

Approval of FY2024 Project Recommendations for Funding from the Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund

§ 10.1-611.1. Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund established; Department to manage; Board to expend moneys; regulations.

A. There is hereby created in the state treasury a special nonreverting fund to be known as the Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund, hereafter referred to as "the Fund." The Fund shall be comprised of moneys appropriated to the Fund by the General Assembly and any other moneys designated for deposit to the Fund from any source, public or private. The Fund shall be established on the books of the Comptroller and the moneys shall be paid into the state treasury and credited to the Fund. Interest earned on moneys in the Fund shall remain in the Fund and be credited to it. Any moneys remaining in the Fund, including interest thereon, at the end of each fiscal year shall not revert to the general fund but shall remain in the Fund. Moneys in the Fund shall be used solely for (i) the maintenance and repair of any dams owned by soil and water conservation districts and (ii) the rehabilitation and major repair of Class I and Class II dams owned by soil and water conservation districts, in order to bring such dams into compliance with regulations promulgated pursuant to Article 2 (§10.1-604 et seq.) of Chapter 6 of this title. Expenditures from the Fund made under clause (ii) of this subsection may include, but are not limited to, the following repairs to the infrastructure of a dam: increasing the height of a dam, modifying the spillway, and reducing wave erosion of a dam's inside face. Expenditures and disbursements from the Fund shall be made by the State Treasurer on warrants issued by the Comptroller upon written request signed by the Director of the Department of Conservation and Recreation.

B. The Fund shall be administered and managed by the Department of Conservation and Recreation, subject to the right of the Board, following consultation with the Department of Conservation and Recreation, to direct the distribution of moneys in the Fund to particular soil and water conservation districts.

C. The Board is authorized to promulgate regulations for the proper administration of the Fund. Such regulations may include, but are not limited to, the type and amount of financial assistance, the terms and conditions of the assistance, and project eligibility criteria.

Chapter 1 of the 2023 Special Session 1 Acts of Assembly; Item 374

A.1. Out of the amounts appropriated for Financial Assistance to Virginia Soil and Water Conservation Districts, \$11,347,091 the first year and \$10,947,091 the second year from the general fund shall be provided to soil and water conservation districts for administrative and operational support. These funds shall be distributed upon approval by the Virginia Soil and Water Conservation Board to the districts in accordance with the Board's established financial allocation policy. Of this amount, \$9,965,091 the first year and \$9,565,091 the second year from the general fund shall be distributed to the districts for core administrative and operational expenses (personnel, training, travel, rent, utilities, office support, and equipment) based on identified budget projections and in accordance with the Board's financial allocation policy; \$468,000 the first year and \$468,000 the second year from the general fund shall be distributed at a rate of \$4,500 per dam for maintenance; \$500,000 the first year

and \$500,000 the second year from the general fund for small dam repairs of known or suspected deficiencies; \$400,000 the first year from the general fund for the purchase and installation of remote monitoring equipment for District-owned dams; and \$170,000 the first year and \$170,000 the second year to the department to provide district support in accordance with Board policy, including, but not limited to, services related to auditing, bonding, contracts, and training. The amount appropriated for small dam repairs of known or suspected deficiencies and the purchase and installation of remote monitoring equipment is authorized for transfer to the Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund.

Recommended Motion:

The Virginia Soil and Water Conservation Board (Board) approves funding for twelve (12) projects in the amount of \$650,120 as presented and recommended by the Department. For FY2024, the Board also approves allocating \$166,674.33 for contingency funds and \$50,000 for emergency project funds.

Additionally, the Board directs the Department to reimburse Soil and Water Conservation Districts for all eligible costs associated with the installation of the remote monitoring equipment as provided for in Chapter 2 of the 2022 Special Session 1 Acts of Assembly. The funding for the reimbursements shall be provided from the Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund.

FY 2024 PROJECT FUNDING RECOMMENDATIONS
Soil and Water Conservation District
Dam Maintenance, Repair, and Rehabilitation Fund
(Fund 09254)

TO THE VIRGINIA SOIL AND WATER CONSERVATION BOARD

TABLE OF CONTENTS

Section	Page
Table of Contents	2
Introduction	3
FY 2024 Overview	3
FY 2024 Recommendations	4
Project Contingency Funds	4
Emergency Project Funds	5
Reallocation of Funds	5
Remote Monitoring Project	5
FY 2023 Projects Summary	5
FY 2022 Projects Summary	6
Account Summary	6
Appendix I – FY 2024 Project Prioritization	7
Introduction	8
Prioritization Table	8
Prioritization Scoring System	9
Appendix II – FY 2024 Project Evaluations and Recommendations.....	10
Introduction	11
Summary Table	11
Evaluations and Recommendations.....	12
Appendix III – Remote Monitoring Project	16
Appendix IV – FY 2023 Project Status	20
Appendix V – FY 2022 Project Status	25

Introduction:

The Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund (the Fund) is established by § 10.1-611.1 (see below). The Fund is administered and managed by the Department of Conservation and Recreation (DCR), subject to the approval of the Virginia Soil and Water Conservation Board for the distribution of moneys from the Fund to Soil and Water Conservation Districts (SWCD).

