



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WESTERN REGIONAL OFFICE
436 DWIGHT STREET, SPRINGFIELD, MA 01103 413-784-1100

MAURA T. HEALEY
Governor

REBECCA L. TEPPER
Secretary

KIMBERLEY DRISCOLL
Lieutenant Governor

GARY MORAN
Commissioner

DATE: March 24, 2023

Municipality SOUTH HADLEY
(city/town)

RE: NOTIFICATION OF WETLANDS PROTECTION ACT FILE NUMBER

The Department of Environmental Protection has received a Notice of Intent filed in accordance with the Wetlands Protection Act (M.G.L. c. 131, §40):

Applicant:	HILLCREST PARK CONDOMINIUM	Owner:	HILLCREST PARK CONDOMINIUM TRUST
Address:	35E HILLCREST PARK SOUTH HADLEY, MA 01075	Address:	35E HILLCREST PARK SOUTH HADLEY, MA, 01075

LOCUS: HILLCREST CONDOMINIUMS POND (20 LAWRENCE AVE)

This project has been assigned the following file # : WE 288-0483

A FILE NUMBER ONLY INDICATES THAT THE APPLICATION CONTAINS THE MINIMAL SUBMITTAL REQUIREMENTS AND IS ADMINISTRATIVELY COMPLETE - NOT THAT THE INFORMATION IN THE APPLICATION IS ADEQUATE FOR ISSUANCE OF AN ORDER OF CONDITIONS.

Although a file # is being issued, please note the following:

[1] This project has been submitted as an Ecological Restoration Limited Project. The commission needs to review 310 CMR 10.11, 310 CMR 10.12 and 310 CMR 10.53(4)(e)5. as well as the included Appendix A. An Ecological Restoration Limited Project means a project whose primary purpose is to restore or otherwise improve the natural capacity of a Resource Area(s) to protect and sustain the interests identified in M.G.L. c. 131, § 40, when such interests have been degraded or destroyed by anthropogenic influences. The NOI fails to state what those anthropogenic influences are or were. Failure to do so means the work does not qualify as an ER Limited Project and full compliance with the performance standards is required and specifically a wildlife habitat evaluation will be required.

[2] Nuisance vegetation removal has been an ongoing process here for many years. The Commission should note that the application of herbicides is typically only a short term management solution. Herbicide treatment should only be approved as part of a comprehensive lake management plan that includes not only short term but also long term management methods. A Lake Management Plan should include water quality data, information on the history and sources of water quality degradation and other information to identify existing pollution inputs to the water body. It is essential to review past and current watershed management practices, assess the effect of these practices on water quality, and evaluate alternative watershed management practices to improve water quality through source

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD# 1-866-539-7622 or 1-617-574-6868.

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HILLCREST PARK CONDOMINIUM TRUST
35E HILLCREST PARK
SOUTH HADLEY, MA 01075

control. What data is available to show that previous management activities have in fact controlled non-native species, nuisance species, improved fish habitat, improved water quality, and slowed down pond eutrophication, as is the purpose of this and previous NOIs? The commission may certainly require transect data be submitted to them detailing before and after vegetative conditions.

[3] Have previous Orders for this property received Certificates of Compliance? See 288-0334, 288-0434 and 288-0441.

[4] The NOI should clearly describe what it means to “scale them back to a more desirable density/cover”.

[5] No bathymetric information on the pond was included in the NOI. The following may not specifically reference Massachusetts lakes and ponds, but be aware that per the GEIR, Shireman et al. (1982) caution that the following lake characteristics can produce undesirable water quality changes after treatment with herbicides for weed control, especially when they occur in combination:

- * High water temperature
- * High plant biomass to be controlled
- * Shallow, nutrient-rich water

[6] The document entitled Guidance for Aquatic Plant Management in Lakes and Ponds as it relates to the Wetlands Protection Act was released in 2004 that provides extensive guidance to a conservation commission regarding projects of this nature. The Commission should review Section IV of that document where it discusses the information required for all projects. The Commission should determine whether or not the submitted information is adequate as per the guidance document and the regulations. The Commission should review the possible special conditions that can be included in the Order of Conditions. Please review Appendix A of that document. The Commission should also review Section VI, Information for Herbicide/Algicide projects.

