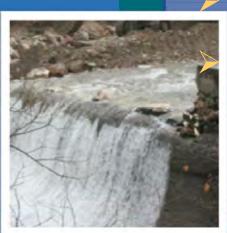
Wetlands Protection Act Ecological Restoration (ER)

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



Presented by

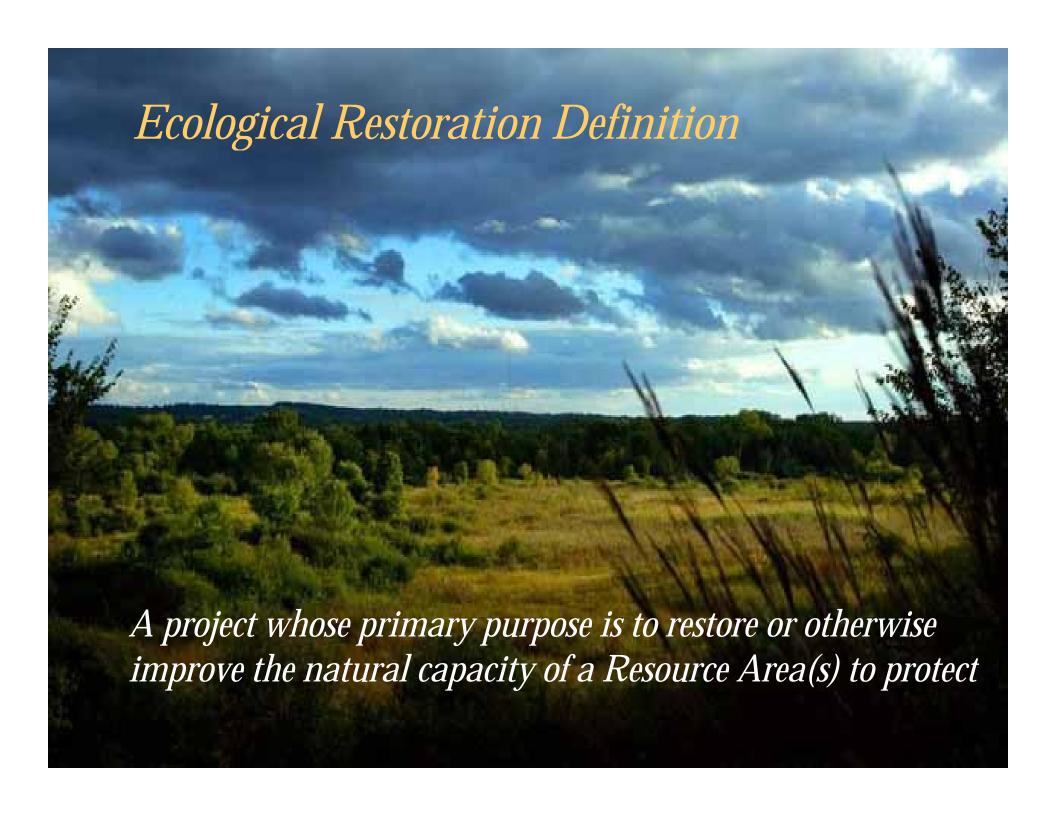
Nancy Lin and Alice Smith

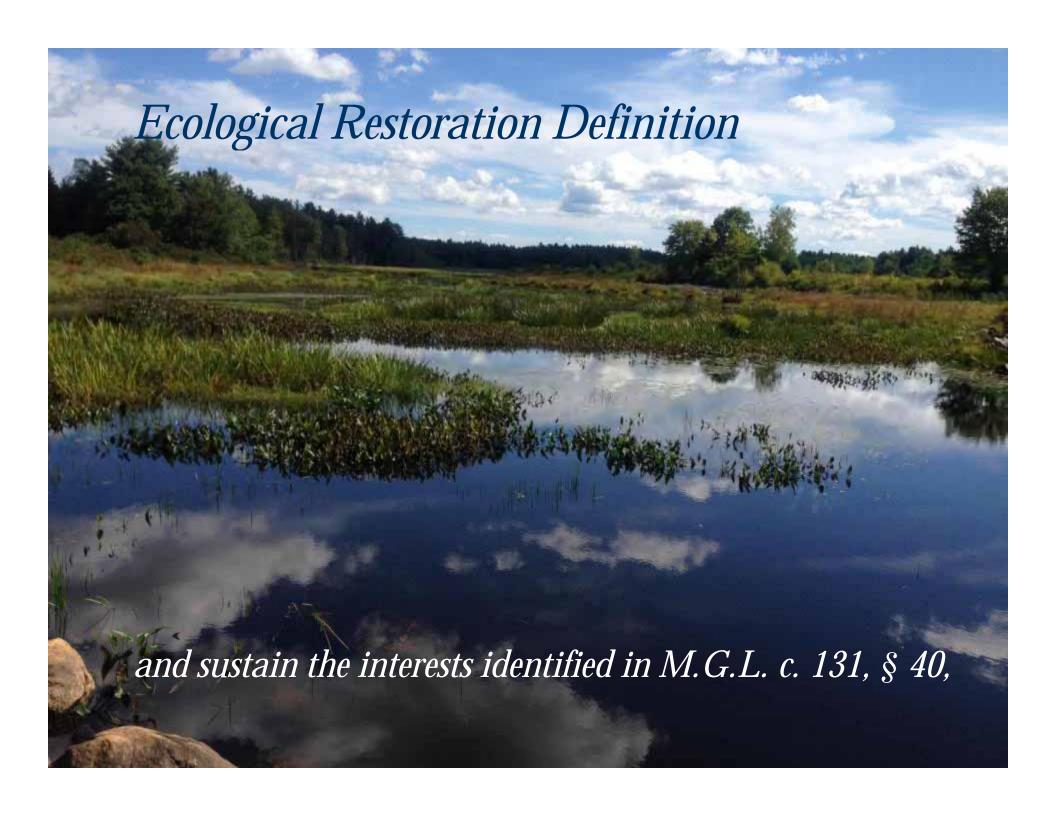
MassDEP Wetlands and Waterways Program

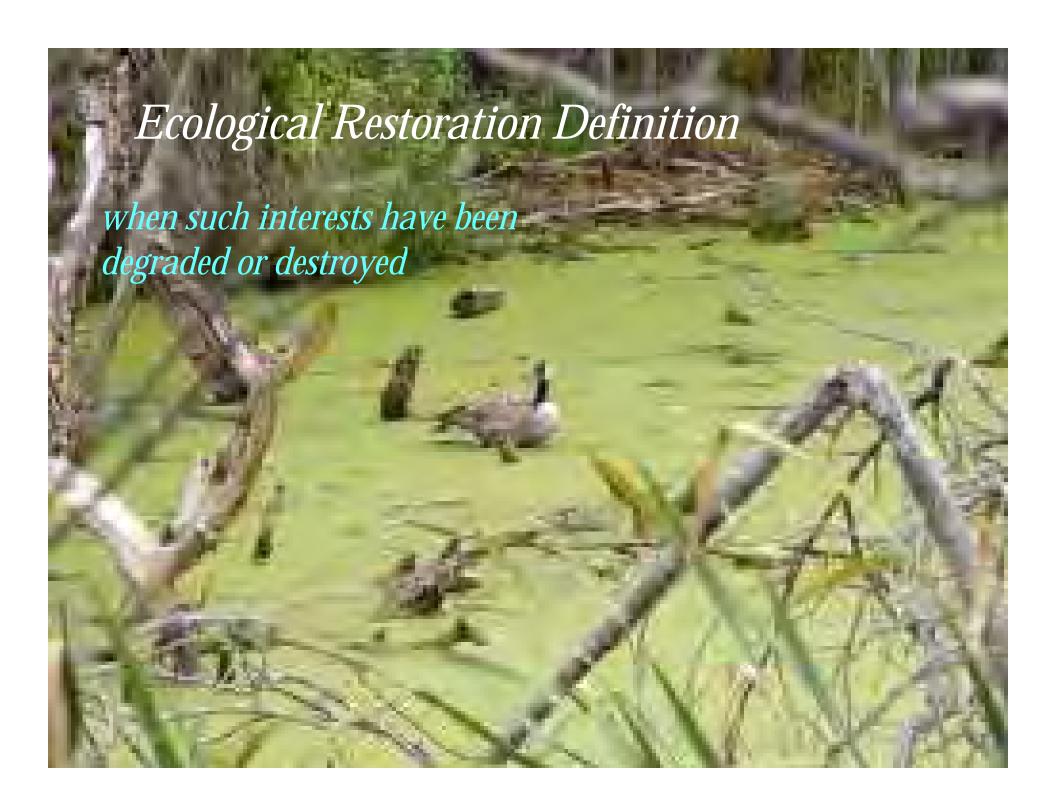
Funded in part by a Federal Clean Water Act Wetland Program Development Grant (WPDG) 104(b)(3) from U.S. EPA.











