



# Culvert Flood Risk Assistance Grant Program Application Instructions and Evaluation Criteria



## A. Introduction

The New Hampshire Department of Environmental Services (NHDES) is pleased to announce the Culvert Flood Risk Assistance Grant Program and is seeking applications from New Hampshire municipalities and non-governmental organizations interested in upgrading outdated, undersized, perched, and/or degraded culverts that are highly susceptible to flooding. The purpose of this funding opportunity is to encourage the replacement of high-risk culverts with better designed crossings that meet improved structural and environmental design standards and flood resiliency criteria. Incorporating these standards into culvert replacement designs will reduce flood hazards and risks to public safety, including culvert failure and road washout. Federal funding for this grant opportunity is provided by the American Rescue Plan Act (ARPA).

## B. Application Process

NHDES is accepting applications which will be reviewed and ranked by a NHDES grant review committee according to the criteria outlined in Section G. Select applicants may be asked to organize a project site visit with the NHDES grant review committee. Applicants with the highest-ranking applications will be notified in writing and must enter into a Grant Agreement with NHDES to receive funds. The final Grant Agreement will be subject to successful negotiation and State of New Hampshire Governor and Executive Council approval.

## C. Eligible Applicants

New Hampshire municipalities and non-governmental organizations are eligible to apply. Each applicant may apply for funding for multiple projects, if desired. Applicants must submit a separate application for each project. If selected for funding, grant recipients may use these grant funds to subcontract with private entities, such as environmental consulting or engineering firms selected through an approved procurement procedure.

## D. Eligible Projects

Eligible projects must be a culvert replacement on a public way and cross a natural freshwater, non-tidal stream channel. Replacement of culverts owned by or located on property owned by private individuals will also be considered if the project provides a tangible and public safety benefit by reducing flood hazards in the state. Culverts owned by the State or federal agencies are not eligible.

In order to be eligible, projects must also meet the following criteria:

- ✓ The project site has experienced adverse effects of flooding.
- ✓ The existing structure shows signs of deterioration.
- ✓ Conceptual engineering designs have been completed and demonstrate hydraulic improvements that meet the 100-year storm event, allow natural stream processes to occur, and allow the channel to naturally adjust over time.
- ✓ The culvert replacement will improve environmental conditions and ecological function at the crossing (e.g., optimize fish and wildlife passage, improve water quality, etc.)
- ✓ The project must be completed within three years of Governor and Executive Council approval.

## E. Funding Availability

The Culvert Flood Risk Assistance Grant Program will utilize ARPA funds to award approximately \$1,000,000 in grants in 2022. The program budget allows individual awards of up to \$400,000. NHDES anticipates awarding funding for two to three projects. It is unlikely this grant program will be able to fund all project applications that are received, but applications not selected for funding will be used to generate a list of culvert replacement projects in need of funding to help NHDES and partner organizations prioritize projects for future funding opportunities.

Projects must address improvements, modifications, or upgrades to existing culverts. A portion of the grant award may be used to fund non-construction related activities, including engineering and design, permitting, bidding/construction contract services, and project management and reporting, up to a maximum of 20% of the grant award. There is **no match requirement** for this funding opportunity.

## F. Application Instructions

Complete and submit an application using the online application form, accessible from the [Culvert Flood Risk Assistance Grant Program webpage](#), no later than 4 PM Eastern Time on July 1, 2022. Refer to the following application requirements as you fill out the online application form. Application requirements that are marked with an asterisk below will be scored according to the corresponding evaluation criteria outlined in Section G.

### Section 1: Applicant Information

- 1.1 **Organization name:** *Enter the name of the lead applicant organization.*
- 1.2 **Mailing address:** *Enter the mailing address of the lead applicant organization.*
- 1.3 **Contact person:** *Enter the name of the primary contact person for the application.*
- 1.4 **Contact email:** *Enter the email address of the primary contact person.*
- 1.5 **Contact phone:** *Enter the phone number of the primary contact person.*

