

East Machias 25529.00 Bridge Replacement Project

Section 4(f) De Minimis Summary

[PUBLIC COMMENT DRAFT]

Section 4(f) De Minimis Impact Determination

Section 4(f) of the Department for Transportation Act of 1966 and its revisions protects four types of properties: publicly owned park and recreation areas that are open to the general public, publicly owned wildlife and waterfowl refuges, and public or privately owned historic sites. De minimis impacts are defined as those that, after taking into account any measures to minimize harm, do not adversely affect the activities, features or attributes that qualify a significant public park, recreation area, wildlife and/or waterfowl refuge, or historic sites for protection under Section 4(f) of the DOT of 1966, as amended.

Project Scope

Replacement of Chase Mills Bridge (#5465) that carries Chases Mill Road over Gardner Lake Outlet in East Machias, located 0.03 of a mile north of Lakeside Road.

Purpose and Need

The purpose of the project is to provide a safe, reliable, low-maintenance, and cost-effective two-way crossing for the current and projected traffic.

The need for this project is due to the structural deficiency of the existing crossing. According to the most recent inspection report (2022), the superstructure is in overall poor condition. The reinforced concrete slab has extensive cracking with active efflorescence. The fascias have extensive cracking, efflorescence and spalled concrete. The substructure is in poor condition—the east abutment has deep scaling and cracking up to 1 foot deep, the west abutment has moderate scaling and deep nested cracking, and the upstream wingwalls have deep scaling and section loss.

Built in 1952, the Chase Mills Bridge is a 25' single span reinforced concrete slab bridge with a concrete wearing surface and bituminous overlay that carries Chases Mill Road over Gardner Lake Outlet. The Chase Mills Bridge has no skew and carries two 12-foot lanes of traffic. The substructure consists of concrete gravity abutments founded on bedrock. There is a dam, owned by the Town of East Machias, located immediately upstream of the bridge and the wingwalls terminate at the dam structure. There is a fishway located adjacent to the west abutment between the dam and the bridge.

The proposed alternative would replace the existing structure with a single-span precast, prestressed concrete bridge with NEXT 28F beams and a 9" composite concrete slab, which would include a 1" integral wearing surface. The bridge would have two 11' lanes with minimum 2' shoulders. The shoulder would vary from 2' to 3.5' on the bridge due to the horizontal curve. The bridge would have an overall width of 27'-6" curb-to-curb with standard 3-bar steel bridge rail and a 5.6% superelevation.

The entire project area is shown in Appendix A.

Description of Section 4(f) Properties & Impacts

Historic Sites

There are no historic sites within the project area.

Public Parks

There are no public parks within the project area.

