Dam Removal Permitting in Massachusetts

Dam Busters 101

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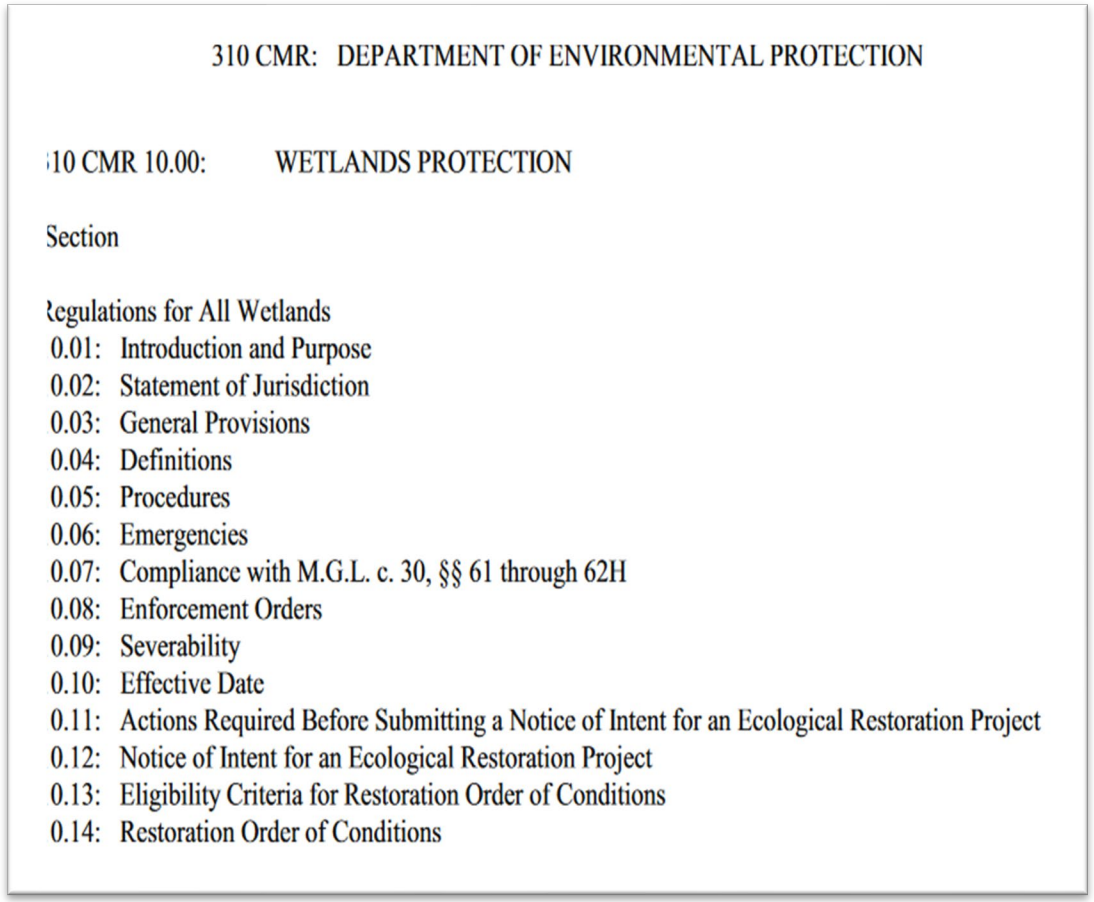
Horsley Witten Group

September 2024

Today's Agenda



310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 10.00: WETLANDS PROTECTION

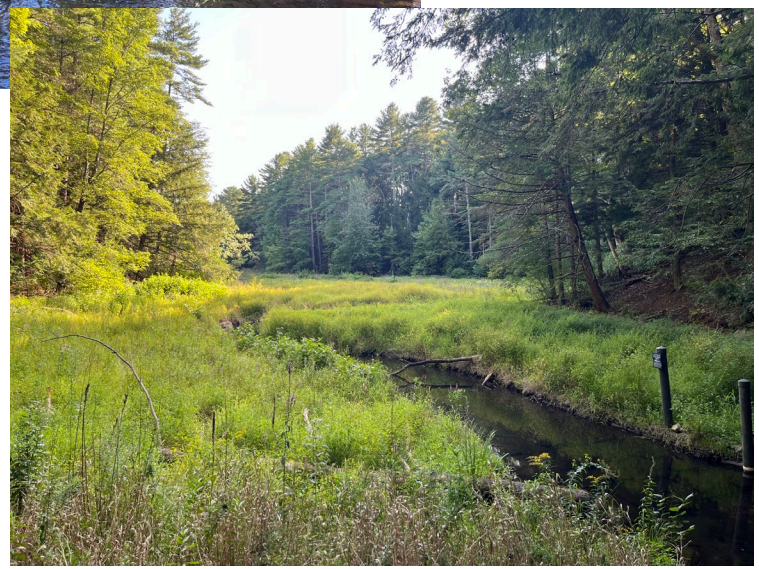
Section

Regulations for All Wetlands
10.01: Introduction and Purpose
10.02: Statement of Jurisdiction
10.03: General Provisions
10.04: Definitions
10.05: Procedures
10.06: Emergencies
10.07: Compliance with M.G.L. c. 30, §§ 61 through 62H
10.08: Enforcement Orders
10.09: Severability
10.10: Effective Date
10.11: Actions Required Before Submitting a Notice of Intent for an Ecological Restoration Project
10.12: Notice of Intent for an Ecological Restoration Project
10.13: Eligibility Criteria for Restoration Order of Conditions
10.14: Restoration Order of Conditions

