

Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 9 – Enforcement Order

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
READING WETLAND PROTECTION BYLAWS SECTION 7.1

A. Violation Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



This Enforcement Order is issued by:

Reading Conservation Commission
Conservation Commission (Issuing Authority)

8/22/2024
Date

To:

Michael & Amy Rivers
Name of Violator
445 pearl Street
Address

1. Location of Violation:

Property Owner (if different)
445 Pearl Street
Street Address
Reading
City/Town
Map 46
Assessors Map/Plat Number

01867
Zip Code
Lot 14
Parcel/Lot Number

2. Extent and Type of Activity (if more space is required, please attach a separate sheet):

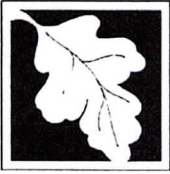
This Enforcement Order is issued pursuant to the Massachusetts Wetlands Protection Act (M.G.L. c. 131 §40) and the Reading Wetlands Protection Bylaw 7.1
You were granted approval by the Conservation Commission to conduct work at 445 Pearl Street in accordance with the Williams & Sparages plan, dated **August 14, 2021**. This plan included the restoration of the stream and streambank using soft armoring and vegetated stabilization methods.
It has come to the Commission's attention that, instead of following the approved plan, you installed a **wooden retaining wall** directly adjacent to the stream without prior authorization or a permit. This work constitutes a violation of the Wetlands Protection Act and local bylaws.
Upon discovery of the unpermitted activity, the Conservation Commission requested that you attend a public meeting and submit a revised plan identifying all unpermitted modifications. At the meeting, several questions remained unresolved, and a subsequent site visit was necessary to verify the location of the original streambank and backyard fence
After further review and discussion at its **April 9, 2025** meeting, the Conservation Commission **denied** your request to amend the original plan to incorporate the retaining wall and **ordered full restoration** of the stream and streambank, as originally approved on **October 13, 2021**.

You are hereby ordered to:

- 1. **Remove the unpermitted retaining wall.**
- 2. **Restore the stream and streambank** in accordance with the original Williams & Sparages plan dated August 14, 2021, and approved by the Commission on October 13, 2021.
- 3. Submit a restoration schedule and timeline to the Conservation Office within **14 days** of the date of this letter.

Failure to comply within 30 days of this order will result in the initiation of formal enforcement actions, including daily fines of up to **\$300 per day** and potential legal action.

Please contact the Conservation Office immediately if you have any questions or require clarification on the steps needed for compliance.



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 9 – Enforcement Order

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
READING WETLAND PROTECTION BYLAWS SECTION 7.1

B. Findings

The Issuing Authority has determined that the activity described above is in a resource area and/or buffer zone and is in violation of the Wetlands Protection Act (M.G.L. c. 131, § 40) and its Regulations (310 CMR 10.00), because:

- the activity has been/is being conducted in an area subject to protection under c. 131, § 40 or the buffer zone without approval from the issuing authority (i.e., a valid Order of Conditions or Negative Determination).

B. Findings (cont.)

- the activity has been/is being conducted in an area subject to protection under c. 131, § 40 or the buffer zone in violation of an issuing authority approval (i.e., valid Order of Conditions or Negative Determination of Applicability) issued to:

Name	Dated
------	-------

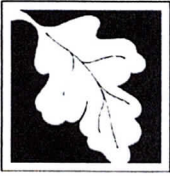
File Number	Condition number(s)
-------------	---------------------

- The Order of Conditions expired on (date): _____ Date
- The activity violates provisions of the Certificate of Compliance.
- The activity is outside the areas subject to protection under MGL c.131 s.40 and the buffer zone, but has altered an area subject to MGL c.131 s.40.
- Other (specify): _____

C. Order

The issuing authority hereby orders the following (check all that apply):

- The property owner, his agents, permittees, and all others shall immediately cease and desist from any activity affecting the Buffer Zone and/or resource areas.
- Resource area alterations resulting from said activity shall be corrected and the resource areas returned to their original condition.
- A restoration plan shall be filed with the issuing authority on or before _____ Date



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 9 – Enforcement Order

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
READING WETLAND PROTECTION BYLAWS SECTION 7.1

for the following:

finest will be issued for this violation.

The restoration shall be completed in accordance with the conditions and timetable established by the issuing authority.

C. Order (cont.)

Complete the attached Notice of Intent (NOI). The NOI shall be filed with the Issuing Authority on or before:

Date

for the following:

No further work shall be performed until a public hearing has been held and an Order of Conditions has been issued to regulate said work.

The property owner shall take the following action to prevent further violations of the Act:

Remove the unpermitted retaining wall.

Restore the stream and streambank in accordance with the original Williams & Sparages plan dated August 14, 2021, and approved by the Commission on October 13, 2021.

