

CONSERVATION COMMISSION DETAILED AGENDA

Date: April 20, 2023

Time: 6:30 pm



DECISIONS

I. WETLANDS DECISIONS

1. 72 Farquhar Road– RDA- Removal of diseased red pines

- Owner/Applicant: Nicholas Iozzo Representative: Owner
- Request: Issue an Order of Conditions
- Documents Presented: n/a
- Project Summary: Removal of dead red pine trees
- Staff Notes:
 - Proof of legal ad and proof of abutter notifications received.
 - Selective tree removal for hazardous trees that have died from red pine scale. Stumps and roots are not proposed to be removed. Trees are within falling distance of structures.
 - Also requesting removal of additional dead trees within the buffer zone as they continue to die w/in the 3 year permit timeframe.
- Staff Recommendation: Close the hearing and issue a DOA:
 - Negative #3 with conditions:
 - Standard pre-work and sign off conditions.
 - For trees beyond the current scope, contact office for sign off of dead trees.
 - Positive #2b: no resource area approval
 - Positive #5 w/ conditions noted above.

2. 221 Fiske Hill Road –RDA – Request for Determination of Applicability-House addition

- Owner/Applicant: Jerry & Suzanne Farinella Representatives: Owner
- Request: Issue DOA
- Documents Presented: n/a
- Jurisdiction: Buffer Zone
- Project Summary:
 - House additions within a developed yard.
- Staff Notes:
 - Proof of legal ad and proof of abutter notifications received.
 - All work is located within a developed yard.
 - Wetlands are located south of the property and east of the property on the other side of Fiske Hill.
 - Excavated material to be used for grading yard on northern boundary away from wetlands.
 - Work is over 50 feet from wetlands and within yard. Provided erosion controls are installed = exempt from WPA. Larger addition does not appear to be within 100 feet just front addition.
- Staff Recommendation: Close the hearing and issue a DOA:
 - Positive #5 (subject to bylaw) with conditions:
 - Standard pre-work and sign off conditions.
 - EC install throughout work – wattle.
 - Positive #2b: no resource area approval
 - Negative #5: The area described in the Request is subject to protection under the Act...the work ... meets the requirements for the following exemption 321 CMR 10.02(b)2.(e.)

Conservation Agent

Rebecca Gendreau

Administrative Assistant

Erin Carson

Conservation Commission Members

Ed Goodwin

Erik Gaspar

Roy Bishop

Ted Winglass

Karsten Stueber

308 Main Street.

Sturbridge, MA

01566

T 508/347-2506

www.sturbridge.gov

3. 73 Paradise Lane –SWB Notice of Intent – Raze and rebuild of a single-family home

- Owner/Applicant: Paul Johnson Representatives: L. Jalbert, Jalbert Engineering
- Request: Issue a OOC
- Documents Presented: colored site plan
- Jurisdiction: Buffer Zone
- Project Summary
 - Project includes the raze and rebuild of a single family house and associated site work.
- Staff Notes:
 - Proof of abutter notifications and proof of legal ad required to open hearing.
 - All work is within the 100 - 200-foot local buffer zone. No work shown within the 100 buffer zone.
 - Project includes new house with foundation, new driveway and other site work.
 - Runoff is the primary concern for this property with the lake. Project includes BMP during work (construction entrance, ECs and materials will be directly loaded and removed from the site). In addition, long term BMPs are proposed to manage stormwater runoff. Cultec rechargers are proposed for the driveway runoff and a drainage swale will be installed around the house.
 - Three trees noted in narrative to be removed. Four flagged on site. 1 is dead others are within the work footprint at extent of 200' BZ. Trees will be replaced w/ native trees. Trees aren't marked on the plan. It should be noted which trees these are.
- Staff Recommendation: Recommend closing the public hearing and approving the project pursuant to the SWB with the following conditions:
 - Standard OOC conditions.
 - Spoil/debris piles to be directly moved off site.
 - Perpetual conditions for stormwater BMPs.
 - Tree replacement as proposed.
 - Require a surety bond or deposit during work to ensure conditions are met. Funds to be returned or bond to be released upon issuance of a complete Certificate of Compliance. \$5,000 for SFH projects has been previously required.