- Big Picture Context
- Permitting Process Overview
- Ecological Restoration NOI or not?
- Permitting Details
- Questions/ Input from others on call

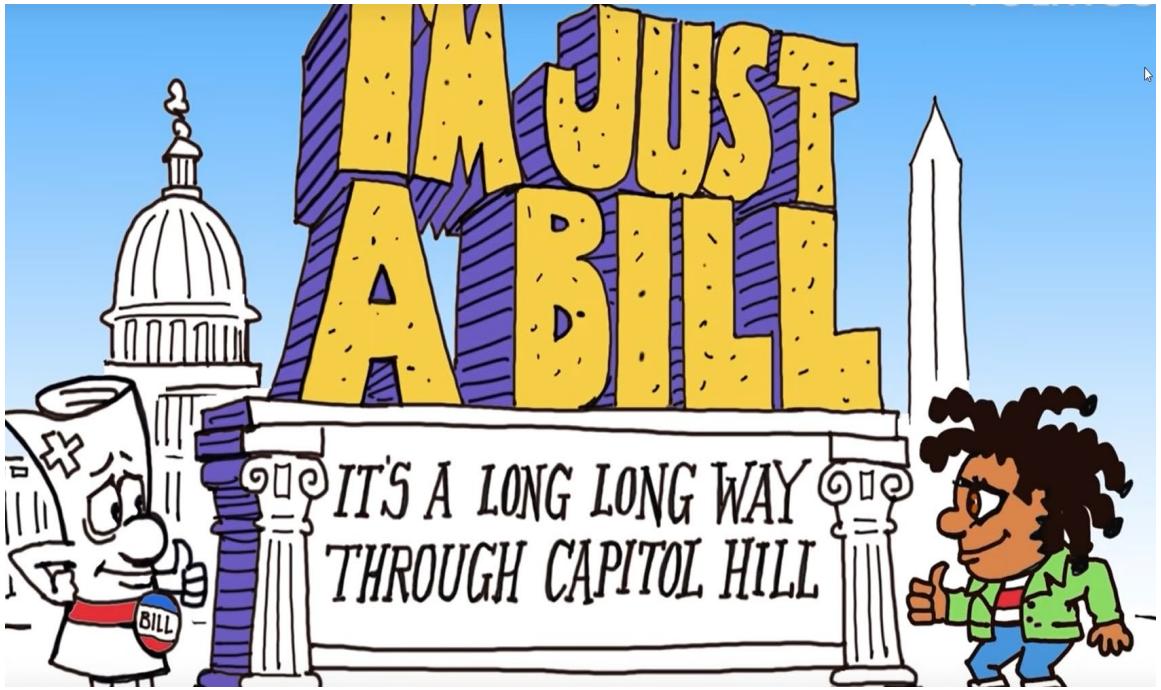
Today's Agenda

Keyes Parker Pepperell



Ipswich Mills

Big Picture



- Complex
- Requirements variable by project
  - Location - tidal/inland
  - Location – regional agency differences
  - Local regs
  - Federal lead agency
  - Mapped rare species habitat
  - Fishway/ Cold Water Fishery
  - ORW/ ACEC
  - Contamination history
  - Other
- Allow sufficient time (9-18 months typical)
- Early consultation with agencies
- Enlist professional help

Big Picture Things to Remember

- Regulations were originally not crafted with ecological restoration projects in mind
- Regulators must evaluate all types of projects equally
- Agency priorities not always consistent with each other
- Not everyone fully embraces the long-term benefits of ecological restoration projects, yet…
- Patience, and then more patience

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Permitting Overview

Common Potential Requirements:

