

Trails and the Wetlands Protection Act



**2015 Massachusetts Trails Conference
"Sustainable Trails for a Sustainable Future"**

Saturday, November 14, 2015

8:00am - 4:30pm

**Double Tree Hotel and Conference Center by Hilton
Leominster, MA**

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MassDEP Western Region Circuit Rider,

Wetlands and Waterways Program

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Abbreviations

- **BVW** – Bordering Vegetated Wetlands
- **NOI** – Notice of Intent, Form 3
- **RDA** (some people say RFD) Request for Determination of Applicability, Form 1
- **OOC** – Order of Conditions
- **NHESP** – Natural Heritage and Endangered Species Program
- **RFA** – Riverfront Area
- **GIS** – Geographic Information System

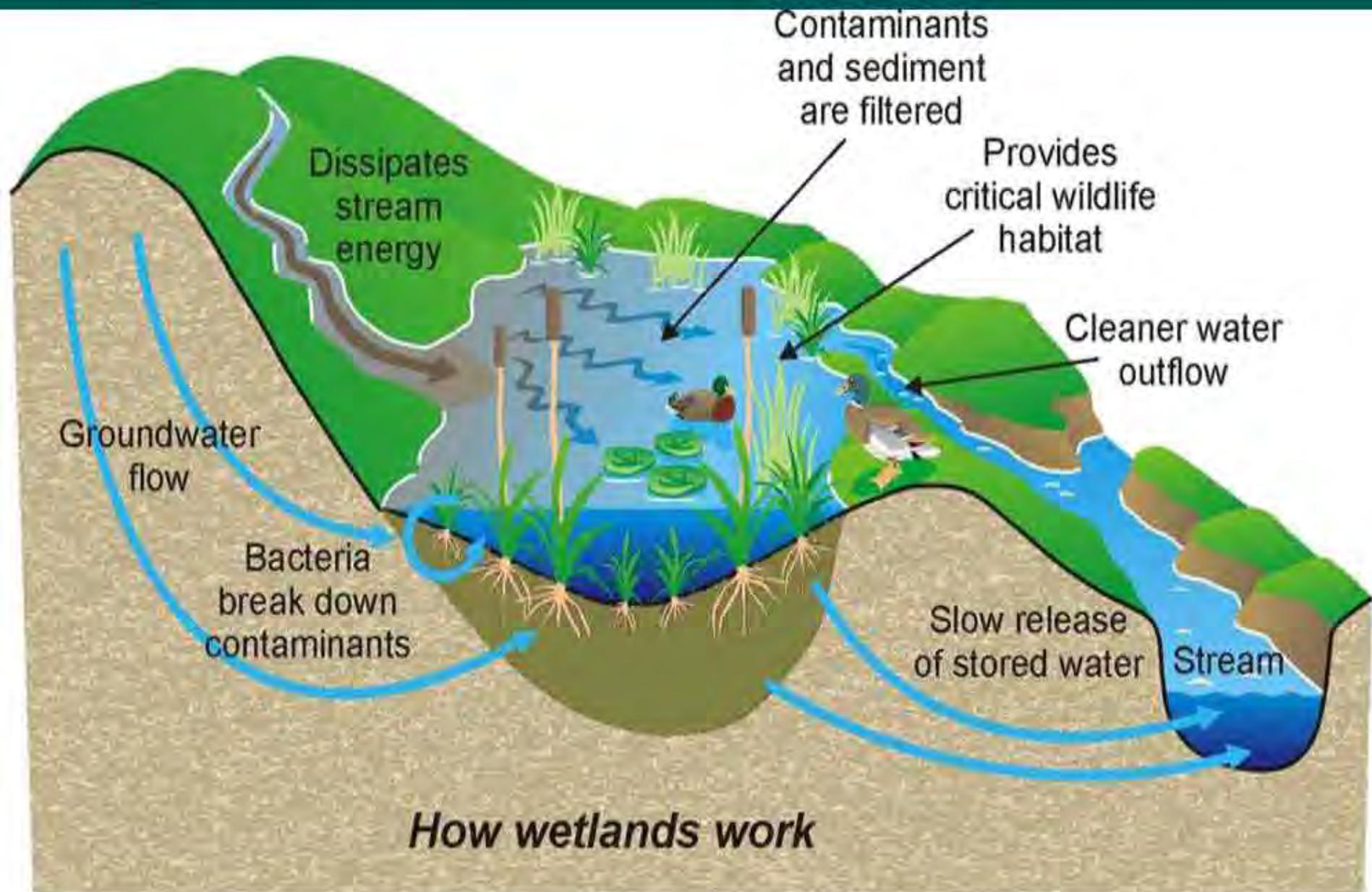
Wet Meadow





Wetlands Protection Act

- No person shall remove, fill, dredge or alter any (resource area) without filing written notice including such plans as may be necessary to describe such proposed activity and its effect on the environment and without receiving and complying with an order of conditions and provided all appeal periods have elapsed.



How wetlands work

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
 - Floods



Where Does It Apply?

- Inland Wetland Resource Areas
- Buffer Zones to certain Wetland Resource Areas
- Coastal Wetland Resource areas



Inland Wetland Resource Areas



1. Bank
2. Bordering Vegetated Wetlands (**BVW**)
3. Land Under Water Bodies and Waterways
4. Land Subject to Flooding (Bordering and Isolated Areas)
5. Riverfront Area

Coastal Resource Areas

- ┌ Land Under Ocean
- ┌ Designated Port Areas
- ┌ Coastal Beaches
- ┌ Coastal Dunes
- ┌ Barrier Beaches
- ┌ Coastal Banks
- ┌ Rocky Intertidal Shores
- ┌ Salt Marshes
- Land Under Salt Ponds
- Land Containing Shellfish
- Banks of/Land Under Anadramous/
Catadramous Fish Run

Buffer Zone = 100 feet from:

- Inland Wetlands

- Bank
- BVW



Bordering Vegetated Wetlands

Boundary of BVW Line:

➤ 50% or More of Wetland Indicator Plants

➤ Wetland Hydrology is Present

➤ Other Indicators of Hydrology

● *e.g. Hydric Soils*



<http://www.mass.gov/dep/water/laws/policies.htm#wetlguid>

<http://www.buzzardsbay.org/wetlands-delineation.htm>

Wetland Indicator Plant



Red Maple – Facultative tree, grows in either wetland or upland but is considered a wetland indicator species. The stems of this tree give it its name with their red hue. The leaves are opposite with usually 3 lobes that have very serrated edges. Red maples grow either singly or in clumps.

Soils



A dark surface layer indicating a possible wetland soil.

FROM: USDA-NRCS WETLAND SCIENCE INSTITUTE

Indicators of Hydrology



Standing Water



Water stained leaves

Vernal Pool – Isolated Land Subject to Flooding





Bank

- A Bank is a portion of the land surface which normally abuts and confines a water body.
- Upper boundary of a Bank is the first observable break in slope or the mean annual flood level, whichever is lower



Resource Areas?



Riverfront Area

- Along a “River”
- Is a heavily regulated Resource Area...not a Buffer Zone
- Extends 200 feet from Mean Annual High Water Line