4. 159 Walker Pond Road (Wells State Park) – NOI-Trail maintenance and accessibility upgrades-DEP File# 300-XXXX

- Owner: Commonwealth of Mass Applicant: E. Huffman, DCR Representative: Christen McDonough, SWCA Environmental
- Request: Issue an Order of Conditions
- Documents Presented: n/a
- Jurisdiction: Buffer Zone
- Project Description: Project includes a trail maintenance within Buffer Zone and Riverfront Area.
 - Proof of abutter notifications and proof of legal ad required to open hearing.
 - DEP File # has not been issued.
 - Project is within Priority and Estimated Habitat.
 - No NHESP comments received to date.
 - Existing handicap accessible trail improvements for drainage and wheelchair rest area.
 - 55 sq. ft. of permanent RA impact. This trail widening will remain pervious. 6,010 sq. ft. of temporary impacts with trail improvements.
 - 2 new elevated boardwalk proposed over existing wetland crossing. No wetland impacts proposed. These will go over the existing ground surface.
 - O & M activities proposed for the existing trail to improve the trail including new crushed stone in areas in eroded areas. Plan included.
 - Overall project will improve existing conditions.
- Staff Recommendations: Continue to next meeting (May 11th) for DEP comments and NHESP comments. Provided DEP and NHESP comments are received, staff recommend closing the public hearing and approving the project pursuant to the WPA and the SWB with the following conditions:
 - Standard OOC conditions.
 - Include any NHESP comments.
 - Approval for trail maintenance activities outlined in the O & M activities.

5. 6 Birch Street –RDA – Removal of three trees

- Owner/Applicant: Joseph Murphy Representatives: Owner
- Request: Issue DOA
- Documents Presented: n/a
- Project Summary:
 - Project includes the removal of 3 trees within 100 ft of Cedar Lake, one tree is dead, one is causing damage to the foundation of the house and the other needs to be removed in order to remove one tree.
- Staff Notes:
 - Proof of abutter notifications and proof of legal ad required to open hearing.
 - Removal includes 3 large oak trees within 75-100 feet of the lake.
 - Replacements proposed along property line to include: shrubs and cedar trees.
 - Is stump or root removal/grinding required for stump near house?
 - Site visit performed.
 - Property includes ample canopy cover from mature trees. Loss of 2 trees canopy wouldn't appear to have a significant impact on lake.
 - Applicant noted future work to address runoff from roadway. Runoff issues were noted at site visit. Additional work will require permitting.
- Staff Recommendation: Close the hearing and issue a DOA:
 - Negative #3 with conditions:
 - Standard pre-work and sign off conditions.
 - No stump removal (grinding okay if needed for that one tree).
 - Positive #2b: no resource area approval
 - Positive #5 w/ conditions noted above.

6. 55 Caron Road– RDA- Landscape Improvements

- Owner/Applicant: Denise Janci Representative: M. Thibeault, Landscape Evolution
- Request: Issue a DOA
- Documents Presented: sketch plan
- Project Summary: Project includes the removal of a concrete paver patio and installation of permeable patio.
- Staff Notes:
 - Proof of legal ad and proof of abutter notifications received.
 - All work is within an existing developed yard. There is an existing concrete shoreline wall. No alteration to the wall or resource areas proposed.
 - Project will include removal of the existing patio and some lawn which will be replaced with a permeable patio and 120 sq. ft. of lawn will be planted with shrubs and herbaceous perennials. Patio will be expanded within lawn to the edge of the concrete shoreline.
 - Project would require waiver for work within 25' no disturb zone. Applicant should articulate how the project will not impact resource area and what mitigation would be proposed and/or make modifications to the project to decrease patio size. May be beneficial to add a vegetated filter strip between the wall and patio and decrease patio size leaving some lawn as is.
 - ECs proposed. No stockpiling proposed and equipment will be located above the work area on a terrace set back further from the lake.
- Staff Recommendation: The board should consider alternative options if they feel that the project does not conform to the waiver requirements and/or Close the hearing and issue a DOA if appropriate. Staff would recommend the following conditions if that is the boards consensus:
 - Negative #3 with conditions:
 - Standard pre-work and sign off conditions.
 - No stockpiling.
 - EC install.
 - Positive #2b: no resource area approval
 - Positive #5 w/ conditions noted above.

