



Isolated Vegetated Wetland Survey

for

27 Kimball Road
Amesbury, MA 01913
Parcel ID(s): 73-19

DATE:

May 14, 2026

ADDRESSED TO:

Amesbury Conservation Commission
39 South Hunt Road
Amesbury, MA 02346

PREPARED BY:

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PREPARED FOR:

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1.0 BACKGROUND

27 Kimball Road is a 9.15-acre site developed with a single-family house with associated detached garage, shed, lawn and driveway centralized on the property. Goddard Consulting performed a site reconnaissance on April 28, 2025 and performed the delineation of resource area on June 18, 2025. In the western portion of the property, a Bordering Vegetated Wetland associated with an internal intermittent stream exists. In the southern portion of the property, an approximately 6,500SF Isolated Vegetated Wetland (IVW) exists. An Abbreviated Notice of Resource Area Delineation (ANRAD) application was filed by Goddard Consulting on behalf of MP Properties, LLC on January 25, 2026, to confirm the delineation of the wetland resource areas on-site. The ANRAD (DEP File # 002-1361) application was peer reviewed by Rhianna Sommers of Weston & Sampson. The Amesbury Conservation Commission voted to close the public hearing at the April 6, 2026, hearing and issue an Order of Resource Area Delineation (ORAD) on April 27, 2026.

Findings were attached with the ORAD approval. One of the findings within the ORAD reads “The Commission notes public concern about the IVW and its vernal pool status. Vernal pools are not regulated under 310 CMR but are locally regulated under the Amesbury Wetlands Ordinance.” This finding was included after a letter from an abutter was received by the Conservation Commission through public comment during the ANRAD process.

Goddard Consulting, LLC performed a four site walks to review the IVW for vernal pool characteristics under the Massachusetts Division of Fisheries and Wildlife Vernal Pool Certification protocol and Amesbury Wetland Bylaw on April 15th, 23rd, April 29th and May 6th 2026, to inspect the IVW feature located at 27 Kimball Road in Amesbury, Massachusetts (Map 73 Parcel 19). The wetland boundary is approved through the issuance of the ORAD (DEP File # 002-1361). The IVW is not identified as potential or certified vernal pool based on mapping from the Natural Heritage and Endangered Species Program.

The IVW consists of a small, very shallow depressional area that seasonally retains standing water during the early spring months. Water depths are generally less than one foot and are associated with seasonal precipitation and snowmelt. The feature typically dries completely as the growing season progresses and does not exhibit a surface water into the later spring months. The IVW is partially located within an existing path. Underlying soils throughout the IVW consist primarily of loamy sand, which promotes rapid infiltration and limits the duration of standing water within the IVW. Due to the limited hydroperiod and well-drained soils, the wetland appears to function primarily as a very temporary seasonal drainage and ponding area. During the initial recon in April of 2025 and the wetland delineation in June of 2025 the IVW was completely dry and no vernal pool species were observed. Figure 1 below provides the approved ORAD plan depicting the location of the IVW on the property.

Given the finding included with the ORAD, 2026 surveys were conducted to assess the IVW and document any qualifying evidence of vernal pool habitat under the state and local regulations.



Photo 1. A view (facing north) of the IVW taken during the wetland delineation. No ponding can be seen within the IVW, consistent with 2026 findings (06/18/2025).

