

### west virginia department of environmental protection

Division of Water and Waste Management 601 57<sup>th</sup> Street, SE Charleston, WV 25304 Phone: 304-926-0495 / Fax: 304-926-0463

To:

Marie Prezioso, Chair

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

#### **MEMORANDUM**

From:  Date: Subject:		:	Katheryn Emery, P.E. Engineer Chief Sewer Technical Review Committee December 13, 2024			
		ct:	City of Welch Preliminary Application: IJDC No. 2024S-2592 CSO Removal			
1. This committee has reviewed the preliminary application and engineering report submit for the above referenced project in accordance with Chapter 31, Article 15A. It has bee 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.			
2.	c. Ou	r recom	Same as (a) above except that certain issues need to be addressed prior to design and construction as the attached comments indicate.  mendation is that:			
	a.	<u>√</u>	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.			

- 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 is phase I of a multi-phase project that will address their existing CSO issues outlined in their LTCP and order. Welch is under Civil Action (No. 77-1163BL) from the EPA. This project will provide the infrastructure to be able to remove CSO #005 that is required by December 2027.

The proposed total cost for this project is \$5,642,000, and the City intends to pursue a \$2,500,000 CWSRF Debt Forgiveness Loan, a \$1,500,000 AMLER Grant, a \$750,000 CDS Grant, a \$544,000 ARC Grant, a \$250,000 CDBG-MIT Grant, a \$53,000 IJDC District 3 Grant, and a \$45,000 WQMP 604(b) Grant.

This project is only eligible for \$2,000,000 in CWSRF principal forgiveness. Loan funding is available to make up the difference. The City will need to apply for the AMLER funds next year.

Using the Combined Application, the Total Engineering Fees appear to be above the ASCE curve.

#### **Preliminary Project Ratings:**

Public Health Benefits: 10 Compliance with Standards: 10



STATE OF WEST VIRGINIA

DEPARTMENT OF HEALTH

BUREAU FOR PUBLIC HEALTH

OFFICE OF ENVIRONMENTAL HEALTH SERVICES

Sherri A. Young, DO, MBA, FAAFP Cabinet Secretary Jason R. Frame OEHS Director

### MEMORANDUM

**TO:** Jason Billups, P.E.

DEP/Infrastructure Sewer Technical Review Committee

**FROM:** Patrick Murphy, P.E.

**Environmental Engineering Division** 

**DATE:** December 12, 2024

**SUBJECT:** City of Welch

IJDC Application- 2024S-2592

CSO Removal Project McDowell County

#### **Recommendation:**

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

## **Project Scope:**

This project is Phase I of the overall project that will involve the construction of a new stormwater management system in the downtown area of Welch, which includes a new stormwater collection system with required appurtenances such as inlets, outlets, manholes, and grit removal devices. New stormwater pipes will be installed on McDowell, Mercer, Hobart, Court, Federal, and Sudith Streets. Existing inlets shall be disconnected from the existing CSS, and, where applicable, be rerouted into the proposed stormwater system. The new stormwater collection system will daylight into the Tug Fork River. This also includes the design for the installation of a flow equalization tank and wet weather treatment train, with the construction planned for Phase II of this project.

The total project cost is \$5,642,000. (CDS Grant: \$750,000, WQMP 604(b) Grant: \$45,000, ARC Grant: \$544,000, AMLER Grant: \$1,500,000, IJDC Grant: \$53,000, CDBG-MIT Grant: \$250,000, and CWSRF Debt Forgiveness Loan: \$2,500,000)



Welch, City of 2024S-2592 December 12, 2024 Page 2

### **Need for the Project:**

Following an amendment to their Consent Order from the EPA, the remaining two CSOs (#002 and #005) are required to be capped by December 2027. In order to cap the remaining CSOs, the combined system in the downtown area must be separated to reduce peak flow. This project proposes to separate the stormwater from the sanitary sewer in the downtown area and implement distributed flow equalization/detention for stormwater management.

#### **Concerns:**

No concerns noted.

#### **Permits:**

A permit <u>may be</u> required from the WV Bureau for Public Health prior to construction. WV Department of Highways Permits
National Pollutant Discharge Elimination System (NPDES) Permits
United States Army Corps of Engineers Permit
Utility and Temporary Construction Easements
City of Welch Building Permits
City of Welch agreement for road and sidewalk repairs



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

#### **MEMORANDUM**

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

**FROM:** Michael King, P.E., DWWM

**DATE:** December 10, 2024

**SUBJECT:** City of Welch

Preliminary Application: IJDC No. 2024S-2592

CSO Removal

#### RECOMMENDATION

The IJDC Application and Preliminary Engineering Report prepared by Thompson & Litton has been reviewed and is technically feasible.

