



Rare Species Survey Proposal for Woods Pond Spur Rail Transload Area

Prepared by AECOM for General Electric Company

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On July 24, 2025, EPA issued a conditional approval letter for GE's May 15, 2025 Pre-Design Investigation Work Plan for Rail Transload Areas in Reaches 5 and 6 of the Housatonic River, Rest of River. Specific Condition 10 of that letter noted that, although the Massachusetts Natural Heritage and Endangered Species Program (MNHESP) has not identified any mapped habitat for any state-listed species at the Woods Pond Spur rail transload area, construction at and increased use of that area for remediation activities may result in impacts to state-listed faunal species through disruption of key behaviors (for example, nesting, breeding, foraging) within MNHESP-mapped habitats directly adjacent to the project area. Therefore, EPA directed GE to submit a proposal for appropriate surveys of state-listed faunal species (identified based on MNHESP species mapping) within adjacent habitats.

This document constitutes the required proposal. MNHESP has provided GE with digital information that includes Species Habitat Mapping prepared by MNHESP of the state-listed species within the ROR, including Reaches 5A through 6.¹ The Species Habitat Mapping provided to GE was updated in late March 2025 to include species mapping within 1,000 feet of the designated floodplain boundary (i.e., the 1 mg/kg PCB isopleth) in these reaches. Based upon this mapping, there are no state-listed faunal species with Species Habitat Mapping that intersects with or directly abuts (i.e., touches) the limits of the Woods Pond Spur transload Area (considering the entire rail transload area). The following are the state-listed faunal species with the closest Species Habitat Mapped areas to the Woods Pond Spur transload area, along with the distances from the transload area limits to the mapped habitat (as measured from the closest point at the transload area to the MNHESP Species Habitat Mapping):

1. Common gallinule (*Gallinula galeata*): 125 feet
2. Mustard white (butterfly) (*Pieris oleraceae*): 125 feet
3. Bald eagle (*Haliaeetus leucocephalus*): 1,700 feet
4. American bittern (*Botaurus lentiginosus*): 2,017 feet

Based upon these distances and the respective ecology and life histories of each species, and considering the rail transload area conditions (habitat/cover types, historical and existing uses), and anticipated construction activities at the transload area, GE has determined that the only state-listed faunal species for which a specific survey is necessary at that area is the common gallinule. Surveys for the other three species listed above are not considered warranted for various reasons, including distance of the mapped habitat from the transload area, the respective ecology and life histories of each species, the transload area conditions (habitat/cover types, historical and existing uses), and anticipated construction and operation activities at the transload area. For example, the current main line rail traffic along the existing rail line between the transload area and the mapped habitat of these three species, as well as additional industrial activity and traffic in the vicinity of that area (along Willow Creek Road), which includes a rail-transfer station and operation of a railway museum, establish long-standing land use factors which minimize the potential for additional indirect effects to be generated by the planned rail

¹ Species Habitat Maps are species-specific maps prepared by MNHESP using the "best scientific evidence available," examining individual occurrence records and other set criteria to delineate the anticipated habitat area for an individual state-listed species.

transload area development and operation. The following summary assessments further demonstrate that specific surveys for each of those three other species are not warranted.

Mustard White: The Species Habitat Mapping of the mustard white (butterfly) extends continuously throughout the floodplain of the Housatonic River from the Holmes Road Bridge to the upper portion of Woods Pond. The mapped habitat extends along the northwestern edge of Woods Pond to approximately 125 feet from the eastern edge of the Woods Pond Spur rail transload area. According to MNHESP (2015a), “in Massachusetts the mustard white inhabits openings in mesic forests, including riparian floodplains, margins of fens and marshes, and streamsides, as well as wet meadows, fields, and pastures.” The Species Habitat Mapping by MNHESP accurately includes the limits of these habitat conditions in the vicinity of the rail transload area. The transload area does not contain any of the habitat types described above, nor have any potential larval host plant species for this butterfly been observed in the area during surveys to date in the fall of 2024 and summer of 2025. Since the rail transload area does not provide suitable habitat conditions for the mustard white, and since this species is not significantly affected by indirect activity from nearby areas, there is no basis to conduct a site-specific survey for the mustard white.