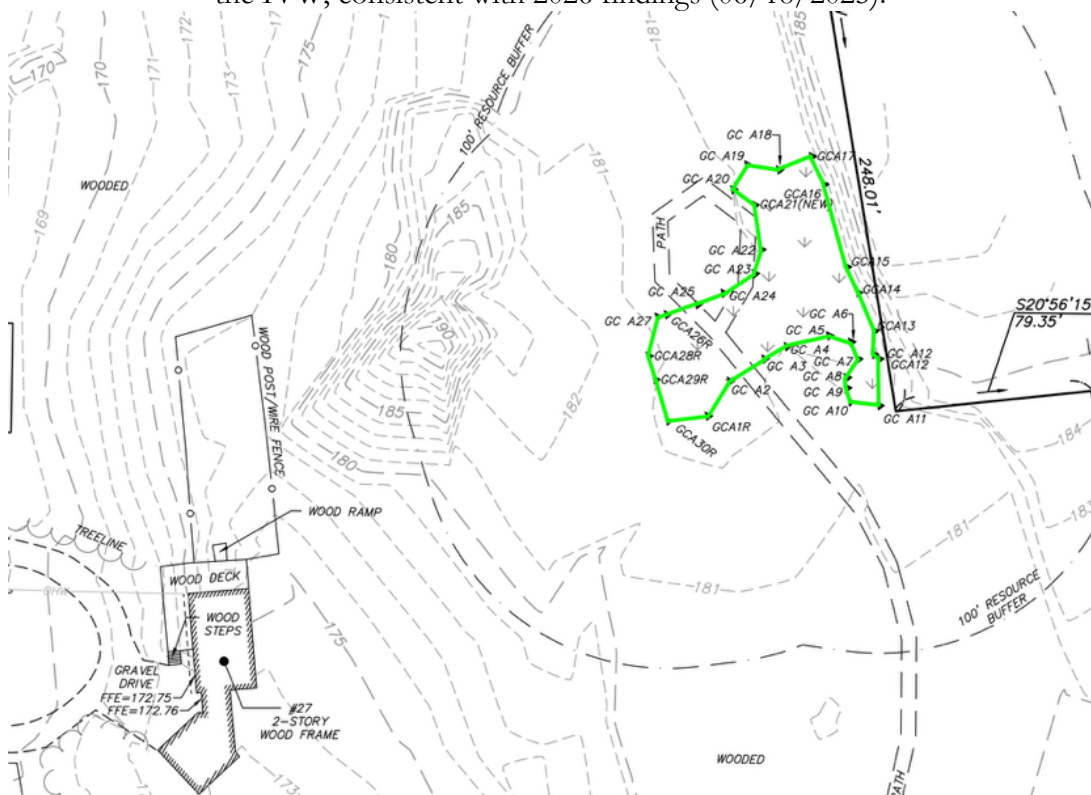


Figure 1. Approved ORAD plan.

2.0 VERNAL POOL CRITERIA

2.1 STATE VERNAL POOL CERTIFICATION CRITERIA

In Massachusetts, vernal pools are certified through the Massachusetts Division of Fisheries and Wildlife Vernal Pool Certification Program and administered by the Natural Heritage & Endangered Species Program. The certification of a vernal pool is based on documentation of biological and physical criteria within a wetland. Based on the 2009 guidelines, there are two certification methods, including: a) the obligate species method and b) the facultative amphibian species method. Each certification methods includes both biological and physical criteria.

For biological criteria, the obligate species method requires breeding evidence of an obligate amphibian species or the presence of Fairy Shrimp (*Eubranchipus* sp.). The facultative amphibian species method requires breeding evidence of 2 or more facultative amphibian species.

For physical criteria, the obligate species method requires evidence of a pool with no permanently flowing outlet, or essentially, a photo of the pool holding water during the spring months. The facultative amphibian species method requires the previously mentioned documentation, and evidence that there is no established, reproducing fish population. This evidence may be provided as a photo of the pool dry following the vernal pool season. More details

BIOLOGICAL CRITERIA		PHYSICAL CRITERIA	
Obligate Species Accepted - one or more of the following	Breeding Evidence Accepted - one or more of the following from at least one obligate species must be documented by photos, video, or audio (chorusing)	Physical Features Accepted	Physical Evidence Accepted
Wood frog (<i>Lithobates sylvaticus</i>) Spotted salamander (<i>Ambystoma maculatum</i>) Blue-spotted salamander * (<i>A. laterale</i>) Jefferson salamander * (<i>A. jeffersonianum</i>) Marbled salamander * (<i>A. opacum</i>)	Adult wood frogs - - Full chorus (calls constant, continuous, & overlapping) - map location of chorus (pool) and site where recording was taken; <u>OR</u> 5+ mated pairs <u>OR</u> Adult salamanders - - Congressing <u>OR</u> - Spermatophores <u>OR</u> - Marbled salamander attending a nest <u>OR</u> Egg masses - - TOTAL of 5 egg masses - any combination, regardless of species <u>OR</u> 1 egg mass of a MESA-listed salamander or nest and eggs of marbled salamander <u>OR</u> Larvae - - Any number of larvae <u>OR</u> Transforming juveniles - - Still in pool with tail and/or gill remnants.	Pool with no permanently flowing outlet.	Good quality photos or video of the entire pool holding water including any inlets or outlets (e.g., any streams, culverts, etc). <i>See 'Tips for Photographing Evidence Required for Vernal Pool Certification'.</i>
Fairy shrimp (<i>Anostraca: Eubranchipus</i>)	Photo or video of adult specimen(s).	Same as above.	Same as above.

