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west virginia department of environmental protection

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Division of Water and Waste Management  
601 57<sup>th</sup> 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:** September 21, 2022

**Subject:** Shady Spring PSD  
Preliminary Application: IJDC No. 2022S-2187  
Grandview Wastewater Collection System Extension - Phase I

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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.

Promoting a healthy environment.

- 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/returned until technical comments have been resolved.
- d.  This project should be referred to the Consolidation Committee.

3. Other remarks:

This application should be returned until the applicant can address the issues in the DEP and PSC memos.

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

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:** September 12, 2022

**SUBJECT:** Shady Springs PSD  
Preliminary Application **Project No.: 2022S-2187**  
Phase I Grandview Grinder Pump Pressure Sewer System  
Raleigh County

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**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 extend sewer service to 147 new customers in the Phase I Grandview Area using a grinder pump pressure sewer system. The project will consist of the installation of one (1) duplex sewage pump station with emergency generator; 147 grinder pump stations; and approximately 21,200 LF of 1 ½", 19,400 LF of 2", 5,800 LF of 3", 3,800 of 4" and 11,700 LF of 6" force main.

The cost per customer is \$55,707. Total estimated project cost is \$8,189,000: (CWSRF Loan: \$1,668,631 @ 0.5% interest and 0.5% Adm fee for 30 years; Congressionally Directed: \$4,020,369; and Raleigh County Commission: \$1,000,000).

**NEED FOR PROJECT:**

The Preliminary Engineering Report the proposed area to be served is currently served by sewage package WWTPs, sewage treatment lagoons and individual septic tanks, many of which are failing.

**CONCERNS:**

None.

**PERMITS:**

A permit **will not be** required from the WV Bureau for Public Health, since CWSRF funding is proposed.



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

## MEMORANDUM

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

**FROM:** Dominique Madison E.I., DWWM

**DATE:** Sept 12, 2022

**SUBJECT:** Shady Spring PSD Sanitary Board  
Preliminary Application: IJDC No. 2022S-2187  
Shady Spring PSD Grandview Wastewater Collection System (Phase I)

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## RECOMMENDATION

The IJDC Application and Preliminary Engineering Report prepared by L.A. Gates for the above referenced project has been reviewed and is not technically feasible.

## PROJECT DESCRIPTION

The Shady Spring PSD Sanitary Board owns and operates a wastewater collection system and 2 wastewater treatment plants (WWTP), The Glen Morgan plant and Cool Ridge/Flat Top plant. The Sanitary Board wants to provide sewer service to approximately 147 customers in Raleigh County, WV Grandview area.

The proposed project will provide a sanitary sewer collection system service to the Grandview Area. The sanitary system improvements will consist of installing small diameter pressure sewer lines, force main, 1 duplex pump station, 147 grinders, 17 sewer flushing connections with cleanouts, and all other necessary appurtenances.

The proposed total cost for this project is \$8,189,000 and the Sanitary Board intends to pursue a \$4,020,369 grant in Congressionally Directed Spending, a \$1,500,000 grant through the United States Army Corps of Engineers, \$1,000,000 from Local/City/Council, and a \$1,668,631 grant from the Clean Water State Revolving Fund. The proposed monthly rate for 3,400 gallons is \$42.88.

## **NEED FOR PROJECT**

According to a letter from Beckley-Raleigh County Health Department, there is presently no public sewer in the Grandview Area. All residences depend on individual septic systems for wastewater disposal. The Grandview Community sits atop a ridge where there is shallow bedrock in most locations causing the septic system drain fields not to percolate. Over the years, the PSD has sought to eliminate all failing package wastewater treatment plants and lagoons within the PSD Boundary by pursuing funding to extend their central collection systems to the customers served by these failing treatment facilities.

## **DEFICIENCIES/COMMENTS**

- The PER will need to be developed into a facility plan that meets CWSRF requirements if CWSRF is used.
- Lands and ROWs required should be stated.
- User charge should show 3,400 gallon costs as well.
- Following the 2-year manufacturer's warranty, the customer is responsible for the repair cost of grinder pumps and control panels which is a huge concern.
- The project appears to define a scope which presents violations of PSC Rules and WV Code. A sewer utility shall be responsible for the cost of operation and maintenance of required pumps, including grinder systems, downstream of the point of service.

