

Assuming the Mantle



A Cross-Agency Collaboration to Safeguard Freshwater Mussels
during Transportation Projects

Leslie Latt, MaineDOT, and Beth I. Swartz, Maine Department of Inland Fisheries and Wildlife

Maine's Threatened Mussels



Yellow lampmussel (*Lampsilis cariosa*)—
prefers medium to large rivers



Tidewater mucket (*Leptodea ochracea*) —
lakes, ponds, slow-moving rivers



Brook floater (*Alasmidonta varicosa*) —
flowing water, small streams to large
rivers

Mussels?



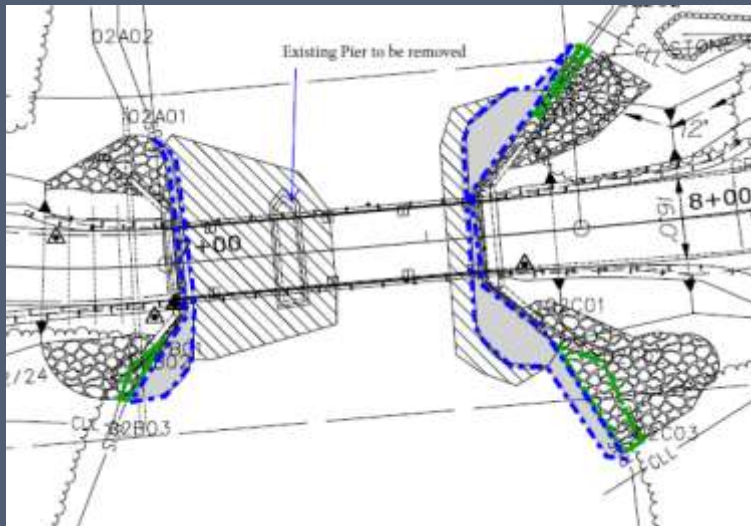
Goal

- To streamline project review process
- Avoid or minimize Take when a project intersects a state-listed species occurrence



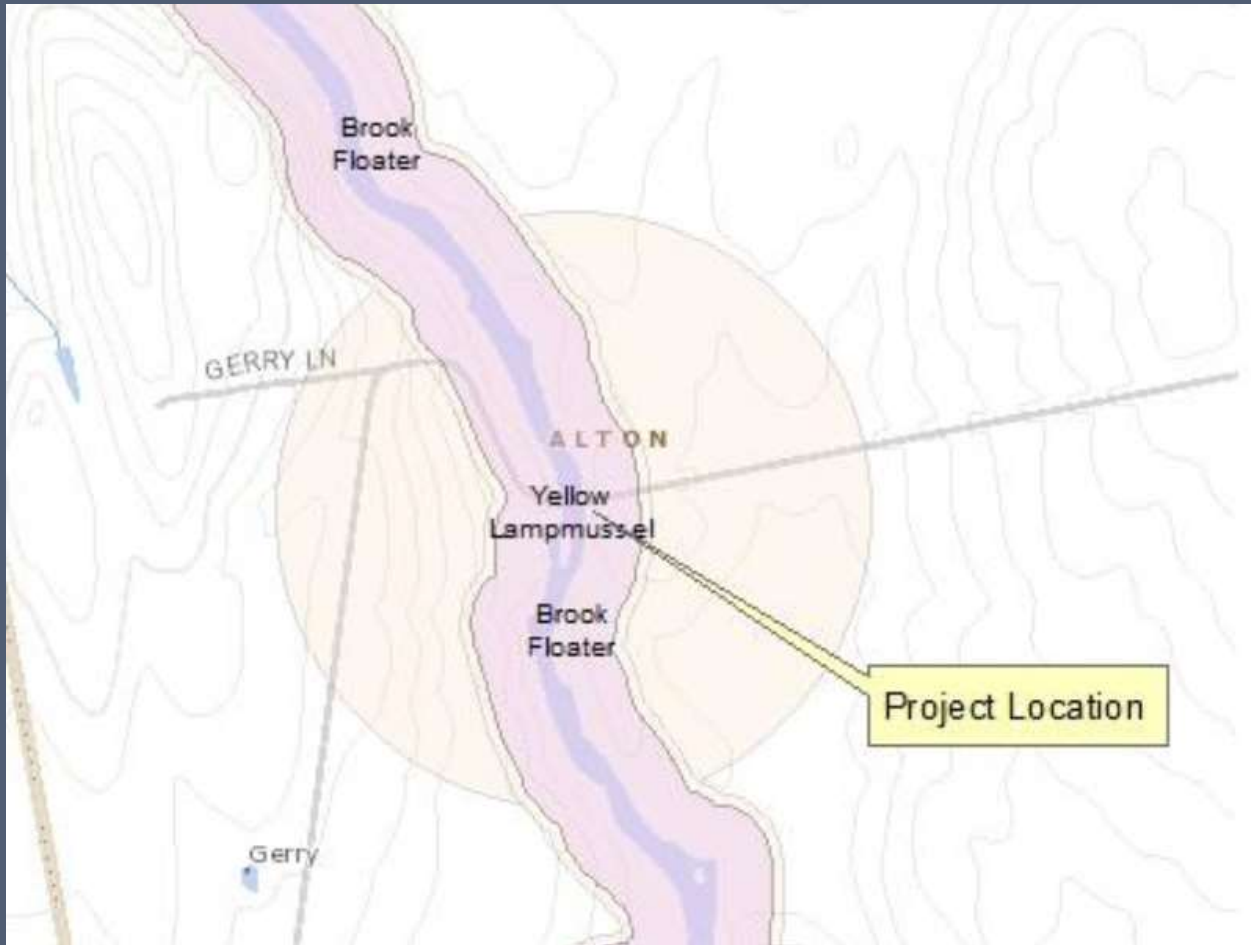
Task

MaineDOT needs more species-specific occurrence data from MDIFW



MDIFW needs more project-specific information from MaineDOT

Update Screening Layer - MDIFW



Update Occurrence Data - MDIFW

Occurrences of
State-Listed
Freshwater
Mussels by
Watershed

MDIFW

KENNEBEC RIVER WATERSHED

Kennebec River (Merrymeeting Bay to Anson/Madison; low potential for BF upstream) YL TM BF

Messalonskee Stream (mouth; low to medium potential upstream) YL

Carrabassett Stream BF

Wesserunsett Stream BF

Sebasticook River (mouth to Hartland; low to medium potential upstream) YL TM BF

Outlet Stream (mouth; low potential upstream) TM

Fifteen Mile Stream (Clinton/Benton; low potential upstream) YL

Twenty-five Mile Stream (Unity; medium to high potential downstream) YL

Unity Pond YL TM

Sandy Stream (Unity) YL TM

Douglas Pond TM

[Indian Stream; medium to high potential for TM]

Indian Pond TM

Great Moose Lake TM

Sandy River (Norridgewock/Starks; low potential upstream) BF

Carrabassett River (Anson, Embden, New Portland) BF

Gilman Stream (lower; potentially upstream) BF

Page 7 of 12 | 3520 words

9:26 AM
4/24/2023

Provide Better Project Info – MaineDOT

Alton, WIN 17866, Bridge Replacement (Bridge #5100)

Project Description

The Tannery Bridge (R5100) is located in Alton, ME on Alton Tannery Road over the Dead Stream (Appendix 1 - maps). Built in 1928, the existing bridge is a two-span structure with 23'-7 1/2" reinforced concrete slab span and one 40'-0" thru girder span for a total span length of 63'-8 1/2". The bridge substructure consists of full-height, combination stacked mortared stone, unreinforced mass concrete abutments, wingwalls, and a pier, all supported by spread footings.

MaineDOT proposes to replace the superstructure of the bridge, remove the existing current repair the existing abutments (concrete rehabilitation and new tiebacks) to satisfy current AASHTO bridge specifications and live load requirements.

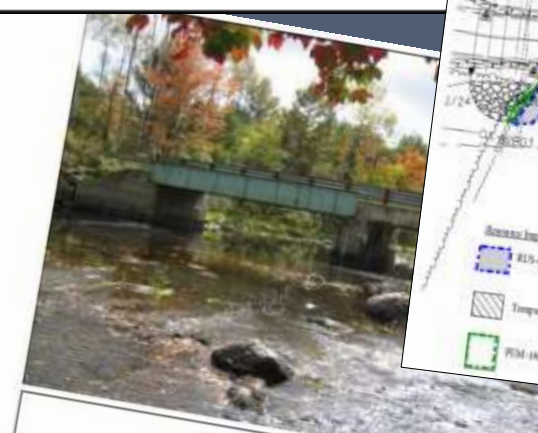
Project Details

The contractor will not begin work before July 1, 2017. Mussel relocation is expected to occur mid to late June.

The bridge replacement includes rebuilding the existing abutments, removal of the center and construction of a new super structure. The abutments will be reinforced by adding additional structure support and placing rip rap in front around them (Appendix 2 - plan).

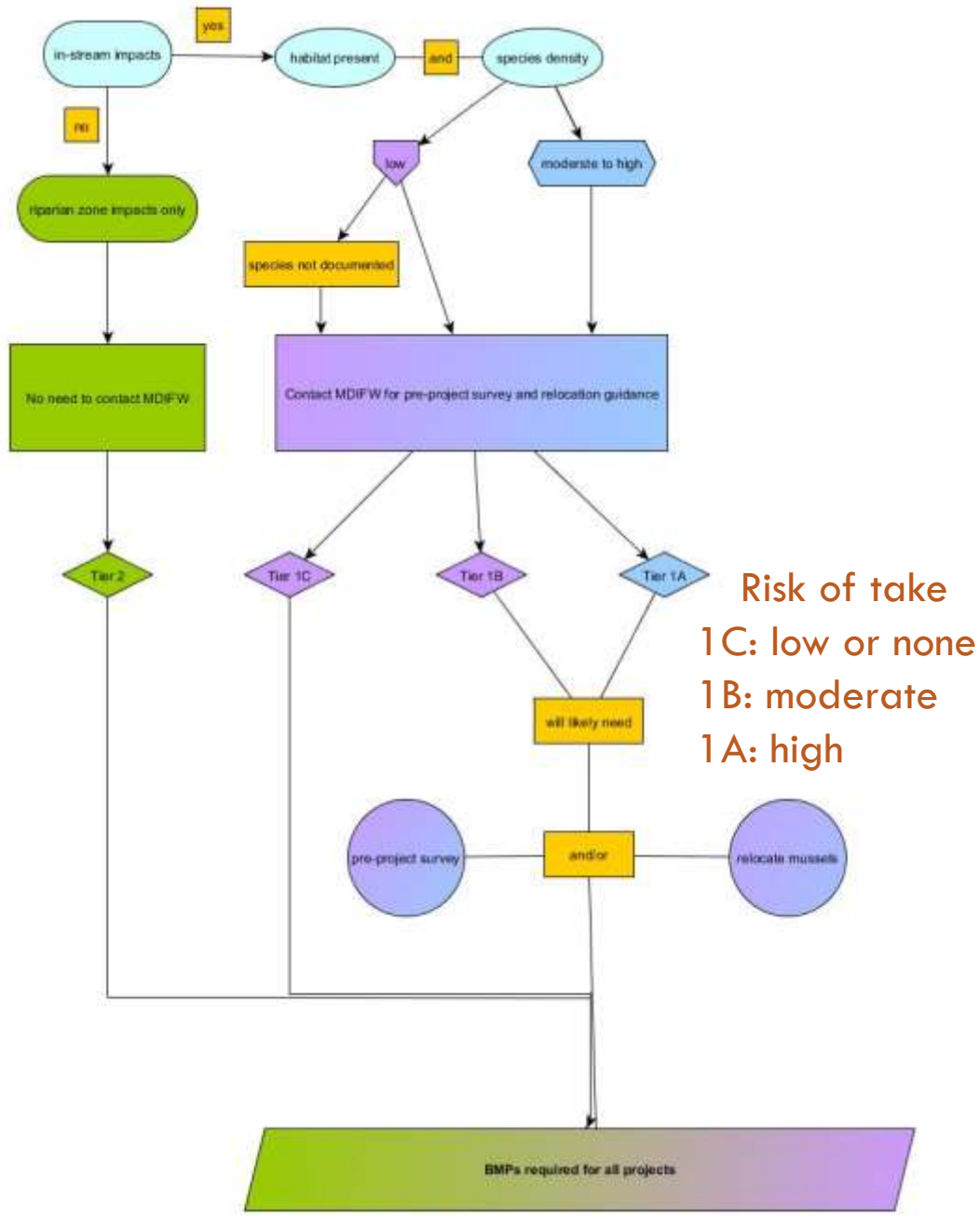


Looking Upstream



Looking Downstream





Mussels Potentially Present

- Brook floater – cryptic, easily confused with other species

- Tidewater mucket or Yellow lampmussel – large, relatively easy to find and identify

- Contract mussel biologist



- MaineDOT can survey and relocate



Outcome

- Better communication between MDIFW and MaineDOT:
 - Better screening maps
 - Streamlined decision-making (tier hierarchy)
 - Fewer projects fall through the cracks, less chance of Take

Mussels?



Mussels!



Thanks!

