



DEPARTMENT OF FISH AND GAME

## Division of Ecological Restoration

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Hunt Durey, *Deputy Director*



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**PRE-REQUEST FOR RESPONSE**  
**MASSACHUSETTS DIVISION OF ECOLOGICAL RESTORATION**  
**DEPARTMENT OF FISH AND GAME**  
**Culvert Replacement Municipal Assistance**  
*For the Replacement of Ecologically High Value Culverts*  
***FY22 Grant Program***

**RFR ID: DER 2021-01**

Dated: 01/12/21

**PURCHASING DEPARTMENT: DEPARTMENT OF FISH AND GAME**

**TYPE OF PROCUREMENT:**

### **1. GRANT OPPORTUNITY SUMMARY:**

- 1.1 PROPOSALS SOUGHT:** The Division of Ecological Restoration (DER) is seeking proposals from Massachusetts municipalities interested in replacing an undersized, perched, and/or degraded culvert located in an area of high ecological value. The purpose of this funding is to encourage municipalities to replace aging culverts with better designed crossings that meet improved structural and environmental design standards and flood resiliency criteria. ***Only projects that intend to meet the goals of the Massachusetts Stream Crossing Standards will be considered for funding.*** Incorporating these Standards into culvert replacement designs will improve river function and access for fish and wildlife, and will reduce hazards to public safety, such as flooding, culvert failure, and road washout. Massachusetts municipalities are eligible to apply. Interested communities should refer to an overview of the Stream Crossing Standards in Appendix A.

This opportunity will provide funding for selected municipalities to advance one culvert replacement project toward completion. Funding will be limited to the Commonwealth of Massachusetts Fiscal Year 2022 (July 1, 2021 – June 30, 2022). See Section 1.6 for funding details.

- 1.2 OVERVIEW AND GOALS:** DER's Stream Continuity Program provides state-wide assistance to communities interested in replacing degraded and/or undersized road-stream crossings with better designed culverts or bridges that meet improved environmental and flood resiliency criteria. To help municipalities install better designed replacement crossings, the Stream Continuity Program provides technical assistance and training to municipal road managers and provides financial assistance when available. The Stream Continuity Program develops tools to help municipalities carry out efficient and cost-effective culvert replacements that meet the Massachusetts Stream Crossing Standards.
- 1.3 ELIGIBLE PROJECTS:** Eligible projects must be a culvert or bridge replacement on a public way, owned and maintained by the applying municipality, and must cross a natural freshwater, non-tidal river or stream channel. The stream channel may be either intermittent or perennial. **Projects must intend to meet the Massachusetts Stream Crossing Standards<sup>1</sup>.**

Culverts identified by the Massachusetts Wildlife Action Tool as priorities for replacement will receive more points under ***Benefit to the Environment*** evaluation criteria (see Section 3.2 *Evaluation Criteria*). Simple instructions to determine whether a culvert is a priority for replacement per the Massachusetts Wildlife Climate Action Tool are provided in Section 3.3.3 *Online Submission Portal*.

Projects are eligible for the CRMA grant program at any phase, and funding will support work toward any phase(s) from project planning through construction. Typical project phases for culvert replacement include *project planning and field data collection (i.e. new projects), design and engineering, permitting, preconstruction activities (e.g. bidding, materials testing, fabrication, etc.), and construction*. Applicants may apply for work needed in one or multiple phases; however, work proposed in this application must be completed within the Commonwealth of Massachusetts Fiscal Year 2022. **Applicants should only apply for funding for the portion of the project that can be completed by June 30, 2022.** Each municipality may submit one culvert replacement project for this funding opportunity.

Municipalities seeking construction funding must demonstrate that the proposed project meets the goals of the Massachusetts Stream Crossing Standards. Projects that are construction-ready but do not meet the Stream Crossings Standards must be redesigned to meet the Standards. Redesign work is eligible for funding under this grant program.

Projects where a culvert will be completely removed and the road decommissioned are eligible for funding as well.

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<sup>1</sup> An overview of the Massachusetts Stream Crossing Standards can be found in Appendix A. The full Massachusetts River and Stream Crossing Standards can be found here: [http://streamcontinuity.org/sites/streamcontinuity.org/files/pdf-doc-ppt/MA%20Crossing%20Stds%203-1-11%20corrected%203-8-12\\_1.pdf](http://streamcontinuity.org/sites/streamcontinuity.org/files/pdf-doc-ppt/MA%20Crossing%20Stds%203-1-11%20corrected%203-8-12_1.pdf)

- 1.4 ELIGIBLE APPLICANTS:** All Massachusetts municipalities are eligible to apply. Ideally, the Department of Public Works (DPW)/Highway staff responsible for managing and maintaining culvert infrastructure will be the primary applicant and point of contact through the duration of the grant period. This person will be responsible for communicating directly with DER's Grants Manager about the project, site specifics, and the town's project goals and needs.