In accordance with Chapter 1 of the 2023 Special Session 1 Virginia Acts of Assembly (Item 374):

A.1. Out of the amounts appropriated for Financial Assistance to Virginia Soil and Water Conservation Districts, \$11,347,091 the first year and \$10,947,091 the second year from the general fund shall be provided to soil and water conservation districts for administrative and operational support. These funds shall be distributed upon approval by the Virginia Soil and Water Conservation Board to the districts in accordance with the Board's established financial allocation policy. Of this amount, \$9,965,091 the first year and \$9,565,091 the second year from the general fund shall be distributed to the districts for core administrative and operational expenses (personnel, training, travel, rent, utilities, office support, and equipment) based on identified budget projections and in accordance with the Board's financial allocation policy; \$468,000 the first year and \$468,000 the second year from the general fund shall be distributed at a rate of \$4,500 per dam for maintenance; \$500,000 the first year and \$500,000 the second year from the general fund for small dam repairs of known or suspected deficiencies; \$400,000 the first year from the general fund for the purchase and installation of remote monitoring equipment for District-owned dams; and \$170,000 the first year and \$170,000 the second year to the department to provide district support in accordance with Board policy, including, but not limited to, services related to auditing, bonding, contracts, and training. The amount appropriated for small dam repairs of known or suspected deficiencies and the purchase and installation of remote monitoring equipment is authorized for transfer to the Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund.

In an effort to better allocate the funding and identify priority projects, DCR has developed a prioritization process for project requests. This process is detailed in Appendix I. The following report provides project funding recommendations for FY 2024. The report also includes a status update on the previous years' obligated funds.

FY 2024 Overview:

Soil and Water Conservation Districts (SWCDs) submitted to the District Dam Engineer requests for twelve (12) new projects in the amount of \$730,589.00.00 for consideration in FY 2024.

A total of five (5) projects in the amount of \$637,000.00 did not receive funding in FY 2023 and, therefore, were also considered for FY 2024 funding.

The seventeen (17) projects were prioritized using a point evaluation system and assigned a unique sequential ID#; the result of which are located in Appendix I. The projects were then evaluated based on the prioritization score, project scope and need, available funding, and the SWCD's ability to complete the project if awarded funding. The evaluation and recommendation for each project is located in Appendix II.

FY 2024 Recommendations:

A total of twelve (12) projects are recommended for FY 2024 funding in the amount of **\$650,120**. The project recommendations organized by SWCD for FY 2024 are as follows:

Culpeper SWCD (2 Projects - \$165,000)

- Beautiful Run #1B wave berm construction (additional funding) project (ID#24-02) in the amount of \$15,000.
- Mountain Run 13 wave berm construction project (ID#24-03) in the amount of \$150,000.

Piedmont SWCD (4 Projects – \$227,000)

- Bush River #2 gate valve repair project (ID#24-04) in the amount of \$44,500.
- Bush River #5 gate valve repair project (ID#24-06) in the amount of \$50,000.
- Bush River #6 gate valve repair project (ID#24-07) in the amount of \$65,250.
- Bush River #7 gate valve repair project (ID#24-05) in the amount of \$67,250.

Robert E. Lee SWCD (1 Project – \$60,000)

- East Ford Falling River 15 gate valve repair project (ID#24-08) in the amount of \$60,000.

Shenandoah Valley SWCD (4 Projects – \$13,120)

- Lower North River 22B beaver dam removal project (ID#24-09) in the amount of \$300.
- Lower North River 22B access road maintenance project (ID#24-10) in the amount of \$1,000.
- Shoemaker River 4C tree removal project (ID#24-11) in the amount of \$1,320.
- Shoemaker River 3B debris removal project (ID#24-12) in the amount of \$10,500.

Southside SWCD (1 Project – \$185,000)

- Roanoke Creek 62 wave berm and access road relocation construction project (ID#21-14) in the amount of \$185,000.

Project Contingency Funds:

Project contingency funds are used to address unexpected costs that could occur for an awarded project. For FY 2024, it is recommended that **\$166,674.33** be designated as contingency funds. This recommended amount is approximately 5.5% of current ongoing projects for which funds

were obligated but not yet paid or returned to the Fund in previous years, as well as FY 2024 project recommendations. Contingency funds for any one given project are limited to no more than 15% of the awarded funding amount.

Emergency Project Funds:

Emergency project funds are used to address conditions that may develop unexpectedly, which endanger the structural integrity of the dam and/or downstream life or property. Immediate action is required to protect the dam and/or downstream life or property. For FY 2024, it is recommended that **\$50,000** be designated as emergency funds. A balance of at least \$50,000 is desired to be maintained in this Fund each fiscal year for this purpose.

Reallocation of Funds:

Upon the final disbursement of project funds, any unexpended funds shall be returned to the Fund, shall be unobligated, and shall be available for subsequent project awards. The SWCD may request the unexpended funds to be reallocated to another SWCD project with a current Grant Agreement. The request for the reallocation of funds must be approved by the District Dam Engineer.

