

West Newbury Conservation Commission Proposed Wetlands Protection Bylaw Public Info Session

April 9, 2024



Wetlands and the Wetlands Protection Act (The *very* brief version)

- **What is a wetland and how do I know if a wet area is a wetland?**
 - A wetland is an area where water covers the soil or is present at or near the surface of the soil all year or for varying periods of time during the year, including the growing season
 - A wetland must have hydrology, hydric soil, and hydrophytic vegetation
 - A wetlands scientist determines if an area is a wetland by studying the hydrology, soils, and vegetation of an area
 - A wetlands delineation is the only way to accurately confirm the location of a wetland
- **Enacted in 1972, the Wetlands Protection Act (the Act) protects eight presumed public interests provided by wetlands**
 - These eight interests are community benefits ranging from flood control to drinking water protection to protection of wildlife habitat
 - Every wetland is presumed to protect multiple public interests
 - The Act regulates activities in a variety of wetland resource areas
 - The Massachusetts Department of Environmental Protection (MassDEP) at the state level and the Conservation Commission at the local level have joint jurisdiction to review and approve filings under the Act
- **What does this all mean?**
 - Under the Act, no person shall remove, fill, dredge, or alter an area subject to protection under the Act without first filing with the Conservation Commission and receiving a permit approving their proposed project or activity

Why Have a Local Wetlands Protection Bylaw?

- **Increase community control** over potentially impactful activities in wetlands and buffer zones
- **Reduce community costs** associated with the degradation of wetlands and their buffer zones
- Guide development to be **more sustainable** and **more resilient** to a changing climate
- Provide **enhanced protections of the community's wetlands** and the values they provide for the community
- **Increase the Town's competitiveness** for certain grant funding opportunities
- **Empower the Conservation Commission** with additional tools to better protect wetlands

Is a Wetlands Protection Bylaw Needed in West Newbury?

The Town's long-standing objectives of increased wetland and water protections have been identified in various Town plans and reports:

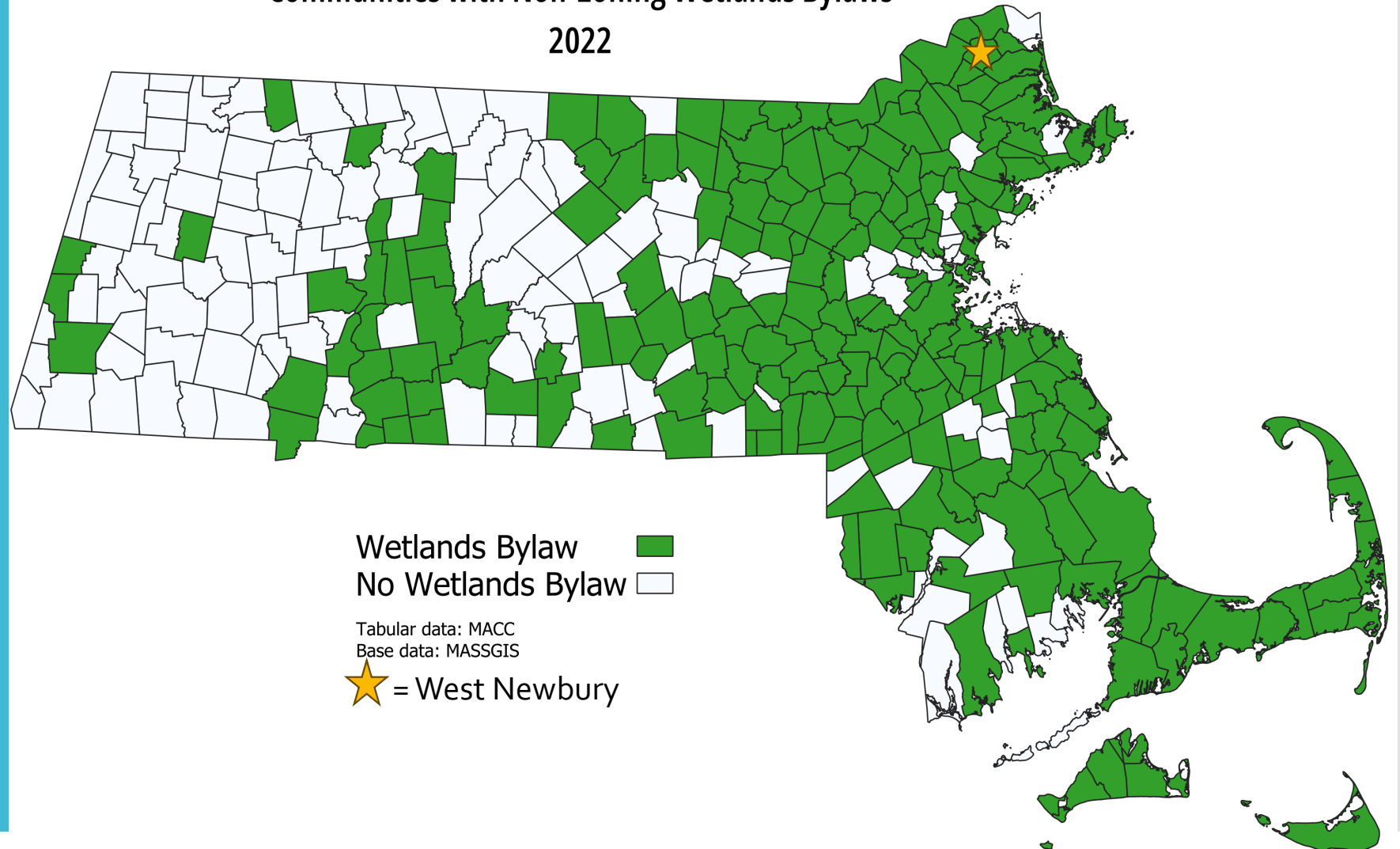
- **1999 Comprehensive Plan:** included a *goal of protecting aquifers and groundwater recharge areas*
- **2015 Hazard Mitigation Plan:** indicated that enactment of a *local wetlands protection bylaw would be a "very effective" tool to reduce hazards in Town* such as flooding, erosion, and impaired drinking water quality
- **2018 Open Space and Recreation Plan:** included an action item to *enact a local wetlands protection bylaw by 2019 to protect against flooding due to climate change, protect surface water quality, and preserve wetlands*
- **2020 Municipal Vulnerability Preparedness Workshop Summary of Findings:** called for *enactment of a wetlands protection bylaw to improve local land use controls*

Cans and Cant's of Local Wetlands Protection Bylaws

- Under Home Rule Authority, **municipalities may enact local wetlands protection bylaws that differ from the state Wetlands Protection Act**
- All **wetlands protection bylaws are required to be more protective** of wetlands than the Act
- The state has ruled that the Act is meant to serve as a baseline for “statewide **minimum wetlands protection standards**, and **local communities are free to impose more stringent requirements.**” *Oyster Creek Pres., Inc. v. Conservation Comm’n of Harwich*, 449 Mass. 859, 866 (2007)
- The Commission has received feedback asking for the bylaw to exempt certain activities such as invasive plant removal projects and the removal of potentially hazardous trees on private property but **because these activities are not exempt under the Act, the Commission is unable to exempt these activities under the bylaw**
- **The bylaw is written in a way that automatically accepts any additional exemptions MassDEP may amend into its regulations, 310 CMR 10.00.** MassDEP is currently working on amending these regulations to include climate resiliency objectives. **The public is welcomed, and encouraged, to submit comments to MassDEP on these amendments** through April 30, 2024. More info may be found at <https://www.mass.gov/regulations/310-CMR-1000-wetlands-protection-act-regulations>

Do Other Municipalities have Local Wetlands Protection Bylaws?

The Commonwealth of Massachusetts Communities with Non-Zoning Wetlands Bylaws 2022



Note: The Town has a wetlands bylaw enacted in 1988 that adopted the state Wetlands Protection Act as the bylaw and gave the Commission the ability to charge local filing fees. The current bylaw does not provide any additional protections to wetlands.

Local Wetlands Protection Bylaws by the Numbers

- **220 out of 351 or 63%** of municipalities in Massachusetts that have a local wetlands protection bylaw
- **29 out of 34 or 85%** of municipalities in Essex County that have a local wetlands protection bylaw

What are the Stronger Protections Proposed in the Wetlands Protection Bylaw?