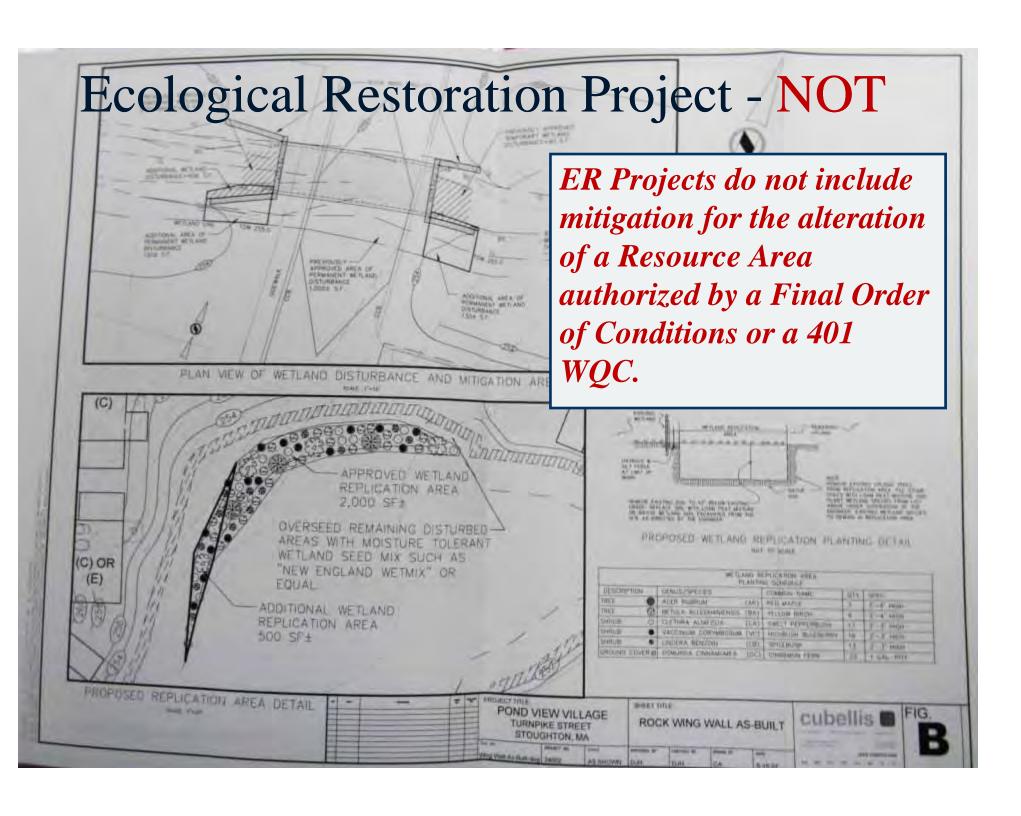


Ecological Restoration Limited Project?

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).

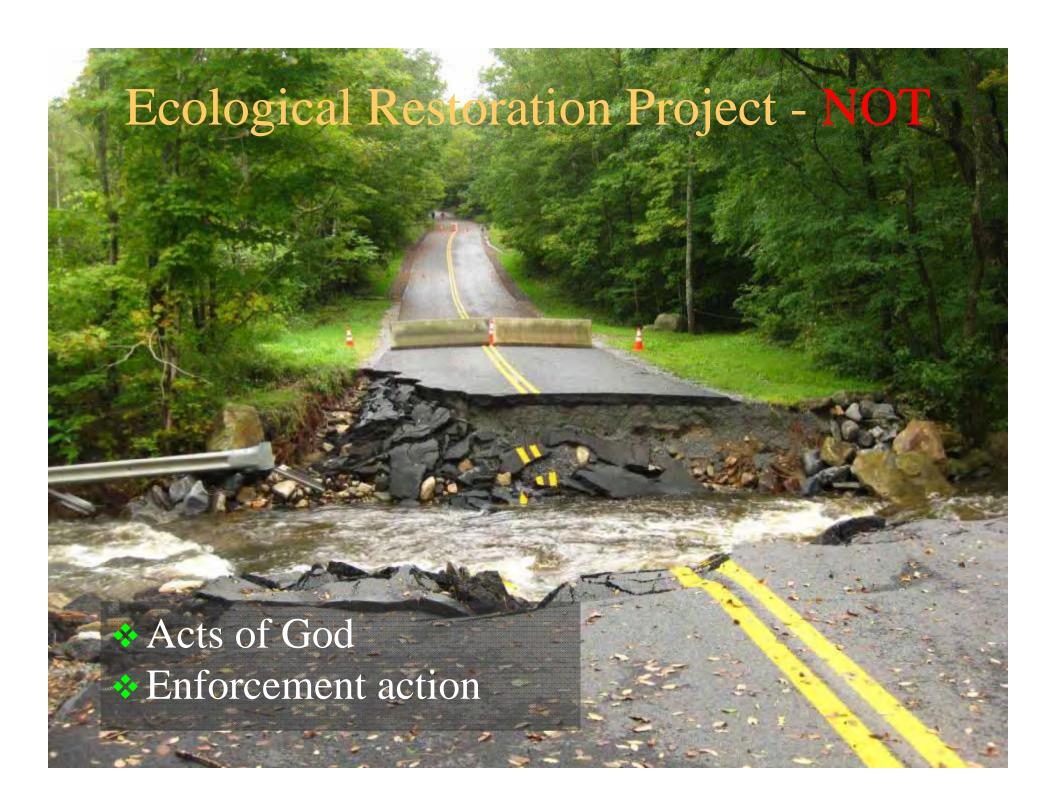




Ecological Restoration Project - NOT



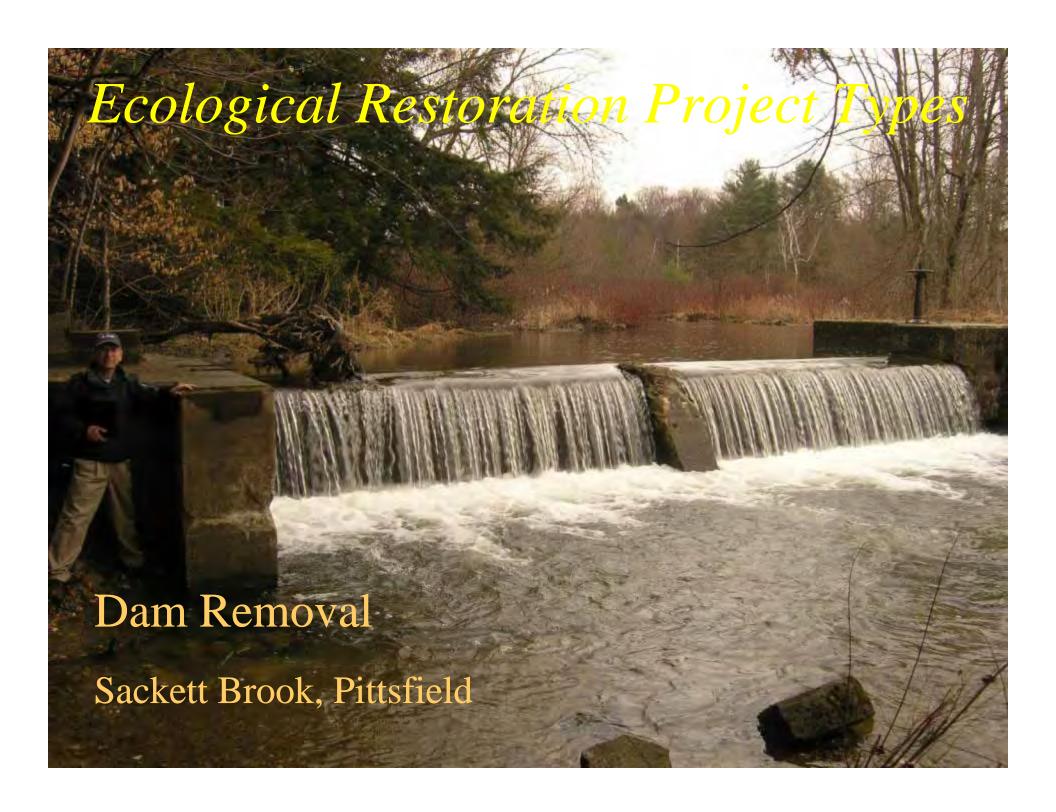




Ecological Restoration

Project Types









Ecological Restoration Project Types









Ecological Restoration

Advantages of General Permit



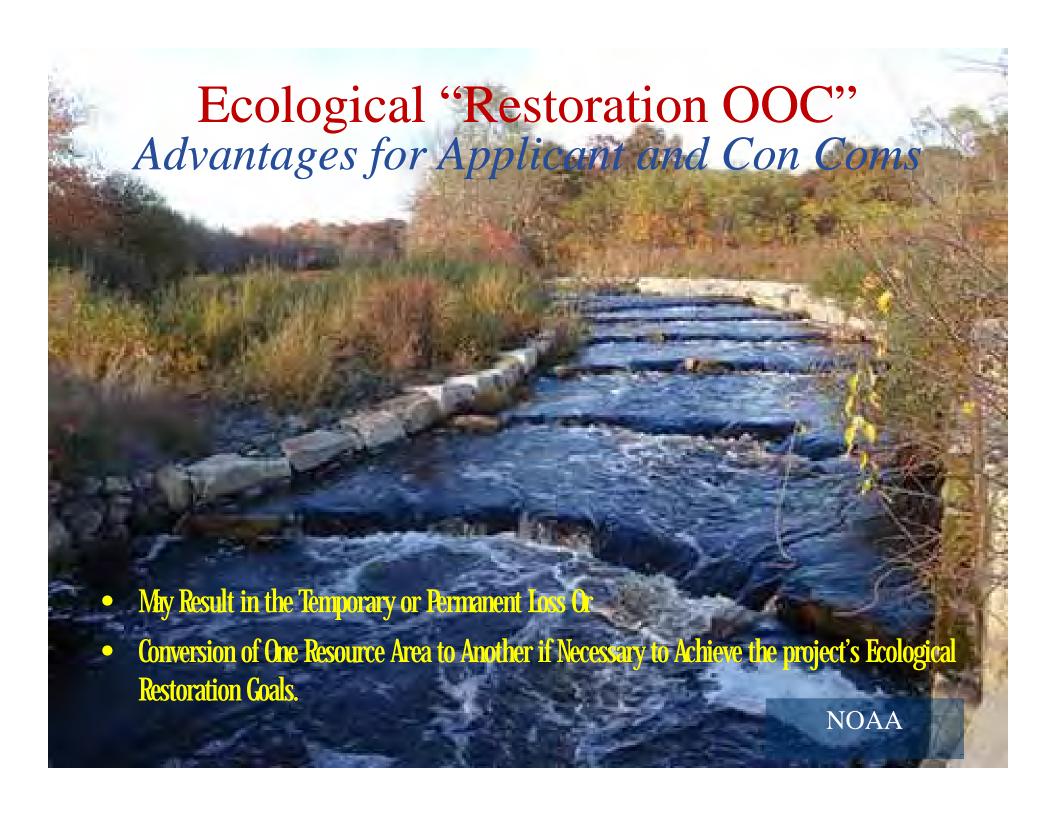
Ecological "Restoration OOC" Advantages for Applicant and Con Coms