Remote Monitoring Project:

Funding was previously provided during the 2022 General Assembly, the 2021 Special Session and 2020 Special Session.

Detailed information on the remote monitoring projects is in Appendix III.

FY 2023 Projects Summary:

A total of Sixteen (16) projects were allocated funds in FY 2023. Ten (10) of these projects are still in progress and six (6) projects have been completed.

FY 2023 Allocations:	\$1,191,978.00
FY 2023 Reallocations:	\$1,339,348.64
Payments from FY 2023 Allocations:	(\$826,817.22)
FY 2023 Allocations Returned to Fund:	(\$8,256.83)
FY 2023 Remaining Obligations:	\$1,696,252.59

Detailed information on the status of FY 2023 projects is in Appendix IV.

FY 2022 Projects Summary:

A total of seven (7) projects were allocated funds in FY 2022. One (1) of these projects are still in progress and six (6) projects have been completed.

FY 2022 Allocations:	\$1,115,350.50
FY 2022 Reallocations:	\$96,000.00
Payments from FY 2022 Allocations:	(\$381,263.39)
<u>FY 2022 Allocations Returned to Fund:</u>	<u>(\$713,036.61)</u>
FY 2022 Remaining Obligations:	\$117,050.50

Detailed information on the status of FY 2022 projects is in Appendix V.

Account Summary:

The account information and proposed allocations for FY 2024 are as follows:

FY 2023 Ending Balance:	\$2,748,387.64
<u>FY 2024 Appropriations:</u>	<u>\$500,000.00</u>
FY 2024 Starting Balance:	\$3,248,387.64
<i>*Includes accrued interest from FY2023</i>	
FY 2024 Starting Balance:	\$3,248,387.64
FY 2024 Contingency Funds:	(\$166,674.33)
FY 2024 Emergency Funds:	(\$50,000.00)
Pending Project Disbursements:	(\$568,290.22)
FY 2023 Remaining Obligations:	(\$1,696,252.59)
<u>FY 2022 Remaining Obligations:</u>	<u>(\$117,050.50)</u>
FY 2024 Project Allocations:	\$650,120.00
FY 2023 Unfunded Request:	\$637,000.00
<u>FY 2024 New Requests:</u>	<u>\$730,589.00</u>
FY 2024 Total Project Requests:	\$1,367,589.00
FY 2024 Total Project Requests:	\$1,367,589.00
<u>FY 2024 Project Recommendations:</u>	<u>(\$650,120.00)</u>
FY 2024 Unfunded Project Requests:	\$717,469.00
FY 2024 Project Allocations:	\$650,120.00
<u>FY 2024 Project Recommendations:</u>	<u>(\$650,120.00)</u>
FY 2024 Unobligated Funds:	\$0.00

APPENDIX I
FY 2024
PROJECT PRIORITIZATION

Introduction:

Each project was prioritized using a scoring system and assigned a numerical final score. The scoring system considers the hazard class of the dam, the project type, specific project features, and project need in determining the final score.

The projects are sorted based on the final score and then assigned a project tracking ID number. Refer to the Project Prioritization Table for the results of this process.

Table 1 – FY 2024 Project Prioritization

ID	SWCD	Inv#	Hazard Class	Dam Name	Project Description	HCP	PTP	AP	Base Score	NEM	Final Score
21-05	Piedmont	147001	Significant	Buffalo Creek #1	Wave Berm, Graded Filter, Auxiliary Spillway Tile Drain Project	4	40	10	54	1.0	54
21-06	Piedmont	147002	Significant	Buffalo Creek #3	Wave Berm Project	4	40	10	54	1.0	54
21-07	Piedmont	147007	Significant	Buffalo Creek #5	Training Dike Improvements and Road Access Relocation	4	20	10	34	1.0	34
21-14	Southside	037008	High	Roanoke Creek 62	Wave Berm and Access Road Relocation Project	8	40	10	58	1.0	58
23-01	Piedmont	147008	Significant	Buffalo Creek #6	Wave Berm Project	4	40	10	54	1.0	54
24-01	Culpeper	113006	Low	Beautiful Run #7	Wave Berm Armoring	2	20	0	22	1.0	22
24-02	Culpeper	113009	Low	Beautiful Run #1B	Wave Berm and Gate Valve Project (Additional Funding)	2	40	10	52	1.5	78
24-03	Culpeper	047005	High	Mountain Run 13	Wave Berm Project	8	40	10	58	1.0	58
24-04	Piedmont	147034	High	Bush River #2	Gate Valve Project	8	20	5	33	1.0	33
24-05	Piedmont	147036	High	Bush River #7	Gate Valve Project	8	20	5	33	1.0	33
24-06	Piedmont	147039	Low	Bush River #5	Gate Valve Project	2	20	5	27	1.0	27
24-07	Piedmont	147040	Significant	Bush River #6	Gate Valve Project	4	20	5	29	1.0	29
24-08	Robert E. Lee	011003	Significant	East Ford Falling River 15	Gate Valve Project	4	20	0	24	1.5	36
24-09	Shenandoah Valley	165004	High	Lower North River 22B	Beaver Dam Removal	8	10	5	23	1.0	23
24-10	Shenandoah Valley	165004	High	Lower North River 22B	Access Road Maintenance	8	10	5	23	1.0	23
24-11	Shenandoah Valley	165010	High	Shoemaker River 4C	Tree Removal	8	10	5	23	1.0	23
24-12	Shenandoah Valley	165011	High	Shoemaker River 3B	Riser Tower Debris Removal	8	10	5	23	1.0	23

