
COMMONWEALTH OF VIRGINIA

2023 Grant Manual for the Virginia Dam Safety, Flood Prevention and Protection Assistance Fund *2023 Grant Funding*

Applications due: 4 p.m., February 28, 2023

Developed by the Department of Conservation and Recreation
in cooperation with the Virginia Resources Authority



November 1, 2022

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Part I: Introduction and Overview

Purpose of this Manual

The purpose of this manual is to provide guidance regarding the policies, criteria, conditions, and procedures for determining project eligibility and awarding grants from the Virginia Dam Safety, Flood Prevention and Protection Assistance Fund to local governments and private entities for specified dam safety and floodplain management issues pursuant to [§10.1-603.16 et seq. of the Code of Virginia](#).

Dam Safety, Flood Prevention and Protection Assistance Fund (Fund) Overview and Authority

The Fund was established to:

1. Provide matching grants to local governments (including Soil and Water Conservation Districts) and to private entities owning existing regulated dams to improve dam safety. This includes matching grants to local governments for orphan dams that are within their jurisdiction. State-owned and federally-owned dams, or dams not regulated pursuant to the Dam Safety Act ([§10.1-604 et seq. of the Code of Virginia](#)) are ineligible.
2. Provide matching grants to any local government for the purpose of assisting the local government with improvements to flood prevention or protection.

The Fund consists of monies appropriated by the General Assembly, assessments made on flood insurance premium income pursuant to §38.2-401.1 of the *Code of Virginia*, funds returned in the form of interest and loan principal by recipients of funding, income from the investment of monies contained in the fund, and other public and private funds eligible for deposit.

The Fund is permanent and non-reverting and is administered and managed by the Virginia Resources Authority (VRA) in cooperation with the Department of Conservation and Recreation (DCR). Section 10.1-603.19 F of the *Code of Virginia* specifies that “[t]he total amount of expenditures for grants in any fiscal year shall not exceed 50 percent of the total non-interest or income deposits made to the Fund during the previous fiscal year, together with the total amount collected in interest or income from the investment of monies in the Fund from the previous fiscal year as determined at the beginning of the fiscal year.” Subsection G states that “[a]ny grants made from the Fund shall require [a minimum of] a 50 percent project match by the applicant. Any loans made from the Fund shall require a minimum of a 10 percent project match by the applicant.”

The Director of Department of Conservation and Recreation (DCR) is authorized to make this grant available to communities, as outlined in §10.1-603.19:

§10.1-603.19 A. The Director may make grants or loans to any local government for the purpose of assisting the local government in the development and implementation of flood prevention or protection projects, or for flood prevention or protection studies.

§10.1-603.19 C. The Director may, in order to protect public safety and welfare, make ...
(ii) grants to local governments and private entities for the determination of the hazard classification for impounding structures (dams), dam break analysis, the mapping and digitization of dam break inundation zones, incremental damage analysis, and other engineering requirements such as emergency action plan development.

The Director of DCR will determine the type and amounts of funding available prior to each funding period, and will specify the categories that will be considered for grant assistance. The Director is authorized to make expenditures in accordance with §10.1-603.16 et seq. and the terms of this Guidance Document following approval of Department funding recommendations by the Virginia Soil and Water Conservation Board (Board). ***While flood prevention and protection is eligible, no funding is allocated in the 2023 Grant Manual for this purpose. Interested applicants may seek funding under the Community Flood Preparedness Fund (CFPF) for flood prevention and protection activities. Additional information can be found [here](#).***

Limitations of Funding

Funding available during this grant cycle consists of the following:

Dam Safety, Flood Prevention and Protection Assistance Fund (Fund) prior year eligible deposits:

\$1,000,000. Per Section 10.1-603.19 F of the *Code of Virginia* “[t]he total amount of expenditures for grants in any fiscal year shall not exceed 50 percent of the total non-interest or income deposits made to the Fund during the previous fiscal year, together with the total amount collected in interest or income from the investment of monies in the Fund from the previous fiscal year as determined at the beginning of the fiscal year.” While \$10,000,000 will be deposited into the Fund the during SFY2023, funds will not be eligible for award until SFY2024. These funds will be used to continue address the more than 1,800 dams of regulatory size without a hazard classification.

American Rescue Plan Act Funds: \$10,000,000. Per 2022 Special Session I Budget amendments - HB30 (Conference Report) Bill Order » Item 486 #25c Water Impoundment Structures Central Appropriations, provides funds to the Department of Conservation and Recreation for improvements to **privately** owned high-hazard dams across the Commonwealth.

Due to potential greater availability of non-state funding during the SFY2024 application period, some funds will be reserved to maximize the Commonwealth’s ability to match and leverage future federal funds, including Infrastructure Improvement and Jobs Act funding.

Definitions

Some of the terms used in this grant manual and in §10.1-603 of the *Code of Virginia* have specific meanings that may vary from other contexts. For the purposes of this manual and the Fund:

- “Local government” means any county, city, town, municipal corporation, authority, district, commission, or political subdivision created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of two or more of these entities.