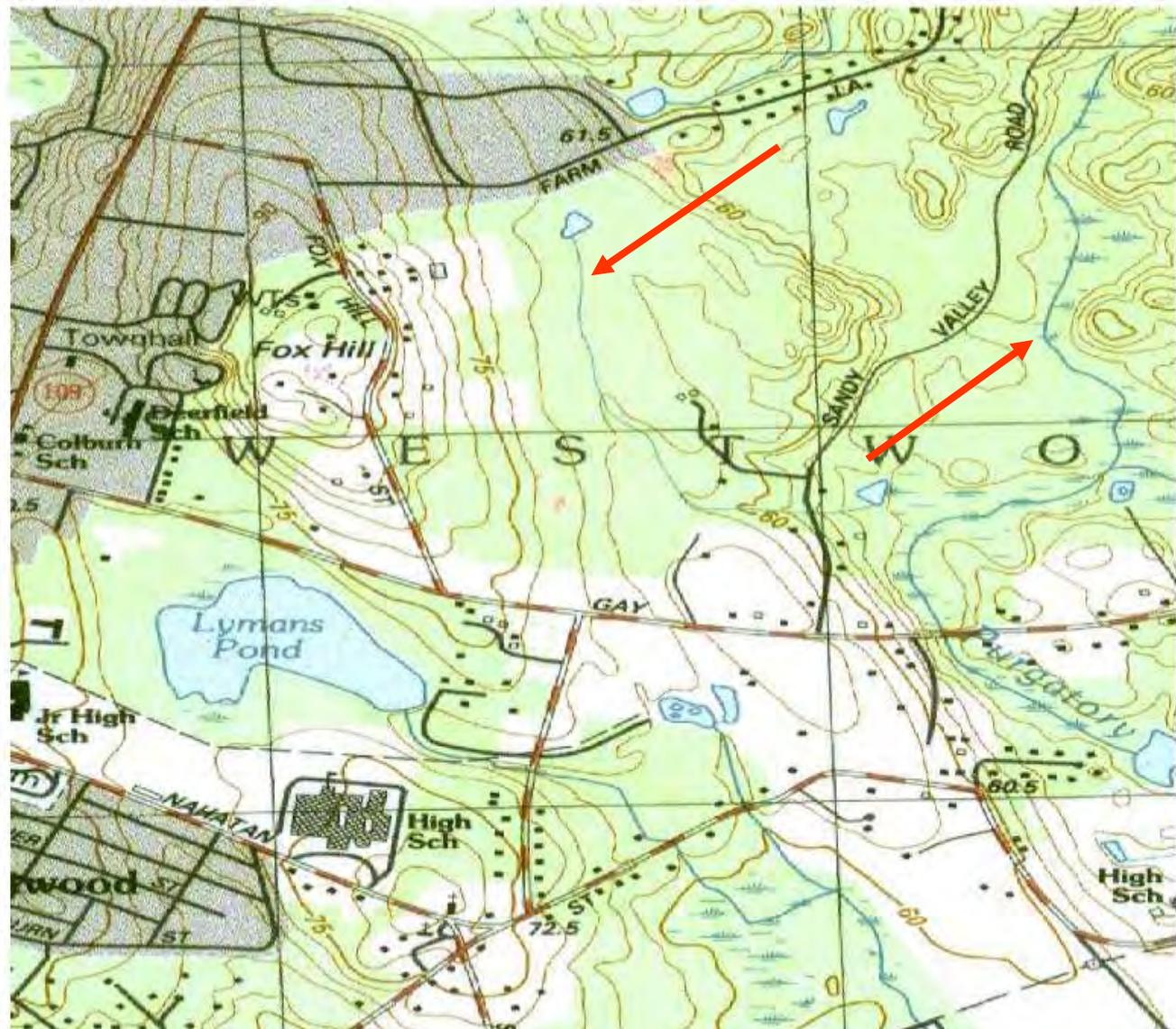


Land Under Water Bodies and Waterways

- Land Under Water Bodies and Waterways is the land beneath any creek, river, stream, pond or lake. Said land may be composed of organic muck or peat, fine sediments, rocks or bedrock
- The boundary of Land Under Water Bodies and Waterways is the mean annual low water level



Streams: Perennial or Intermittent? USGS Topographic maps



How are these resource areas sometimes identified?

- USGS Topographic Maps
- NHESP Priority and Estimated Habitat online and maps
- <http://www.google/maps>
- <http://www.bing.com/maps>
- <http://www.mass.gov/eea/agencies/massdep/service/online/my-community/my-community.html>
- http://maps.massgis.state.ma.us/map_ol/oliver.php
- Check with Conservation Commission
- <http://www.qgis.org/en/site/>
- <http://www.historicaerials.com/>
- May need to hire a wetlands consultant

If you don't have a dedicated GIS program

- <http://www.qgis.org/>

QGIS - The Leading Open Source Desktop GIS



[OLIVER is MassGIS' Online Data Viewer](#)

With this application you can:

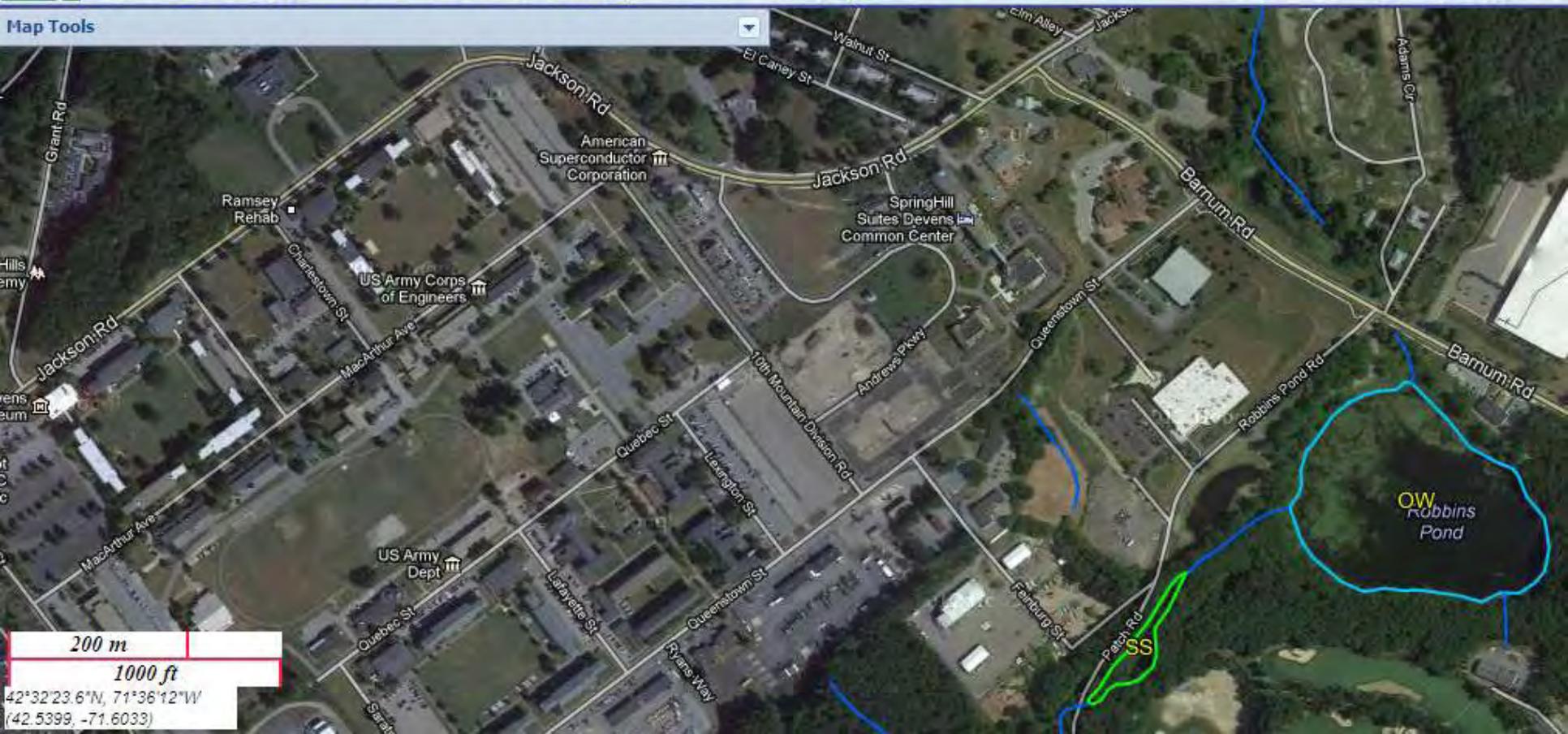
- Interactively display and query nearly all of MassGIS' data
 - Download up-to-date shapefiles from our database, with legend files
 - Overlay MassGIS data onto other basemaps such as Google Terrain
- ... And much more (see details [below](#)), all within your web browser.

[Give it a try!](#)

My Community

MassDEP Online Map Viewer
Wetland and Wetland Change Areas Map

Map Tools



200 m

1000 ft

42°32'23.6"N, 71°36'12"W
(42.5399, -71.6033)

The Wetlands Permitting Process



What is the Permitting Process?

- Permit requests are made to municipal Conservation Commissions and DEP
- Municipal Conservation Commission issues decisions on the permit requests
- Appeals made to Conservation Commission decisions are submitted to DEP

What are the typical documents an applicant submits to a Conservation Commission?

What's it going to cost?

- Form 1 – Request for Determination of Applicability
 - Cost – Legal Notice, maybe a local fee under a bylaw/ordinance
 - Have meeting and issue a Determination within 21 days of receipt of the RDA by the Commission
- Form 3 – Notice of Intent
 - Cost – Legal Notice, Abutter Notification, Filing Fee and maybe a local fee under a bylaw/ordinance, Recording Fee at the Registry of Deeds for recording an Order of Conditions
 - Have hearing within 21 days of receipt of the DEP File Number. Hearings can be continued with consent of both parties

Trail Maintenance or Improvement

- Work in the buffer zone or resource area?
If the buffer zone (or resource area), you can submit an RDA. If in a resource area (or buffer), and the work will remove, fill, dredge or alter the resource area, then an NOI is required.
- Check with the conservation commission, local bylaws/ordinances sometimes require an NOI for work in the buffer zone

Form 1: Request for Determination of Applicability

310 CMR 10.05(3)



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 1- Request for Determination of Applicability
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

City/Town _____

A. General Information

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



1. Applicant:

Name _____ E-Mail Address _____
Mailing Address _____
City/Town _____ State _____ Zip Code _____
Phone Number _____ Fax Number (if applicable) _____

2. Representative (if any):

Firm _____
Contact Name _____ E-Mail Address _____
Mailing Address _____
City/Town _____ State _____ Zip Code _____
Phone Number _____ Fax Number (if applicable) _____

B. Determinations

1. I request the _____ make the following determination(s). Check any that apply:
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance or bylaw** of _____

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

Form 1: Request for Determination of Applicability

The Commission should only issue a determination in response to what is asked on the Form 1 by the applicant.

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance or bylaw** of:

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).





Many Buffer Zone Activities can Proceed Under a Negative Determination

- If you can demonstrate that proposed work in a Buffer Zone will **not alter** the adjoining Resource Area, then you can proceed under a negative Determination of Applicability if that is how the commission votes
- Many activities that are not otherwise exempt can still qualify for a negative Determination if designed carefully
- Use of project phasing, time-of-year considerations, and appropriate best management practices can often be helpful in arguing for a negative Determination

Now what?

