



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: July 21, 2022

Subject: Greater Harrison Co. PSD
Preliminary Application: 2022S-2162
Route 21 – Quiet Dell Sewer Extension

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:

The proposed project will construct a new 250,000 gpd WWTP and sewer collection system in the Quiet Dell area to provide service to 415 customers and eliminate five privately owned package plants.

This application should be tabled until the next Funding committee meeting to give the applicant time to address the comments/concerns in the DEP memo.

Attachments: Technical Comments

Engineering Fees:

Estimated construction cost =	\$ 20,690,000
Consultant's design fee =	\$ 1,220,000
Design fee percentage =	5.9%
Design fee per ASCE curve =	7.0%
Consultant's total fee =	\$ 3,010,000
Total fee percentage =	14.6%
Total fee per ASCE curve =	16.0%

Preliminary Project Ratings:

1. Public Health Benefits	10
3. Compliance with Standards	15
5. O & M Capabilities	3
6. Readiness to Proceed	0
8. Cost Effectiveness	1
10. Compliance with PSC Orders	0



STATE OF WEST VIRGINIA
DEPARTMENT OF HEALTH AND HUMAN RESOURCES
Bureau for Public Health
Office of Environmental Health Service

Bill J. Crouch
Cabinet Secretary

Ayne Amjad, 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: July 1, 2022

SUBJECT: Greater Harrison County PSD
Preliminary Application **Project No.: 2022S-2162**
Rt. 20/Quiet Dell Sewage System
Harrison 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 provide sewage collection and treatment in the Rt 20 and Quiet Dell areas. Major work will consist of the installation of approximately 5,000 LF of 6", 37,000 LF of 8", 8,250 LF of 10" and 2,500 LF of 12" sewer line; 310 manholes; four (4) new sewage lift stations, one (1) grinder pump station; approximately 350 LF of 1 ¼ ", 4,000 LF of 4" and 1,000 LF of 6" force main; and a new 250,000 GPD SBR WWTP.

The cost per customer is **\$60,241**. Total estimated project cost is **\$25,000,000** (IJDC District 1 Grant: **\$1,000,000**; CWSRF Principal Forgiveness: **\$1,000,000**; WDA Economic Enhancement Grant: **\$8,000,000**; Local/City/Council: **\$7,800,000**; and IJDC District 1 Loan: **\$7,200,000 @ 1.00% for 40 years**).

NEED FOR PROJECT:

The Preliminary Engineering Report indicates the Rt. 20 and Quiet Dell areas are served by privately owned packaged WWTP's and septic tank/soil absorption systems that will be eliminated by the new sewage collection and treatment facilities.

CONCERNS:

None.

PERMITS:

A permit **will not 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., Director, DWWM

FROM: Paul Daniels, P.E., Engineer, DWWM

DATE: July 14, 2022

SUBJECT: Greater Harrison County Public Service District
Preliminary Application: IJDC No. 2022S-2162
Route 20 – Quiet Dell Sanitary Sewer Extension

RECOMMENDATION

The IJDC Application and Preliminary Engineering Report prepared by The Thrasher Group, Inc. for the above referenced project has been reviewed and it is recommended to be tabled. This has been discussed with the project's engineer, and they agreed that tabling the project would allow the deficiencies/comments listed below to be addressed.

PROJECT DESCRIPTION

The Greater Harrison County Public Service District (PSD) is a large sewer and water service provider throughout Harrison County, West Virginia. The PSD has owned and operated a public wastewater system since 1986. Currently, the PSD provides sanitary sewer service to 2,239 customers within West Milford, Good Hope, Lost Creek, Laurel Valley, Clarksburg Country Club, Laurel Park, Route 73 areas, and other areas in the southern portion of Harrison County. Currently, the PSD has a project underway and nearing completion in Enterprise, WV which will add approximately 407 new customers. The PSD owns and operates two (2) separate wastewater treatment plants (WWTP). The West Milford WWTP is a 600,000 GPD aerated lagoon system built in 1986 with upgrades in the early 2000's and 2016 with discharge to the West Fork River. The Boothsville WWTP is a 100,000 GPD Orbal Ditch treatment system recently completed with a discharge to Booth's Creek of the West Fork River.

