



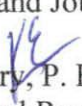
west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Phone: 304-926-0495 / Fax: 304-926-0496

Austin Caperton, Cabinet Secretary
dep.wv.gov

MEMORANDUM

To: Wayne Morgan, P. E.
Executive Secretary
Infrastructure and Jobs Development Council

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

Date: December 10, 2019

Subject: Weirton Preliminary Application: 2019S – 1797
Wastewater Treatment Plant Upgrade

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:

I recommend this application be tabled until the February Funding Committee meeting to allow the applicant time to respond to the comments from the technical review committee.

Attachments: Technical Comments



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

Bill J. Crouch
Cabinet Secretary

Catherine C. Stemp, 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: December 2, 2019

SUBJECT: Weirton Sanitary Board
Preliminary Application **Project No.: 2019S-1797**
WWTP Upgrade/Expansion
Hancock 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 for the Weirton Sanitary Board to upgrade and expand the existing 4 MGD WWTP to a 12 MGD WWTP. The project includes one (1) new headworks building, four (4) SBR basins and one (1) SBR blower build. There will also be upgrades to the existing equipment, piping, valves, controls and other appurtenances.

The cost per customer is \$2,573. Total estimated project cost is \$25,730,000 (CWSRF Loan: \$13,130,000 @ 3.00% for 20 years; and WIFIA Loan: \$12,600,000 @ 4.00% for 30 years).

NEED FOR PROJECT:

The Preliminary Engineering Report indicates Weirton's WWTP currently experiences an average flow that is above design and permit limits on a regular basis. The capacity must be increased to keep the plant operating in optimal conditions, reduce strain on equipment, and satisfy regulatory requirements. In order to maintain compliance with the NPDES permit, Weirton needs, at minimum, a 50% upgrade to its treatment capacity. This project is also needed to satisfy future demands of the area. The BDC has entered into an agreement with Frontier focused on property redevelopment in the Weirton area that will include additional infrastructure such as roadways, bridges, buildings, and water and sewer lines. Weirton's WWTP capacity must be further increased in order to serve the additional residential, commercial, and industrial customers resulting from this growth.

CONCERNS:

None.

PERMITS:

A permit **will not be** required from the West Virginia Bureau for Public since DEP CWSRF funding is proposed.



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Austin Caperton, Cabinet Secretary
dep.wv.gov

MEMORANDUM

TO: Kathy Emery, P.E., Acting Director, DWWM

FROM: Jason Billups, P.E., DWWM 

DATE: December 9, 2019

SUBJECT: Weirton Sanitary Board
Preliminary Application: 2019S-1797
Wastewater Treatment Plant Improvements

RECOMMENDATION

The IJDC Application and Preliminary Engineering report prepared by The Thrasher Group for the above referenced project has been reviewed and is recommended to be tabled until the February Funding Committee meeting.

COMMENTS

Both WVDEP and the PSC staff have contacted the Engineer with questions and concerns. The Engineer will need adequate time to allow them to answer these properly and allow staff to review the application fully.

showing to the public the information that
concerns the financial and other activities that show them to support these projects and
both WADSWORTH and the FSC and have contacted the Director with decisions and

COMMENTS

the Federal Financing Committee meeting
showing to the public references to the fact that it is recommended to be funded and
The FSC, WADSWORTH and the Director's information about the work described by the Director

RECOMMENDATION

SUBJECT: WADSWORTH, Director's information about
Director's information 2010-1-10
WADSWORTH, Director
DATE: December 8, 2010
FROM: WADSWORTH, Director
TO: WADSWORTH, Director

MEMORANDUM

WADSWORTH, Director
Director's information
WADSWORTH, Director

Director's information
Director's information

Director's information



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

December 10, 2019

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. 2019S-1797
Weirton Sanitary Board
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:

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

Please advise if you have any questions.

Sincerely,

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

Jonathan M. Fowler, P.E.
Engineering Division
JFowler@psc.state.wv.us

Enclosures
JMF:vt

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: December 10, 2019

PROJECT SPONSOR: WEIRTON SANITARY BOARD

PROJECT SUMMARY: This project proposes to triple the capacity of the existing wastewater treatment plant to accommodate future growth and development.

PROPOSED FUNDING: WIFIA Loan 4% , 35 yrs \$12,600,000
CWSRF Loan 2.75% , .25% admin fee, 20 yrs 13,130,000
\$25,730,000

CURRENT RATES: \$22.34 3,400 gallons
\$24.85 4,000 gallons

PROPOSED RATES: \$38.21 3,400 gallons
\$42.51 4,000 gallons

Application No. 2019S-1797

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

The stated need for the project relates to potential future demands of the area. Staff notes that Commission policy has historically been that the party benefitting from the expansion (i.e. Developers) should 'pay their own way' and that existing customers should not pay a disproportionate share of such costs. Accordingly, Staff does not support the proposed project as it is currently structured.