7. 130 Lane Nine– NOI- Site improvements to an existing lakefront property -DEP File# 300-1153

- Owner/Applicant: J. Tasse Representative: M. Thibeault, Landscape Evolution
- Request: Issue an Order of Conditions
- Documents Presented: sketch plan
- Jurisdiction:
 - **Buffer Zone** 10.53(1): General Provisions
 - Sturbridge Wetland Bylaw Regs.: 365-1.1E - H.; 365-1.2, 365-1.3 see: <https://ecode360.com/35319582>
- Project Summary: Project includes the removal and replacement of existing timber steps with stone steps. Project also includes terracing the hillside to construct a pervious patio with rock wall. Native plantings will be transplanted and invasive species removed.
- Staff Notes:
 - Project was continued to allow engineer assistance with establishing BLSF.
 - Site visit previously conducted.
 - Area is a steep slope along South Pond at a developed SFH residence. Project is to replace existing steps along the slope, landscape plantings, invasive removal and to add a pervious patio set back from the lake for a use area which currently does not exist.
 - No take issued by NHESP.
 - No DEP Comments.
 - No flood storage impacts to BLSF. New steps will be within the footprint of the existing steps. Patio is set back from BLSF and MAHWL.
 - Bank impact associated with step replacement and negligible per Bank standards (6 linear ft within previous disturbed/developed bank footprint).
 - Project will assist with current erosion issues and define use areas.
- Staff Recommendations: Recommend closing the public hearing and approving the project pursuant to the WPA and the SWB with the following conditions:
 - Standard OOC conditions.
 - EC install.
 - Any spoils to be directly removed or immediately stabilized if used on site.
 - No cutting of vegetation. Any additional tree, shrub or vegetation removal for vistas, etc. requires additional review.

8. Quacumquasit Pond– NOI- Alum treatment of South Pond-DEP File #300-XXXX

- Owner/Applicant: Town of Sturbridge Representative: C. Nielsen. TRC Companies
- Request: Issue an Order of Conditions
- Documents Presented: n/a
- Jurisdiction:
 - **Land Under Water**
 - **Limited project Ecological Restoration**
- Project Summary: Project includes the treatment of the Pond with aluminum sulfate to address the build-up of phosphorus in the sediment.
- Staff Notes:
 - Project was continued.
 - Still awaiting DEP file # and comments
 - NHESP comments received. Attached to detailed agenda.
 - The goals of the project are to reduce the available phosphorous within the surficial sediments to improve water quality conditions for fish and wildlife, ensure adequate water quality, prevent algae blooms and to improve recreational opportunities of the lake.
 - Project noted as being designed in compliance with the 2004 Eutrophication and Aquatic Plant Management ... Final Generic Environmental Impact Report.
 - NHESP noted concerns with treatment proposal. Notes large treatment in short duration.
 - Applicant should demonstrate that this application is safe for wildlife habitat and provide examples of where similar treatments have bene permitted. Provide response to NHESP.

