Wetlands Protection Act
Ecological Restoration (ER)

- Regulatory Additions for ER
- Is Project an Ecological Restoration?
- ER Project Types
- ER Project Permitting Process
- Stream Crossing Standards

Presented by
Nancy Lin and Alice Smith
MassDEP Wetlands and Waterways Program

Funded in part by a Federal Clean Water Act Wetland Program Development Grant (WPDG) 104(b)(3) from U.S. EPA.
New Regulatory Additions for Ecological Restoration

- Definitions: 310 CMR 10.04
- Permitting Process: 310 CMR 10.11 thru 310 CMR 10.14
- Coastal/Inland ER Limited Projects: 310 CMR 10.24(8) and 310 CMR 10.53(4)
Ecological Restoration Definition

A project whose primary purpose is to restore or otherwise improve the natural capacity of a Resource Area(s) to protect...
Ecological Restoration Definition

and sustain the interests identified in M.G.L. c. 131, § 40,
Ecological Restoration Definition

when such interests have been degraded or destroyed
by anthropogenic influences. (310 CMR 10.04)

Ecological Restoration Definition
Ecological Restoration Limited Project?

Definition (310 CMR 10.04)

*Ecological Restoration Limited Project* is an Ecological Restoration Project that meets the eligibility criteria set forth in 310 CMR 10.24(8) or 310 CMR 10.53(4).
Ecological Restoration Project - NOT

ER Projects do not include mitigation for the alteration of a Resource Area authorized by a Final Order of Conditions or a 401 WQC.
Ecological Restoration Project - NOT

Dredging projects - 401 WQC issued pursuant to 314 CMR 9.00
Ecological Restoration Project - NOT

Natural disasters
Ecological Restoration Project - NOT

- Acts of God
- Enforcement action
Ecological Restoration

Project Types
Ecological Restoration Project Types

Dam Removal

Sackett Brook, Pittsfield
Ecological Restoration Project Types

Dam Removal Sackett Brook, Pittsfield
Ecological Restoration Project Types

Freshwater Stream Crossing
Ecological Restoration Project Types

Stream Daylighting
Ecological Restoration Project Types

Culvert Replacement to Eliminate Tidal Restrictions.
Shellfish Habitat Restoration

Ecological Restoration Project Types
Ecological Restoration Project Types

Fish Passage and Rare Species Habitat Restoration
Ecological Restoration

Advantages of General Permit
Ecological “Restoration OOC”
Advantages for Applicant and Con Coms

- Key information is front loaded before NOI is Submitted.
- No WQC except for dredging
- Template conditions for Restoration OOC
Ecological “Restoration OOC”
Advantages for Applicant and Con Coms

Wellfleet Harbor University of MA

- General Permits are exempt from MEPA Environmental Monitor Notice still required
- No changes to the MEPA requirements for EF Limited Projects
Ecological “Restoration OOC”

Advantages for Applicant and Con Coms

- Eligible Projects are Exempt from Wildlife Habitat Evaluation

Image: Stantec Inc.
Ecological “Restoration OOC”
Advantages for Applicant and Con

- May Result in the Temporary or Permanent Loss
- Conversion of One Resource Area to Another if Necessary to Achieve the Project's Ecological Restoration Goals
Ecological Restoration

Permitting Process
Restoration Project Permitting Process

Meet Definition Ecological Restoration 310 CMR 10.04?

Yes

Use WPA Form 3

No

Use WPA Form 3

Is Project Eligible for a Restoration OOC 310 CMR 10.13?

Yes

Is the proposed activity eligible to be treated as an Ecological Restoration Limited Project [310 CMR 10.24(8) or 310 CMR 10.53(4)]? Complete WPA Form 3 Section A.7b and attach the ER Limited Project Eligibility Checklist and Certification in Appendix A.

No

ER Limited Project Use WPA Form 3

Is Project Eligible for a Restoration OOC 310 CMR 10.13?

Yes

Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.

No

Use WPA Form 3

Complete Required Actions (310 CMR 10.11) BEFORE submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1

Attach the required documentation for submittal with NOI. (310 CMR 10.12) Use the Minimum Required Documents Checklist in WPA Form3A, Section D and Appendix 2.

Sign and submit WPA Form 3A with documentation.

Restoration OOC is Issued use WPA Form 5A

Required Documentation for Submittal with NOI. (310 CMR 10.12(1) and (2)). Skip Form 3, Section D. Attach Required Documents Checklist in Appendix A.