If you have any questions regarding this letter, please contact: MARK STINSON @ (413)-961-9583

Cc: South Hadley Conservation Commission, TOWN HALL, 116 MAIN STREET, South Hadley, MA, 01075
Owner: HILLCREST PARK CONDOMINIUM TRUST, 35E HILLCREST PARK, SOUTH HADLEY, MA, 01075
Representative: WATER & WETLAND, LLC, 115 SOUTH STREET, UPTON, MA, 01568



April 11, 2023

South Hadley Conservation Commission
Attention: Rebekah Cornell
116 Main Street
South Hadley, MA 01075

RE: Response to MA-DEP Comments – MA DEP File #: 288-0483

Dear Ms. Cornell and Conservation Commission Members:

The below information addresses the comments issued by MA-DEP when issuing the file number 288-0483 (Hillcrest Park Condominiums Pond Aquatic Management Program Implementation).

- 1) This project has been submitted as an Ecological Restoration Limited Project. The commission needs to review 310 CMR 10.11, 310 CMR 10.12 and 310 CMR 10.53(4)(e)5. as well as the included Appendix A. An Ecological Restoration Limited Project means a project whose primary purpose is to restore or otherwise improve the natural capacity of a Resource Area(s) to protect and sustain the interests identified in M.G.L. c. 131, § 40, when such interests have been degraded or destroyed by anthropogenic influences. The NOI fails to state what those anthropogenic influences are or were. Failure to do so means the work does not qualify as an ER Limited Project and full compliance with the performance standards is required and specifically a wildlife habitat evaluation will be required.

Response: The Hillcrest Park Condo Pond Aquatic Management program detailed in the Notice of Intent narrative has been filed as an Ecological Restoration Project in accordance with 310 CMR 10.53(4). Per 310 CMR 10.04, "Ecological Restoration Limited Project means an Ecological Restoration Project that meets the eligibility criteria set forth in 310 CMR 10.24(8) or 10.53(4)." 310 CMR 10.53 (4) (e) (5) states that, "An Ecological Restoration Project that is not listed in 310 CMR 10.54(4)(e)2. through 4., that will improve the natural capacity of a Resource Area(s) to protect the interests identified in M.G.L. c. 131, § 40, may be permitted as an Ecological Restoration Limited Project provided that the project meets the eligibility criteria set forth in 310 CMR 10.54(4)(a) though (d). Such projects include, but are not limited to, the restoration, enhancement or management of Rare Species habitat, the restoration of hydrologic and habitat connectivity, the removal of aquatic nuisance vegetation to retard pond and lake eutrophication, the thinning or planting of vegetation to improve habitat value, riparian corridor re-naturalization, river floodplain reconnection, in-stream habitat enhancement, fill removal and regrading, flow restoration, and the installation of fish passage structures."

As stated within the project narrative, the purpose of the management program is to remove aquatic nuisance vegetation to retard pond and lake eutrophication and the thinning of vegetation to improve habitat value. Hillcrest Park Condo Pond contains extremely dense vegetation during the summer months. In addition, the pond contains non-native water chestnut. Luckily, due to fairly low densities, our plan is to hand-pull the water chestnut if possible. Selective treatments will allow for control of the dense nuisance species.