- Staff Recommendations: Continue to next meeting (May 11th) for additional information, DEP comments and NHESP comments.
- 9. SHLO SE of 248 Podunk Road– NOI – MA DOT Geotechnical Soil Borings – DEP File #300-1154**
- Owner: MassDot District 3 & Town of Sturbridge Applicant: MA Electric Company Representatives: H. Graf BSC Group
 - Request: Issue OOC.
 - Documents Presented: n/a
 - Jurisdiction: Buffer Zone
 - Project Summary
 - Project includes exploratory geotechnical soil borings to plan for road maintenance and stormwater design along the unpaved section of Podunk Road. Project was continued.
 - Staff Notes:
 - Written continuance to the May 11, 2023 meeting received. Site visit requested to be postponed.
 - Staff Recommendations: Re-schedule site visit as requested (next date is May 3rd) and continue hearing to May 11, 2023 as requested.
- 10. 68 Paradise Lane –NOI – Raze and rebuild of a lakefront home – DEP File #300-1155**
- Owner/Applicant: Jeffery Buchanan Representatives: S. Morrison, EcoTec
 - Request: Issue OOC.
 - Documents Presented: n/a
 - Jurisdiction: Buffer Zone & SWB Regs. 365-1.1E - H.; 365-1.2, 365-1.3 (see: <https://ecode360.com/35319582>)
 - Project Summary:
 - Project includes the raze and rebuild of the existing house. A permeable driveway, grading, stormwater improvements and corrective grading w/ wetland impacts are also included.
 - Staff Notes:
 - Project continued to solicit peer review proposals. SCC voted for peer review. Staff solicited proposals and only 1 received to date. Provided to board. After only receiving 1 proposal per deadline, staff solicited additional proposals. Staff hopeful to receive additional proposals before the meeting.
 - Staff Recommendations: Select peer review. Continue hearing to allow for peer review. It would be advisable to continue this to the June 1, 2023 meeting to allow review to start and findings to be submitted as 2 weeks would not provide sufficient time for this to be completed before the next meeting.
- 11. Lot 3, 20 Fiske Hill Road & 30 Main Street (Future Road named Berry Farm) – NOI-Construction of a 68 lot manufactured housing community-DEP File# 300-1156**
- Owner: M. Sosik Applicant: Justin Stelmok Representative: B. Madden, LEC Environmental
 - Request: Issue an Order of Conditions
 - Documents Presented: colored plans
 - Jurisdiction: Buffer Zone & Vernal Pool Habitat (Sturbridge Wetland Bylaw see <https://ecode360.com/35320117> & <https://ecode360.com/35319610>).
 - Project Description: Construction of a 68 lot manufactured home community with associated appurtenances.
 - Staff Notes:
 - Project continued. Additional stormwater peer review required and plan modifications needed based on stormwater.
 - New Information:
 - LEC Letter dated 4-12-2023 (posted on website)
 - New information includes potential project revisions, draft declaration of restriction and DFW email.
 - Some project revisions made which is an improvement. Significant improvement made along roadway B vernal pool to move permanent disturbance out of VP buffer. VP buffer impacts to E series was minimized but still impacts there. Significant impact still proposed in 200 VP buffer at A series VP near the wildlife crossing.
 - An additional tree proposed per lot will help w/ future shading to aid in keeping stormwater runoff temperatures cooler. Trees should be able to provide canopy, native and not all the same species (in case of invasive issues and loss of trees). Tree spacing should be adequate to allow for canopies.
 - DFW email: DFW would accept a donation of the 2 parcels. An easement would be needed from Berry Farm Road. Is this just for passive access or would this easement be for the construction of a trail or roadway, etc.
 - Draft declaration will be sent to town counsel for review. Intent is to use declaration to provide a legal placeholder for future land transfer so they can start the project before the transfer occurs.

- No revisions to the proposed salt use mentioned.
- Staff were requested to research projects proposed within the 200-foot vernal pool buffer zone and outcomes. 2 single family house projects were found during staff's tenure on undeveloped land. Each project moved forward on the presumption of VP habitat (no survey conducted). Each maintained a 100 foot no disturb zone from the edge of the entire wetland (not necessarily vernal pool boundaries which may or may not have been the same). One project (59 New Boston Rd.) was on a 1.38 acre parcel and all work was situated as far as possible to the wetland. The developed envelope was ~ 0.5 acres in size to allow for house and septic. No further revisions could be made to allow reasonable use for property for SFH. The other parcel (165 Shepard Rd.) was 5.09 acres and revised to move work outside of the 200' BZ. The only work allowed within the 100-200' BZ was the driveway and grading. Septic was moved out of 200' BZ. No alternatives to driveway location. Permanent bounds were set. Development envelope in outer VP buffer zone was ~0.15 acres allowed. Overall project was ~0.75 acres on 5.09 acres.
- Staff Recommendations: Staff still support protecting the VP buffer zone and see that they could make better improvements to protect VP buffer as entirety of the project will result in a loss of critical habitat needed to support VP populations. No research/studies have been provided to support an opinion otherwise. Based on the information provided by Oxbow, critical habitat will be impacted and bisected by a roadway.
- Impacts to water quality are still a concern. Water quality monitoring proposed. What is proposed if the results indicate impacts to VPs? The project will already be approved. Unless there was a way to modify later phases of the project no changes can be made to address impacts. A reduced salt program is proposed. How much salt would that amount to on these roadways and driveways and how frequently dispersed? Hard to articulate how often which will depend on storm events, etc. Implementing a salt ban (similar to Hobbs Brook Plaza) may help satisfy salinity concerns.
- The board should provide feedback to the proponent on the proposed revisions. Continue to next meeting May 11th or continue out to June 1st if additional time is needed.

