



Maine Department of Environmental Protection
2021 Municipal Stream Crossing Infrastructure Grants
Scoring and Evaluation Guidance

NOTE: This document is intended to give Municipal Stream Crossing Grant Applicants, agents, engineers, and grant proposal reviewers clear information regarding the way proposals are scored. While grant funding opportunities are not available year-round, and applications will vary slightly year to year, the information provided in this document can allow appropriate consideration of all elements to be scored for grant award consideration.

Resources

[DEP Stream Crossing Resources Page](#)
[Maine Stream Smart Program](#)

[Maine Stream Habitat Viewer](#)
[Maine Tidal Restriction Atlas](#)
[Maine Beginning with Habitat](#)

Applicability

To be considered for award, projects must:

- Be located on a municipal road, not a state (including state-aid) or private road
- Contribute a portion of the overall project funding (cannot be 100% grant funded)
- Be a culvert carrying a stream under a road

Definitions

Bridge - A structure designed to span a portion or all of a stream. Bridges consist of a deck supported by abutments. It may have more than one cell or section separated by piers. *NOTE: this definition is in the context of this grant program; MaineDOT has a separate legal definition based on size.*

Culvert - A structure surrounded by soil or other fill materials that allows water to pass under a road or similar obstruction. A culvert may take the form of a pipe, arch, or box made from metal, plastic, reinforced concrete, stone, or other materials and can have a bottom or consist of a natural bottom.

Diadromous fish species - Fish species that migrate between freshwater and saltwater environments during their life cycle. These species include Atlantic salmon, shortnose sturgeon, Atlantic sturgeon, alewife, American eel, rainbow smelt, sea lamprey, blueback herring, and American shad.

Scoring

Proposal scoring will be based on a 100-point scale using the group consensus scoring method and will measure the degree to which each proposal meets the evaluation criteria and considerations in each section below.

1. Public Infrastructure Information, Safety, & Community Impact (25% of Total Score)

Scoring will consider the extent to which the proposed project allows communities to more effectively prepare for storm and flood events. Review and scoring will take into account the degree of urgency of the proposed project based on the culvert's age, location within a watershed or reach, or severe flood history. In addition, scoring will consider the project's contribution to stormwater and flooding management, reduction in frequency or severity of flooding for upstream and downstream communities, and the new crossing's ability to meet or exceed the Department of Transportation's 100-year flood standard.

A. Failure risk, location, history, and reduction in flooding

- Estimated time to failure, structure age
- Previous flooding or failure events & inclusion of any documentation
- Culvert condition & inclusion of any documentation
- Change in culvert capacity & expected decrease in flooding
- Comparison to MaineDOT's 100-year flood standard ([Guidance for MaineDOT's 100-year flood standard](#))
- Regularity of obstruction by debris or need for regular maintenance



Maine Department of Environmental Protection
2021 Municipal Stream Crossing Infrastructure Grants
Scoring and Evaluation Guidance

B. Safety & impact to community

- Number of cut-off or detoured residences, business, infrastructure
- Length of detour should the crossing fail or availability of alternate routes
- Average vehicles per day ([Maine DOT Public MapViewer](#))
- Presence or lack of safety features
- Any affected critical infrastructure
- # of emergency calls from previous year to affected residences/businesses
- Level of support for project locally
- Other noted safety concerns

2. Project Represents a Cost Effective & Efficient Investment (25% of Total Score)

Scoring for this section includes the extent to which the proposed project represents an efficient and cost-effective investment, including the proportion of total project funding that will be provided from other sources and the potential avoided costs associated with the proposed project. MSCG funds may not be used to cover all of the costs associated with a proposed project.