Sign and submit WPA Form 3A with documentation.

OOC for Ecological Restoration Limited Project may be issued use WPA form 5.
Is Project an Ecological Restoration?

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. (310 CMR 10.04)
**Restoration Project Permitting Process**

**Meet Definition Ecological Restoration 310 CMR 10.04?**

- No → Use WPA Form 3
- Yes → Is Project Eligible for a Restoration OOC 310 CMR 10.13?
  - Yes → Use WPA Form 3A Ecological Restoration NOI
  - No → ER Limited Project Use WPA Form 3

**Is Project Eligible for a Restoration OOC 310 CMR 10.13?**

- Yes → Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.
- No → Is the proposed activity eligible to be treated as an Ecological Restoration Limited Project [310 CMR 10.24(8) or 310 CMR 10.53(4)]? Complete WPA Form 3 Section A.7b and attach the ER Limited Project Eligibility Checklist and Certification in Appendix A.

**Complete Required Actions (310 CMR 10.11) BEFORE submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1**

**Attach the required documentation for submittal with NOI. (310 CMR 10.12) Use the Minimum Required Documents Checklist in WPA Form3A, Section D and Appendix 2.**

**Sign and submit WPA Form 3A with documentation.**

**Restoration OOC is Issued use WPA Form 5A**

**Required Documentation for Submittal with NOI. (310 CMR 10.12(1) and (2)). Skip Form 3, Section D. Attach Required Documents Checklist in Appendix A.**

**Sign and submit WPA Form 3A with documentation.**

**OOC for Ecological Restoration Limited Project may be issued use WPA form 5.**
Restoration Project Permitting Process

Meet Definition Ecological Restoration 310 CMR 10.04?

No

Use WPA Form 3

Yes

Is Project Eligible for a Restoration OOC 310 CMR 10.13?

No

Is the proposed activity eligible to be treated as an Ecological Restoration Limited Project [310 CMR 10.24(8) or 310 CMR 10.53(4)]? Complete WPA Form 3 Section A.7b and attach the ER Limited Project Eligibility Checklist and Certification in Appendix A.

Yes

Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.

Complete Required Actions (310 CMR 10.11) BEFORE submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1

Attach the required documentation for submittal with NOI. (310 CMR 10.12) Use the Minimum Required Documents Checklist in WPA Form3A, Section D and Appendix 2.

Sign and submit WPA Form 3A with documentation.

Restoration OOC is Issued use WPA Form 5A

No

Use WPA Form 3

Is Project Eligible for a Restoration OOC 310 CMR 10.13?

Yes

Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.

Complete Required Actions (310 CMR 10.11) BEFORE submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1

Attach the required documentation for submittal with NOI. (310 CMR 10.12) Use the Minimum Required Documents Checklist in WPA Form3A, Section D and Appendix 2.

Sign and submit WPA Form 3A with documentation.

Restoration OOC is Issued use WPA Form 5A

No

Use WPA Form 3

Is the proposed activity eligible to be treated as an Ecological Restoration Limited Project [310 CMR 10.24(8) or 310 CMR 10.53(4)]? Complete WPA Form 3 Section A.7b and attach the ER Limited Project Eligibility Checklist and Certification in Appendix A.

Yes

Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.

Complete Required Actions (310 CMR 10.11) BEFORE submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1

Attach the required documentation for submittal with NOI. (310 CMR 10.12(1) and (2)). Skip Form 3, Section D. Attach Required Documents Checklist in Appendix A.

Sign and submit WPA Form 3A with documentation.

OOC for Ecological Restoration Limited Project may be issued use WPA form 5.
Eligibility Criteria for Restoration OOC (310 CMR 10.13(1))

- Be an Ecological Restoration as Defined in 310 CMR 10.04
Eligibility Criteria for Restoration OOC
(310 CMR 10.13(1))

- Must further at least one of the interests of the Act.
Maximum extent practicable

- Avoid and Minimize Adverse Impacts to Resource Areas and the interests of Act,
- Use Erosion and Siltation Control BMPs to minimize construction impacts,
Eligibility Criteria for Restoration OOC (310 CMR 10.13(1))

No significant increase in flooding or storm damage
Eligibility Criteria for Restoration OOC (310 CMR 10.13(1))