- “Private entities” means dam owners, whether individuals, partnerships, corporations, or other nongovernmental entities. This additionally includes, but is not limited to, homeowners' associations, planned unit developments as defined in §15.2-2201, and common interest communities as defined in §54.1-2345 of the *Code of Virginia* when recognized as dam owners.
- “Project” for the Dam Safety program means the design, repair, and safety modifications of a dam or impounding structure, as defined in §10.1-604, and identified in dam safety reports generated pursuant to §10.1-607 or §10.1-609; or the mapping and digitization of dam break inundation zones. The term includes, without limitation, the construction, modification, or repair of dams, levees, flood walls, channel improvements, or diversions.
- “Maintenance” means routine activities conducted by the dam owner for preventive maintenance such as removal of woody plants, addressing rodent holes, etc.; replacement of parts, systems, or components; and other activities needed to preserve or maintain the dam that do not require an alteration permit.

Virginia Dam Safety Program

Provisions of the Virginia Dam Safety Act, (§10.1-604 et seq. of the *Code of Virginia*) and its attendant regulations (4 VAC 50-20-10 et seq.) promulgated by the Virginia Soil and Water Conservation Board and administered DCR’s Division of Dam Safety and Floodplain Management, promote the proper and safe design, construction, operation, and maintenance of dams in the Commonwealth. The Act applies to dams that are twenty-five feet or higher and that create a maximum impoundment capacity of fifteen acre-feet or greater, and dams that are six feet or higher and a maximum impoundment capacity of fifty acre-feet or greater. Exceptions are dams operated primarily for agricultural purposes which are less than 25 feet in height or which create a maximum impoundment capacity smaller than 100 acre feet, dams owned or licensed by the United States government, dams licensed by the State Corporation Commission that are subject to a safety inspection program, water or silt retaining dams approved pursuant to §45.1-222 or 225.1 of the *Code of Virginia* (mining or quarry dams permitted by Department of Mines, Minerals, and Energy), and obstructions in a canal used to raise or lower water. The Virginia Dam Safety Program’s goal is to enhance public safety and the protection of property by ensuring that dams meet mandatory regulatory requirements and assisting dam owners and their licensed engineers in the proper construction, maintenance and operations of their dams.

Part II: General DCR Grant Eligibility Criteria and Application Procedures

DCR Conditions and Limitations for Making Grants

- Grant assistance will be awarded by category on a competitive scoring basis for eligible projects that meet the general conditions of this section **and the specific criteria set out in the project category descriptions**. Scoring criteria to be utilized for each project category are contained in Appendix B.
- There is no limitation on the number of applications to the fund where a Letter of Engagement has been received, however in all cases limitations in funding may make it

necessary to reduce the requested grant amounts.

- Applications for repairs, safety modifications or removal are limited to one per dam and a maximum amount of \$500,000.
- Per §10.1-603.19 G of the *Code of Virginia*, any grants made from the Fund shall require a minimum of a 50 percent match. This match may be a combination of funding sources, including federal dollars, so long as the Fund does not contribute more than 50 percent of total costs.
- Grant funds will be disbursed on a reimbursement basis and only after the completion of the approved project.
- For dams where a Letter of Engagement has been received, the dam must be under a Regular or Conditional Operation and Maintenance Certificate prior to disbursement. The Certificate application may be submitted at the time of reimbursement request.
- For dams seeking funding for Plans and Specifications or Engineering Studies, a current Regular or Conditional Operation and Maintenance Certificate **and** a current professional engineer's inspection must be approved by DCR prior to reimbursement. The Certificate application and inspection may be submitted at the time of reimbursement request.
- For dams seeking funding for Repairs, Safety Modifications, or Removal, a current Regular or Conditional Operation and Maintenance Certificate, as well as plans and specifications and alteration permit must be approved by DCR prior to application deadline.
- No analysis or study will be approved if methodology used to conduct any analysis or study fails to meet applicable Dam Safety Regulations.
- ***All dam safety applications and supporting documentation must be submitted through the online Dam Safety Inventory System (DSIS). DSIS forms and data are located at <https://www.dcr.virginia.gov/dam-safety-and-floodplains/ds-dsis>. New users to DSIS are required to register through DSIS prior to application.***
- ***All dam safety grant deliverables and documents must be submitted through the online Dam Safety Inventory System (DSIS).***
- **A total of approximately \$5,000,000 is available for grants during this grant cycle.**
 - Up to \$1,000,000 is available for Letter of Engagement recipients.
 - Up to \$4,000,000 is available for “*private entity*” owned High Hazard Dams for
 - Plans, Specifications and Engineering Studies
 - Repairs, Safety Modifications and Removal. Only one application per dam with maximum request of up to \$500,000.00

- Maximum grant amounts will be determined based on scoring, amounts requested from eligible projects, and available funds. \
- **All successful “private entity” applicants will be required to provide identifying tax information (SSN/EIN) at the time of acceptance of award. All grant reimbursements are taxable and reportable to the IRS. The Department does not give advice regarding the tax implications of grants, the grantee should seek any necessary guidance from a tax professional.**
- Each application submitted must be for a discrete project that **commences on or after** the beginning of the application period and ends not later than **24-months** of an executed agreement or extension date approved by the Department. These specified dates constitute the required “project completion date.” Reimbursement requests must be submitted within 90 days following the project completion date.
- **Projects commencing prior to November 1, 2022 ARE NOT be eligible for funding.**
- No project or portion thereof identified in a previously awarded and reimbursed application is eligible for funding. For Dam Safety projects, this does not prohibit grant awards to a dam owner for an eligible separate and discrete project on the same dam.
- DCR, VRA, and the Board, in their discretion, reserve the right to provide funding at a level less than requested by the applicant, or to refuse to fund an applicant’s request. Reasons for such determinations include, but are not limited to, incomplete applications, project ranking, attainability of the proposal, credit worthiness of the applicant, total funding determined to be necessary to complete the project, failure to complete the project by the specified completion date, and total available funding.
- Should ownership of the dam change, the grant does not transfer. This does not include legal name changes where the new name remains clearly tied to the grant recipient.
- **Applications will be accepted beginning November 1, 2022 and ending at 4:00 p.m. on February 28, 2023.**
- In order for a grant to be authorized, an eligible project shall satisfy the following general conditions:
 - A complete application meeting the requirements set forth in this manual has been submitted to DCR within the specified application period.
 - Where applicable, the applicant [if a locality or entity (for example, a corporation or homeowner’s association)] has formally adopted a resolution requesting assistance from the Fund or a statement indicating that a resolution will be proposed, and once approved, will be forwarded to DCR **prior to the close of the application period.** Resolutions not received prior to the close of the application period will cause the application to be disqualified.
 - The applicant has provided satisfactory assurances of funding availability to fully fund

