



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
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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 22, 2025

Subject: Shady Spring PSD
IJDC Application - 2025S-2664
Cool Ridge Community Sewer Project

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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:

The proposed project should be tabled until the next funding committee meeting to allow time for the consultant to address the technical comments.

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: Shady Spring PSD
IJDC Application- **2025S-2664**
Community of Cool Ridge Extension Study
Raleigh County

Recommendation:

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

Project Scope:

The purpose of this study is to analyze the proposed project area for the potential of wastewater service to be provided by the PSD's Cool Ridge/Flat Top Wastewater System. This study will look at the interest of the residents for sewer service, the components necessary to serve the area, and the associated costs of the project and those effects on the operation of the PSD.

The total project cost is **\$1,664,050.00**

Need for the Project:

The residents in the project area all rely on septic systems for wastewater disposal. The area soils and depth to bedrock have caused ongoing issues with slow absorption of gray water from the tank by the drainfields. During rain events or high water usage, many residents have complained about large areas of wet lawns and gray water flowing across the surface to local ditches and streams. The areas studied in this report have had a slow steady growth over time and will likely continue that trend. Public wastewater collection would minimize the containments from entering neighboring streams which ultimately flow to a major public water source for Raleigh County in White Oak operated by the Beckley Water Company.



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Concerns: No concerns were noted.

Permits: None for the study.



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MEMORANDUM

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

FROM: Dominique Madison, E.I., DWWM

DATE: April 4, 2025

SUBJECT: Shady Spring PSD
IJDC Application - 2025S-2664
Cool Ridge Community Sewer Project

RECOMMENDATION

The IJDC Application and Preliminary Engineering Report (PER) prepared by The Thrasher Group, for the above referenced project has been reviewed and should be tabled to the next funding committee meeting.

PROJECT DESCRIPTION

The Shady Spring Public Service District (PSD) is located in the south-eastern end of Raleigh County. The PSD operates two separate wastewater collection and treatment systems. The initial system known as the Core System was constructed in 1984. It consists of a conventional gravity/grinder pump pressure sewer collection system and a 1.2 million gallon per day (MGD) extended aeration-type wastewater treatment facility at Glen Morgan. The second collection and treatment system is the Cool Ridge-Flat Top Wastewater System. It includes a grinder pump pressure collection system and a 0.21 MGD sequencing batch reactor (SBR) treatment facility constructed in 2007 at Ghent.

The proposed project will utilize the nearby Cool Ridge-Flat Top Wastewater Treatment Plant and connect an additional 48 customers of Cool Ridge residences. This project will place a grinder station for each connection. From this point the wastewater will be forced into a new pressure line that will be tied into the existing system along Route 19.

The proposed total cost for this project is \$1,664,050.00. Shady Spring PSD intends to pursue a \$1,500,000 Corp. of Engineers Grant, and a \$164,050 Raleigh County Commission Grant. The monthly rate for 3,400 gallons is \$62.40 (1.73% MHI).

NEED FOR PROJECT

The proposed project area currently does not have access to public wastewater treatment. The residents in the project area rely on septic systems for wastewater disposal. The area's soil and depth to bedrock have caused ongoing issues with slow absorption of gray water from the tank by the drainfields. During rain events or high water usage, many residents have complained about large areas of wet lawns and gray water flowing across the surface to local ditches and streams. The areas studied have had slow steady growth over time and will likely continue that trend. Public wastewater collection would minimize the containments from entering neighboring streams.

DEFICIENCIES/COMMENTS

- Using the Combined Application, the Design, and Total Engineering Fees appear to be within the ASCE Curves.
- The PER should include further documentation to show the need for the project.
- Need to include the current MHI with the current rates in the PER.
- Should include Peak flow and Current flow to show if there is enough capacity for the system to handle the additional flow.
- PER only included one alternative.
- Some costs appear to be missing in the estimate (laterals).
- The proposed O&M increase cost should be further explained in the PER.
- Include Right-of-Ways obtained and needed for this project.
- The PER will need to be developed into a facilities plan that meets CWSRF requirements if CWSRF is used.

Preliminary Project Ratings:

Public Health Benefits: 15
Compliance with Standards: 5