Ecological "Restoration OOC" Advantages for Applicant and Con Coms



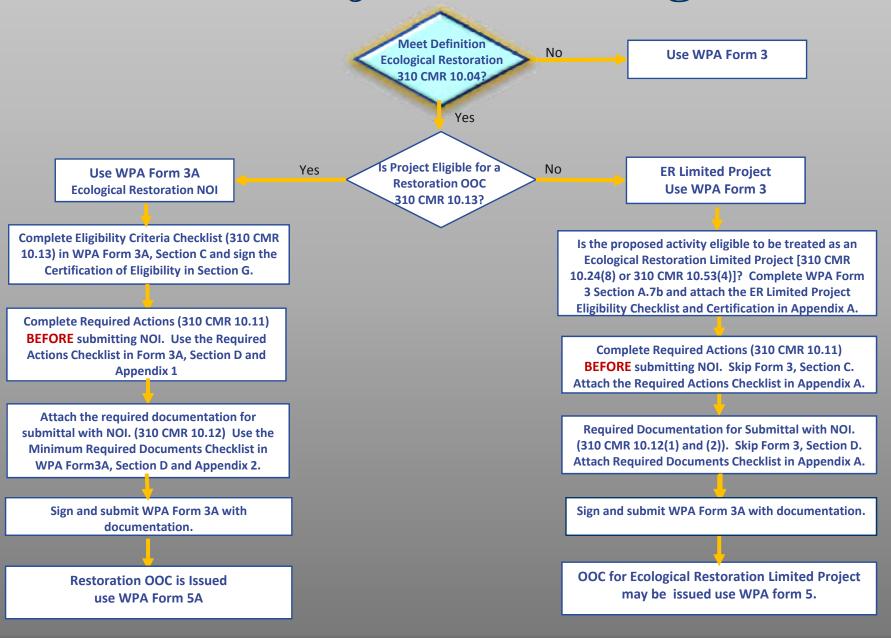


Ecological Restoration

Permitting Process



Restoration Project Permitting Process



Is Project an Ecological Restoration?

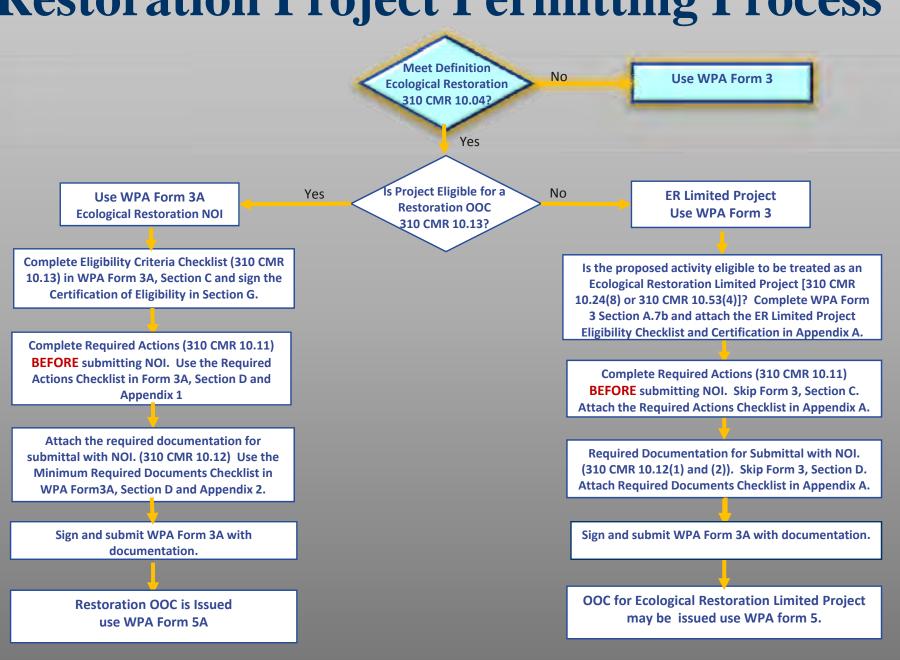




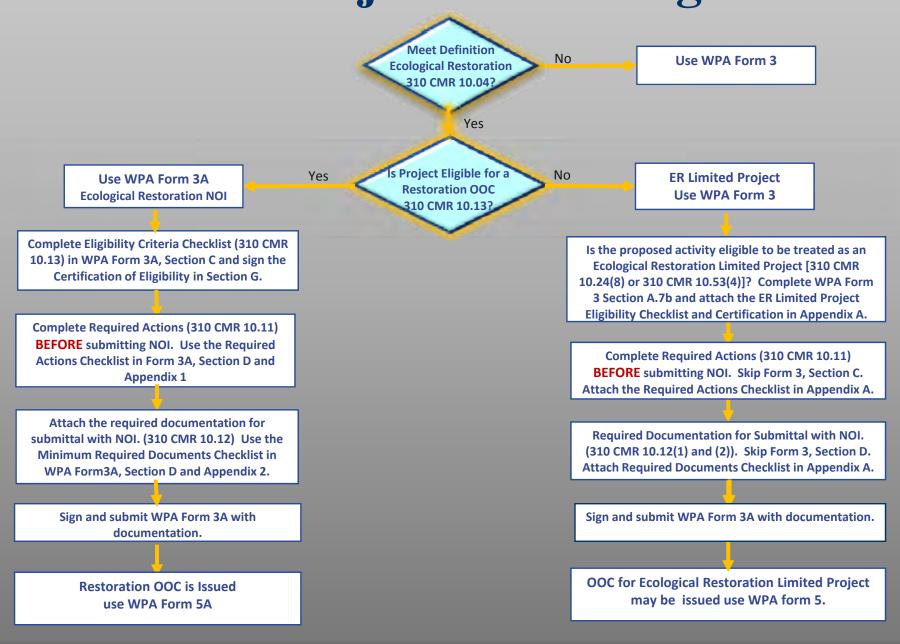
A project whose primary purpose is to restore or otherwise improve the natural capacity of a Resource Area(s) to protect and sustain the interests identified in M.G.L. c. 131, § 40, when such interests have been degraded or destroyed by anthropogenic influences. (310 CMR 10.04)