### Engineering Fees:

Estimated construction cost =	\$ 7,091,403.00
Consultant's design fee =	\$ 440,000.00
Consultant's total fee =	\$ 845,000.00
Design fee percentage =	6.2 %
Design fee per ASCE curve =	8.5 %
Total fee percentage =	11.9%
Total fee per ASCE curve =	19.0%

### Preliminary Project Ratings:

Public Health Benefits:	10
Compliance with Standards:	5

# 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

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. 2022S-2187  
Shady Spring 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

return 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 9, 2022

**PROJECT SPONSOR:** **SHADY SPRING PUBLIC SERVICE DISTRICT –  
(SEWER)**

**PROJECT SUMMARY:** The proposed plan (Phase 1) consists of constructing a grinder pump pressure sewer system to serve 147 potential customers in the Community of Grandview. The estimated cost of the project is \$8,189,000.

<b>PROPOSED FUNDING:</b> Local/City/Council Grant	\$1,000,000
USCOE	\$1,500,000
CWSRF Loan (0.5%, 0.5% AF, 30 yrs.)	\$1,668,631
Congressional Directed Spending Award	<u>\$4,020,369</u>
Total	\$8,189,000

**CURRENT RATES:**

<b>Schedule I</b>	\$34.71	3,400 gallons
	\$40.84	4,000 gallons
<b>Schedule II</b>	\$59.71	3,400 gallons
	\$65.84	4,000 gallons

**PROPOSED RATES:**

<b>Schedule I</b>	\$42.87	3,400 gallons
	\$50.44	4,000 gallons
<b>Schedule II</b>	\$67.87	3,400 gallons
	\$75.44	4,000 gallons

Application No. 2022S-2187

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

**FINANCIAL:** Kaitlyn J. Shamblin

1. Current average rates (\$47.21 for 3,400 gallons) are above the rates attributable to 1.25% (\$45.09) of the Median Household Income (MHI), but below the rates attributable to 1.5% (\$54.10), 1.75% (\$63.12), and 2% (\$72.14) of the MHI. Increasing current rates to 1.5%, 1.75%, and 2% of the MHI would provide additional revenues of \$417,053, \$962,575, and \$1,508,097, respectively

2. Using Scenario 1, the preferred funding package consisting of a Local/City/Council Grant of \$1,000,000, a USCOE Grant of \$1,500,000, a Congressionally Directed Spending Award of \$4,020,369, and a CWSRF Loan of \$1,668,631 at 0.5%, 0.5% Administrative Fee for 30 years, proposed average rates (\$55.37 for 3,400 gallons) will provide a cash flow surplus of \$8,396 and debt service coverage of 129.01%.
3. Using Scenario 2, alternate loan package of \$8,189,000 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed average rates (\$61.72 for 3,400 gallons) will provide a cash flow deficit of \$7,765 and debt service coverage of 124.65%. An additional 0.2% (for a total of \$61.84 for 3,400 gallons) increase in proposed rates will be required in order to provide a cash flow surplus of \$35 and debt service coverage of 125.06%.
4. Notes to Comments:
  - A. Staff's detailed adjustments are listed on Attachment A for Scenario 1 (Preferred Funding Package), Attachment B for Scenario 2 (Loan Package), and Attachment C for Scenario 3 (Alternate Funding Package).
  - B. Staff prepared the attached Cash Flow Analysis utilizing information from the Annual Report for the Fiscal Year Ended June 30, 2021, and the Applicant's Rule 42 Exhibit submitted with the application.
  - C. Staff notes its concern with the Applicant's Per Books rates (average rate of \$43.47 for 3,400 gallons) billed to customers for the months of July 2020 through December 2020. These are the Applicant's rates to be in effect from July 5, 2017 to June 29, 2019. The rates (average rate of \$39.60) that became effective June 29, 2019 via Case No. 19-0248-PSD-CN-42A) were to be the rates charged to customers for the months of July 2020 through December 2020. Based on information provided by the project sponsor's accountant the Applicant charged customers a higher rate than it was authorized to charge.
  - D. Staff strongly encourages the Applicant to ensure it is charging customers the correct rates at the correct time.
  - E. Staff notes the Applicant's Rule 42 Exhibit includes a going-level column, a pre-project proforma column, a post-project proforma column for the Glen Morgan Project (IJDC Project No. 2020S-1910), and a post-project proforma column for the Grandview Project (the project to which the application pertains). For purposes of this review, Staff's analysis is



focused on the proforma column for the Grandview Project.

