

MA Wetlands Protection Act 101

Intro to the Act, Regulations, Paperwork, & Procedures

MassDEP-CERO
Wetlands Program

AUTHOR: KIMBERLY ROTH

PRESENTER: MIA MCDONALD, WETLANDS CIRCUIT RIDER

Agenda

- General Overview of MassDEP CERO's BWR Wetland Program
- Circuit Rider Program
- Wetlands Protection Act Overview
- How to review the Regulations
- Paperwork
- Questions/Discussion

MassDEP Organization

Boston & 4 Regional Offices

- Central Region – Worcester
- Central Regional Director – Mary Jude Pigsley

4 Bureaus in each region

- Bureau of Water Resources - Marielle Stone, DRD
 - **Wetlands Section Chief – Judith Schmitz**
- Bureau of Air and Waste – Doug Fine, DRD
- Bureau of Waste Site Clean Up – Mark Baldi, DRD
- Bureau of Administrative Services – Andrea Briggs, DRD

Each Program has a Director in Boston

- Wetlands Program Director– Stephanie Moura

Wetlands Circuit Rider

Liaison between Municipalities and MassDEP

Technical Outreach to Conservation Commissions

- Training Programs, Meetings

Questions from Commissions, Applicants, Abutters

NOI, ANRAD, and RDA review

Does NOT review appeals

Wetland Protection Act

Public Interests Protected by the Act

Protects

- Public and Private Water Supply
- Groundwater Supply
- Fisheries
- Wildlife Habitat
- Land Containing Shellfish

Prevents

- Pollution
- Storm Damage

Controls

- Flooding

310 CMR 10.02: Statement of Jurisdiction

(1) AREAS Subject to Protection Under M.G.L. c. 131, § 40.

(a) Any bank

any freshwater wetland

any coastal wetland

any beach

any dune

any flat

any marsh

or any swamp

the ocean

any estuary

any creek

any river

any stream

any pond

or any lake

BORDERING
ON

Cont... 310 CMR 10.02 (1)

Areas Subject to Protection Under M.G.L. c. 131, § 40.

(b) Land under any of the water bodies listed above

(c) Land subject to tidal action

(d) Land subject to coastal storm flowage

(e) Land subject to flooding

(f) Riverfront area.

Inland Wetland Resource Areas

- Bank
- Bordering Vegetated Wetland (BVW)
- Land Under Water Bodies and Waterways (LUW)
- Land Subject to Flooding (Bordering & Isolated Areas)
- Riverfront Area (RFA)





