



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

Bill J. Crouch  
Cabinet Secretary

Ayne Amjad, MD, MPH  
Commissioner & State Health Officer

**MEMORANDUM**

**TO:** Marie Prezioso, Funding Committee  
WV Infrastructure and Jobs Development Council

**FROM:** Meredith J. Vance  
Water Technical Review Committee

**DATE:** September 27, 2022

**RE:** City of Logan  
IJDC Preliminary Application Number: **2022W-2155**  
Water Treatment Plant Upgrade  
Logan County

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1. The Committee has reviewed the pre-application and preliminary engineering report submitted for the above referenced project in accordance with Chapter 31, Article 15-A. It has been determined that the project is:
    - a. \_\_\_\_\_ Consistent with the intent of the Infrastructure and Jobs Development Act and is the most cost-effective and environmentally sound alternative for solving the drinking water needs in this area.
    - b.  Consistent with the Act but may not be the most cost-effective and environmentally sound alternative for solving the drinking water needs in this area.
    - c. \_\_\_\_\_ Consistent with the intent of the Act and most cost-effective and environmentally sound alternative for solving the drinking water needs in this area **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.
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- b. \_\_\_\_\_ The Funding Committee should recommend that 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 application. The proposed project funding should be postponed until technical comments have been resolved.
- d.  The project to be referred to the Consolidation Committee.

3. Other remarks:

**Comment:**

This Preliminary Application is to upgrade the existing City of Logan Water Board's water treatment plant and add a new raw water source.

**PSC STAFF CONCERNS:**

1. Project Alternatives: The option of an interconnection to Logan County PSD as an alternate water source was discussed but dismissed due to capacity limitations at the District's treatment plant. However, Staff notes that the Logan County PSD recently received considerable funding for a project which will increase the capacity of their water treatment plant. Accordingly, the option of connecting with the Logan County PSD must be further investigated before this application can proceed.
2. Consolidation: This project presents an opportunity for consolidation of treatment facilities with Logan County PSD. Staff recommends returning the application for a further analysis of this option.

**Concerns:**

The system has a score of 20 on the July 2022 quarter of the EPA's Compliance Tracking Tool (ETT.) The system has unresolved compliance issues, including the following:

- Failure to monitor for DBPs in 2022 and 2021.
- Failure to Monitor for CVOC
- Violation of the SWTR (turbidity) 2022
- Violation of the IESWTR

pc: To be distributed at the Funding Committee Meeting



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**MEMORANDUM**

**TO:** Meredith J. Vance, Director  
Environmental Engineering Division

**FROM:** William Herold, P.E.  
Infrastructure & Capacity Development

**DATE:** September 27, 2022

**SUBJECT:** City of Logan  
IJDC Application- 2022W-2155  
Water Treatment Plant Upgrade  
Logan County

**Recommendation:**

This preliminary application appears technically feasible; however, the option of connecting with the Logan County PSD should be evaluated in more detail by the Consolidation Committee. The application should be returned for further consideration.

**Project Scope:**

This Preliminary Application is to upgrade the existing City of Logan Water Board's water treatment plant and add a new raw water source. Major work will consist of upgrading the existing three (3) filters with new media, addition of air header piping, underdrain piping, blower & controls; improve site drainage, parking and security such a demolition and sludge removal of existing sludge holding pond for more parking, add site lighting and new fencing; upgrading the mechanical and electrical equipment and components such as dehumidification units and replacing HVAC system; make structural improvements such as repair broken/cracked brick or concrete and replace broken stairs and handrails; and add a new water intake to a local abandoned coal mine that will include a new pump station, approximately 10,000 LF of 6" force main, and a new raw water flow equalization storage tank with screening.

The cost per customer is \$5,238 for the project. The total project cost is \$9,900,000 (DWTRF Design Grant: \$2,047,850; DWTRF Loan: \$5,880,000 @ 1.00% for 30 years; AML Grant: \$952,150; Congressionally Directed: \$820,000; and Local/City/Council: \$200,000.)

**Need for the Project:**

The PER indicates the large portions of the existing City of Logan's Water Treatment Plant are at the

end of their useful life and need to be replaced.