Bald Eagle: The Species Habitat Mapping of the bald eagle extends throughout the floodplain of the Housatonic River from roughly the middle of Reach 5C to approximately 1,000 feet upstream of Woods Pond. The mapped habitat is approximately 1,700 feet from the eastern edge of the Woods Pond Spur rail transload area. That distance by itself is sufficient to consider the mapped habitat for the bald eagle not “directly adjacent” to the transload area. Further, most of the disturbance guidelines for bald eagles are related to setbacks or buffers from nesting activity. For example, federal guidance under the Bald and Golden Eagle Protection Act on distances from which certain activities can be conducted without a permit specify distances of 330 to 660 feet from a bald eagle nest.² There is no evidence of any bald eagle nests within that buffer area or anywhere near the Woods Pond Spur transload area. There do not appear to be any recent records of bald eagle nesting attempts in Reaches 5 and 6 of the Housatonic River, and it is AECOM’s understanding that the last recorded bald eagle nesting activity in Reaches 5C and 6 was in 2005 and was within the area currently encompassing the bald eagle Species Habitat Mapping. The most suitable bald eagle nesting habitat is several thousand feet upstream of Woods Pond on the western side of the river on the edge of the large backwaters associated with the Willow Creek drainage.³ While AECOM’s 2023-2025 biological surveys in the vicinity of Reaches 5C and 6 have noted the occasional presence of bald eagles within this species’ mapped habitat as well as downstream of this habitat to the northeastern portions of Woods Pond, no nesting activity has been observed in any portions of Reaches 5 and 6.

According to MNHESP (2019), bald eagles in Massachusetts inhabit larger inland waters, and require “a great amount of shoreline habitat containing stands of forest for nesting and trees projecting above the forest canopy for perching, an adequate supply of moderate-sized to large fish, an unimpeded view, and reasonable freedom from human disturbance.” The bald eagles’ large home range and capacity for long-distance flight indicate that the occasional observations of this species in the Reach 5C or Woods Pond area are related to migratory or regional movements.

For these reasons, we have concluded that no survey of bald eagles is warranted in or adjacent to the Woods Pond Spur rail transload area.

² [Eagle Incidental Disturbance and Nest Take Permits | U.S. Fish & Wildlife Service.](#)

³ Since 2015, a large solar array was constructed just west of this large backwater area, and ongoing activity related to that solar array and adjacent farming is noteworthy.



American Bittern: The Species Habitat Mapping of the American bittern includes an area of Reach 5C which extends along the eastern side of the Housatonic River to a point 2,017 feet from the eastern side of the Woods Pond Spur rail transload area. Again, that distance by itself is sufficient to consider the mapped habitat for the American bittern not “directly adjacent” to the transload area. Moreover, according to MNHESP (2015b), American bitterns inhabit freshwater marshes, meadows, fens and bogs dominated by emergent vegetation such as cattails, bulrushes, sedges, and grasses. These habitats do not occur within the Woods Pond rail transload area. The distance of over 2,000 feet between the closest point on the transload area to the Species Habitat Mapping for the American bittern exceeds that which would result in any disruption to this species from construction and/or operation of the transload area. Further, as for the other species discussed above, the occurrence of current rail traffic along the existing rail line between the rail transload area and the mapped habitat of the bittern, as well as additional industrial activity and traffic in the vicinity of the area (along Willow Creek Road), establish long-standing land use factors which minimize the potential for additional indirect effects to be generated by the rail transload area development and operation. Again, therefore, there is no basis for a survey of American bitterns in or adjacent to the transload area.

For the foregoing reasons, the state-listed species survey in and adjacent to the Woods Pond Spur rail transload area will focus on the common gallinule. That survey will be conducted in 2026. A Standard Operating Procedure (SOP) for that survey is attached.

References

MNHESP. 2015a. MA Natural Heritage and Endangered Species Program Fact Sheet: Mustard White (*Pieris oleracea*). Westborough, MA.

MNHESP. 2015b. MA Natural Heritage and Endangered Species Program Fact Sheet: American Bittern (*Botaurus lentiginosus*). Westborough, MA.

MNHESP. 2019. MA Natural Heritage and Endangered Species Program Fact Sheet: Bald Eagle (*Haliaeetus leucocephalus*). Westborough, MA.

Standard Operating Procedure for Survey of State-Listed Common Gallinule in Woods Pond Spur Rail Transload Area

August 8, 2025

1.0 Introduction

In response to a conditional approval letter issued by EPA on July 24, 2025 for GE's May 15, 2025 Pre-Design Investigation Work Plan for Rail Transload Areas in Reaches 5 and 6 of the Housatonic Rest of River, GE has proposed to conduct a survey for the common gallinule, a state-listed rare species, in and adjacent to the Woods Pond Spur rail transload area. This Standard Operating Procedures (SOP) describes the procedures to be followed in conducting that survey.