Bordering Vegetated Wetlands

Bank

Land Under Water

Bordering Land Subject to Flooding



Riverfront Area



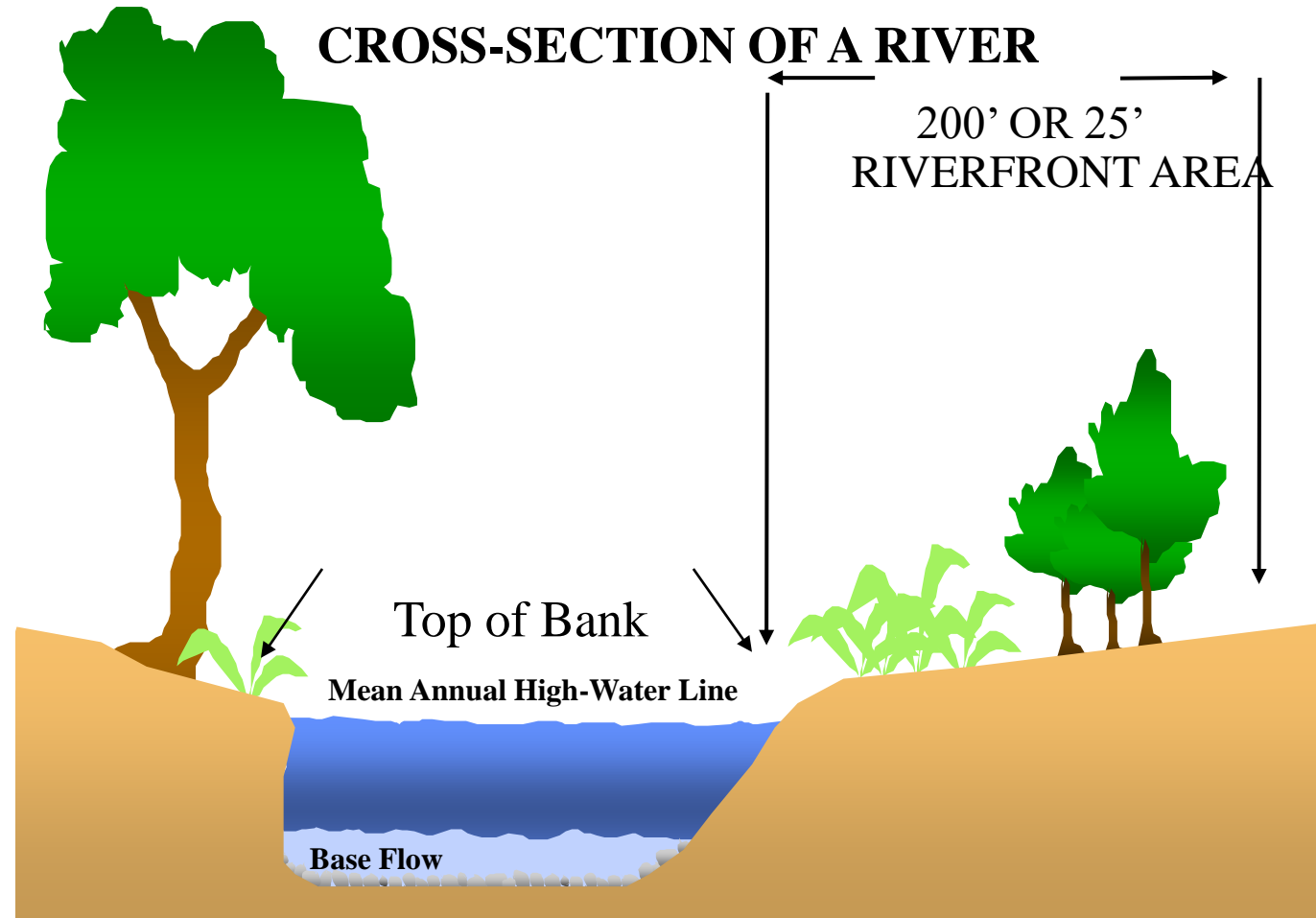
Rivers

Any Natural Flowing Body of Water that Empties to Any Ocean, Lake or River

- Any Size (includes Streams)
- Perennial
 - Flows throughout the Year
 - U.S.G.S Maps
- Major Rivers Listed in Wetlands Regulations



Riverfront Area



- Along a “River”
- No Buffer Zone
- Extends 200 Ft from Mean Annual High Water
 - 25 Ft in Densely Developed Areas
- May Overlap Other Wetland Resources