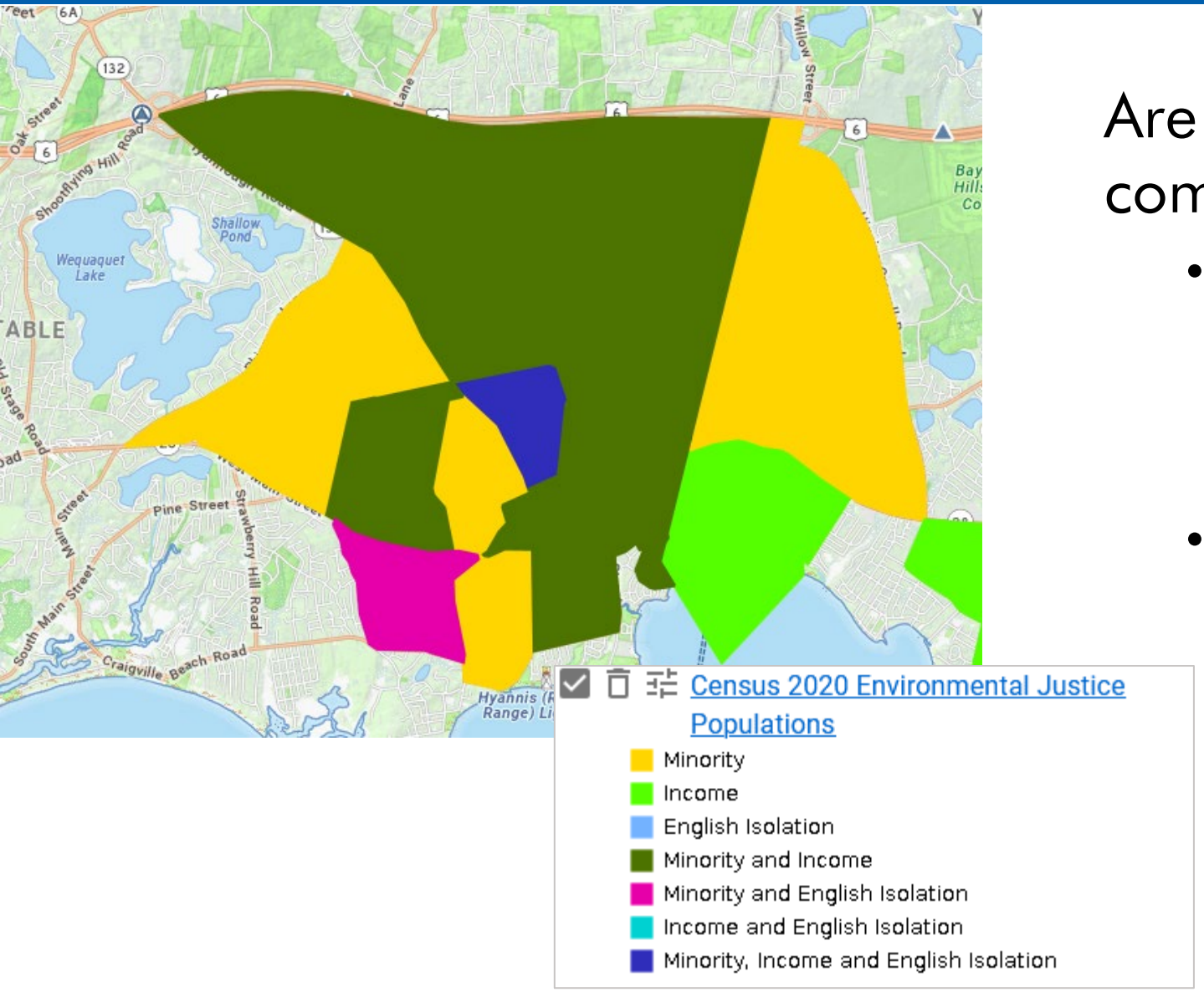
- MEPA - ENF/ EIR
- MassDEP - Chapter 91 Permit or License
- MassDEP - 401 WQC
- USACE 404 Permit/ Section 10
- OOC via a NOI - Local and MassDEP
- NHESP - MESA Project Review letter
- MHC Notification / Federal Section 106 Notification
- ODS Chapter 253 Dam Safety Permit
- DMF Fishway Permit /DFW consultation
- CZM Consistency Review
- FEMA –CLOMR
- NEPA – When federal funding and lead federal partner
- NPDES – filed by contractor at end

Check for Key Constraints Pre -Permitting

Do you have NHESP mapped Estimated or Priority Habitats? If yes,

- Need to file a request for species identification
- Consult with NHESP & file MESA Habitat Management Project Review request
- Receive a MESA Determination Letter
- Project MUST avoid a "Take" of rare species

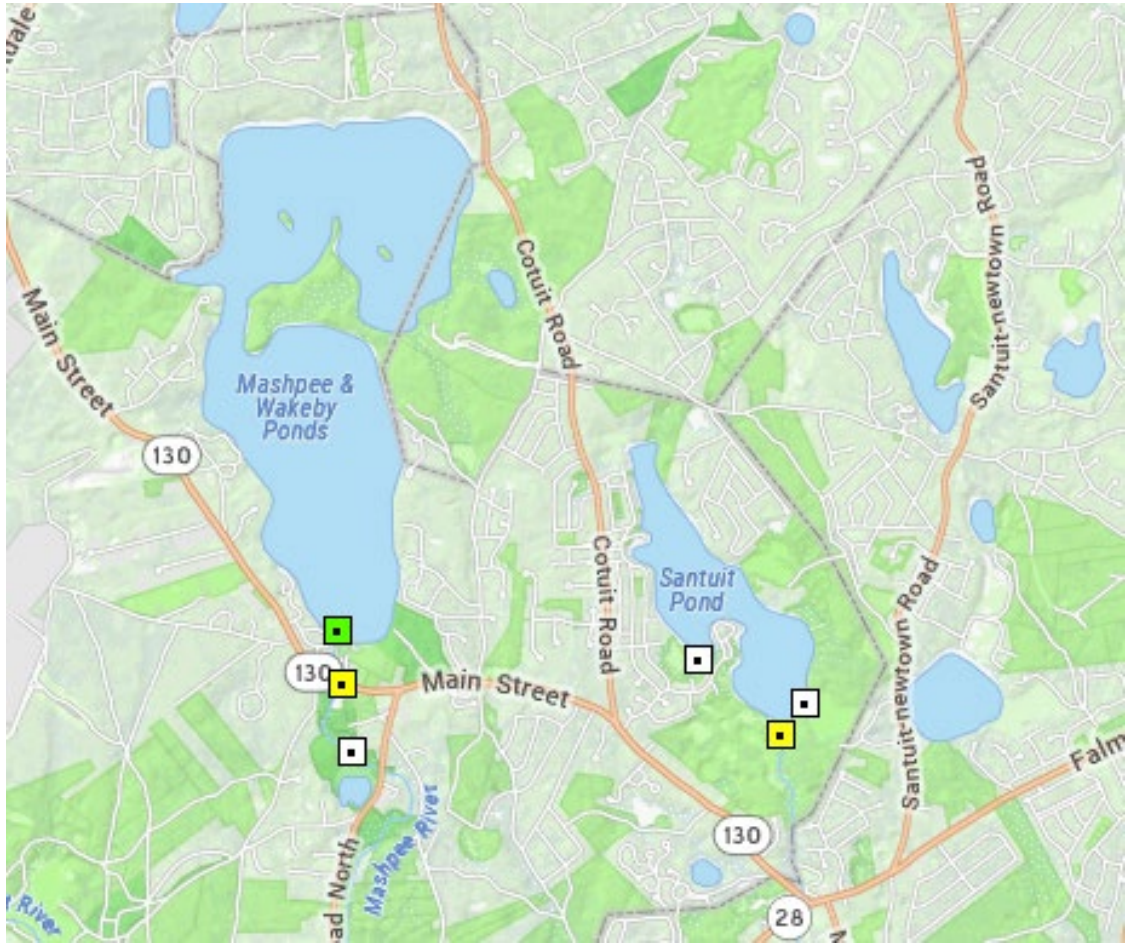
Check for Key Constraints Pre -Permitting