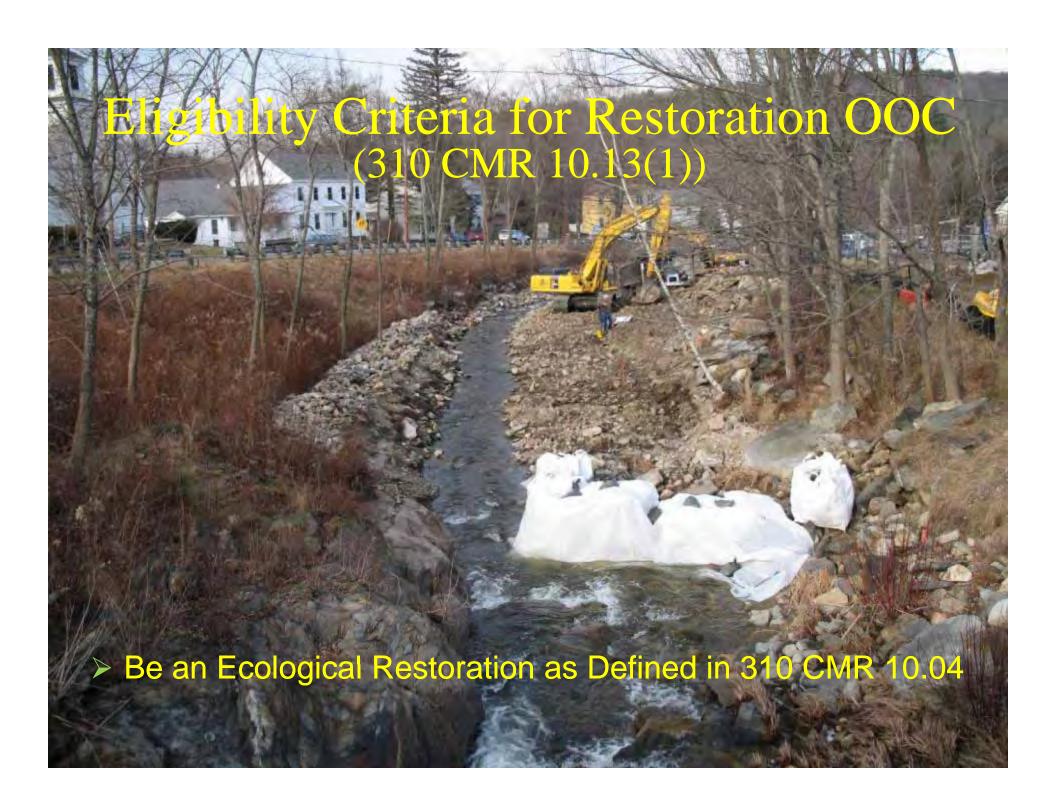


Restoration Project Permitting Process



Restoration Project Permitting Process





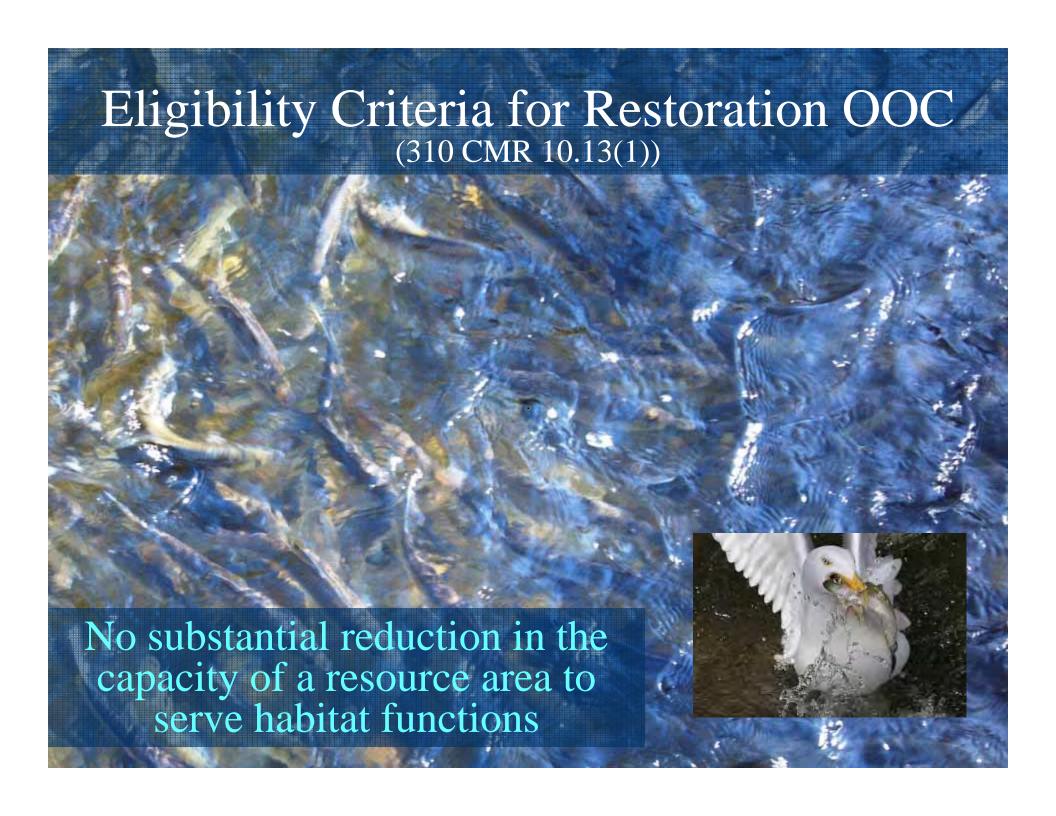
Eligibility Criteria for Restoration OOC (310 CMR 10.13(1))

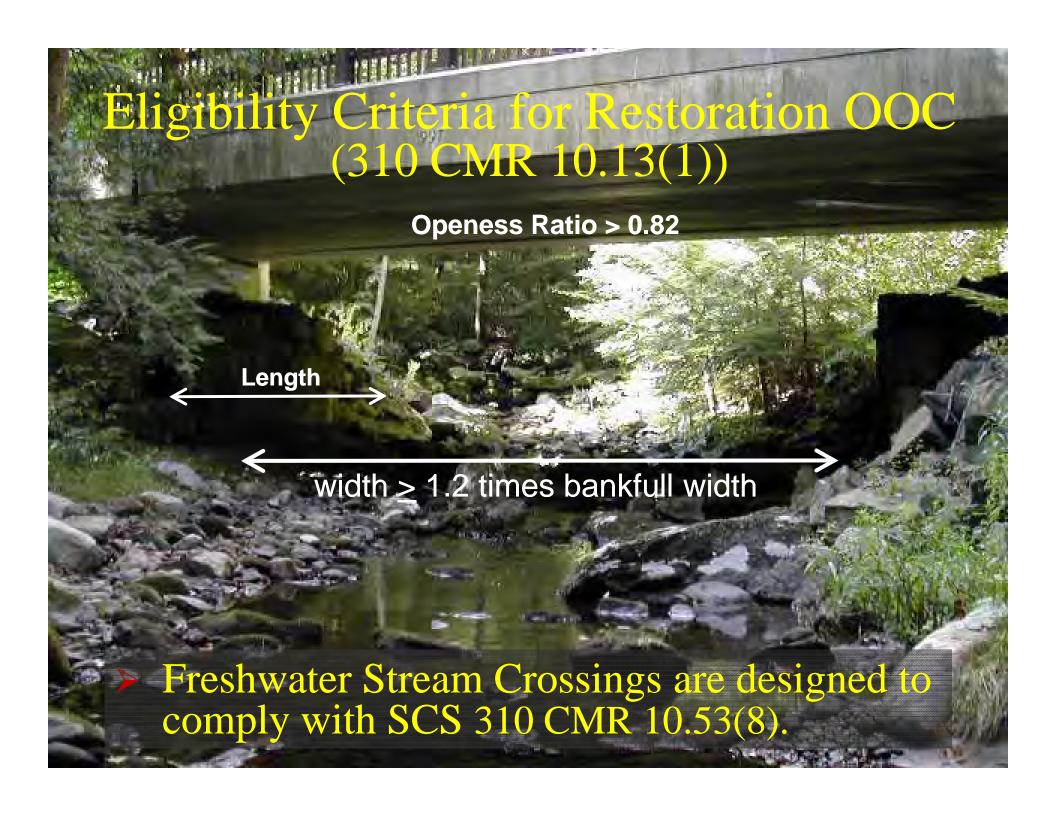




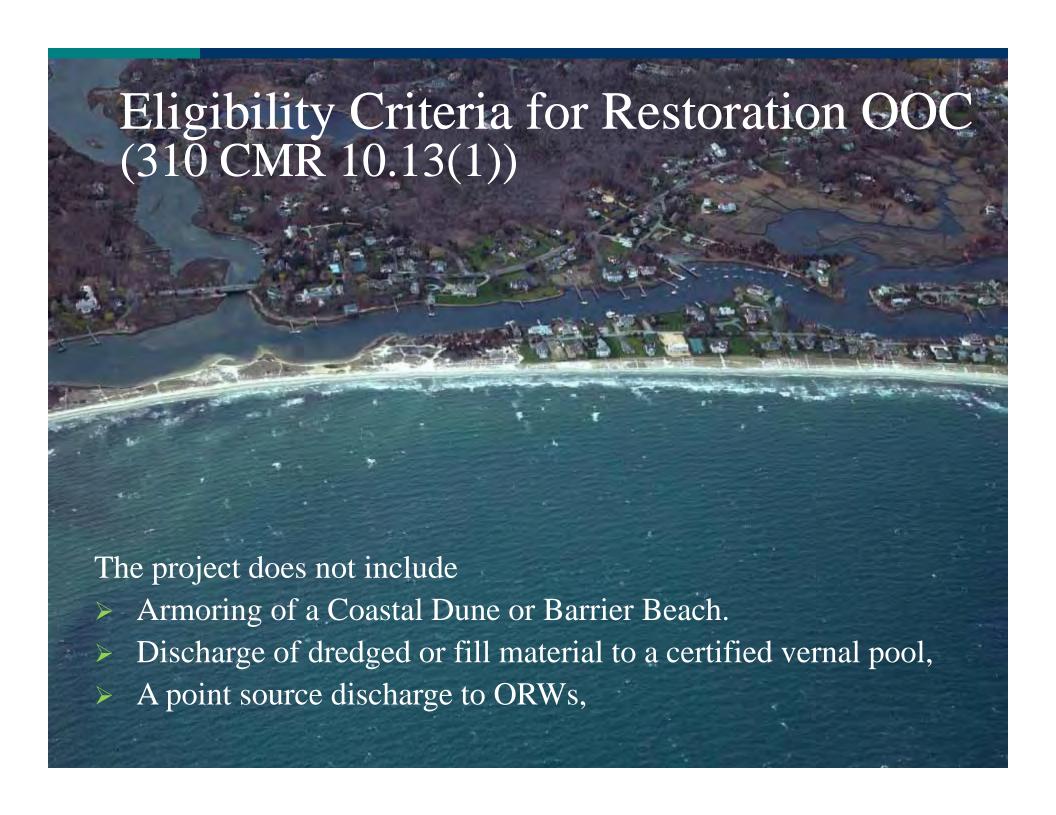














Eligibility Criteria for Restoration OOC

(310 CMR 10.13(1))

NHESP Review

- ➤ If project is within rare species habitat a written

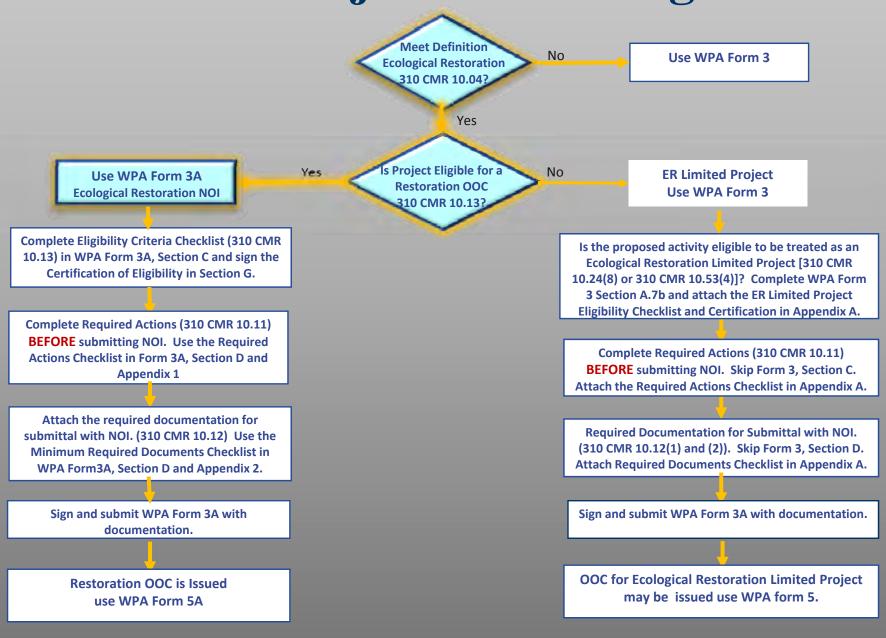
 Determination from NHESP that project will not have adverse effect on specified habitat sites within the resource.
- Determination identifies Rare Species and recommends appropriate changes or conditions to insure no short or long term adverse effects or
- Project is carried out in accordance with Habitat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