- 2) Nuisance vegetation removal has been an ongoing process here for many years. The Commission should note that the application of herbicides is typically only a short-term management solution. Herbicide treatment should only be approved as part of a comprehensive lake management plan that includes not only short term but also long-term management methods. A Lake Management Plan should include water quality data, information on the history and sources of water quality degradation and other information to identify existing pollution inputs to the water body. It is essential to review past and current watershed management practices, assess the effect of these practices on water quality, and evaluate alternative watershed management practices to improve water quality through source control. What data is available to show that previous management activities have in fact controlled non-native species, nuisance species, improved fish habitat, improved water quality, and slowed down pond eutrophication, as is the purpose of this and previous NOIs? The commission may certainly require transect data be submitted to them detailing before and after vegetative conditions.

Response: The project narrative submitted to the Commission details the management approach. While herbicides and algaecides are a part of the program, a full alternatives analysis has been completed and various techniques are part of the proposed approach. The integrated management program proposed, and detailed within the project narrative includes the continued use of a submersed aeration system which helps breakdown nutrient rich organic material, improve valuable dissolved oxygen, etc. In addition, water chestnut is proposed to be removed by manual hand-pulling unless it's growth and density exceeds the thresholds detailed within the NOI project narrative. Several paragraphs are also included within the project narrative which detail the use of best management practices. Water & Wetland, LLC provides "field notes summaries" to our clients following each visit. Many times, in these field notes, we include educational elements towards landscaping best practices, beneficial buffers, etc. The goal is not to eliminate a natural shoreline buffer, but to maintain a valuable shoreline buffer. The entire program is based on regular monitoring throughout the growing season by a qualified aquatic biologist. Water quality data including temperature, dissolved oxygen, and Secchi disk clarity is collected during each visit. This information will continue to be included within the year-end reports sent to the Commission. The Commission received our 2022 year-end report towards the end of the year. This report included photos, water quality, and a detailed narrative of site conditions during each monitoring visit. If not for previous management efforts, the invasive and nuisance species at Hillcrest Park Condo

Pond would not be at a “maintenance level,” which allows for tasks such as hand-pulling of water chestnut and only selective, area specific maintenance of other nuisance species.

- 3) Have previous Orders for this property received Certificates of Compliance? See 288-0334, 288-0434 and 288-0441.

Response: Submitted with our Notice of Intent was a request for COC for DEP File #288-0434.

- 4) The NOI should clearly describe what it means to “scale them back to a more desirable density/cover”.

Response: As stated within our Notice of Intent project narrative, “Ponds and Lakes are by no means swimming pools and vegetation is key to a healthy eco-system. We typically only recommend management of vegetation when it is either non-native invasive, or native vegetation that has reached levels/densities that are unhealthy to the eco-system (otherwise referred to as nuisance levels). There were areas within the Pond noted with excessive plant growth. The excessive plant cover can reduce fish density. Competitive, vegetative growth also reduces light for benthic organisms and native plants. As a result, dense monocultures can form and species richness within the pond is greatly reduced. The dense waterlily cover can limit oxygen exchange, leading to depleted dissolved oxygen.” Invasive species such as water chestnut and purple loosestrife will be removed/controlled in their entirety. Native targets and algae within the pond will only be controlled as warranted based on the regular monitoring visits. Our goal is to leave greater than 25% aquatic vegetation cover within the pond, while fully controlling non-indigenous species. Information specific to plant cover and observations during each regular monitoring visit will be included in the year-end summary report provided to the Commission. Algae will be managed as-needed throughout the season, especially given the potential for toxins. Treatment will only commence if algae growth (either surface, benthic, or microscopic) covers >15% of the Pond.

- 5) No bathymetric information on the pond was included in the NOI. The following may not specifically reference Massachusetts lakes and ponds, but be aware that per the GEIR, Shireman et al. (1982) caution that the following lake characteristics can produce undesirable water quality changes after treatment with herbicides for weed control, especially when they occur in combination: * High water temperature * High plant biomass to be controlled * Shallow, nutrient-rich water.