Are you within 1 mile of an EJ community?

- Mandatory EIR, but all dam removals are mandatory EIR per decrease in impoundment capacity
- Won't matter for Eco NOI but standard NOI submittal would trigger EJ language and outreach requirements

Check for Key Constraints Pre -Permitting



- Are you an ODS Jurisdictional Dam?
- Are you a DMF fish run (TRs 15-18) or have a TOY (TR 47)?
- Are you in CZM coastal zone purview?
- Are you a mapped ORW, Cold Water Fishery, ACEC?
- Mapped MA Historical Inventory Areas

Pre-Permitting Initial Design Evaluations

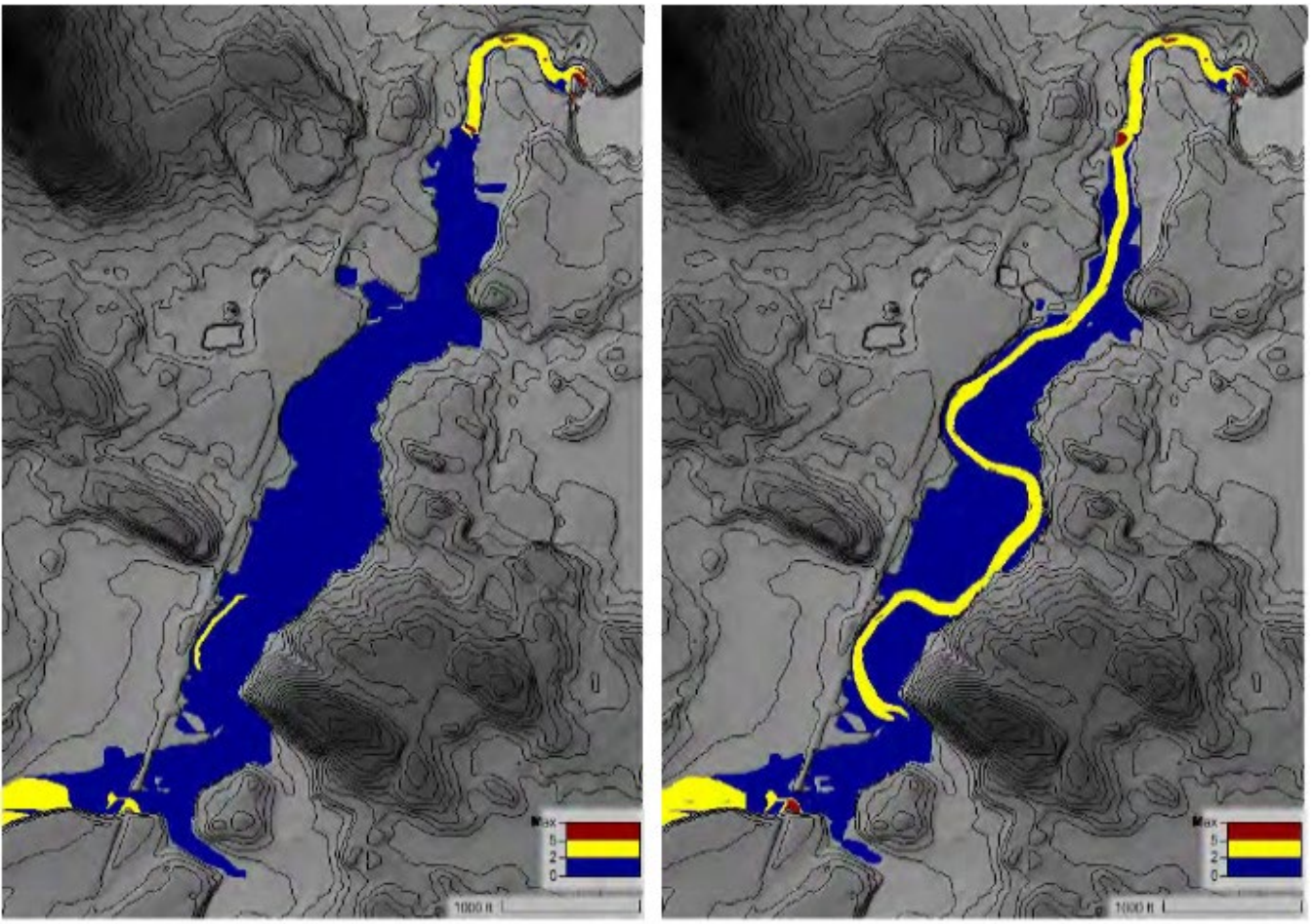
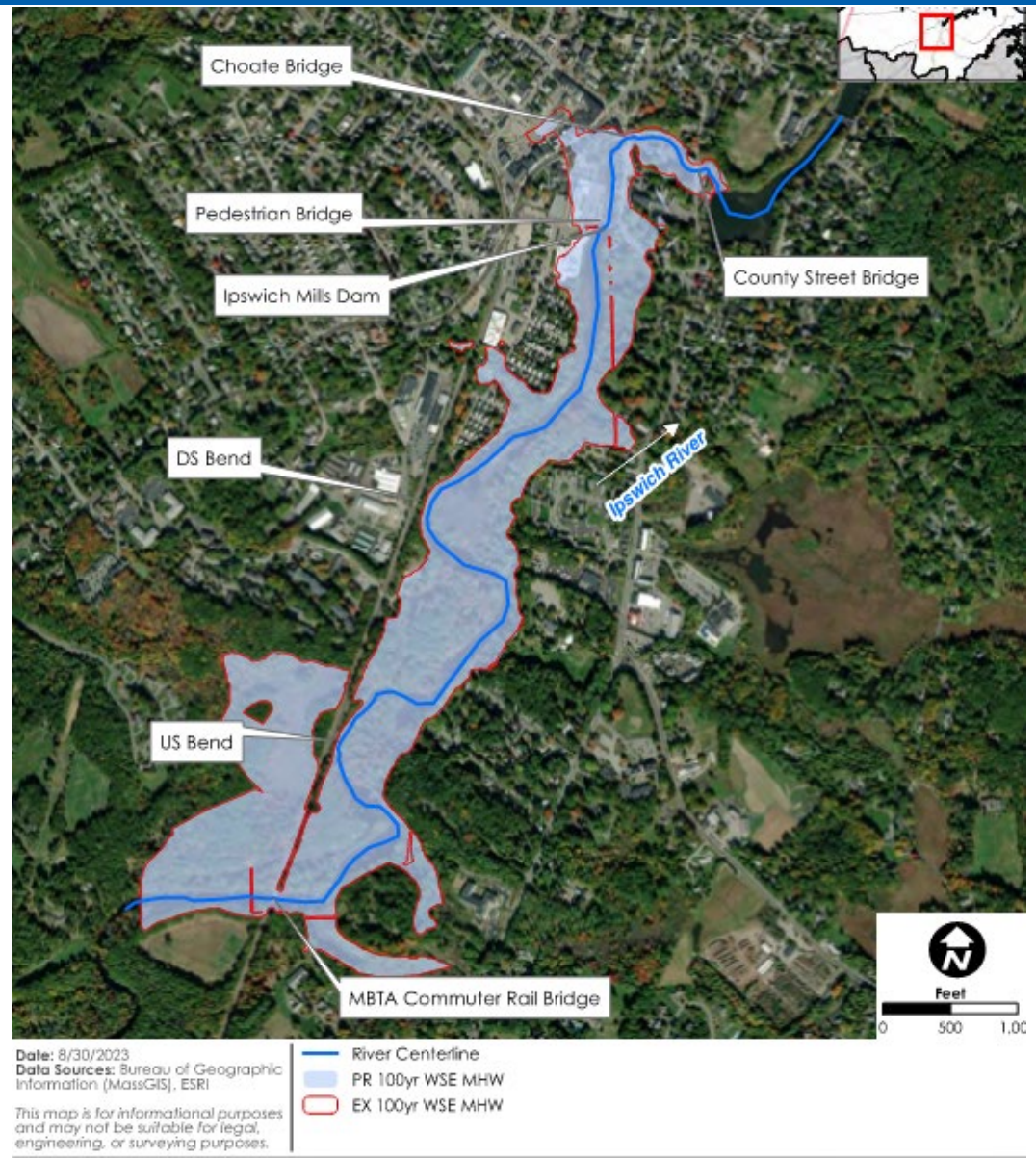