on the criteria and procedures for certification are outlined in the *Guidelines for the Certification of Vernal Pool Habitat* (Massachusetts Division of Fisheries and Wildlife, March 2009) (Reference Figure 2).

BIOLOGICAL CRITERIA		PHYSICAL CRITERIA	
Facultative Species Accepted - two or more of the following	Breeding Evidence Accepted - one or more of the following from at least two facultative species must be documented by photos, video, or audio (chorusing)	Physical Features Accepted	Physical Evidence Accepted
Spring peeper (<i>Pseudacris crucifer</i>) Gray treefrog (<i>Hyla versicolor</i>) American toad (<i>Anaxyrus americanus</i>) Fowler's toad (<i>Anaxyrus fowleri</i>)	Adults – - Full chorus (calls constant, continuous, & overlapping) - map location of chorus (pool) and site where recording was taken; <u>OR</u> 5+ mated pairs <u>OR</u> Egg masses – - Any number of egg masses <u>OR</u> Larvae – - Any number of larvae <u>OR</u> Transforming juveniles – - Still in pool with tail remnants.	Pool with no permanently flowing outlet. <u>AND</u> Evidence that there is no established, reproducing fish population.	Good quality photos or video of the entire pool holding water including any inlets or outlets (e.g., any streams, culverts, etc.). <u>AND</u> Good quality photos or video of the entire pool dry. <i>See 'Tips for Photographing Evidence Required for Vernal Pool Certification'.</i>

Figure 2. Breakdown of two certification methods: a) the obligate species method and b) the facultative amphibian species method (Source: *Guidelines for the Certification of Vernal Pool Habitat*, Massachusetts Division of Fisheries and Wildlife, 2009).

2.2 CITY OF AMESBURY WETLAND BYLAW VERNAL POOL CRITERIA

The Amesbury Wetland Bylaw regulates vernal pools as bylaw jurisdictional resource areas if they exemplify additional characteristics.

The Amesbury Wetland Regulations Part II Section 18.1 (c) define a vernal pool as “Same as 310 CMR 10.57 (2) with the following addition: The term “vernal pool” shall include any confined basin or depression not occurring in existing lawns, gardens, landscaped areas, or driveways which, at least in most years, holds water for a minimum of two continuous months during the spring and/or summer, contains at least 200 cubic feet of water at some time during most years, is free of adult predatory.”

3.0 METHODOLOGY

The initial survey was performed on April 15, 2026. A visual search was conducted within the IVW for evidence of breeding by common obligate indicator species such as spotted salamanders, wood frogs, and fairy shrimp. The survey was performed on a partly cloudy day under suitable conditions for observing aquatic habitats and biological activity.

The survey included a thorough inspection of the entire IVW, with particular focus on shallow pool margins, submerged vegetation, and woody debris where amphibians typically deposit their egg masses. Polarized sunglasses were used to reduce surface glare and improve visibility into the water column. Dip nets were also used to sample deeper areas of the pool and locations with reduced visibility, including the deeper central portion of the depression. The pool was traversed using a meandering approach to ensure adequate coverage of available microhabitats and to increase the likelihood of detecting any biological indicators.

Three additional surveys were conducted on April 23, 29 and May 6, 2026, to account for potential variability in breeding phenology and detectability of vernal pool species. The additional visits were also intended to assess existing hydrologic conditions within the Isolated Vegetated Wetland (IVW), including the extent and duration of observed surface water ponding in relation to the city of Amesbury's more encompassing definition of a vernal pool under the regulations.