The proposed project will construct a new 250,000 GPD sequencing batch reactor (SBR) WWTP and sanitary sewer collection system in the Quiet Dell area of Harrison County. The project will serve approximately 415 customers and eliminate five (5) existing privately owned package plants. The new WWTP will discharge into Elk Creek and the collection system will

Promoting a healthy environment.

include approximately 10 miles of 6 to 12 inch gravity sewer, 1 mile of 1-1/4 to 6 inch force main, 300 manholes, one (1) duplex grinder pump station, four (4) lift stations, and all necessary appurtenances.

The proposed total cost for this project is \$25,000,000 and the PSD is seeking a \$1,000,000 IJDC Grant, \$7,200,000 IJDC Loan (1%, 40 yrs.), \$1,000,000 CWSRF Principal Forgiveness Loan, \$8,000,000 WDA Grant, and a \$7,800,000 ARPA Grant. The proposed average user rate for 3,400 gallons per month is \$81.61 (1.88% MHI).

NEED FOR PROJECT

The Quiet Dell area currently is not served by a public sewer system. The existing private package WWTPs are nearing the end of useful life and struggle to meet discharge requirements. The condition of the home septic systems and aeration units are unknown, and there is potential that some residents have no treatment at all. This project would provide reliable public wastewater collection and treatment for the area. The private package WWTPs will be removed and served by the new system. The remainder of the homes will also be served by the new system which will eliminate failing home units and provide treatment to homes that potentially have no treatment.

DEFICIENCIES/COMMENTS

- The PER included a planning/preliminary WLA instead of an official one. An official WLA is required for approval.
- Documentation of Need was not included in PER.
- I&I for the existing collection system was not included in PER.
- Proposed user rates and project % MHI were not included in PER. Proposed user rates were in the Application. The % MHI was calculated using Harrison County average incomes.
- The proposed average user rate is \$81.61 for 3,400 gallons per month. This is an affordability concern for the community.
- Preferred funding did not include loan source, however the Application indicated it was from IJDC.
- The PER will need to be developed into a facility plan that meets CWSRF requirements if CWSRF is used.

Engineering Fees:

Estimated construction cost =	\$ 20,690,000.00
Consultant's design fee =	\$ 1,220,000.00
Consultant's total fee =	\$ 3,010,000.00
Design fee percentage =	5.9 %
Design fee per ASCE curve =	7.0 %
Total fee percentage =	14.6 %
Total fee per ASCE curve =	16.0 %

Preliminary Project Ratings:

Public Health Benefits:	10
Compliance with Standards:	15

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



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. 2022S-2162
Greater Harrison 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

table the application

Please advise if you have any questions.

Sincerely,



Jonathan M. Fowler, P.E.
Engineering Division

JMF:vb

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: July 11, 2022

PROJECT SPONSOR: GREATER HARRISON COUNTY PSD – (SEWER)

PROJECT SUMMARY: Build a treatment plant in the Quiet Dell area and line extension to approximately 415 new customers.

PROPOSED FUNDING:	IJDC District 1 Grant	\$1,000,000
	CWSRF Debt Forgiveness Loan	\$1,000,000
	IJDC District 1 Loan (1%, 40 yrs.)	\$7,200,000
	Local/City/Council Grant	\$7,800,000
	WDA Economic Enhancement Grant	<u>\$8,000,000</u>
	Total	\$25,000,000

CURRENT RATES	\$70.26	3,400 gallons
	\$79.57	4,000 gallons

PROPOSED RATES	\$81.61	3,400 gallons
	\$92.43	4,000 gallons

Application No. 2022S-2162

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

FINANCIAL: Kaitlyn J. Shamblin

1. Current rates (\$70.26 for 3,400 gallons) are above the rates attributable to 1.25% (\$45.82), 1.5% (\$54.98), and 1.75% (\$64.15) of the Median Household Income (MHI), but below the rates attributable to 2% (\$73.31) of MHI. Increasing current rates to 2% of the MHI would provide additional revenues of \$123,537.
2. Using Scenario 1, the preferred funding package consisting of an IJDC District 1 Grant of \$1,000,000, a CWSRF Debt Forgiveness Loan of \$1,000,000, an IJDC District 1 Loan of \$7,200,000 at 1% for 40 years (paid back over 38 years), a Local/City/Council Grant for \$7,800,000, and an Economic Enhancement Grant of \$8,000,000, proposed rates (\$81.61 for 3,400 gallons) will provide a cash surplus of \$64,457 and debt service coverage of 135.60%.