- the project through completion in order to qualify for cash matching funds. This must include signed, written verification as outlined in requirements for the Dam Safety Budget Narrative.
- Project maintenance and management plans are required when applying for funding for Repairs or Safety Modifications. A maintenance plan for repair and safety modification projects must be provided demonstrating how the dam will be maintained for the expected lifetime of the impounding structure or at least 50 years. No maintenance plan is required for dam removals.
 - **All legal dam owners must sign the grant application. If only one owner applies, the applicant owner must submit proof of signatory authority signed by all legal dam owners. In cases where known owners refuse to sign the application. A written request for authorization to apply without all signatures must be included with the application submission as a separate document. The request must provide an explanation and justification for the request. Approval will be at the sole discretion of the DCR agency head.**
 - If a grant is sought for a study, project, or activity that will be carried out in concert with a federal agency, the applicant must have entered into or have adopted a resolution to enter into, any necessary written agreement with the federal agency endorsing the study, project, or activity, including any provisions for cost-sharing. A copy of the agreement must be submitted with the application.

Application and Selection Process

1. General Submittal Information and Deadline

A complete electronic application file with all required attachments **must be submitted through DSIS.**

Files should be saved as follows:

- Dam Safety projects: Dam inventory number.pdf (example: 190054.pdf). If multiple applications for the same inventory number then please use 190054-1.pdf.

If electronic submittal through DSIS is not possible, approval to submit outside of DSIS may be considered under extenuating circumstances. A written justification must be submitted to dam@dcr.virginia.gov at least 30 days prior to application close or January 30, 2023. If approval is granted, the applicant will be required to submit the completed application along with all attachments and supporting documentation to dam@dcr.virginia.gov. If email submission is not possible, submit 3 complete copies of each application (including one originally-signed copy), together with all attachments and supporting documentation, to the Virginia Department of Conservation and Recreation at the address below:

Virginia Department of Conservation and Recreation
Attention: Dam Safety, Flood Prevention and Protection Assistance Fund
Division of Dam Safety and Floodplain Management
600 East Main Street, 24th Floor
Richmond, Virginia 23219

It is important that applications be printed on one-sided pages. All pages must be sized to 8.5 x 11 inches. Photographs are acceptable. All photos and images and their captions must be mounted on 8.5 x 11 inch paper and be of quality suitable for reproduction by photocopier. It is not necessary to submit 3 sets of original images, but all reproduced images must be clear and discernable. Images and photos will not be returned.

Please ensure signature pages are completed prior to submitting electronically or mailing. Applications without signatures will be considered incomplete and will be removed from funding consideration. Applications will be accepted beginning on November 1, 2022. **All applications must be RECEIVED by 4:00 p.m. eastern time on February 28, 2023.** Applications received after this deadline **will not be considered.**

Applications will be scored, ranked, and funded based on scoring criteria in Appendix B for Dam Safety and the availability of funds.

General Application Inquiries: For any questions regarding the application process, please contact the Department of Conservation and Recreation, Division of Dam Safety and Floodplain Management at (804) 371-6095 or via email at dam@dcr.virginia.gov.

2. Project Application Contents

Organizational Information

The Application Form (Appendix A) contains general organizational information, including the title, category, and location of the project, the amount of grant funds requested, and contact information for the applicant or the applicant's designated contact person.

Scope of Work Narrative (as an attachment to the Application Form)

The requirements for the project's Scope of Work Narrative are outlined in Part III of this manual. A completed scoring criteria sheet must also be included to support the Scope of Work Narrative.

Budget Narrative (as an attachment to the Application Form)

The Budget Narrative establishes the proposed budget for the project. It should include evidence of the source of funds available to fully fund the project to qualify for cash matching funds. A description of the Budget Narrative is outlined in Part III of this manual.

3. Application Review and Approval

Qualifying projects in each category are selected for funding on a competitive scoring basis. DCR will use the following procedure in determining the qualification of an application.

Department of Conservation and Recreation (DCR) Review

Applications will be reviewed by DCR's Division of Dam Safety and Floodplain Management for completeness in accordance with the eligible grant categories and application requirements. Division staff will additionally review and rank each complete application to determine its merits in accordance with the criteria set out in this manual pursuant to the scoring criteria contained in Appendix B.

Virginia Soil and Water Conservation Board Review

The Director of DCR will recommend qualified projects for funding to the Board. The Board will consider the Director's recommendations and approve projects for funding in accordance with the criteria set out in this manual.