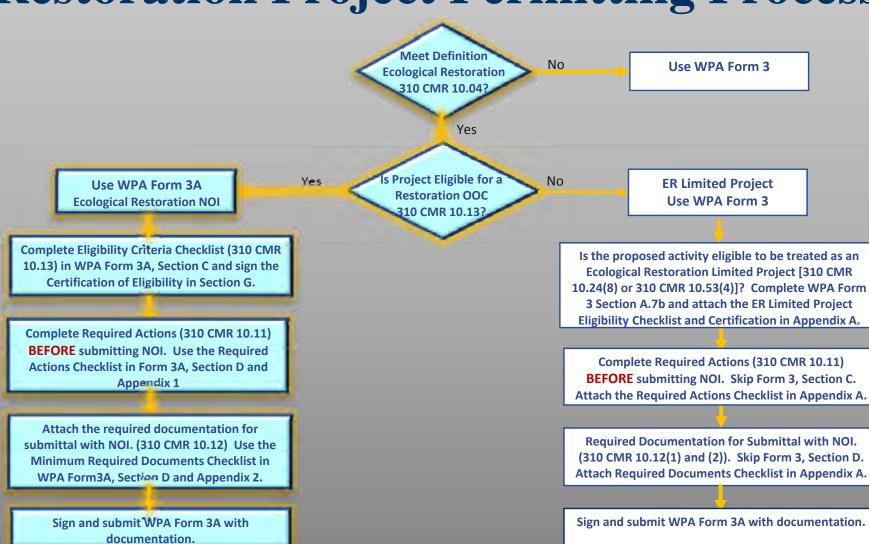
Estimated Habitat Map of State-Listed Rare Wetlands Wildlife Natural Heritage and Endangered Species Program (321 CMR 10.12). 1000 m 2000 ft Scale = 1:72,224 278,700.78m 849,495.70m

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

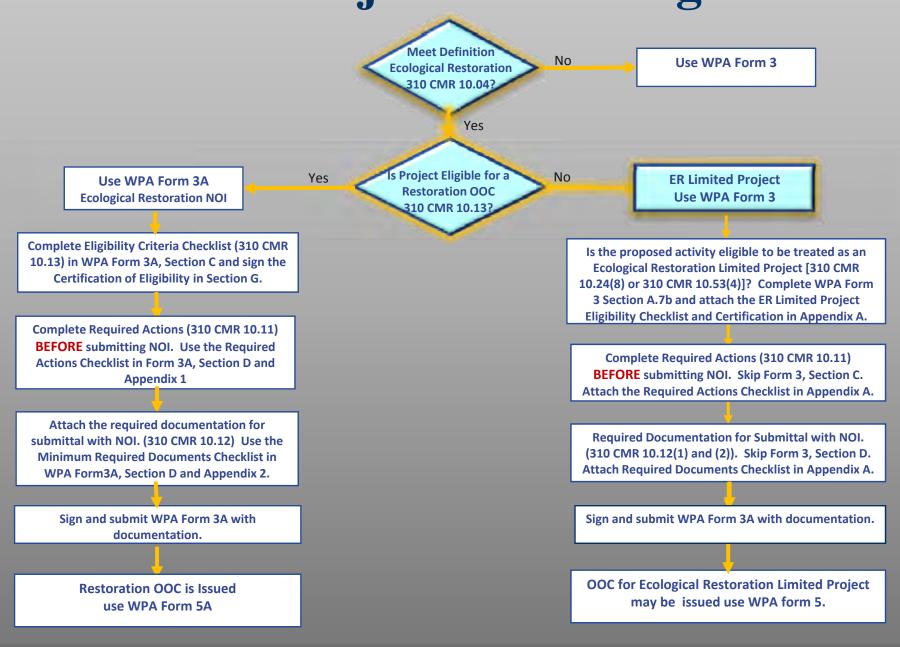
Restoration OOC 310 CMR 10.13(Inland ERLP	Coastal ERLP	Inland - ER Limited Project 310 CMR 10.53(4)(a)	Coastal - ER Limited Project 310 CMR 10.24(8)(a)
·	10.53(4)(a)	10.24(8)(a)		
(a) The project is an Ecological Restoration Project as defined in 310 CMR 10.04, is a project type listed in 310 CMR 10.13(2) through (7), and the applicant has submitted a Notice of Intent that meets all applicable requirements of 310 CMR 10.12.	√	✓	 the Issuing Authority determines that the project is an Ecological Restoration Project as defined in 310 CMR 10.04; 	 The Issuing Authority determines that the project is an Ecological Restoration Project as defined in 310 CMR 10.04;
(b) The project will further at least one of the interests identified in M.G.L. c. 131, § 40.				
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 Natura Heritage and Endangered Species Program and submitted with the Notice of Intent.		✓	most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife published by the Natural Heritage and Endangered Species Program (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	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 Wetlands Wildlife published by the Natural Hertiage and Endangered Species Program (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;
(d) To the maximum extent practicable, the project will:				
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;				
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; and	,			
s. utilize best management practices such as erosion and siltation controls 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 will involve 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 CMR9.00: 401 Water Quality Certification for Discharge of Dredged or Fill Material, Dredging, and Dredged Materia Disposal in Waters of the United States Within the Commonwealth.	v	√	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	If the project is located in a Coastal Dune or Barrier Beach, the applicant has demonstrated that s/he has avoided and minimized armoring of the Coastal Dune or Barrier Beach to the maximum extent practicable; and

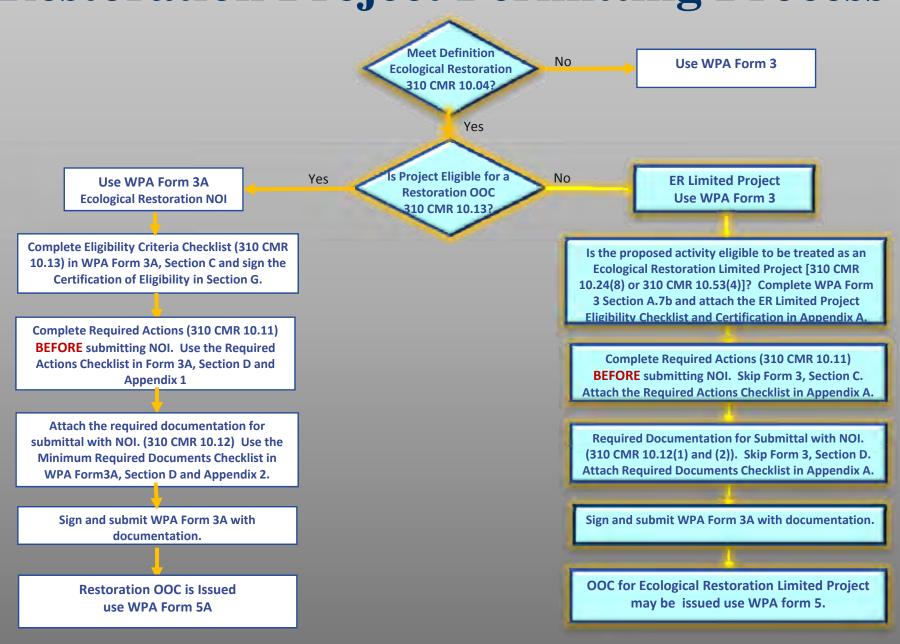




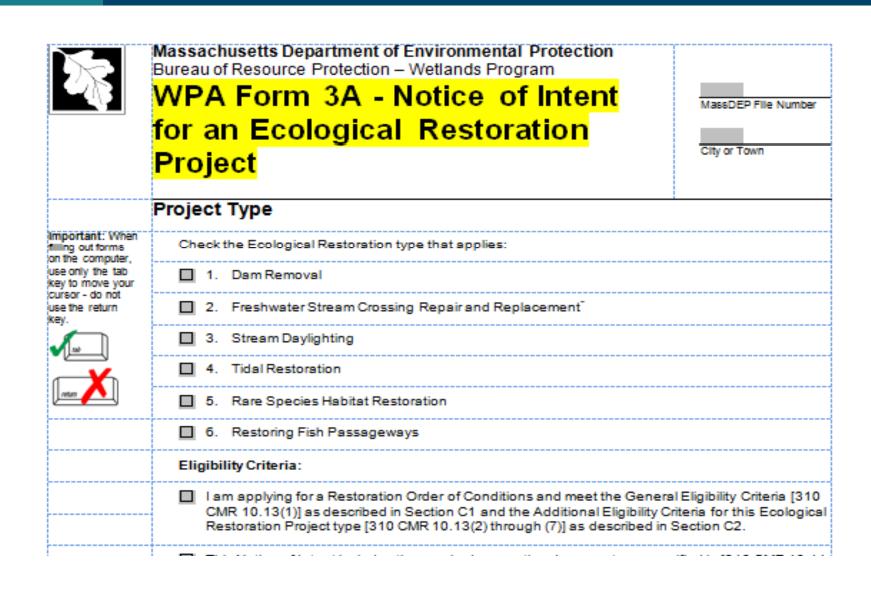
Restoration OOC is Issued use WPA Form 5A

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





Project is Eligible for Restoration OCC *Use WPA Form 3A*



Project is ER Limited Project Use WPA Form 3



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

WPA Form 3 - Notice of Intent

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

Provided by MassDEP: MassDEP File Number City/Town

Important.





	i-onoral	Informat	
-			
	THE SECTION AND ADDRESS.		

a. Street Address	b. City/Town	c. Zip Code		
Latitude and Longitude:	d. Latitude	e. Longitude		
f. Assessors Map/Plat Number	g. Parcel /Lot Numbe	g. Parcel /Lot Number		
Applicant:				
Applicant: a. First Name	b. Last Name			
	b. Last Name			
a. First Name	b. Last Name			

Projects Eligible for Restoration OCC

Complete Project Description / ER Eligibility Checklist WPA Form 3A, Section C, pp. 4-9

h Identify the appropriate resource area(s) type/name Square feet or linear feet
C. Ecological Restoration Project Description
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.

wpaform3a • 10/24/14 Form Name • Page 4 of 19



Project is ER Limited Project

Complete Project Description WPA Form 3, Section A.7b, p.2

	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 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.
8	3. Property recorded at the Registry of Deeds for:
	MassDEP

Project is Not Eligible for Restoration OCC

Complete ER Eligibility Checklist WPA Form 3, Appendix A, p.1



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

Eligibility Checklist

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.