Prioritization Score Legend:

Base Score = HCP + PTP + AP

Final Score = Base Score * NE

Prioritization Scoring System:

Hazard Class Point Values (HCP)

- High = **8 points**
- Significant = **4 points**
- Low = **2 Points**
- Low/Special = **0 Points**

Project Type Point Values (PTP)

A Type I project is a repair to the dam needed for safe operation and maintenance during normal operating conditions. Type I projects will receive **40 points**. Examples of Type I projects are wave berm reconstructions and graded filter drains.

A Type II project is a repair to the dam needed for safe operation during rare or extreme operating conditions. Type II projects will receive **20 points**. Examples of Type II projects are training dike repair, concrete riser work, trash rack replacement, gate valve replacement, and stilling basin reconstruction.

A Type III project is a repair to the dam that is not classified as a Type I or Type II project but is within the dam footprint. Type III projects will receive **10 points**. Examples of Type III projects are gate valve repair, buffer tree removal, debris removal, and vegetation management.

A Type IV project is defined as work conducted outside of the dam footprint and appurtenant structures but is still related to the operation and maintenance of the dam. Type IV projects will receive **5 points**. An example of a Type IV project is access road improvement.

Project Additional Point Values (AP)

If a project contains more than one task for a single dam, the project will receive **5 points**. An example is a project request for buffer tree removal and stilling basin reconstruction at a single dam.

If a project contains a task that is also needed on additional dams in close proximity, then the project will receive **5 points**. An example is a gate valve replacement project on four dams.

If an Engineering Design has been prepared for the project, then the project will receive **10 points**.

Project Need Evaluation Multiplier (NEM)

Certificate Need – x2 Multiplier

A certificate need project is defined as a condition that must be addressed in order to obtain a Regular Operation and Maintenance Certificate from the Division of Dam Safety.

Priority Need – x1.5 Multiplier

A priority need project is defined as a condition that if not addressed in a timely manner has the potential to endanger the structural integrity of the dam and/or downstream life or property.

Normal Need– x1 Multiplier

A normal need project is any project request not classified as urgent need or certificate need.

APPENDIX II
FY 2024
PROJECT EVALUATIONS AND RECOMMENDATIONS

Introduction:

A recommendation for project funding is based on an evaluation of the project. The evaluation takes into consideration the prioritization score, project scope and need, available funding, and the SWCD's ability to complete the project if awarded funding.

The following summary table contains project information, requested funding amounts, and recommend funding amounts for all seventeen (17) projects considered for funding in FY 2024. Project evaluations with recommendations are located after the summary table.

Table 2 – FY 2024 FUNDING REQUESTS AND RECOMMENDATIONS

ID	SWCD	Inv#	Hazard Class	Dam Name	Score	Project Description	Engineering	Construction	Total	Recommend Funding Amount
21-05	Piedmont	147001	Significant	Buffalo Creek #1	54	Wave Berm, Graded Filter, Auxiliary Spillway Tile Drain Project	\$ -	\$ 165,000.00	\$ 165,000.00	\$0.00
21-06	Piedmont	147002	Significant	Buffalo Creek #3	54	Wave Berm Project	\$ -	\$ 93,000.00	\$ 93,000.00	\$0.00
21-07	Piedmont	147007	Significant	Buffalo Creek #5	34	Training Dike Improvements and Road Access Relocation	\$ -	\$ 87,000.00	\$ 87,000.00	\$0.00
21-14	Southside	037008	High	Roanoke Creek 62	58	Wave Berm and Access Road Relocation Project	\$ -	\$ 185,000.00	\$ 185,000.00	\$185,000.00
23-01	Piedmont	147008	Significant	Buffalo Creek #6	54	Wave Berm Project	\$ -	\$ 107,000.00	\$ 107,000.00	\$0.00
24-01	Culpeper	113006	Low	Beautiful Run #7	22	Wave Berm Armoring	\$ 28,469.00	\$ 237,000.00	\$ 265,469.00	\$0.00
24-02	Culpeper	113009	Low	Beautiful Run #1B	78	Wave Berm and Gate Valve Project (Additional Funding)	\$ -	\$ 15,000.00	\$ 15,000.00	\$15,000.00
24-03	Culpeper	047005	High	Mountain Run 13	58	Wave Berm Project	\$ -	\$ 150,000.00	\$ 150,000.00	\$150,000.00
24-04	Piedmont	147034	High	Bush River #2	33	Gate Valve Project	\$ -	\$ 44,500.00	\$ 44,500.00	\$44,500.00
24-05	Piedmont	147036	High	Bush River #7	33	Gate Valve Project	\$ -	\$ 67,250.00	\$ 67,250.00	\$67,250.00
24-06	Piedmont	147039	Low	Bush River #5	27	Gate Valve Project	\$ -	\$ 50,000.00	\$ 50,000.00	\$50,000.00
24-07	Piedmont	147040	Significant	Bush River #6	29	Gate Valve Project	\$ -	\$ 65,250.00	\$ 65,250.00	\$65,250.00
24-08	Robert E. Lee	011003	Significant	East Ford Falling River 15	36	Gate Valve Project	\$ -	\$ 60,000.00	\$ 60,000.00	\$60,000.00
24-09	Shenandoah Valley	165004	High	Lower North River 22B	23	Beaver Dam Removal	\$ -	\$ 300.00	\$ 300.00	\$300.00
24-10	Shenandoah Valley	165004	High	Lower North River 22B	23	Access Road Maintenance	\$ -	\$ 1,000.00	\$ 1,000.00	\$1,000.00
24-11	Shenandoah Valley	165010	High	Shoemaker River 4C	23	Tree Removal	\$ -	\$ 1,320.00	\$ 1,320.00	\$1,320.00
24-12	Shenandoah Valley	165011	High	Shoemaker River 3B	23	Riser Tower Debris Removal	\$ -	\$ 10,500.00	\$ 10,500.00	\$10,500.00
									Total Funding Recommendation:	\$650,120