Submit a restoration schedule and timeline to the Conservation Office within **14 days** of the date of this letter

Failure to comply with this Order may constitute grounds for additional legal action. Massachusetts General Laws Chapter 131, Section 40 provides: "Whoever violates any provision of this section (a) shall be punished by a fine of not more than twenty-five thousand dollars or by imprisonment for not more than two years, or both, such fine and imprisonment; or (b) shall be subject to a civil penalty not to exceed twenty-five thousand dollars for each violation". Each day or portion thereof of continuing violation shall constitute a separate offense.

D. Appeals/Signatures

An Enforcement Order issued by a Conservation Commission cannot be appealed to the Department of Environmental Protection, but may be filed in Superior Court.

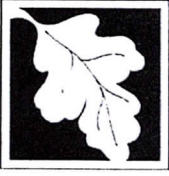
Questions regarding this Enforcement Order should be directed to:

Chuck Tirone

Name

781 942-6616 or ctirone@ci.reading.ma.us

Phone Number



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 9 – Enforcement Order

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
READING WETLAND PROTECTION BYLAWS SECTION 7.1

M-W-T 8am-5:30 Tuesday 8am-7:00
Hours/Days Available

Issued by:


Reading
Conservation Commission

Conservation Commission signatures required on following page.

D. Appeals/Signatures (cont.)

In a situation regarding immediate action, an Enforcement Order may be signed by a single member or agent of the Commission and ratified by majority of the members at the next scheduled meeting of the Commission.

Signatures:

	4/17/2025
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name

7022 0410 0000 9813 7163
Signature of delivery person or certified mail number

Introduction:

The subject property is located in northcentral Reading just east of Main Street (Route 62). The property is located approximately 500 feet southeast of the Pearl and Main Street intersection. The property is bounded by residential properties along Pearl Street. The parcel is currently occupied by a single family home, driveway, attached garage, swimming pool and two sheds in the rear. According to the Reading Assessor's, the existing dwelling was constructed in 1965. The subject property is located within Single Family 20 (S-20) zoning district. The property is not located within the Town's Aquifer Protection District.

In total, the site is 20,0002 s.f. in size according to the Reading Assessor's Department. Topographically, the site generally slopes west to east towards the rear of the property. Between the dwelling and property line to the north exists an intermittent stream channel, which flows from a BVW to the west across Main Street. This stream channel continues along the northern property boundary and towards properties along Beaver Road. This channel appears to also collect street drainage and is of importance for this portions of the Town's flood control.

According to the NRCS Web Soil Survey, soils within the subject parcel are predominantly mapped as 255B Windsor loamy sand. The property is not mapped as Priority Habitats of Rare Species by the Natural Heritage and Endangered Species Program (NHESP), nor is the subject parcel located within an Area of Critical Environmental Concern (ACEC).

Ecological Assessment:

The project site was assessed based on preliminary data review, an on-site inspection, and conversations with both the Conservation Administrator, Mr. Tirone, and the homeowner. A topographic instrument survey was completed by Williams & Sparages LLC (W&S) on August 12, 2021, to locate the delineated resource areas the property, and to conduct a topographic mapping of the property. A site inspection was also made by Thorsen Akerley of W&S in late April of 2021, and on August 10, 2021.

Based on our review of the information, site history, and site itself, it is evident that approximately 50' of the northern portion of this intermittent stream bank has incurred significant erosion. Fill material in the form of rocks and gravel was placed along the southern limit of the stream bank, and as a result the streams flow was diverted further north. With flow directed towards the northern bank, the additional water and increased flow velocity appears to have scoured and eroded portions of the northern bank over the years. As a result, 3-5' of soil is now vertically exposed along the northern



bank. Vegetation is not able to establish roots along this area of the bank and therefore further erosion and degradation of the bank should be anticipated if left in its current state.

Restoration Approach:

Given the major instability and slope of the existing northern bank, it is unlikely that this bank could be restored without shifting the stream channel back to its original location. Furthermore, fill and rocks that were placed along the southern portion of the stream will also need to be removed to accomplish this. Once fill is removed from the southern portion of the stream, new bank slopes can be established with live willow stakes, biodegradable erosion control blankets and erosion control seed mix. Work should be done during a dry period of the year to limit the downstream migration of sediment.

Soil bioengineering techniques are proposed to be used to control erosion of the restored stream. Vegetation established with bioengineering treatments create conditions that allow stable landforms and healthy soils along with a host of functions and values such as water quality improvement and enhanced flood control. Willow stakes approximately 3' long are installed approximately 2.4' deep. The underground portion of the stem grows roots that bind the soil and the aboveground portion slows the near surface flow velocity to eliminate erosion and foster sediment deposition.

Primary objectives include:

- Establish native woody riparian vegetation for bank and bed stability;
- Restoring riparian habitat and reconnect the bank corridor;
- Restoring hydrologic regime to natural conditions; and
- Reducing sediment and pollutants from surrounding land uses through dense planting.

