



STATE OF WEST VIRGINIA
DEPARTMENT OF HEALTH AND HUMAN RESOURCES
BUREAU FOR PUBLIC HEALTH
OFFICE OF ENVIRONMENTAL HEALTH SERVICES

Earl Ray Tomblin
Governor

Karen L. Bowling
Cabinet Secretary

MEMORANDUM

TO: Chris Jarrett, Funding Committee
WV Infrastructure and Jobs Development Council

FROM: Robert W. DeCrease, P. E. *RWD*
Water Technical Review Committee

DATE: March 24, 2015

RE: Mingo County PSD
IJDC Preliminary Application Number: **2014W-1550** (Formerly 2009W-1128)
Beech Creek Extension
Mingo County

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.
- 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:

The PSC cash flow analysis indicates the proposed user rate is **\$42.02 for 3,400 gallons (1.53% MHI)** and will provide an annual **cash flow surplus** of **\$38,144** and debt service coverage of **119.56%** using the preferred funding package.

BJS:

pc: OEHS St. Albans DO
To be distributed at the Funding Committee Meeting



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MEMORANDUM

TO: Robert W. DeCrease, P.E., Manager
Infrastructure & Capacity Development

FROM: Benjamin J. Savage, P.E. *Benjamin J. Savage*
Infrastructure & Capacity Development

DATE: March 24, 2015

RE: Mingo County PSD
IJDC Preliminary Application Number: **2014W-1550** (Formerly 2009W-1128)
Beech Creek Extension
Mingo County

RECOMMENDATION:

This preliminary application appears technically feasible and is recommended to be forwarded to the Funding Committee.

PROJECT SCOPE:

This proposed project will extend water service to 252 new customers in the Beech Creek area of Mingo County. This project will include the installation of approximately 14.03 miles of 8-inch and smaller waterline, 31 fire hydrant assemblies, and all other necessary valves and appurtenances. The original preliminary application was to extend water service to 220 customers by installing approximately *10 miles* of 8-inch or smaller waterline.

The cost per customer is **\$19,040**. The estimated total project cost is **\$4,798,000** [USDA RUS Loan: **\$1,798,000** (3% for 38 yrs.); USDA RUS Grant: **\$1,500,000**; SCBG: **\$1,500,000**].

The October 2014 total project cost was \$4,798,000 [IJDC Loan: **\$1,649,000** (0% for 30 yrs.); IJDC Grant: **\$1,649,000**; SCBG: **\$1,500,000**].

The 2009 total project cost was \$3,459,000 [RUS Grant: \$2,669,000; RUS Loan: \$790,000 (2.75% for 38 yrs)].

NEED FOR THE PROJECT:

This project will provide residents in the area with a reliable source of water. Currently residents depend on private water sources and wells. There is no sewer service in this area so septic systems are primarily used which can contaminate underground water in the area according to the Preliminary Engineering Report.

CONCERNS:

1. This project is dependent on the completion of the Ben Creek project that will not be starting construction until early 2015.
2. The unaccounted water loss was reported in the Preliminary Engineering Report to be as high as 50%. Following from discussion with the BPH District Office, it was determined that the PSD does not account for the losses due to fire department use or flushing purposes. If that is indeed the case, then the actual water loss may be reasonable if it were calculated more accurately.

PERMITS:

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

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

ENGINEERING FEES:

The engineering design fees for this project are “**below**” the curve for average complexity and very complex for both new construction and modified construction costs as referenced in the American Society of Civil Engineers manual of practice. The engineering total fees for this project are “**above the curve**” for average complexity for new and modified construction costs as referenced in the American Society of Civil Engineers manual of practice. An engineering fee waiver should be requested

ASSET MANAGEMENT PLAN AND ANNUAL MAINTENANCE AUDIT:

On the IJDC application the applicant has marked “Yes” to having a formal asset management plan in place and has marked “Yes” to having completed the annual maintenance audit for the current year.