EVALUATIONS AND RECOMMENDATIONS:

ID#21-05 - INV#147001 – Buffalo Creek #1 – Significant Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a wave berm, graded filter, and emergency spillway tile drain project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$165,000 for construction.

Funding for this project is **not recommended** at this time. This recommendation will allow the SWCD to focus on project SDR23005 and the four (4) recommended gate valve projects (ID#24-04 thru ID#24-007).

ID#21-06 - INV#147002 – Buffalo Creek #3 – Significant Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a wave berm project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$93,000 for construction.

Funding for this project is **not recommended** at this time. This recommendation will allow the SWCD to focus on project SDR23005 and the four (4) recommended gate valve projects (ID#24-04 thru ID#24-007).

ID#21-07 - INV#147007 – Buffalo Creek #5 – Significant Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a training dike improvement and road access relocation project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$87,000 for construction.

Funding for this project is **not recommended** at this time. This recommendation will allow the SWCD to focus on project SDR23005 and the four (4) recommended gate valve projects (ID#24-04 thru ID#24-007).

ID#21-14 - INV#037008 – Roanoke Creek #62 – High Hazard – Southside SWCD

Southside SWCD requested funding for a wave berm and road relocation project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$185,000 for construction.

Funding for this project is **recommended** in the amount of **\$185,000** for construction.

ID#23-01 - INV#147008 – Buffalo Creek #6 – Significant Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a wave berm project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$107,000 for construction.

Funding for this project is **not recommended** at this time. This recommendation will allow the SWCD to focus on project SDR23005 and the four (4) recommended gate valve projects (ID#24-04 thru ID#24-007).

ID#24-01 - INV#113006 – Beautiful Run #7 – Low Hazard – Culpeper SWCD

Culpeper SWCD requested funding for a wave berm armor project. Funding for this project has been requested in the amount of \$28,469 for engineering design and \$237,000 for construction for a total request amount of \$265,469.

Funding for this project is **not recommended** at this time.

ID#24-02 - INV#113009 – Beautiful Run #1B – Low Hazard – Culpeper SWCD

Culpeper SWCD requested additional funding for a wave berm and gate valve project. Previous funding for this project under SDR23003 was approved in the amount of \$200,000. Additional funding for this project has been requested in the amount of \$15,000.

Funding for this project is **recommended** in the amount of **\$15,000** for construction.

ID#24-03 - INV#047005 – Mountain Run #13 – High Hazard – Culpeper SWCD

Culpeper SWCD requested funding for a wave berm project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$150,000 for construction.

Funding for this project is **recommended** in the amount of **\$150,000** for construction.

ID#24-04 - INV#147034 – Bush River #2 – High Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a gate valve repair project. The project scope and need are supported by a site visit conducted by the District Dam Engineer and field investigation conducted by the District. Funding for this project has been requested in the amount of \$44,500 for construction.

Funding for this project is **recommended** in the amount of **\$44,500** for construction.

ID#24-05 - INV#147036 – Bush River #7 – High Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a gate valve repair project. The project scope and need are supported by a site visit conducted by the District Dam Engineer and field investigation conducted by the District. Funding for this project has been requested in the amount of \$67,250 for construction.

Funding for this project is **recommended** in the amount of **\$67,250** for construction.

ID#24-06 - INV#147039 – Bush River #5 – Low Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a gate valve repair project. The project scope and need are supported by a site visit conducted by the District Dam Engineer and field investigation conducted by the District. Funding for this project has been requested in the amount of \$50,000 for construction.

Funding for this project is **recommended** in the amount of **\$50,000** for construction.