#### PROJECT DESCRIPTION

The City of Welch, located in McDowell County, West Virginia, owns and operates a combined sewer system (CSS) and wastewater treatment plant (WWTP) permitted under NPDES Permit No. WV0024589. The Welch WWTP serves approximately 856 customers and discharges into the Tug Fork. The existing system consists of approximately 89,000 linear feet of gravity sewer line, 8,200 feet of force mains, 326 manholes, 5 lift stations, and other necessary appurtenances, as well as a 1.12 MGD WWTP.

This is phase I of a multi-phase project that will involve the construction of a new stormwater management system in the downtown area of Welch, which includes a new stormwater collection system including inlets, outlets, manholes, and grit removal, in addition to other required appurtenances. New stormwater pipes will be installed on McDowell, Mercer, Hobart, Court, Federal, and Sudith Streets. Existing inlets will be disconnected from the existing CSS, and, where applicable, be rerouted into the proposed stormwater system, which will direct stormwater into the Tug Fork River.

Additionally, Phase I will include the design of a flow equalization tank and wet weather treatment train, with the construction planned for Phase II of this project.

The proposed total cost for this project is \$5,642,000, and the City intends to pursue a \$2,500,000 CWSRF Debt Forgiveness Loan, \$1,500,000 AMLER Grant, \$750,000 CDS Grant, \$544,000 ARC Grant, \$250,000 CDBG-MIT Grant, \$53,000 IJDC District 3 Grant, and \$45,000 WQMP 604(b) Grant. The proposed monthly rate for 3,400 gallons is \$38.25 (1.82% MHI).

#### **NEED FOR PROJECT**

The City of Welch is a CSO community that has been performing projects to eliminate CSOs since 2006. This process began following Civil Action (No. 77-1163BL) being taken against the City by the United States of America on behalf of the Environmental Protection Agency (EPA). They have eliminated 26 of their 28 CSO Outlets, with only two functioning CSOs remaining in service. Following an amendment to their Consent Order from the EPA, the remaining two CSOs (#002 and #005) are required to be capped by December 2027.

In order to cap CSO #005 without allowing flooding to occur during wet weather events, additional work must be performed to split the stormwater system from the sanitary system in the downtown area and implement distribution flow equalization/detention for stormwater management.

Additionally, the design cost proposed for Phase II will begin the process of eliminating CSO #002.

#### **DEFICIENCIES/COMMENTS**

- Using the Combined Application, the Total Engineering Fees appear to be above the ASCE curve.
- Existing Permits were not listed.
- This PER makes a selection for a Phase I and Phase II of this project, but this project will only include the construction for Phase I.
- The monthly rate for 3,400 gallons of \$38.25 appears to be a low rate for no rate increases to be included.

#### Preliminary Project Ratings:

Public Health Benefits: 10 Compliance with Standards: 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

Ms. Kathy Emery, P. E.
Office of Water Resources

Department of Environmental Protection 601 57<sup>th</sup> St.

Charleston, West Virginia 25304

Re: Public Service Commission Staff Review Comments

Application No. 2024S-2592

City of Welch - 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:

Χ	Forward the Application
	Return the Application
	_ Returned to the Applicant

Please advise if you have any questions.

Sincerely,

Jonathan M. Fowler, P.E. Engineering Division

onathan M Fowler

Enclosures JMF:vb

# PUBLIC SERVICE COMMISSION STAFF TECHNICAL REVIEW

DATE: December 12, 2024 PROJECT SPONSOR: CITY OF WELCH - SEWER **PROJECT SUMMARY**: Project provides sewer separation in the downtown Welch area near McDowell Street upstream of CSO #005. This project will allow for the removal of CSO #005 from the sanitary collection system in accordance with an EPA Consent Order. **PROPOSED FUNDING:** IJDC District 3 Grant \$ 53,000 Congressionally Directed Grant 750,000 WVDEP Grant 45,000 **ARC Grant** 544,000 AMLER Grant 1.500.000 CDBG MIT 250,000 **CWSRF** Grant 2,500,000 Total \$5,642,000 CURRENT/PROPOSED RATES: \$38.25 3,400 gallons \$45.00 4,000 gallons Application No. 2024S-2592 X forward to the Funding Committee. **RECOMMENDATION:** 

#### FINANCIAL: William Nelson

1. Current rates (\$38.25 for 3,400 gallons) are above the rates attributable to 1.25% (\$26.28), 1.5% (\$31.53), and 1.75% (\$36.79), of the Median Household Income (MHI), but below the rates attributable to 2.0% (\$42.05) of the MHI. Increasing current rates to 2.0% of the MHI would provide additional revenues of \$63,163.

return to the Applicant.

forward to the Consolidation Committee.