CAPACITY DEVELOPMENT PROGRAM ASSESSMENT:

The preliminary application indicates the system **has had** a capacity development analysis (CDA) within the last five (5) years. Our records show that a CDA was completed in March 2010.

RANKING:

- Public Health Benefit: 5
- Compliance: 0

*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

March 12, 2015

Mr. Robert W. DeCrease, P.E.
Office of Environmental Health Services
350 Capitol Street, Room 313
Charleston, West Virginia 25301-3713

Re: Public Service Commission Staff Review Comments
Application No. 2014W-1550 (Revised)
Mingo County PSD
Infrastructure Preliminary Application

Dear Mr. DeCrease:

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,

A handwritten signature in black ink, appearing to read "Jonathan M. Fowler".

Jonathan M. Fowler, P.E.
Engineering Division

JMF:vt

**PUBLIC SERVICE COMMISSION STAFF
TECHNICAL REVIEW**

DATE: March 12, 2015

PROJECT SPONSOR: MINGO COUNTY PUBLIC SERVICE DISTRICT

PROJECT SUMMARY: The proposed Beech Creek Water Main Extension Project is being implemented by the Mingo County Public Service District (MCPSD) to provide water and fire protection service to approximately 252 residences in the Magnolia Magisterial District of Mingo County, West Virginia

SCBG	\$1,500,000
USDA Grant	1,500,000
USDA Loan 3%, 38 years	<u>1,798,000</u>
	\$4,798,000

CURRENT RATES: \$38.08 3,400 Gallons

PROPOSED RATES: \$42.02 3,400 Gallons

Application No. 2014W-1550 Revised

RECOMMENDATION: X forward to the Funding Committee
_____ forward to the Consolidation Committee
_____ return to the Applicant

Staff notes that this project was previously reviewed and that the current review is for a revised funding package. The scope and total cost of the project appears to be unchanged. Any relevant comments from the prior review are incorporated by reference.

FINANCIAL: Versie Hill

1. Current rates (\$38.08 for 3,400 gallons) are below the rates attributable to 1.5% (\$41.13), 1.75% (\$47.98) and 2% (\$54.84) of the Median Household Income (MHI). Increasing current rates to 1.5%, 1.75%, and 2% of the MHI would provide additional revenues of \$197,581, \$641,990 and \$1,086,399 respectively.
2. Using the revised Preferred Funding Package consisting of a SCBG of \$1,500,000, an USDA Grant of \$1,500,000, and an USDA Loan of \$1,798,000 @3% for 38 year, proposed rates (\$42.02 for 3,400 gallons) will provide a cash flow surplus of \$38,144 and debt service coverage of 119.56%.

3. Notes to Comments:

- A. Staff prepared the attached Cash Flow Analysis utilizing information from the Annual Report for the Fiscal Year Ended June 30, 2014, and the applicant's revised Rule 42 Exhibit submitted by the accountant. This application was reviewed in July 2009, (2009W-1128) and again in October 2014 (2014W-1550).
- B. Based on information from the Rule 42 Exhibit, the proposed rates, (\$42.02 for 3,400 gallon) are treated as the going level tariff rate. On February 11, 2015, the District filed a notice of intent to file a general rate case. Thus, the proposed rates associated with this project may need to be adjusted depending upon the outcome of the general rate filing, once filed.
- C. The Cash Flow Analysis included in the application for the Preferred Funding Scenario included an administrative fee proforma adjustment of \$8,679 that was not referenced or further identified in the Rule 42 Exhibit. Staff did not include an administrative fee calculation for analysis of the USDA Loan included in the Preferred Funding. Staff used the information from the Rule 42 Exhibit (Statement A, Schedule 2) and then adjusted to correct errors.
- D. The project sponsor will need to resolve discrepancies between the operations and maintenance expenses on Statement A (Schedule 2) and the operation and maintenance/administrative fees listed on the Draft Rule 42 cash flow analysis prior to filing for a Certificate of Convenience and Necessity.

ENGINEERING: Jonathan M. Fowler, P.E.

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) et seq.