Virginia Resources Authority (VRA) Review

Following the Board's approval, and pending further necessary submittals, the application will be forwarded to VRA for the execution of a grant agreement and funding.

4. Project Commencement and Schedule for Completion

Since the readiness of projects to proceed is a critical factor in maintaining the integrity of the program, projects will be required to start on or after the beginning of the application period and not later than twenty-four (24) months following the issuance of a signed agreement between the applicant and VRA on behalf of DCR. If a project does not commence in a timely fashion to allow completion within the agreement period, funding will be withdrawn from the project and the applicant may reapply during the next funding round, should funds be available. Such funds may be redistributed to other qualifying projects at the discretion of the Board.

A one-year extension may be granted at the discretion of DCR; however, all extension requests (Appendix D) must be received not later than 120 days prior to the expiration of the original agreement, and the approved project must have commenced within the first twelve (12) months of the original agreement period.

5. Reporting and Close-Out Guidelines for Grant Recipients

Where applicable, DCR will conduct project inspections as necessary to ensure conformance to grant terms. **Final project deliverables defined in the approved Scope of Work are due to DCR within 30 days following the project end date, unless another date is approved by the Department. All materials shall be provided digitally to DCR through the Dam Safety Inventory System (DSIS) as a requirement for receipt of this grant.** Although not required, printed materials may also be submitted to DCR in addition to the DSIS submittal. Printed material may not substitute for DSIS submittal.

- All documents must be provided in PDF and/or a Microsoft Word compatible format, including any embedded maps or other figures/illustrations.
- All engineering files (including hydrologic and hydraulic studies) and assumptions necessary to replicate various analyses or other calculations need to be provided in a format compatible with the software used to perform those calculations; likewise all output files are also required.
- All tabular information not included in the engineering files above, whether or not contained within any report or appendix, which was used as the basis for any calculation, shall be provided in a Microsoft Excel compatible format or Microsoft Access compatible format.
- All map data shall be delivered as a geodatabase or individual shapefiles. Additionally, maps shall be provided in a PDF format if not already included embedded within the report(s).
 - If derived from CAD or another non-GIS workflow, data must be converted into a

- GIS format.
- See the Virginia Soil and Water Conservation Board's Guidance Document for specific requirements and direction for mapping - [Dam Break Inundation Zone Modeling and Mapping Procedures](#) (PDF) (Revised June 28, 2018, and Sept. 27, 2018)
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6. Grant Award and Administration

- A. After approval by the Virginia Soil and Water Conservation Board at the meeting tentatively scheduled for May 2023, a letter will be sent from DCR to the applicants, and notice of awards will be posted on the DCR Dam Safety and Floodplain Management Grants web page at <http://www.dcr.virginia.gov/dam-safety-and-floodplains/dsfpm-grants>.
- B. VRA will email Grant Agreements to recipients using the email address provided in the original application. If no email address is provided, the Grant Agreements will be sent via U.S. mail. Recipients shall return the signed Grant Agreement within 90 days of receipt to:
 - Peter DAlema
 - Virginia Resources Authority
 - 1111 E. Main Street, Suite 1920
 - Richmond, VA 23219
 - PDalema@virginiareources.org
 - (804) 616-3446

Grant agreements not signed and returned to VRA within 90 days as required will have grant funds rescinded.

- C. Within 30 days after the dam safety project is completed the applicant shall submit digital copies of the completed engineering work to the Regional Dam Safety Engineer for approval. Exhibit D Form of Requisition along with the Certificate of the Consulting Engineer Form, both included in the grant agreement, must be included with the dam safety project submittal to the Regional Engineer. Electronic submittals shall be made to dam@dcr.virginia.gov. Names and mailing addresses of DCR's Regional Dam Safety Engineers are available online at <http://www.dcr.virginia.gov/dam-safety-and-floodplains/dsfpmcontx>.
- D. **Submit reimbursement requests within 90 days following passage of the authorized project completion date** including completed and signed Exhibit E Reimbursement Request Form, signed Exhibit D Form of Requisition along with the Certificate of the Consulting Engineer Form, all located in the Grant Agreement, proof of payment (cancelled checks, bank statements, accounting system reports, etc.) and invoices to dam@dcr.virginia.gov or:
 - Virginia Department of Conservation and Recreation
 - Attention: Dam Safety, Flood Prevention and Protection Assistance Fund
 - Division of Dam Safety and Floodplain Management
 - 600 East Main Street, 24th Floor

Richmond, Virginia 23219

Invoices must be detailed and specific to the project awarded and provide sufficient detail to determine the work and hours actually completed related to the approved project.

If the project was awarded for Dam-break Inundation Zone Study (DBIZ) Analysis, Mapping, and Digitization, or for EAP Development, evidence must be provided that the map has been additionally filed with the local planning department and the EAP with the local emergency management coordinator and the Virginia Department of Emergency Management prior to reimbursement approval.

7. Virginia Resources Authority Disbursement of Grant Funds

Grant funds shall be disbursed on a reimbursement basis only. All requests for disbursement shall be delivered to DCR for approval according to the reimbursement terms of the grant manual and Grant Agreement. DCR shall forward the approved request to VRA for payment to the applicant. VRA will not disburse funds prior to receipt of a fully executed Grant Agreement signed by the grant recipient and subsequently signed by VRA's Executive Director. Where applicable, DCR will conduct site visits and inspections to monitor project compliance. A checklist for reimbursement will be included as Exhibit E in the Grant Agreement.