ID#24-07 - INV#147040 – Bush River #6 – Significant Hazard – Piedmont SWCD

Piedmont SWCD requested funding for a gate valve repair project. The project scope and need are supported by a site visit conducted by the District Dam Engineer and field investigation conducted by the District. Funding for this project has been requested in the amount of \$65,250 for construction.

Funding for this project is **recommended** in the amount of **\$65,250** for construction.

ID#24-08 - INV#011003 – East Ford Falling River #15 – Significant Hazard – Robert E. Lee SWCD

Robert E. Lee SWCD requested funding for a gate valve repair project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$60,000 for construction.

Funding for this project is **recommended** in the amount of **\$60,000** for construction.

ID#24-09 - INV#165004– Lower North River #22B – High Hazard – Shenandoah Valley SWCD

Shenandoah Valley SWCD requested funding for a beaver den removal project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$300 for construction.

Funding for this project is **recommended** in the amount of **\$300** for construction.

ID#24-10 - INV#165004 – Lower North River #22B – High Hazard – Shenandoah Valley SWCD

Shenandoah Valley SWCD requested funding for an access road maintenance project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$1,000 for construction.

Funding for this project is **recommended** in the amount of **\$1,000** for construction.

ID#24-11 - INV#165010 – Shoemaker River #4C – High Hazard – Shenandoah Valley SWCD

Shenandoah Valley SWCD requested funding for a tree removal project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$1,320 for construction.

Funding for this project is **recommended** in the amount of **\$1,320** for construction.

ID#24-12 - INV#165011 – Shoemaker River #3B – High Hazard – Shenandoah Valley SWCD

Shenandoah Valley SWCD requested funding for a debris removal project. The project scope and need are supported by a site visit conducted by the District Dam Engineer. Funding for this project has been requested in the amount of \$10,500 for construction.

Funding for this project is **recommended** in the amount of **\$10,500** for construction.

ID#24-13 – DCR – Remote Monitoring Project

Refer to Appendix III for additional information on this project.

APPENDIX III
Remote Monitoring Project

Remote Monitoring Project

Project Funding

The Remote monitoring project received funding in FY2020, FY2021, FY2022, and FY2023. As part of this report, all funding for this project will be consolidated under FY2024.

Phase 1

A total of eighteen (18) RX2100 data loggers were purchased in May 2020 at a total cost of \$21,246. The units were allocated to six (6) SWCDs for installation.

SWCD	#Units	Equipment Cost	Installation Cost	Total Cost	Average Cost per Unit	Project Status
Blue Ridge	4	\$4,721.35	\$5,200	\$9,921.35	\$2,480	Installed
Culpeper	3	\$3,541	\$17,113.98	\$20,654.98	\$6,885	Installed
Headwaters	1	\$1,180.30	\$2,000	\$1,180.30	\$2,000	Installed
Mountain Castles	2	\$2,360.65	\$8,000	\$10,360.65	\$5,180	Installed
Piedmont	4	\$4,721.35	\$11,344.78	\$16,066.13	\$4,016	Installed
Thomas Jefferson	4	\$4,721.35	\$24,075.36	\$28,796.71	\$7,199	Installed

Notes: Headwaters SWCD installed the unit using SWCD staff. The SWCD will be reimbursed for material costs upon request.

Phase 2

A total of sixty (60) RX2100 data loggers were purchased in September 2021 at a total cost of \$101,754.75.

Each SWCD will be responsible for the installation of the remote monitoring equipment. Installation will include buried conduit with pull boxes, conduit in the permanent pool area, and a mounting pole on the crest of the dam. All installation costs will be reimbursed through the Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund.

The District Dam Engineer will assist in the set-up and configuration of the system and training will be provided to SWCD staff on how to use and maintain the system.

SWCD	#Units	Equipment Cost	Installation Cost	Total Cost	Average Cost per Unit	Project Status
Blue Ridge	3	\$5,035.50	Pending	Pending	Pending	Pending
Culpeper	3	\$5,004	\$32,000	\$37,004	\$12,334.67	Installed
Hanover-Caroline	1	\$1,657.50	\$4,810	\$6,467.50	\$6,467.50	Installed
Headwaters	8	\$13,752	Pending	Pending	Pending	Pending
Lord Fairfax	2	\$3,468	Pending	Pending	Pending	Pending
Mountain Castles	1	\$1,689	Pending	Pending	Pending	Pending
Piedmont	9	\$15,231	\$20,500	\$35,731	\$3,970.11	Installed
Peter Francisco	13	\$21,987	Pending	Pending	Pending	Pending
Shenandoah Valley	2	\$3,561.75	N/A	N/A	N/A	See Note
Southside	11	\$18,579	Awaiting Invoice	Awaiting Invoice	Awaiting Invoice	Installed
Thomas Jefferson	4	\$6,693	Pending	Pending	Pending	Pending
Robert E Lee	3	\$5,097	Pending	Pending	Pending	Pending

Notes: Shenandoah SWCD two cellular units were returned and will be replaced with Phase 3 Satellite units.