- F. Staff notes the Applicant has reflected going-level adjustments, pre-project proforma adjustments, and proforma adjustments related to the Glen Morgan Project. For purposes of this review, Staff accepted the going-level and proforma adjustments to revenues, operation and maintenance (O&M) expenses, and debt service requirements.
- G. Staff has included a Scenario 3 analysis. Staff notes that the project sponsor is proposing a CWSRF Loan at 0.5%, 0.5% Administrative Fee for 30 years. Since proposed target average rates of \$55.37 (3,400 gallons) are greater than 1.5% (\$54.10) but less than 1.75% (\$63.12) of the MHI, the terms of this proposed CWSRF Loan would typically be 1.75%, .25% Administrative Fee for 30 years, for the preferred funding package. If the preferred funding package is adjusted for this change, proposed average target rates (\$55.37 for 3,400 gallons) would provide a cash flow deficit of \$2,493 and debt service coverage of 128.16%. An additional 0.11% (for a total of \$55.43 for 3,400 gallons) increase in proposed average rates will be required in order to provide a cash flow surplus of \$42 and debt service coverage of 128.33%.
- H. 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.

**ENGINEERING:** Brandon Crace

1. This project will require a Certificate of Convenience and Necessity from the PSC. The project sponsor should consult with Commission Staff pursuant to the requirements of General Order No. 246 for such determination. Should a Certificate be required, the 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) et seq. Staff notes that an affirmative determination of need for the project must be established in a Certificate filing at the PSC.
2. Scope: Shady Spring Public Service District (District, PSD) is proposing to extend sewer service to 147 potential customers in the Grandview area. The proposed

collection method includes: 147 grinder pumps, approximately 21,200 LF of 1.5-inch pressure line, 19,400 LF of 2-inch pressure line, 5,800 LF of 3-inch pressure line, 3,800 LF of 4-inch pressure line, 11,700 LF of force main, 1 duplex pump station (with backup generator), 735 LF of sewer laterals, and all necessary valves, connections, casings, cleanouts, and flushing connections. The IJDC Application provides an estimated construction cost is \$7,091,000 (includes 9.99% construction contingency), and the estimated total project cost is \$8,189,000 (includes 2.14% project contingency).

Need: Project will correct a public health issue due to failing septic systems and on-site sewage treatment facilities.

Customer Density: Based upon the estimated main line quantities (61,900 LF), the proposed line extension is approximately 11.7 miles. This is approximately 12.5 customers per mile which is low for a sewer collection system.

Cost per Customer: Based upon the estimated total project cost of \$8,189,000, and 147 potential customers, the cost per customer is approximately \$55,700. This is moderately high but, not unacceptable in today's project development environment. Staff further notes that the proposed funding consists of more than 70% grant which reduces the impact of the high cost per customer.

3. Project Feasibility: The project appears to define a scope which presents violations of PSC Rules and WV Code. Therefore, it is recommended that this project be returned to address the deficiencies/inconsistencies noted in Section 6 of this review.
4. Project Alternatives: The PER includes three (3) alternates: #1 – as described in section 2. (above), #2 – grinder pump pressure sewer with conventional gravity sewer combination system, and #3 – no action. The PER indicates that Alternate #1 was selected due to being the most cost-effective solution, exhibiting the lowest project cost and lowest total present worth. Staff has no objection to the alternative selected.
5. Consolidation: There are no consolidation opportunities presented by this project.
6. Deficiencies/Inconsistencies:
  - 6.1. The IJDC Application does not accurately reflect the Engineer's estimate; in that the Application does not depict the construction contingency (\$75,400) shown on the Engineer's Opinion of Probable Costs – Alternate #1. However, the construction contingency is included in the total construction cost.
  - 6.2. Public Meeting Minutes (included in with the PER) from July 21, 2021 raise several concerns:
    - 6.2.1. Customers will be responsible for providing a powerline from the control

panel to the breaker and paying power costs associated with the customer's grinder pump,

6.2.2. Following the 2-year manufacturer's warranty, the customer is responsible for the repair cost of grinder pumps,

6.2.3. Following a warranty period, the customer is responsible for repair costs associated with control panels,

The three comments above indicate an apparent conflict with PSC Sewer Rules (15CSR05) and common utility practice. A sewer utility shall be responsible for the cost of operation and maintenance of required pumps, including grinder systems, downstream of the point of service, **This matter must be resolved prior to moving this project forward.**