Part III: Eligible Dam Safety Projects

Dam Safety Project Descriptions and Eligible Activities

The purpose of this category is to assist dam owners in bringing their regulated dams into compliance with the Dam Safety Act (§10.1-604 et seq. of the *Code of Virginia*) and the Virginia Impounding Structure Regulations (4VAC5-20-10 et seq.) or to remove unsafe dams. Funding is available under three categories.

Project Type 1: Letters of Engagement

Criteria

1. Must have received a Letter of Engagement from DCR
2. A copy of the Letter of Engagement must be submitted with the application
3. Only one project type may be selected per application; multiple applications may be submitted
4. Previously funded activities are ineligible

Eligible Activities

1. Dam Break Inundation Zone Analysis, Mapping, and Digitization
2. Emergency Plan Development (EAP Emergency Action Plan)
3. Professional Engineer Inspection Project

Project Type 2: Plans, Specifications and Engineering Studies

Criteria

1. Is a High Hazard dam regulated by DCR
2. Is a Privately owned High Hazard dam
1. Only one project type may be selected per application; multiple applications may be submitted
2. Has an approved and active Conditional Operation and Maintenance Certificate on file with DCR at the time of application

Eligible Activities

1. Dam Break Inundation Zone Analysis, Mapping, and Digitization with Hazard Classification
2. Emergency Plan Development (EAP Emergency Action Plan or EPP Emergency Preparedness Plan)
3. Spillway Capacity or Overtopping Analysis
4. Alternatives Analysis for Spillway Capacity and Stability
5. Geotechnical Investigation and/or Structural Analysis for Dam/Spillway Stability
6. Engineering and Design for one of the following:
 - a. Dam Embankment Wave Run-up or Wave Berm Construction and Reconstruction Analysis and Plan
 - b. Dam Graded Filter Drains, Toe Drains, Drainpipes and/or /Underdrain Analysis and Plan
 - c. Principal and/or Emergency Spillway and Repair/Replacement Plan
 - d. Trash Rack and/or Anti-Vortex Device Analysis and Repair/Replacement Plan
 - e. Dam Embankment Culvert or Pipe Analyses and Repair/Replacement Plan (Hydraulic or Structural)
 - f. Outlet/Stilling Basin Analysis and Repair/Replacement Plan
 - g. Dam Primary Mechanical Flow Control Evaluation and Repair Plan (Valves, Siphons, etc.) Dam or Lake Drain/Low Level Outlet Analysis and Repair Plan
 - h. Analyses and Repair/Replacement of Erosion or Deteriorated Appurtenant Structures
7. Final plans and specifications suitable for dam rehabilitation

Project Type 3: Dam Repair, Safety Modifications or Removal

Criteria

3. Is a High Hazard dam regulated by DCR
4. Is a Privately owned High Hazard dam
5. A Regular Operation and Maintenance Certificate application must be submitted prior to or with reimbursement request
6. Has an approved and active Conditional Operation and Maintenance Certificate on file with DCR at the time of application, and
7. Has approved plans and specifications for any construction project along with the approved alteration permit on file with DCR at the time of application.
8. Proposed construction project must bring the dam into full compliance with Dam Safety Regulations and the application for a Regular Operation and Maintenance Certificate must accompany the reimbursement request.
9. Deferred maintenance is not eligible for funding.
10. One application per dam with maximum funding not to exceed \$500,000

Eligible Activities

1. Repair and/or Safety Modifications to address any of the following:
 - a. Static failure mode:
 - i. Fails to meet stability criteria
 - ii. Settlement, cracking, depressions/sinkholes, slumps/sloughs
 - iii. Seepage

- iv. Instrumentation readings are indicative of a problem
 - v. Known design and/or construction issues
 - vi. Non-routine operational issues
 - b. Hydrologic failure mode:
 - i. Deficiency of spillway design flood
 - ii. No spillway redundancy
 - iii. Spillway condition is in poor or unsatisfactory condition
 - iv. Non-routine operational issues
 - c. Seismic failure mode:
 - i. Does not meet state required seismic stability criteria
 - ii. Embankment or foundation comprised of liquefiable materials
 - d. Other repairs or safety modifications required by the Conditional Operation and Maintenance Certificate - Does not include maintenance.
2. Removal of an unsafe dam where no new impounding structure will be rebuilt

Part IV: Dam Safety Scope of Work Narrative

All applications must include a Scope of Work Narrative that is an attachment to the application document. The Scope of Work Narrative shall include a detailed description of the need for assistance and the work to be conducted to address that need. Appendix B must be included in the submission. The Scope must also describe how the project meets criteria in Appendix C, identify risk reduction benefits to be achieved from the project, goals and objectives, the approach, milestones and deliverables of the project, a maintenance plan, if applicable and any alternatives considered for each grant application,. Additional details for each category are listed below.