- The Conservation Commission issues a Form 2, a Determination of Applicability.
- If negative, work can proceed
- If positive, an NOI is required



Form 3: Notice of Intent

A Notice of Intent is required for any activity that will remove, fill, dredge or alter any resource area.



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
Document Transaction Number
City/Town

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



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

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

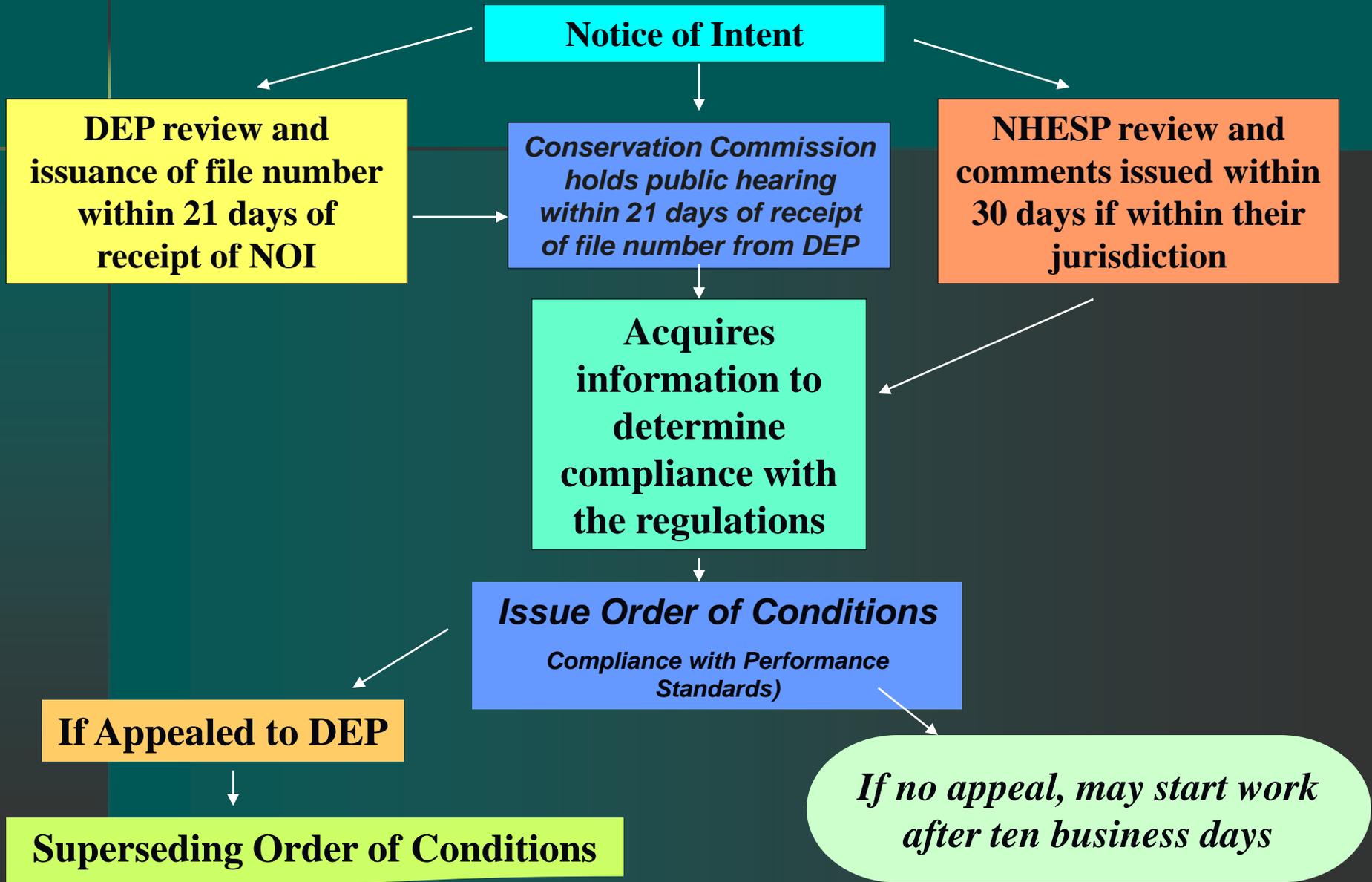
2. Applicant:

a. First Name	b. Last Name	
c. Organization		
d. Street Address		
e. City/Town	f. State	g. Zip Code
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

a. First Name	b. Last Name	
c. Organization		
d. Street Address		
e. City/Town	f. State	g. Zip Code

Notice of Intent Application Process



Notice of Intent (NOI)

- File NOI/Permit Application if:
 - Work Will **Alter** Resource Area(s)
- Filing Fees/Forms
- Plans:
 - USGS Locus map
 - Site Plans and Calculations
 - Title 5 Compliance
- Burden is upon the **applicant** to demonstrate compliance with all regulations
- Abutters Notified
- If Rare/Endangered Species Present --Send NOI to MA Natural Heritage and Endangered Species Program (MA NHESP)
- **MUST demonstrate that a proposed project meets General Performance Standards specified in Regulation**

310 CMR 10.53(6)

- Notwithstanding the provisions of 310 CMR 10.58, the issuing authority may issue an Order of Conditions for the construction, rehabilitation, and maintenance of footpaths, bikepaths, and other pedestrian or nonmotorized vehicle access to or along riverfront areas but outside other resource areas, provided that adverse impacts from the work are minimized and that the design specifications are commensurate with the projected use and are compatible with the character of the riverfront area. Generally, the width of the access shall not exceed ten feet of pavement, except within an area that is already altered (*e.g.*, railroad beds within rights of way). Access shall not be located in vernal pools or fenced in a manner which would impede the movement of wildlife.

Activities Within Buffer Zone

Any activity, other than minor activities, proposed or undertaken within 100 feet of an area specified in 310 CMR 10.02(1)(a) which, in the judgment of the issuing authority, will *alter* an Area Subject to Protection is subject to regulation and requires the filing of a Notice of Intent.



Form 5: Order of Conditions

310 CMR 10.05(6)



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

MassDEP File Number: _____

A. General Information

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



1. From: Conservation Commission
2. This issuance is for (check one): a. Order of Conditions b. Amended Order of Conditions
3. To: Applicant:
 - a. First Name _____ b. Last Name _____
 - c. Organization _____
 - d. Mailing Address _____
 - e. City/Town _____ f. State _____ g. Zip Code _____
4. Property Owner (if different from applicant):
 - a. First Name _____ b. Last Name _____
 - c. Organization _____
 - d. Mailing Address _____
 - e. City/Town _____ f. State _____ g. Zip Code _____
5. Project Location:
 - a. Street Address _____ b. City/Town _____
 - c. Assessor's Map/Plot Number _____ d. Parcel/Lot Number _____
 - Latitude and Longitude, if known: e. Latitude _____ f. Longitude _____
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 _____

Order of Conditions

- The permit which governs work by conditioning it
- Almost always requires sedimentation and erosion controls
- Often requires environmental mitigation
- If an Order of Conditions is issued for a project you are working on, you and your employees are required to familiarize yourself with its conditions and comply with them



Form 5: Order of Conditions

- The Order must be issued within 21 days from the closing of the public hearing.
- If the conservation commission finds that the information submitted by the applicant is not sufficient to describe the site, the work or the effect of the work on the interests identified in M.G.L. c. 131, § 40, it **may issue an Order prohibiting the work**. The Order *shall specify the information which is lacking and why it is necessary*.

Potential Other Permits

- US Army Corps of Engineers
- Natural Heritage and Endangered Species Program (NHESP)
- National Park Service - Wild and Scenic Rivers
- MassDEP (401 Water Quality Certificate)