Municipalities awarded funding through the CRMA grant program in a previous year are eligible to apply for a new project or apply for continued work on the previously awarded project.

- 1.5 APPLICATION DEADLINE:** Applications are due **5:00 p.m. March 18, 2021**. (See further detail on deadlines and grant program calendar in Section 4, *Deadlines and Procurement Calendar*)

- 1.6 FUNDING AVAILABILITY:** **Total funding available is anticipated to be \$750,000-\$1,500,000** (pending authorization) to support culvert replacements in locations of high ecological value. DER anticipates making awards to multiple municipalities with this funding.

If additional funds become available (above the funding described above) either prior to or after initial awards, and prior to the end of Fiscal Year 2022, DER reserves the right to increase the maximum obligation to some or all contracts executed as a result of this Grant Announcement, or to execute contracts with Applicants not funded in the initial selection process.

**Individual awards may range from \$25,000 to \$200,000**, depending on the project phase and work proposed. For example, awards for field data collection for new projects have typically ranged from \$25,000-\$35,000, whereas awards for design and permitting have typically ranged from \$40,000-\$90,000, depending on the complexity and needs of the project. Construction awards are not anticipated to exceed \$200,000. Applicants may request funding to support tasks from multiple project phases, based on the status of the culvert replacement and need; however, **applicants should only request support for work that can be completed by June 30, 2022**.

Exceptions to the number of awards and range of funds awarded may be made at DER's discretion, dependent on funding allocations. Total amount of funding available is subject to annual authorized spending plans.

- 1.7 MATCH REQUIREMENT:** Applicants are not required to provide match. Although DER will award funding to cover a full phase of a project (e.g. design and engineering), DER does not anticipate being able to provide funding for the full cost of a culvert replacement project (e.g. field data collection, design, engineering, permitting and construction). Applicants are encouraged to report other known sources of funding for the proposed project on the Application Form, both secured and anticipated sources.

**1.8 TOTAL ANTICIPATED DURATION OF GRANT(s):** Contracts for awarded grants are expected to start in August 2021. The contract duration will be through June 30, 2022. (See further detail on anticipated contract duration in Section 2.1).

**1.9 APPLICABLE PROCUREMENT LAW:** Grants MGL c. 7A, § 7; St. 1986 c. 206, § 17; 815 CMR 2.00

**1.10 CONTACT FOR PRE-RFR PERIOD:**

Bernadette DeBlander, Grants Manager  
Massachusetts Division of Ecological Restoration  
[DERCulverts@mass.gov](mailto:DERCulverts@mass.gov)  
617-921-0661

## 2. Performance and Contract Specifications

- 2.1 PROJECT TERMS:** A final contract is subject to successful negotiation of an agreed upon scope of work (SOW). Please note that DER does not guarantee that any contracts or technical assistance may result from this RFR or that any amount of funding or particular funding level will be awarded. It is anticipated that awarded grants will be available August 2021. The SOW detailed within FY22 grant award contracts must be completed no later than June 30, 2022.

DER reserves the right to fund a portion, to modify or amend the scope and/or add or delete tasks of any project proposal in coordination with the applicant, to more closely meet the purposes of the program. Respondents will have the option of rejecting the grant award if the revised scope does not meet their goals.

- 2.2 DELIVERABLES, OWNERSHIP, AND CREDIT DUE:** DER requires that all technical deliverables produced under the contract resulting from this award be delivered to DER in native format, either electronic or hardcopy, as decided under scope and contract. Deliverables may include software, maps, reports, contracts with construction firms, design plans, etc., to execute work on culvert replacements. Culverts replaced under this grant will maintain their original ownership.
- 2.3 REPORTING:** Necessary reports and other deliverables are project specific and will be identified in coordination with the applicant at the time of contract award and project scoping.
- 2.4 INVOICING:** The payment procedure for grants resulting from this RFR is by reimbursement for costs incurred during the contract period. Only those tasks/deliverables identified in the grant scope of work are eligible for reimbursement. Reimbursement is made within 45 days subsequent to the receipt of a correctly executed invoice with appropriate documentation and deliverables. No payments shall be made for Massachusetts sales tax.
- 2.5 CONTRACT EXPANSION:** If additional funds become available during the grant contract duration period, DER reserves the right to increase the maximum obligation to some or all contracts executed as a result of this Grant Announcement. Contract terms may also be modified if additional funding is available. This is subject to available funding, satisfactory contract performance, project need, and based on successful negotiation with the applicant.
- 2.6 CONDITION OF AN AWARD:** Within a reasonable timeframe from the public announcement of the award, the awardee will execute a contract with DER. If other related factors (for example other anticipated financial sources, required approvals, etc.) are not resolved by the awardee thereby preventing the awardee from signing a contract, DER reserves the

right to withdraw financial support of the project and will provide the awardee with 30 days written notice.