The proposed \$4.798 million waterline extension project will extend water service to approximately 252 potential, rural households who presently lack reliable water supplies.

Customer Density and Cost per Customer: Based upon a total of 74,100 feet of new mains (14.03 miles) and 252 potential new customers, the density is calculated at about 18 customers per mile which is marginal but, acceptable. The cost per potential customer is about \$19,040 which is marginal but, acceptable.

2. Technical Feasibility: Based upon review of the Preliminary Engineering Report this project is viewed as a straight-forward water line extension and is considered technically feasible. The WV DHHR, BuPH has primacy for technical review of such projects and we will defer to that agency for any further technical comments.
3. Project Alternatives: Alternatives to provide water service in rural areas are limited and have been appropriately considered.
4. Consolidation: There are no apparent consolidation issues with this project.
5. Inconsistencies: No significant inconsistencies were noted.
6. Operation and Maintenance Expenses: The applicant provided a preliminary estimate of O&M costs which is opined to be adequate at this stage of the project. A more refined analysis of the O&M costs would be made during our review of any Certificate filing which may potentially result from this application.
7. Engineering Agreement: The application provided sufficient documentation to determine apparent compliance with West Virginia Code §5G.

According to the preliminary project budget, basic engineering services (design) are estimated at about 4.3% of construction costs and total engineering fees are approximately 17.1% of construction costs.

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

MINGO COUNTY PUBLIC SERVICE DISTRICT
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2014
APPLICATION NO: 2014W-1550 Revised
March 12, 2015

**PREFERRED 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	2,957,685	3,077,527	-	3,077,527
Other Operating Revenue	93,339	93,339	-	93,339
Interest Income & Other Miscell.	468	468	-	468
Total Cash Available	3,051,492	3,171,334	-	3,171,334
OPERATING DEDUCTIONS				
Operating Expenses	1,686,480	1,714,075	334 (1)	1,714,409
Taxes	55,348	55,773	-	55,773
Total Cash Requirements Before Debt Service	1,741,828	1,769,848	334	1,770,182
Cash Available for Debt Service (A)	1,309,664	1,401,486	(334)	1,401,152
DEBT SERVICE REQUIREMENTS				
Principal & Interest (B)	1,100,877	1,171,310	582 (2)	1,171,892
Principal & Interest - Bank Loan	-	-	-	-
Reserve Account @ 10%	103,850	111,786	58 (3)	111,844
Renewal & Replacement Fund (2.5%)	76,287	79,283	(11) (4)	79,272
Total Debt Service Requirement	1,281,014	1,362,379	629	1,363,007
Remaining Cash	28,650	39,107	(963)	38,144
Percent Coverage (A) / (B)	118.97%	119.65%		119.56%
Average rate for 3,400 gallons	\$ 38.08	\$ 42.02	\$ -	\$ 42.02