Phase 3

A total of twenty-one (21) satellite remote data loggers were purchased in August 2023 at a total cost of \$238,256.63. This cost includes installation by the manufacturer. Average cost per unit is \$11,345.55. Data plans for each unit were not included in the purchase price. Installation is scheduled for winter 2023 through spring 2024.

SWCD	#Units	Equipment/ Installation Costs
Blue Ridge	3	\$34,036.66
Headwaters	2	\$22,691.11
Mountain Castles	1	\$11,345.55
Peter Francisco	4	\$45,382.22
Shenandoah Valley	8	\$90,764.43
Robert E Lee	3	\$34,036.66

Notes: Data plan costs are separate.

Service Plan

Each unit requires an annual service plan. Project funding will be used for service plan renewal.

Cellular equipment annual service plans cost \$299.00 per unit.

Satellite equipment annual service plans costs are approximately \$2,752.92 per unit.

Any data plan overage costs will be reimbursed upon approval of the District Dam Engineer.

Replacement Equipment

Replacement parts for installed units have been covered under the project to maintain the units functionality.

District	Part	Cost
Culpeper	Replacement sensor	\$392
Culpeper	Unit replacement	\$1,096.30
Mountain Castles	Unit replacement/battery	\$1,445.66
Culpeper	Unit repair	\$241
Culpeper	Warranty shipping cost	\$45.15

Future Deployment

The remote monitoring program will also expand to include ten (10) low hazard dams.

Cellular remote monitoring units with poor signal strength will be evaluated for replacement with a satellite remote monitoring unit.

APPENDIX IV
FY 2023
Project Status

FY 2023 Projects Status:

A total of Sixteen (16) projects were allocated funds in FY 2023. Ten (10) of these projects are still in progress and six (6) projects have been completed.

As part of this report, all FY 2023 project not completed by December 31, 2023 will be moved to FY 2024.

FY 2023 Allocations:	\$1,191,978.00
FY 2023 Reallocations:	\$1,339,348.64
Payments from FY 2023 Allocations:	(\$826,817.22)
<u>FY 2023 Allocations Returned to Fund:</u>	<u>(\$8,256.83)</u>
FY 2023 Remaining Obligations:	\$1,696,252.59

FY 2023 Projects List:

SDR23001 - ID#23-02 - INV#089005 – Leatherwood Creek 2A – High Hazard – Blue Ridge SWCD

Project Status: In Progress

Blue Ridge SWCD requested funding for a graded filter project. Funding for this project was awarded in the amount of \$13,350 for engineering design.

The District has utilized the engineering term contract and work on the project has started.

SDR23002 - ID#23-03 - INV#089007 – Leatherwood Creek 6 – High Hazard – Blue Ridge SWCD

Project Status: In Progress

Blue Ridge SWCD requested funding for a graded filter and surface water management project. Funding for this project was awarded in the amount of \$18,400 for engineering design.

The District has utilized the engineering term contract and work on the project has started.

SDR23003 - ID#23-04 INV#113009–Beautiful Run #1B – Low Hazard – Culpeper SWCD

Project Status: In Progress

Culpeper SWCD requested funding for wave berm construction costs. Funding for this project was awarded in the amount of \$165,000 for construction. Funding from SDR22003 in the amount of \$35,000 was transferred to this project. Total project funds for this project are \$200,000.

Culpeper SWCD submitted a FY 2024 application requesting \$15,000 in additional funding.

SDR23004 - ID#23-05 - INV#015005– Upper North River 10 – High Hazard – Headwaters SWCD

Project Status: Completed FY 2023

Headwaters SWCD requested funding for a tree removal at the entrance of the emergency spillway project. Funding for this project was awarded in the amount of \$18,400 for construction.

SDR23005 - ID#21-09 - INV#147034 – Bush River #2 – High Hazard – Piedmont SWCD

Project Status: In Progress

Piedmont SWCD requested funding for a wave berm, emergency spillway storm damage repair, and gate valve repair project. Funding for this project was awarded in the amount of \$145,000 for construction. Funding from SDR22001 in the amount of \$96,270 was transferred to this project. Total project funds for this project are \$241,270.

Remaining funds from this project have been authorized for use towards ID#21-10 Bush River #5 (INV#147039) wave berm project.

SDR23005 - ID#21-10 - INV#147039 – Bush River #5 – Low Hazard – Piedmont SWCD

Project Status: In Progress

Piedmont SWCD requested funding for a wave berm project.

Remaining funds from SDR23005-ID#21-09 have been authorized for use towards ID#21-10 Bush River #5 (INV#147039) wave berm project.

SDR23006 - ID#23-06 - INV#029006 – Willis River 5F – High Hazard – Peter Francisco SWCD

Project Status: Completed FY 2023

Peter Francisco SWCD requested funding for a debris removal and gate valve repair project. Funding for this project was approved in the amount of \$3,803 for construction.

SDR23007 - ID#23-07 - INV#029033 – Slate River 14 – Significant Hazard – Peter Francisco SWCD

Project Status: Completed FY 2023

Peter Francisco SWCD requested funding for access road improvement project. Funding for this project was approved in the amount of \$8,500 for construction.