- 2. Using Scenario 1, the preferred funding package consisting of an IJDC District 3 Grant of \$53,000, a Congressionally Directed Spending Grant of \$750,000, a WVDEP Grant of \$45,000, an ARC Grant of \$544,000, a AMLER Grant of \$1,500,000, a CDBG MIT of \$250,000 and a CWSRF Grant of \$2,500,000, proposed rates (\$38.25 for 3,400 gallons) will provide a cash flow surplus of \$56,059 and debt service coverage of 140.21%.
- 3. Using the Scenario 2 alternate loan package of \$5,597,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), and committed funds consisting of a WVDEP Grant of \$45,000, proposed rates (\$57.91 for 3,400 gallons) will provide a cash flow surplus of \$17,689 and debt service coverage of 123.35%.

#### 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, 2024, and the applicant's Cash Flow Statement submitted with the application.
- C. Because proposed funding is based on all grant funding and no rate increase is needed for the project, the Applicant is requesting a waiver of the Rule 42 Exhibit requirement.
- D. 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.
- E. Senate Bill 234 (2015) required, pursuant to WV Code 24-2-4b (b), that municipally operated utilities shall consider a reasonable plant-inservice 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.

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. Calculations to support the revenue projections should also be provided.

**ENGINEERING:** Jonathan M. Fowler, P.E.

- 1. This project may not require a Certificate of Convenience and Necessity from the PSC. The project sponsor should consult with Staff pursuant to General Order 246 for such determination. If a Certificate is required, the utility 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) et seq.
- 2. Scope and Need: The proposed project consists of internal improvements in an existing sewer collection system to provide for the removal of combined sewer overflows (CSO) as required by a Consent Decree and Order issued by the US EPA. The instant project is the continuance of a long series of sewer system upgrades constructed by the City over the past three decades in pursuit of compliance with regulatory and legal requirements imposed on this sewer system. The current project provides for separation of storm and sanitary sewers and includes new stormwater systems on McDowell, Mercer, Hobart, Court, Federal, and Sudith Streets and the installation of a low-pressure sewer system with 38 grinder pump stations to serve existing customers in certain project areas.

Customer Density: Not calculated since there are no new customers added by this project.

Cost per Customer: \$6,500 - based upon a project cost of \$5,642,000 and 868 existing customers; this is moderately high but, is deemed acceptable through the use of 100% grant funding.

- 3. Project Feasibility: The project is technically feasible and will address known issues which are mandated to be corrected by legal orders.
- 4. Project Alternatives: An evaluation of practical alternatives was provided and Staff has no objection to the scope of work.
- 5. Consolidation: No consolidation opportunities are presented by this mandated internal upgrade project.
- 6. Inconsistencies: No significant issues were found.
- 7. Operation and Maintenance (O & M) Expenses: The application indicates an increase in O&M costs due primarily to the cost of operating 38 new grinder pump stations. This was included in the PER but was not in the Preliminary Application form. This should be corrected as the project moves forward. Further the City should take care to cover all increases in O&M costs in the process of preparing future municipal rate ordinances.
- 8. Engineering Agreement: The application includes information to determine presumptive compliance with <u>West Virginia Code</u> §§5G-1-1, <u>et seq.</u> Total technical services (engineering) costs for the project are \$952,200 which is equal to 23.2% of the construction cost of \$4,102,000 (including contingency).

#### CITY OF WELCH - SEWER CASH FLOW ANALYSIS YEAR ENDED: June 30, 2024 APPLICATION NO: 2024S-2592

# PREFERRED FUNDING PACKAGE SCENARIO 1

December 12, 2024	Cash Flow	Cash Flow		
	Going Level	Proforma		
	Per Application	Per Application	Staff	Per Staff
	Before Project	with Project	Adjustments	Analysis
	1	2	3	4
	\$	\$	\$	\$
AVAILABLE CASH				
Operating Revenues	636,619	636,619	(107,358)	(1) 529,261
Other Operating Revenue	21,248	21,248	-	21,248
SB 234 Annual Working Cash Collec	ctions		107,358	(2) 107,358
Interest Income & Other Misc.	848,689	848,689	, -	848,689
	,	,		,
Total Cash Available	1,506,556	1,506,556	-	1,506,556
OPERATING DEDUCTIONS				
Operating Expenses	858,862	858,862	-	858,862
Taxes	29,898	29,898	-	29,898
Total Cash Requirements Before				
Debt Service	888,760	888,760	-	888,760
Cash Available for Debt Servi (A)	617,796	617,796	-	617,796
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	440,616	440,616	-	440,616
Other Debt	-	-	-	-
Reserve Account @ 10%	-	-	-	-
Renewal & Replacement Fund (2.5%)	37,664	37,664	(23,901)	(3) 13,763
Total Debt Service Requirement	478,280	478,280	(23,901)	454,379
SB 234 Cash Working Capital	107,358	107,358	_	107,358
CD 201 Cach Working Capital	107,000	101,000		101,000
Remaining Cash	32,158	32,158	23,901	56,059
Percent Coverage (A) / (B	140.21%	140.21%		140.21%
Average rate for 3,400 gallons	\$ 38.25	\$ 38.25	\$ -	\$ 38.25
Average rate for 4,000 gallons	\$ 45.00	\$ 45.00	\$ -	\$ 45.00

CITY OF WELCH - SEWER CASH FLOW ANALYSIS YEAR ENDED: June 30, 2024 APPLICATION NO: 2024S-2592

replacement fund.