3. Using Scenario 2, alternate loan package of \$25,000,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed rates (\$113.13 for 3,400 gallons) will provide a cash flow surplus of \$18,872 and debt service coverage of 123.21%.
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 (FYE) June 30, 2021 and the Applicant's Rule 42 Exhibit submitted with the application.
 - C. Staff notes the Applicant has reflected various going-level adjustments to revenue, O&M expenses, taxes other than income, and debt service, which is supported by the Applicant's Rule 42 Exhibit. For purposes of this review, Staff has accepted and used these adjustments in its analysis.
 - D. Staff further notes, the Accountant's Preliminary Application reflects a Max Rate of \$110.24 for 3,400 gallons, however, the Max Rate Cash Flow Analysis reflects a Max Rate of \$113.13 for 3,400 gallons. Staff reflected the Max Rate of \$113.13 for its Scenario 2 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 flow provided by the project sponsor includes funding for the 1/8 cash working capital reserve. Staff accepted that amount in its analysis. However, this amount may be reviewed by the Commission in future filings in accordance with Public Service Commission General Order 183.11.
 - F. 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: Jonathan M. Fowler, P.E.

1. The project will not require a Certificate from the Commission since 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 does not have to issue a Certificate for this project.
2. Scope: The Greater Harrison County Public Service District is proposing to construct a new sanitary sewer collection and treatment system in the Quiet Dell area of Harrison County, West Virginia. The District is also proposing to tie into any existing sanitary sewer collection systems in the area. This project will eliminate the following six (6) package wastewater treatment plants: P&R Development LLC, Dollar General Quiet Dell, Bennett Manor Addition, Circle Drive Homeowners Association, Circle Drive Estates Association, and Pheasant Ridge Farm Subdivision and will be protective of the environment.

The project involves construction of approximately 2,500 linear feet (LF) of 12” PVC SDR-35 Gravity Sewer, 8,250 LF of 10” PVC SDR-35 Gravity Sewer, 37,000 LF of 8” PVC SDR-35 Gravity Sewer, 5,000 LF of 6” PVC SDR-35 Gravity Sewer, and all necessary appurtenances. The Project will also include the installation of approximately 300 Each (EA) 48” Manhole, Complete w/ Frame and Cover, 1 Lump Sum (LS) Duplex Grinder Station, 4 LS Lift Stations, and all necessary appurtenances. Finally, the proposed project will include approximately 1,000 LF of 6” PVC C-900 DR-18 Forcemain, 4,000 LF of 4” PVC C-900 DR-18 Forcemain, 350 LF of 1 ¼” PVC C-900 DR-18 Forcemain, and all necessary appurtenances.

Customer Density: The customer density – for the gravity collection system is about 41.4 customers per mile which is acceptable for a gravity collection system.

Cost per Customer: Based upon the estimated total project cost of \$25,000,000, and 415 new customers, the cost per customer will be approximately \$60,250 which is acceptable when considering the fact that a new treatment system capable of handling additional customers is to be built.

3. Project Feasibility: This project appears to be technically feasible and poses little technical risk.
4. Project Alternatives: Two (2) Alternates were proposed (do nothing or improve the system). The PER did not indicate that any other alternates were evaluated.
5. Consolidation: There are no consolidation opportunities presented by this project.
6. Inconsistencies: No fatal issues were noted.
7. Operation and Maintenance (O&M) Expenses: The PER included a preliminary evaluation of O&M costs which are acceptable at this stage of the project. A detailed, conservative estimate of O&M costs should be completed for use by the accountant as the project moves ahead.
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 \$3,010,000, which is equal to 214.6% of the construction cost of \$20,690,000 (including contingency).

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

GREATER HARRISON COUNTY PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2021
 APPLICATION NO: 2022S-2162
 July 11, 2022