SDR23008 - ID#23-08 - INV#029012– Muddy Creek 2 – High Hazard – Peter Francisco SWCD

Project Status: Completed FY 2023

Peter Francisco SWCD requested funding for access road improvement project. Funding for this project was approved in the amount of \$4,925 for construction.

SDR23009 - ID#21-15 - INV#037003 – Roanoke Creek #35A – Low Hazard – Southside SWCD

Project Status: In Progress

Southside SWCD requested funding for a wave berm and storm damage repair project. Funding for this project was approved in the amount of \$350,000 for construction.

The project was substantially completed, and final project payment and close-out anticipated for January 2024.

SDR230010 - ID#23-09 – DCR – Remote Monitoring Project

Project Status: In Progress

Refer to Appendix III for additional information on this project.

As part of this report, the remote monitoring equipment project funding be moved to FY 2024.

SDR23011 – (SDR18008) – ID#17-40 - INV#047001 – Mountain Run Dam #8A – Significant Hazard – Culpeper SWCD

Project Status: In Progress

Culpeper SWCD requested funding to patch the concrete riser. Funding for this project was awarded in the amount of \$5,000 for construction.

The SWCD is currently working to procure a contractor to perform this work.

SDR23012 – (SDR18010) – ID#18-19 - INV#047005 – Mountain Run Dam #13 – High Hazard – Culpeper SWCD

Project Status: In Progress

Culpeper SWCD requested funding to patch the concrete riser. Funding for this project was awarded in the amount of \$2,500 for construction.

The SWCD is currently working to procure a contractor to perform this work.

SDR23013 – (SDR19014) – ID#19-15 - INV#165007– Lower North River #82 – High Hazard –
Shenandoah Valley SWCD
Project Status: Completed FY 2023

Shenandoah Valley SWCD requested funding to replace the transmitter on the IFLOWS System.
Funding for this project was approved in the amount of \$6,500.

SDR23014 – (SDR19015) – ID#19-16 - INV#165003– Lower North River #83 – High Hazard –
Shenandoah Valley SWCD
Project Status: Completed FY 2023

Shenandoah Valley SWCD requested funding to replace the transmitter on the IFLOWS System.
Funding for this project was approved in the amount of \$6,500.

SDR23015 – (SDR20008) – ID#18-11 - INV#015001– South River Dam #26 – High Hazard –
Headwaters SWCD
Project Status: In Progress

Headwaters SWCD requested funding for a wave berm reconstruction project. Funding for this project was approved in the amount of \$15,000 for construction. Funding in the amount of \$8,078.64 was transferred to this project from SDR21007. Total project budget for this project is \$23,078.64.

The SWCD is currently working to procure a contractor to perform this work.

SDR23016 – (SDR21008) – INV#045001 – Johns Creek #2 – High Hazard – Mountain Castles
SWCD
Project Status: In Progress

Mountain Castles SWCD requested funding for an emergency spillway stabilization project.
Funding for this project was approved in the amount of \$30,000 for construction.

The SWCD is currently working to procure a contractor to perform this work.

APPENDIX V
FY 2022
Project Status

FY 2022 Projects Status:

A total of seven (7) projects were allocated funds in FY 2022. One (1) of these projects are still in progress and six (6) projects have been completed.

FY 2022 Allocations:	\$1,115,350.50
FY 2022 Reallocations:	\$96,000.00
Payments from FY 2022 Allocations:	(\$381,263.39)
<u>FY 2022 Allocations Returned to Fund:</u>	<u>(\$713,036.61)</u>
FY 2022 Remaining Obligations:	\$117,050.50

FY 2022 Projects List:

SDR22001 - ID#20-12 - INV#113004–Beautiful Run #5 – Low Hazard – Culpeper SWCD
Project Status: Completed FY 2022

SDR22002 - ID#20-13 - INV#113005–Beautiful Run #6 – Low Hazard – Culpeper SWCD
Project Status: Completed FY 2022

SDR22003 - ID#22-01 – INV#113002 – Beautiful Run #2A – High Hazard – Culpeper SWCD
Project Status: Completed FY 2023

SDR22004 - ID#21-11 - INV#147036 – Bush River #7 – High Hazard – Piedmont SWCD
Project Status: Complete FY 2023

SDR22005 - ID#22-03 – INV#029019 – Willis River 2 – High Hazard Dam – Peter Francisco SWCD
Project Status: Completed FY 2022

SR22006- ID#22-02 – INV#085002 – South Anna River 52B – Significant Hazard – Hanover/Caroline SWCD
Project Status: In Progress

Hanover/Caroline SWCD requested funding for a wave berm project. Funding for this project has been requested in the amount of \$117,050.50 for construction. The engineering design for this project has been completed.

Funding for this project is recommended in the amount of \$117,050.50 for construction.

Construction has been completed. Awaiting request from District to issue final project reimbursement and project close-out.

SDR22007 - ID#22-04 – DCR – Remote Monitoring Project
Project Status: Funds Transferred to FY 2023