Provided by MassDEP:

City/Town

MassDEP File Number

Document Transaction Number

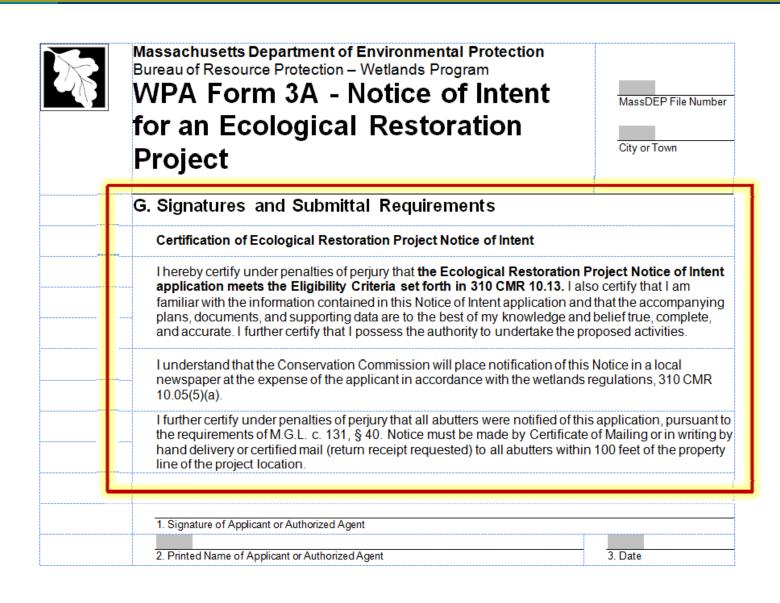
Important:

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

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



MassDEP

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

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

Date

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

MEPA Environmental Monitor - Current Issue

Feb 11, 2015 Volume 83, Issue 7

The Environmental Monitor

a publication of the Massachusetts Executive Office of Energy and Environmental Affairs Charles D. Baker, Jr., Governor Matthew Beaton, Secretary

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

Secretary's Certificates Jan. 16 - 31, 2015

Environmental Notification Forms

Environmental Impact Reports

Notices of Project Change

Records of Decision

Other Projects Under Review

Environmental Notification Forms

Environmental Impact Reports

Notices of Project Change

Requests for Advisory Opinion

Public Notices

Submitting Public Notices

Site Visits

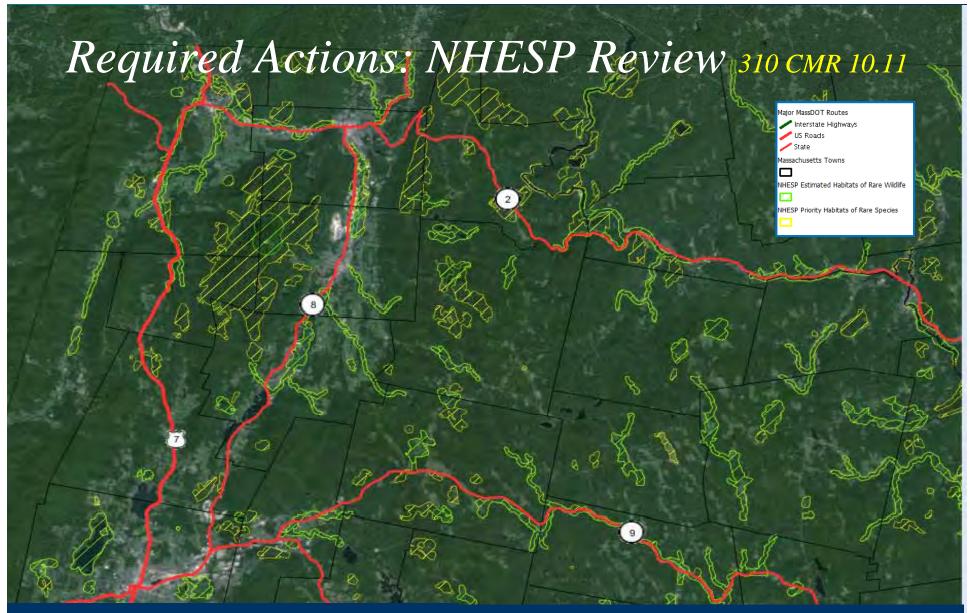
Projects Submitted Jan. 16 - Feb. 2, 2015

Environmental Notification Forms

Restoration OOC

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

- Skip Form 3, Section C
- ➤ Complete Appendix A, pp. 10-14



Restoration OOC

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

- ➤ Skip Form 3, Section C
- Complete Appendix A, pp. 10-14



Restoration OOC

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

- ➤ Skip Form 3, Section C
- Complete Appendix A, pp. 10-14

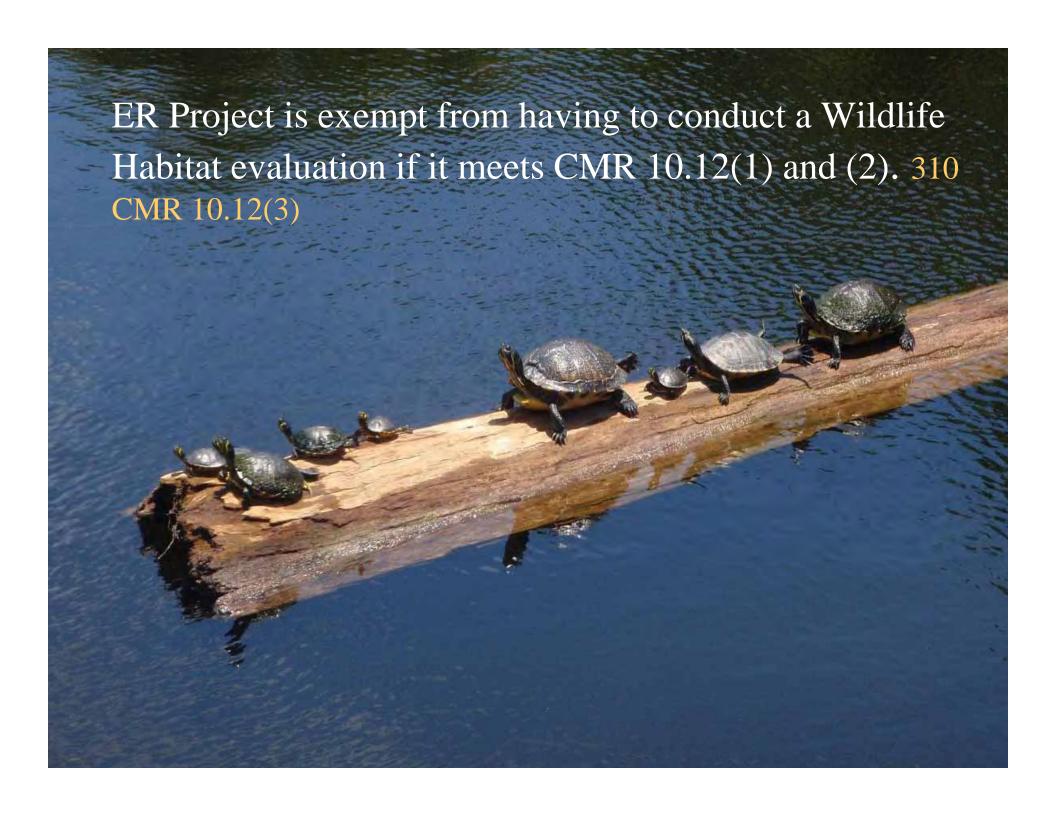


Restoration OOC

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

- Skip Form 3, Section C
- ➤ Complete Appendix A, pp. 10-14





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.



Minimum Required Documents 310 cmr 10.12

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.



Restoration Order of Conditions 310 CMR 10.14

Ecological restoration projects that meet the eligibility requirements in 310 CMR 10.13 shall be issued a Restoration OOC.



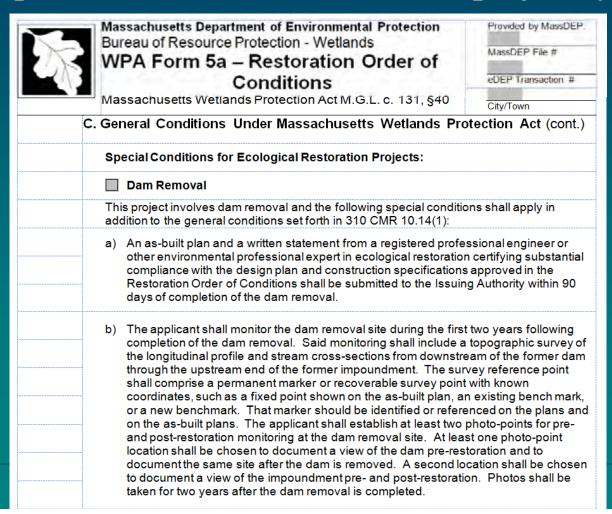
N.	Bureau of Resource F WPA Form 5a – C Massachusetts Wetland	Restoration Order of conditions is Protection Act M.G.L. c. 131, §40	Provided by MassDEP: MassDEP File # eDEP Transaction # City/Town		
	A. General Informat	tion			
Please note:					
this form has been modified	1. From: Conservation Commission				
space to accommodate	2 This issuance is for a. ☐Order of Conditions b. ☐ Amen (check one):		led Order of Conditions		
the Registry of Deeds Requirements	3.To: Applicant:				
	a. First Name	b. Last Name			
Important: When filling	a. i no manie				
out forms on the	c. Organization				
computer,	d. Mailing Address				
use only the tab key to	u. maining Address	·			
move your cursor - do	e. City/Town	f. State	g. Zip Code		
	4. Property Owner (if different from applicant):				
	a. First Name		b. Last Name		
V I∞	a. First Name	D. Last Name). Last Name		
	c. Organization				
nter 🔨					
	d. Mailing Address				
	e. City/Town	f. State	q. Zip Code		
	5. Project Location:				
	a. Street Address	b. City/Town	h City/Town		
	a. Saleta muuletta	B. City/Town			
	c. Assessors Map/Plat Number	d. Parcel/Lot Number	d. Parcel/Lot Number		
COMPANY CONTRACTOR			Danie CoCOC		



- 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.