A. Local funding committed to the project

- Match type and status (e.g. in-hand vs. TBD), & confidence in quality of match included
- Proportion of local funding

B. Project efficiency and avoided costs

- Avoided costs associated with the replacement, including past repair & maintenance, road closures, etc.
- Anticipated lifespan of new structure vs. in-kind replacement ([Comparison of Road-Stream Crossing Structures \(Stream Smart Handout\)](#))
- Completed field work including multiple averaged bankfull width field measurements, longitudinal profile, cross sections
- Level of preparation for application, completeness of application, adherence to RFP guidance & requirements
- Budget items requested, total project costs for type of installation
- Design & project stage at time of application
- Whether engineering is complete or started, intent to utilize an engineer on the project
- Status of Army Corp permit (contact, begun, or permit in hand)
- Maintenance costs over previous 10 years and level of documentation of costs
- Estimated construction year
- Feasibility for success based on confidence in sizing, level of detail, completeness, project phase & scope, design concerns, or if any clarification or changes that would be required post-award
- Contact and discussion of design standards with DOT pre-submission if structure span is proposed to be 20 feet or more ([MaineDOT Fact Sheet – Laws Regarding Bridges in Maine \(PDF\)](#))

3. Fish & Wildlife Habitat Improvement (50% of Total Score)

Scoring for this section will consider the extent to which the proposed project advances the goals of restoring habitat for fish (including sea-run fish and native brook trout) and wildlife, including the priority status of the culvert to be upgraded or replaced for native brook trout and sea-run fish restoration. This status is based upon available stream survey data, statewide prioritization for aquatic connectivity, and presence in priority watersheds of salmon, alewives and other diadromous fishes. Scoring will also consider the extent to which the proposed project meets design standard of 1.2 times the stream's bankfull width, with a natural stream bottom, embedded and backfilled structure with bed material closely resembling the material found in the natural stream bed.



Maine Department of Environmental Protection
2021 Municipal Stream Crossing Infrastructure Grants

Scoring and Evaluation Guidance

A. Inclusion of design elements for aquatic connectivity, fish & wildlife benefit

- Inclusion of U.S. Forest Service Stream Simulation Techniques, Maine Stream Smart principles and guidance, or other stream restoration practices in the design and installation of the structure [Stream Smart Overview](#) (video)
- Degree to which project meets 1.2 x Bankfull width sizing on inland streams and integrates tidal considerations into the design, where applicable
- Bankfull width measurement confidence level & appropriateness - how well the bankfull width used for structure sizing in the proposal represents the “actual” bankfull width of the stream, based on the information provided, level of field work or survey, photos, any hydraulic or hydrologic modelling that has been performed.
- Quality of fieldwork performed, the number and location of measurements, experience of surveyor/designer inclusion, and comparison of measured values to modelled values; confidence in sizing. [Field Stream Assessment](#) (video)
- Inclusion a natural bottom consisting of material similar in gradation and form to the natural stream bed to provide stream continuity [Stream Crossing Bank Construction Guidance](#)
- Type of natural bottom material and how the material was determined
- Whether structure contains contiguous banks within the structure for terrestrial passage
- Level of detail of submitted design
- Whether or not the design matches stream slope and skew and accounts for downward scour potential
- Estimated structure life span
- Appropriateness of selected structure size and type for the location
- Any additional noted design elements that could benefit fish and wildlife

B. Statewide Prioritization for Aquatic Connectivity Restoration

- Documented barrier or potential barrier status of the crossing utilizing Maine Stream Habitat Viewer, Maine Department of Inland Fisheries and Wildlife input, Department of Marine Resources input; inclusion of additional photo documentation of fish passage issues if mis- or not classified using available online tools; or restriction status in the Maine Tidal Restriction Atlas or other available resources
- Statewide Priority Status of waterbody and location for restoration of Inland Fisheries as determined by Maine Department of Inland Fisheries and Wildlife
- Statewide Priority Status of waterbody and location for restoration of Sea-Run Fisheries as determined by Maine Department of Marine Resources

C. Fish, Wildlife, and Habitats: Presence

- Any additional improvements to fish and wildlife habitat that can be realized from the project including but not limited to:
 - Water quality improvements, such as reduced sedimentation through proper ditch turnouts/other means, realignment of crossing to reduce downstream erosion
 - Benefits to nearby endangered, threatened, special concern species
- Level of support for project by state, federal agencies, fishery, nonprofit groups, inclusion and contents of letters of support
- Amount and quality of habitat opened upstream, and overall length of unimpeded stream upstream and downstream resulting from the project
- Presence of fish in the reach or stream system per Maine Stream Habitat Viewer, assessment from fisheries agencies, or other documentation
- Documented presence of native brook trout, Atlantic salmon, alewives, and/or other diadromous (sea-run) fishes
- Level of effort undertaken to locate appropriate fisheries information