401 WQC for Dredging

Self-propelled hopper dredge

Self-propelled seagoing hopper dredge.
Eligibility Criteria for Restoration OOC
(310 CMR 10.13(1))

No substantial reduction in the capacity of a resource area to serve habitat functions
Eligibility Criteria for Restoration OOC (310 CMR 10.13(1))

- Openess Ratio > 0.82
- Length
- Width > 1.2 times bankfull width

- Freshwater Stream Crossings are designed to comply with SCS 310 CMR 10.53(8).
Eligibility Criteria for Restoration OOC
(310 CMR 10.13(1))

Tidal Crossings designed to eliminate tidal restrictions
Eligibility Criteria for Restoration OOC (310 CMR 10.13(1))

The project does not include

- Armoring of a Coastal Dune or Barrier Beach.
- Discharge of dredged or fill material to a certified vernal pool,
- A point source discharge to ORWs,
Eligibility Criteria for Restoration OOC
(310 CMR 10.13(1))

NHESP Review

- If project is within rare species habitat - a written Determination from NHESP that project will not have adverse effect on specified habitat sites within the resource.
- Determination identifies Rare Species and recommends appropriate changes or conditions to insure no short or long term adverse effects or
- Project is carried out in accordance with Habitat Management Plan OR Conservation and Management Permit approved by NHESP.

Estimated Habitat Map of State-Listed Rare Wetlands Wildlife
Natural Heritage and Endangered Species Program (321 CMR 10.12).
## Comparison of Eligibility Criteria for Restoration OOC and ER LP

### Comparison of Eligibility Criteria for Restoration OOC and Eligibility Criteria for Ecological Restoration Limited Project

<table>
<thead>
<tr>
<th>Restoration OOC 310 CMR 10.13(1)</th>
<th>Island ERLP</th>
<th>Coastal ERLP</th>
<th>Island - ER Limited Project 310 CMR 10.53(4)(a)</th>
<th>Coastal - ER Limited Project 310 CMR 10.24(8)(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.53(4)(a)</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
</tr>
<tr>
<td>10.24(8)(a)</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
<td>![Checkmark]</td>
</tr>
</tbody>
</table>

(a) The project is an Ecological Restoration Project as defined in 310 CMR 10.04, is a project type listed in 310 CMR 10.13(2) through (7), and the applicant has submitted a Notice of Intent that meets all applicable requirements of 310 CMR 10.12.

(b) The project will further at least one of the interests identified in M.G.L. c. 131, § 40.

1. The Issuing Authority determines that the project is an Ecological Restoration Project as defined in 310 CMR 10.04;

2. If the project will impact an area located within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-listed Rare Wildlife published by the Natural Heritage and Endangered Species Program, the applicant has obtained a preliminary written determination from the Program in accordance with 310 CMR 10.11(2) that the project will not have any adverse long-term and short-term effects on specified habitat sites of Rare Species, or the project will be carried out in accordance with a habitat management plan that has been approved in writing by the Natural Heritage and Endangered Species Program and submitted with the Notice of Intent;

3. The project will not have any short-term or long-term adverse effect, as identified by the procedures established by 310 CMR 10.11, on specified habitat sites of Rare Species located within the Resource Areas that may be affected by the project or will be carried out in accordance with a habitat management plan that has been approved in writing by the Natural Heritage and Endangered Species Program and submitted with the Notice of Intent.

(d) To the maximum extent practicable, the project will:

1. Avoid adverse impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40, that can be avoided without impeding the achievement of the project’s ecological restoration goals;

2. Minimize adverse impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40, that are necessary to the achievement of the project’s ecological restoration goals;

3. Utilize best management practices such as erosion and sediment control and proper construction sequencing to prevent and minimize adverse construction impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40;

(e) The project will not have significant adverse effects on the interests of flood control and storm damage prevention in relation to the built environment (i.e., the project will not result in a significant increase in flooding or storm damage affecting buildings, wells, septic systems, roads or other human-made structures or infrastructure).

(f) If the project involves the dredging of 100 cubic yards of sediment or more or dredging of any amount in an Outstanding Resource Water, the Notice of Intent includes a Water Quality Certification issued by the Department in accordance with 314 CMR9.01:401 Water Quality Certification for Discharge of Dredged or Fill Material, Dredging and Dredged Material Disposal in Waters of the United States Within the Commonwealth.