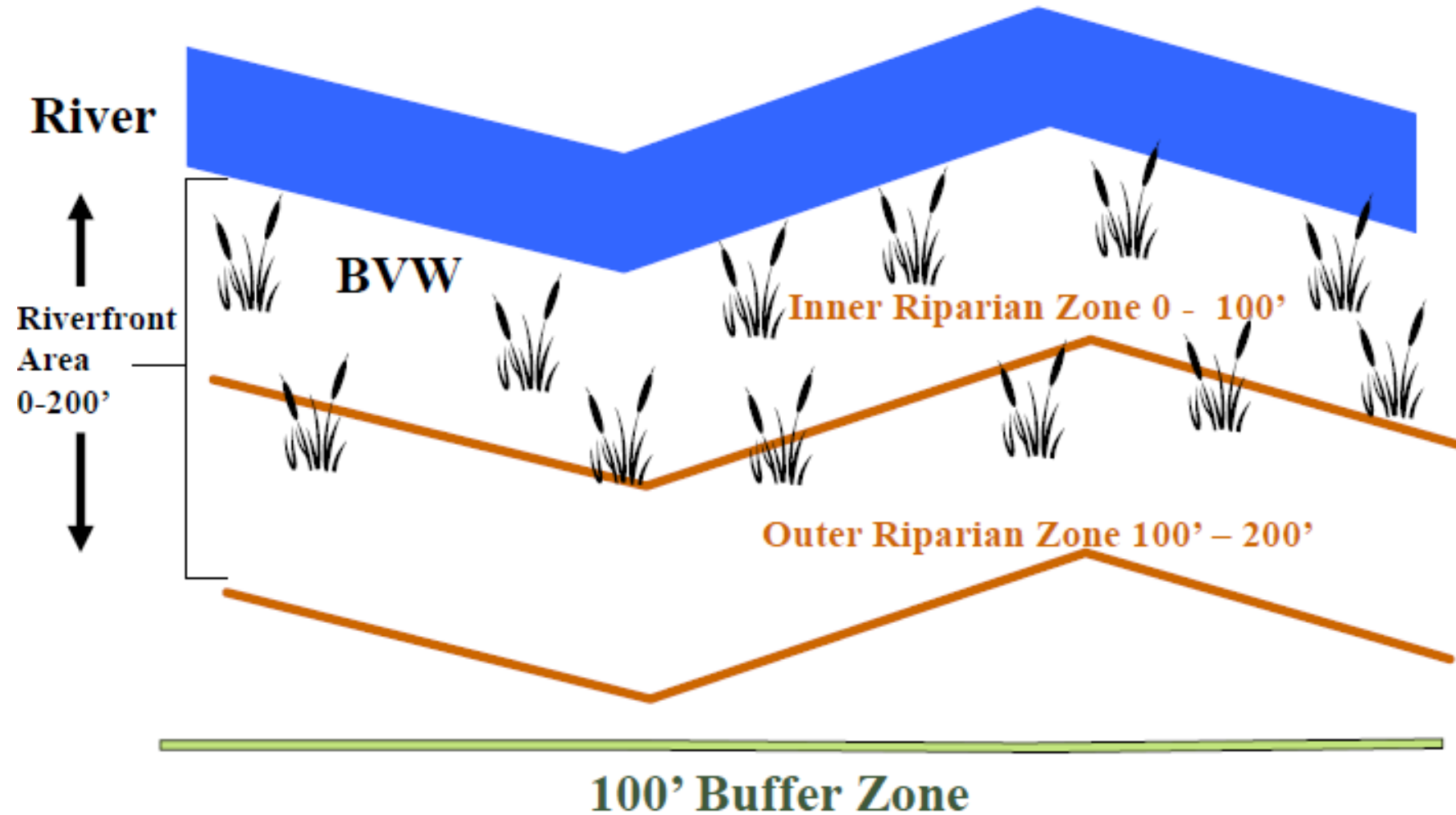
Buffer Zone

100 feet from Inland Wetlands

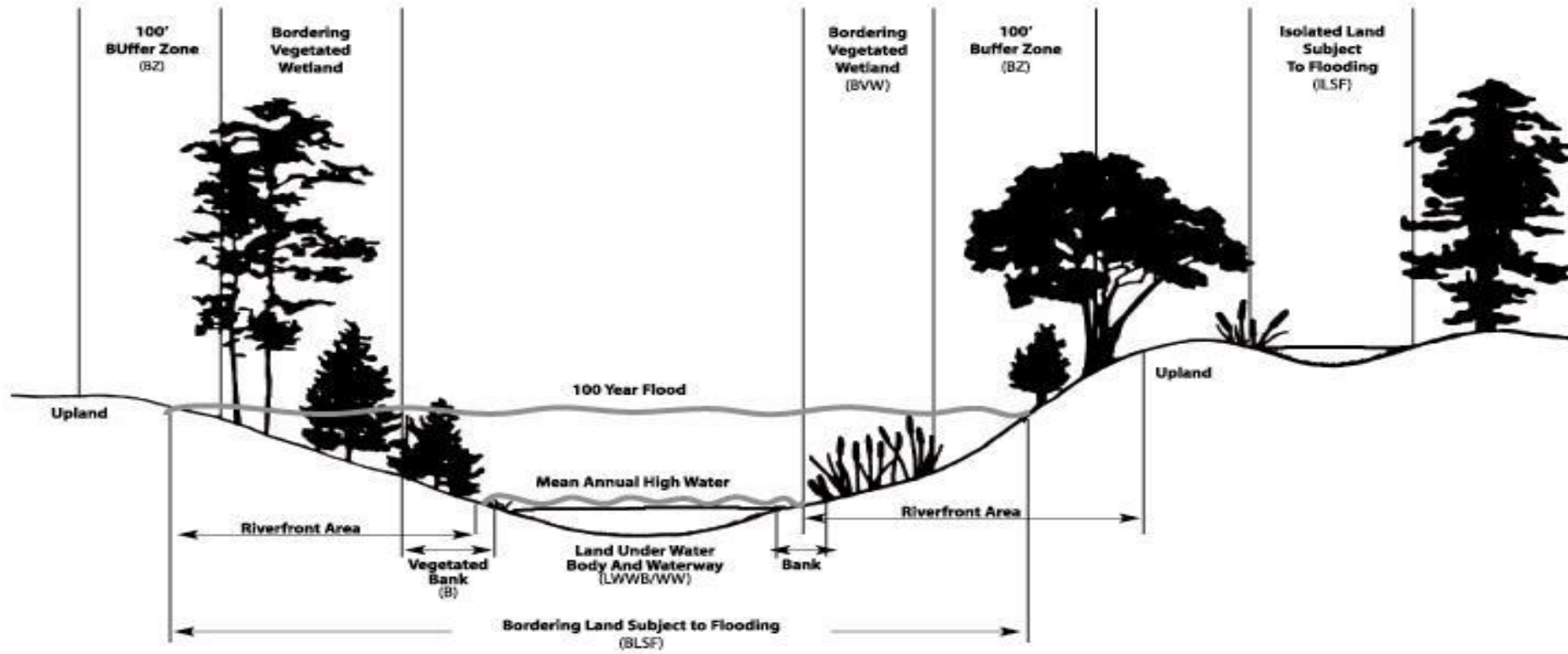
- Bank
 - intermittent streams,
 - lakes,
 - ponds
- Bordering Vegetated Wetlands
 - marshes,
 - swamps,
 - bogs,
 - wet meadows

NOTE: Land Subject to Flooding, Land Under Water and Riverfront Area **DO NOT** have a buffer zone

Overlapping Wetland Resource Areas



**Figure C-1:
Inland Wetland Resources Area
and Associated Buffer Zones**



310 CMR 10.02 (2)

Activities Subject to Regulation

(a) ACTIVITIES within the Areas Subject to Protection...

Any activity that will **REMOVE, FILL, DREDGE OR ALTER** an Area subject to Protection IS subject to the WPA Regulations and requires a filing of a Notice of Intent or Request for Determination...

Except...

(1) Minor activities within the Riverfront Area;

(2) Activities conducted to maintain, repair or replace, but **not substantially change or enlarge** an existing and **lawfully located** structure or **facility...electric, gas, water, telephone, telegraph and other communication services...utilizes the best practical measures...proponent has burden of establishing work is not subject to the WPA & Regulations.**

Alter?

To **alter** is to change the condition of any Area Subject to Protection.

Examples include, but are not limited to, the following:

(a)...changing of pre-existing drainage characteristics...

(b)...lowering of the water level or water table

(c)...destruction of vegetation

(b)...changing of water temperature, biochemical oxygen demand (BOD), and other physical biological or chemical characteristics of receiving water.

310 CMR 10.00

Part 1. Regulations for All Wetlands

310 CMR 10.01 – Intro and Purpose

310 CMR 10.02 – Jurisdiction and Exemptions

310 CMR 10.03 – General Provisions including Fee Schedule

310 CMR 10.04 – Definitions

310 CMR 10.05 – Procedures

310 CMR 10.06 – Emergencies

310 CMR 10.08 – Enforcement

310 CMR 10.00

Part 3. Additional Regulations for Inland Wetlands

310 CMR 10.51 – Introduction

310 CMR 10.56 – LUWW

310 CMR 10.52 – Purpose

310 CMR 10.57 – Land Subject to Flooding

310 CMR 10.53 – General Provisions

310 CMR 10.58 – Riverfront Area

310 CMR 10.54 – Bank

310 CMR 10.59 – Rare Species

310 CMR 10.55 – BVW

310 CMR 10.60 – Wildlife Habitat Evaluations

Performance Standards?

- All wetland resource areas have performance standards listed in the regulations that must be met.
- The performance standards are different for each wetlands resource area.
- Projects must be designed and conditioned to meet the performance standards.