2.0 Common Gallinule Survey Procedures

2.1 Common Gallinule Habitat Summary

The gallinule is a duck-like swimming bird that inhabits large freshwater or brackish marshes and water bodies with cattails and other emergent vegetation. Preferred habitats include waterbodies with water at least one foot deep, with dense cattail beds and occasionally shrub swamps adjacent to open water with aquatic bed vegetation. Although gallinules prefer emergent wetlands as foraging, breeding, nesting, and protective cover habitat, they also utilize margins of lakes, ponds, and slow-flowing rivers and streams as feeding areas (MNHESP 2019). The courtship and breeding season runs from April through June in Massachusetts. Emigration from New England to the southern U.S. runs from October into December. The common gallinule is listed as a species of special concern in Massachusetts.

Based on the Species Habitat Mapping provided by the Massachusetts Natural Heritage and Endangered Species Program (MNHESP) to date,¹ mapped habitat for the common gallinule occurs throughout the Housatonic River and its floodplain in most of Reach 5C and extends into the central portion of Woods Pond. At its closest point, along the northwestern edge of Woods Pond, the mapped habitat of the common gallinule is 125 feet from the eastern side of the Woods Pond Spur rail transload area. Based upon the observed habitat conditions within this mapped area, this habitat appears suitable to support common gallinule activity (including courtship, nesting, feeding, and resting). MNHESP recommends the protection of a 330-foot buffer around known breeding sites to reduce adverse effects of disturbance from human activities. Accordingly, the survey for the common gallinule will be conducted during the 2026 breeding season (April-June 2026) encompassing suitable habitats within this buffer from the rail transload area limits, with an additional 500 feet of coverage within suitable habitat (i.e., a total distance of 830 feet from the transload area limits within suitable habitat conditions).

2.2 Common Gallinule Survey Method

This SOP describes the methods and procedures for conducting the common gallinule survey within 830 feet of the rail transload area in areas that provide potentially suitable habitat for this species. These procedures have drawn from and are generally consistent with MNHESP guidance for state-listed wildlife species habitat assessments (MNHESP 2025) and Conway's (2011) Standardized North American Marsh

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Bird Monitoring Protocol. The overall objective of the survey is to determine habitat suitability for the common gallinule within the surveyed area, including (but not limited to) determining the presence/absence of the species within that area. As part of the survey, observations of any other state-listed bird (or other) species recorded during the common gallinule survey will also be documented and included in reporting of the gallinule survey results.

Base Map Preparation and Survey Route/Point Determination

The primary method to be used for this gallinule survey is to conduct meander routes through appropriate habitat during the active breeding and nesting season. Use of spot mapping, or point counts, is a well-accepted and long-standing bird survey method (Williams 1936), which will be implemented for this survey. For this purpose, a detailed base map with habitat cover types will be prepared. Based upon the habitat cover type mapping, an anticipated survey route with survey points will be laid out. The survey routes and points may be modified based on observed field conditions; survey routes and points will be labeled on the mapping to aid in tracking results. Observations will be located on the base map using either established control points (such as habitat cover boundaries or geomorphic features) or with the use of GPS instrumentation with at least three-meter accuracy.

Survey Scheduling, Weather Limitations, and Level of Effort

Conway (2011) indicates that, in western Massachusetts, surveys for marsh birds (including common gallinule) should be dispersed among three survey periods: May 15-May 31, June 1-June 14, and June 15-June 30. This distribution of survey dates is intended to account for variation in breeding phenology (and hence variation in optimal survey timing). The three survey windows, which are based on the average minimum temperatures in May in each location, increase probability of conducting at least one survey during the seasonal peak in vocalization probability. At least three surveys are needed to confirm seasonal presence or absence of some marsh bird species in a wetland with 90% certainty (Gibbs and Melvin 1993). Thus, as part of the overall common gallinule survey for the Woods Pond Spur transload area, a separate survey will be conducted within each of the three above-listed 15-day survey windows in 2026.

The surveys will occur during days of minimal wind and limited precipitation to maximize auditory and sensory receptors of the survey individuals. Surveys will begin just before sunrise, although evening surveys are also acceptable and useful. During the habitat suitability surveys, quiet observations will occur at each survey point for at least 15 minutes to enable birds in the area to resume normal activity. After 5-10 minutes of this time, call broadcasts can be used to elicit responses from local gallinules (see next section). The observations or calls recorded of any individual gallinules will be used as supportive evidence of the habitat suitability.