4. If the project involves the dredging of 100 cubic yards of sediment or more or dredging of any amount in an Outstanding Resource Water, the applicant has applied for or obtained a Water Quality Certification by the Department; and

5. If the project is located in a Coastal Dune or Barrier Beach, the applicant has demonstrated that it has accepted and minimized armoring of the Coastal Dune or Barrier Beach to the maximum extent practicable; and
Restoration Project Permitting Process

Meet Definition Ecological Restoration 310 CMR 10.04?  
- Yes: Use WPA Form 3A Ecological Restoration NOI
- No: Use WPA Form 3

Is Project Eligible for a Restoration OOC 310 CMR 10.13?  
- Yes: Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.
- No: Is the proposed activity eligible to be treated as an Ecological Restoration Limited Project [310 CMR 10.24(8) or 310 CMR 10.53(4)]? Complete WPA Form 3 Section A.7b and attach the ER Limited Project Eligibility Checklist and Certification in Appendix A.

Complete Required Actions (310 CMR 10.11) BEFORE submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1

Attach the required documentation for submittal with NOI. (310 CMR 10.12) Use the Minimum Required Documents Checklist in WPA Form3A, Section D and Appendix 2.

Sign and submit WPA Form 3A with documentation.

Restoration OOC is Issued use WPA Form 5A

Required Documentation for Submittal with NOI. (310 CMR 10.12(1) and (2)). Skip Form 3, Section D. Attach Required Documents Checklist in Appendix A.

Sign and submit WPA Form 3A with documentation.

OOC for Ecological Restoration Limited Project may be issued use WPA form 5.
Restoration Project Permitting Process

Meet Definition Ecological Restoration 310 CMR 10.04?

Yes -> Use WPA Form 3A Ecological Restoration NOI

Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.

Complete Required Actions (310 CMR 10.11) **BEFORE** submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1

Attach the required documentation for submittal with NOI. (310 CMR 10.12) Use the Minimum Required Documents Checklist in WPA Form3A, Section D and Appendix 2.

Sign and submit WPA Form 3A with documentation.

Restoration OOC is Issued use WPA Form 5A

Is Project Eligible for a Restoration OOC 310 CMR 10.13?

Yes -> Use WPA Form 3A Ecological Restoration NOI

No -> Use WPA Form 3

Is the proposed activity eligible to be treated as an Ecological Restoration Limited Project [310 CMR 10.24(8) or 310 CMR 10.53(4)]? Complete WPA Form 3 Section A.7b and attach the ER Limited Project Eligibility Checklist and Certification in Appendix A.

Complete Required Actions (310 CMR 10.11) **BEFORE** submitting NOI. Skip Form 3, Section C. Attach the Required Actions Checklist in Appendix A.

Required Documentation for Submittal with NOI. (310 CMR 10.12(1) and (2)). Skip Form 3, Section D. Attach Required Documents Checklist in Appendix A.

Sign and submit WPA Form 3A with documentation.

OOC for Ecological Restoration Limited Project may be issued use WPA Form 5.
Restoration Project Permitting Process

Meet Definition Ecological Restoration 310 CMR 10.04?

- No: Use WPA Form 3
- Yes: Is Project Eligible for a Restoration OOC 310 CMR 10.13?

- No: Use WPA Form 3
- Yes: Is the proposed activity eligible to be treated as an Ecological Restoration Limited Project [310 CMR 10.24(8) or 310 CMR 10.53(4)]? Complete WPA Form 3 Section A.7b and attach the ER Limited Project Eligibility Checklist and Certification in Appendix A.

- No: Complete Required Actions (310 CMR 10.11) BEFORE submitting NOI. Use the Required Actions Checklist in Form 3A, Section D and Appendix 1
- Yes: Complete Eligibility Criteria Checklist (310 CMR 10.13) in WPA Form 3A, Section C and sign the Certification of Eligibility in Section G.

- No: Required Documentation for Submittal with NOI. (310 CMR 10.12(1) and (2)). Skip Form 3, Section D. Attach Required Documents Checklist in Appendix A.
- Yes: Sign and submit WPA Form 3A with documentation.