10.54 Bank

10.54(1) Preamble

- Discusses significance of banks

10.54(2) Definition, Critical Characteristics, and Boundary

- Discusses how to ID a bank according to the regulations

10.54(3) Presumption

- Discusses presumption that bank is significant to the Eight Interests

10.54(4) Performance Standards

- Outlines the protection or preservation the proposed project must provide in order to be permissible.

10.54(4) General Performance Standards for Bank

(4) General Performance Standard

(a) Where the presumption set forth in 310 CRM 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:

1. the physical stability of the Bank;
2. the water carrying capacity of the existing channel within the Bank;
3. ground water and surface water quality;
4. the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;
5. the capacity of the Bank to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that **(cumulatively) alter(s) up to 10% or 50 feet (whichever is less) of the length of the bank found to be significant to the protection of wildlife habitat**, shall not be deemed to impair its capacity to provide important wildlife habitat functions. In the case of a bank of a river or an intermittent stream, the impact shall be measured on each side of the stream or river. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

10.54(4) General Performance Standards for Bank, cont.

6. Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.54(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and **the structure spans the channel by a minimum of 1.2 times the bankfull width**. The presumption is rebuttable and may be overcome by the submittal of credible evidence from a competent source. Notwithstanding the requirement of 310 CMR 10.54(4)(a)5., the impact on bank caused by the installation of a stream crossing is exempt from the requirement to perform a habitat evaluation in accordance with the procedures contained in 310 CMR 10.60.

Replacing Culverts in MA that Convey Streams and Rivers

- ~30,000 stream crossings exist in the Commonwealth, most of which are conveyed by culverts, and many of which are undersized or poorly configured.
- Many of these culverts are in disrepair and reaching “pull date.”
- Most are owned and maintained by municipalities.
- Often, limited municipal funds are available for repair or replacement.
- A common misperception is that replacement of culverts are exempt from permitting. **Culvert replacements are generally NOT EXEMPT activities.**

Representative condition of many culverts



Existing pipe condition under roadway

Problems due to improper culverts

- Clogging
- Crushing/road failure
- Undesirable ponding upstream
- Undesirable scouring and erosion downstream
- Can exacerbate storm and flood damage
- Fail prematurely and can result in public safety and/or convenience issues
- Are costlier to maintain over the long term
- Adversely affect stream and ecological continuity
- Many of these problems can be solved by bringing replacement culverts in compliance with Massachusetts Stream Crossing Standards

This is what we are seeking to avoid...

BEFORE



AFTER



Example of Success

BEFORE: 6-FT. CMP



AFTER: 9'9" X 6'7" METAL ARCH



General Standards

- Bridge span preferred
- If a culvert, then embedded ≥ 2 foot; ≥ 1 foot and 25% for round corrugated culverts
- Natural bottom substrate within culvert (matching upstream and downstream substrates)
- Spans channel (1.2 x bankful width)
- Designed to provide water depths and velocities at a variety of flows that are comparable to those found in upstream and downstream natural stream segments (e.g. low flow channel)
- Openness ratio ≥ 0.82 ft or 0.25 calculated in meters for perennial streams

<https://www.mass.gov/files/documents/2018/08/23/Stream%20Crossings%20booklet%20Web.pdf>

https://www.nae.usace.army.mil/Portals/74/docs/regulatory/StreamRiverContinuity/MA_RiverStreamCrossingStandards.pdf



A Well Designed Crossing

Large size suitable for handling flood flows

Open-arch design considered optimum under most conditions

Openness ratio greater than 0.5m, suitable for most settings

Greater than 1.2x stream width maintains dry banks for wildlife passage

Water depth and velocity match conditions upstream and downstream

Natural substrates create good conditions for stream-dwelling animals

10.53(8) Culvert Replacement Limited Project

(8) Any person proposing the replacement of an existing stream crossing shall demonstrate to the Issuing Authority that the impacts of the crossing have been avoided where possible, and when not possible have been minimized and that mitigation measures have been provided to contribute to the protection of the interests of the Act. An applicant will be presumed to have made this showing if...:

10.53(8) Culvert Replacement Limited Project

(a) If the project includes replacement of an existing non-tidal crossing, the applicant demonstrates to the satisfaction of the Issuing Authority that the crossing complies with the Massachusetts Stream Crossing Standards to the **maximum extent practicable**

At minimum, in evaluating the potential to comply with the standards to the maximum extent practicable the applicant shall consider site constraints in meeting the standard, undesirable effects of risk in meeting the standard and the environmental benefit of meeting the standard compared to the cost by evaluating the following:

10.53(8) Continued

- 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;
- The amount of stream miles made accessible by the improvements;
- Storm flow conveyance;
- Engineering design constraints specific to the crossing;
- Hydrologic constraints specific to the crossing;
- Impacts to wetlands that would occur by improving the crossing;
- Potential to affect property and infrastructure; and
- Cost of replacement.

What about Buffer Zone?

10.53(1) ...For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., “the Issuing Authority shall impose such conditions as necessary to contribute to the protection of such interests” of the Act in the adjacent Resource Area. **The potential for adverse impacts to Resource Areas from work in the Buffer Zone increase with the extent of work and proximity to the Resource Area.**

...consider the characteristics of the Buffer Zone such as the presence of steep slopes, that may increase the potential for adverse impacts on Resource Area.

...Conditions may include limitations on the scope and location of work in the Buffer Zone as necessary to avoid alteration of Resource Areas....

...a clear limit of work, and the preservation of natural vegetation adjacent to the Resource Area...

Buffer Zone, cont.