7. Operation and Maintenance (O&M) Expenses: The PER indicates that the estimated additional O & M expenses is proposed to increase by \$42,152; however, the PER additionally states that the power cost for the grinder pumps is to be paid directly by each customer. Therefore, the proposed increase is \$36,860. Further, the O&M costs seem to rely upon out-of-date information and should be updated. A more thorough analysis of O&M costs will be accomplished during the processing of any Certificate application which may arise in conjunction with this project.
8. Engineering Agreement: The application includes information to determine apparent compliance with West Virginia Code §5G-1-1, et seq. Total technical services (engineering) costs for the project are \$845,000, which is equal to 11.92% of the construction cost of \$7,091,000 (includes 9.99% construction contingency).

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

SHADY SPRING PUBLIC SERVICE DISTRICT  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2021  
 APPLICATION NO: 2022S-2187  
 September 9, 2022

**PREFERRED FUNDING PACKAGE  
 SCENARIO 1**

	Rule 42 Going Level Per Application Before Project	Rule 42 Grandview Post-Project Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
<b>AVAILABLE CASH</b>				
Operating Revenues	2,686,144	3,319,535	-	3,319,535
Other Operating Revenue	94,241	94,241	-	94,241
SB 234 Annual Working Cash Collections	184,506	196,696	-	196,696
Interest Income & Other Misc.	1,669	1,669	-	1,669
<b>Total Cash Available</b>	<b>2,966,560</b>	<b>3,612,141</b>	<b>-</b>	<b>3,612,141</b>
<b>OPERATING DEDUCTIONS</b>				
Operating Expenses	1,476,048	1,573,566	129 (1)	1,573,695
Taxes	54,156	56,451	-	56,451
<b>Total Cash Requirements Before Debt Service</b>	<b>1,530,204</b>	<b>1,630,017</b>	<b>129</b>	<b>1,630,146</b>
Cash Available for Debt Service (A)	1,436,356	1,982,124	(129)	1,981,995
<b>DEBT SERVICE REQUIREMENTS</b>				
Principal & Interest (B)	788,688	1,536,182	127 (2)	1,536,309
Other Debt	80,487	80,487	-	80,487
Reserve Account @ 10%	-	74,749	14 (3)	74,763
Renewal & Replacement Fund (2.5%)	74,164	90,304	(4,960) (4)	85,344
<b>Total Debt Service Requirement</b>	<b>943,339</b>	<b>1,781,722</b>	<b>(4,820)</b>	<b>1,776,902</b>
SB 234 Cash Working Capital	184,506	196,696	-	196,696
<b>Remaining Cash</b>	<b>308,511</b>	<b>3,706</b>	<b>4,691</b>	<b>8,396</b>
Percent Coverage (A) / (B)	182.12%	129.03%		129.01%
Average rate for 3,400 gallons	\$ 47.21	\$ 55.37	\$ -	\$ 55.37
Average rate for 4,000 gallons	\$ 53.34	\$ 62.94	\$ -	\$ 62.94
<b>Schedule 1</b>				
Rate for 3,400 gallons	\$ 34.71	\$ 42.87	\$ -	\$ 42.87
Rate for 4,000 gallons	\$ 40.84	\$ 50.44	\$ -	\$ 50.44
<b>Schedule 2</b>				
Rate for 3,400 gallons	\$ 59.71	\$ 67.87	\$ -	\$ 67.87
Rate for 4,000 gallons	\$ 65.84	\$ 75.44	\$ -	\$ 75.44

SHADY SPRING PUBLIC SERVICE DISTRICT  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2021  
 APPLICATION NO: 2022S-2187

Attachment A  
 PREFERRED FUNDING PACKAGE  
 SCENARIO 1

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	<b>Operating Expenses</b>	Per Staff Analysis	1,573,695	129
		Per Application with Project	1,573,566	
	The difference in Operating Expenses is due to Staff's calculation of a 0.50% administrative fee for 30 years.			
(2)	<b>Principal &amp; Interest</b>	Per Staff Analysis	1,536,309	127
		Per Application with Project	1,536,182	
	The difference in P&I is related to Staff's calculation of a loan of \$1,668,631 for 30 years at 0.50% interest, 0.50% administrative fee.			
(3)	<b>Reserve Account @ 10%</b>	Per Staff Analysis	74,763	14
		Per Application with Project	74,749	
	Staff assumed a 10% reserve on the new debt.			
(4)	<b>Renewal &amp; Replacement Fund (2.5%)</b>	Per Staff Analysis	85,344	(4,960)
		Per Application with Project	90,304	
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			

SHADY SPRING PUBLIC SERVICE DISTRICT  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2021  
 APPLICATION NO: 2022S-2187  
 September 9, 2022

LOAN PACKAGE  
 SCENARIO 2

	Rule 42 Going Level Per Application Before Project	Rule 42 Grandview Post-Project Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
<b>AVAILABLE CASH</b>				
Operating Revenues	2,686,144	3,782,814	8,000 (1)	3,790,814
Other Operating Revenue	94,241	94,241	-	94,241
SB 234 Annual Working Cash Collections	184,506	196,696	-	196,696
Interest Income & Other Misc.	1,669	1,669	-	1,669
<b>Total Cash Available</b>	<b>2,966,560</b>	<b>4,075,420</b>	<b>8,000</b>	<b>4,083,420</b>
<b>OPERATING DEDUCTIONS</b>				
Operating Expenses	1,476,048	1,573,566	-	1,573,566
Taxes	54,156	56,451	-	56,451
<b>Total Cash Requirements Before Debt Service</b>	<b>1,530,204</b>	<b>1,630,017</b>	<b>-</b>	<b>1,630,017</b>
Cash Available for Debt Service (A)	1,436,356	2,445,403	8,000	2,453,403
<b>DEBT SERVICE REQUIREMENTS</b>				
Principal & Interest (B)	788,688	1,950,118	11,634 (2)	1,961,752
Other Debt	80,487	80,487	-	80,487
Reserve Account @ 10%	-	116,143	1,164 (3)	117,307
Renewal & Replacement Fund (2.5%)	74,164	101,885	(4,759) (4)	97,126
<b>Total Debt Service Requirement</b>	<b>943,339</b>	<b>2,248,633</b>	<b>8,038</b>	<b>2,256,672</b>
SB 234 Cash Working Capital	184,506	196,696	-	196,696
<b>Remaining Cash</b>	<b>308,511</b>	<b>74</b>	<b>(38)</b>	<b>35</b>
Percent Coverage (A) / (B)	182.12%	125.40%		125.06%
Average rate for 3,400 gallons	\$ 47.21	\$ 61.72	\$ 0.12	\$ 61.84
Average rate for 4,000 gallons	\$ 53.34	\$ 70.41	\$ 0.14	\$ 70.55
<b>Schedule 1</b>				
Rate for 3,400 gallons	\$ 34.71	\$ 49.22	\$ 0.10	\$ 49.32
Rate for 4,000 gallons	\$ 40.84	\$ 57.91	\$ 0.12	\$ 58.03
<b>Schedule 2</b>				
Rate for 3,400 gallons	\$ 59.71	\$ 74.22	\$ 0.15	\$ 74.37
Rate for 4,000 gallons	\$ 65.84	\$ 82.91	\$ 0.17	\$ 83.08

SHADY SPRING PUBLIC SERVICE DISTRICT  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2021  
 APPLICATION NO: 2022S-2187

Attachment B  
 LOAN PACKAGE  
 SCENARIO 2

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1) <b>Operating Revenues</b>	Per Staff Analysis	3,790,814	8,000
	Per Application with Project	3,782,814	
Staff projected that an additional \$8,000 in revenues would be needed to achieve 115% debt service coverage and a positive cash flow surplus.			
(2) <b>Principal &amp; Interest</b>	Per Staff Analysis	1,961,752	11,634
	Per Application with Project	1,950,118	
The difference in P&I is related to Staff's calculation of a loan of \$8,189,000 for 40 years (paid back over 38 years) at 5% interest.			
(3) <b>Reserve Account @ 10%</b>	Per Staff Analysis	117,307	1,164
	Per Application with Project	116,143	
Staff assumed a 10% reserve on the new debt.			
(4) <b>Renewal &amp; Replacement Fund (2.5%)</b>	Per Staff Analysis	97,126	(4,759)
	Per Application with Project	101,885	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			

SHADY SPRING PUBLIC SERVICE DISTRICT  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2021  
 APPLICATION NO: 2022S-2187  
 September 9, 2022

