



MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

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August 29, 2022

Sheffield Conservation Commission
Conservation Department
116 Main Street
Room U6
South Hadley, MA 01075

Edward Connor
MA Department of Conservation & Recreation
Office of Dam Safety
251 Causeway Street
Boston, MA 02114-2119

Project Location: Lithia Springs Reservoir Dam Gatehouse
Project Description: Maintenance repairs and modifications to address deficiencies at the Lithia Springs Reservoir Dam Gatehouse; installation of a pedestrian foot bridge over spillway; erosion and sedimentation control along access road
DEP File No.: Unavailable
NHESP Tracking No.: 12-31563

Commissioners and Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent with plans entitled LITHIA SPRINGS RESERVOIR DAM GATEHOUSE MODIFICATIONS DESIGN CONTRACT NO. P21-3421-D4A CONSTRUCTION CONTRACT NO. P21-3421-C1A MA00607 SOUTH HADLEY, MASSACHUSETTS (dated August 2022, prepared by PARE Corporation; the "Plans") in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.59). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.00). The narrative and NOI were updated on August 25, 2022 to correct wetland impact calculations and the text of the project description.

The Division has determined that this Project, as currently proposed, will occur **within** the actual habitat of and is mapped as *Priority Habitat* for the following state-listed species, as indicated in the *Massachusetts Natural Heritage Atlas* (15th Edition):

Scientific Name	Common Name	State Status	Taxonomic Group
<i>Carex lupuliformis</i>	False Hop Sedge	Endangered	Vascular Plant
<i>Populus heterophylla</i>	Swamp Cottonwood	Endangered	Vascular Plan
<i>Ambystoma opacum</i>	Marbled Salamander	Threatened	Vertebrate Animal

These species and its habitats are protected pursuant to the MESA and the rare species provisions of the MA Wetlands Protection Act. Fact sheets for these species can be found on our website, www.mass.gov/nhesp.

The purpose of the Division's review of the proposed project under the WPA regulations is to determine whether the project will have any adverse effects on the Resource Areas Habitats of state-listed species. The purpose of the Division's review under the MESA regulations is to determine whether a Take of state-listed species will result from the proposed project.

MASSACHUSETTS ENDANGERED SPECIES ACT (MESA) & MA WETLAND PROTECTION ACT (WPA)

Based on the information provided and the information contained in our database, it is the opinion of the Division that a portion of this project, as currently proposed, **must be conditioned in order to avoid adverse effects to the actual Resource Area and avoid a prohibited Take of state-listed species (321 CMR 10.18(2)(a)).**

1. **Delineate and Avoid False Hop Sedge and Swamp Cottonwood.** We appreciate and support the use of protective measures along the access road (Sheet 2.1, "STRAW BALE OR COMPOST FILTER SOCK"). These are protective of Marbled Salamander aquatic habitat, so they are important to include.

But, in the specific area noted herein, state-listed plants must be delineated, flagged and avoided. The below condition applies only to the access road south of the Lithia Springs Road/Lithia Springs Road Branch intersection (near -72.560214 42.293299 Decimal Degrees) to the point nearest to the southern end of Parcel 59-12 (-72.563183 42.288585 Decimal Degrees). This condition also applies for any side-trimming, mowing, or use of swamp-mats needed for machinery access in this area.

- a. The candidate botanist must submit a survey protocol to the Division for review and approval.
 - b. The survey protocol shall also include details such as timing of the survey and sufficient information about the botanical/taxonomic criteria to clearly differentiate from similar species.
 - c. The survey results, reporting positive or negative finding (aka 'fail to find') shall be submitted to the Division as outlined in the survey guidelines reporting all state-listed and watch-listed species. Please note that survey data must be submitted via the Heritage Hub (<https://www.mass.gov/info-details/overview-of-the-heritage-hub>) within 10 days of the completion of the survey.
 - d. The botanist shall submit a plan for delineation and avoidance of these species for the duration of work.
2. **Required Restoration Plans.**
 - a. *Sheet 1, Project Completion, Note 1* – The text refers to "all areas disturbed". If any areas outside the limit of disturbance, "LOD" on Sheet 3, require restoration then a DCR Ecologist or similar shall review the area prior to restoration to determine appropriate restoration action and recommend any seed mixes needed.
 - b. *D-series wetland.* The impacted wetland area south of the dam, D-series on sheets 2.0 and 3.0, should be restored. The existing vegetation includes a range of native forbs, shrubs and trees; as well as several invasives.
 - i. We recommend herbicide-based control for Multiflora Rose and Tartarian Honeysuckle prior to initiation of work to maximize success with the invasive control plan in this area.
 - ii. The restoration plan should include a native mixture of the species identified in the wetland field report (dated 4/23/21, page 4 of 4). We recommend plantings, especially shrubs and trees, are small when planted. In coordination with the Division, it may be possible to source trees and shrubs from the surrounding area outside the "LOD" on Sheet 3.
 - iii. The restoration plan must be submitted for Division review and approval.
 3. **Expand Invasive Plant Species Management Plan.** The proposed invasive management actions for the project are listed in Section 4e. of the filing. The actions include: pre-work inspection to flag species for removal by hand, cleaning equipment before entering the site, cleaning equipment before leaving site, and confirmation that any imported compost or soil is free of invasive species. Invasive species listed in the filing include Oriental Bittersweet, Multiflora Rose, Japanese Barberry, and Tartarian Honeysuckle.