### 3. Instructions for Application Submission

- 3.1 SUBMISSION INSTRUCTIONS:** All applications must be submitted through the online submission portal. No paper applications will be accepted. ***Applications received after the deadline will automatically be rejected.*** Complete all items and submit as instructed. Applicants must include all required documents. ***Each municipality may submit ONE culvert replacement project for this funding opportunity.***

#### INSTRUCTIONS FOR ONLINE SUBMISSION

Once the Application Forms have been completed, applicants must submit the application online. Applicants will fill in basic details about their project and upload the application materials listed below through an online submission portal. ***The link to the online submission portal will be provided upon release of the RFR on February 18, 2021.***

#### Required documents include:

- **Application Forms** – This provides applicant and project information as well the proposed work associated with this funding request. The forms are all contained in one electronic file and include:
  - Culvert Replacement Municipal Assistance Grant Application Form (Required)
  - Proposed Work Checklist (Required)
- **Project Photos** – Photos can be submitted as one document or as separate photo files. (Required)
- **Supporting Documentation** – Attach electronic copies of all relevant work completed to date on the proposed culvert replacement, including but not limited to field notes, technical reports and analyses, design plan sets, permits, cost estimates, design or construction bids, etc. (As Applicable)

**The application materials uploaded via the online submission portal cannot exceed 20MB in total.** Required documents can be uploaded in Microsoft Word, *or to reduce file size*, the document may be converted and uploaded as an Adobe PDF file. Supporting documentation should be uploaded with the online submission form when feasible.

To make arrangements for submitting additional supporting documentation exceeding the file size limit or if you have trouble with your online submission, please contact:

Ione Hughes, Program Coordinator  
[Ione.S.Hughes@mass.gov](mailto:Ione.S.Hughes@mass.gov)  
617-626-1545

You will receive an email confirming receipt of your application and supporting documentation within 2 business days following submission. If you do not receive a confirmation email, please contact **Ione Hughes** (see above).

**All Applications, including receipt of all the supporting materials, must be received by DER by 5:00 p.m. on March 18, 2021. Applications received after the deadline will automatically be rejected.**

Responses will be accepted and are encouraged to be submitted in advance of the submission deadline.

**Note: Incomplete or incorrectly submitted applications will be disqualified prior to the review process.**

If you have complications with your on-line application, please contact [Ione.S.Hughes@mass.gov](mailto:Ione.S.Hughes@mass.gov) prior to the grant deadline for assistance.

DER reserves the right to reject any and all proposals or request additional information and documentation if needed.

As part of the review of proposals, DER may perform a site visit or call applicants. DER may request a site visit with the applicant present during the review process.

By submitting a proposal, the applicant acknowledges the terms and specifications contained within the RFR.

- 3.2 EVALUATION CRITERIA:** Applicants must submit a completed application that includes all of the required supporting materials, agree to the program conditions, and meet the eligibility requirements, in order to be considered for a reimbursable grant award. A DER review committee will evaluate proposals based on criteria listed below. The review committee reserves the right to request additional details and documentation and to reject any or all proposals. The review committee will review **all** proposed projects based on the Evaluation Criteria below.

#### **EVALUATION CRITERIA:**

##### **MEET PROGRAM PRIORITIES (5 POINTS)**

Based on the content of the full application, does the applicant demonstrate that the proposed project **intends to meet** the goals of the Massachusetts Stream Crossing Standards?

##### **DEMONSTRATED NEED (25 POINTS)**

PROJECT BACKGROUND (15 POINTS) - How well does the applicant identify the problem(s) associated with the existing crossing and describe its current condition? Does the applicant demonstrate why the project is a high-priority for the municipality? The applicant should consider the physical condition of the culvert, risk of failure, maintenance and flooding history, erosion, environmental concerns such as impacts to fish and wildlife, and hazards to the community.

PROJECT STATUS (5 POINTS) - How well does the applicant describe the current status of the culvert replacement project? For example, is the culvert replacement a *new project* (i.e., no data collection or design work has begun for an existing degraded culvert)? If the project is underway, the applicant should describe all initiated and completed work to date, such as field data collection and analyses, design, permitting, utility coordination, and/or construction. *Applicants should submit all relevant supporting documentation (e.g., technical reports, design plans, permits, opinion of probable costs, etc.) with the application.*

FINANCIAL NEED (5 POINTS) - How well does the applicant demonstrate the municipality's need for financial assistance for the proposed crossing replacement? Does the applicant describe other anticipated or secured funding sources that will support portions of this project?

**PROJECT DESCRIPTION (30 POINTS)**

PROJECT SCOPE (15 POINTS) -How well does the applicant describe the proposed culvert replacement project and the proposed work to be covered by this funding? This includes proposed projects tasks, personnel, and desired outcome for the culvert replacement. The applicant may use, but is not limited to, topics listed on the Proposed Work Checklist form (See Application Completion and Submission Instructions below).