FINANCIAL: Laura Leport

1. Current rates (\$22.34 for 3,400 gallons) are below the rates attributable to 1.25% (\$41.49), 1.5% (\$49.79), 1.75% (\$58.09), and 2.0% (\$66.39) 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 \$2,916,590, \$4,180,336, \$5,444,081, and \$6,707,827 respectively.
2. Using Scenario 1, the preferred funding package consisting of a CWSRF Loan of \$13,130,000 at 2.75%, .25% Admin. Fee, for 20 years, and a WIFIA Loan of

\$12,600,000 at 4%, for 35 years, proposed rates (\$38.21 for 3,400 gallons) will provide a cash flow surplus of \$62,193 and debt service coverage of 116.54%.

3. Using the Scenario 2 alternate loan package of \$25,730,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), maximum rates (\$37.79 for 3,400 gallons) will provide a cash flow surplus of \$33,253 and debt service coverage of 115.16%.
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, 2019, and the applicant's Rule 42 Exhibit submitted with the application.
 - C. It should be noted that the project sponsor is proposing a pre-project rate increase that would increase rates to \$23.61 (3,400 gallons).
 - D. The bill analysis prepared by the project sponsor's accountant didn't pull through per books correction factors for the going level, pre-project, and post-project revenue projections. This should be corrected so the City has an accurate projection of the revenues generated by the proposed rates.
 - 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 do not include funding for the 1/8 cash working capital reserve. The project sponsor would need to have non-restricted funds available to meet the 1/8 requirement, otherwise, they may need to take steps to fund this reserve. This 1/8 requirement, along with any steps taken to fund this reserve, may be evaluated by the Commission in future filings.
 - F. The City 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. Staff notes that the City 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 City's rates pursuant to WV Code 24-2-4b. 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.

- G. The Accountant Preliminary Application Form incorrectly lists the Preferred Funding of the CWSRF Loan terms as 3% for 20 years. The correct terms for a CWSRF for MHI less than 1.5% is 2.75%, .25% admin. fee for 20 years.

ENGINEERING: Jim Spurlock

1. Staff notes that the Utility 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 no longer has jurisdiction for Certification of this project.
2. Scope: The Weirton Sanitary Board is proposing to expand the capacity of its wastewater treatment plant from 4 MGD to 12 MGD. The largest portion of this expansion is due to projected, speculative growth.

Customer Density: N/A

Cost per Customer: \$2,808 (taken from the total project cost estimate of \$25,730,000 spread over 9,164 customers).

3. Project Feasibility: The project is technically feasible. The project will provide an upgrade in treatment capacity which is needed to meet current demand. However, the project is significantly over sizing the WWTP in order to accommodate future growth (See Item 4, below).
4. Need: The stated need for the project relates to future demands of the area. The Business Development Corporation (BDC) of the Frontier Group of Companies (Frontier) has entered into an agreement focused on property development in the Weirton area. Should such future demand materialize, the capacity of the Weirton wastewater treatment plant would likely be insufficient to serve the additional demand.

Staff notes that it has long been our position that the responsible party (Developers) should pay their own way with respect to major utility expansion made necessary by development and that existing customers should not pay a disproportionate share of such expansion costs. Accordingly, Staff does not support the proposed project - as it is currently structured. However, we note that the Weirton WWTP is currently operating near maximum capacity. Thus, a project may be needed to make improvements and expand the capacity of this critical regional treatment facility in the near future.

5. **Project Alternatives:** Alternatives for expanding the WWTP included 1) an additional extended aeration treatment process next to the existing WWTP; 1A) an SBR treatment process next to the existing WWTP; 2) a new MBR plant at a separate location; 2A) a new SBR plant at a separate location. The most feasible alternative was determined to be 1A) an SBR treatment process next to the existing WWTP.
6. **Consolidation:** There are no consolidation opportunities presented by this project.
7. **Inconsistencies:** With the exception of the significant over sizing of the WWTP to accommodate speculated future growth and development, none were noted.
8. **Operation and Maintenance (O & M) Expenses:** O & M expenses are expected to increase by \$356,438 as a result of the project. Staff notes that, at the present time, all of these increased costs would have to be borne by the existing customers who would see limited benefit from the over sized treatment facility being proposed.
9. **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 \$3,860,000 which is equal to 18.3% of the construction cost of \$21,100,000 (including contingency).