Site Design:

The channel bed will be returned to historic elevation and grade. These elevations are shown on the accompanying Restoration Plan, but values may need to be slightly adjusted in the field. Excavation with a mini-excavator will establish elevations within the restored channel bed within the degraded area and tie into the downgradient healthy portion of the stream. A seeded and staked 12" Coconut coir log shall be installed at the end of the stream restoration area to limit any downgradient migration of sediment during excavation. Given the stream appears to dry up during the summer, this should not be a significant issue. The new stream bed should be lined with material



matching the downslope natural stream and consist of rounded river rock in a 2-4" range.

Following fill removal along the southern stream boundary and excavation of the restored stream bed, 12" diameter Coconut coir logs with wood stakes on either side (see detail) of the restored are proposed along either side of the outer boundary of the new stream bed. Logs should be butted end to end. Clean topsoil in the sandy loam texture range shall be used to create the new banking along the northern and southern portions of the stream with high organic content loam used as topsoil over the new subgrade. The stream banks are proposed be installed at no steeper than a 2:1 slope along the southern portion of the stream and 1.5:1 along the northern portion of the stream. Proposed grades for the banking are shown on the accompanying plan.

Following earthwork, soils will be left rough and loose within the sloped banks where live staking will take place above the high water mark. All equipment traffic will avoid crossing or otherwise encroaching the restored stream channel or bank, as **most of this work can be completed from the driveway side of the stream.** Willow cuttings will be completed using dense live staking with spacing of two per linear foot. Stakes up to 3' long will be installed approximately 2.4' deep. Staking should occur with a higher density (3 per linear foot) along the northern bank in the area of the inlet of the 24" culvert to protect this portion of the bank during periods of high flow as water exits the culvert. Willow cuttings may include the species listed below (all native to Massachusetts):

- Bebb's willow (*Salix bebbiana*)
- Pussy willow (*Salix discolor*)
- Black willow (*Salix nigra*)
- Silky Willow (*Salix sericea*)

For live staking, correct methods for collection, care, and installation of willow cuttings are critical to success. Methods are described on the accompanying plan. Necessary monitoring should be in place to guide installation. Areas of exposed soil resulting from construction and not within live staking zones will be seeded using a native erosion control mix.



Construction Schedule:

As discussed above, all work should be done during a dry period of the year and while willow stakes are dormant, and preferably during a period of likely dry upcoming weather.

1. Mark the boundary of excavation limits.
2. Install seeded and staked Coconut coir-logs along downgradient limit of stream.
- * 3. **Temporary shoring wall in place on southern limit of channel for machine access to north bank**
Installed as means and methods to enable work to be done during wet season as requested by Commission
4. Install seeded and staked Coconut coir-logs along either side of new stream bed.
5. Install sloped fill along new stream banking to toe of Coconut coir logs along each side of stream. Seed with native erosion control mix.
6. Lay staked biodegradable erosion control blanket on top of native erosion control mix.
7. Plant live cuttings as per detail in the accompanying restoration plan.
8. Seed any disturbed areas outside of live staking/restoration zone.
9. Monitoring of restored areas for 2 years.
- * 10. **Temp shoring wall to be removed once northern bank and channel are established, As directed in approved documents**

* Modified
4/25/25
By
Michael
Rivers

Monitoring:

Monitoring is critical to any restoration project to identify problems in the early stages when corrective measures can be most effective and to ensure that the project goals are being met. As part of the monitoring program, the following activities are recommended:

1. Water willow cuttings once per week during the first growing season;
2. Inspect cuttings for damage by wildlife during each watering; and
3. Inspect slope for erosion.

Additional Site Considerations:

- Existing 4" PVC Pipe
 - There is an existing 4" PVC pipe between the edge of driveway and dwelling. The pipe appears to direct water from along the house towards the southern stream bank. The pipe shall be removed and an additional 6" mulch sock will be added along the edge of driveway as shown on the accompanying restoration plan to reduce the impact of flow during the early stages of construction.



- **Debris Pile**

- There is brush debris pile along the easterly property boundary. Portions of this pile lie within Bordering Vegetated Wetlands (BVW). As part of this restoration plan, the debris pile shall be removed and disposed of appropriately.

- **Lawn Furniture**

- There is an existing lawn chair beyond the debris pile. The removal of this chair from BVW should be coordinated with the neighbor of 15 Lucy Drive.

- **Additional Stream Erosion**

- During the site visit with the Reading Conservation Commission on September 13th, an additional 5-10' section of stream bank along the backyard of the site was observed to be eroding as well. As part of the restoration effort, we would recommend the removal of the existing stones along the southern portion of the stream in this area. In addition to the stone removal, willow staking's should be planted at a 3 per linear foot density in this area on either side of the stream bank (2' horizontally in either direction of water flow). Cuttings should be placed within the eroding bank on the northern side of the stream as well to help re-establish the bank.

Erosion Controls:

Erosion Controls in the form of staked and seeded Coconut coir logs are proposed along the end of the stream restoration area and along the toe of the proposed banks. These logs are biodegradable, and can remain in place until slopes are well established or allowed to decompose in place. An additional 6" mulch sock is proposed along the upper boundary of the limit of work.