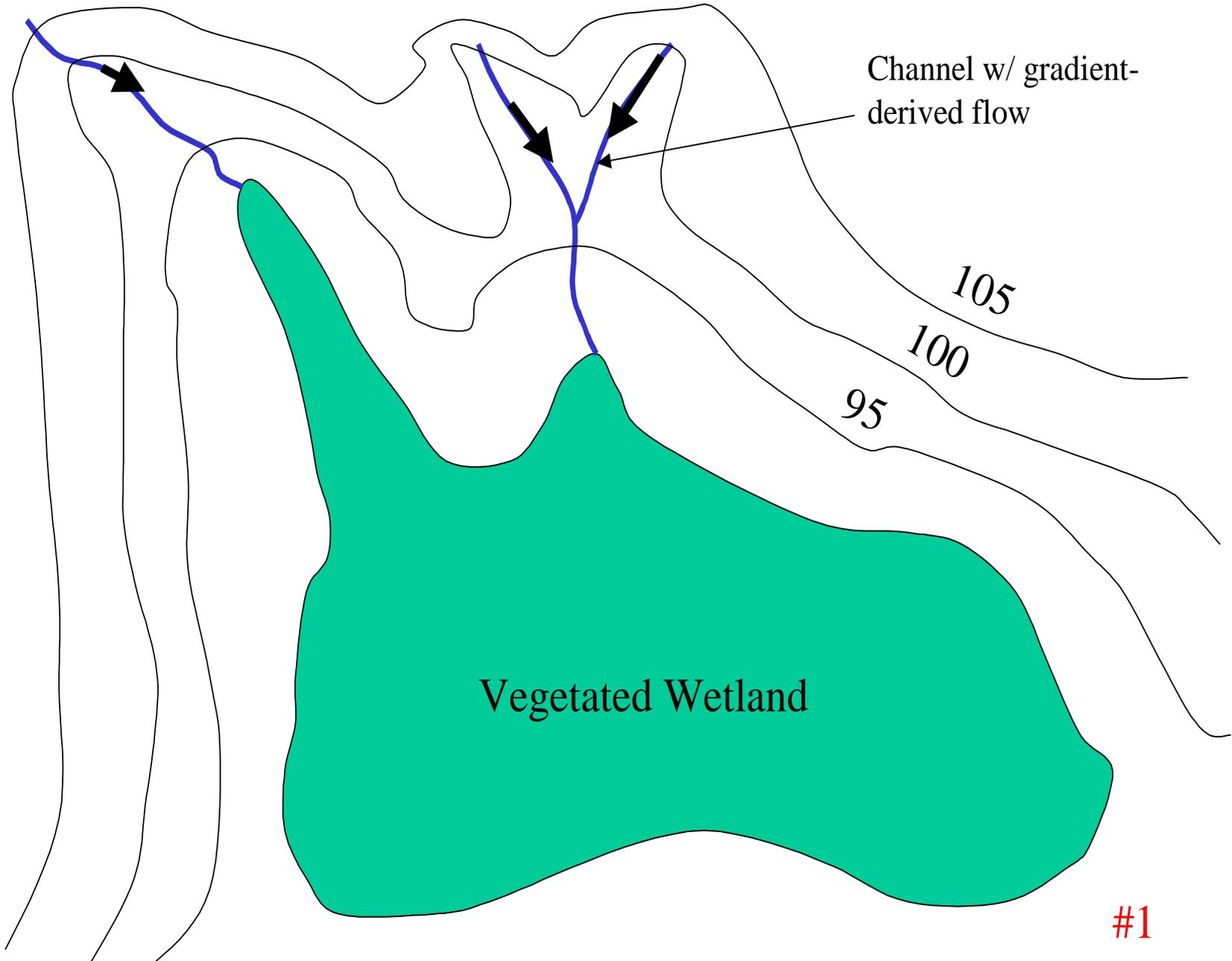
WHAT MAKES A STREAM JURISDICTIONAL?

- Stream means a body of running Water, including brooks and creeks, which moves in a definite channel in the ground due to a hydraulic gradient
- Such a body of running water which does not flow throughout the year (*i.e.*, which is intermittent) is a stream except for that portion upgradient of all bogs, swamps, wet meadows and marshes.

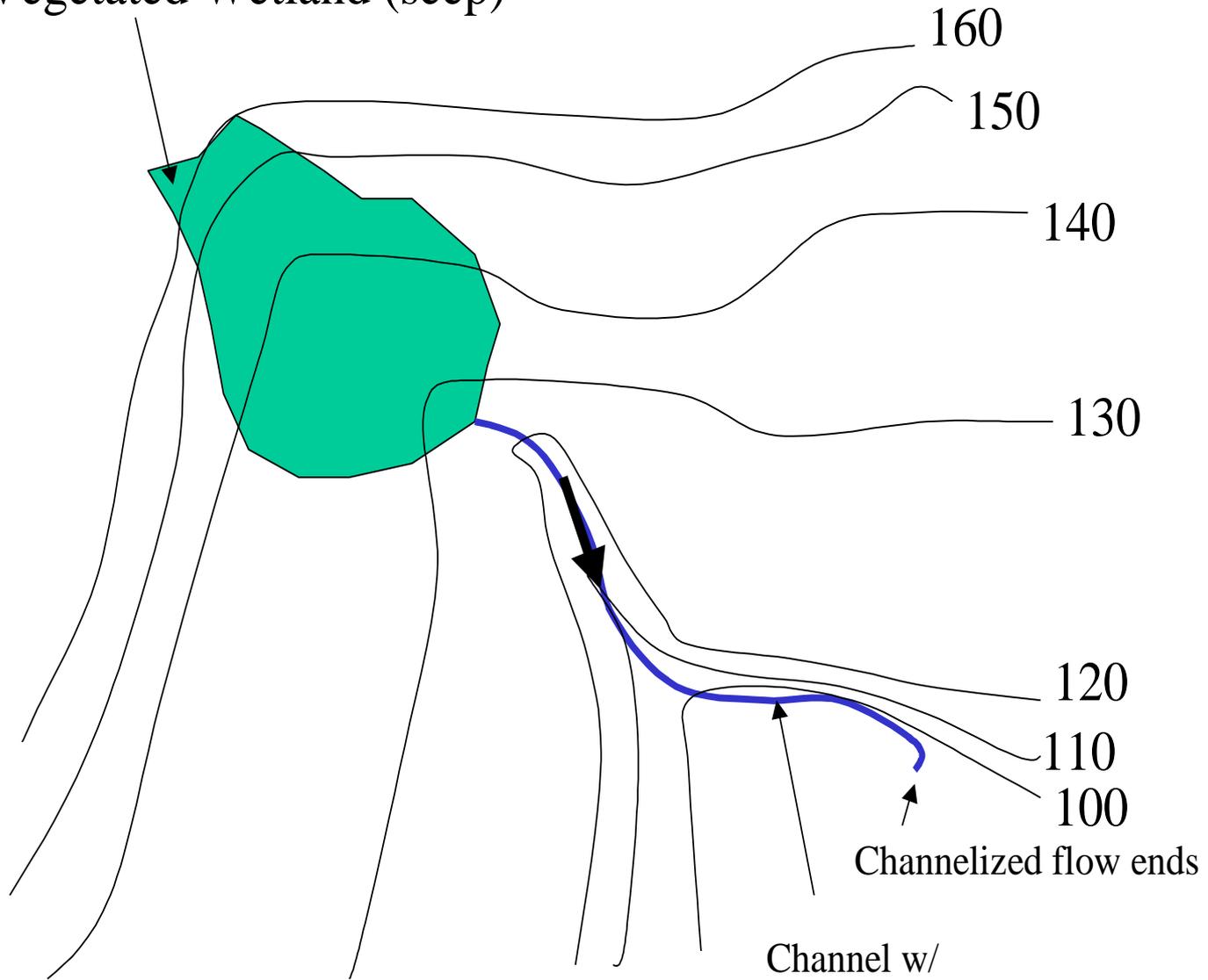






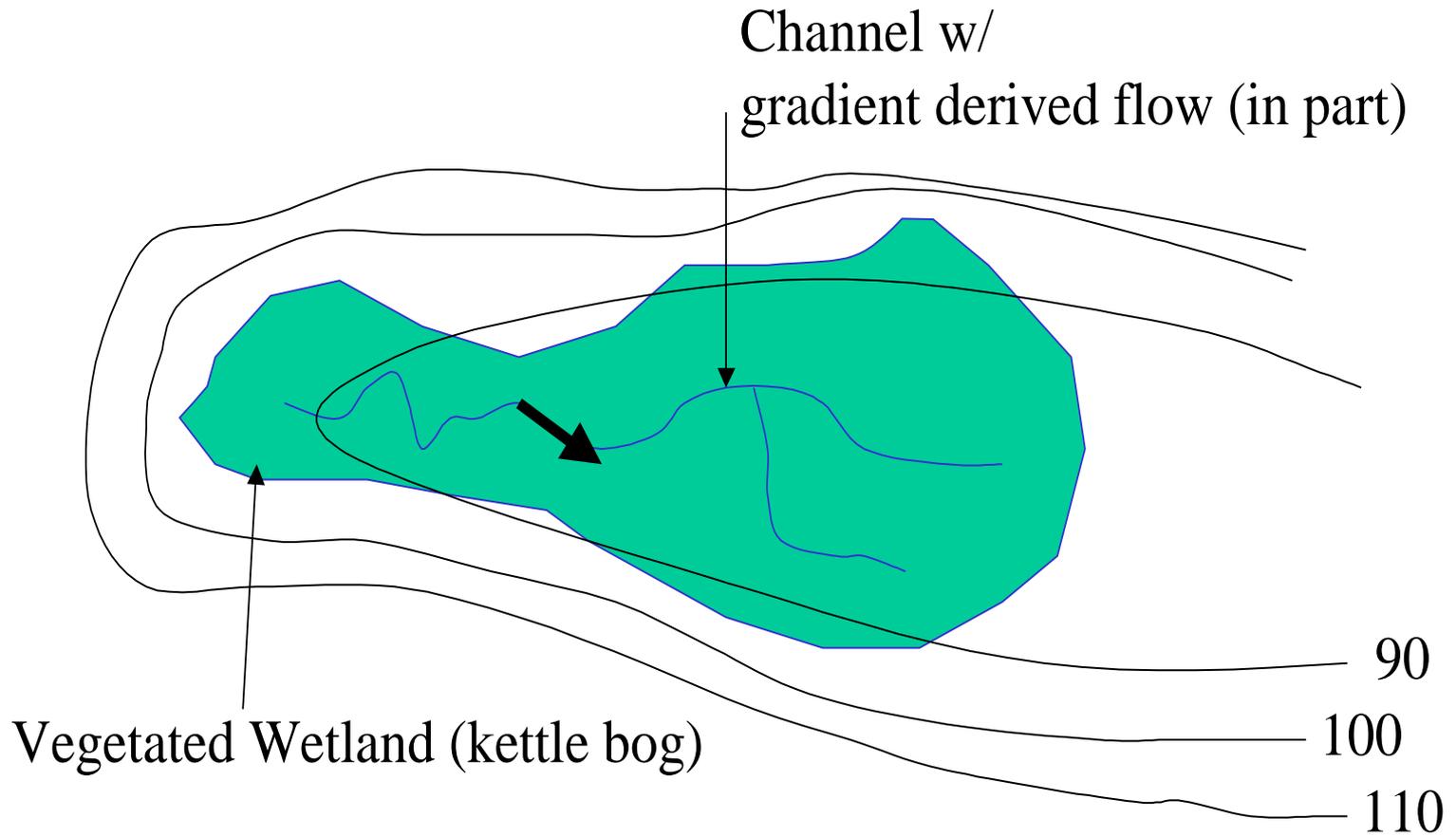


Vegetated Wetland (seep)

