

Biodiversity Studies • Wetland Delineation & Assessment • Habitat Management • GIS Mapping • Permitting • Forestry

August 31, 2020

Mr. Matt Johnson 11 Fife Court Ivoryton, CT

RE:

11 Fife Court

Dear Mr. Johnson:

I am writing to report the results of recent investigations I conducted at your property. I visited the site on August 12, 2020. I have also reviewed the following documents, reports, and plans:

- June 8, 2020 letter from Mr. Bob Doane, Town Engineer
- July 8, 2020 letter from Mr. George Logan, REMA Ecological Services
- May 21, 2020 Verified Petition to Intervene from Keith Ainsworth on behalf of Michael Whalen
- Landscape Plan prepared by Mr. David Verespey, RLA, Rock Spring Design.

EXISTING CONDITIONS

The subject property is a 1.61-acre residential property located at the end of Fife Court in the Ivoryton section of Essex. A common driveway (shared with 10 Fife Court), runs northeasterly from the cul-de-sac at the end of Fife Court. A south draining intermittent watercourse is carried under the common portion of the driveway in a corrugated plastic pipe. The portion of the driveway serving your home slopes down to the south-southeast, more or less runs parallel to the intermittent watercourse. The intermittent watercourse runs in a rocky channel and is flanked by a narrow strip of wetland soils for a short distance at/near the downstream (southern) property line. I marked the centerline of the watercourse and the wetland limits in the field, as detailed in the attached report. These limits are substantially the same as that which is shown on the original subdivision map for the property.

The rocky intermittent watercourse (and small portion of wooded wetland) at the site functions primarily to convey drainage across the property from north to south. It also provides a minor groundwater discharge function. It does not provide significant aquatic or wetland habitat, water quality renovation, flood storage, flood desynchronization, recreation, education, aesthetic, or uniqueness/heritage functions or values. Currently, the wetland and upland review area support predominantly native wetland and facultative species. These include mature and sapling Black Cherry, Tulip Tree, Red Oak, White Oak, Sugar Maple, American Beech, hickory, Spicebush, Arrowwood Viburnum, Staghorn Sumac, brambles, Ostrich Fern, Wood Fern, Christmas Fern, Trillium, Pennsylvania Sedge, Jack-in-the Pulpit, Narrow-leaf

- The trees that were removed do not need to be replaced, other than by natural processes.
- There has been no adverse effect on the "forested wetland ecosystem", nor is an unreasonable adverse impact reasonably likely to occur.
- The felled trees do not have a significant effect on the temperature of the water in the intermittent watercourse, which is highly variable under normal conditions.
- Neither the riparian zone nor the forested wetland habitat was destroyed.
- The alternative wood removal methods proposed would have more effect on the slope than the method you plan to use.
- There is no threat of erosion from either the construction of the garage on the existing foundation, or the installation of shed, within the upland review area.

Plans by Rock Spring Design

After reviewing the site conditions and the conceptual plans prepared on your behalf by Rock Creek Design, I made the following initial recommendations:

- 1. The trees overhanging the watercourse should be removed so that as they do not eventually impede flows in the intermittent watercourse.
- 2. The balance of the downed trees can remain in place to serve as an energy source for the detritus food chain, or removed, at your discretion.
- 3. Any trees that are removed should be cut into pieces that can be removed without the need for mechanized equipment.
- 4. The eroded areas on the driveway noted above should be repaired and the flows should be directed to a stable outlet.

Although not directly associated with the work anticipated under this application, I would also recommend that the band of Japanese Knotweed at the edge of the driveway closest to the intermittent watercourse be removed. Due to the characteristics of this invasive, non-native species, this would be most effectively accomplished with a combination of cutting and herbicide. A foliar, aquatic-approved glyphosate formulation applied this September will result reduced re-growth next year. In 2021, I would recommend a late spring/early summer cutting, followed by a late summer glyphosate treatment. The cuttings should be bagged for proper disposal and should not be composted.

I then reviewed the PROPOSED LANDSCAPE PLAN AND DETAILS that Rock Spring Design prepared. They include detailed specifications for knotweed removal, installation of long term erosion and stormwater control measures, and the installation of 113 native shrubs to replace the knotweed and provide habitat as the existing understory vegetation matures.

In summary, it is my professional opinion that the application you submitted responds appropriately to the Cease and Desist Order and the recommendations of the Town's

engineering consultant. While the recent tree-felling may have required approval by the Inland Wetlands Commission or town staff, there is no evidence that it has caused an adverse impact on the wetland or intermittent watercourse. I made several recommendations that have been incorporated in the plans. The proposed work will further improve site conditions, by eliminating an existing source of erosion (due to uncontrolled runoff from the abutting property) and a Japanese Knotweed infestation. The work shown on the plans will not have an adverse impact on wetlands or watercourses.

Yours truly,

Michael S. Klein, Principal Professional Soil Scientist

Professional Wetland Scientist

Plantain, Broadleaf Plantain, Poison Ivy, New England Aster, Common Mullein, Fox Grape, Virginia Creeper, and Greenbriar.

The property contains your home, driveway, a small shed, and the foundation for an approved garage. A small portion of the foundation and shed are within the 100 foot upland review area. Several mature trees were recently felled within the upland review area, and in response the Town issues a cease and desist order. The trees have therefore been left in place, as have the stumps, roots, and understory vegetation. The upland review area (URA) on either side of the intermittent watercourse and wetland is wooded and slopes down toward the regulated resource. During my inspection I did not see any evidence of erosion in the regulated resources or the upland review area associated with the tree-cutting. However, there is some evidence of erosion of your driveway from runoff that stormwater that runs onto your property from the driveway and property to the north.

DOCUMENT/PLAN REVIEW

June 8, 2020 letter from Robert Doane to Joseph Budrow I concur with Mr. Doane's findings and recommendations.

July 8, 2020 letter from George Logan to the Inland Wetlands Commission

I disagree with many of Mr. Logan's conclusions and recommendations. Most importantly, there is no evidence of any adverse impacts on the intermittent watercourse or the wetland from the tree removal, nor has Mr. Logan presented any evidence of same. The "stream" is in fact an intermittent watercourse, which by definition is highly variable in terms of water quality, especially temperature. Intermittent watercourses are also not habitat for temperature-sensitive species like brook trout. Any changes in the temperature regime will be short term as the understory fills in, and will not have an adverse impact on the regulated resource.

We would also note that there is no evidence of erosion in the area affected by the tree felling, that the area was not grubbed, and that the area is well vegetated and stable. For the same reasons, there is no need for a long-term monitoring program. The restoration/planting plan included with the application is sufficient to direct the work, and the typical town oversight of a wetland permit will be sufficient to identify any necessary remedial measures.

May 21, 2020 Verified Petition to Intervene from Keith Ainsworth on behalf of Michael Whalen

The petition is factually incorrect and highly speculative.

- No trees were cut in the wetland or intermittent watercourse.
- There is no evidence of erosion at the site from the tree-felling, the installation of the garage foundation, or the installation of the shed.