4.0 FINDINGS

As stated above, The IVW consists of a small, very shallow depressional area that seasonally retains standing water during the early spring months. Water depths are generally less than one foot and are associated with seasonal precipitation and snowmelt. The feature typically dries completely as the growing season progresses and does not exhibit a surface water into the later spring months. The IVW is partially located within an existing path. Underlying soils throughout the IVW consist primarily of loamy sand, which promotes rapid infiltration and limits the duration of standing water within the feature.

Four site visits were conducted to monitor hydrologic conditions within the IVW and document the extent and duration of surface water ponding. During the initial site visit, standing water was observed throughout much of the IVW at depths ranging from approximately 0.5 to 1.0 feet (reference Photos 2-3). By the second site visit, the majority of the IVW had dried, with only isolated pockets of standing water remaining. One primary depression continued to exhibit ponding, with a maximum observed water depth of approximately 6 inches (reference Photos 4-5).

Conditions observed during the third site visit indicated continued drying within the IVW. No isolated puddling was present outside of the primary depression, which had further reduced in size and exhibited a maximum water depth of approximately 3 inches (reference Photos 6-8). During the fourth and final site visit, the IVW was observed to be completely dry with no standing water present (reference Photos 9-11). The IVW only held water for less than one month during active breeding season. This **does not** meet the criteria required to be considered a vernal pool under the Amesbury Wetland Bylaw and Regulations Part II Section 18.1 (c).

No evidence of obligate amphibian breeding was observed during the survey period (four site visits). One American Toad (not an obligate vernal pool species) (*Anaxyrus americanus*) egg mass was found within the IVW during the April 23 site visit. No wood frog or spotted salamander egg masses, tadpoles or larva was documented, and no adult amphibians, including wood frogs, spring peepers, or other species, were observed during any site visit. Aquatic invertebrate observations were dominated by mosquito larvae. No fairy shrimp were observed during any site visit. No fish, or evidence of an established, reproducing fish population, were observed within the pool. The lack of breeding evidence of obligate vernal pool species **does not** meet the Massachusetts Division of Fisheries and Wildlife Vernal Pool Certification requirement, nor the definition of a vernal pool under the Amesbury Wetland Bylaw and Regulations Part II Section 18.1 (c).

5.0 SITE PHOTOS



Photo 2. A view (facing east) of the IVW. Shallow ponding can be seen (04/15/2026).



Photo 3. A view (facing south) of the main depression in the IVW (04/15/2026).



Photo 4. A view (facing east) of the IVW. The IVW has completely dried in this location. 04/23/2026).



Photo 5. A view (facing south) of the main depression in the IVW. The drying of this area has begun (04/23/2026).



Photo 6. A view (facing south) of the main depression in the IVW. The area has almost dried (04/29/2026).



Photo 7. A view (facing northeast) of the main depression in the IVW. The area has almost dried. Additionally, the remainder of the IVW is completely dry (04/29/2026).



Photo 8. A view (facing north) of the IVW. This portion of the IVW is completely dry (04/29/2026).



Photo 9. A view (facing north) of the IVW. The main depression in the IVW is completely dry (05/06/2026).



Photo 10. A view (facing northeast) of the main depression in the IVW. The IVW has completely dried. (05/06/2026).



Photo 11. A view (facing southwest) of the IVW. The IVW has completely dried. (05/06/2026).

6.0 CONCLUSION

The lack of sufficient biological indicators shows that the IVW does not meet state or local certification criteria. The IVW only holding water for less than one month does not meet the City's criteria for a vernal pool. Only a single American Toad egg mass was observed, with no additional obligate or facultative species documented during the site visits. Based on the 2026 survey results, the IVW does not meet the criteria for vernal pool certification under either the state and city bylaw and should not be considered a vernal pool.

Please do not hesitate to contact our office if you have any questions or concerns.

Sincerely,

Goddard Consulting, LLC



Tom Schutz, WPIT
Lead Wetland Scientist