... Where a Buffer Zone has already been developed, the Issuing Authority may consider the extent of existing development in its review of subsequent proposed work....where prior development is extensive, may consider measures such as restoration of natural vegetation adjacent to a Resource Area to protect the interests of the Act.

What is the Permitting Process

- Submitted to local conservation commission (issuing authority) and MassDEP.
- Commissions are required to review applications to ensure compliance with the WPA and its Regulations, as well as local wetland laws.
- Commissions issue wetland permits, emergency certifications and enforcement orders.
- Appeals requests under the WPA are submitted to MassDEP. Appeal requests under a local bylaw or ordinance go to Superior Court.

Applications & Orders

Request for Determination of Applicability (RDA)

Determination of Applicability (DOA)

Abbreviated Notice of Intent

Order of Conditions (OOC)

Notice of Intent (NOI)

Order of Conditions (OOC)

Abbreviated Notice of Resource Area Delineation (ANRAD)

Order of Resource Area Delineation (ORAD)

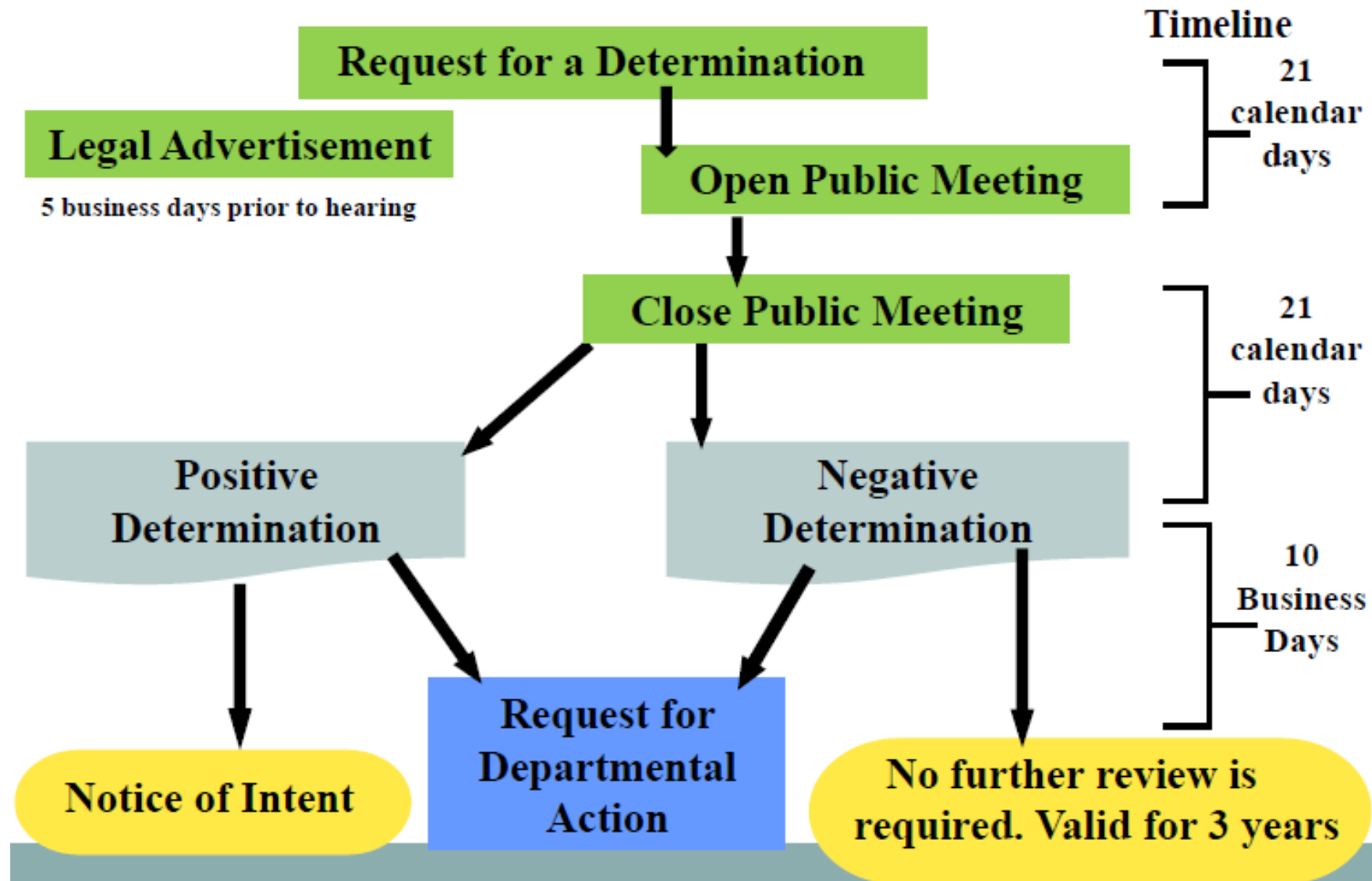
Request for Certificate of Compliance

Certificate of Compliance (COC)

WPA Form 1: Request for Determination of Applicability (RDA)

- a. whether the **area** is subject to **WPA** jurisdiction.
- b. whether the **resource area boundaries** are accurately delineated.
- c. whether the **work** is subject to **WPA** regulation.
- d. whether the **area and / or work** is subject to **municipal wetlands ordinance or bylaw** jurisdiction.
- e. whether the **scope of alternatives is adequate** for work in the Riverfront Area.