1. **Need for Assistance:** Identify and describe any relevant issues or problems to be addressed by the project and the proposed activity to be accomplished by the grant program.
 - The applicant must attach a copy of a current Conditional or Regular Operation and Maintenance Certificate or Letter of Engagement.
2. **Scoring Criteria:** Describe how the project meets each of the applicable scoring criteria contained in Appendix B, and provide documentation where necessary. Documentation can be incorporated into the Scope of Work Narrative or included as attachments to the application. At a minimum applicant must identify if project impacts any of the following: Major public street or road; secondary public street or road; private public street or road; limited use public street or road; private road or driveway; service or access road; public water or sewer treatment; public water system; public sewer system; public pump or lift station; electric; gas; cable; communications; business structures; industrial structures; public structures (school, library, fire, police, etc.) Appendix B must be completed and submitted with the application.
3. **Risk Reduction Benefits Expected:** Briefly discuss the expected results and **risk reduction benefits** of the project. The proposal should describe how the project is part of a complete approach to addressing dam deficiencies, such as those required in the Conditional

Operation and Maintenance Certificate, where applicable, or flood impacts.

4. ***Goals and Objectives:*** Identify and describe the goals and objectives of the project. Include a description of the expected results of the completed project and explain the expected benefits of the project. This may include financial benefits, increased awareness, decreased risk, etc.
5. ***Approach, Milestones and Deliverables:*** Outline a plan of action laying out the scope and detail of how the proposed work will be accomplished with a timeline identifying expected completion dates. Determine milestones for the project that will be used to track progress. Explain what deliverables can be expected at each milestone, and identify the final project deliverables. Identify other potential project partners. If assistance is sought for a project that will be carried out in concert with a federal agency, provide evidence of an agreement with the federal agency endorsing the project.
 - ***Please note no analysis or study will be approved for reimbursement if methodology used to conduct analysis or study does not meet Dam Safety Regulations and Floodplain Management standards.***
6. ***Maintenance Plan:*** Applications for Repair and Safety Modification projects must be provide a maintenance plan demonstrating how the dam will be maintained for the expected lifespan of the project, or at least 50 years. Ongoing operation and maintenance will be the financial responsibility of the applicant and will not be eligible for monies from the Fund.
7. ***Alternatives:*** Applications for Repair and Safety Modifications must briefly describe any alternatives to the proposed activity that have been considered and the reason the project was selected. One alternative should be doing nothing, and one alternative should be another project type that could reasonably address the issues identified. Explain these alternatives and the reason the proposed project was selected. Include how the two alternatives differ from the proposed activity, and how the cost and benefit of the alternatives compares to the proposed activity

Part V: Dam Safety Budget and Budget Narrative

Each application must include a detailed Budget and Budget Narrative explaining all proposed expenditures. The budget narrative is applicable to requests for all grant requests in this manual. The following items must be included in the Budget Narrative:

- ***Estimated total project cost and amounts requested from the fund:*** This must reflect the total cost of bringing the project to completion and reflect the amount of funds requested from the Fund. Estimates for all work to be completed by third parties (engineers, contractors, etc.) on the specified project should be included. Include a detailed breakdown of how this funding is proposed to be allocated between the applicant and the fund. At a minimum the budget and budget narrative should include a breakdown of salaries, fringe benefits, travel, equipment, supplies, construction, contracts and other direct costs. The

amount allocated to the Fund cannot exceed 50 percent of estimated total project costs or \$500,000 for Repairs, Safety Modifications or Removal. Indirect costs are not allowable.

- ***Amount of cash funds available:*** The applicant must demonstrate the ability to pay the full cost (100%) of the project prior to reimbursement. Include a description of the source of these funds and evidence of the applicant's ability to obtain these funds in order to complete the project.
- ***Resolution authorizing request for funding:*** Localities seeking funding shall attach a resolution or other authorizing documentation approving the request for funding.

For non-localities, a pledge agreement or other authorizing documentation is required for each contribution, signed by the authorized representative of the contributing organization and the applicant organization, if different, which must include:

- The name, address, and telephone number of the contributor;
- The name of the applicant organization;
- The title of the project for which the cash contribution is made;
- The source of funding for the cash contribution;
- The dollar amount of the cash contribution; and
- A statement that the contributor will pay the cash contribution during the agreement period.

In-kind services, indirect costs, loans or other grant funds awarded from the Fund may NOT be used as match funds. Monies used to match other funding streams are also NOT allowed as match for this grant program.

Part VI: Additional Funding Resources:

Private Entities:

Virginia Small Business Financing Authority

(VSBFA) - <https://www.sbsd.virginia.gov/virginia-small-business-financing-authority/>

Contact: Anna Mackley, Chief Credit Officer & Operations Manager

anna.mackley@sbsd.virginia.gov

Virginia Community Capital (VCC) - <https://www.vacommunitycapital.org/>

Contact page for the lending team: <https://www.vacommunitycapital.org/about/staff/lending/>

Local Governments:

USDA Rural Development Virginia Office - <https://www.rd.usda.gov/va>

State Director: [Elizabeth Walker Green](#) 804-287-1552

Community Programs: [Janice Stroud-Bickes](#) 804-287-1615

Appendix A: Application Form for Dam Safety Projects

Virginia Department of Conservation and Recreation

Dam Safety, Flood Prevention and Protection Assistance Fund Grant Program

Type of Applicant (Check one): Public Government Entity Private Entity

Dam Name: _____

Dam Inventory Number: _____

Name of Dam Owner (1): _____

Signature of Dam Owner: _____

Email Address: _____ Phone No: _____

Name of Dam Owner (2): _____

Signature of Dam Owner: _____

Email Address: _____ Phone No: _____

(If additional dam owners, please see page two of the application)

APPLICANT INFORMATION

Name of Applicant: _____

Signature of Applicant: _____

Mailing Address (1): _____

Mailing Address (2): _____

City: _____ State: _____ Zip: _____

Telephone Number: (____) _____ Cell Phone Number: (____) _____

Email Address: _____

Project Type (select only one project type):

