



# MaineDOT

## 2026 Maine Infrastructure Adaptation Fund

### Resilience Guidelines

#### Overview and Content

The resilience guidelines for the **2026 Maine Infrastructure Adaptation Fund** emphasize strengthening existing public infrastructure in Municipalities, Tribal Governments, and Infrastructure Districts to prepare for, withstand, and recover from climate-related risks and ongoing stressors. The persistent warming on land and at sea is leading to more frequent and severe storms, rising seas, flooding, and drought, posing significant challenges to Maine's people, their environment, heritage industries, local communities, and economy. See the [Scientific Assessment of Climate Change and Its Effects in Maine \(PDF\)](#) report for more information.

**The purpose of this guide** is to communicate industry standards and offer a practical, best-practice approach to climate adaptation projects involving existing public infrastructure. It aims to ensure that benefits reach all populations across Maine and promote long-term, sustainable, resilient infrastructure rather than just implementing temporary repairs or deferred maintenance. This list serves to outline qualifiers for the grant program's resiliency requirements. This is a guide and not intended to be a comprehensive list of all resiliency engineering practices or approaches. The Maine Climate Council recommends that the state commit to managing for 1.5 feet of relative sea-level rise by 2050 and 3.9 feet by 2100. Use information from [Maine Won't Wait](#), as appropriate.

## Proposed Resilience Actions

### Action # 1 Specific Sustainability Activities

**Nature-based Solutions (NbS)** refer to the use of natural features and processes to mitigate and adapt to climate change and to address existing public infrastructure needs. Traditional strategies to protect infrastructure rely on hardening and other “gray” solutions, which can be costly. Nature-based solutions refer to both green and natural infrastructure. Natural infrastructure is a natural barrier that separates protected areas and infrastructure projects. Examples of natural infrastructure include wetlands, living shorelines, urban forests, pastures, and gardens. Green infrastructure uses natural areas and systems, such as bioswales, stormwater retention gardens, and urban forests, to maximize project benefits and resilience. Gray infrastructure combines conventional engineered solutions with natural systems such as wetlands and vegetation to maximize project benefits and resilience. All projects are encouraged to utilize NbS and/or a combination of green (natural) and gray (structural) solutions (hybrid) where applicable; however, NbS **is not a requirement** for this program.

The stabilization of coastal or inland shorelands must be achieved through the utilization of vegetation and biodegradable materials. Construction of hard shoreline stabilization structures is not eligible for funding **unless integrated into a hybrid green-and-gray adaptation strategy.**

### Action #2: Improvements to existing Infrastructure

#### **Transportation resilience projects:** (separate or in combination)

- **Elevating Roadways:** Increasing the elevation of roads above flood-prone levels to prevent inundation.
- **Relocating Roads:** Moving roads to more secure locations upland to avoid flooding.
- **Upgrading Drainage Infrastructure:** Replacing existing culverts and drains with higher-capacity systems to handle extreme rainfall and prevent road overflow.

**Upgrades to Stormwater Systems:** Climate-resilience stormwater management may include:

- Replace an existing undersized storm drainpipe with a larger storm drainpipe to handle increased extreme precipitation events
- Stormwater management system improvements consisting of drainage ditch armoring, replacing and drains with larger infrastructure to handle increased rain events.
- Constructing a dedicated storm drain to convey precipitation away from sanitary sewer system.
- Stormwater projects that improve or implement stormwater management measures that are aimed at controlling, reducing, treating, or recapturing stormwater or surface drainage water.
- Stormwater projects may include road transportation resilience upgrades that are directly associated with an eligible stormwater project, and other projects that make sewer or stormwater infrastructures more resilient to climate change (e.g., relocating existing infrastructure).

**Upgrades to Wastewater Systems:** Climate-resilience wastewater management may include:

- Renovating existing wastewater treatment plants by installing flood protection measures, elevating critical components that protect and secure equipment to withstand extreme weather events.
- Wastewater system projects that address or improve water quality and water pollution (e.g., improve resiliency of infrastructure to severe weather events).

**Note:** Projects may involve upgrades integrated with Stormwater and Wastewater Systems.

**Upgrades to Stream Crossings:** Replacing existing structures that aim to:

- Improve fish passage and handle increased peak flows, including designs capable of managing 100-year storm events (Q100). Key standards include natural-flowing structures sized at 1.2 times the bankfull width of the stream, designed to promote natural sediment transport and wildlife movement or passage. Such infrastructure should also be properly embedded to prevent perching and maintain structural integrity.