Determination of Applicability Process



WPA Form 4A:

Abbreviated Notice of Resource Area Delineation (ANRAD)

- Used to confirm wetland resource boundaries.
- Typically filed for larger projects prior to the NOI for design purposes.
- Take advantage of retaining a wetland scientist as a 3rd party review (at the applicant's expense) on large or tough sites. *

*(See Wetlands Program Policy 08-1: Lack of Information Necessary for Conservation Commission Decisions aka Consultant Fee Policy)

WPA Form 4B: Order of Resource Area Delineation (ORAD)

- **Accurate** - delineations accurate on plan as initially submitted.
- **Modified** - revised plan shows modified delineation(s) based on field review.
- **Inaccurate** - boundaries not accurate and cannot be confirmed. Must explain why the boundary or boundaries were determined to be inaccurate.

Order of Resource Area Delineation (ORAD)

- An ORAD is valid for 3 years and can be extended (310 CMR 10.05(6)(d)).
- An ORAD no longer needs to be recorded at the Registry of Deeds.
- Can be appealed to MassDEP- Superseding Order of Resource Area Delineation.

WPA Form 3: Notice of Intent (NOI)

An NOI must be filed if work is proposed in a wetland resource area.

Minimum submittal Requirements:

- Wetland delineation
- Site plans
- Stormwater calculations
- Title 5 Compliance
- Abutter notification
- Legal Ad
- Correct filing fee
- NOI submitted to NHESP
- Signed correctly

File Number Lookup

<https://eeaonline.eea.state.ma.us/portal#!/search/wire>

Search for Wetlands NOI Projects

NOI Number

City/Town

SPENCER

Filing Date

02/01/2018

to

04/24/2018

PREVIOUS

CLEAR

SEARCH

Wetlands NOI Project Information

Related links

There are no related links for displayed element.

NOI Number

293-0925

Filing Date

03/12/2018

Project Type

Comments

2 MW PHOTOVOLTAIC ARRAY

Applicant Information

ZERO POINT ENERGY SOLUTIONS II, LLC

Filing Type

Buffer Zone

Project Address

EAST MAIN STREET

Technical Comments

Information should be submitted to confirm that there is adequate separation between the bottoms of the detention basins and annual high groundwater. A comparison of test pit data and proposed basin grading suggests that groundwater may intersect the excavations for Basin 3A, and possibly Basin 3B and/or the western end of Basin 2B. Many

Search Criteria

City/Town: SPENCER

Filing Date: from Feb 1, 2018 through Apr 24, 2018

1 - 6 of 6 items					
	NOI Number	Filing Date	Project Address	Applicant Name	Company
Details	293-0924	04/12/2018	MAPLE STREET	TYLER, STEPHEN	TOWN OF SPENCER, UTILITIE
Details	293-0924	04/04/2018	5 1ST STREET	FREEDMAN, JAY	
Details	293-0925	03/19/2018	92 MCCORMICK ROAD	LOWELL, ROBERT	MA DCR
Details	293-0925	03/12/2018	EAST MAIN STREET	MELLO, ERNIE	ZERO POINT ENERGY SOLUT
Details	293-0925	03/12/2018	17 GH WILSON ROAD	MELLO, ERNIE	ZERO POINT ENERGY SOLUT
Details	293-0923	02/09/2018	18 LAUREL LANE	CESTARO, GERALD	CESTAR HOMES

PREVIOUS

EXPORT TO EXCEL

Where is the File Number?

MassDEP Administrative Review

- Fees
- Administrative Issues
- Application Deficiencies

MassDEP Technical Review

- Intended to highlight issues that the Commission may want to consider in their review and point out deficiencies in the filing
- Do not take the place of 3rd Party Review
- Are not a DEP Approval or Denial

What's the hold up?

Delays often caused by:

- Lack of fee/incorrect fee
- Lack of plans
- Lack of detail on the plans
- Inadequate description of the project
- Database issues