Call Broadcasts

Because common gallinules are secretive and seldom observed and vocalize infrequently, the Standardized North American Marsh Bird Monitoring Protocol instructs surveyors to broadcast calls to elicit vocalizations during surveys. The broadcast player will be placed upright on the ground (or on the bow of a boat), and sound pressure will be 80-90 dB at one meter in front of the speaker. A sound-level meter will be used to adjust volume of the broadcast player at the beginning of each day. If sound quality distorts when volume on the broadcast equipment reaches 80-90 dB, higher-quality broadcast equipment will be used. If the ground is wet, the speaker will be placed on an object as close to the ground as possible. Surveyors will stand two meters to one side of the speaker while listening for vocal responses (since standing too close to the speaker can reduce the surveyors' ability to hear calling birds). Surveyors

will point the speaker toward the center of the marsh and not rotate the speaker during the call-broadcast survey.²

Data Recording and Reporting

Field notes will be kept in a project-designated field book and/or on standardized field data forms. Immediately upon returning from the field, personnel will double-check all field notes and data forms for completeness and legibility, and then enter these data into a digital format (e.g., database or digital version of field data forms). These data will be provided to the lead biologist at the end of each day's sampling to be inspected for accuracy and completeness, and will then be signed off by the lead biologist and dated. All documentation will be returned to the project files following completion of the review.

Unexpected deviations from the procedures stated in this SOP will be documented in the field records, along with an explanation of changes and review and approval from the project's lead biologist.

Upon completion of the reconnaissance field work, a report will be prepared that includes information on existing site conditions, a summary of the survey methodology, survey area mapping, descriptions of any deviations from this survey plan, a summary of the survey's results (including representative photographs), and a list of references. Any confirmed occurrences of common gallinules will be shown on mapping.³ GPS waypoints will be provided. The report will include a count of individual species.

In addition, any observations of any state-listed species during these surveys will be reported to MNHESP and uploaded to the MNHESP's Heritage Hub online reporting system.

3.0 Responsibilities, Qualifications, and Timing

3.1 Responsibilities

The project manager and/or lead biologist will be responsible for ensuring that all materials, resources, and guidance necessary to implement the required procedures are provided to the project team.

The lead biologist will be responsible for implementing and/or overseeing the activities described in this SOP, coordinating field personnel and any subcontractors, and providing a secondary review of field data. The lead biologist will also be responsible for ensuring that the data required to be reported to EPA or MNHESP are provided to those agencies within required timeframes and formats. The field staff is responsible for implementing procedures in accordance with this SOP and for completely and accurately documenting field activities.

3.2 Qualifications and Training

The field biologist managing this reconnaissance project will be an experienced ecologist or wildlife biologist or person with a minimum of five years of experience conducting bird surveys. Any personnel conducting field research other than the designated lead biologist will:

- Receive training directly from the lead biologist,
- Demonstrate a thorough understanding of this SOP and any project specific information, and

² A list of suitable equipment for broadcasting calls can be found at: <http://www.cals.arizona.edu/research/azfwru/NationalMarshBird/>.

³ Any report that shows specific locations of state-listed species will be submitted on a confidential basis to EPA and MNHESP, with a separate version for public release which redacts those specific locations.

- Demonstrate the knowledge, skills, and abilities necessary to perform the procedures and collect accurate data.

4.0 Health and Safety Considerations

Health and safety considerations are dependent upon site logistics and the possible presence of hazardous site conditions at the rail transload area. The survey for common gallinules will require work in various waterbody and vegetated floodplain habitats and along an active rail line, which require careful planning and implementation of safety measures. Field health and safety protocols will follow those specified in the most current Site Health and Safety Plan (HASP) for the GE-Pittsfield/Housatonic River Site (Arcadis 2023). All field personnel will wear proper clothing for the environmental conditions present, and at least one member of the field team will be trained for basic first-aid techniques and Cardiopulmonary Resuscitation (CPR). A first-aid kit will be provided as standard equipment for all field activities conducted under this SOP. If boats are employed, specific safety protocols related to such crafts will be followed.

5.0 References

- Arcadis. 2023. Site Health and Safety Plan - GE-Pittsfield/Housatonic River Site. Prepared for General Electric Company, Pittsfield, Massachusetts. Revised July.
- Conway, C.J. 2011. Standardized North American Marsh Bird Monitoring Protocol. *Waterbirds* 34(3): 319-346.
- Gibbs, J. P., and S. M. Melvin. 1993. Call-response surveys for monitoring breeding waterbirds. *Journal of*
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