Response: A bathymetric map is not required with the filing; however, based on our previous monitoring efforts, the average depth of Hillcrest Park Condo Pond is approximately 4.5 feet, with an approximate maximum depth of 10-12 feet. As stated within the Notice of Intent narrative, our plan is to continue the use of the submersed aeration system to provide dissolved oxygen consistently throughout the entirety of the water column. Also included within the Notice of Intent narrative are precautions taken, especially when using contact

herbicides or algaecides. This includes treating only portions of the pond at one time to limit too much die-off at one time.

- 6) The document entitled Guidance for Aquatic Plant Management in Lakes and Ponds as it relates to the Wetlands Protection Act was released in 2004 that provides extensive guidance to a conservation commission regarding projects of this nature. The Commission should review Section IV of that document where it discusses the information required for all projects. The Commission should determine whether or not the submitted information is adequate as per the guidance document and the regulations. The Commission should review the possible special conditions that can be included in the Order of Conditions. Please review Appendix A of that document. The Commission should also review Section VI, Information for Herbicide/Algicide projects.

Response: We have closely reviewed the Guidance for Aquatic Plant Management in Lakes and Ponds as it relates to the Wetlands Protection Act, as we do with every project we work on. Section A. Control of Target Species requires a map, factors that contribute to propagation, development of a pre- and post-management monitoring program, and a description of any long-term management efforts. We have included a map of the vegetation species in Hillcrest Park Condo Pond. We have also discussed the propagation of the dense nuisance and invasive species in Hillcrest Park Condo Pond. The monitoring strategy proposed within our Notice of Intent goes well beyond simply just pre- and post-management and includes regular monitoring throughout the growing season including collection of basic water quality parameters during each monitoring visit. Finally, we have included several longer-term strategies including implementation of landscape best management practices, continued use of submersed aeration, and encouraging and maintaining a beneficial vegetative buffer. Section B focuses on the protection of resource areas. We do not anticipate impacts to resource areas outside of the Hillcrest Park Condo Pond. Section C focuses on a work description. Our extensive Notice of Intent narrative provides a detailed description of every element of our proposed integrated management approach. Section D focuses on rare species, of which there are none within Hillcrest Park Condo Pond. Sections E and F focus on fisheries and wildlife habitat. It is important to note that section 4(f) notes that “The Department presumes that nonindigenous aquatic plants within lakes ponds are not “significant to the protection of wildlife habitat”, either in whole or as a component of a larger plant community.³ As such, the control or elimination of non-indigenous aquatic hydrophytes within lakes or ponds will not exceed any threshold established at 310 CMR 10.56(4)(a) 4 or 310 CMR 10.60, providing that work is designed and carried out using the best practical measures (BMPs).” This includes non-indigenous water chestnut (*Trapa natans*), which is a target of our proposed management program. Continued use of pond aeration provides valuable dissolved oxygen for fish species. Finally, our Notice of Intent Narrative quotes the Commonwealth of Massachusetts Executive Office of Environmental Affairs Practical Guide to Lake Management (2004). Each technique and herbicide/algaecide proposed includes a detailed summary as well as the impacts specific to the Wetlands Protection Act including

protection of fisheries and protection of wildlife habitat. Many of which hold a possible benefit of habitat enhancement.

We hope that the responses detailed above help the Commission confirm that the project meets the requirements of a limited project under 310 CMR 10.53(3)(e)(5): "Other Restoration Projects. An Ecological Restoration Project that is not listed in 310 CMR 10.54(4)(e)2 through 4, that will improve the natural capacity of a Resource Area(s) to protect the interests identified in M.G.L. c. 131, § 40, may be permitted as an Ecological Restoration Limited Project provided that the project meets the eligibility criteria set forth in 310 CMR 10.54(4)(a) through (d). Such projects include, but are not limited to,...the removal of aquatic nuisance vegetation to retard pond and lake eutrophication,..." The project will help restore open water habitats of Hillcrest Park Condo Pond and will enhance the wildlife value.

Sincerely,



Colin Gosselin, Co-Owner
Water & Wetland, LLC
colin@waterandwetland.com / 888-493-8526