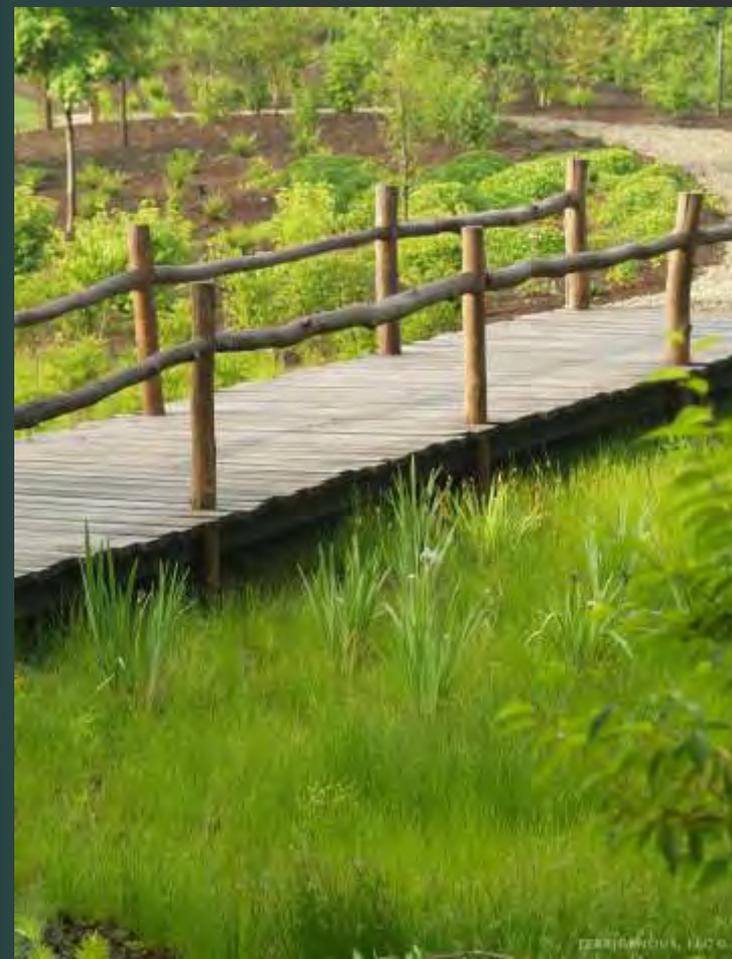


Channel w/
gradient-derived flow

#3



Thou shalt not impair a wetland (functions and values)





Helical Piers













MASSACHUSETTS RIVER AND STREAM CROSSING STANDARDS





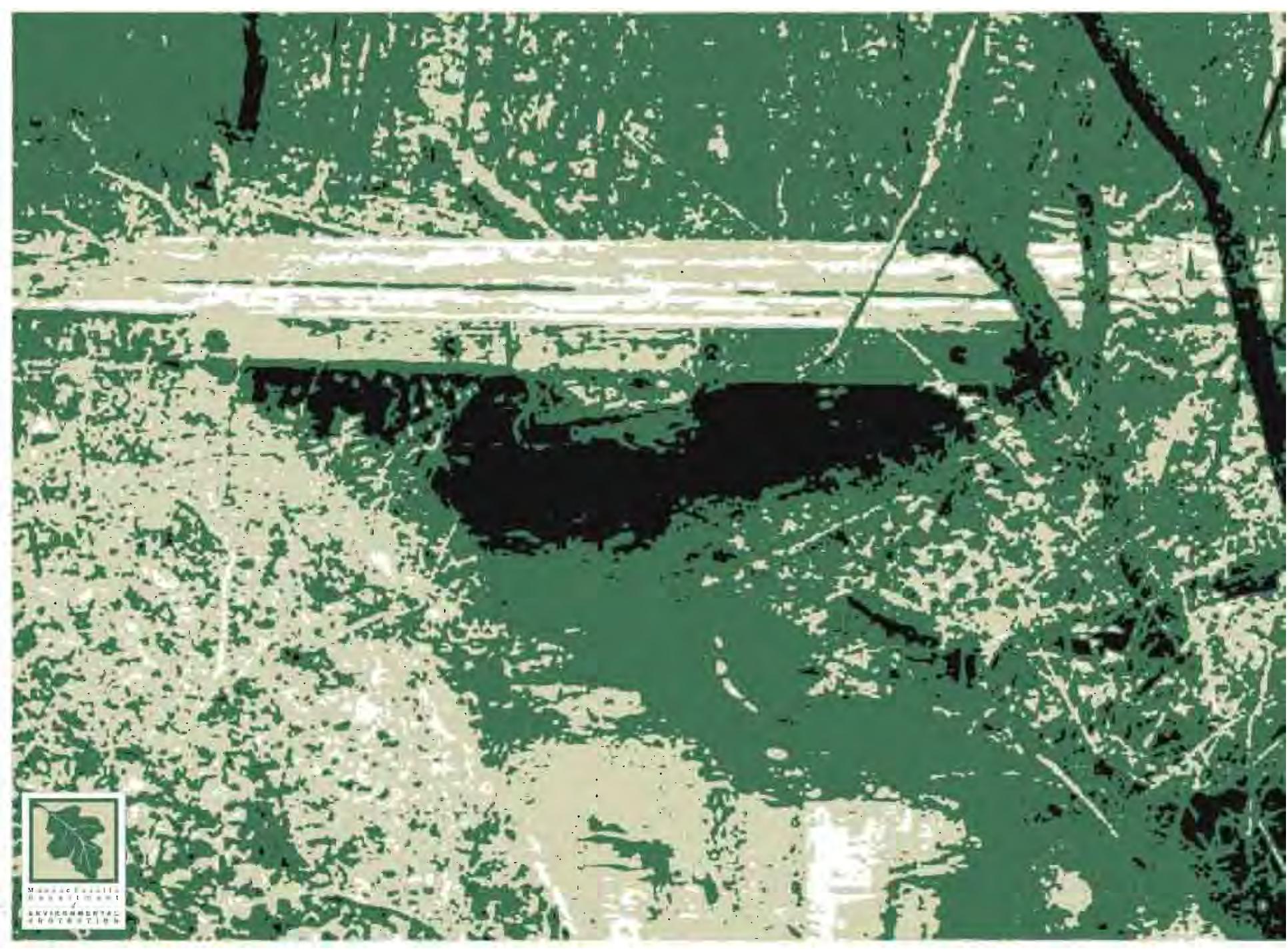
Conservation Commissions, MassDEP and the US Army Corps of Engineers have authority to regulate stream crossings.











MASSACHUSETTS
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION

Stream & Wetland Crossings - Narrow Trails

Causes:

Trails often cross intermittent streams, perennial streams or wetlands and impacts to water quality can occur if the trail users cannot cross the resource without directly contacting the water and stream substrate.

Standard Repair:

Along narrow streams used for non-motorized purposes, streams can be crossed in several ways depending on the size and type of the stream and the trail's geometric relationship to the water feature. For intermittent streams, placement of flat stone along the stream bed may be appropriate. Another option is the placement of a pipe or culvert to convey flow under the trail. For perennial streams, an anchored bridge is preferred, but culverts may also be used. For wetlands (marshes, swamps) the use of a bog bridge (aka puncheon) or a boardwalk can be used although boardwalks are preferred as they are elevated above the ground.

Regulatory Considerations:

Placement of fill within a wetland would require an Order of Conditions from the local Conservation Commission (Cons Com) and, possibly a Section 404 Permit from the U.S. Army Corps of Engineers and a 401 Water Quality Certification from the DEP. Fill placed within the "buffer area" of the wetland may also require a permit from the Cons Com. The buffer area will differ from town to town. The crossing of perennial streams must conform to the MA DEP Stream Crossing Standards.

Other Repair Options:

Bridge material options include steel or fiberglass pre-fab.