**ALTERNATE FUNDING PACKAGE  
 SCENARIO 3**

	Rule 42 Going Level Per Application Before Project	Rule 42 Grandview Post-Project Proforma Per Application with Project	Staff Adjustments		Per Staff Analysis
	1	2	3		4
	\$	\$	\$		\$
<b><u>AVAILABLE CASH</u></b>					
Operating Revenues	2,686,144	3,319,535	2,600	(1)	3,322,135
Other Operating Revenue	94,241	94,241	-		94,241
SB 234 Annual Working Cash Collections	184,506	196,696	-		196,696
Interest Income & Other Misc.	1,669	1,669	-		1,669
<b>Total Cash Available</b>	<b>2,966,560</b>	<b>3,612,141</b>	<b>2,600</b>		<b>3,614,741</b>
<b><u>OPERATING DEDUCTIONS</u></b>					
Operating Expenses	1,476,048	1,573,566	(2,107)	(2)	1,571,459
Taxes	54,156	56,451	-		56,451
<b>Total Cash Requirements Before Debt Service</b>	<b>1,530,204</b>	<b>1,630,017</b>	<b>(2,107)</b>		<b>1,627,910</b>
<b>Cash Available for Debt Service (A)</b>	<b>1,436,356</b>	<b>1,982,124</b>	<b>4,707</b>		<b>1,986,831</b>
<b><u>DEBT SERVICE REQUIREMENTS</u></b>					
Principal & Interest (B)	788,688	1,536,182	12,059	(3)	1,548,241
Other Debt	80,487	80,487	-		80,487
Reserve Account @ 10%	-	74,749	1,207	(4)	75,956
Renewal & Replacement Fund (2.5%)	74,164	90,304	(4,895)	(5)	85,409
<b>Total Debt Service Requirement</b>	<b>943,339</b>	<b>1,781,722</b>	<b>8,370</b>		<b>1,790,093</b>
<b>SB 234 Cash Working Capital</b>	<b>184,506</b>	<b>196,696</b>	<b>-</b>		<b>196,696</b>
<b>Remaining Cash</b>	<b>308,511</b>	<b>3,706</b>	<b>(3,663)</b>		<b>42</b>
<b>Percent Coverage (A) / (B)</b>	<b>182.12%</b>	<b>129.03%</b>			<b>128.33%</b>
Average rate for 3,400 gallons	\$ 47.21	\$ 55.37	\$ 0.06		\$ 55.43
Average rate for 4,000 gallons	\$ 53.34	\$ 62.94	\$ 0.06		\$ 63.00
<b>Schedule 1</b>					
Rate for 3,400 gallons	\$ 34.71	\$ 42.87	\$ 0.04		\$ 42.91
Rate for 4,000 gallons	\$ 40.84	\$ 50.44	\$ 0.05		\$ 50.49
<b>Schedule 2</b>					
Rate for 3,400 gallons	\$ 59.71	\$ 67.87	\$ 0.07		\$ 67.94
Rate for 4,000 gallons	\$ 65.84	\$ 75.44	\$ 0.08		\$ 75.52



SHADY SPRING PUBLIC SERVICE DISTRICT  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2021  
 APPLICATION NO: 2022S-2187

Attachment C  
 ALTERNATE FUNDING PACKAGE  
 SCENARIO 3

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1) <b>Operating Revenues</b>	Per Staff Analysis	3,322,135	2,600
	Per Application with Project	3,319,535	
Staff projected that an additional \$2,600 in revenues would be needed to achieve 115% debt service coverage and a positive cash flow surplus.			
(2) <b>Operating Expenses</b>	Per Staff Analysis	1,571,459	(2,107)
	Per Application with Project	1,573,566	
The difference in Operating Expenses is due to Staff's calculation of a 0.25% administrative fee for 30 years.			
(3) <b>Principal &amp; Interest</b>	Per Staff Analysis	1,548,241	12,059
	Per Application with Project	1,536,182	
The difference in P&I is related to Staff's calculation of a loan of \$1,668,631 for 30 years at 1.75% interest, 0.25% administrative fee.			
(4) <b>Reserve Account @ 10%</b>	Per Staff Analysis	75,956	1,207
	Per Application with Project	74,749	
Staff assumed a 10% reserve on the new debt.			
(5) <b>Renewal &amp; Replacement Fund (2.5%)</b>	Per Staff Analysis	85,409	(4,895)
	Per Application with Project	90,304	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.			