- No provisions for Conservation Commissions to issue/ attach additional conditions under WPA.
- Provisions for Local Bylaw decisions are included in Form 5A.

D	D. Findings Under Municipal Wetlands Bylaw or Ordinance				
1.	ls a municipal v	wetlands bylaw or ordinance applic	able? 🗌 Yes 🔲 No	D	
2.	The Conservation	on Commission	hereby finds (check on	e that applies):	
		proposed work cannot be condition or dinance or bylaw, specifically:	ned to meet the standards	set forth in a	
	1. Municipal C	Ordinance or Bylaw		2. Citation	

ER Limited Project OOC

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)

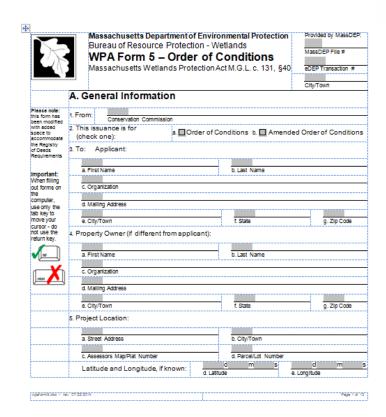


Superseding Restoration OOC Request for Departmental Action (310 CMR 10.05(7))

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

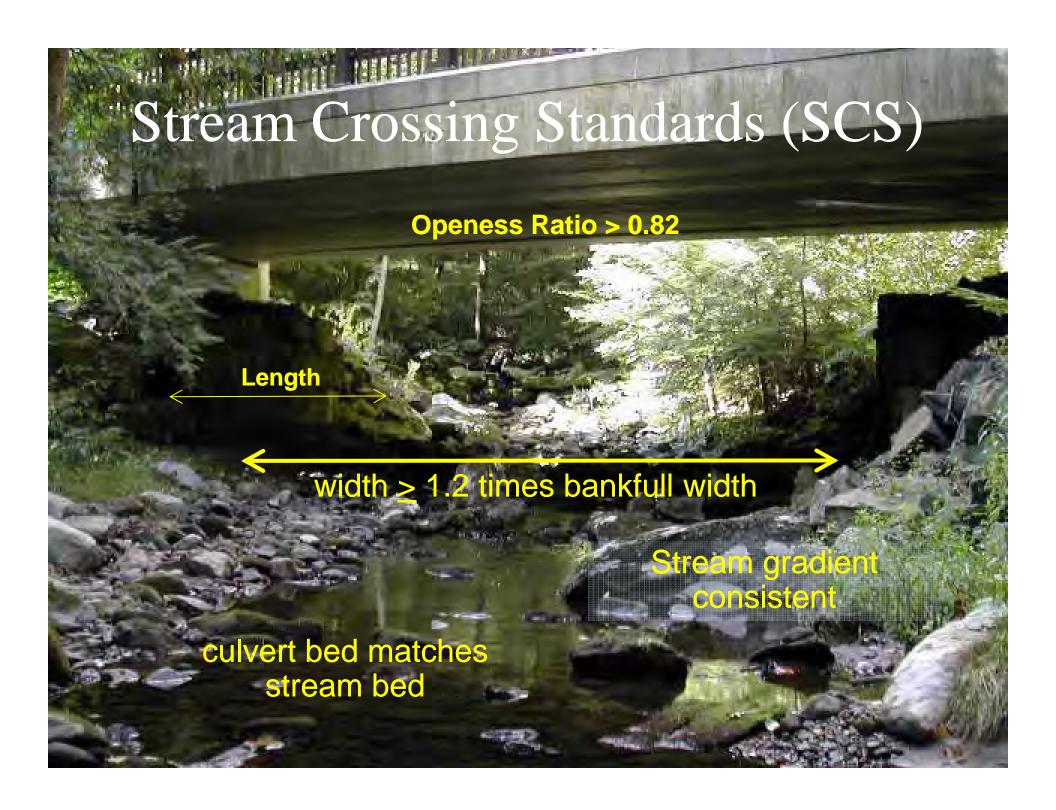
"When the Order is a Restoration Order of Conditions, the basis of the request is limited to claim(s) that the applicant did not comply with one or more of the applicable procedural requirements of 310 CMR 10.05 and/or the conservation commission issued the General Order of Conditions in contravention 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









New Non-tidal Stream Crossings



New Tidal Stream Crossings



Stream Crossing Standards (SCS) 310 CMR 10.53(8) and 10.24(10)

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.