### **Concerns:**

1. The option of an interconnection to Logan County PSD as an alternate water source was discussed but dismissed due to capacity limitations at the District's treatment plant. However, the Logan County PSD recently received considerable funding for a project which will increase the capacity of their water treatment plant. Accordingly, the option of connecting with the Logan County PSD should be further investigated.

2. The system has a score of 20 on the July 2022 quarter of the EPA's Compliance Tracking Tool (ETT.) The system has unresolved compliance issues, including the following:

- Failure to monitor for DBPs in 2022 and 2021.
- Failure to Monitor for CVOC
- Violation of the SWTR (turbidity) 2022
- Violation of the IESWTR

### **Permits:**

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

Construction activities with a disturbed area of one (1) acre or greater are required to register for the NPDES Storm Water Construction General Permit No. WV0115924.

A permit for stream crossings may be required.

A Certificate of Convenience and Necessity may be required from the PSC.

A permit from the WV Division of Highways will be required for the construction activities that will take place within WVDOH right-of-way.

**Engineering:** 6.17% for design, 17.09% for total.

The Design Fees vs. Construction Cost for new construction is below both the average complexity curve and the very complex curve. The Design Fees vs. Construction Cost for modifications is below both the average complexity curve and the very complex curve. The Total Fees vs. Construction Cost for new construction is above both the average complexity curve and the very complex curve. The Total Fees vs. Construction Cost for modified construction is above the average complexity curve and on the very complex curve. A fee waiver **will not be** required for this project.

### **Asset Management Plan and Annual Maintenance Audit:**

The system indicates in the application that they do not have an asset management plan. There is no approved asset management plan on file with the BPH. The application indicates that the annual maintenance audit for the current year has been completed.

### **Capacity Development:**

The question about having had a capacity development assessment (CDA) within the last 5 years was marked as “No.” That is correct. There is no record of an assessment of the system.

Additional information that may be helpful to the IJDC in their decisions regarding approval of this project relates to the system’s overall compliance. The system has a score of 20 on the July 2022 quarter of the EPA’s Compliance Tracking Tool (ETT.) The system has unresolved compliance issues, including the following:

- Failure to monitor for DBPs in 2022 and 2021.
- Failure to Monitor for CVOC
- Violation of the SWTR (turbidity) 2022
- Violation of the IESWTR

Based upon information from the Municipal Bond Commission, as of July 2022, the Logan Water Board is current on their water reserve funding requirements.

### **IJDC Ranking:**

- Public Health Benefit: 15
- Compliance: 10

# 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



September 13, 2022

Meredith J. Vance  
Office of Environmental Health Services  
350 Capitol Street, Room 313  
Charleston, West Virginia 25301-3713

Re: Public Service Commission Staff Review Comments  
Application No. 2022W-2155  
Logan Water Board  
Infrastructure Preliminary Application

Dear Ms. Vance:

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,

Jonathan M. Fowler, P.E.  
Engineering Division

JMF:vb

**PUBLIC SERVICE COMMISSION STAFF  
TECHNICAL REVIEW**

**DATE:** September 12, 2022

**PROJECT SPONSOR:** LOGAN WATER BOARD

**PROJECT SUMMARY:** This project proposes to make significant improvements to the existing City of Logan Water Treatment Plant.

<b>PROPOSED FUNDING:</b> DWTRF Loan (1%, 30 yrs.)	\$5,880,000
DWTRF Design Grant	2,047,850
AML Grant	952,150
Congressionally Directed Funds	820,000
Local Contribution	<u>200,000</u>
Total	\$ 9,900,000

<b>CURRENT RATES:</b>	\$23.18	3,400 gallons (includes \$0.25 per 1,000 gallons surcharge)
	\$26.94	4,000 gallons (includes \$0.25 per 1,000 gallons surcharge)

<b>PROPOSED RATES:</b>	\$33.00	3,400 gallons (includes \$1.22 per 1,000 gallons surcharge)
	\$38.40	4,000 gallons (includes \$1.22 per 1,000 gallons surcharge)

Application No. 2022W-2155

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

**NOTE:** Due to financial and engineering issues, including the potential for consolidation of treatment facilities, we recommend that this application be returned. Please refer to the comments below.