Figure 20. Existing (left) and Proposed (right) Channel Velocity During 2-Year Flow

Blue:	*no sediment transport expected (0-2 fps)*
Yellow:	*transport of silt is feasible (2-5 fps)*
Maroon:	*transport of silt, sand, and gravel is feasible (5 fps or greater)*

- Calculate areal impacts to wetland resource areas. Key #'s:
  - MEPA wetlands triggers don't matter since ANY reduction in impoundment capacity triggers mandatory EIR
  - >5,000 SF cumulative wetlands fill requires WQC Fill & Excavation Permit
  - > 5,000 sf wetlands loss (any loss if ORW) is 401 WQC major project
- Calculate volumes of active dredge and fill & mobile sediment (passive dredge)
  - 100 CY dredge requires WQC dredge permit
  - 5,000 CY dredge = 401 WQC Major Dredge Permit

Pre-Permitting Initial Design Evaluations



- Calculate Flood Zone changes upstream and downstream
  - Cannot increase flood risk to existing structures
- Evaluate changes in wetlands types
- Fish passage, scour, recreation impacts
- Water supply impacts?

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Question #1
Qualify as an Ecological Restoration Project?

- Dam removal is one of the 6 Ecological Restoration Project Types under the MA Wetlands Protection Act
- The project dam cannot be used for flood control or be a hydro power dam with FERC license
- The project cannot impact public or private water supplies
- Removal of full vertical extent of dam & enough of horizontal to not impound 500 yr flood

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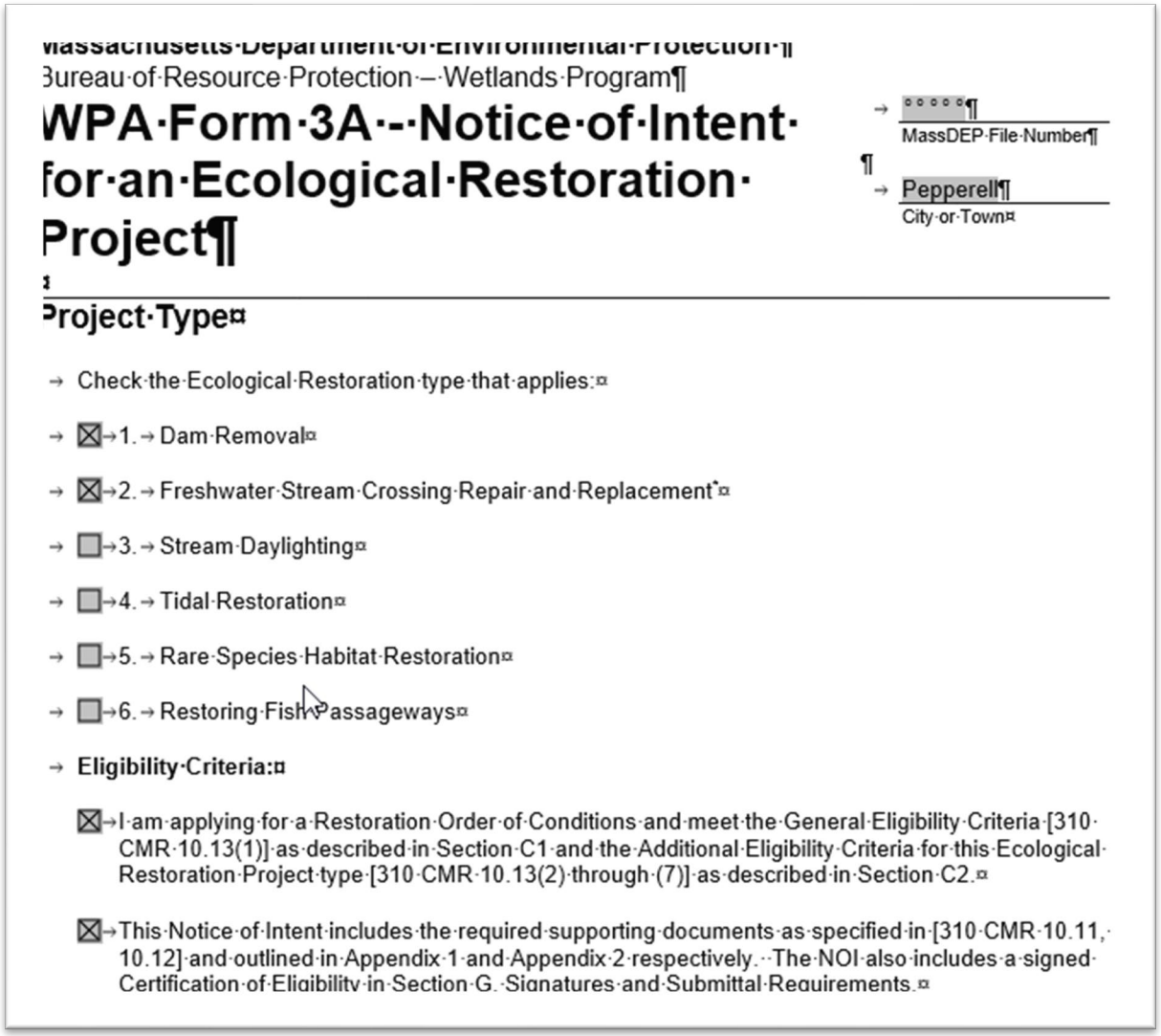
Ecological Restoration vs. Standard NOI



Massachusetts Department of Environmental Protection

Bureau of Resource Protection – Wetlands Program

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

MassDEP File Number

Pepperell

City or Town

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.

☒ This Notice of Intent includes the required supporting documents as specified in [310 CMR 10.11, 10.12] and outlined in Appendix 1 and Appendix 2 respectively. The NOI also includes a signed Certification of Eligibility in Section G. Signatures and Submittal Requirements.

- Eco NOI benefits:
  - Simplified MEPA process
  - Standard set of conditions
- Different order of operations:
  - Eco NOI hits NOI later
  - Standard NOI typically first
- Agencies inputs solicited differently:
  - Eco NOI input upfront
  - Standard NOI input during individual permits
- Important questions:
  - Are you within a mile of an EJ community?
  - How much public input do you want?

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Permitting Pathway – Standard NOI Track