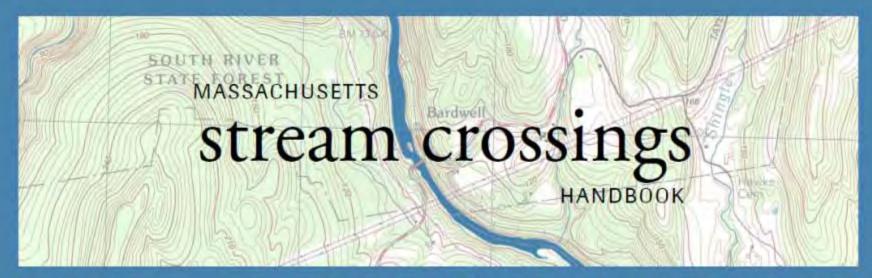


Replacement or Work on Existing Non-tidal Stream Crossings



Replacement or Work on Existing Tidal Crossings





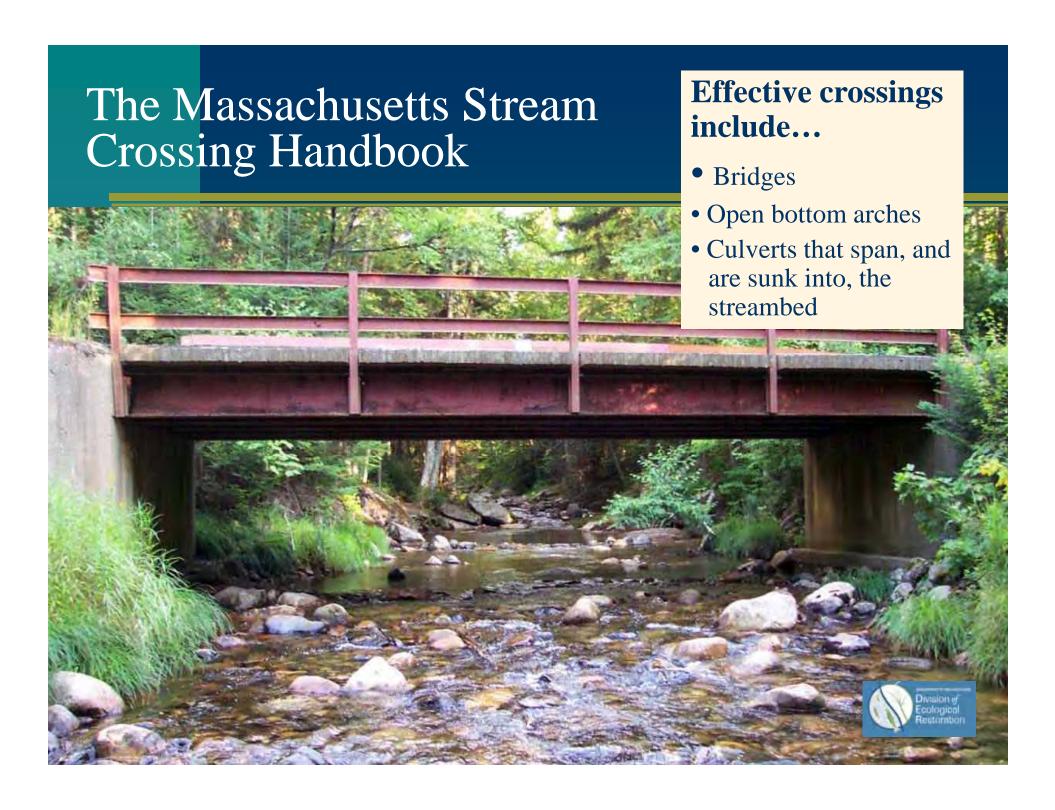




DIVISION OF ECOLOGICAL RESTORATION

http://www.mass.gov/eea/agencies/dfg/der/publications/technical-resources/



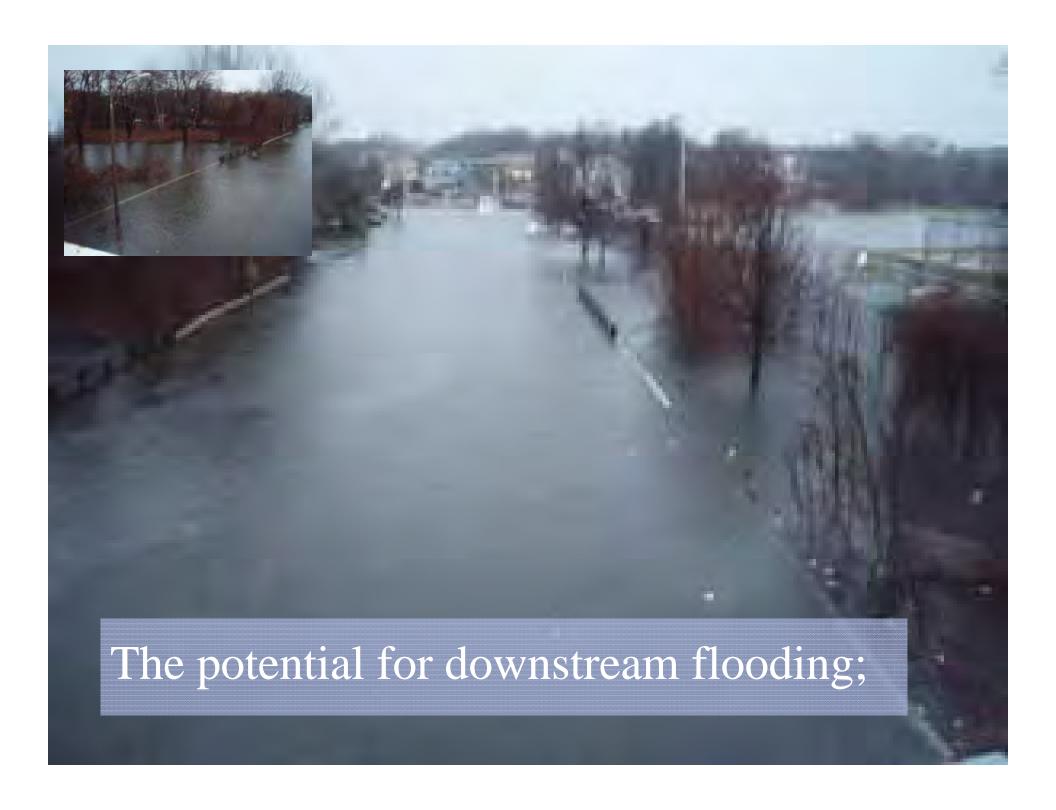


Reviewing Stream Crossing Projects

At a minimum,

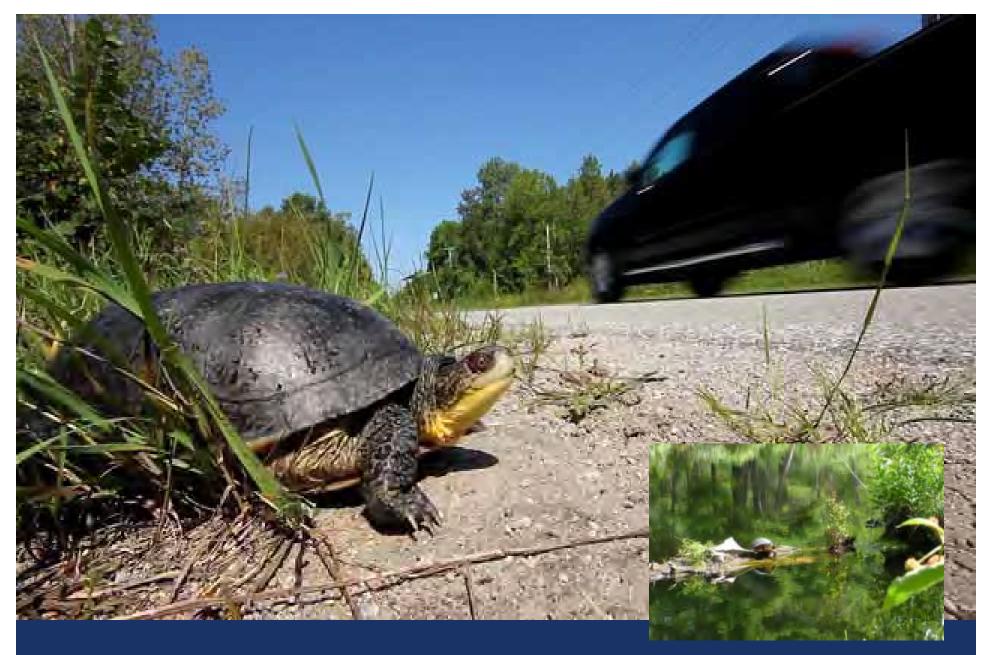
in evaluating the potential to comply with the standards to the maximum extent practicable the following should be considered;



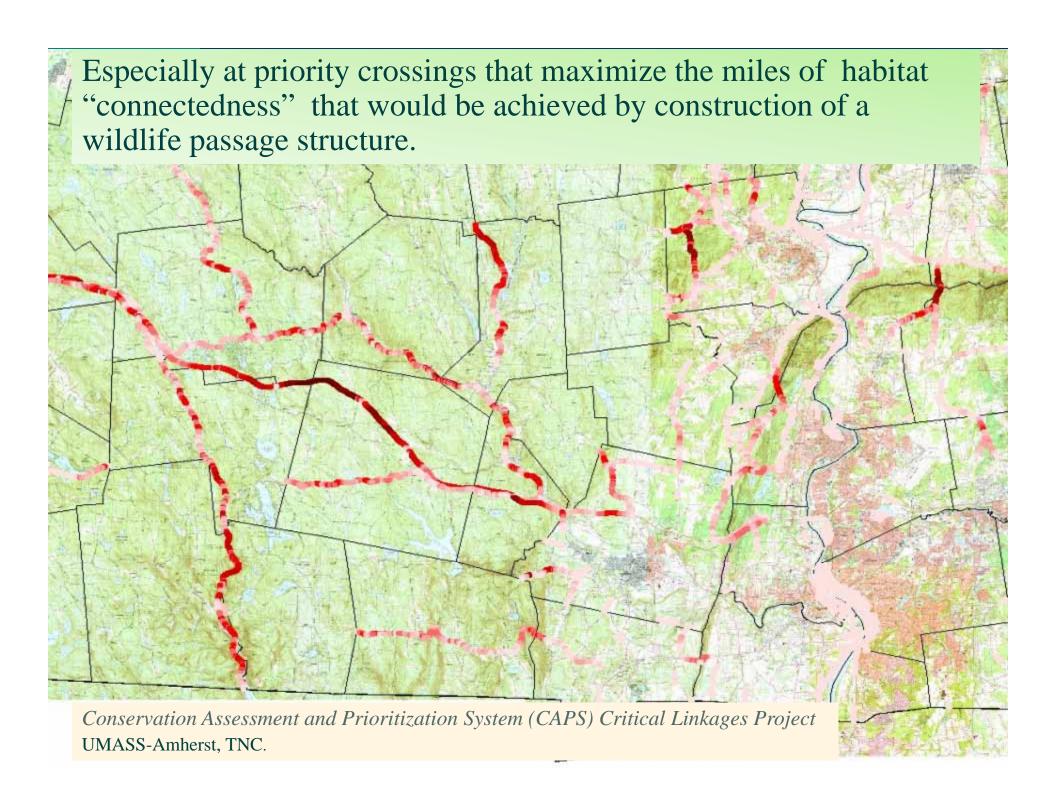








Habitat fragmentation caused by the crossing;



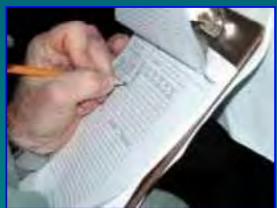


Engineering design constraints specific to the crossing

Bed Material Design - Alluvial







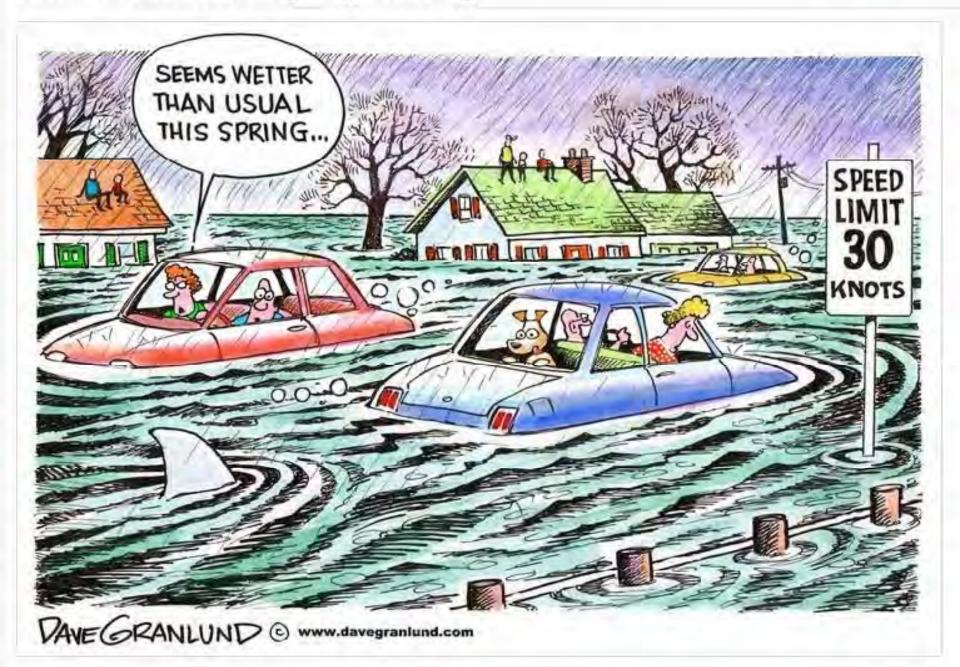


Stream Crossing Standards "Maximum Extent Practicable"

- Hydrologic constraints specific to the crossing;
- Impacts to wetlands that would occur by improving the crossing;



Granlund cartoon: Spring flooding











Thanks for Coming!

Contact Information

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Alice Smith

Phone: (617) 292-5854

Email: Alice.Smith@state.ma.us

Mark Stinson

Phone: (413) 755-2257

Email: Mark.Stinson@state.ma.us



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%20

 It%20Rains,%20It%20Pours%20vUS.pdf
- Flood Effects on Road-Stream Crossing Infrastructure: Economic and Ecological Benefirt of Stream Simulation Designs

 http://mc.manuscriptcentral.com/Fisheries and http://fisheries.org/better-road-stream-crossing-designs-can-help-prevent-road-wash-outs-and-help-fish
- Kevin McGarigal, Bradley W. Compton, Scott D. Jackson, Ethan Plunkett and Eduard Ene, 2012. Critical Linkages Phase 1: Assessing Connectivity Restoration Potential for Culvert Replacement, Dam Removal and Construction of Wildlife Passage Structures in Massachusetts