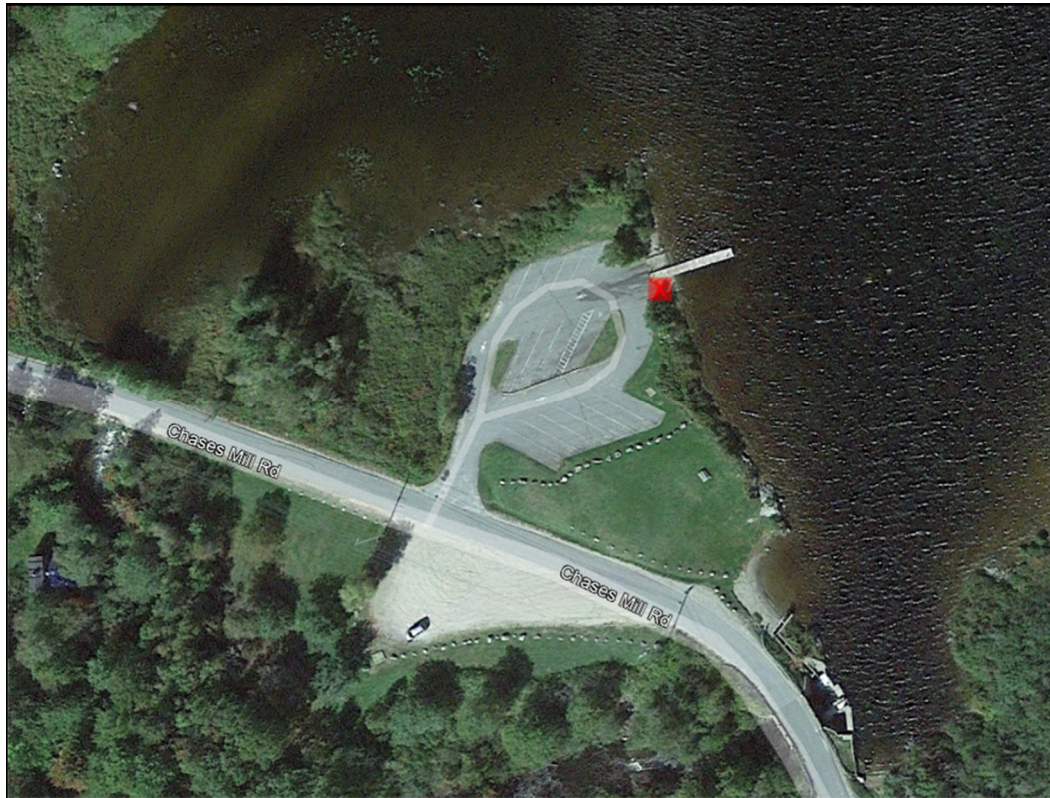
Recreation Areas

Gardner Lake Boat Launch (Town of East Machias)

The Gardner Lake Boat Launch is a town-owned property that is located off of Chases Mill Road that is located on the southwestern side of Gardner Lake in East Machias. The paved parking area holds 8 spaces for vehicles to access the 48' boat ramp. A dirt parking lot is located across from the boat launch property and is also owned by the Town of East Machias.

In order to complete the bridge replacement, MaineDOT would require approximately 736 SF for highway purposes and approximately 105 SF for a construction and maintenance easement at the town-owned Gardner Lake Boat Launch due to grading, guardrail installation, and slope easements that are required for the increased span length and additional bridge width.

The property limits and impacts are shown in Appendix B.



Gardner Lake Boat Launch © Google

Wildlife and Waterfowl Refuges

There are no wildlife and waterfowl refuges within the project area.

Avoidance, Minimization, and Mitigation Efforts

MaineDOT sought ways to avoid adverse impacts to the area surrounding the bridge. Since the proposed bridge will be constructed on the existing horizontal alignment, no major right-of-way impacts are expected and the majority of work is still within the preliminary right-of-way limits. The design uses reduced berm on sections of the guardrail to reduce impacts. Permanent easements were minimized to the greatest extent possible.

The Gardner Lake Boat Launch's accessibility will not be restricted during construction, and MaineDOT will return the impacted land that holds the Gardner Lake Boat Launch to a condition that is as good as or better than the existing.

Official with Jurisdiction Concurrence

The Town of East Machias is the Official with Jurisdiction under Section 4(f), as the Town owns the Gardner Lake Boat Launch. MaineDOT consulted with the Town in October 2024 and informed them of the proposed impacts on the boat launch property. The Town expressed no concerns at that time.

Consultation with the Town is ongoing.

Public Involvement

Public involvement is ongoing.

Summary

Based on the scope of the proposed project and the above information, the following assessment has been made:

The proposed bridge replacement project in East Machias, Maine, would require permanent easements on the Gardner Lake Boat Launch property, which is considered a recreation area under Section 4(f). The project would not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f). Therefore, the use of the Section 4(f) property will result in a de minimis impact.

Appendix A

EAST MACHIAS 25529.00



The Maine Department of Transportation provides this publication for information only. Reliance upon this information is at user risk. It is subject to revision and may be incomplete depending upon changing conditions. The Department assumes no liability if injuries or damages result from this information. This map is not intended to support emergency dispatch.

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Miles
1 inch = 0.07 miles

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Appendix B

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