PROJECT BUDGET (10 POINTS) – Did the applicant complete the budget table on the Application Form? How well does the applicant estimate and describe project costs, given the current status and understanding of the culvert replacement? Do the cost estimates seem reasonable and feasible for this culvert replacement project? For projects at an advanced level of design, does the applicant (1) demonstrate a realistic understanding of project costs for both the overall project and the proposed work to be supported by this DER grant and (2) provide supporting documentation (e.g. budget with detailed and credible cost estimates)? New projects should at least provide a cost estimate of the proposed work to be supported by this DER grant. If applicable, applicants should describe additional sources of funding for the culvert replacement and the amount, including sources both in-hand and anticipated, and the expected timeline for which funds will be available.

PROJECT TIMELINE (5 POINTS) - How well does the applicant describe the overall proposed culvert replacement project timeline *and* the timeline for proposed work supported by



DER grant funding? Does the applicant list milestones or goals? Can the proposed work realistically be completed by June 30, 2022?

**PROJECT BENEFITS (40 POINTS)**

**BENEFIT TO THE ENVIRONMENT (20 POINTS)** – The Division of Ecological Restoration will evaluate the proposed culvert replacement’s benefit to the environment, based on the existing site condition, proximity of the culvert to important habitat, available ecological data, information provided by the applicant from the Massachusetts Wildlife Climate Action Tool, and additional notes provided by the applicant.

DER will consider the feasibility for and extent to which the proposed project will improve ecological function at the site. For example, DER will weigh whether the new stream crossing will (a) allow natural stream processes to occur, (b) allow the channel to naturally adjust and change over time, and (c) improve passage for fish and wildlife. DER will consider the severity of the existing barrier to fish passage and the expected magnitude of improvements with a replacement structure meeting the Stream Crossing Standards. Did the applicant provide any additional environmental information about the culvert site or possible environmental benefits from the proposed culvert replacement (e.g. information on critical habitat, bank erosion, water quality, fish and wildlife species that inhabit the site/area, and problems for these organisms to pass through the existing culvert)?

*Appendix B: DER’s Tools to Evaluate Environmental Benefits of Culvert Replacements provides examples of decision-support tools that DER will use in part to assess Environmental Benefits of the proposed culvert replacement. This list is provided for informational purposes. **Applicants are not required to seek information about their culverts using these tools.***

**PUBLIC SAFETY BENEFITS (15 POINTS)** – To what extent will the proposed project improve public safety and health and reduce risk to the community through elimination of a hazard? Is the culvert replacement likely to reduce vulnerability and enhance resiliency to changing climatic conditions, such as 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 narrative or other supporting materials (e.g., photos, recent inspection reports, news stories, etc.) document the hazard and/or anticipated public safety benefits of the project? Has the project been identified in a town or region-wide vulnerability or resiliency plan, e.g. *Hazard Mitigation Plan (HMP)* or *Municipal Vulnerability Preparedness (MVP) assessment and resiliency plan*?

**ECONOMIC AND COMMUNITY BENEFITS (5 POINTS)** – Will the proposed project have a positive impact on the local economy? This may include but is not limited to improving or protecting infrastructure, decreasing costs associated with flooding impacts, eliminating

safety hazards, reducing culvert maintenance costs, maintaining or improving transportation routes for commerce, and/or enhancing recreation. Does the Community have a signed *Community Compact* with an applicable Best Practice?

- 3.3 INSTRUCTIONS FOR COMPLETING APPLICATION FORMS:** The Culvert Replacement Municipal Assistance Grant Application and Proposed Work Checklist should be completed in the Microsoft Word form provided and then uploaded to the online submission portal.

**3.3.1 CULVERT REPLACEMENT MUNICIPAL ASSISTANCE APPLICATION (Required)**

Instruction numbers correspond to the fields in the application. Boxes should expand as you fill them in. Enter your information in the spaces provided:

**1) APPLICANT INFORMATION**

- i. **Funding Request** – Enter the amount of DER grant funds requested
- ii. **Town-** Enter the town where the target culvert is located. If the river is a town boundary, enter the town which the Applicant represents.
- iii. **Applicant's Name** – Enter the primary contact for the grant application.
- iv. **Email/Phone** – Enter the email or phone number of the Applicant.