### Section 2: Project Information

- 2.1 **Project title:** *Enter a descriptive title for the project (300-character limit, including spaces).*
- 2.2 **Project location description:** *Enter a brief description of the crossing location (e.g., next to a physical address or a specific distance from a crossroad) (300-character limit, including spaces).*
- 2.3 **GPS location:** *Enter the GPS location of the crossing in decimal degrees (e.g., 43.074814, -70.802584; available on Google Maps by clicking the location on the map)*
- 2.4 **Road name:** *Enter the name of the road.*
- 2.5 **Waterbody name:** *Enter the name of the waterbody. If unknown or unnamed, enter UNKNOWN.*
- 2.6 **Project goal\*:** *Enter a clear goal statement that is well-aligned with the purpose of this funding opportunity (500-character limit, including spaces).*
- 2.7 **Project need\*:** *Enter a paragraph justifying the need for the culvert replacement, how the replacement will address issues identified at the crossing, why it is timely, and why Culvert Flood Risk Assistance Grant funds are appropriate to support the project (1,500-character limit, including spaces).*
- 2.8 **Project partners (if applicable):** *Enter the names of any additional project partners involved in the project and briefly describe their role.*
  - a. Project Partner:  
Role:

### Section 3: Existing Structure Information

- 3.1 **Number of culverts:** *Enter the number of culverts that exist at this crossing.*
- 3.2 **Structure type:** *Select the structure type that best describes the shape of the main culvert.*
- a. Round culvert
  - b. Elliptical culvert
  - c. Pipe arch culvert
  - d. Box culvert
  - e. Embedded round culvert
  - f. Embedded elliptical culvert
  - g. Embedded pipe arch culvert
- 3.3 **Material:** *Select the material that best describes the construct of the main culvert.*
- a. Concrete
  - b. Plastic-corrugated
  - c. Plastic-smooth
  - d. Stone
  - e. Steel-corrugated
  - f. Steel-smooth
  - g. Aluminum-corrugated
  - h. Wood
  - i. Other
- 3.4 **Length:** *Enter the length of the culvert from inlet to outlet. Record in feet and inches.*
- 3.5 **Width:** *Enter the width of the culvert. Record in feet and inches.*
- 3.6 **Height:** *Enter the height of the culvert from the streambed to the top of the culvert (for embedded culverts) or the bottom to the top of the structure. Record in feet and inches.*
- 3.7 **SADES ID:** *Enter the SADES ID of the culvert (see [Stream Crossing Viewer](#)). If unknown, enter UNKNOWN.*

### Section 4: Condition and Flood Risk

- 4.1 **What is the current condition of the structure?** *Check Good (like new, with little or no deterioration, consistent shape, minor joint misalignment, no movement, structurally sound and functionally adequate), Fair (some deterioration or cracking, joint separation with minor infiltration but structurally sound, localized distortion in shape, functionally adequate), or Poor (significant deterioration or extensive cracking and/or spalling, extreme deflection in shape, joint separation with potential to create voids, significant movement and/or functionally inadequate requiring maintenance or repair).*
- 4.2 **Has the existing structure caused adverse effects to the project site such as erosion, bank failure, or a scour pool?** *Check Yes or No.*
- 4.3 **Has the crossing caused flooding or overtopping of the road in the last 10 years?** *Check Yes or No.*
- 4.4 **Has this crossing ever experienced a complete failure, culvert collapse, or wash-out leading to an emergency authorization for wetlands impacts from the NHDES Wetlands Bureau?** *Check Yes or No.*
- 4.5 **Is the proposed project referenced in the municipality's Hazard Mitigation Plan?** *Check Yes or No.*

## Section 5: Project Benefits

- 5.1 **Public safety benefits\***: Describe how the project will improve public safety and reduce vulnerability to changing climatic conditions, such as flooding and damage caused by more frequent and intense storms. Consider potential road closures, culvert failure, road wash-out, and access to municipal and emergency services (1,500-character limit, including spaces).
- 5.2 **Fish and wildlife benefits\***: Describe how the proposed project will lead to improved passage for fish and wildlife and protect, restore, enhance and/or create important fish and wildlife habitat. Include details on any rare or endangered species identified at the crossing (see [NH Aquatic Restoration Mapper](#)) (1,500-character limit, including spaces).
- 5.3 **Water quality benefits\***: Describe how the project will improve water quality. Consider whether the upstream reach of the crossing has a water quality impairment identified in the state's 305(b) or 303(d) list (see [Surface Water Quality Assessment Viewer](#)), whether the project site is located in the municipality's National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) area, whether chronic flooding has caused a water quality problem at the project site (e.g., excess bacteria, sediment, or other pollutants released to the waterbody), and whether the project will include implementation of additional stormwater runoff control practices at the crossing (1,000-character limit, including spaces).
- 5.4 **Economic benefits\***: Describe expected economic benefits to the community from the culvert replacement. Consider increased economic activity, enhanced recreation, cost savings through improved infrastructure resilience, and/or reduced maintenance cost (1,000-character limit, including spaces).