Information Sources:

USFS, http://www.ettechtonics.com/pedestrian_and_trail_bridges/

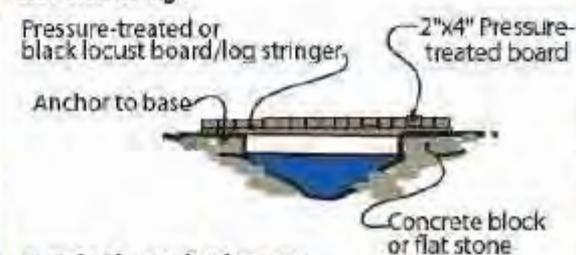
**Photo of Problem Type:
Intermittent Stream Crossing**



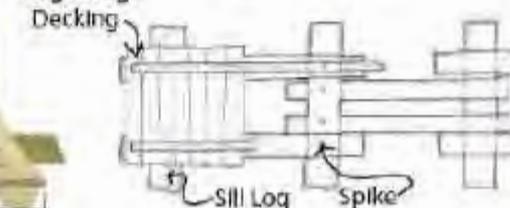
**Standard Repair Diagram:
Bog Bridge**



**Standard Repair Diagram:
Elevated Bridge**



**Standard Repair Diagram:
Bog Bridge**



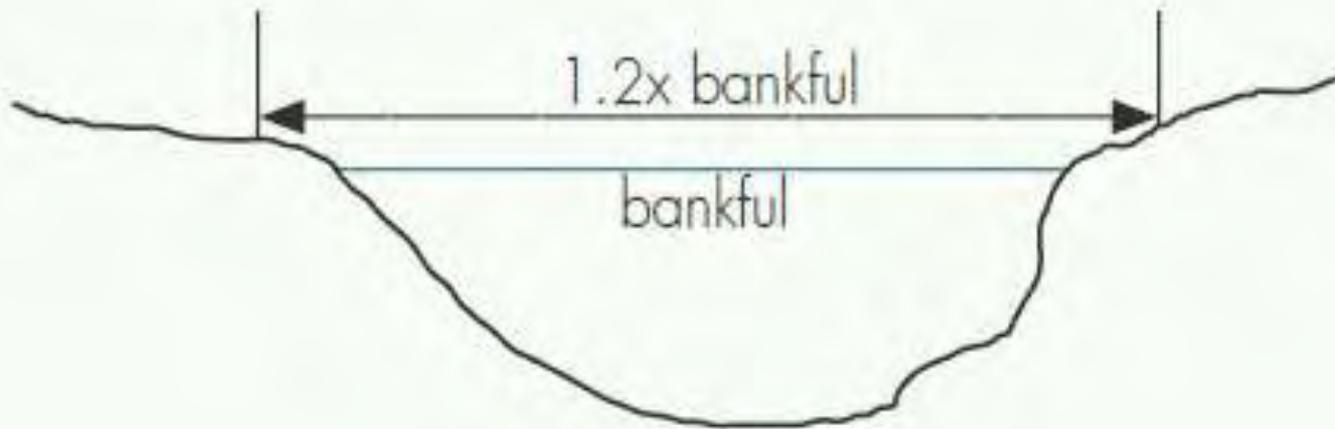
**Photo of Problem Type:
Perennial Stream Crossing**



**Standard Repair Diagram:
Elevated Bridge**



Stream Crossing Standards



III. Stream width

Riverfront Area Exemptions

- Maintenance of lawfully located structures, roads, **clearings**, **landscaping**, in its existing condition
- Cannot be in other Resource Areas or their Buffer Zones

- Can this clearing be maintained?



Exemptions?

Applies only to work in the buffer zone or Riverfront area.

- **Vista Pruning** — You are creating a specific window in the vegetation. Only applies if the activity is located more than 50 feet from the mean annual high water line within a riverfront area or from bordering vegetated wetland, whichever is farther.
- **Pruning** of landscaped areas is not subject to jurisdiction
- **Plantings** of native species of trees, shrubs, or groundcover, but excluding turf lawns

Exemptions

Applies only to work in the buffer zone or Riverfront area.

- Unpaved pedestrian walkways less than 30 inches wide for private use and less than three feet wide for public access on conservation property



Vista Pruning

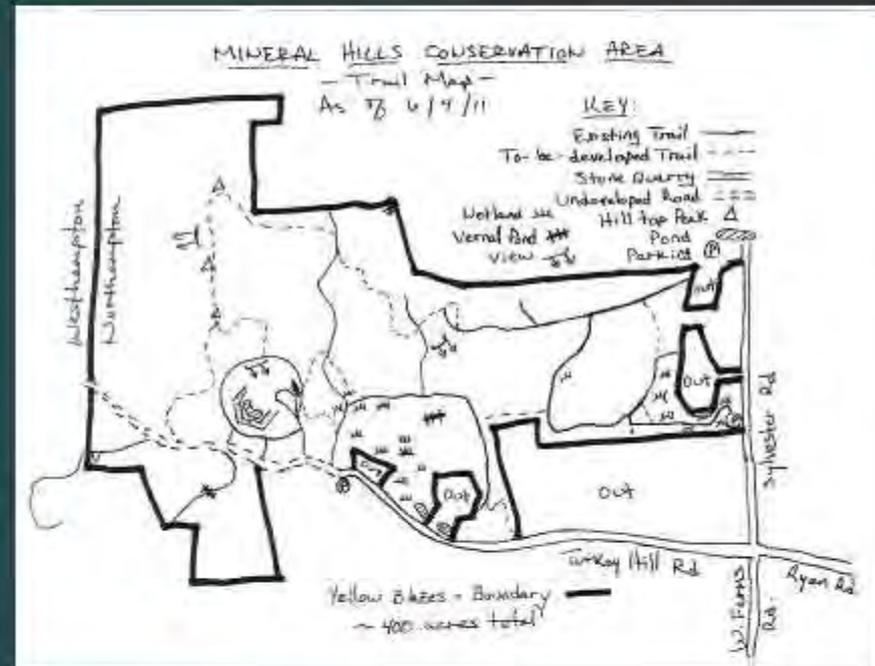


Selective thinning of tree branches or understory shrubs to establish a specific "window" to improve visibility, located at least 50 feet from the River or from wetlands. It does not include the cutting of trees which would reduce the leaf canopy to less than 90% of the existing crown cover and does not include the mowing or removal of understory brush.

The City of Northampton Seven Year Plan of open space and recreation:
 - agriculture
 - recreation
 - multi use trails
 - open space
 - recreation

2011-2018
 (valid through March 2018)

Open Space, Recreation & Multi-Use Trail Plan



Planning Trails... before permitting

- If wetlands can be avoided, all the better!
- But that's often not possible.
- Are there other wetland trails in town?
- What type of permitting was done, how did it go?
 - Learn from others

Working with Conservation Commissions

Commissions like 'good' projects

- Improve wetlands
- Provide educational opportunities

■ Appropriate public
access and

Recreation

Improve wetlands

- Open Process



Plan Ahead

- Do Contact Commissions early
- Do Offer site visits before applications are filed



Photo: BLM.gov

Plan Ahead Some More

- Budgeting: set-aside funds for wetlands consultants
- **Don't wait until designs and plans are finalized to contact the Commission**



What about these local Wetlands Bylaws?

■ Ask!

- If consultants are on board, make sure they are aware
- Can change delineation and plans for mitigation

– Some bylaws online at

www.maccweb.org/resources/bylaw_list.html



Massachusetts
Association of Conservation Commissions

Since 1961
Celebrating **50** Years!

What about these local Wetlands Bylaws?

- Local bylaws have performance standards, just like the WPA
 - These must also be addressed in plans and applications
 - Read through the bylaw to see if your trail meets local standards.
 - Prepare a bullet-point sheet that shows how Your proposed work complies

Local Wetlands Bylaws Might Have...

Additional fees

- For RDA
 - In addition to local share for NOI
- Larger buffers
- Fewer exemptions
- A project that doesn't need a state wetlands permit could still require review and approval under the local bylaw/ordinance!

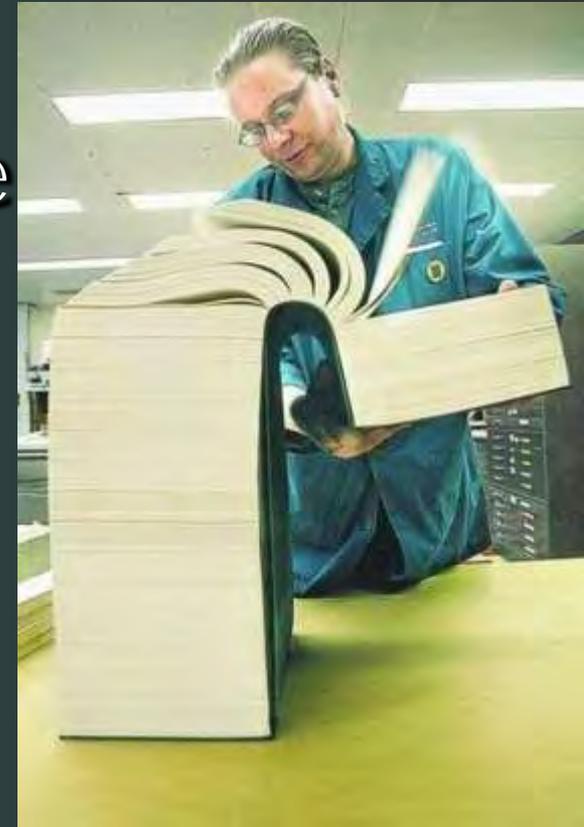
They might also have

- Longer timelines
- “I” VW
 - No need for connections
- More vernal pool protection
- Local forms
- ‘No work’ zones
 - Sometimes exceptions for trails and linear projects
- DEP has no jurisdiction.
 - Must appeal in court
 - (But of course you won’t need to worry about that!)



