

February 5, 2022

To: Burlington Conservation Board via Zoe Richards, Chair.

From: Kate Kruesi
77 Oakcrest Drive
Burlington VT 05408

Concern: beach grading along the Appletree Bay shoreline, Burlington, VT.

The beach owners along Burlington's Appletree Bay shoreline should check with the DEC Chittenden County District Wetland Ecologist, Tina Heath, for wetland jurisdiction before doing any beach grading or ditching. It appears most, if not all, is protected Class II wetland. The New North End's sand and silt delta soils absorb annual precipitation which seeps year-round through the soils and this beach zone into the lake. This wet Lake Sand Beach Natural Community is rare and several state-level rare plants, one of which is globally rare (G1, Critically Imperiled), are found the length of this beach: *Eleocharis diandra* (G1, S1), *Schoenoplectiella smithii*, *Eragrostis hypnoides*, *Eleocharis intermedia*, *Cyperus squarrosus* and *Cyperus erythrorhizos*, among others. All are obligate wetland species. [FYI, I live in the Lakewood neighborhood and am a Plant Conservation Volunteer. I do rare plant surveys for the state and Native Plant Trust, observing these populations annually as they respond to seasonally changing lake levels.]

After Marla Emery observed beach grading and ditching at Killarney Beach and the Elks Club Beach, Assistant State Botanist, Aaron Marcus contacted Tina Heath to check wetland status (see email conversation below). Ms. Heath visited the Killarney Beach area, August 19, 2021. I asked her to check Lakewood's beach as well to demonstrate that the conditions continue up the beach. (I've observed beach grading further north along this beach over the years.)

Conservation Board and Municipal actions to consider:

1. I believe the only access for heavy equipment to do work on sea walls and beach grading is through Leddy Park. If this is true, these businesses likely require a permit from BPRW to access the beach, correct? This permit should require that the wetland status of the beach property be determined before heavy equipment work.
2. The city should ask Tina Heath to assess wetland jurisdiction at Leddy Beach, to classify Class II wetlands further north along the bay. (Note that beach raking is allowed in the attached documents.)
3. There are rumors of the Elks Club Beach changing ownership. New owners need to be reminded of the Class II wetland classification as well as the legally protected plant species here: *Equisetum palustre* and *Lathyrus maritimus*, (both coded T-threatened), should shoreline protection or other changes come before the board.

Thanks for your attention and all the volunteer work that you do!

See references and list of attachments on next page.

Attachments:

2021-370 Wetland Classification Report.pdf
2021-370_KDIBeach_Wetlands.pdf

Email, 4/29/2021, from Tina Heath, VT's District Wetland Ecologist:

Heath, Tina <Tina.Heath@vermont.gov>

to sarajbarsotti@gmail.com, me, marla.r.emery@gmail.com, Aaron

Good morning,

I was contacted by Aaron Marcus to look into the beach grading proposal and whether wetland jurisdiction may be triggered. Based on Aaron's description, although temporal, the beach area (when exposed) is likely wetland. This means that the area has a predominance of wetland vegetation (which includes RTE species), hydric soils, and hydrology to "qualify" it as a wetland. It is likely jurisdictional as well ("Class II") and would have a 50-foot protected buffer zone.

If these wet areas have been regularly maintained by hand or use of rakes, then that is fine to continue to do. However, if a more substantial alteration is proposed such as mechanical grading, then this would require wetland permitting. It would likely be difficult to approve, as we'd be looking for alternatives that have a more minimal effect (such as raking) on the wetland and its plant communities.

Please let me know if you have any questions, I could also come out to the site to have a closer look.

*Best,
Tina*

Due to the coronavirus (COVID-19), the Agency of Natural Resources is taking additional safety measures to protect our employees, partners and customers. We anticipate we will be working remotely until a least March 31, 2021 and encourage you to communicate electronically or via phone to the greatest extent possible. Thank you for your patience and understanding that responses may occasionally be delayed.

Tina Heath | District Wetland Ecologist – Chittenden County
Vermont Department of Environmental Conservation
Watershed Management Division
Wetlands Program
111 West Street
Essex Junction, Vermont 05452
802-490-6202
<https://dec.vermont.gov/watershed/wetlands>

September 7, 2021

Sent Via Email

re: Killarney Drive Beach, Wetland Project 2021-370

Dear Killarney Drive Inc./ Homeowner's Association, c/o Marla Emery:

Thank you for meeting with me on August 19, 2021, to review the subject property/beach for wetlands and to discuss a complaint regarding machine grading and alteration.

Please be advised there is a Class II wetland on the property with SPAN ID 114-035-13304, located just south of 277 Killarney Drive, Burlington. Attached to this letter is a Wetland Classification Report for your records.

The subject wetland is not mapped on the Vermont Significant Wetland Inventory maps, but meet the presumptions listed in Section 4.6 of the Vermont Wetland Rules. Any activity that is not an allowed use designated in Section 6 of the VWR will require a State Wetland Permit. In addition, the U.S. Army Corps of Engineers (Corps) regulates discharge of dredge and fill material and mechanized land clearing in wetlands. For detailed information on Corps permits and regulations call (802)872-2893. In addition, your town may have local regulations regarding wetland protection.

Back in April 2021 the Wetlands Program received a complaint regarding the use of a machine to grade and alter the beach. These types of activities require a state wetland permit if within a Class II wetland or its 50-foot buffer zone. Based on the August 19, 2021 site visit, it appears this work was done within the wetland.