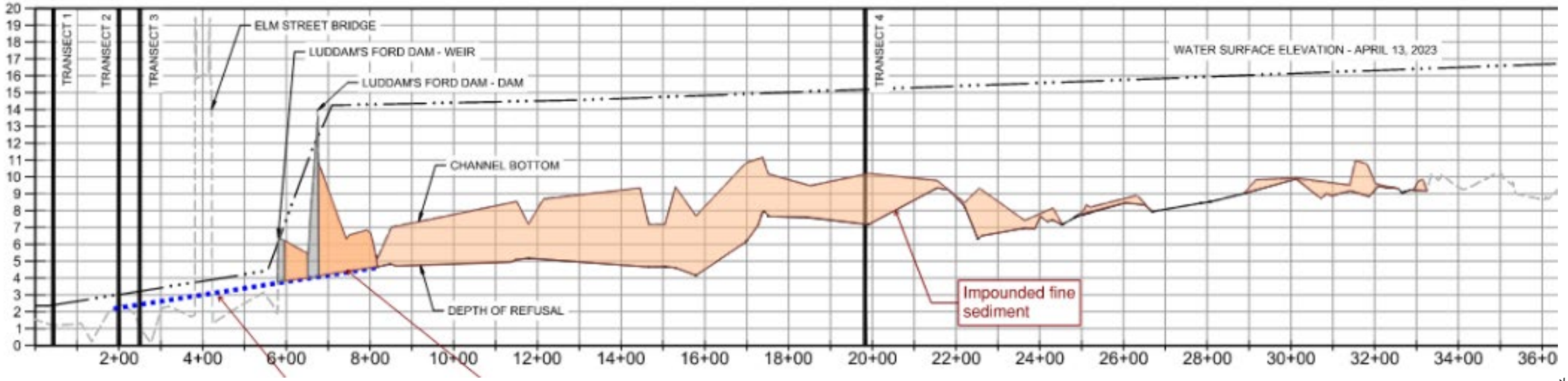
- Pre-permitting meetings recommended but not required
- MEPA Certificate (ENF and EIR if required)
- NHESP w NOI, or before if significant concerns
- NOI
- Ch. 91 (MassDEP) (Must have proof of NOI submittal)
- WQC (MassDEP)
- 404 (USACE)
- MHC Project Notification Form – w MEPA and USACE 404
- ODS Dam Safety Permit (anytime)
- CZM – anytime in coastal zone
- FEMA – CLOMR if needed
- NEPA – only if federal funding and lead federal partner
- Fishway Permit (DMF) – after contractor chosen
- NPDES – filed by contractor at end

Permitting Pathway – Ecological Restoration Project Track

- Pre-permitting meetings with all agencies to understand potential concerns
- Notice of Ecological Restoration Project to MEPA - 30 day wait period before other permitting
- MassDEP sediment sampling plan approval
- Submit WQC (MassDEP) & 404 (USACE)
- Section 106/NEPA part of the USACE process
- Obtain MESA Determination letter, if needed
- Obtain letters from DMF and/or DFW, if needed
- Submit Ecological Restoration NOI - must have WQC in hand to submit
- Submit Ch. 91 (MassDEP) – must have proof of NOI submittal first
- Office of Dam safety permit – anytime
- DMF Fishway Permit
- FEMA – CLOMR if needed
- NPDES – >1 ac impact, filed by contractor at end

Question #2
How much dredge is associated with the project?

- If dredging less than 100 CY AND the project is an Ecological Restoration project: No Water Quality Certificate required