**FINANCIAL:** Nathan Nelson

1. Current rates (\$23.18 for 3,400 gallons, including \$0.25 per 1,000 gallons surcharge) are below the rates attributable to 1.25% (\$42.69), 1.5% (\$51.23), 1.75% (\$59.76), and 2.0% (\$68.30) of the Median Household Income (MHI).

2. Staff has concerns with the Applicant's filing, and notes some deficiencies with the Rule 42 Exhibit, specifically the following:
  - The Going Level and Proforma revenue adjustments do not track back to the corresponding bill analysis. The adjustments made on the cash flow and on Schedule 1 are higher than what is calculated in the bill analysis. Some of the difference, at Going Level, is attributed to new meters recording increased usage, however no adjustment was made to the bill analysis and there doesn't appear to be an explanation at Proforma.
  - The City is proposing a \$1.22 per 1,000 gallon surcharge to all customers and states in its tariff that the surcharge is to be used to fund a Cash Working Capital Reserve as required by Senate Bill 234, however all proceeds from the surcharge appear to be funding the project and no money is available for funding the reserve.
  - The project sponsor also needs to carefully review its surcharge language associated with rates and minimum charges, in its proposed tariffs, to ensure the wording and surcharge amounts are accurately reflected in the proposed tariffs. The bill analysis would then be adjusted to accurately reflect the surcharges.
  - The Preliminary Engineering report estimates a \$90,274 increase in O&M expenses, mainly attributable to increased maintenance and electricity costs for the additional pumps, filters and hvac system. The Rule 42 does not appear to account for these increases.
  - It doesn't appear that the applicant will be eligible for the proposed DWTRF loan terms (1%, 30 yrs.) based on the 2020 MHI criteria.
  - The applicant should correct errors in the surplus calculation on the cash flow statement.

Staff recommends the application be returned to the Applicant until the above deficiencies are addressed.

**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: The City of Logan Water Department proposes improvements to its existing water treatment plant, to include adding an alternate raw water source from an abandoned coal mine, filtration system improvements, as well as significant mechanical, electrical, and structural upgrades.

Customer Density: N/A Internal Improvements, no new customers.

Cost per Customer: \$5,238 (taken from the total project cost estimate of \$9,900,000 spread over 1,890 existing customers).

3. Project Feasibility: The project is technically feasible. The cost per customer is reasonable. The project will provide needed improvements to aging treatment plant components, increase treatment efficiency, reduce operating time, and provide an alternate raw water source.
4. Project Alternatives: The option of an interconnection to Logan County PSD as an alternate water source was discussed but dismissed due to capacity limitations at the District's treatment plant. However, Staff notes that the Logan County PSD recently received considerable funding for a project which will increase the capacity of their water treatment plant. Accordingly, the option of connecting with the Logan County PSD must be further investigated before this application can proceed.
5. Consolidation: This project presents an opportunity for consolidation of treatment facilities with Logan County PSD. Staff recommends returning the application for a further analysis of this option.
6. Inconsistencies: No fatal issues were noted.
7. Operation and Maintenance (O & M) Expenses: O & M expenses are projected to increase by \$90,274 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 \$1,385,000 which is equal to 17.09% of the construction cost of \$8,105,000 (including contingency).

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



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west virginia department of environmental protection

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Division of Water and Waste Management  
601 57th Street SE  
Charleston, WV 25304-2345  
Telephone Number: (304) 926-0495  
Fax Number: (304) 926-0497

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

**MEMORANDUM**

**MEMO TO:** Meredith J. Vance  
Office of Environmental Health Services  
Bureau for Public Health

**FROM:** John M. Perkins   
Supervisor  
General Permits & Support Team

**DATE:** August 17, 2022

**SUBJECT:** Infrastructure Preliminary Application for the City of Logan (2022W-2155): WTP Improvement in Logan County, WV.

We have reviewed the above referenced project application information. The City of Logan Water Treatment Plant discharges its backwash to its wastewater treatment plant, which is covered under WV/NPDES Permit No. WV0033821 and expires December 19, 2022..