In order to be issued a permit the applicant needs to demonstrate that wetland impacts are unavoidable and have been minimized and mitigated such that there are no undue adverse impacts to the wetland or its functions and values. In this situation, the use of a machine to grade and alter the wetland can cause undue adverse harm to the wetland and permitting is unlikely.

Less impactful maintenance activities such as hand raking can be done, so long the wetland's vegetation and hydrology remains intact.

If you have any questions or concerns, please contact me at 802-490-6202.

Sincerely,



Tina Heath
District Wetland Ecologist

#2021-370 Wetland Classification Report

Tuesday, September 7, 2021 8:35 AM

[Please add this document to your land records for reference](#)

Wetland is Class II: Please be advised that I have confirmed that one or more wetlands on your property has characteristics that make it a Class II significant wetland. Class II significant wetlands and their 50 ft buffers are protected under the Vermont Wetland Rules (VWR). This report outlines the reasons for this decision, and serves as notice that any activity in the wetland or 50ft buffer zone may need a Vermont wetland permit before you start work. If you disagree with this decision you can petition for a formal wetland classification determination of Class III as outlined under the petition section of this report. The following table(s) document the reasons for this decision.

Wetland Name:	1
Wetland Location:	South of 277 Killarney Drive, Burlington. Beachfront on Lake Champlain.
Desktop Review Only?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Site Visit Date:	8/19/2021
People Present:	Tina Heath; Marla Emery; Kate Kruesj; Danielle Campbell; Leah Israel
Wetland is Mapped:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Wetland is contiguous to mapped wetland:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Wetland was found to meet the following presumption(s) of significance:	<input type="checkbox"/> Presumptions have not been assessed. Wetland meets classification by other means. <input checked="" type="checkbox"/> §4.6(a) over half an acre in size; <input type="checkbox"/> §4.6(b) contains woody vegetation and is adjacent to a stream, river, or open body of water; <input type="checkbox"/> §4.6(c) contains dense, persistent non-woody vegetation and is adjacent to a stream, river, or open body of water; <input type="checkbox"/> §4.6(d) is a vernal pool that provides amphibian breeding habitat; <input type="checkbox"/> §4.6(e) is a headwater wetland; <input type="checkbox"/> §4.6(f) adjacent to impaired waters and the impairment is related to wetland water quality functions; <input type="checkbox"/> §4.6(g) the wetland contains a species that appears in the NNHP database as rare, threatened, endangered or uncommon; or is a natural community type that is rare or uncommon; <input type="checkbox"/> §4.6(h) has been previously designated as a significant wetland.
Presumption Description:	Temporal wetland dependent upon water levels of Lake Champlain. Wetland appears to continue off property for quite a ways north and south along Apple Tree Bay. Several rare and uncommon species are mapped in and within 50-feet of the wetland.

Sketch Map of general wetland area (not a delineation):

[Mapped wetland in teal, hydric soils in orange, advisory wetlands in green, wetland sketch in light blue, area reviewed in yellow]



Photo:

Preliminary Classification:

- Class II
- Class III

Class III justification:

Wetlands Determination Petition Process

If you disagree with this report, you may request a formal determination of wetland classification, pursuant to Section 8 of the VWR. To request a §8 formal determination of wetland classification, please fill out and submit the petition form located on the Vermont Wetlands Program’s website “Permit Information” page. Formal determinations are appealable pursuant to 10 V.S.A. § 917.

Pursuant to 10 V.S.A. chapter 220, any appeal of a formal wetland determination decision must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Division; and must be signed by the appellant or their attorney.

In addition, the appeal must give the address or location and description of the property, project, or facility with which the appeal is concerned; the name of the permittee; and any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court



More Information is Available on the Wetlands Program Website

For more on state wetland permitting and how to apply for a permit visit the [Wetlands Permit Information Page](http://dec.vermont.gov/watershed/wetlands/jurisdictional/permit-info), at <http://dec.vermont.gov/watershed/wetlands/jurisdictional/permit-info>

For more on wetland classifications visit the [Jurisdictional Wetland Page](http://dec.vermont.gov/watershed/wetlands/jurisdictional) at <http://dec.vermont.gov/watershed/wetlands/jurisdictional>

For more about Allowed Uses visit the [Allowed Uses Page](http://dec.vermont.gov/watershed/wetlands/bmps) at <http://dec.vermont.gov/watershed/wetlands/bmps>

For more on wetland classification petitions and forms visit the [Wetlands Permit Information Page](http://dec.vermont.gov/watershed/wetlands/jurisdictional/permit-info), at <http://dec.vermont.gov/watershed/wetlands/jurisdictional/permit-info>

To find a wetland consultant to help with applying for a permit or petitioning see our [Wetland Consultant List Page](http://dec.vermont.gov/watershed/wetlands/what/id/wetland-consultant-list) at <http://dec.vermont.gov/watershed/wetlands/what/id/wetland-consultant-list>

Other Wetland Permit Obligations

In addition, the U.S. Army Corps of Engineers ([Corps](#)) regulates the discharge of dredged and/or fill material, including mechanized land clearing and grading, in all waters of the United States, including inland rivers, lakes, streams and wetlands. For detailed information on Corps permits and regulations call (802) 872-2893. It is the applicants responsibility to determine if your project also requires an Corps permit. In addition, your town may have local regulations regarding wetland protection. Please call your town clerk to verify any local regulations.

[Please add this document to your land records for reference](#)