**2) Culvert Information**

- i. **Road** - Provide road name.
- ii. **Stream** - Enter the name of the stream. If unknown or unnamed, enter UNKNOWN.
- iii. **Location-** Briefly describe the location of the culvert, e.g., next to a physical address or a specific distance from a cross road. This will help DER make sure we evaluate the correct culvert.
- iv. **Does this crossing have multiple Culverts?** Select Yes if there is more than one culvert or structure at this location. Select No if there is only one culvert at this location.
- v. **Culvert Type-** Enter the material and shape of your culvert, i.e. Concrete Box, Corrugated Metal Pipe (CMP), Reinforced Concrete Pipe (RCP), etc.
- vi. **Length-** Enter the length of the culvert from inlet to outlet. **Record in feet and inches.** If there are multiple culverts at the crossing with variable lengths, enter the length of the longest structure AND include under Project Background (4)(i) a description of the crossing including the width and length of each structure.
- vii. **Width-** Enter the width of your culvert. **Record in feet and inches.** Width is the same as culvert diameter. If there are multiple culverts at the crossing with variable widths, enter the width of the widest structure AND include under Project Background (4)(i) a description of the crossing, including the width and length of each structure.
- viii. **Utilities within Right of Way (ROW) or close proximity to the Culvert (check all that apply)** – Check all known underground and overhead utilities that are

found within the road right-of-way or within close proximity to the culvert and/or stream. If you check “Other”, please include type of utility in the box.

- 3) **Project Summary** – Please provide a descriptive *Brief Summary* for the project (e.g. 4 sentences), including existing conditions, environmental and community benefits and goals of the proposed project.
- 4) **Demonstrated Need** – Please provide information on *Project Background, Project Status, and Financial Need* in the boxes provided. *Refer to Evaluation Criteria (Section 3.2 under Instructions for Application Submission, pp. 7-9) for guidance. The boxes on the form should expand as you write.*
- 5) **Project Description** - Please provide information on *Project Scope, Project Budget* (including Overview and Narrative), and *Project Timeline* in the boxes provided. Complete the budget table to the best of your ability. Where possible, provide additional supporting documentation (e.g., budget details, opinion of probable costs, design or construction bids, etc.). *Refer to Evaluation Criteria (Section 3.2 under Instructions for Application Submission, pp. 7-9) for guidance. The boxes on the form should expand as you write.*

Municipalities proposing new culvert replacement projects, i.e., projects that are in the early planning phase, are encouraged to consult DER’s website (<https://www.mass.gov/how-to/culvert-replacement-municipal-assistance-grant-program>) for an example of a field data collection bid request and scope of work to help develop and inform the *Project Scope*.

*Municipalities who engage Engineering Firms for culvert or bridge replacement projects meeting the MA Stream Crossing Standards may want to verify that the selected firm or its subcontractors have:*

- *River assessment experience and knowledge about river processes, dynamics, and features.*
- *Demonstrated ability to design structures to meet the MA River and Stream Crossing Standards.*
- *Capacity to perform geotechnical borings and subsurface analysis for geotechnical design of a replacement structure.*
- *Experience with performing existing hydrology and hydraulic modeling.*
- *Skilled staff to perform resource area delineation and experience completing environmental permits.*
- *MassDOT prequalification and/or MassDOT Chapter 85 review experience, as applicable*

- 6) **Project Benefits** – Please provide information on *Benefits to the Environment, Public Safety Benefits, and Economic and Community Benefits* in the boxes provided. Refer to *Evaluation Criteria* (Section 3.2 under *Instructions for*

*Application Submission*, pp. 7-9) for guidance. The boxes on the form should expand as you write.

### **3.3.2 PROPOSED WORK CHECKLIST (Required)**

The Proposed Work Checklist is intended to help applicants assess the status of the proposed culvert replacement and determine what tasks to include in the funding request to DER. For reviewers, this checklist provides a quick assessment of work completed to date and a summary of work proposed to be covered by this funding opportunity (Fiscal Year, 2022).

**Proposed Work Checklist** – Indicate under the Project Status column if the tasks/activities listed are:

- “Proposed” and included in the funding request to DER and will be completed by the end of the grant period (i.e. June 30, 2022). If a portion of a task is included in the funding request, please check this column;
- “In Progress” and will either be completed prior to receipt of the grant funds requested or prior to the end of the grant period (i.e. June 30, 2022);
- “Complete” at the time of the grant application submission;
- “Not Started” at the time of the grant application submission and may include tasks or phases which will be started or completed after the grant period (i.e. June 30, 2022); or
- “Not Applicable” as determined by the project applicant to the best of their knowledge. If the applicant does not know if the task or activity is applicable to their project, then please include a note in the descriptive boxes included.

The tasks listed comprise a typical culvert replacement project scope and are arranged in general project order. *Applicants are not bound to the tasks/activities listed on the Proposed Work Checklist for the funding request but should consider including tasks that may have been omitted from the project’s previous work history.* Details for proposed work should be summarized on the Application Form in the *Project Scope* box (Application Form, Section 5). Provide additional detail regarding completed work on the Application Form in the *Project Background* and *Project Status* boxes (Application Form, Section 5).

### **3.3.3 ONLINE SUBMISSION PORTAL:**

In addition to the information provided above, applicants will need to provide some basic project details as part of the online submission. We advise all applicants to review the information below and to have the application and all supporting documents ready to be uploaded prior to beginning the online submission.