**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
	\$	\$	\$	\$
<u>AVAILABLE CASH</u>				
Operating Revenues	2,844,241	3,452,516	-	3,452,516
Other Operating Revenue	61,756	77,568	-	77,568
SB 234 Annual Working Cash Collections	74,488	225,508	-	225,508
Interest Income & Other Misc.	31,219	31,219	-	31,219
Total Cash Available	3,011,704	3,786,811	-	3,786,811
<u>OPERATING DEDUCTIONS</u>				
Operating Expenses	1,459,047	1,804,060	-	1,804,060
Taxes	34,142	44,378	-	44,378
Total Cash Requirements Before Debt Service	1,493,189	1,848,438	-	1,848,438
Cash Available for Debt Service (A)	1,518,515	1,938,373	-	1,938,373
<u>DEBT SERVICE REQUIREMENTS</u>				
Principal & Interest (B)	1,200,801	1,428,627	857 (1)	1,429,484
Other Debt			-	-
Reserve Account @ 10%	107,804	130,587	85 (2)	130,672
Renewal & Replacement Fund (2.5%)	152,343	152,343	(64,091) (3)	88,252
Total Debt Service Requirement	1,460,948	1,711,557	(63,149)	1,648,408
SB 234 Cash Working Capital	74,488	225,508	-	225,508
Remaining Cash	(16,921)	1,308	63,149	64,457
Percent Coverage (A) / (B)	126.46%	135.68%		135.60%
Average rate for 3,400 gallons	\$ 70.26	\$ 81.61	\$ -	\$ 81.61
Average rate for 4,000 gallons	\$ 79.57	\$ 92.43	\$ -	\$ 92.43

GREATER HARRISON COUNTY PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2021
 APPLICATION NO: 2022S-2162

Attachment A
 PREFERRED FUNDING PACKAGE
 SCENARIO 1

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Principal & Interest	Per Staff Analysis	1,429,484	857
		Per Application with Project	1,428,627	
	The difference in P&I is related to Staff's calculation of a loan of \$7,200,000 for 40 years (paid back over 38 years) at 1%.			
(2)	Reserve Account @ 10%	Per Staff Analysis	130,672	85
		Per Application with Project	130,587	
	Staff assumed a 10% reserve on the new debt.			
(3)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	88,252	(64,091)
		Per Application with Project	152,343.0	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			

GREATER HARRISON COUNTY PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2021
 APPLICATION NO: 2022S-2162
 July 11, 2022

**LOAN PACKAGE
 SCENARIO 2**

	Rule 42 Going-Level Per Application Before Project	Rule 42 Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
<u>AVAILABLE CASH</u>				
Operating Revenues	2,844,241	4,791,987	-	4,791,987
Other Operating Revenue	61,756	105,461	-	105,461
SB 234 Annual Working Cash Collections	74,488	225,508	-	225,508
Interest Income & Other Misc.	31,219	31,219	-	31,219
Total Cash Available	3,011,704	5,154,175	-	5,154,175
<u>OPERATING DEDUCTIONS</u>				
Operating Expenses	1,459,047	1,804,060	-	1,804,060
Taxes	34,142	44,378	-	44,378
Total Cash Requirements Before Debt Service	1,493,189	1,848,438	-	1,848,438
Cash Available for Debt Service (A)	1,518,515	3,305,737	-	3,305,737
<u>DEBT SERVICE REQUIREMENTS</u>				
Principal & Interest (B)	1,200,801	2,671,667	11,240 (1)	2,682,907
Other Debt			-	-
Reserve Account @ 10%	107,804	254,891	1,124 (2)	256,015
Renewal & Replacement Fund (2.5%)	152,343	152,343	(29,907) (3)	122,436
Total Debt Service Requirement	1,460,948	3,078,901	(17,544)	3,061,357
SB 234 Cash Working Capital	74,488	225,508	-	225,508
Remaining Cash	(16,921)	1,328	17,544	18,872
Percent Coverage (A) / (B)	126.46%	123.73%		123.21%
Average rate for 3,400 gallons	\$ 70.26	\$ 113.13	\$ -	\$ 113.13
Average rate for 4,000 gallons	\$ 79.57	\$ 128.12	\$ -	\$ 128.12

GREATER HARRISON COUNTY PSD - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2021
 APPLICATION NO: 2022S-2162

Attachment B
 LOAN PACKAGE
 SCENARIO 2

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Principal & Interest	Per Staff Analysis	2,682,907	11,240
		Per Application with Project	2,671,667	
	The difference in P&I is related to Staff's calculation of a loan of \$25,000,000 for 40 years (paid back over 38 years) at 5%.			
(2)	Reserve Account @ 10%	Per Staff Analysis	256,015	1,124
		Per Application with Project	254,891	
	Staff assumed a 10% reserve on the new debt.			
(3)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	122,436	(29,907)
		Per Application with Project	152,343.0	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			