Given the soil and vegetation disturbance associated with the project, and the important rare plant habitat in the vicinity, the **plan must be revised to incorporate 1- and 3- years post-construction invasive species monitoring and triggers for further invasive control actions**, unless otherwise allowed by the Division.

Application of appropriate herbicides may be more effective than hand-removal methods alone. We recommend that DCR incorporate the use of an appropriate herbicide in the season before work. Provided the herbicide is limited to the limit of disturbance "LOD" (Plans, Sheet 3), no impact to state-listed species would be anticipated.

4. **Native Plants Required within Priority Habitat.** All plants and seed mixes applied within *Priority Habitat* shall be composed of species native to the county in accordance with THE VASCULAR PLANTS OF MASSACHUSETTS: A COUNTY CHECKLIST FIRST REVISION (Dow Cullina, M, B Connolly, B Sorrie, and P Somers. 2011. MA NHESP DFW). Available from Massachusetts State Library <http://archives.lib.state.ma.us>.

Note: Loam and seed upland south of the dam - The Plans include loaming and seeding of the upland south of the dam (Sheet 3) to provide a "maintainable cover of perennial grass." The Division does not object to the use of perennial grasses in this area, but these should be composed of native species and varieties. Once a seed mix is selected, it should be reviewed and approved by a DCR Ecologist or the Division.

5. **State-listed Plants Shall Not Be Planted.** The Division does not approve of the planting of state-listed species, even if the seeds are sourced outside of Massachusetts. Please carefully review seed mixes at the time of purchase as the specific composition and mixes change within a year.
6. **Contractor Training.** The proposed project will occur within Marbled Salamander habitat. The contractor should be trained to identify Marbled Salamanders, their habitat, where they may be encountered (e.g., under objects) and know what actions to take if one is located within the limits of work. Marbled Salamander will be moving more frequently in late summer/early fall and April/May. The training can be provided by a Division-approved biologist or DCR Ecologist.
7. **Authorization Duration.** This authorization is valid for five (5) years from the date of issuance.
8. **Notice, Wetlands Protection Act (WPA) filing(s).** When filing for any Notice of Intent, Request for Determination of Applicability or associated renewal, extension, or amendment of the WPA Orders of Conditions the Applicant shall contact the Division for written response regarding impacts to Resource Area habitat of state-listed wildlife. A renewal, extension or amendment of any Order of Conditions or other permit under the MA Wetland Protection Act does not renew, extend or amend this MESA authorization.
9. **Compliance Report.** Within thirty (30) days of completion of Work the Applicant shall submit a brief written report including photographs to demonstrate compliance with the Conditions herein.

Provided the above-noted conditions are fully implemented and the required revisions completed, the proposed project will not result in an adverse effect to the actual Resource Area (310 CMR 10.59) or a Take of state-listed species. All work is subject to the anti-segmentation provisions (321 CMR 10.16) of the MESA. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

FISHERIES

The Massachusetts Division of Fisheries and Wildlife's Fisheries Program (MassWildlife) reviews projects within the Commonwealth which will affect fish and their habitats and provided the following comments and recommendations. Fisheries is one of the stated Interests identified in MGL c.131§40 which is then defined in the MA Wetlands Protection Act as "*protection of the capacity of an Area Subject to Protection under MGL C.131: (a) to prevent or reduce contamination or damage to fish; and (b) to serve as their habitat and nutrient source.*"

No drawdown is proposed during the project, but if it one becomes necessary to complete the repairs:

- Stream flows downstream of Lithia Springs Reservoir should not exceed 4 cfsm during the drawdown period and should be no less than 0.5 cfsm during the refill period, and
- Any drawdown should not be conducted at any time when surface water temperature in the reservoir exceeds 70-degrees Fahrenheit to protect downstream Coldwater Fish Resource Elmer Brook (321 CMR 5.00).

The project does not discuss future actions that may be proposed relative to lake and pond management within the Reservoir. DCR should consult with the Division if future actions are proposed (e.g., use of herbicide in the Reservoir, annual drawdown, etc.).

Please note that this determination addresses only the matter of state-listed species and their habitats and Fisheries. If you have any questions about state-listed species relative to this letter, please contact Misty-Anne Marold, Senior Endangered Species Review Biologist by email at misty-anne.marold@mass.gov. If you have any questions about fisheries relative to this letter, please contact Jason Stolarski (jason.stolarski@mass.gov).

Sincerely,



Everose Schlüter, Ph.D.
Assistant Director

cc: Lauren Gluck, Pare Corporation
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