WEIRTON SANITARY BOARD
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2019
 APPLICATION NO: 2019S-1797
 December 10, 2019

**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	3,200,390	5,527,859	-	5,527,859
Other Operating Revenue	73,003	73,003	-	73,003
Interest Income & Other Misc.	16,678	16,678	-	16,678
Total Cash Available	3,290,071	5,617,540	-	5,617,540
<u>OPERATING DEDUCTIONS</u>				
Operating Expenses	2,646,455	3,002,608	17,332 (1)	3,019,940
Taxes	81,062	90,139	-	90,139
Total Cash Requirements Before Debt Service	2,727,517	3,092,747	17,332	3,110,079
Cash Available for Debt Service (A)	562,554	2,524,793	(17,332)	2,507,461
<u>DEBT SERVICE REQUIREMENTS</u>				
Principal & Interest (B)	614,168	2,157,467	(5,955) (2)	2,151,512
Other Debt	-	-	-	-
Reserve Account @ 10%	-	154,330	(596) (3)	153,734
Renewal & Replacement Fund (2.5%)	82,252	140,439	(417) (4)	140,022
Total Debt Service Requirement	696,420	2,452,236	(6,968)	2,445,268
SB 234 Cash Working Capital	-	-	-	-
Remaining Cash	(133,866)	72,557	(10,364)	62,193
Percent Coverage (A) / (B)	91.60%	117.03%		116.54%
Average rate for 3,400 gallons	\$ 22.34	\$ 38.21	\$ -	\$ 38.21
Average rate for 4,000 gallons	\$ 24.85	\$ 42.51	\$ -	\$ 42.51

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1) Operating Expenses	Per Staff Analysis	3,019,940	17,332
	Per Application with Project	3,002,608	
Staff's calculation adjusts the administrative fee.			
(2) Principal & Interest	Per Staff Analysis	2,151,512	(5,955)
	Per Application with Project	2,157,467	
The difference in P&I is related to Staff's calculation of a CWSRF Loan of \$13,130,000 for 20 years at 2.75%, .25% Admin. Fee and a WIFIA Loan of \$12,600,000 at 4% for 35 years.			
(3) Reserve Account @ 10%	Per Staff Analysis	153,734	(596)
	Per Application with Project	154,330	
Staff assumed a 10% reserve on the new debt.			
(4) Renewal & Replacement Fund (2.5%)	Per Staff Analysis	140,022	(417)
	Per Application with Project	140,439	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			

WEIRTON SANITARY BOARD
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2019
 APPLICATION NO: 2019S-1797
 December 10, 2019

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
	\$	\$	\$	\$
AVAILABLE CASH				
Operating Revenues	3,200,390	5,466,661	-	5,466,661
Other Operating Revenue	73,003	73,003	-	73,003
Interest Income & Other Misc.	16,678	16,678	-	16,678
Total Cash Available	3,290,071	5,556,342	-	5,556,342
OPERATING DEDUCTIONS				
Operating Expenses	2,646,455	3,002,608	-	3,002,608
Taxes	81,062	89,900	-	89,900
Total Cash Requirements Before Debt Service	2,727,517	3,092,508	-	3,092,508
Cash Available for Debt Service (A)	562,554	2,463,834	-	2,463,834
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	614,168	2,102,998	36,553 (1)	2,139,551
Other Debt	-	-	-	-
Reserve Account @ 10%	-	148,883	3,655 (2)	152,538
Renewal & Replacement Fund (2.5%)	82,252	138,909	(417) (3)	138,492
Total Debt Service Requirement	696,420	2,390,790	39,792	2,430,581
SB 234 Cash Working Capital	-	-	-	-
Remaining Cash	(133,866)	73,044	(39,792)	33,253
Percent Coverage (A) / (B)	91.60%	117.16%		115.16%
Average rate for 3,400 gallons	\$ 22.34	\$ 37.79	\$ -	\$ 37.79
Average rate for 4,000 gallons	\$ 24.85	\$ 42.04 **	\$ -	\$ 42.04

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Principal & Interest	Per Staff Analysis	2,139,551	36,553
		Per Application with Project	2,102,998	
	The difference in P&I is related to Staff's calculation of a Loan of \$25,730,000 for 40 years (paid back over 38 yrs) at 5% interest.			
(2)	Reserve Account @ 10%	Per Staff Analysis	152,538	3,655
		Per Application with Project	148,883	
	Staff assumed a 10% reserve on the new debt.			
(3)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	138,492	(417)
		Per Application with Project	138,909	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			