



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: April 23, 2025

Subject: Town of Junior
Preliminary Application: IJDC No. 2022S-2297
Phase 1 – Wastewater Collection System Improvements

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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 is Phase 1 of a multiphase project to address the 62% of infiltration/inflow found in the collection system. Pump station #5 that serves all the flow from Norton-Harding-Jimtown PSD and the Tygart Valley Regional Jail will be upgraded and various parts of the collection system will be replaced. This will address the Town's Order #10297 .

The total cost for this project is \$4,160,000 and the Town intends to pursue a Local ARPA Grant for \$47,500, an IJDC Grant for \$1,000,000, a CWSRF Principle Forgiveness Loan for \$2,000,000, and a CWSRF Loan for \$1,112,500.

Please carefully review the PSC memo regarding their concerns with the Town's billing procedures and necessary corrections.

Preliminary Project Ratings:

Public Health Benefits: 5
Compliance with Standards: 20



Russel Crane
Interim Cabinet Secretary of Health

Jason R. Frame
OEHS Director

MEMORANDUM

TO: Meredith J. Vance, Director
Environmental Engineering Division

FROM: Patrick Murphy, P.E.
Environmental Engineering Division

DATE: April 6, 2025

SUBJECT: Town of Junior
IJDC Application- **2022S-2297**
Phase I – Wastewater Collection System Improvements
Barbour County

Recommendation:

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

Project Scope:

This project proposes to upgrade Lift Station #5 (LS5) which is located along Corridor "H" near the Tygart Valley Regional Jail. (LS5) is approximately 20 years old and handles all flow from the jail and Norton-Harding Jimtown PSD (NHJPSD).

The total project cost is **\$4,160,000.00**

Need for the Project:

The Town of Junior experiences a high volume of I&I which causes wear and tear on pumps at the lift stations and the wastewater treatment plant.

Concerns: No concerns were noted.



Town of Junior

2022S-2297

April 6, 2025

Page 2

Permits:

Coordination with the following agencies will likely be required for this project:

- WV Department of Environmental Protection
- WV Department of Health
- WV Department of Transportation
- WV State Historic Preservation Office
- WV Division of Natural Resources
- US Fish and Wildlife



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MEMORANDUM

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

FROM: Spencer Fultineer, DWWM

DATE: April 9, 2025

SUBJECT: Town of Junior
Preliminary Application: IJDC No. 2022S-2297
Phase 1 – Wastewater Collection System Improvements

RECOMMENDATION

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

PROJECT DESCRIPTION

The Town of Junior owns and operates an existing wastewater collection and treatment system operating under NPDES Permit# WV0040843. The Town's collection and treatment system currently serves approximately 193 customers.

This is Phase 1 of a multiphase project to address the significant I/I found in the collection system. This project proposes upgrades to Lift Station #5 that serves all the flow from Norton-Harding Jimtown PSD and the Tygart Valley Regional Jail and replaces the force main with 8" PVC. The project will also replace the existing 10" and 8" gravity sewer pipe, 22 manholes, upgrading 4" steel force main with new 4" HDPE DR-11 force main, and replacing all necessary appurtenances.

The proposed total cost for this project is \$4,160,000 and the Town intends to pursue a Local ARPA Grant for \$47,500, an IJDC Grant for \$1,000,000, CWSRF Principle Forgiveness Loan for \$2,000,000, and a CWSRF Loan for \$1,112,500 at a 0.25% rate for 40 years.

The proposed 3,400 gallon rate is \$55.52.

NEED FOR PROJECT

The project will replace and upgrade parts of the inadequate collection system that has an I/I rate of 62.22%. The excessive amount of I/I causes wear and tear on pumps and lift stations. Through CCTV inspection it was discovered that the 10" gravity sewer line along River Avenue and located between the Elementary School and Lift Station #4 is deteriorated and needs to be replaced. Lift Station #4 pumps all sewage to the WWTP via a 6" force main. In correspondence to the high flow levels and following the WWTP from the previous project, this line needs to be upgraded to an 8" line to accommodate the increased pump rate and decrease backups in the system. The 4" line from lift station #1 is a steel line that was installed with the original system and has needed to be patched due to leaks caused by deterioration. This line also needs to be replaced. The Town of Junior is also under Order 10297 from the WVDEP following multiple Notices of Violation.