II. WETLAND DECISIONS

12. 24 Hamilton Road-OOC Extension request-DEP File #300-739

- Staff Notes: Three-year extension requested for treatment of private ponds. This is a historic permit which has been extended many times, treatment has been modified over time.
- Staff Recommendations: Issue a three-year extension as requested but note that this will be the last extension. New NOI will need to be submitted for future treatments.

13. 108 Westwood Drive-Request for Certificate of Compliance-DEP File #300-1128

- Staff Notes: Landscape project along Cedar Lake. Work has been completed and inspection conducted. Staff have no concerns with the completed project. Not an engineered plan.
- Staff Recommendations: Issue complete CoC with the following perpetual special conditions: 32-34.

14. 300 Clarke Road Ext.-Request for Certificate of Compliance-DEP File #300-1008

- Staff Notes: Small house addition project. Site inspection completed, letter of substantial compliance and as-built plan
- Staff Recommendations: Issue complete CoC with the following perpetual special conditions: 15-18, 25 & 26.

15. 300 Clarke Road Ext.-Request for Certificate of Compliance-DEP File #300-136

- Staff Notes: Project was never completed.
- Staff Recommendations: Issue Invalid CoC. Work never commenced.

III. ADMINISTRATIVE DECISIONS

IV. OLD BUSINESS

16. 71 Paradise Lane DEP File #300-929

- Staff Notes: Plan had been established to bring project into compliance which was to be executed last summer. Staff were not aware that work had been completed. Property owner had been requested to attend meeting. Staff have been informed that they are working with the engineer to redesign the drainage plan as there is a concern with a water line. Photos have been provided of shrub plantings. The amount and location will have to be field verified. A deadline must be implemented to finish this project and a CoC request filed.

17. 71 Mashapaug Road

Staff Notes:

- Board has expressed concerns with use of site. Site was a junkyard which was primarily cleared out of vehicles. Portions of site were left for many years and vegetation grew back. New owner re-established use areas within jurisdiction and is continuing to use those areas. Those activities required permitting. No permit applications were submitted or approvals given for activities conducted within jurisdiction of the state and local wetland laws. Concerns recently made aware w/ recent activities which occurred on site without permits and potential real estate transaction.

- Discussion had been continued to allow time for a wetland delineation to see extent of jurisdiction as that was unknown and to schedule a site visit. Materials submitted day of last meeting.
- Work occurred within jurisdictional areas which was a violation. Ongoing use of areas is a violation. Staff recommend issuance of an Enforcement Order.

V. ADMINISTRATIVE UPDATES

- Committee Updates: CPA, Trails, Open Space, and Lakes

VI. CORRESPONDENCE

VII. NEW BUSINESS

18. Agent's Report

19. Next Meeting-Thursdays May 11, 2023 and Site Visit Schedule-Tentative-TBD

From: [Marold, Misty-Anne \(FWE\)](#)
To: [Shaw, Olivia](#)
Cc: [Rebecca Gendreau](#); [Robin Grimm](#); [Richards, Todd \(FWE\)](#); abclerk@brookfieldma.us; conservation@eastbrookfieldma.us; [Cheeseman, Melany \(FWE\)](#)
Subject: Alum in Quacumquasit Pond, Additional Information Required
Date: Thursday, April 13, 2023 1:23:13 PM

RE: Quacumquasit, RC-54742, Alum, NHESP 06-20695

Hi Olivia,

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a MESA filing for alum in Quacumquasit with a MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.18, MESA).

I read over the proposal for alum treatment over 25 feet of water depth in Quacumquasit. I was surprised to see such high doses of alum being applied. I have not seen such a high sediment targets, but most alum I've seen has been used on the Cape.