- Generally, much more than 100 CY of mobile sediment and therefore WQC required with MassDEP-approved sampling plan



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Question #3
Is there federal funding for the project?

- If yes:
  - National Historic Preservation Act Consultation
  - National Environmental Protection Act Consultation
- If no: standard Section 404 (USACE) permitting

Step 1 for Ecological Restoration Projects - MEPA Process

- Advanced notice to Community Based Organizations (if Environmental Justice population within 1 mile of project)
- Notice of Ecological Restoration Form published in *Environmental Monitor*

Step 2 for Ecological Restoration Projects – MassDEP 401WQC

- Conduct due diligence review and draft a sediment sampling plan
- Consult with MassDEP
- Conduct sampling per MassDEP-approved sampling plan
- Submit application
- Public Notice in local newspaper

Step 3 for Ecological Restoration Projects – USACE 404 / Section 10

- 404 Applies to any dredge or fill in WOTUS; Section 10 only for tidal waters and select large tributaries
- Generally applied for under MA GP10 as PCN
- Will not approve until 401 WQC approved
- Section 106 process is required if federal funding
- Notification to MHC, BUAR, and Tribes required

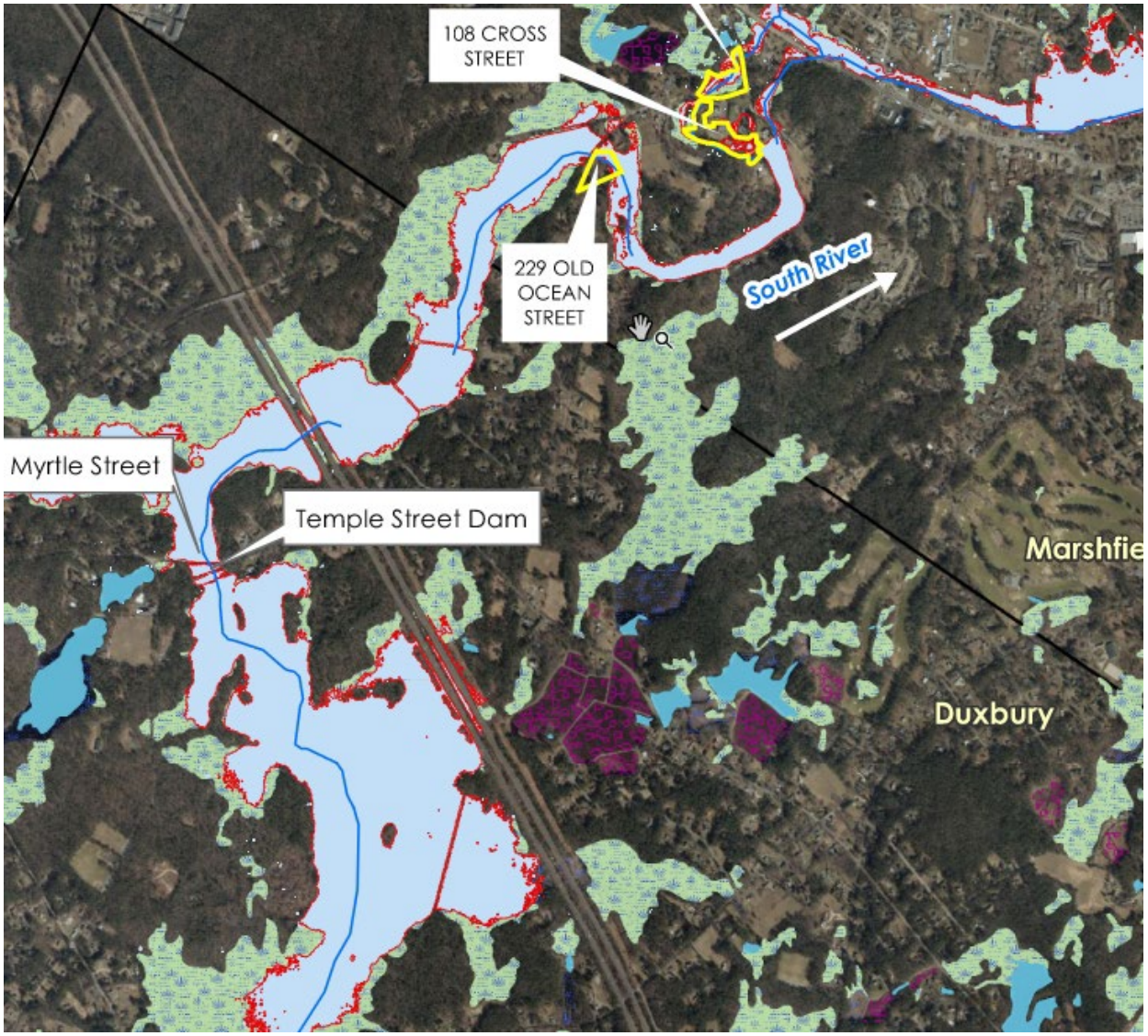
Step 4 for Ecological Restoration Projects – Eco NOI submittal