DEFICIENCIES/COMMENTS

- Using the Combined Application, the Total Engineering Fee and the Design Fee appear to be within the ASCE curve.
- The PER will need to be developed into a facilities plan that meets CWSRF requirements if CWSRF is used.
- Populations and Flow Projections will be needed for the facilities plan
- Justification of why Alternative #1 is being chosen and should be included in the summary.

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



April 22, 2025

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-2297
Town of Junior - 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,

Jonathan M Fowler
Jonathan M. Fowler, P.E.
Engineering Division

Enclosures
JMF:vb

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: April 22, 2025

PROJECT SPONSOR: TOWN OF JUNIOR (SEWER)

PROJECT SUMMARY: The Town of Junior is proposing to make improvements to their existing sanitary sewer system.

PROPOSED FUNDING: Barbour County Commission

ARPA Grant	\$ 47,500
IJDC District 1 Grant	\$1,000,000
CWSRF Principal Forgiveness	\$2,000,000
CWSRF Loan (.25%, .25% AF, 40 yrs.)	<u>\$1,112,500</u>
Total	<u>\$4,160,000</u>

CURRENT RATES: \$33.35 3,400 gallons
\$39.24 4,000 gallons

PROPOSED RATES: \$51.84 3,400 gallons
\$60.99 4,000 gallons

Application No. 2022S-2297

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

FINANCIAL: Stephen Edens

1. Current rates (\$33.35 for 3,400 gallons) are above the rate attributable to 1.25% (\$26.04), 1.5% (\$31.25) of the Median Household Income (MHI), but below the rates attributable to 1.75% (\$36.46) and 2.0% (\$41.67) of the MHI. Increasing current rates to 1.75% and 2.0% of the MHI would provide additional revenues of \$27,760 and \$74,276.
2. Using Scenario 1, the preferred funding package consisting of a Barbour County Commission ARPA Grant of \$47,500, a \$1,000,000 IJDC District 1 Grant, a CWSRF Principal Forgiveness of \$2,000,000, and a CWSRF Loan of \$1,112,500 at 0.25%, 0.25% Admin. Fee, for 40 years (paid back

over 38 years), proposed rates (\$51.84 for 3,400 gallons) will provide a cash flow surplus of \$3,658 and debt service coverage of 173.92%.

3. Using the Scenario 2 alternate loan package of \$4,112,500 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), and committed funds consisting of a Barbour County Commission ARPA Grant of \$47,500, proposed rates (\$82.11 for 3,400 gallons) will provide a cash flow deficit of \$1,036 and debt service coverage of 126.00%. An additional .2% (for a total of \$82.27 for 3,400 gallons) increase in proposed rates will be required in order to provide a cash flow surplus of \$37 and debt service coverage of 126.39%.

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, 2024, and the applicant's Rule 42 Exhibit submitted with the application.
- D. Staff notes the Applicant's cash flow analyses include going level rates, however, as of this date no ordinance adopting these rates has been submitted to the Commission for Legal Division's review. Staff included these rates in its analyses.
- E. Staff notes, based on its review of the Rule 42 Exhibit's per books, going level and proforma bill analysis, it appears the Applicant is incorrectly billing its customers. When comparing the rates for 3,400 gallons in the Town's application (Per Books \$35.72, Going Level: \$50.10, Proforma: \$55.52) to its tariff rates for 3,400 gallons (Per Books \$33.35, Going Level: \$46.79, Proforma: \$51.84), the respective customers are being currently overcharged at Per Books by approximately \$2.37 per month. If the issue isn't corrected the respective customers will be overcharged at Going Level by \$3.31 and Proforma by approximately \$3.68 per month. Staff

corrected the rates in its analysis and didn't make other adjustments at this time. The Town of Junior should carefully review its billing procedures and take steps to immediately correct its customer billing. Staff will follow-up with the Town to discuss this situation. More detailed justification including a revised Rule 42 Exhibit will be required when filing for a Certificate of Convenience and Necessity.

- 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. Senate Bill 234 (2015) required, pursuant to WV Code 24-2-4b (b), that municipally operated utilities shall consider a reasonable plant-in-service depreciation expense for rates and charges. The project sponsor should take this into consideration when preparing its Rule 42. Municipals that do not provide for a reasonable depreciation expense risk delays in Certificate of Convenience and Necessity filings if rates are determined to not be sufficient.
- H. The Town of Junior should correct its billing errors and 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. Calculations to support the revenue projections should also be provided.