Project Type 1: Engineering Studies

- Dam Break Inundation Zone Analysis, Mapping, and Digitization
- Emergency Plan Development (EAP Emergency Action Plan)
- Professional Engineer Inspection

Project Type 2: Plans, Specifications and Engineering Studies

- Dam Break Inundation Zone Analysis, Mapping, and Digitization with Hazard Classification
- Emergency Plan Development (EAP Emergency Action Plan or EPP Emergency Preparedness Plan)
- Spillway Capacity or Overtopping Analysis
- Alternatives Analysis for Spillway Capacity and Stability
- Geotechnical Investigation and/or Structural Analysis for Dam/Spillway Stability
- Engineering and Design for one of the following:
 - Dam Embankment Wave Run-up or Wave Berm Construction and Reconstruction Analysis and Plan
 - Dam Graded Filter Drains, Toe Drains, Drainpipes and/or /Underdrain Analysis and Plan
 - Principal and/or Emergency Spillway and Repair/Replacement Plan
 - Trash Rack and/or Anti-Vortex Device Analysis and Repair/Replacement Plan
 - Dam Embankment Culvert or Pipe Analyses and Repair/Replacement Plan (Hydraulic or Structural)
 - Outlet/Stilling Basin Analysis and Repair/Replacement Plan
 - Dam Primary Mechanical Flow Control Evaluation and Repair Plan (Valves, Siphons, etc.) Dam or Lake Drain/Low Level Outlet Analysis and Repair Plan
 - Analyses and Repair/Replacement of Erosion or Deteriorated Appurtenant Structures
- Final plans and specifications suitable for dam rehabilitation

Project Type 3: Repairs, Safety Modifications and Removal

- Repairs and/or Safety Modifications to address any of the following:
 - Static failure mode:
 - Fails to meet stability criteria
 - Settlement, cracking, depressions/sinkholes, slumps/sloughs
 - Seepage
 - Instrumentation readings are indicative of a problem
 - Known design and/or construction issues
 - Non-routine operational issues
 - Hydrologic failure mode:

- Deficiency of spillway design flood
- No spillway redundancy
- Spillway condition is in poor or unsatisfactory condition
- Non-routine operational issues
- Seismic failure mode:
 - Does not meet state required seismic stability criteria
 - Embankment or foundation comprised of liquefiable materials
- Other repairs or safety modifications required by the Conditional Operation and Maintenance Certificate - Does not include maintenance.
- Removal of an unsafe dam where no new impounding structure will be rebuilt

Location of Project (Include Maps): _____

Total Cost of Project: _____

Total Amount Requested: (Not more than 50% of total costs) _____

Additional Dam Owners

Name of Dam Owner (3): _____

Signature of Dam Owner: _____

Email Address: _____ **Phone No:** _____

Name of Dam Owner (4): _____

Signature of Dam Owner: _____

Email Address: _____ **Phone No:** _____

Appendix B: Scoring Criteria for Dam Safety Projects

Virginia Department of Conservation and Recreation

Dam Safety, Flood Prevention and Protection Assistance Fund Grant Program

Name of Applicant: _____

Dam Name: _____

Dam Inventory Number: _____

Dam Name:	Dam Inventory Number:	
Eligibility Information		
Criterion	Description	Check One
1. Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these) or a private entity (including dam owners, whether individuals, partnerships, corporations, homeowners association, or other nongovernmental entities)?		
Local Government	Eligible for consideration under this category LOE Only	
Private Entity	Eligible for consideration under this category	
Other	Not eligible for consideration under this category	
2. Has this or any portion of this project been included in any application previously funded by Fund? This does not include necessary updates to EAP, DBIZ, etc.		
Yes	Not eligible for consideration under this category	
No	Eligible for consideration under this category	
3. Has the applicant provided evidence of an ability to provide the required match funds?		
Yes	Eligible for consideration under this category	
No	Not eligible for consideration under this category	
4. Has the applicant maintained proper Certification during the past twelve months or provided sufficient documentation regarding efforts to bring the dam into compliance? (Include copy)		
Yes	Eligible for consideration under this category	
No	Not eligible for consideration under this category	

Dam Name:		Dam Inventory Number:	
Scoring Information			
Criterion		Point Value	Points Awarded
5. What is the hazard classification or size of the dam? (select one)			
High	Confirmed spillway deficiency	30 pts	
Significant	Confirmed spillway deficiency	15 pts	
Low	Confirmed spillway deficiency	8 pts	
Large Dam (Top Capacity \geq 50,000 Ac-Ft or Height \geq 100 Ft)	No hazard class determination	20 pts	
Medium (Top Capacity \geq 1,000 & < 50,000 Ac-Ft or Height \geq 40 & < 100 Ft)	No hazard class determination	10 pts	
Small (Top Capacity \geq 15 & < 1,000 Ac-Ft or Height \geq 6 & < 40 Ft)	No hazard class determination	4 pts	
High	Adequate spillway capacity	10 pts	
Significant	Adequate spillway capacity	5 pts	
Low	Adequate spillway capacity	2 pts	
6. Number of residential units within the probable dam break inundation zone of the dam?			
101 or more		20 pts	
21-100		15 pts	
11-20		10 pts	
1-10		5 pts	
0 (or undetermined)		0 pts	
7. Will public roadways, public utilities, and/or commercial structures be impacted within the dam's probable dam break inundation zone?			
Public Roadways, public utilities, and commercial structures		10 pts	
Any two of the above		7 pts	
One of the above		4 pts	
None of the above		0 pts	
Unknown		0 pts	
8. What is the most common land use downstream within the likely dam break inundation zone?			