- No: OOC for Ecological Restoration Limited Project may be issued use WPA form 5.
- Yes: Restoration OOC is Issued use WPA Form 5A
Project is Eligible for Restoration OCC

Use WPA Form 3A

WPA Form 3A - Notice of Intent for an Ecological Restoration Project

Project Type

Check the Ecological Restoration type that applies:

1. Dam Removal
2. Freshwater Stream Crossing Repair and Replacement
3. Stream Daylighting
4. Tidal Restoration
5. Rare Species Habitat Restoration
6. Restoring Fish Passageways

Eligibility Criteria:

I am applying for a Restoration Order of Conditions and meet the General Eligibility Criteria [310 CMR 10.13(1)] as described in Section C1 and the Additional Eligibility Criteria for this Ecological Restoration Project type [310 CMR 10.13(2) through (7)] as described in Section C2.
Project is ER Limited Project

*Use WPA Form 3*
C. Ecological Restoration Project Description

1. Check each box below to confirm that the project complies with each Eligibility Criteria required to obtain a Restoration Order of Conditions and provide the appropriate documentation.

- This project will have no short term or long-term adverse effects on Estimated Habitat sites of Rare Species located within resource areas that may be affected by the project or will be carried out according to a habitat management plan approved by NHESP.

- The project avoids and minimizes adverse impacts to Resource Areas and the interests identified in the WPA, without impeding the achievement of the ecological restoration goals.

- The project will utilize best management practices to prevent and minimize adverse impacts to Resource Areas and the WPA interests.

- This Project will cause NO significant adverse effects on the interests of flood control and storm damage prevention in relation to the built environment (i.e., the project will not result in a significant increase in flooding or storm damage affecting buildings, wells, septic systems, roads or other man-made structures or infrastructure) and documentation on how this is achieved.
### 9. Other

#### 7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. [ ] Yes  [ ] No  
   
   If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

#### 2. Limited Project Type

   If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

### 8. Property recorded at the Registry of Deeds for:
This Ecological Restoration Limited Project Eligibility Checklist guides the applicant in determining if their project is eligible to file as an Inland or Coastal Ecological Restoration Limited Project (310 CMR 10.53(4) or 310 CMR 10.24(8) respectively). These criteria must be met when submitting the Ecological Restoration Limited Project Notice of Intent to ensure that the restoration and improvement of the natural capacity of a Resource Area(s) to protect and sustain the interests identified in the WPA is necessary to achieve the project's ecological restoration goals.

**Regulatory Features of All Coastal and Inland Ecological Restoration Limited Projects**

- **(a)** May result in the temporary or permanent loss of/or conversion of Resource Area: An Ecological Restoration Limited Project that meets the requirements of 310 CMR 10.24(8) may result in the temporary or permanent loss of Resource Areas and/or the conversion of one Resource Area to another when such loss is necessary to the achievement of the project's ecological restoration goals.
Project is Eligible for Restoration OCC
Sign the Certification of Eligibility
WPA Form 3A, Section G, p.13

WPA Form 3A - Notice of Intent for an Ecological Restoration Project

G. Signatures and Submittal Requirements

Certification of Ecological Restoration Project Notice of Intent

I hereby certify under penalties of perjury that the Ecological Restoration Project Notice of Intent application meets the Eligibility Criteria set forth in 310 CMR 10.13. I also certify that I am familiar with the information contained in this Notice of Intent application and that the accompanying plans, documents, and supporting data are to the best of my knowledge and belief true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.
Project is Not Eligible for Restoration OCC
Sign the Certification of Eligibility
WPA Form 3, Appendix A, p.16

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
Appendix A: Ecological Restoration Limited Project Checklists

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Certification that the Ecological Restoration Project Meets the Eligibility Criteria

I hereby certify under penalties of perjury that the Ecological Restoration Project Notice of Intent application does not meet the Eligibility criteria for an Ecological Restoration Order of Conditions set forth in 310 CMR 10.13, but does meet the Eligibility Criteria for a Ecological Restoration Limited Project set forth in 10.24(8) or 10.53(4) whichever is applicable. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Signature of Applicant or Authorized Agent

Printed Name of Applicant or Authorized Agent

The certification must be signed by the applicant, however, it may be signed by a duly authorized agent (named in Item 2) if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request, supplemental information in support of the application.
**Required Actions: MEPA 310 CMR 10.11**

**Restoration OOC**
- Complete Form 3A, Section D
- Complete Appendix 1, pp. 14-18

**ER Limited Project**
- Skip Form 3, Section C
- Complete Appendix A, pp. 10-14

**MEPA Environmental Monitor - Current Issue**

**Feb 11, 2015**
**Volume 83, Issue 7**

The Environmental Monitor provides information on projects under review by the Massachusetts Environmental Policy Act (MEPA) office, recent MEPA decisions of the Secretary of Energy & Environmental Affairs, and public notices from environmental agencies. Please note that the links on this page require the use of Adobe Acrobat Reader®, which is available free of charge at http://www.adobe.com/products/acrobat/readstep.html.