# Attachment A PREFERRED FUNDING PACKAGE SCENARIO 1

#### **Staff Adjustments**

	Adjustment Description			\$	Increase <decrease></decrease>
(1)	Operating Revenues		Per Staff Analysis Per Application with Project	529,261 636,619	(107,358)
	Adjust revenues in accordance wit	h PSC General Order 183.11.			
(2)	SB 234 Annual Working Cash Co	ollections	Per Staff Analysis Per Application with Project	107,358 -	107,358
	Account for SB 234 (2015) funding	pursuant to PSC General Orde	r 183.11.		
(3)	Renewal & Replacement Fund (2	2.5%)	Per Staff Analysis Per Application with Project	13,763 37,664	(23,901)
	Staff used 2.5% of the projection of	of "Operating & Other Revenues"	as the basis of the renewal &		

#### LOAN PACKAGE SCENARIO 2

CITY OF WELCH - SEWER CASH FLOW ANALYSIS YEAR ENDED: June 30, 2024 APPLICATION NO: 2024S-2592

December 12, 2024	Max Rate	Max Rate		
	Going Level Per Application	Proforma Per Application	Staff	Per Staff
	Before Project	with Project	Adjustments	Analysis
	1	2	3	4
	\$	\$	\$	\$
	<b>*</b>	<b>Y</b>	•	*
AVAILABLE CASH				
Operating Revenues	636,619	971,619	(107,358) (	(1) 864,261
Other Operating Revenue	21,248	21,248	- ' '	21,248
SB 234 Annual Working Cash Collections			107,358 (	(2) 107,358
Interest Income & Other Misc.	848,689	848,689	-	848,689
Total Cash Available	1,506,556	1,841,556	-	1,841,556
OPERATING DEDUCTIONS				
Operating Expenses	858,862	858,862	-	858,862
Taxes	29,898	29,898	-	29,898
T. 10 1 D 1 1 D 5				
Total Cash Requirements Before	202 722	000 700		000 700
Debt Service	888,760	888,760	-	888,760
Cash Available for Debt Servi (A)	617,796	952,796		952,796
Cash Available for Debt Servi (A)	617,796	952,790	-	952,790
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	440,616	767,082	5,348 (	(3) 772,430
Other Debt	-	707,002	-	-
Reserve Account @ 10%	_	_	33,181 (	(4) 33,181
Renewal & Replacement Fund (2.5%)	37,664	46,039	,	(5) 22,138
(2.2)	,	,	(==,==)	,
Total Debt Service Requirement	478,280	813,121	14,628	827,749
·				
SB 234 Cash Working Capital	107,358	107,358	-	107,358
Remaining Cash	32,158	32,317	(14,628)	17,689
Percent Coverage (A) / (B)	140.21%	124.21%		123.35%
	• • • • •			
Average rate for 3,400 gallons	\$ 38.25	\$ 57.91	\$ -	\$ 57.91
Average rate for 4,000 gallons	\$ 45.00	\$ 68.13	\$ -	\$ 68.13

CITY OF WELCH - SEWER CASH FLOW ANALYSIS YEAR ENDED: June 30, 2024 APPLICATION NO: 2024S-2592

replacement fund.

Attachment B LOAN PACKAGE SCENARIO 2

Increase

#### **Staff Adjustments**

			\$	<decrease></decrease>	
4	Adjustment Description				
(1)	Operating Revenues	Per Staff Analysis Per Application with Project	864,261 971,619	(107,358)	
	Adjust revenues in accordance with PSC General Order 183.11.				
(2)	SB 234 Annual Working Cash Collections	Per Staff Analysis Per Application with Project	107,358 -	107,358	
	Account for SB 234 (2015) funding pursuant to PSC General Order	183.11.			
(3)	Principal & Interest	Per Staff Analysis Per Application with Project	772,430 767,082	5,348	
	The difference in P&I is related to Staff's calculation of a loan of \$5,597,000 for 40 years (paid back over 38 years) at 5%.				
(4)	Reserve Account @ 10%	Per Staff Analysis Per Application with Project	33,181 -	33,181	
	Staff assumed a 10% reserve on the new debt.				
(5)	Renewal & Replacement Fund (2.5%)	Per Staff Analysis Per Application with Project	22,138 46,039	(23,901)	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal &				