



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: Flatwoods – Canoe Run PSD
IJDC Preliminary Application Number: **2015W-1563**
Exchange Road Waterline Extension Phase I
Braxton 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 **\$42.20 (1.57% MHI)** and will provide an annual cash flow *surplus* of **\$6,246** and debt service coverage of **119.69%** using the preferred funding package.

RWD:bjs

pc: OEHS Philippi DO
To be distributed at the Funding Committee Meeting



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Cabinet Secretary

MEMORANDUM

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

FROM: Stephanie D. Hickerson, P.E. *Steph D Hickerson*
Infrastructure & Capacity Development

DATE: March 24, 2015

SUBJECT: IJDC Application- 2015W-1563
Flatwoods-Canoe Run PSD – Exchange Road Waterline Extension Phase I
Braxton County

RECOMMENDATION:

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

PROJECT SCOPE:

This project will extend water service to 59 new customers along County Routes 19/22, 19/26, and 19/16 in Braxton County. The project will also provide additional fire flow service to the Flatwoods Factory Outlet and support future development in the I-79/Flatwoods interchange area. The project will consist of approximately 28,760 LF (5.4 mi) of 12" and smaller water line, one (1) new water storage tank, modifications to the existing pressure reducing station, fifty nine (59) water meters and all necessary valves and appurtenances.

The preliminary engineering report states that the plant operates 24/7 and produces on average approximately 638,600 gpd. The total estimated demand for existing and proposed projects would be approximately 660,500 gpd. This is less than half of the existing capacity of the 1.5 MGD water treatment plant.

The cost per customer is \$53,162. The estimated total project cost is **\$3,136,600.00** [RUS Loan: \$636,600 (3%, 40 years); RUS Grant: \$1,000,000; ARC Grant: \$1,367,000; Private Grant: \$133,000].

NEED FOR THE PROJECT:

The preliminary engineering report indicates that there is no reliable source of potable water in the areas that this project proposes to expand. Residents in the area complain of contaminated wells. A study was conducted in 2012 that showed 65% of the 41 wells tested contained coliform bacteria which indicates widespread surface water contamination. This project would enable the residents to have a clean and reliable source of water.

CONCERNS:

No concerns at this time.

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

A permit for stream crossings may be required.

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

ENGINEERING FEES:

The engineering design fees for this project are “**below**” the curve for average complexity for both new construction and modified construction costs as referenced in the American Society of Civil Engineers manual of practice. The total fees for this project are “**between**” the average complexity and the very complex curves for both new construction and modified construction costs as referenced in the American Society of Civil Engineers manual of practice. The sponsor should make a written request for a waiver approval from the WVIJDC for the total fees.

ASSET MANAGEMENT PLAN AND ANNUAL MAINTANENCE AUDIT:

The IJDC application states that Flatwoods-Canoe Run PSD does have a formal asset management plan in place and has not completed an annual maintenance audit for the current year.

CAPACITY DEVELOPMENT:

The IJDC application states that the Flatwoods-Canoe Run PSD has not completed a Capacity Development Analysis (CDA) within the last 5 years. Bureau for Public Health Records indicates that a CDA has never been conducted with the system.

Additionally during the capacity development program review, it was discovered that the system appears on the January 2015 quarter of the EPA’s Compliance tracking tool (ETT) with a score of 5 indicating that the system has some outstanding violations that have not been addressed. Please refer to the memo from Michelle Cochran for additional information.

RANKING:

- Public Health Benefit: 5
- Compliance: 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

March 16, 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. 2015W-1563
Flatwoods-Canoe Run 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:

 X 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 16, 2015

PROJECT SPONSOR: FLATWOODS-CANOE RUN PUBLIC SERVICE
DISTRICT

PROJECT SUMMARY: The project is to extend water to 59 new residents as well as provide additional fire flow for the Flatwoods Factory Outlet and support future development in the I-79 Flatwoods interchange area.

ARC Grant	\$1,367,000
Private Grant	133,000
RUS Grant	1,000,000
RUS Loan 3%, 40 years	<u>636,600</u>
	\$3,136,600

CURRENT/PROPOSED

RATES: \$42.20 3,400 Gallons

Application No. 2015W-1563

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

FINANCIAL: Versie Hill

1. Current rates (\$42.20 for 3,400 gallons) are above the rates attributable to 1.5% (\$40.20) of the Median Household Income (MHI); but below the rates attributable to 1.75% (\$46.90) and 2% (\$53.60) of the MHI. Increasing current rates to 1.75%, and 2% of the MHI would provide additional revenues of \$164,168 and \$398,325 respectively.
2. Using Scenario 1, the Preferred Funding Package consisting of an ARC Grant of \$1,367,000, a Private Grant of \$133,000, a RUS Grant of \$1,000,000, and a RUS Loan of \$636,000 at 3% for 40 years (paid back over 38 years), proposed rates (\$42.20 for 3,400 gallons) will provide a cash flow surplus of \$6,246 and debt service coverage of 119.69%.
3. Using Scenario 2, Alternate Loan Package of \$3,003,600 (in uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed rates (\$46.33 for 3,400 gallons) will provide a cash flow deficit of \$5,949 and debt service coverage of

116.51%. An additional 0.41% (for a total of \$46.52 for 3,400 gallons) increase in proposed rates would be required to provide a cash flow surplus of \$47 and debt service coverage of 117.37%.

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, 2014, and the applicant's Rule 42 submitted with the application.
- C. The Debt Service Reserve listed in the Cash Flow Analysis for the Max Rate was the same level as the Debt Service Reserve listed in the Cash Flow Analysis for the Preferred Funding Rate. Staff's calculation was based on the difference in debt levels between the Preferred Funding Scenario and the Loan Scenario.

ENGINEERING: Jonathan 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 \$3,136,600 waterline extension project will extend water service to approximately 59 potential, rural households who presently lack reliable water supplies and will enhance service and fire flows to the area near the Flatwoods Interchange of I-79.

Customer Density and Cost per Customer: Based upon a total of 28,760 feet of new mains (5.45 miles) and 59 potential new customers, the density is calculated at about 11 customers per mile and the cost per potential customer is about \$53,162. Both metrics are viewed as being marginally 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 4.5% of construction costs and total engineering fees are approximately 14.9% of construction costs.

Preliminary Project Ranking		
O & M Capabilities		
Performance Measures:	2	Pt.
Asset Management:	1	Pt.
Environmental Management:	1	Pt.
Readiness to Proceed:	0	Pt.
Cost Effectiveness:	1	Pt.

FLATWOODS-CANOE RUN PSD
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2014
APPLICATION NO: 2015W-1563
March 16, 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
	\$	\$	\$	\$
<u>AVAILABLE CASH</u>				
Operating Revenues	1,571,394	1,598,341	-	1,598,341
Other Operating Revenue	29,466	29,812	-	29,812
Interest Income & Other Miscell.	227	227	-	227
Total Cash Available	1,601,087	1,628,380	-	1,628,380
<u>OPERATING DEDUCTIONS</u>				
Operating Expenses	907,960	915,919	-	915,919
Taxes	34,505	34,592	-	34,592
Total Cash Requirements Before Debt Service	942,465	950,511	-	950,511
Cash Available for Debt Service (A)	658,622	677,869	-	677,869
<u>DEBT SERVICE REQUIREMENTS</u>				
Principal & Interest (B)	538,072	566,169	206 (1)	566,375
Principal & Interest - Bank Loan	45,801	45,801		45,801
Reserve Account @ 10%	15,913	18,723	20 (2)	18,743
Renewal & Replacement Fund (2.5%)	45,098	45,098	(4,394) (3)	40,704
Total Debt Service Requirement	644,884	675,791	(4,168)	671,623
Remaining Cash	13,738	2,078	4,168	6,246
Percent Coverage (A) / (B)	122.40%	119.73%		119.69%
Average rate for 3,400 gallons	\$ 42.20	\$ 42.20	\$ -	\$ 42.20

FLATWOODS-CANOE RUN PSD
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2014
APPLICATION NO: 2015W-1563

Attachment A
PREFERRED PACKAGE
SCENARIO I

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1) Principal & Interest	Per Staff Analysis	612,176	206
	Per Application with Project	611,970	
Difference is related to Staff's calculation of the proposed RUS loan of \$636,600 @ 3% for 40 years (paid back over 38 years) versus the principal & interest listed in the Rule 42 for the same loan.			
(2) Reserve Account @ 10%	Per Staff Analysis	18,743	20
	Per Application with Project	18,723	
Staff assumed a 10% reserve on the new debt.			
(3) Renewal & Replacement Fund (2.5%)	Per Staff Analysis	40,704	(4,394)
	Per Application with Project	45,098	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal and replacement fund.			

FLATWOODS-CANOE RUN PSD
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2014
APPLICATION NO: 2015W-1563
March 16, 2015

LOAN PACKAGE
SCENARIO 2

	Rule 42 Going Level Per Application Before Project	Rule 42 Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
<u>AVAILABLE CASH</u>				
Operating Revenues	1,571,394	1,754,126	6,150 (1)	1,760,276
Other Operating Revenue	29,466	31,810	-	31,810
Interest Income & Other Miscell.	227	227	-	227
Total Cash Available	1,601,087	1,786,163	6,150	1,792,313
<u>OPERATING DEDUCTIONS</u>				
Operating Expenses	907,960	916,708	-	916,708
Taxes	34,505	35,097	-	35,097
Total Cash Requirements Before Debt Service	942,465	951,805	-	951,805
Cash Available for Debt Service (A)	658,622	834,358	6,150	840,508
<u>DEBT SERVICE REQUIREMENTS</u>				
Principal & Interest (B)	538,072	722,613	(6,475) (2)	716,138
Principal & Interest - Bank Loan	45,801	45,801		45,801
Reserve Account @ 10%	15,913	18,723	14,997 (3)	33,720
Renewal & Replacement Fund (2.5%)	45,098	45,098	(296) (4)	44,802
Total Debt Service Requirement	644,884	832,235	8,226	840,461
Remaining Cash	13,738	2,123	(2,076)	47
Percent Coverage (A) / (B)	122.40%	115.46%		117.37%
Average rate for 3,400 gallons	\$ 42.20	\$ 46.33	\$ 0.19	\$ 46.52

FLATWOODS-CANOE RUN PSD
CASH FLOW ANALYSIS
YEAR ENDED: June 30, 2014
APPLICATION NO: 2015W-1563

Attachment B
LOAN PACKAGE
SCENARIO 2

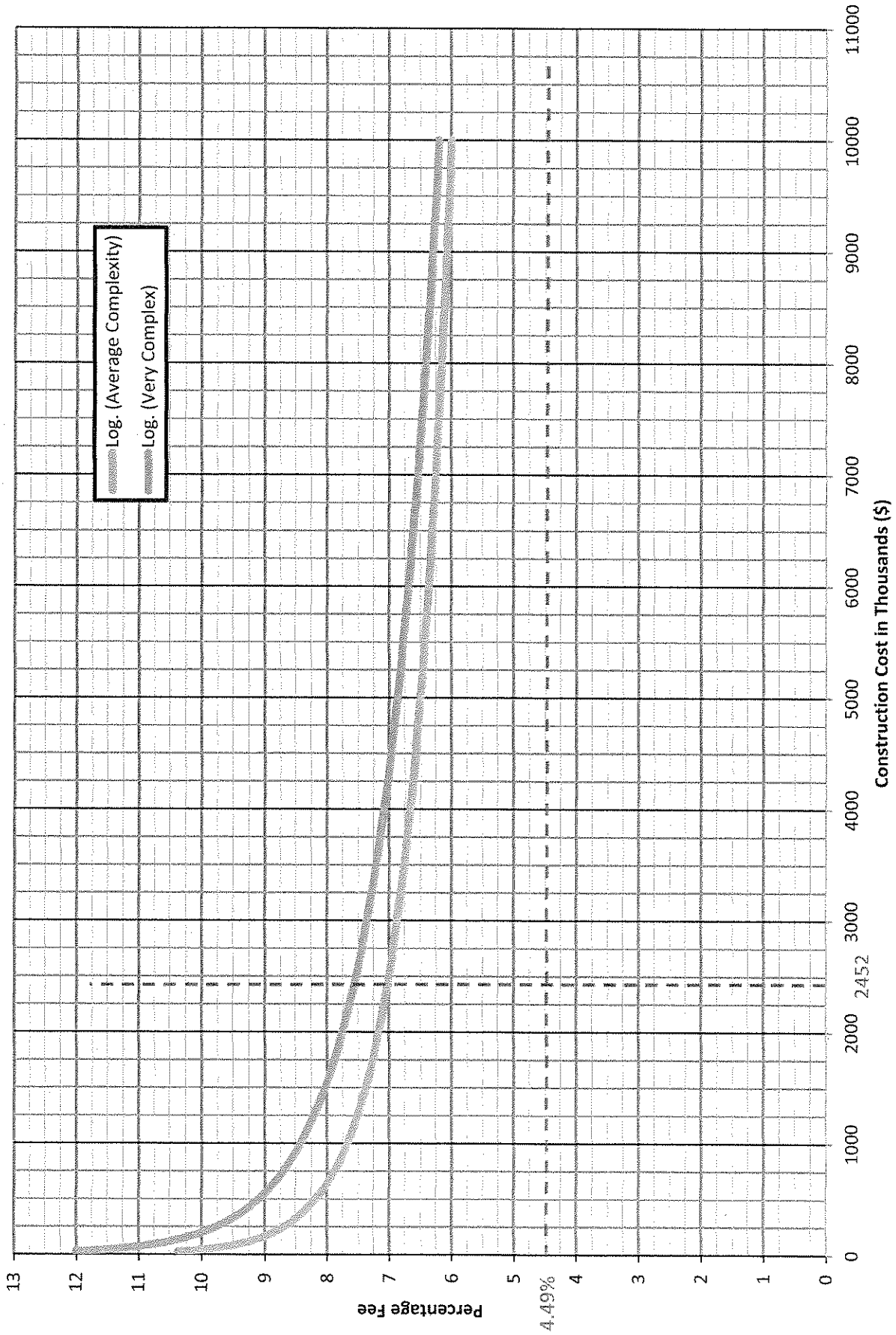
Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1) Operating Revenues	Per Staff Analysis	1,760,276	6,150
	Per Application with Project	1,754,126	
Based on proposed rates of \$46.33 for 3,400 gallons, an additional \$6,150 in revenues would be required to provide a cash flow surplus of \$47 and debt service coverage of 117.37%.			
(2) Principal & Interest	Per Staff Analysis	761,939	(6,475)
	Per Application with Project	768,414	
Difference is related to Staff's calculation of a typical loan of \$3,003,600 @ 5% for 40 years (paid back over 38 years) versus the principal & interest listed in the Rule 42 for the same loan.			
(3) Reserve Account @ 10%	Per Staff Analysis	33,720	14,997
	Per Application with Project	18,723	
Staff assumed a 10% reserve on the new debt. The reserve included in the Cash Flow Analysis included in the application for the max rate was unchanged from the calculated reserve included in the application for the preferred rate which included a difference proposed debt and terms.			
(4) Renewal & Replacement Fund (2.5%)	Per Staff Analysis	44,802	(296)
	Per Application with Project	45,098	

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

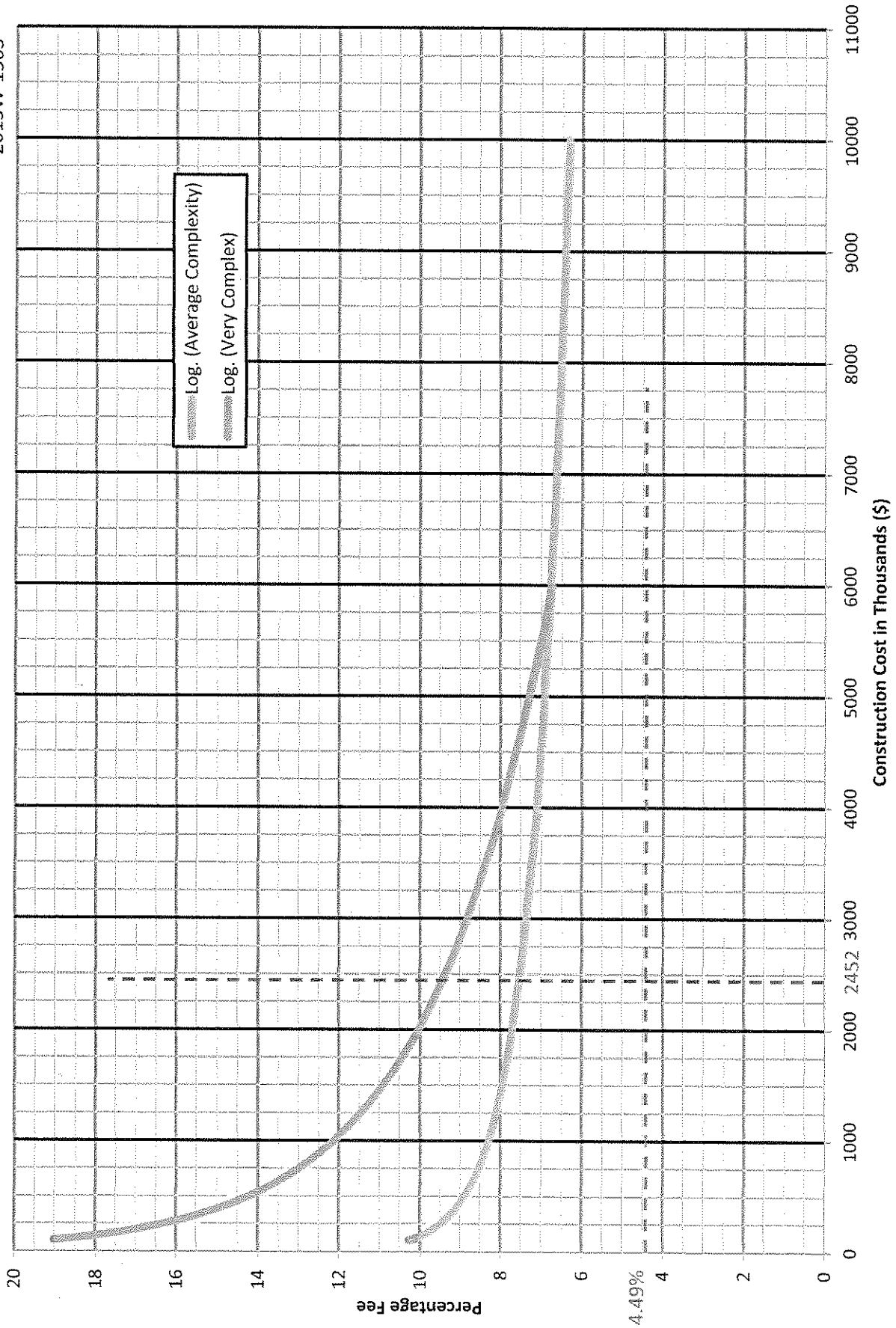
FCR PSD
2015W-1563



Graph 2. Design Fee vs. Construction Costs for Modifications

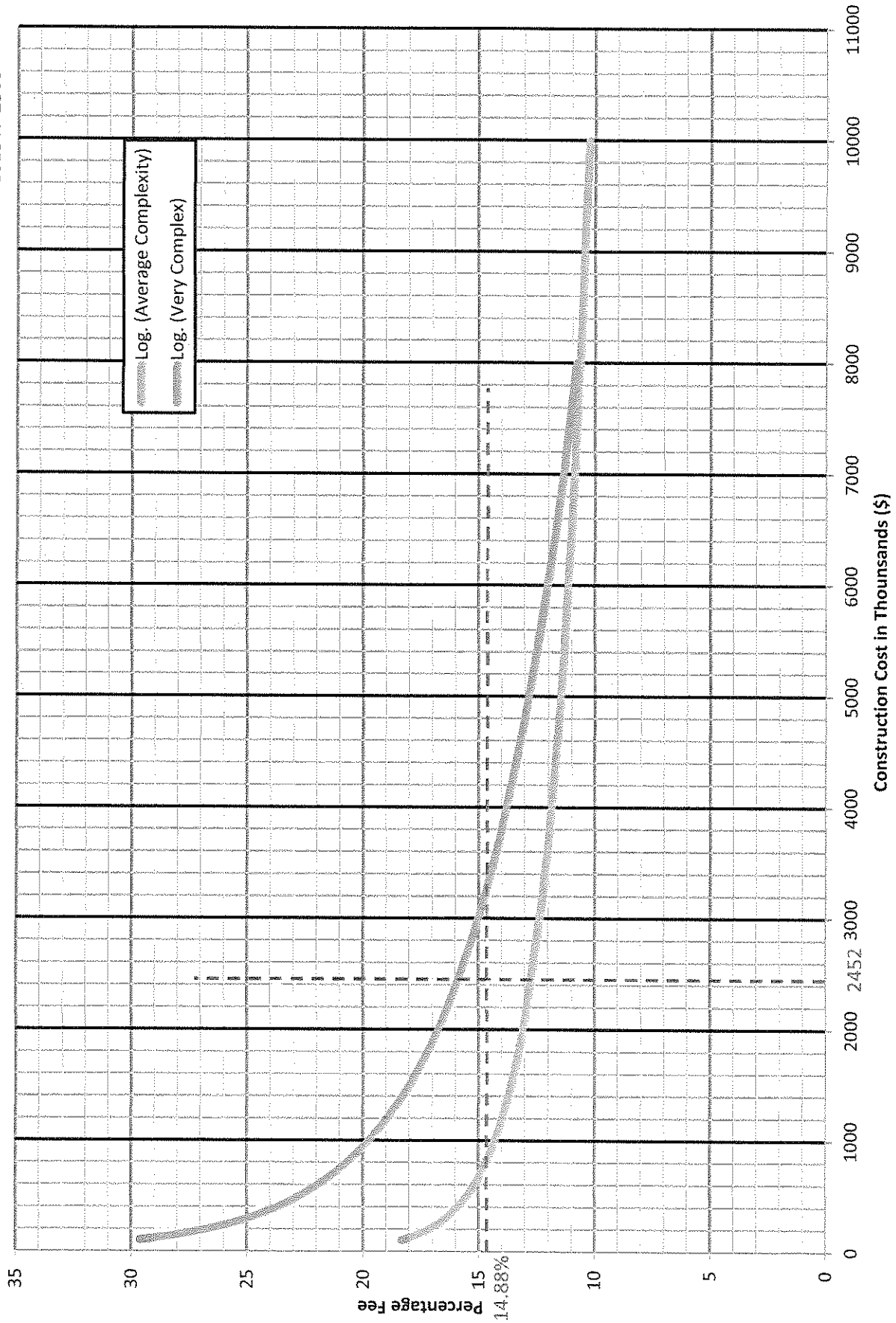
FCR PSD

2015W-1563



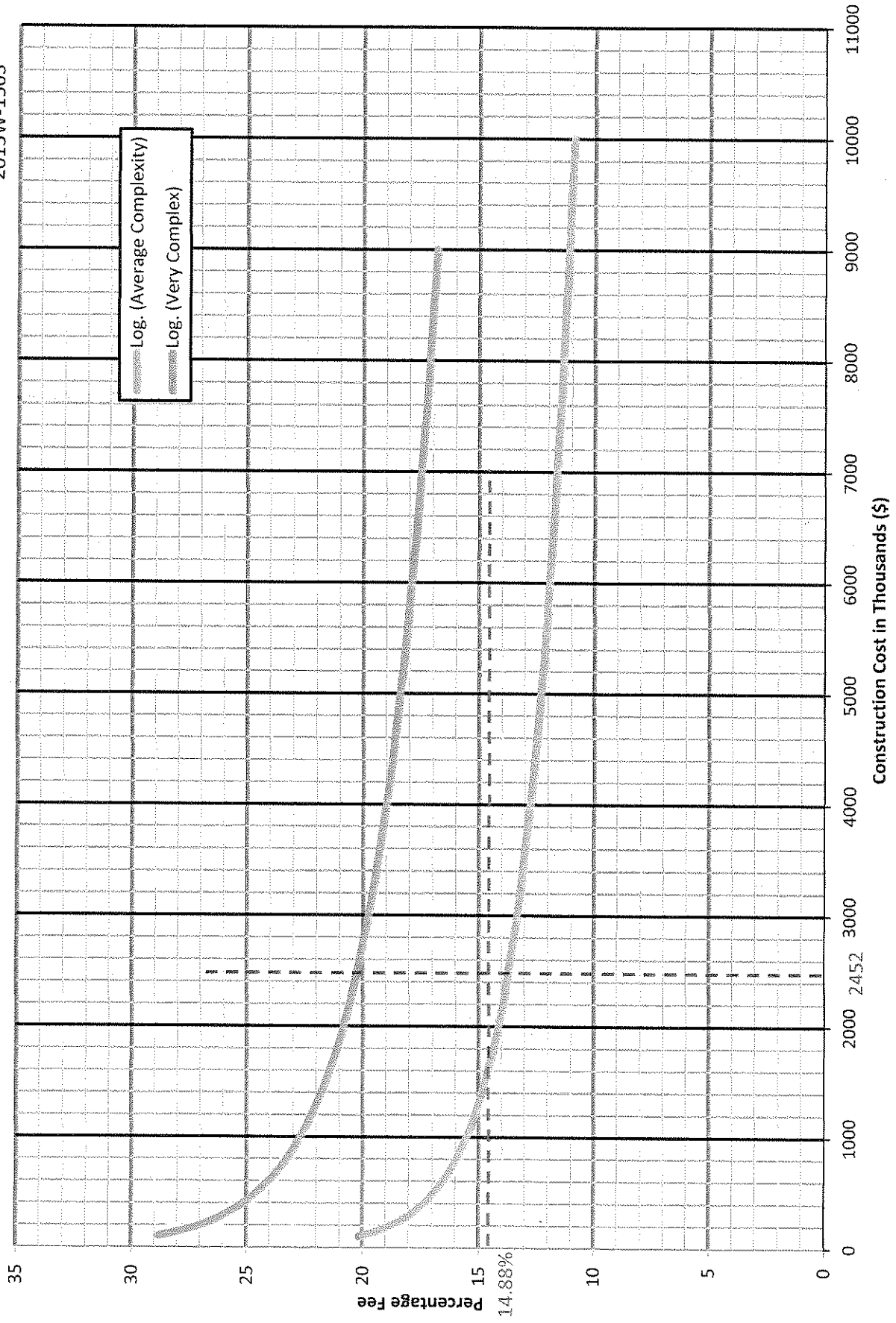
Total Fee vs. Construction Cost for New Construction

FCR PSD
2015W-1563



Total Fee vs. Construction Cost for Modifications

FCR PSD
2015W-1563





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

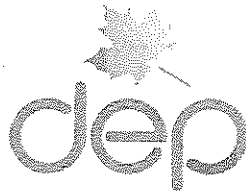
To: Mr. Robert W. DeCrease, P.E., Manager
Infrastructure and Capacity Development

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

Date: March 17, 2015

Subject: Flatwoods-Canoe Run Public Service District
LUDC Preliminary Application: 2015W-1563

This application would most likely not be eligible for AML funds because there are no known AML 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: February 20, 2015

SUBJECT: Infrastructure Preliminary Application for the Flatwoods-Canoe Run PSD
(2015W-1563): Waterline Extension in Braxton County, WV.

We have reviewed the above reference project application information. The preliminary application indicates that the proposed project will include waterline extension to 59 new residents as well as provide additional fire flow service to the Flatwoods Factory Outlet and to support future development in the I-79/Flatwoods interchange area. The Flatwoods-Canoe Run PSD Water Treatment Plant discharges its backwash to its wastewater treatment plant, which is covered under WV/NPDES Permit No. WV0084042 and expires June 26, 2017.

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.

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

Benjamin J. Savage, P. E.

February 20, 2015

Page 2

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

JMP:dac

cc: Kathryn Emery

OEHS District Review for Infrastructure Council Water Projects

Water System:	Flatwoods Canoe Run PSD	IJDC Number:	2015W-1563
Project Description:	Exchange Road Waterline Extension, Phase I	Review by:	C. Cobb
County:	Braxton	Date:	2/19/2015

<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?	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				



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

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

DATE: February 23, 2015

RE: Flatwoods-Canoe Run PSD WV3300402
IJDC Application No.: 2015W-1563
Braxton Co.

The Flatwoods-Canoe Run PSD preliminary infrastructure application indicates that they are not seeking DWTRF monies. It indicates that the system has an asset management plan and marked the question about having had a capacity development assessment (CDA) within the last 5 years as no.

In a research of the CDA files, I find that a CDA has never been conducted with Flatwoods-Canoe Run PSD.

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 appears on the January 2015 quarter of the EPA's Compliance Tracking tool (ETT) with a score of 5 indicating that the system has some outstanding violations that have not been addressed, but is well below the EPA's action level of 11. The score was the result of the following violations: in 2008 for SOC's, in 2010 for VOC's and in 2014 for TCR.

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

MC