.S.P. Hazelton Prison and is under a separate rate.
2. Using Scenario 1, the preferred funding package consisting of a CWSRF Loan of \$5,238,000 at 2.75%, .25% Admin. Fee, for 20 years, and an IJDC District 1 Grant of \$162,000, current/proposed rates (\$75.14 for 3,400 gallons) will provide a cash flow surplus of \$112,855 and debt service coverage of 168.14%.

3. Using the Scenario 2 alternate loan package of \$5,400,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), current/proposed rates (\$75.14 for 3,400 gallons) will provide a cash flow surplus of \$146,008 and debt service coverage of 182.83%.

4. NOTES TO COMMENTS:

A. Staff's detailed adjustments are listed on Attachment A for Scenario 1 (Preferred Funding Package), Attachment B for Scenario 2 (Loan Package), and Attachment C for Scenario 3 (Alternate Funding Package).

B. The Going Level and Proforma adjustments included in the Applicant's Cash Flow Analyses for Scenarios 1, 2 and 3 were used in Staff's Cash Flow Analyses, except as noted on Attachments A, B and C.

C. Staff prepared the attached Cash Flow Analysis utilizing information from the Annual Report for the Fiscal Year Ended June 30, 2022, and the applicant's Rule 42 Exhibit submitted with the application.

D. The Applicant did not provide a Cash flow Analysis or other financial information to support its alternate proposed rate (\$75.14 for 3,400 gallons) for Scenario 2. However, Staff calculated its Cash flow Analysis for Scenario 2 using the Applicant's current/proposed rate.

E. Staff notes the Project Account listed CWSRF Loan Interest Expense in the amount of \$154,485 with O&M Expenses in the Rule 42 Exhibit Cash Flow Statement. Staff's analyses reflect this CWSRF Loan Interest Expense as part of the Principal and Interest Expenses.

F. Staff notes the Project Accountant showed an increase in Proforma Operating Revenue in the amount of \$496,920. Staff reflected this in its analysis since it is based on the increase in Commercial Flat rates (\$2.30 to \$4.83 per 1,000 gallons) generated by the U.S.P. Hazelton Prison and is under a separate rate.

G. Staff has included a Scenario 3 analysis. Staff notes that the project sponsor is proposing a CWSRF Loan at 2.75%, .25% Admin. Fee, for 20 years. Since current/proposed rates of \$75.14 (3,400 gallons) are less than 1.74% of MHI (\$75.82), the terms of this proposed CWSRF Loan would typically be 1.75%, .25% Admin. Fee, for 21-30 years, for the preferred funding package. If the preferred funding package is adjusted for

this change, current/proposed rates (\$75.14 for 3,400 gallons) would provide a cash flow surplus of \$242,807 and debt service coverage of 256.05%.

- 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: Jim Spurlock

1. This project will require a Certificate of Convenience and Necessity from the PSC. The project 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). Staff notes that an affirmative determination of need for the project must be established in a Certificate filing at the PSC.
2. Scope: Preston County PSD proposes to construct improvements at its Hazelton wastewater treatment plant to include the addition of metals removal technology for copper and zinc, influent lift station and headworks improvements, a sludge transfer station, a new non-potable water system, repair undercutting of the stream bank, and other miscellaneous equipment upgrades.

Customer Density: N/A - No new customers.

Cost per Customer: \$13,075 (taken from the total project cost estimate of \$5,400,000 spread over 413 existing customers). NOTE: The Federal Bureau of Prisons is the primary user of the Hazelton Plant.

3. Project Feasibility: The project is technically feasible. The project will enable the treatment process to remedy copper and zinc exceedances, and will address numerous needs in regard to aging and worn equipment at the facility.

4. Project Alternatives: The project does not lend itself to alternatives besides “do nothing”.
5. Consolidation: No consolidation opportunities are presented by the project.
6. Inconsistencies: None were noted.
7. Operation and Maintenance (O & M) Expenses: O & M expenses are projected to increase by \$18,046 annually as a result of the project. Supporting calculations were provided.
8. 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 \$870,000 which is equal to 20.56% of the construction cost of \$4,232,000 (including contingency).

Preliminary Project Ranking		
O & M Capabilities		
Performance Measures:	1	Pt.
Asset Management:	1	Pt.
Environmental Management:	1	Pt.
Readiness to Proceed:	0	Pt.
Cost Effectiveness:	0	Pt.
Compliance with PSC Orders:	0	Pt.