**Projects Submitted Jan. 16 - Feb. 2, 2015**
- Environmental Notification Forms
- Environmental Impact Reports
- Notices of Project Change

**Other Projects Under Review**
- Environmental Notification Forms
- Environmental Impact Reports
- Notices of Project Change

**Secretary's Certificates Jan. 16 - 31, 2015**
- Environmental Notification Forms
- Environmental Impact Reports
- Notices of Project Change
- Records of Decision

**Requests for Advisory Opinion**
- Public Notices
- Submitting Public Notices
- Site Visits

**Projects Submitted Jan. 16 - Feb. 2, 2015**
- Environmental Notification Forms
Required Actions: NHESP Review

**Required Actions**

- Complete Form 3A, Section D
- Complete Appendix 1, pp. 14-18
- Skip Form 3, Section C
- Complete Appendix A, pp. 10-14
Required Actions: DMF 310 CMR 10.11

**Restoration OOC**
- Complete Form 3A, Section D
- Complete Appendix 1, pp. 14-18

**ER Limited Project**
- Skip Form 3, Section C
- Complete Appendix A, pp. 10-14
**Required Actions: DFW 310 CMR 10.11**

**Diadromous fish run**

**Restoration OOC**
- Complete Form 3A, Section D
- Complete Appendix 1, pp. 14-18

**ER Limited Project**
- Skip Form 3, Section C
- Complete Appendix A, pp. 10-14
Required Actions: 401 WQC 310 CMR 10.11

Restoration OOC
- Complete Form 3A, Section D
- Complete Appendix 1, pp. 14-18

ER Limited Project
- Skip Form 3, Section C
- Complete Appendix A, pp. 10-14
ER Project is exempt from having to conduct a Wildlife Habitat evaluation if it meets CMR 10.12(1) and (2). CMR 10.12(3)
Minimum Required Documents 310 CMR 10.12

Required Documents

- ER Goals
- ER Project location,
- Construction sequencing,
- Maps of permanent alteration, rare species habitat, etc.
- Flood impact study for built environment.
Required Documents include

- Plan for controlling invasive species.
- NHESP written determinations.
- TOY restrictions or conditions.
- Proof that notice was published in Env Monitor.
- Eligibility criteria certification.
- O&M for infrastructure.
Minimum Required Documents

310 CMR 10.12

Required Documents

- 401 WQC if needed.
- Info to show a stream crossing design meets requirements of 310 CMR 10.24(10) for coastal or 10.53(8) for inland resource areas.
- Stream crossing baseline documentation.
- Stormwater Report.
Ecological restoration projects that meet the eligibility requirements in 310 CMR 10.13 shall be issued a Restoration OOC.
Restoration Order of Conditions
310 CMR 10.14, WPA Form 5A
Approvals and Denials are based solely on the ability of the project to meet all Eligibility Criteria in 310 CMR 10.13(1) through (7).

ROCC General Conditions 1-23 under WPA include Stormwater.
Special Conditions for each ER project type.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5a – Restoration Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

Special Conditions for Ecological Restoration Projects:

- Dam Removal

  This project involves dam removal and the following special conditions shall apply in addition to the general conditions set forth in 310 CMR 10.14(1):

  a) An as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plan and construction specifications approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of the dam removal.

  b) The applicant shall monitor the dam removal site during the first two years following completion of the dam removal. Said monitoring shall include a topographic survey of the longitudinal profile and stream cross-sections from downstream of the former dam through the upstream end of the former impoundment. The survey reference point shall comprise a permanent marker or recoverable survey point with known coordinates, such as a fixed point shown on the as-built plan, an existing bench mark, or a new benchmark. That marker should be identified or referenced on the plans and on the as-built plans. The applicant shall establish at least two photo-points for pre-and post-restoration monitoring at the dam removal site. At least one photo-point location shall be chosen to document a view of the dam pre-restoration and to document the same site after the dam is removed. A second location shall be chosen to document a view of the impoundment pre- and post-restoration. Photos shall be taken for two years after the dam removal is completed.
No provisions for Conservation Commissions to issue/attach additional conditions under WPA.