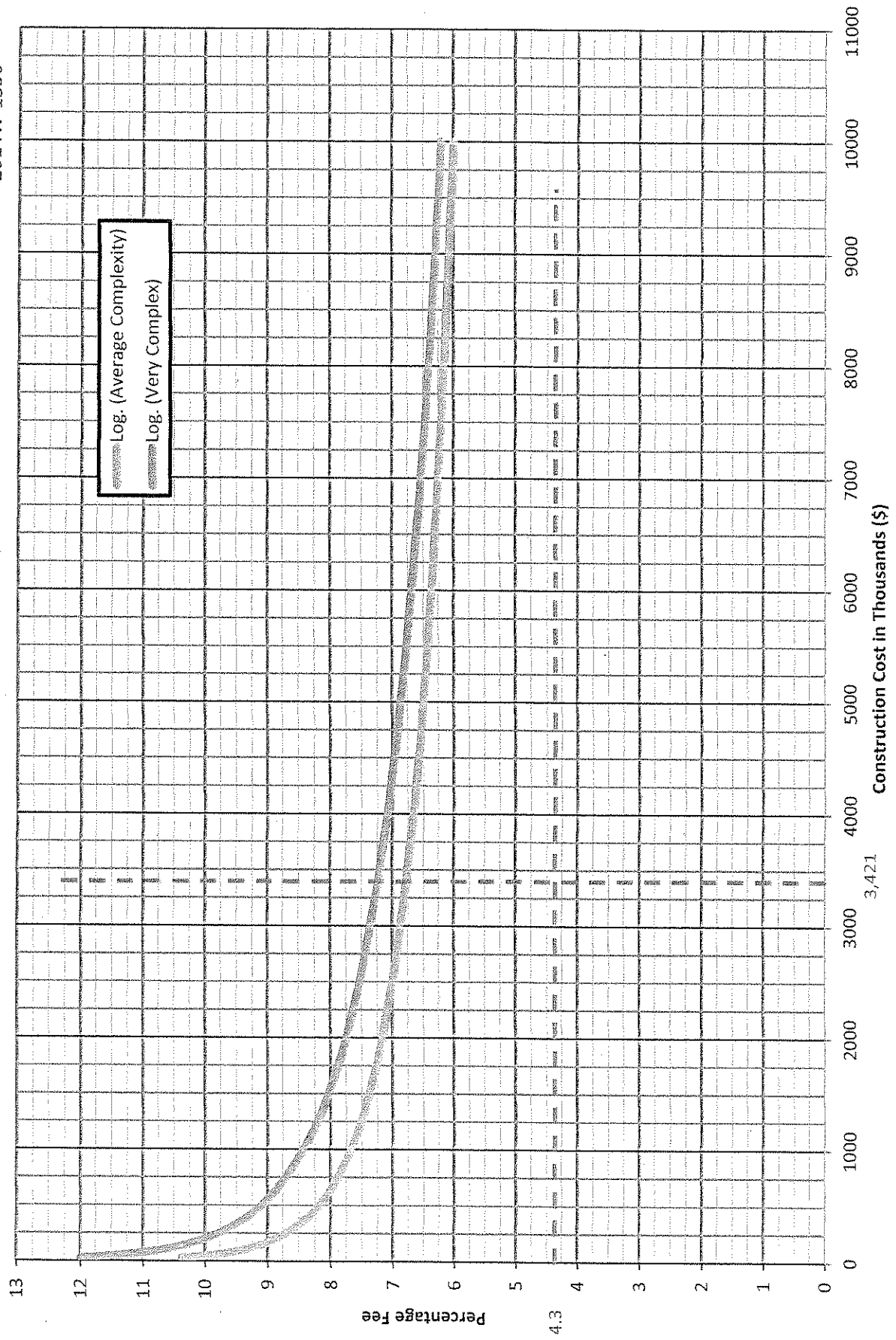
MINGO COUNTY PUBLIC SERVICE DISTRICT
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2014
APPLICATION NO: 2014W-1550 Revised

Attachment A
PREFERRED PACKAGE
SCENARIO 1

Staff Adjustments

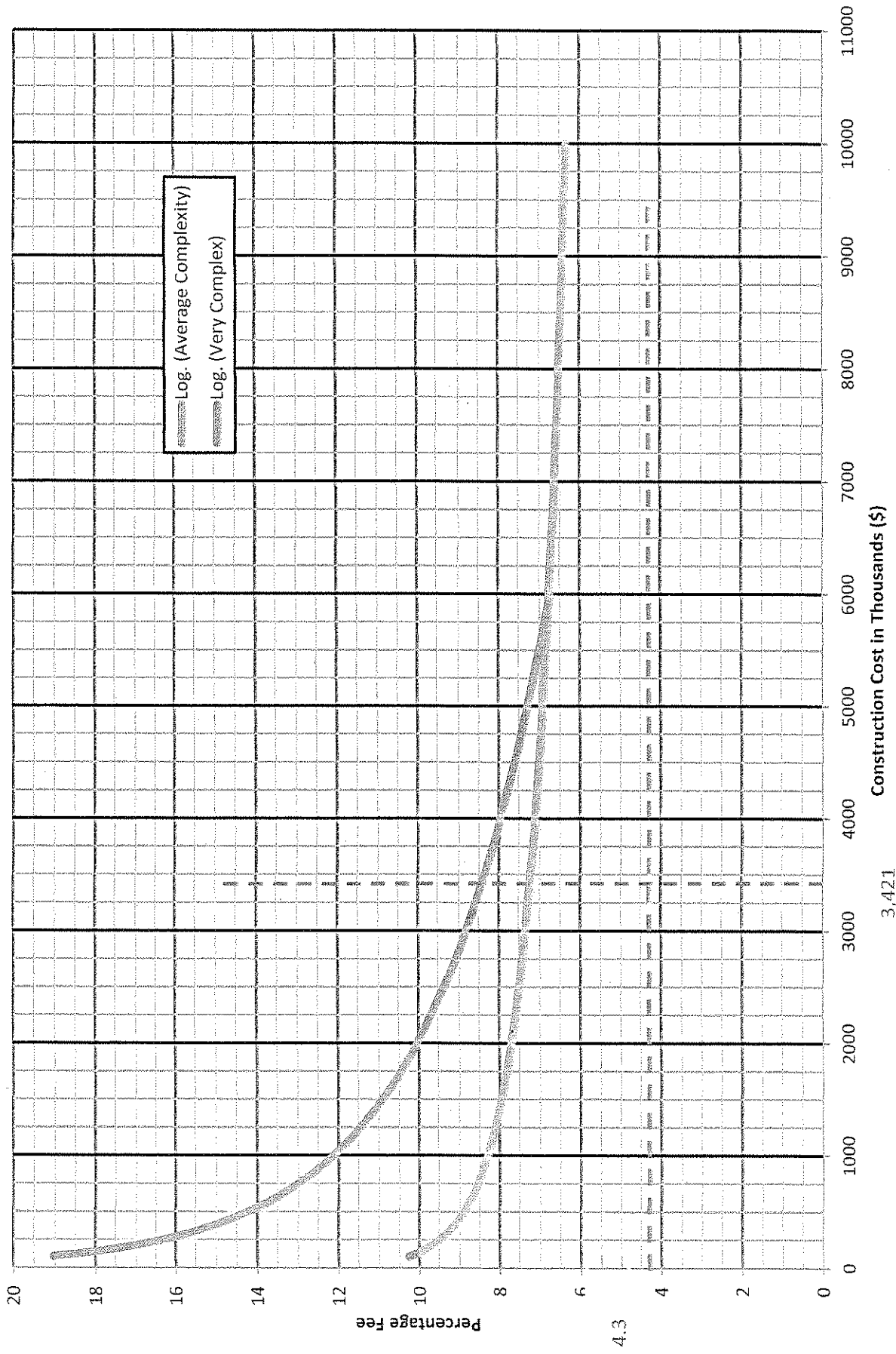
<u>Adjustment Description</u>		\$	Increase <Decrease>
(1) Operating Expenses	Per Staff Analysis	1,714,409	334
	Per Application with Project	1,714,075	
Staff used the information from the Rule 42 Exhibit and then adjusted to correct errors on Statement A, Schedule 2.			
(2) Principal & Interest	Per Staff Analysis	1,171,892	582
	Per Application with Project	1,171,310	
Difference is related to the principal & interest calculated for the proposed USDA loan of \$1,798,000 @ 3% for 38 years and the principal & interest amount listed in the Cash Flow Analysis for the same loan. The principal & interest amount listed in the Rule 42 (Statement C-2) Exhibit shows different debt service when compared to Statement C-4. Staff's comparison were made with Statement C-4.			
(3) Reserve Account @ 10%	Per Staff Analysis	111,844	58
	Per Application with Project	111,786	
Staff assumed a 10% reserve on the new debt.			
(4) Renewal & Replacement Fund (2.5%)	Per Staff Analysis	79,272	(11)
	Per Application with Project	79,283	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal and replacement fund.			

Graph 1. Design Fee vs. Construction Cost for New Construction Mingo County PSD
2014W-1550



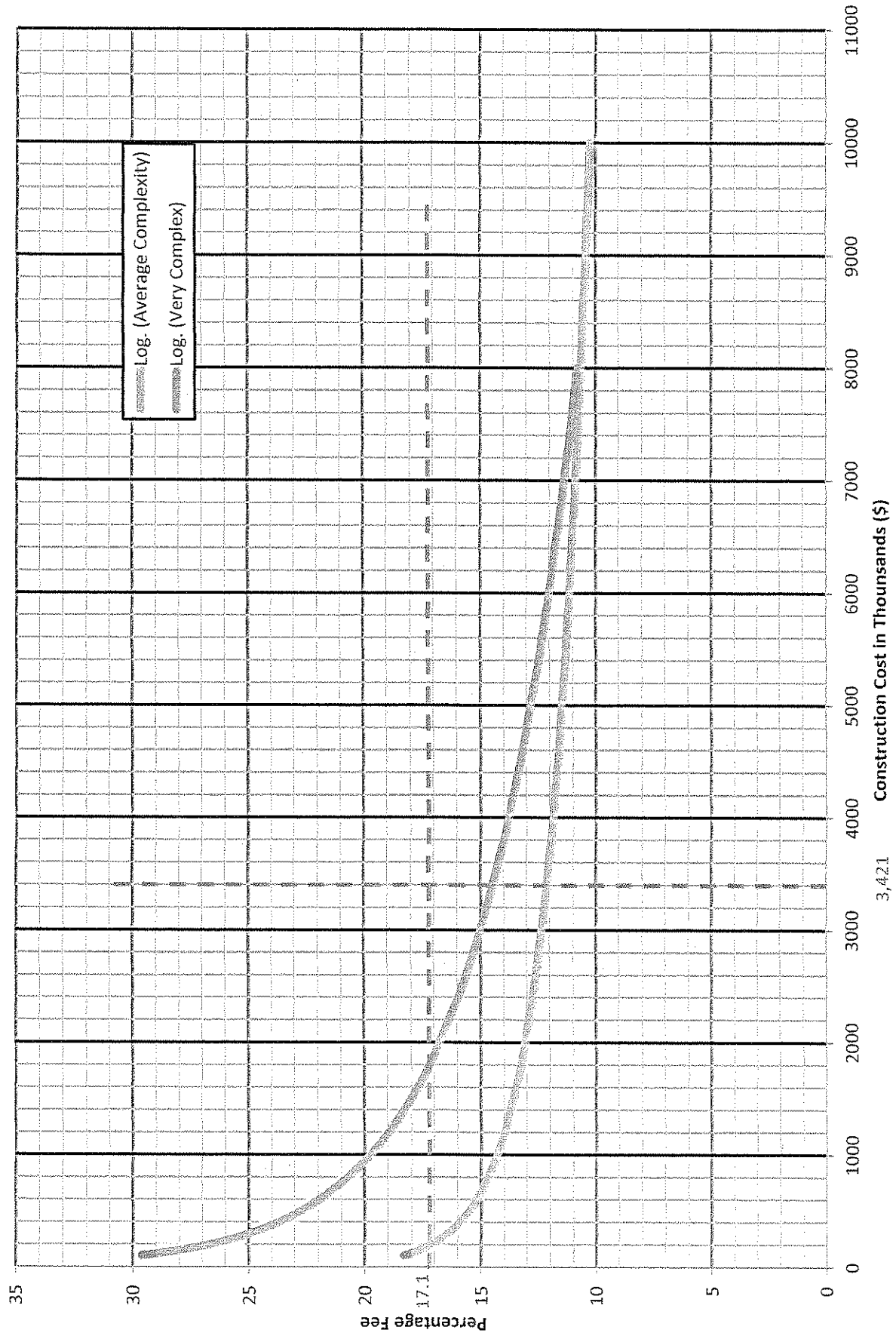
Graph 2. Design Fee vs. Construction Costs for Modifications

Mingo County PSD
2014W-1550



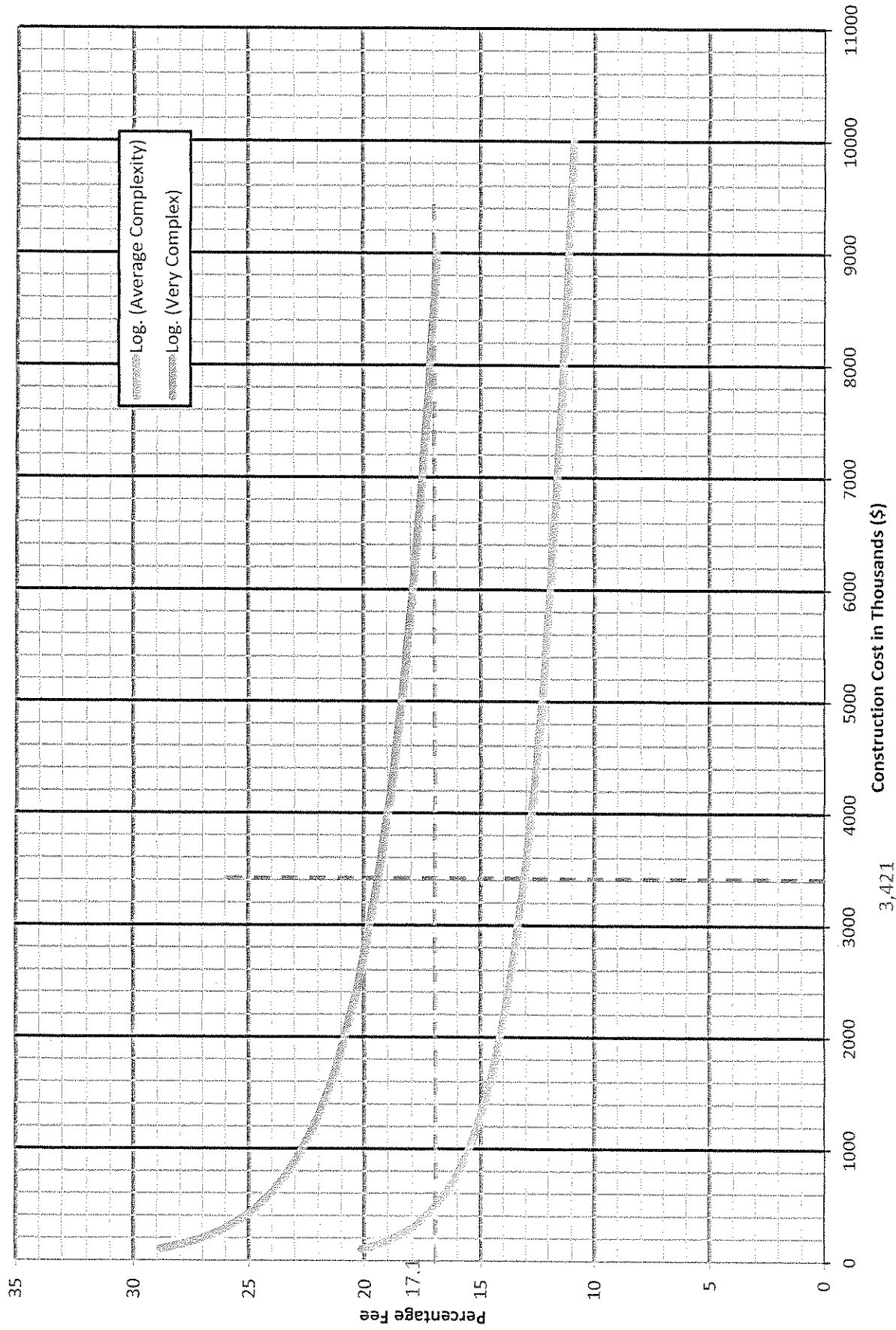
Total Fee vs. Construction Cost for New Construction

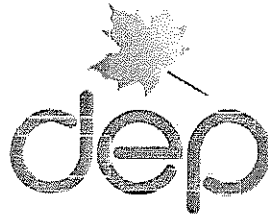
Mingo County PSD
2014W-1550



Total Fee vs. Construction Cost for Modifications

Mingo County PSD
2014W-1550





west virginia department of environmental protection

Office of Abandoned Mine Lands & Reclamation
601 57th Street SE
Charleston, WV 25304
Telephone: (304) 926-0485
Fax: (304) 926-0458

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

MEMORANDUM

To: Mr. Robert W. DeCrease, P.E., Manager
Infrastructure and Capacity Development

From: Jonathan Holbert, P.E., Waterline Coordinator^{JH}
Office of Abandoned Mine Lands & Reclamation

Date: October 21, 2014

Subject: Mingo County Public Service District
IJDC Preliminary Application: 2014W-1550

This application would most likely not be eligible for AML funds because there is an abundance of known post law permitted mine sites in this project area.



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street SE
Charleston, WV 25304-2345
Telephone Number: (304) 926-0495
Fax Number: (304) 926-0496

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

MEMORANDUM

MEMO TO: Benjamin J. Savage, P. E.
Office of Environmental Health Services
Bureau for Public Health

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

DATE: September 22, 2014

SUBJECT: Infrastructure Preliminary Application for the Mingo County PSD (2014W-1550):
Beech Creek Water Main Extension in Mingo County, WV.

We have reviewed the above referenced project application information. The preliminary application indicates that the proposed project will provide quality and dependable potable water and fire protection service to approximately 252 residences in the Magnolia Magisterial District of Mingo County. The Beech Creek water main extension would service residents along County Route (CR) 8/10, CR 8/8, CR 8/7, CR 8/6, CR 8/5 and sections of CR 8 and CR 8/4. The majority of the area's residents currently utilize wells, spring, and cisterns as their source for drinking water. The project will be supplied via Mingo County PSD's Naugatuck Water Treatment Plant. The Mingo County PSD would like to revise the original project due to construction of the King Coal Highway, an increase in the project area, and a change in the funding requested. The Mingo County PSD Water Treatment Plant discharges its backwash to its site, which is covered under WV/NPDES Site Registration No. WVG640119 and expires July 18, 2018.

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 January 5, 2013. 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 Connie Anderson at (304)-926-0499, extension 1073.

Promoting a healthy environment.

Benjamin J. Savage, P. E.

September 24, 2014

Page 2

Further, the preliminary application indicates the need for stream crossings. As such, it is assumed that the appropriate organizations will be contacted, as necessary.

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 Doug Casto (304) 553-7972, should additional information be required.

JMP:dac

cc: Katheryn Emery

OEHS District Review for Infrastructure Council Water Projects

Water System:	Mingo PSD	IJDC Number:	2014W-4550
Project Description:	Beech Creek Water Main Extension	Review by:	R. C. Snyder
County:	Mingo	Date:	10-10-2014

<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	
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?				
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			X	



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MEMORANDUM

TO: Bob DeCrease, P.E., Manager
Infrastructure and Capacity Development Unit

FROM: *me*
Michelle Cochran, R.S., Manager
Capacity Development Program

DATE: September 22, 2014

RE: Mingo Co PSD, PWSID # WV3303029
IJDC Application No.: 2014W-1550
Mingo County

The Mingo Co PSD preliminary infrastructure application indicates that they are not seeking DWTRF monies. The system marked the question regarding having an asset management plan as yes. The question about having had a capacity development assessment (CDA) within the last 5 years was marked as yes.

In a research of the CDA files, I find that the last CDA done with this system was in March 2010.

Additional information that may be helpful to the IJDC in their decisions regarding approval of funding requests for the system relates to the system's overall compliance. The system does not appear on the July 2014 quarter of the EPA's Compliance Tracking tool (ETT) indicating that the system does not have any outstanding violations that have not been resolved.

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