We're ready to file!

- Site visits are done, Commission will not be surprised?
- Make a checklist
- If possible have a complete filing reviewed before copies are made



At the hearing

- Powerpoints or large-scale plans
- Be organized - Bring pictures too!
- Suggest conditions
- A few supporters can be helpful



WHERE TO RIDE

To find a list of State Parks and Forests that allow OHV operation visit:

www.mass.gov/dcr/recreate/orv.htm

OHV use is permitted only on designated trails, which are marked with trailhead signage and/or orange or yellow trail blazes. There are specific riding seasons and conditions that determine when trail use is permitted. To be sure the trails are open, call ahead.

Department of Conservation and Recreation (DCR): (617) 626-1250.



OHV PROGRAM FUND

Your recreation vehicle registration revenues are directed to supporting safer operation and improved opportunities for enjoying recreation vehicles. Administered by the Executive Office of Energy and Environmental Affairs, the fund provides financial resources for increased enforcement, improved rider education, and the development and improvement of designated recreation trails in Massachusetts. An Off-Highway Vehicle Advisory Committee made up of recreation vehicle users and other stakeholders advises the agencies responsible for managing recreation vehicle use on the allocation of OHV program funds as well as policies and regulations related to recreation vehicle use.

OHV EDUCATION AND TRAINING

Starting February 1, 2011, an approved recreation vehicle safety and responsibility course is required for operators under the age of 18. There will be one mandatory session that a parent or guardian of an operator under the age of 16 must attend. Proof of successful completion of the course must be in the operator's possession.

To find out more about educational requirements please visit:

www.mass.gov/dfwele/dle/boatrvsafe.htm

SAFETY EQUIPMENT

ANY persons operating, riding in or on or being towed by a recreation or snow vehicle shall wear a DOT approved helmet.

Each recreation vehicle must also be equipped with:

- An adequate braking system.
- An adequate muffler designed to reduce unusual or excessive noise (below 96 dbA) and noxious fumes.
- One or more headlights, a red rear light and a red rear reflector (after sunset, lights must be displayed).
- An attached trailer must have a red rear reflector.



"Promoting Safety through Education"



Massachusetts Environmental Police

www.state.ma.us/dfwele/dle

An Agency of the Executive Office of Energy and Environmental Affairs

Law Enforcement: (800) 632-8075
Safety Bureau: (508) 759-0002

This is only a summary of the recreation vehicle laws, which are subject to change. You must know and observe all local, state, and federal laws. For further information contact the Massachusetts Environmental Police.

Revised: 07/14/2011

MASSACHUSETTS ENVIRONMENTAL POLICE

Boat and Recreation Vehicle Safety Bureau



OFF-HIGHWAY, RECREATION VEHICLE, AND SNOWMOBILE UPDATE

Legislation signed in August of 2010 (Ch. 202 of the Acts of 2010) brings significant changes to Massachusetts Recreation Vehicle Laws. Among the new provisions are educational requirements for young riders, age restrictions for operators of ATVs and UTV's, increased penalties for illegal use and the establishment of an OHV program fund to support improved riding opportunities and law enforcement. This brochure provides a brief overview of the substantive change to MGL c.90B as it pertains to recreation and snow vehicles. These are not the complete laws and regulations pertaining to OHV operation in Massachusetts.

Operating a snow or recreation vehicle in a manner that causes damage to...wetlands or other waters of the Commonwealth...is prohibited

AGE RESTRICTIONS

No person between 14 -16 years of age shall operate an all-terrain vehicle or a recreation utility vehicle with an engine capacity greater than 90 cubic centimeters. When operating such vehicles 90 cubic centimeters or less, persons between 14-16 years of age must be directly supervised by a person 18 years of age or older.

A person between the ages of 10 and 14 may only operate a recreation vehicle while directly supervised in preparation for, or while a participant in, a supervised and sanctioned race, rally, or organized event approved by a municipal permitting authority. If operating an ATV or RUV, said person is limited to a vehicle 90 cubic centimeters or less.

A person under 10 years of age may only operate an age and size appropriate dirt bike while directly supervised in preparation for, or while a participant in, a supervised and sanctioned race, rally, or organized event. When preparing for such event, operation by a person under 10 is limited to private property.

A person under 10 years of age may operate an age and size appropriate snow vehicle while directly supervised on land on which the operator is domiciled, but in no circumstance with a stock engine capacity greater than 150 cubic centimeters.

No person under the age of 16 ½ shall operate a recreation vehicle across a public way unless directly supervised by a person 18 years of age or older. The public way and the crossing must be marked and approved for recreation vehicle use.

No person under 18 years of age shall operate recreation vehicles (including, but not limited to: ATV's, RUV's, and dirt bikes) unless they have successfully completed a MEP approved OHV Safety & Responsibility course. Operators under 18 years of age must have on their person and be able to produce an MEP issued OHV Safety certificate when operating.

REGISTRATION

Recreation vehicles operated on public or private property must be registered through the Commonwealth of Massachusetts.

Recreation vehicles used exclusively for agricultural, forestry, lumbering, or construction purposes are exempt from the registration fee requirement.

Registration must be in operator's possession, and assigned registration number shall be displayed on the vehicle and not obstructed. Out of state registrations are not valid in Massachusetts.

A valid registration is not a right to trespass. Landowner permission is required.

Registration Offices:

Boston

251 Causeway St.
(617) 626-1610

Fall River

218 S. Main St.
(508) 679-8287

Springfield

165 Liberty St.
(413) 733-1642

Worcester

67 Millbrook Street
(508) 753-0603

Hyannis

60 Perseverance Way
(508) 771-8382

PROHIBITED OPERATION

Operating under the influence of drugs and/or alcohol.

Operating across a public way, unless it is marked and approved for recreation vehicles.

Operating on unapproved public ways or upon or across a controlled access highway.

Failure to come to a complete stop when crossing an approved public way (must yield to traffic).

Operating to endanger or at speeds that are unsafe for conditions.

Operating a snow or recreation vehicle in a manner that causes damage to public or private property, including lands owned or managed by DCR, DFW, wetlands or other waters of the Commonwealth including lands used for public water supply purposes or historic or archaeological sites.

Operating a snow vehicle or recreation vehicle in a reforested or planted area in a manner that causes damage to growing stock.

Operating a snow vehicle or recreation vehicle on an ocean beach or sand dune in a manner so as to destroy, damage or breakdown any beach, dune or dune grass.

Operating on land of another without written permission of the owner.

Operating within 150 feet of an occupied residence without permission of the owner.

No person having control of a snow or recreation vehicle shall refuse to stop after having been requested or signaled to do so by a

law enforcement officer. No person shall refuse to give their correct name, address and registration number to such officer.

Operating in a manner to harass or chase wildlife or domestic animals.

Operating a snow or recreation vehicle which emits noxious fumes or makes excessive noise.

Operating with a loaded firearm, rifle, or shotgun.

DRIVING INTOXICATED

Operating an OHV under the influence of drugs and/or alcohol will result in fines, driver's license restrictions, suspensions or penalties, and impoundment of the off-highway vehicle.