#### **A. Applicant Information**

- **DPW Lead** – If different from the Applicant, then enter the name of the DPW Lead contact, e.g., Director or Superintendent.
- **DPW Phone/Email** – Enter the phone number and email for the DPW Lead

## B. Project Information

- **Latitude**- Enter, in decimal degrees, the Latitude of the culvert location at the center of the road. One way the Latitude and Longitude can be determined is through Google Maps, by zooming in to the culvert location, right clicking the mouse directly over the culvert, and selecting, “What’s here?”.
- **Longitude**- Enter, in decimal degrees, the Longitude of the culvert location at the center of the road. See instructions for Latitude above.
- **Proposed Project Phases**- Select the Project Phases in which funding is being requested under this grant program. Proposed work should be consistent with work proposed under the Project Budget and Proposed Work Checklist in the Application Form.
- **Watershed (optional)**- Enter the major watershed where the culvert project is located. Use this link as a resource:  
<https://www.mass.gov/media/5126>
- **Your Regional Planning Agency (optional)**- Enter the Regional Planning Agency for your town. Use this link as a resource: <http://www.apa-ma.org/resources/massachusetts-regional-planning-agencies>

## C. Massachusetts Wildlife Climate Action Tool Priority Crossings

To help DER evaluate the environmental benefits of proposed culvert replacements, we are asking applicants to use a mapping tool on the **Massachusetts Wildlife Climate Action Tool** website. This is a website dedicated to educating local decision-makers, conservation managers, land trusts, regional planners, landowners, and community leaders about actions they can take to address challenges posed by climate change. The tool’s *Maintain Habitat Connectivity: Retrofit or Replace Culverts* page provides information on priority culverts, specifically the top 5%, 10%, and 15% of culverts in need of replacement, due to climate change impacts and the vulnerabilities of fish and wildlife and their habitats. Applicants should use the mapping tool to locate their culvert on the Massachusetts Wildlife Climate Action Tool webpage:

<https://climateactiontool.org/content/maintain-habitat-connectivity-retrofit-or-replace-culverts>

Once on the website, use the map to zoom in to your proposed culvert replacement location – click on the box and arrow in the upper right hand to expand the map to a full screen. On the left side of the map there are five checkboxes in the legend that can be checked to turn culvert layers on/off on the map. **Be sure all five boxes are checked, before looking for your culvert.** These checkboxes represent the top 5%, 10%, and 15% of crossings in need of replacement, and are depicted by different shades of green or blue on the map. Click the boxes on and off to determine if your culvert ranks in the top 5%, 10% or 15% for culvert replacement for either “Stream Crossings” in general and/or for “Coldwater Stream Crossings.” For more instructions about how to use the mapping tool, click “[Read More](#)” below the map on the website. Once you have identified the location of your culvert, check the box on the Online Submission page by the corresponding percentage (5, 10, or 15%) that represents your culvert.

*If you are unable to find your culvert, mark “my culvert isn’t showing up”. **If your culvert is not showing up, it does not rank within the top 15% of culverts for ecological restoration; however, data on the map are not real-time and the replacement of your proposed culvert may have other environmental benefits that are not identified by the Climate Action Tool. If a culvert does not appear on the map, it is still eligible to be considered for funding.***

**D. Community Information** – Check Yes or No to the following questions. If you check “other”, please provide additional information in the box provided (e.g. Draft Plan awaiting approval).

- **Does your town have an approved *Hazard Mitigation Plan*?** – (See <https://www.mass.gov/service-details/local-hazard-mitigation-planning> and scroll to the document titled ‘Massachusetts FEMA-Approved Local and Regional Multi-Hazard Mitigation Plans’).
- **Has your town enrolled in the *Municipal Vulnerability Preparedness (MVP)* program?** – (For more information about the MVP program, see <https://www.mass.gov/service-details/mvp-program-information>).
- **Does your town have a signed *Community Compact* with an applicable *Best Practice*?** – (For more information about *Community Compacts*, see <https://www.mass.gov/lists/signed-community-compacts>).

**E. Attachments to be Uploaded (Required)**

- **Grant Application Forms** (see Section 3.3 for instructions)
- **Site Photos** – Please upload color photos of the views described below. Photos may be inserted and uploaded as one document or uploaded individually. Please be aware of file size limits, we recommend photo files should not exceed 3.5 MB per photo. Photos required are as follows:
  - **Road over culvert** – A photo showing all lanes of traffic over the culvert.

- **Culvert Inlet** – A photo looking toward the culvert inlet.
- **Upstream of the Culvert** – A photo looking upstream from the culvert inlet.
- **Culvert Outlet** – A photo looking toward the culvert outlet.
- **Downstream of the Culvert** – A photo looking downstream from the culvert outlet.

**F. Supporting Project Documents** – Please attach electronic copies of all relevant work completed to date on the proposed culvert replacement, including but not limited to field notes, technical reports and analyses, design plan sets, permits, opinion of probable costs, design or construction bids, etc.