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 Town of Junior (Junior) is proposing to make improvements to Lift Station #5, removal and replacement of its existing 10-inch gravity sewer line along River Avenue, replacement of the existing force main from Lift Station #4 to the WWTP, removal and replacement of its existing 8-inch sewer line along

Swick Street, and replacement of the existing force main from Lift Station #1. The proposed project scope includes: a new 6-ft diameter wet well (18-ft deep), ten (10) 12-inch DI gravity tie-ins, remove all existing equipment in existing Lift Station #5 and rehab (pressure wash, line walls, etc.), install new pump station equipment (new pump bases, pumps, guide rails, electrical, pumps and blower VFDs), new covered panel structure (w/meter, disconnect, telemetry), new back-up pump, site piping, temporary by-pass pumping, demo existing fence and site utilities (control panel, generator, blower, etc.), new 6-ft high chainlink fence (w/ 2 gates), new flow meter, tie-into existing force main, removal and replacement of 3,400 LF of 10-inch gravity sewer pipe, removal and replacement of twenty-two (22) 48-inch diameter manholes, forty-four (44) VF of 48-inch diameter concrete risers for manholes, 30 customer service lateral reconnections (w/wye and cleanout), 900 LF of 4-inch service lateral PVC pipe, 3,400 LF of road milling (w/1-1/2-inch asphalt overlay), 3,425 LF of WVDOH Type "B" Trench Repair, 3,000 LF of WVDOH shoulder stone, 2,500 LF of 8-inch PVC force main pipe, four (4) 8-inch force main cleanouts, 2 combination air vacuum release valves, tie-into existing 6-inch force main, 25-ft of 16-inch steel casing (open cut), 990 LF of asphalt restoration, remove and replace 1,200 LF of 8-inch gravity sewer pipe, 1,900 LF of 4-inch force main pipe, three (3) 4-inch force main cleanouts, tie-into existing 4-inch force main, 350 LF of gravel restoration, 300 LF of concrete driveway restoration, reclamation of disturbed areas, and all necessary appurtenances. The estimated construction cost is \$3,014,714 (includes 10.0% construction contingency), and the estimated total project cost is \$4,160,000 (includes 8.22% project contingency).

Need: The PER indicates that the Engineer conducted a flow monitoring study, inflow and infiltration (I&I) analysis, performed smoke testing, and CCTV inspection of the Junior collection system. Six (6) areas (Area 1, 2, 3, 5, 6, and 8) were identified as contributing the most significant I&I issues. The proposed scope appears to focus on removal and replacement of collection lines impacted by I&I, and upgrades to pump (lift) stations to increase the flows to the WWTP and potentially decrease and/or eliminate the overflow/unpermitted events/discharged.

Cost per Customer: Based upon the estimated total project cost of \$4,160,000, and serving approximately 193 customers, the cost per customer will be approximately \$21,554. However, the cost per customer in terms of proposed borrowing is \$5,764, as the proposed funding is 73.26% grant. (*Cost per customer is calculated based upon the number customers identified in the IJDC Application.*)

3. Project Feasibility: The project appears to be technically feasible and poses little technical risk.
4. Project Alternatives: The PER did include an evaluation of alternatives: Alternative #1 - Lift Station #5 and Collection System Upgrades (PVC Gravity Pipe), Alternative #2 - Lift Station #5 and Collection System Upgrades (Pipe Bursting w/HDPE Gravity Pipe), and Alternative #3 – Do Nothing. The PER indicates that Alternative #1 was selected as the proposed scope meets the needs and goals of Junior’s sewer collection system.
5. Consolidation: There are no consolidation opportunities presented by this project.
6. Operation and Maintenance (O&M) Expenses: The PER included a breakdown of changes to O&M, and suggests that costs are estimated to increase by approximately \$3,500, primarily due to the additional pumping, treatment and disposal expenses.
7. 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 \$767,000, which is equal to 25.44% of the construction cost of \$3,014,714 (includes 10.0% construction contingency).
8. Deficiencies/Comments:
 - The PER states that there are gutter, downspout, and possibly yard/storm drains, connections to the sanitary sewer collection system. Junior’s Tariff does not include any surcharges on customers who have such extraneous connections to the sanitary sewer system. Junior should consider options to incentivize their customers to disconnect gutter downspout connections to reduce the amount of storm water being treated at the wastewater treatment plant (WWTP).
 - Based on a conversation with Junior’s Engineer, they will be pursuing a Phase II project that will include upgrades to its WWTP in the future, and continuing to pursue projects to reduce/eliminate I&I throughout its collection system.