ACCIDENTS

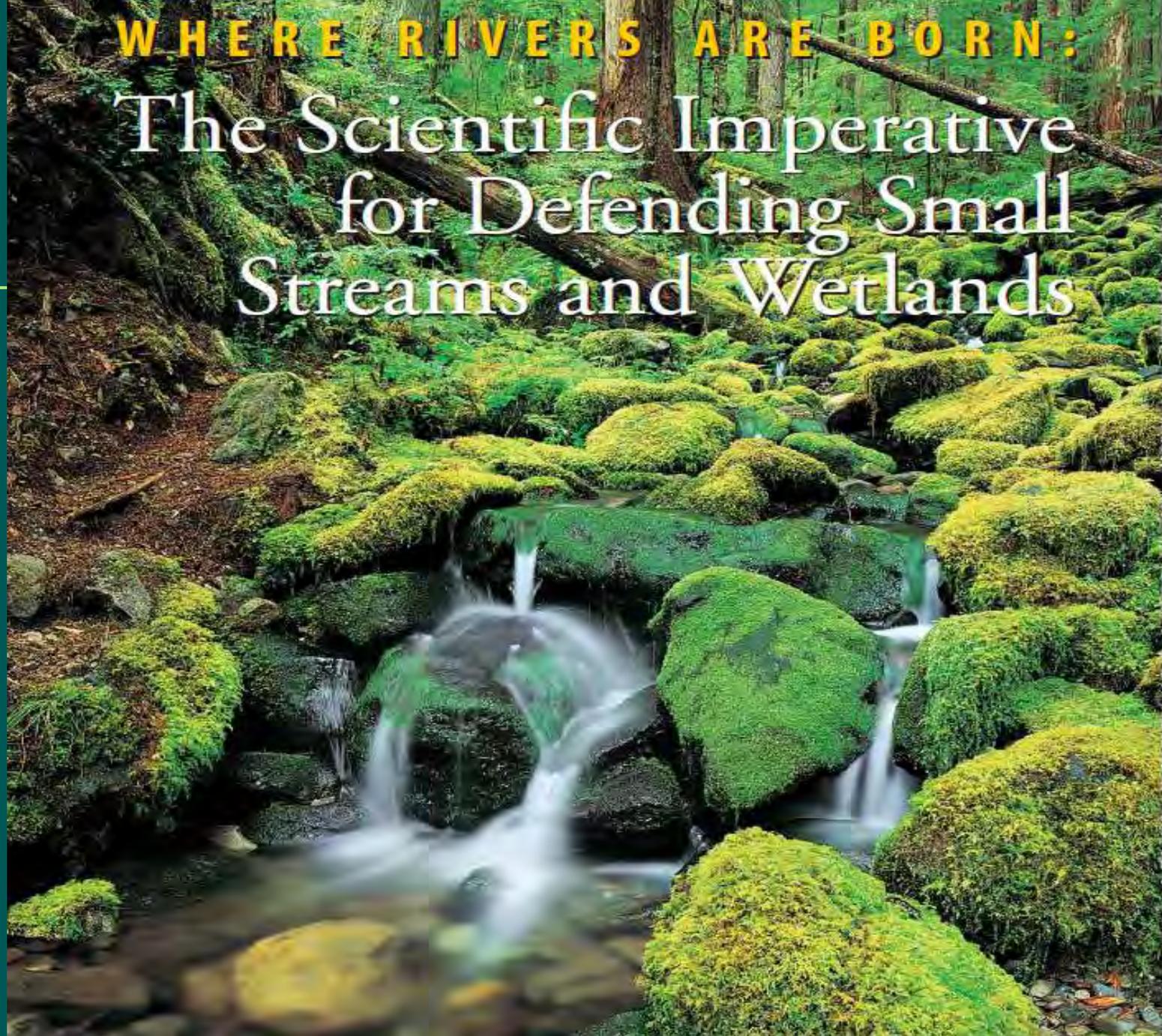
The operator or owner of a recreation vehicle involved in a collision, accident or other such casualty resulting in death or injury to a person or damage to property in excess of \$50 shall notify a law enforcement officer immediately and file a written report of the incident with the Massachusetts Environmental Police within 48 hours.

There are new penalties and fines for:

- Operating recklessly or negligently so lives or safety of the public might be endangered.
- Leaving the scene without stopping and making known his name, address and registration number after colliding with or causing injury to an operator, property, or another recreation vehicle.
- Operating recklessly or negligently and causing serious injury or death by such operation.

WHERE RIVERS ARE BORN:

The Scientific Imperative for Defending Small Streams and Wetlands





Department of Conservation and Recreation

Trails Guidelines and Best Practices Manual



The Metacomb-Monadnock trail to Mt. Norwottock

The health and happiness of people across Massachusetts depend on the accessibility and quality of our green infrastructure - our natural resources, recreational facilities, and great historic landscapes. The Department of Conservation and Recreation (DCR) provides vital connections between people and the environment with over 4,000 miles of trails and 150 miles of paved bikeways and rail trails. Consistent and clearly defined trail policies, procedures, and program guidelines can provide inspiration and direction for managing, enhancing, and developing a successful and sustainable trail system for Massachusetts.

Trail Recommendation Implementation Prioritization

Trail recommendations / proposals should be implemented in the following priority order, provided that the proposed work activities are consistent with DCR Trails Guidelines and Best Practices (as updated), and comply with the Wetlands Protection Act, Massachusetts Endangered Species Act and Massachusetts Historic Commission, permitted as necessary, and provided that the field staff have adequate operational resources:

1. Maintain appropriate existing trails and fire roads.
2. Close or improve existing trails with known public safety hazards.
3. Close or relocate existing trails that adversely impact documented state-listed species, in consultation with DCR Bureau of Planning and Resource Protection and NHESP staff.
4. Close, relocate or improve existing trails that impact vernal pools.
5. Close, relocate or improve wetland crossings on existing trails that impact wetlands, streams or ponds.

Water Quality and other Benefits conferred by Riverine Vegetation:

A – plant roots **filter out excess nutrients and other pollutants** before they reach the water and **add stability to streambanks**

B – living/dead vegetation on the ground **helps slow runoff**, intercepts sediment and reduces erosion

C – Roots, as well as other living and dead vegetation extending into the water, **provide surface areas for pollutant-eating microbes**

D – Trees and other riverine vegetation **provide shade** that helps to keep the water cool and dissolved oxygen levels high enough to support trout and other sensitive organisms. Also, **less algae** grows in shaded streams due to the reduced sunlight

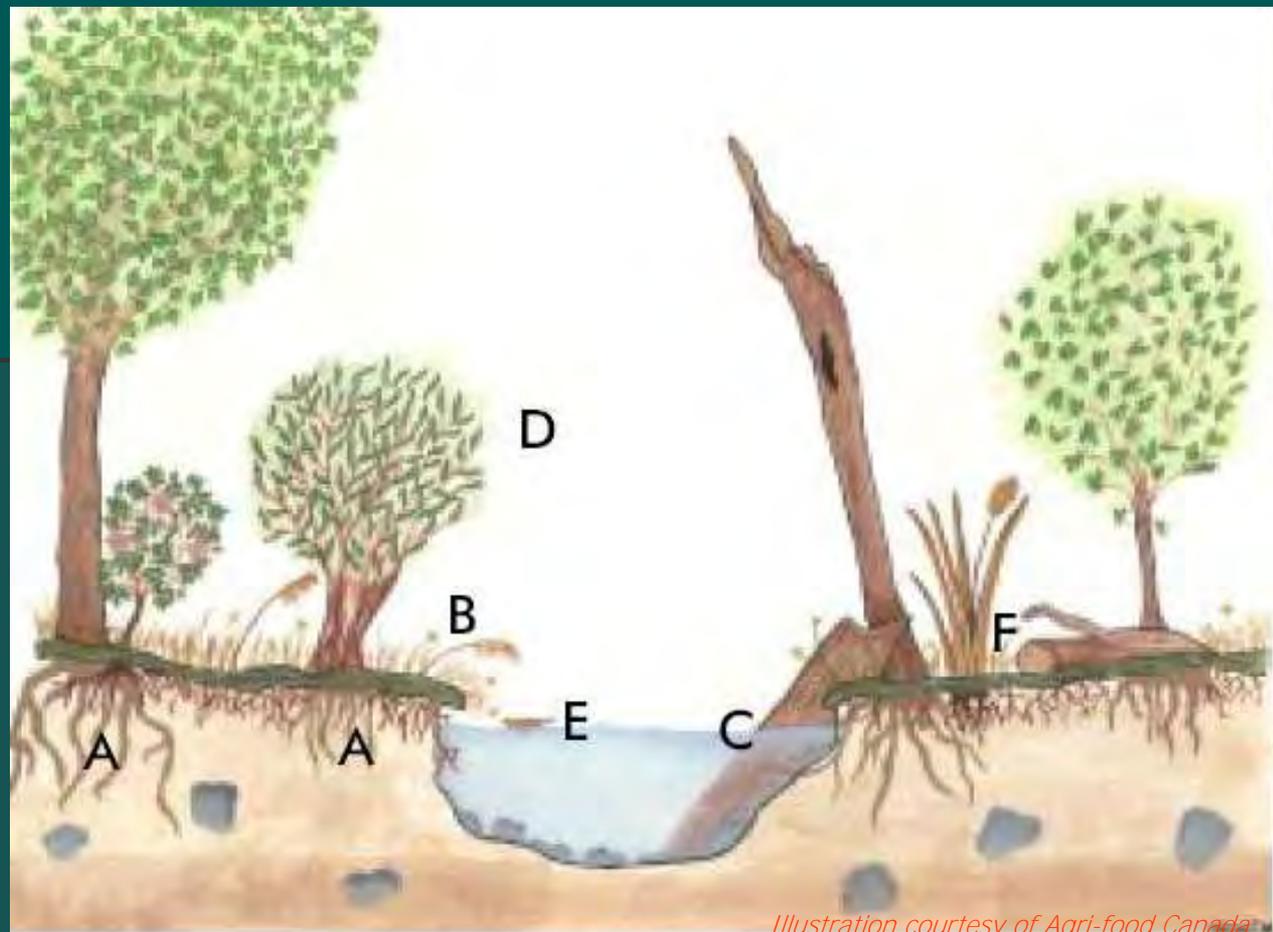


Illustration courtesy of Agri-food Canada

E – Leaves, twigs, insects and other natural items (not lawn clippings!) falling off streamside vegetation and into the water help provide healthy fuel for the aquatic food chain

F – riverine vegetation enhances infiltration of precipitation into the ground, where it can replenish aquifers and **streamflow. Higher “baseflows” dilute pollutants and mitigate stream heating**



NATURE IS "MESSY"



Though this stream has been restored it doesn't appear "neat" and "straight". That's because healthy natural streams are messy, which is what we tried to mimic. Meanders, or curves, allow a stream to dissipate the energy of flowing water and help it move sediment downstream.

Logs and tree roots in the stream provide habitat for fish, turtles, and insects. Grass, shrubs, and trees on the stream bank make cover and food for birds, frogs, snakes, and other wildlife.



Eastern pond turtle

Interpretive sign at a stream restoration project



A good example of "Nature is messy": Large Woody Debris (LWD) in a stream, along with lots of streamside vegetation