## Section 6: Project Readiness

- 6.1 **Project timeline\***: Enter a clear and succinct description of the specific work to be covered by this funding opportunity, as well as associated timeframes to complete the proposed work. If work has already begun on the proposed culvert replacement, applicants should also enter a clear and succinct summary of what has already been initiated and/or completed. List and briefly explain any plans, reports, or documents that have already been created. Consider any prioritization and planning steps, field data collection, analyses, design, permitting, utility coordination, and/or construction (1,500-character limit, including spaces).
- 6.2 **Has an engineer been retained to assist with the project's design?** Check Yes or No.
- 6.3 **What stage of engineered design plans and construction specifications do you have for the replacement culvert?**
- Final, stamped engineering plans and specifications
  - Site-specific plans at 90% completion
  - Preliminary design plans
  - Conceptual plan
  - None
- 6.4 **Engineered design plans:** Upload available design plans for the replacement culvert.
- 6.5 **Do you already have a NHDES Wetlands permit in-hand for the proposed culvert replacement project?** Check Yes or No.
- 6.6 **NHDES Wetlands permit number (if applicable):** Enter the NHDES Wetlands permit number if you already have a permit in-hand.
- 6.7 **Do you already have a permit in-hand from the U.S. Army Corps of Engineers?** Check Yes or No.

**Section 7: Project Budget Detail**

**7.1 Total project budget:** *Enter the total amount of grant funds requested and the total amount of additional leveraged funding for the project (if any).*

- a. Total grant funds requested:  
Total leveraged funding (optional)  
Total project budget:

**7.2 Source of leveraged funding (if applicable):** *List any additional sources of known funding for the culvert replacement and the amount. Be sure to clarify if these sources are anticipated or already secured.*

- a. Source:  
Amount:  
Status:

**7.3 Budget by task\*:** *Enter the amount of grant funds requested for key project tasks, as well as timeframes for completion. The Project Management and Reporting Task must include three required project meetings (kick-off, mid-level, and wrap-up meetings with key stakeholders and a NHDES representative), as well as the required reporting (quarterly project status reports and a final project report). A maximum of 20% of the grant award may be spent on non-construction related activities.*

- a. Task #: 1  
Title: Engineering and design  
Timeframe:  
Grant funds requested:
- b. Task #: 2  
Title: Permitting  
Timeframe:  
Grant funds requested:
- c. Task #: 3  
Title: Bidding/Construction contract services  
Timeframe:  
Grant funds requested:
- d. Task #: 4  
Title: Construction  
Timeframe:  
Grant funds requested:
- e. Task #: 5  
Title: Project management and reporting  
Timeframe:  
Grant funds requested:
- f. Task #: 6  
Title: Other  
Description:  
Timeframe:  
Grant funds requested:

## **Section 8: Photos and Supporting Documentation (Each individual file must not exceed 10 MB in size)**

- 8.1 **Map/aerial image of the project location:** *Upload a map or an aerial photo with the project location clearly marked, including the water body, town, and road names.*
- 8.2 **Photos of existing structure condition:** *Upload up to three photos showing the current condition of the structure and any signs of deterioration.*
- 8.3 **Photos of existing project site condition:** *Upload up to three photos showing the current condition of the project site and any signs that the existing structure has caused adverse effects such as erosion, bank failure, or a scour pool.*
- 8.4 **Photos of previous flood events:** *Upload up to three photos of active flooding at the project site or damage caused by a flood event.*
- 8.5 **Letter(s) of support\*:** *Upload letters from other stakeholders that demonstrate their support for the project.*
- 8.6 **Supporting documentation (optional):** *Upload up to three additional documents relevant to the proposed project that you would like to include with your application.*

## **G. Evaluation Criteria**

Eligible applications will be reviewed and evaluated based on the following criteria and point values (total of 100 points). For the purpose of further informing application scoring, NHDES may perform supplemental analyses of proposed culvert replacement sites, including but not limited to evaluation of potential future flood risk, proximity to priority restoration areas identified in the NH Fish & Game Wildlife Action Plan, and potential water quality impairments identified in the state's 305(b) or 303(d) list.

### **Project Description (35 points)**

**Project Goal (5 points)** – Is the project goal clear and well-aligned with the purpose of the funding opportunity?

**Project Need (10 points)** – Does the applicant provide a compelling justification for why the culvert replacement is needed now, how the replacement will address issues identified at the crossing, and why Culvert Flood Risk Assistance Grant funds are appropriate to support the project?