Wetlands Protection Act Permits

Wetland Applications received in CERO in 2020

- NOIs: ~1100
- SOC's: ~15
- §401 Water Quality Certifications

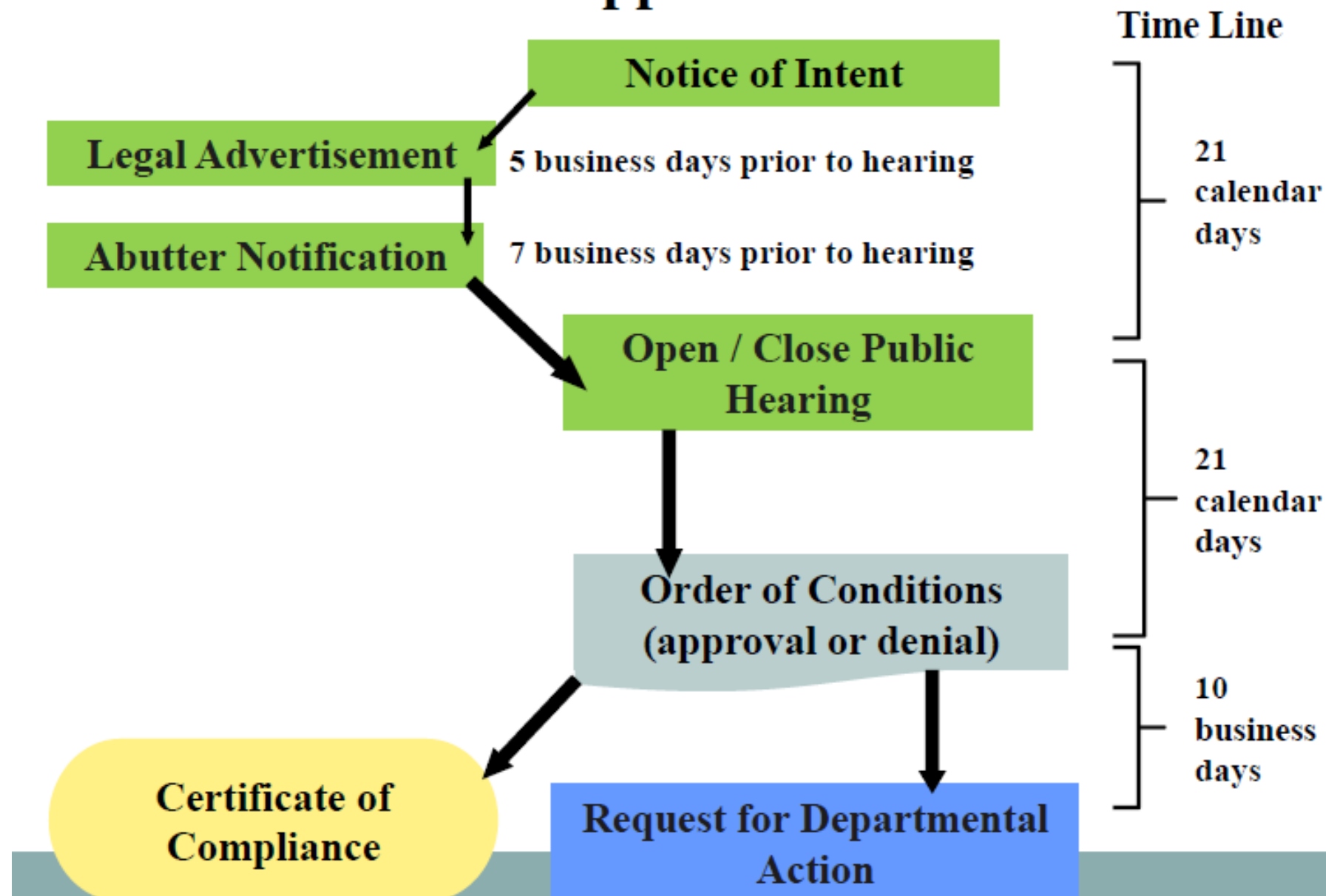
NOI Review, Cont.

Closing the Hearing

Hearings should not be closed before a File Number is issued, why?

- The ConCom and MassDEP cannot consider new information once the hearing is closed.

Notice of Intent Application Process



WPA Form 5: Order of Conditions (OOC)

Used to permit or deny proposed activities.

- Indicates that proposed work is significant to the Interests of the WPA.
- Must Ensure that:
 - The applicable performance standards are met
 - OR
 - Conditions are applied to minimize impacts for Limited Projects
- Establishes “special conditions” for allowing work.
- Include conditions that require recording at registry and seeking a COC.
- Send one copy CONCURRENTLY to MassDEP or submit via eDEP.

Writing an Effective Order of Conditions

310 CMR 10.05(6) Order of Conditions Regulating Work and Orders of Resource Area Delineation

Approval

- Meets performance standards
- Will protect Interests of the Act or Bylaw

Denial

- Cannot be conditioned to meet the performance standards
- Insufficient information has been submitted after it has been asked for by a reasonable deadline
- Don't include any conditions
- Write "Denial" before "Order of Conditions" at top of each page

Writing an Effective Order of Conditions Cont.

Findings of Fact

- Describe the approved scope of work
- List approved plans and documents
- Site / project history
- Define specific resource areas or BZ affected by proposed work
- Describe how project meets applicable performance standards
- Clearly describe project's ability to protect the interests of the Act
- Not approving specific items

Paperwork (and why it matters)

What must be sent to MassDEP at the time of issuance?

Orders of Conditions

Amended Orders of Conditions

Orders of Resource Area Delineation

*eDEP saves time and mailing costs

Determinations of Applicability

Emergency Certifications

Enforcement Orders

What other documentation should I also send to MassDEP?

Extensions

Certificates of Compliance

Paperwork, cont.

Timeliness

- 10 Business Day Appeal Period

When Does the 10-Business Day Appeal Period Start?

- A. At the close of the hearing
- B. On the date the order is signed
- C. When the applicant picks up their order
- ☒ D. When the order is postmarked to DEP

Date of Issuance

What date should you put on the date of issuance line?

A. The date of the close of the hearing

B. The date the order is signed

C. When the applicant picks up their order

D. When the order is postmarked to DEP

Page 2 →



A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

a. County	b. Certificate Number (if registered land)
c. Book	d. Page

7. Dates:

a. Date Notice of Intent Filed	b. Date Public Hearing Closed	c. Date of Issuance
--------------------------------	-------------------------------	---------------------

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

a. Plan Title	
b. Prepared By	c. Signed and Stamped by
d. Final Revision Date	e. Scale
f. Additional Plan or Document Title	g. Date

B. Findings



E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.
Please indicate the number of members who will sign this form.
This Order must be signed by a majority of the Conservation Commission.

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

1. Date of Issuance
2. Number of Signers

Page 11 →

Signature	Printed Name
Signature	Printed Name
Signature	Printed Name

Appealing Conservation Commission Decision?

- Applicant
- Property / Land Owner, if not the applicant
- Aggrieved person
- A direct abutter
- Any 10 residents
- MassDEP- known as an “Intervention”

Wetlands Protection Act Appeals

Appeal Received

- Reviewed for timeliness and standing

Analyst holds site visit

- Appellant, applicant, and commission may be present

Reviews materials

Issues Decision

Superseding Orders of Conditions

- Amendments
- Extensions
- Certificate Of Compliance

Also applies for:

Superseding Orders of Resource Area Delineations

Superseding Determinations of Applicability

Amendments of Orders

- OOC may be amended to address plan changes but may **not** allow **additional impacts**.
- Plan changes that impact additional resource area require a new filing.
- Amended OOCs should only include the amended language.