- Must have 401 WQC approval in advance
- Must have agency approvals in hand from NHESP, DMF, MFW as necessary
- Public Notice in *Environmental Monitor*, newspaper, and certified mailings to abutters

Step 5 for Ecological Restoration Projects – Chapter 91

- Must have submitted Eco NOI first
- Ch. 91 Permit likely in most cases for removal of the dam structure
- Non-tidal dam removals may be exempt if they don't reduce navigation area
- Removal of an unauthorized dam structure to facilitate water dependent use may be exempt for Eco NOI's
- Ch. 91 License possible if stream channel grading sufficient to constitute fill
- Public Notice in newspaper required

Step 6 for Ecological Restoration Projects – Other Approvals, as Necessary



- DMF Fishway Permit
  - If in regulatory fishway
  - Generally, want contractor selected so it can be named in the permit
- ODS Chapter 253 Dam Safety Permit
  - For any dam removal or alteration
- CZM Consistency
- FEMA LOMR or CLOMR
  - Required if flood levels increase downstream
  - Optional for decreased flood levels if Municipality wants to seek revised mapping and updated insurance rates

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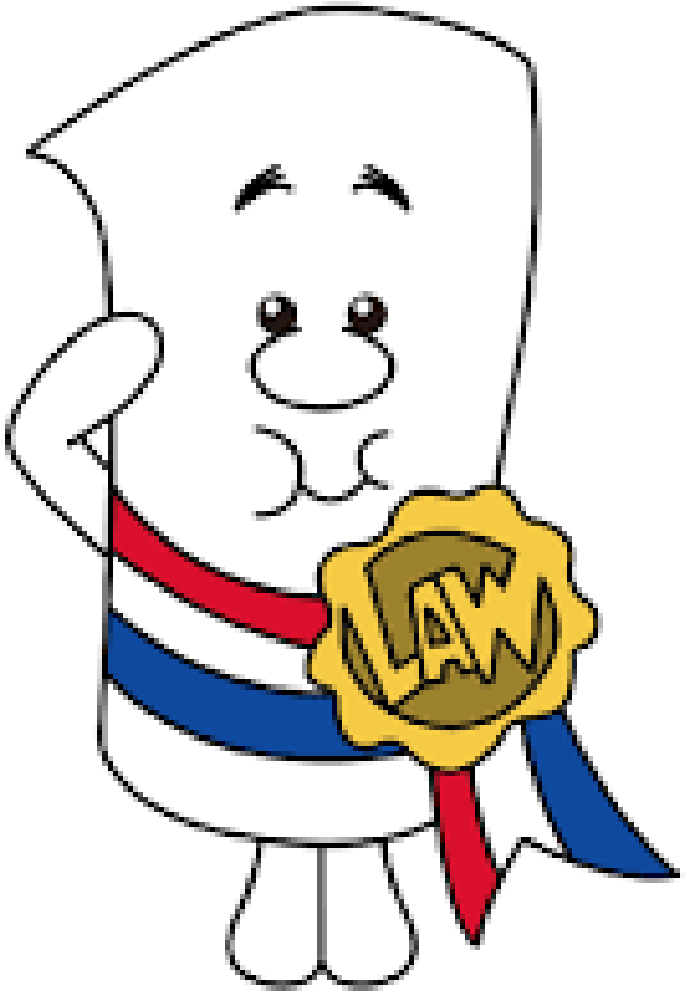
Get Out of Jail Free Card

Emergency Removal:

- Must be imminent safety risk
- Removal/ immediate repair must be ordered by Agency
- Only authorizes minimal work needed to abate risk

SUCCESS!



- Don't forget to record NOI & Chapter 91 at Registry of Deeds!

Questions?

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