**Project Budget (5 points)** – Do the cost estimates for each key project task seem reasonable and appropriate for this culvert replacement project?

**Project Timeline (10 points)** – Does the description of the specific work to be covered by this funding opportunity clearly demonstrate what the applicant will do and when they are going to do it? Does the applicant provide realistic timeframes for the completion of each primary task, including engineering and design, permitting, bidding/construction contract services, and construction? Can the proposed project realistically be completed within three years of anticipated Governor and Executive Council approval? If the project is underway, does the applicant clearly describe all initiated and completed work to date, including any planning and prioritization steps? How well does the initiated and completed work demonstrate the applicant's commitment and capacity to complete the proposed project?

**Project Support (5 points)** – Are letters of support provided from other stakeholders? How well do the letters demonstrate stakeholder support for the project?

### Project Benefits (65 points)

Public Safety Benefits (35 points) – To what extent will the proposed project improve public safety and reduce the risk of flooding? Is the culvert replacement likely to enhance resiliency to changing climatic conditions, such as increased flooding and damage caused by more frequent, high intensity storms? For example, will the culvert replacement decrease the likelihood of road closure or washout during a major storm, thus maintaining access to municipal and emergency services? Does information provided in the application or other supporting materials (e.g., photos, news stories, etc.) document the culvert’s current risk of failure and/or anticipated public safety benefits of the project?

Fish and Wildlife Benefits (20 points) – Does the applicant describe whether the existing condition of the crossing causes a barrier to fish and wildlife passage? Will the culvert replacement improve passage for fish and wildlife? To what extent will the culvert replacement improve conditions for fish and wildlife at the site? Did the applicant provide any additional information on rare or endangered species identified at the crossing, problems for these organisms to pass through the existing culvert, and how the proposed replacement would benefit those species?

Water Quality Benefits (5 points) – Will the proposed project lead to a tangible water quality benefit? This may include but is not limited to addressing an existing water quality impairment in the upstream reach of the crossing, implementing a requirement in the municipality’s NPDES MS4 permit or stormwater management plan, reducing pollutant loads released to the waterbody through chronic flooding events, and/or implementation of additional stormwater runoff control practices at the crossing.

Economic Benefits (5 points) – Will the proposed project have a positive impact on the local economy? This may include but is not limited to decreasing costs associated with flooding impacts, reducing culvert maintenance costs, maintaining or improving transportation routes for commerce, and/or enhancing recreation.

### H. Timeline

Event	Date
Deadline for Emailed Questions	<b>May 27, 2022</b> Please contact Ben Sweeney, NHDES Watershed Management Specialist, at <a href="mailto:benjamin.r.sweeney1@des.nh.gov">benjamin.r.sweeney1@des.nh.gov</a> or (603) 559-0021 with any questions about this solicitation.
Answers to Questions Published	<b>June 10, 2022</b> All questions and responses will be posted to the <a href="#">Culvert Flood Risk Assistance Grant Program webpage</a> .
Application Due Date	<b>July 1, 2022 at 4 PM ET</b>
Award Notifications	<b>August 19, 2022</b> Selected applicants will be invited to negotiate final scopes of services and budgets with NHDES.
Finalize Project Scopes	<b>November 18, 2022</b>
Anticipated Project Start Date	<b>March 2023, subject to change</b> Projects will begin upon New Hampshire Governor and Executive Council contract approval.
Project End Date	All projects are expected to be constructed within 36 months of Governor and Executive Council approval.

## **I. Terms and Conditions**

NHDES does not consider application information confidential, and any information provided within the application may become publicly available. NHDES reserves the right to reject any or all of the applications and to negotiate the scopes of work, timeframes, and requested grant amounts. Selected grant recipients will be notified in writing and must enter into a Grant Agreement with NHDES to receive funds. Submittal of an application does not commit NHDES to award a grant or pay any costs incurred during the preparation of the application. All awards are subject to Governor and Executive Council approval. Projects may begin only after receiving Governor and Executive Council approval.

## **J. Contact**

Ben Sweeney | Watershed Management Specialist | New Hampshire Department of Environmental Services, Watershed Management Bureau | 222 International Drive, Suite 175, Portsmouth, NH 03801 | Email: [Benjamin.r.sweeney1@des.nh.gov](mailto:Benjamin.r.sweeney1@des.nh.gov) | Phone: [\(603\) 559-0021](tel:(603)559-0021)