Extensions of Orders

310 CMR 10.05(8)

- Must be submitted by written request to the Commission at least 30 days prior to expiration of OOC or ORAD.
- Issue a **WPA Form 7 Extension Permit** or written denial letter.
- Cannot be appealed to MassDEP.
- Must be recorded at the Registry of Deeds or Land Court.
- MassDEP handles extension requests for all SOC.

Certificate of Compliance

What should be submitted?

- WPA Form 8A form with a written statement from P.E., P.L.S, etc., and as-built plan.
- Refer to the conditions.

What should be issued?

- WPA Form 8B or written denial letter.
- Indicates work has been completed in compliance with an Order of Conditions.
 - *a PARTIAL Certificate of Compliance may be issued*
- **Don't forget perpetual conditions on COC!!!**
- Cannot be appealed to MassDEP.
- Must be recorded at Registry of Deeds or Land Court.

Enforcement

MassDEP Technical Assistance

- Complaints
- Referrals
- Technical Support

To NOI or not to NOI on an Enforcement Order?

- Does the EO contain a directive?

Emergency Certifications

310 CMR 10.06 Emergencies

Is it for the protection of public health and safety of the citizens of the Commonwealth?

What agency of the Commonwealth (or subdivision thereof)...has ordered the project to be performed?

Emergency Certifications are valid for 30 days and cannot be extended except in circumstances by MassDEP.

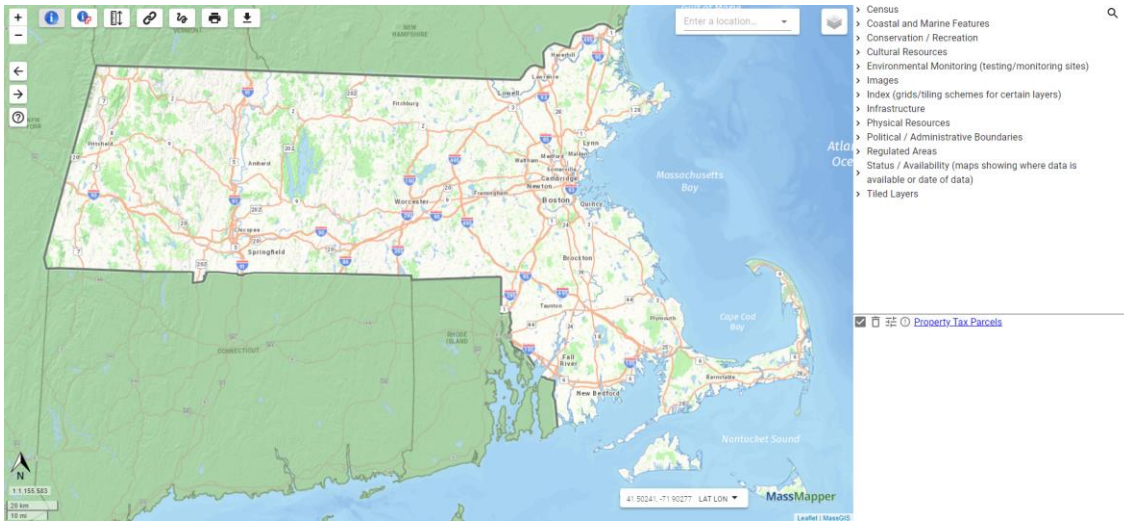
Pre-Application Meetings

Applicants may request a consultation with DEP prior to permitting complex projects that involve multiple permits across MassDEP programs.

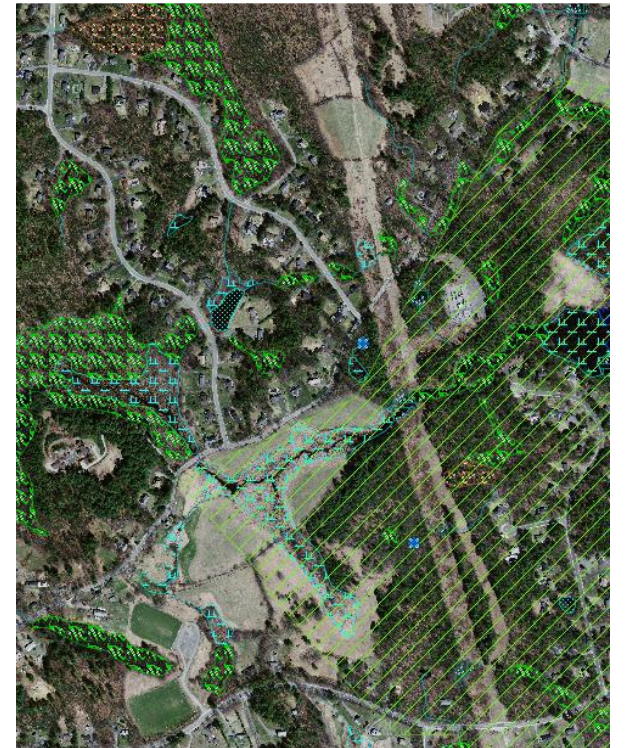
Limited generally to projects that are highly complex and involve more than one wetland permit, like §401 or MEPA.

MassMapper- the MassGIS Online Data View

<https://maps.massgis.digital.mass.gov/MassMapper/MassMapper.html>



- Display and query nearly all MassGIS data
- Download up-to-date shapefiles from our MassGIS, with legend files
- Overlay MassGIS data onto other basemaps, such as Google Terrain



Questions?