Provisions for Local Bylaw decisions are included in Form 5A.

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable?  ■ Yes  ■ No

2. The [Conservation Commission] hereby finds (check one that applies):

   a. [ ] that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:
      1. Municipal Ordinance or Bylaw
      2. Citation
Projects that meet the eligibility criteria set forth in 310 CMR 10.24(8) or 310 CMR 10.53(4) may be permitted as an ecological restoration limited project. (Use WPA Form 5)
Superseding Restoration OOC
Request for Departmental Action (310 CMR 10.05(7))

Appeal of Restoration OOC (310 CMR 10.05(7))

✓ “When the Order is a Restoration Order of Conditions, the basis of the request is limited to claim(s) that the applicant did not comply with one or more of the applicable procedural requirements of 310 CMR 10.05 and/or the conservation commission issued the General Order of Conditions in contravention of one or more of the applicable eligibility criteria. The request for Department action shall specifically identify any procedural requirements and eligibility criteria that the person requesting Department action alleges have not been met.
Ecological Restoration Limited Project OOC
Use WPA Form 5 – Order of Conditions
Stream Crossing Standards (SCS)

- Openness Ratio > 0.82
- Length
- Width > 1.2 times bankfull width
- Stream gradient consistent
- Culvert bed matches stream bed
New Non-tidal Stream Crossings

Comply fully with SCS
New Tidal Stream Crossings

Full natural tidal range
Replacement or work on existing crossings, the applicant must demonstrate that

- Impacts of the crossing have been avoided,
- Impacts of the crossing are minimized,
- Mitigation measures are provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.
Replacement or Work on Existing Non-tidal Stream Crossings

Maximum Extent Practicable
Replacement or Work on Existing Tidal Crossings

Tidal restriction is eliminated to the maximum extent practicable
Effective crossings include...

- Bridges
- Open bottom arches
- Culverts that span, and are sunk into, the streambed
At a minimum, in evaluating the potential to comply with the standards to the maximum extent practicable the following should be considered;
The potential for downstream flooding;
- Upstream and downstream habitat (in-stream habitat, wetlands);
- Potential for erosion and head-cutting;
- Stream stability;
Habitat fragmentation caused by the crossing;
Especially at priority crossings that maximize the miles of habitat “connectedness” that would be achieved by construction of a wildlife passage structure.
The ability of crossings to convey storm flows
Engineering design constraints specific to the crossing

Bed Material Design - Alluvial

Relative grain sizes
Stream Crossing Standards
“Maximum Extent Practicable”

- Hydrologic constraints specific to the crossing;
- Impacts to wetlands that would occur by improving the crossing;
Granlund cartoon: Spring flooding

SEEMS WETTER THAN USUAL THIS SPRING...

SPEED LIMIT 30 KNOTS

DAVE GRANLUND © www.davegranlund.com
Tropical Storm Irene, Hurricane Sandy and Extreme Storm Events

The cost of replacement
Bottom of span is above the elevation of the top of bank.

Design to maintain the natural movement of water and sediment through the crossing.
Stream Crossing Standards

- Openess Ratio > 0.82
- Length
- width > 1.2 times bankfull width
- culvert bed matches stream bed
- Stream gradient consistent

Courtesy of The Nature Conservancy
Stream Crossing Standards for Ecological Restoration Projects

- **Openness Ratio > 0.82**
- **Length**
- **Width > 1.2 times bankfull width**
- **Stream gradient consistent**
- **Culvert bed matches stream bed**

Courtesy of The Nature Conservancy
Thanks for Coming!

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Citations and Links

- Vermont Agency of Natural Resources: Climate Change Team: *Tropical Storm Irene by the Numbers*
  http://www.anr.state.vt.us/anr/climatechange/irenebythenumbers.html

- T. Madsen and N. Willcox. 2012. *When It Rains, It Pours: Global Warming and the Increase in Extreme Precipitation from 1948 to 2011*
  http://www.environmentamerica.org/sites/environment/files/reports/When%20It%20Rains,%20It%20Pours%20vUS.pdf

- Flood Effects on Road-Stream Crossing Infrastructure: Economic and Ecological Benefit of Stream Simulation Designs

  http://www.umassscaps.org/docs_reports/index.html