PRESTON COUNTY PUBLIC SERVICE DISTRICT - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2022
 APPLICATION NO: 2022S-2194
 May 22, 2023

PREFERRED 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	584,284	1,081,204	(61,587) (1)	1,019,617
Other Operating Revenue	2,826	2,826	-	2,826
SB 234 Annual Working Cash Collections			61,587 (2)	61,587
Interest Income & Other Misc.	142	142	-	142
Total Cash Available	587,252	1,084,172	-	1,084,172
OPERATING DEDUCTIONS				
Operating Expenses	474,647	492,693	6,914 (3)	499,607
Taxes	6,175	6,175	-	6,175
Total Cash Requirements Before Debt Service	480,822	498,868	6,914	505,782
Cash Available for Debt Service (A)	106,430	585,304	(6,914)	578,390
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)		348,597	(4,608) (4)	343,989
Other Debt			-	-
Reserve Account @ 10%		34,860	(461) (5)	34,399
Renewal & Replacement Fund (2.5%)	5,858	27,101	(1,540) (6)	25,561
Total Debt Service Requirement	5,858	410,558	(6,610)	403,948
SB 234 Cash Working Capital		61,587	-	61,587
Remaining Cash	100,572	113,159	(304)	112,855
Percent Coverage (A) / (B)		167.90%		168.14%
Average rate for 3,400 gallons	\$ 75.14	\$ 75.14	\$ -	\$ 75.14
Average rate for 4,000 gallons	\$ 86.14	\$ 86.14	\$ -	\$ 86.14

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Revenues	Per Staff Analysis	1,019,617	(61,587)
		Per Application with Project	1,081,204	
	Adjust revenues in accordance with PSC General Order 183.11.			
(2)	SB 234 Annual Working Cash Collections	Per Staff Analysis	61,587	61,587
		Per Application with Project	-	
	Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.			
(3)	Operating Expenses	Per Staff Analysis	499,607	6,914
		Per Application with Project	492,693	
	Staff's calculation included a difference in an Administrative Fee associated with a loan.			
(4)	Principal & Interest	Per Staff Analysis	343,989	(4,608)
		Per Application with Project	348,597	
	The difference in P&I is related to Staff's calculation of a loan of \$5,238,000 for 20 years at 2.75%.			
(5)	Reserve Account @ 10%	Per Staff Analysis	34,399	(461)
		Per Application with Project	34,860	
	Staff assumed a 10% reserve on the new debt.			
(6)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	25,561	(1,540)
		Per Application with Project	27,101	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			

PRESTON COUNTY PUBLIC SERVICE DISTRICT - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2022
 APPLICATION NO: 2022S-2194
 May 22, 2023

**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	584,284	1,081,204	(61,587) (1)	1,019,617
Other Operating Revenue	2,826	2,826	-	2,826
SB 234 Annual Working Cash Collections			61,587 (2)	61,587
Interest Income & Other Misc.	142	142	-	142
Total Cash Available	587,252	1,084,172	-	1,084,172
OPERATING DEDUCTIONS				
Operating Expenses	474,647	492,693	-	492,693
Taxes	6,175	6,175	-	6,175
Total Cash Requirements Before Debt Service	480,822	498,868	-	498,868
Cash Available for Debt Service (A)	106,430	585,304	-	585,304
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)		348,597	(28,462) (3)	320,135
Other Debt			-	-
Reserve Account @ 10%		34,860	(2,847) (4)	32,013
Renewal & Replacement Fund (2.5%)	5,858	27,101	(1,540) (5)	25,561
Total Debt Service Requirement	5,858	410,558	(32,849)	377,709
SB 234 Cash Working Capital		61,587	-	61,587
Remaining Cash	100,572	113,159	32,849	146,008
Percent Coverage (A) / (B)		167.90%		182.83%
Average rate for 3,400 gallons	\$ 75.14	\$ 75.14	\$ -	\$ 75.14
Average rate for 4,000 gallons	\$ 86.14	\$ 86.14	\$ -	\$ 86.14

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Revenues	Per Staff Analysis	1,019,617	(61,587)
		Per Application with Project	1,081,204	
	Adjust revenues in accordance with PSC General Order 183.11.			
(2)	SB 234 Annual Working Cash Collections	Per Staff Analysis	61,587	61,587
		Per Application with Project	-	
	Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.			
(3)	Principal & Interest	Per Staff Analysis	320,135	(28,462)
		Per Application with Project	348,597	
	The difference in P&I is related to Staff's calculation of a loan of \$5,400,000 for 40 years (paid back over 38 years) at 5%.			
(4)	Reserve Account @ 10%	Per Staff Analysis	32,013	(2,847)
		Per Application with Project	34,860	
	Staff assumed a 10% reserve on the new debt.			
(5)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	25,561	(1,540)
		Per Application with Project	27,101	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			