Residential/Commercial/Industrial or equivalent	5 pts	
Agricultural or equivalent	3 pts	
Other	1 pts	
Unknown	0 pts	
9. What is the public use of the impoundment created by the dam?		
Public water supply public water treatment, and public recreation access (Does not include private or restricted access communities)	5 pts	
Public water supply or public water treatment only	3 pts	
Public recreational access only (Does not include private or restricted access communities)	2 pts	
No public access or use (Includes private or restricted access communities)	0 pts	
10. Eligible Projects (Select only one)		
Project Type 1: Letters of Engagement Only		
Dam Break Inundation Zone Analysis, Mapping, and Digitization	50 pts	
Emergency Plan Development (EAP Emergency Action Plan)	50 pts	
Professional Engineer Inspection	40 pts	
Project Type 2: Repairs, Safety Modifications and Removal		
Dam Break Inundation Zone Analysis, Mapping, and Digitization	50 pts	
Emergency Plan Development (EAP/EPP)	50 pts	
Spillway Capacity or Overtopping Analysis	30 pts	
Alternatives Analysis for Spillway Capacity and Stability	20 pts	
Geotechnical Investigation and/or Structural Analysis for Dam/Spillway Stability	35 pts	
Engineering and Design	25 pts	
Final plans and specifications suitable for rehabilitation	45 pts	
Project Type 3: Repairs, Safety Modifications and Removal		
Repair or Safety Modification		
Addresses Failure Modes (Static/Hydrologic/Seismic)	50 pts	
Other Repairs or Safety Modifications	25 pts	

Removal of Unsafe Dam - No New Dam Rebuilt	30 pts	
Total Points		

Appendix C: Documentation Checklist for Dam Safety Applications

Virginia Department of Conservation and Recreation

Dam Safety, Flood Prevention and Protection Assistance Fund Grant Program

Name of Applicant: _____

Scope of Work Narrative	
Required Components	Included
Need for Assistance Narrative	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Operation and Maintenance Certificate or Letter of Engagement	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Application Appendix A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Scope of Work Narrative	
Need for Assistance	<input type="checkbox"/> Yes <input type="checkbox"/> No
Completed Scoring Criteria Sheet in Appendix B	<input type="checkbox"/> Yes <input type="checkbox"/> No
Risk Reduction Benefits Expected	<input type="checkbox"/> Yes <input type="checkbox"/> No
Goals and Objectives	<input type="checkbox"/> Yes <input type="checkbox"/> No
Approach, Milestones and Deliverables	<input type="checkbox"/> Yes <input type="checkbox"/> No
Maintenance Plan	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Alternatives	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Budget Narrative	
Supporting Documentation	Included
Locality Applicants: Resolution or other documentation authorizing the request for funding (LOE Only)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Non-locality Applicants: Signed pledge agreement(s) or other authorizing documentation from each contributing organization	<input type="checkbox"/> Yes <input type="checkbox"/> No
Detailed budget and narrative of how funding is to be allocated	<input type="checkbox"/> Yes <input type="checkbox"/> No
Proof / Evidence of ability to fund total cost (100%) of project prior to Reimbursement	<input type="checkbox"/> Yes <input type="checkbox"/> No

Appendix D: Extension Request Form

Virginia Department of Conservation and Recreation

Dam Safety, Flood Prevention and Protection Assistance Fund Grant Program

Request to Amend Contract between Virginia Resources Authority and Grant Recipient of the 2023 Dam Safety, Flood Prevention and Protection Assistance Fund Grant

All projects are required to commence and to be completed within the twenty-four (24) months following the issuance of a signed agreement between the applicant and VRA on behalf of DCR. A one-year extension may be granted at the discretion of DCR provided such request is **received not later than 120 days prior to the expiration of the original agreement**. Requests should be emailed to dam@dcr.virginia.gov. If email is not available, please mail to:

Virginia Department of Conservation and Recreation
Attention: Dam Safety, Flood Prevention and Protection Assistance Fund
Division of Dam Safety and Floodplain Management
600 East Main Street, 24th Floor
Richmond, Virginia 23219

Grant Recipient: _____

Contact Name: _____

Mailing Address (1): _____

Mailing Address (2): _____

City: _____ State: _____ Zip: _____

Is this a new address? Yes No *Has the Contact Name changed?* Yes No

Telephone Number: (____) _____ Cell Phone Number: (____) _____

Email Address: _____

Grant Number: _____

Type of Project (Check one): Dam Safety Flood Prevention and Protection

Title of Project: _____

Dam Name: _____

Dam Inventory Number: _____

Total Cost of Project: _____

Total Amount Awarded: _____

Current Grant End Date: _____

Requested New End Date: _____

Please provide a detailed explanation for extension request including reason work will not be completed during the initial grant period and a timeline for completion if approved. Please attached additional documentation as needed.

--

Grant Recipient Signature

Date Requested

Grant Recipient Printed Name

Title

DCR Use Only

Virginia Department of Conservation and Recreation

Date Approved

Date Denied

Printed Name

Title

VRA Use Only

Virginia Resources Authority

Date
Received

Date Grant
Modified