### 3.4 ADDITIONAL REQUIRED DOCUMENTATION:

Additional Forms: If selected, the Respondent will be required to submit the following forms to complete a contract. Forms with an asterisk \* need not be submitted, if they are already on file with the Commonwealth. All forms can also be downloaded from: <https://www.macomptroller.org/forms-for-vendors>:

- Commonwealth Standard Contract Form, filled out and signed by the Respondent
- Commonwealth W-9 tax form with DUNS number and Federal Tax ID\* filled out and signed by the Respondent
- Completed Contractor Authorized Signature Verification Form

Applicants are encouraged to review these forms prior to submission of a Response.

Grant payments will be made using Electronic Funds Transfer (EFT). If applicants are awarded a grant contract and are not set up to receive payments in this form, DER will require additional paperwork.

## 4. Deadlines and Procurement Calendar

- 4.1 PRE-RFR PERIOD:** Between **January 12, 2021 and February 18, 2021, 3PM**. DER will be able to discuss and answer any questions regarding proposed projects, and especially questions regarding potential ecological value of a culvert replacement. **We encourage applicants to contact Bernadette DeBlander to set-up times to discuss possible projects and answer questions during the Pre-RFR period (Bernadette DeBlander; 617-921-0661; [DERCulverts@mass.gov](mailto:DERCulverts@mass.gov)).**

We also encourage applicants to check the Division of Ecological Restoration's website (<https://www.mass.gov/how-to/culvert-replacement-municipal-assistance-grant-program>) for the recorded grant briefing which will explain this funding opportunity.

- 4.2 RELEASE OF RFR: February 18, 2021, 5PM**

- 4.3 QUESTION AND ANSWER PERIOD: Closes February 25, 2021 at 5PM.** Only clarifying or technical questions regarding the application and application process may be answered following the release of the RFR.

During this time all questions should be submitted in writing to lone Hughes, [lone.S.Hughes@mass.gov](mailto:lone.S.Hughes@mass.gov) by 5PM February 25, 2021. Questions will not be answered over the phone. Answers to all questions will be posted on DER's website and in COMMBUYS by March 1, 2021.

**APPLICANT COMMUNICATION WITH DER AND THE COMMONWEALTH:** Applicants are prohibited from communicating directly with any employee of DER regarding this Grant Opportunity during the RFR Period from February 18, 2021, 3:00 PM until March 18, 2021, 5PM except as specified in this Grant Announcement. No other individual Commonwealth employee or representative is authorized to provide any information or respond to any question or inquiry concerning this Grant Announcement. Applicants may contact the contact person for this Grant Announcement in the event this Grant Announcement is incomplete, or the applicant is having trouble obtaining or submitting any required attachments. Note that there is an open period to submit written questions up to the deadline specified in this Grant Announcement.

- 4.4 APPLICATION DUE DATE: 5:00 p.m. March 18, 2021.**

- 4.5 ESTIMATED AWARD DATE:** Awards are estimated to be announced by July 2021 with contract development to begin in July 2021.

- 4.6 ESTIMATED CONTRACT START DATE:** DER anticipates execution of grant contracts in August of 2021.



## 5. Miscellaneous

- 5.1 TYPE OF PROCUREMENT:** Grant
- 5.2 USE OF THIS PROCUREMENT BY SINGLE OR MULTIPLE DEPARTMENTS:** This RFR is a single department procurement. All contracts awarded under this RFR will be utilized solely by the issuing entity.
- 5.3 REQUEST FOR SINGLE OR MULTIPLE CONTRACTORS:** Multiple contracts may be awarded under this RFR.
- 5.4 RFR DISTRIBUTION METHOD:** This RFR has been distributed electronically using the COMMBUYS system. It is the responsibility of every Applicant to check COMMBUYS for any addenda or modifications to an RFR to which they intend to respond.
- 5.5 PUBLIC RECORDS:** All responses and information submitted in response to this RFR are subject to the Massachusetts Public Records Law, M.G.L., c. 66, § 10, and c. 4, § 7, cl. 26. Any statements in submitted responses that are inconsistent with these statutes, including marking information as confidential during the submission process, shall be disregarded.
- 5.6 REASONABLE ACCOMMODATION:** Bidders with disabilities or hardships that seek reasonable accommodation, which may include the receipt of RFR information in an alternative format, must communicate such requests in writing to the contact person. Requests for accommodation will be addressed on a case by case basis. A bidder requesting accommodation must submit a written statement which describes the bidder's disability and the requested accommodations to the contact person for the RFR. DER reserves the right to reject unreasonable requests.
- 5.7 APPENDIX**
- A. Appendix A – Overview of Massachusetts Stream Crossing Standards
  - B. Appendix B – DER's Tools to Evaluate Environmental Benefits of Culvert Replacements
- 5.8 LIST OF ATTACHMENTS**
- A. Application Form & Checklists

Department of Fish and Game (DFG)  
Division of Ecological Restoration (DER)

## Appendix A: STREAM CROSSING STANDARDS

Stream crossing standards are based on six important variables. While the specifics of the regulations listed below may change over time, the crossing guidelines presented in the Massachusetts Stream Crossings Handbook remain effective for fish and wildlife.

### 1. TYPE OF CROSSING

- General: Spans (bridges, 3-sided box culverts, open-bottom culverts or arches) are strongly preferred.
- Optimum: Use a bridge.

### 2. EMBEDMENT

- All culverts should be embedded (sunk into stream) a minimum of 2 feet, and round pipe culverts at least 25%.
- If pipe culverts cannot be embedded this deep, then they should not be used.
- When embedment material includes elements >15 inches in diameter, embedment depths should be at least twice the  $D_{84}$  (particle width larger than 84% of particles) of the embedment material.

### 3. CROSSING SPAN

- General: Spans channel width (a minimum of 1.2 times the bankfull width of the stream).
- Optimum: Spans the streambed and banks (at least 1.2 times bankfull width) with sufficient headroom to provide dry passage for wildlife.

### 4. OPENNESS

- General: Openness ratio (cross-sectional area/crossing length) of at least 0.82 feet (0.25 meters). The crossing should be wide and high relative to its length.
- Optimum: Openness ratio of at least 1.64 feet (0.5 meters) and minimum height of 6 feet. If conditions significantly reduce wildlife passage near a crossing (e.g., steep embankments, high traffic volumes, and physical barriers), maintain a minimum height of 8 feet (2.4 meters) and openness ratio of 2.46 feet (0.75 meters).

### 5. SUBSTRATE

- Natural bottom substrate should be used within the crossing and it should match the upstream and downstream substrates. The substrate and design should resist displacement during floods and maintain an appropriate bottom during normal flows.

### 6. WATER DEPTH AND VELOCITY

- Water depths and velocities are comparable to those found in the natural channel at a variety of flows.



Scott Jackson photo

### A Well Designed Crossing

Large size suitable for handling high flows

Open-arch design preserves natural stream channel

Openness ratio greater than 0.5m, suitable for most settings

Crossing span helps maintain dry passage for wildlife

Water depth and velocity are comparable to conditions upstream and downstream

Natural substrates create good conditions for stream-dwelling animals

## APPENDIX B: DER's Tools to Evaluate Environmental Benefits of Culvert Replacements

Below are examples of online decision support tools DER will use as a part of the evaluation of environmental benefits for the proposed culvert replacement project. In addition to these tools, DER will use the Massachusetts Wildlife Climate Action Tool (referenced in Section 3.3.3, Instructions for Applications Submission and on the application form), other data resources, and staff expertise to determine project benefits. **Applicants are not required to seek information about their culverts using the tools listed below. *This list is for informational purposes only.*** Towns may find these tools useful for prioritizing culvert replacements and internal decision-making purposes. ***Culverts that do not appear in these online decisions support tools are still eligible for funding.***

### Coldwater Fisheries Resources ([www.mass.gov/info-details/coldwater-fish-resources](http://www.mass.gov/info-details/coldwater-fish-resources))

A Coldwater Fish Resource (CFR) is a stream, river, or tributary where coldwater fish, such as trout, live and reproduce. CFRs are particularly sensitive habitats. **Applicability: State-wide.**

### NAACC Road-Stream Crossing Database (<https://naacc.org>)

Based on field surveys of culverts and bridges, the North Atlantic Aquatic Connectivity Collaborative (NAACC) ranks culverts based on the severity of the fish passage barrier created by the crossing (e.g. *No Barrier, Insignificant Barrier, Minor Barrier, Moderate Barrier, Significant Barrier, or Severe Barrier*). **Applicability: Approximately 20% of culverts in Massachusetts are surveyed.**

### Stream Crossings Explorer (<http://sce.ecosheds.org/>)

The Stream Crossings Explorer conveys information related to environmental benefits of rivers as well as risk of failure of road-stream crossings and associated disruption of emergency services. This tool was piloted in the Deerfield Watershed. **Applicability: Towns within Deerfield River Watershed, MA.**

### Mapping Data ([HTTPS://WWW.MASS.GOV/GET-A-MAP](https://www.mass.gov/get-a-map))

MassGIS provides geospatial mapping data for all of Massachusetts. Below are examples of map data DER may review as part of the grant review process: **Applicability: State-wide.**

#### Conservation

- Areas of Critical Environmental Concern
- Natural Heritage Data Estimated and Priority Habitats of Rare Wildlife
- Open Space

**Images** (Aerial Photos and Topographic Maps)

#### Physical Resources

- Anadromous Fish
- Hydrography Water Resources
- Outstanding Resource Waters

**Infrastructure** (Dams and Roads)

**Wild & Scenic Rivers** (Available at [www.rivers.gov](http://www.rivers.gov))