TOWN OF JUNIOR - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2024
 APPLICATION NO: 2022S-2297
 April 22, 2025

**PREFERED 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	322,591	360,471	-	360,471
Other Operating Revenue	4,163	4,612	-	4,612
SB 234 Annual Working Cash Collections	34,580	35,213	-	35,213
Interest Income & Other Misc.	2,191	2,191	-	2,191
Total Cash Available	363,525	402,487	-	402,487
OPERATING DEDUCTIONS				
Operating Expenses	276,786	281,708	29 (1)	281,737
Taxes	586	586	-	586
Total Cash Requirements Before Debt Service	277,372	282,294	29	282,323
Cash Available for Debt Service (A)	86,153	120,193	(29)	120,164
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	38,368	69,066	28 (2)	69,094
Other Debt			-	-
Reserve Account @ 10%		3,070	3 (3)	3,073
Renewal & Replacement Fund (2.5%)	12,272	12,272	(3,145) (4)	9,127
Total Debt Service Requirement	50,640	84,408	(3,115)	81,293
SB 234 Cash Working Capital	34,580	35,213	-	35,213
Remaining Cash	933	572	3,086	3,658
Percent Coverage (A) / (B)	224.54%	174.03%		173.92%
Average rate for 3,400 gallons	\$ 46.79	\$ 51.84	\$ -	\$ 51.84
Average rate for 4,000 gallons	\$ 55.04	\$ 60.99	\$ -	\$ 60.99

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Expenses	Per Staff Analysis	281,737	29
		Per Application with Project	281,708	
Staff's calculation included a difference in the Administrative Fee associated with the CWSRF loan.				
(2)	Principal & Interest	Per Staff Analysis	69,094	28
		Per Application with Project	69,066	
The difference in P&I is related to Staff's calculation of a loan of \$1,112,500 for 40 years (paid back over 38 years) at .25%.				
(3)	Reserve Account @ 10%	Per Staff Analysis	3,073	3
		Per Application with Project	3,070	
Staff assumed a 10% reserve on the new debt.				
(4)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	9,127	(3,145)
		Per Application with Project	12,272	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.				

TOWN OF JUNIOR - SEWER
 CASH FLOW ANALYSIS
 YEAR ENDED: June 30, 2024
 2022S-2297
 April 22, 2025

**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	322,591	591,873	1,100 (1)	592,973
Other Operating Revenue	4,163	7,307	-	7,307
SB 234 Annual Working Cash Collections	34,580	35,036	-	35,036
Interest Income & Other Misc.	2,191	2,191	-	2,191
Total Cash Available	363,525	636,407	1,100	637,507
OPERATING DEDUCTIONS				
Operating Expenses	276,786	280,286	-	280,286
Taxes	586	586	-	586
Total Cash Requirements Before Debt Service	277,372	280,872	-	280,872
Cash Available for Debt Service (A)	86,153	355,535	1,100	356,635
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	38,368	283,120	(946) (2)	282,174
Other Debt			-	-
Reserve Account @ 10%		24,475	(94) (3)	24,381
Renewal & Replacement Fund (2.5%)	12,272	12,272	2,735 (4)	15,007
Total Debt Service Requirement	50,640	319,867	1,695	321,562
SB 234 Cash Working Capital	34,580	35,036	-	35,036
Remaining Cash	933	632	(595)	37
Percent Coverage (A) / (B)	224.54%	125.58%		126.39%
Average rate for 3,400 gallons	\$ 46.79	\$ 82.11	\$ 0.16	\$ 82.27
Average rate for 4,000 gallons	\$ 55.04	\$ 96.60	\$ 0.19	\$ 96.79

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	Operating Revenues	Per Staff Analysis	592,973	
		Per Application with Project	591,873	1,100
<p>Staff projected an additional \$1,100 in revenues would be needed to achieve 115% debt coverage and a positive cash balance.</p>				
(2)	Principal & Interest	Per Staff Analysis	282,174	(946)
		Per Application with Project	283,120	
<p>The difference in P&I is related to Staff's calculation of a loan of \$4,112,500 for 40 years (paid back over 38 years) at 5%.</p>				
(3)	Reserve Account @ 10%	Per Staff Analysis	24,381	(94)
		Per Application with Project	24,475	
<p>Staff assumed a 10% reserve on the new debt.</p>				
(4)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis	15,007	2,735
		Per Application with Project	12,272	
<p>Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.</p>				