This email is to inform you that the Division has reviewed the materials submitted with your application and has determined that additional information is required in order for the Division to continue its review pursuant to 321 CMR 10.18, as specified below:

1. Can you confirm that the number in the table (page 2, Treatment Methods) is the total sediment dose to achieve – not the amount to be applied in a single treatment event (even single treatment event/zone)? This use of g/m² suggests a sediment dose vs in solution, but I wanted to be sure.
2. The filings suggests the alum will be applied over a week (7 days) in all zones. Have you evaluated safe treatment limits for fisheries and other aquatic species and created a treatment plan that keeps applications below those limits? For example, most studies on fish limit establish 50 mg Al/L as the safe upper limit and we typically want to see doses limited to even less for mussels.
3. The plan says that "TRC will plan to direct QQLA to allow (TRC) to assist with pH monitoring during the week-long event". Does this mean TRC will be the party responsible for pH monitoring for the applicator or that you will provide a second check? Can you provide more information about the pH monitoring? I've typically seen this being done actively (hourly or 3xday) so that buffering can be quickly adjusted by the treatment operator to avoid drastic pH changes. How often and how many pH tests will be taken? What is the proposed pH range within which the treatments must remain?
4. With the proposal to precipitate the aluminum from the surface, what is the plan to monitor the floc and adjust treatments in response to any impacts to fish or other species? How often will the "downstream" areas be monitored? By whom?

Below are summarizes of three alum applications we reviewed with some examples of how treatments were spaced out over time and dose amount.

~ *Monponsett Pond in Halifax*, they had a calculated sediment target dose of 50 g/m². In 2017-2018, they applied 17, 10, 8 g/m² buffered alum in three events (17+10+8=34 g/m² total). They applied the remaining 16 g/m² over another treatment event. There is some complex history here which is summarized in the Wanger paper linked above.

~ *Hickley's Pond in Harwich*. My summary of the proposed treatment was "Total aluminum content shall be =5 mg/L in the treatment zone on any one application run; maximum dose that can be applied on any day is 18 g/m². It is estimated that the 90 acre treatment zone will be treated 6 times at 18 g/m² to achieve the 108 g/m² dose. The treatment will be buffered to keep the pH at 6.5-7.7. The alum will be applied by an injection system at 2-3 meters below the water surface. Target areas may be treated more than once to achieve the target dose. All areas of Hickley's Pond deeper than 12 feet (3.6 meters) of water (~90 acres). The numbers and location of travel paths to complete the treatments shall be selected to minimize delivery of floc into waters shallower than 12 feet. Treatment shall be applied during the months of June, July, August and September, unless otherwise allowed by the Division in writing".

~ *Cliff Pond in Brewster*. My summary of the proposed treatment was "(a) Alum Dose: Alum dose is targeted to be 75 g/m², but will be delivered in four (4) steps separated in time with each dose of no more than 20 g/m². (b) Alum Timing: The ~73 acre treatment area will be divided into sub-treatment cells. Half the dose will be delivered to all treatment cells in spring 2016 and the other half in late summer or early fall of 2016. All cells will be treated each time, and each half dose will be further subdivided so that no single application (on any given day) is >20 g/m²; (c) Treated Water Depth & Area: > 30 feet; water depths with sediment overlain by fine sediment, (~73 acres); (d) Buffer of Treatment: The alum will be treated with a balanced ratio of alum to buffer to ensure that pH remain within the normal range for this Pond, 6.0 to 8.0, throughout the treatment"

~ Long Pond (Brewster/Harwich), Online summary. https://www.capecodcommission.org/resource-library/file?url=%2Fdept%2Fcommission%2Fteam%2Fh2o%2Fwr_lib%2FPonds%2FPond+Reports%2FBrewster%2FBrewster+and+Harwich+Long+Pond+Alum+Treatment+Report+2009.pdf

Relevant papers. Multisite analysis reports 122 g/m² as the maximum used in 114 lakes; <https://www.sciencedirect.com/science/article/pii/S0043135415301020>). This is a relevant study for Cape Cod (https://www.harwich-ma.gov/sites/g/files/vyhlf7091/f/file/file/cape_cod_al_paper_ulrm_a_1308449_2.pdf).

Best,
Misty-Anne

Misty-Anne R. Marold (*she/her/hers*)
Senior Endangered Species Review Biologist
Massachusetts Division of Fisheries & Wildlife
Natural Heritage & Endangered Species Program
1 North Drive, Rabbit Hill Road
Westborough, MA 01581
508-389-6356
misty-anne.marold@mass.gov