If the City of Logan is considering repairing and painting an existing water treatment plant or storage tanks, then the scope of this project requires precautions to prevent contamination of the waters of the state. Prior to beginning any removal of old paint, the City of Logan should contact Mr. Jeremy Bandy or a member of his staff at (304)-926-0499, extension 43894 for guidance in determining whether the paint to be removed is considered a hazardous waste. If so, proper containment and disposal procedures must be followed for the paint and any material associated with the sandblasting. If it is determined that the paint is not hazardous, the City of Logan should contact Yogesh Patel or a member of his staff at (304)-926-0499, extension 43877 for proper disposal options.

Construction activities with a disturbed area of one (1) acre or greater are now required to register for the NPDES Storm Water Construction General Permit No. WV0115924 that became

effective on March 9, 2019. Projects registered under the previous General Permit No. WV0115100 were automatically provided coverage under WV/NPDES General Permit No. WV0115924. For more information, they may contact Larry Board at (304)-926-0499, extension 43883.

In light of the above, we have no objection to this project as long as the appropriate provisions are taken to assure compliance with Chapter 22, Article 11, of the Code of West Virginia and any associated regulations. The responsible party may contact Mylinda Maddox (304) 926-0499 ext. 43825, should additional information be required.

JMP:mam

cc: Katheryn Emery



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west virginia department of environmental protection

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Office of Abandoned Mine Lands & Reclamation  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

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

## MEMORANDUM

**To:** Christopher Thomas, EIT  
Infrastructure and Capacity Development

**From:** Roger A. Earle, P.E., Waterline Coordinator *RAE*  
Office of Abandoned Mine Lands & Reclamation

**Date:** September 14, 2022

**Subject:** City of Logan – WTP Improvement  
IJDC Preliminary Application: 2022W-2155

AML does not participate in routine improvements or replacement of existing systems. Therefore, AML funds will not be available for this project.

## OEHS District Review for Infrastructure Council Water Projects

Water System:	City of Logan	IJDC Number:	2022W-2155
Project Description:	WTP Improvements	Review by:	J.D. Douglas
County:	Logan	Date:	8/18/2022

<u>No.</u>	<u>Review Criteria</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Comments (Especially if No is indicated or providing a DWTRF score)</u>
1.	Does the district agree that the project scope seems to be the most feasible solution?	X			
2.	Is this the most practical project to correct the problem stated in the application?	X			
3.	Does the project solve the major operation maintenance problems in the water system?	X			
4.	Does the project eliminate deficiencies noted in the sanitary survey?	X			Filter media issue
5.	Should these improvements be made to this system versus another system that could serve the same area?	X			
6.	The application has an alternative in it evaluating the most likely consolidation option?	X			
7.	Do you agree with the need statement for the project?	X			
8.	Has the engineer included all justification (that you are aware of) in the project application?	X			
9.	Is the management of the water system capable of completing this project?	X			
10.	Other comments				

<u>No.</u>	<u>Review Criteria</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Comments (Especially if No is indicated or providing a DWTRF score)</u>
11.	For new projects or projects with revised scope provide DWTRF Priority Ranking Public Health Score (Indicate score in the comments section with explanation)?				
12.	For new projects or projects with revised scope provide DWTRF Priority Ranking Compliance Score (Indicate score in the comments section with explanation)?				
13.					
14.					



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**MEMORANDUM**

**TO:** Meredith Vance, Division Director  
Environmental Engineering Division

**FROM:** Valerie Plance, Manager  
Capacity Development Program

**DATE:** August 25, 2022

**RE:** Logan Water Board (PWSID# 3302331)  
IJDC Application No.: 2022W-2155  
Logan County

The preliminary infrastructure application indicates that they are seeking DWTRF monies. The system indicates in the application that they do not have an asset management plan.

The question about having had a capacity development assessment (CDA) within the last 5 years was marked as "N/A." There is no record of an assessment of the system.

Additional information that may be helpful to the IJDC in their decisions regarding approval of this project relates to the system's overall compliance. The system has a score of 20 on the July 2022 quarter of the EPA's Compliance Tracking Tool (ETT.) The system has unresolved compliance issues, including the following:

- Failure to monitor for DBPs in 2022 and 2021.
- Failure to Monitor for CVOC
- Violation of the SWTR (turbidity) 2022
- Violation of the IESWTR

Based upon information from the Municipal Bond Commission, as of July 2022, the Logan Water Board is current on their water reserve funding requirements.

If you require further information from the capacity development program, please contact me.  
VAP