1. **The 100-foot Buffer Zone becomes a protected resource area***
2. **All vernal pools are protected regardless of state certification**
3. **Entire area extending out 100-feet from the edge of vernal pools becomes a protected resource area** called the vernal pool habitat area
4. **Protections for smaller ponds** (size threshold of 5,000 sq. ft. in proposed bylaw vs. 10,000 sq. ft. in Act)
5. **Protections for smaller isolated wetlands** (size threshold of 5,000 sq. ft. in proposed bylaw vs. area that confines standing water to a volume of at least $\frac{1}{4}$ acre-feet to an average depth of at least 6" in Act)
6. **Expanded protection of additional resource area values** (called public interests in the Act) provided by wetlands including protection of agriculture, recreation, rare species habitat, water quality, & aquaculture; prevention of storm damage from coastal storm flowage; and control of erosion & sedimentation.
7. **Ability for the Commission to issue fines** as a deterrent to wetland violations and as a tool when wetland resource areas are illegally altered. This is a tool that every regulatory board, commission, committee, and entity in Town currently has except for the Conservation Commission

Note: The 100-foot buffer zone is a regulated area today under the Act. As such, any non-exempt activity proposed in the buffer zone currently requires permitting under the Act.

What will not be Changed from the Act in the Proposed Wetlands Protection Bylaw?

- 1. All activities that are exempt from a filing under the Act today remain exempt from a filing** under the proposed bylaw. Potential future exempt activities will also be exempt under proposed bylaw.
- 2. No new forms.** All state permitting forms can be used to file for work under both the proposed bylaw and the Act
- 3. No new permits.** The Commission will issue one permit under both the proposed bylaw and the Act on the forms provided by the state
- 4. No changes to abutter notifications for Notice of Intent filings.** Notice is still only required for abutters within 100-feet of the property line where work is proposed
- 5. No new abutter notification required for Request for Determination of Applicability filings.** As it is today under the Act, no abutter notification is required
- 6. A 200-foot buffer around intermittent streams is no longer proposed.** A 200-foot riverfront area extends from the edge of perennial rivers and streams in the proposed bylaw as it does today under the Act

Note: As the proposed bylaw includes additional protected resource areas, the Commission may, within its regulations, create a separate permit for projects when work is proposed only in a resource area jurisdictional to the bylaw and not jurisdictional under the Act.

Additional Resource Areas Protected in the Proposed Wetlands Protection Bylaw

Resource Areas Currently Protected Under the Wetlands Protection Act

- | | | |
|---|----------------------|--|
| <ul style="list-style-type: none"> • Any bank • Any freshwater or coastal wetland • Any beach • Any dune • Any tidal flat • Any marsh • Any swamp | <p>Bordering on:</p> | <ul style="list-style-type: none"> • The ocean • Any estuary • Any creek • Any river • Any stream • Any pond • Any lake |
| <ul style="list-style-type: none"> • Land under any of the water bodies listed above | | |
| <ul style="list-style-type: none"> • Land subject to tidal action | | |
| <ul style="list-style-type: none"> • Land subject to coastal storm flowage | | |
| <ul style="list-style-type: none"> • Land subject to flooding | | |
| <ul style="list-style-type: none"> • Riverfront area, which is an area that extends a distance of 200' from the mean annual highwater line of any river or perennial (flowing year-round) stream. Riverfront area is not a Buffer Zone, it is a resource area. | | |

Resource Areas Proposed to be Protected by the Wetlands Protection Bylaw

- All resource areas in the left table **AND...**
- Isolated wetlands of at least 5,000 sq. ft. in size
- Wet meadows and bogs
- The 100-foot buffer zone which is the adjoining land extending out a distance of 100-feet from the edge of any freshwater or coastal wetlands, isolated wetlands of at least 5,000 sq. ft., marshes, wet meadows, bogs, swamps, and any freshwater or coastal bank or beach bordering on any lake, pond of at least 5,000 sq. ft., reservoir, river, stream, brook, or creek
- Any vernal pool regardless of state certification
- Vernal pool habitat which is the adjoining land extending out a distance of 100-feet from the edge of any vernal pool

Additional Public Interests Protected in the Proposed Wetlands Protection Bylaw

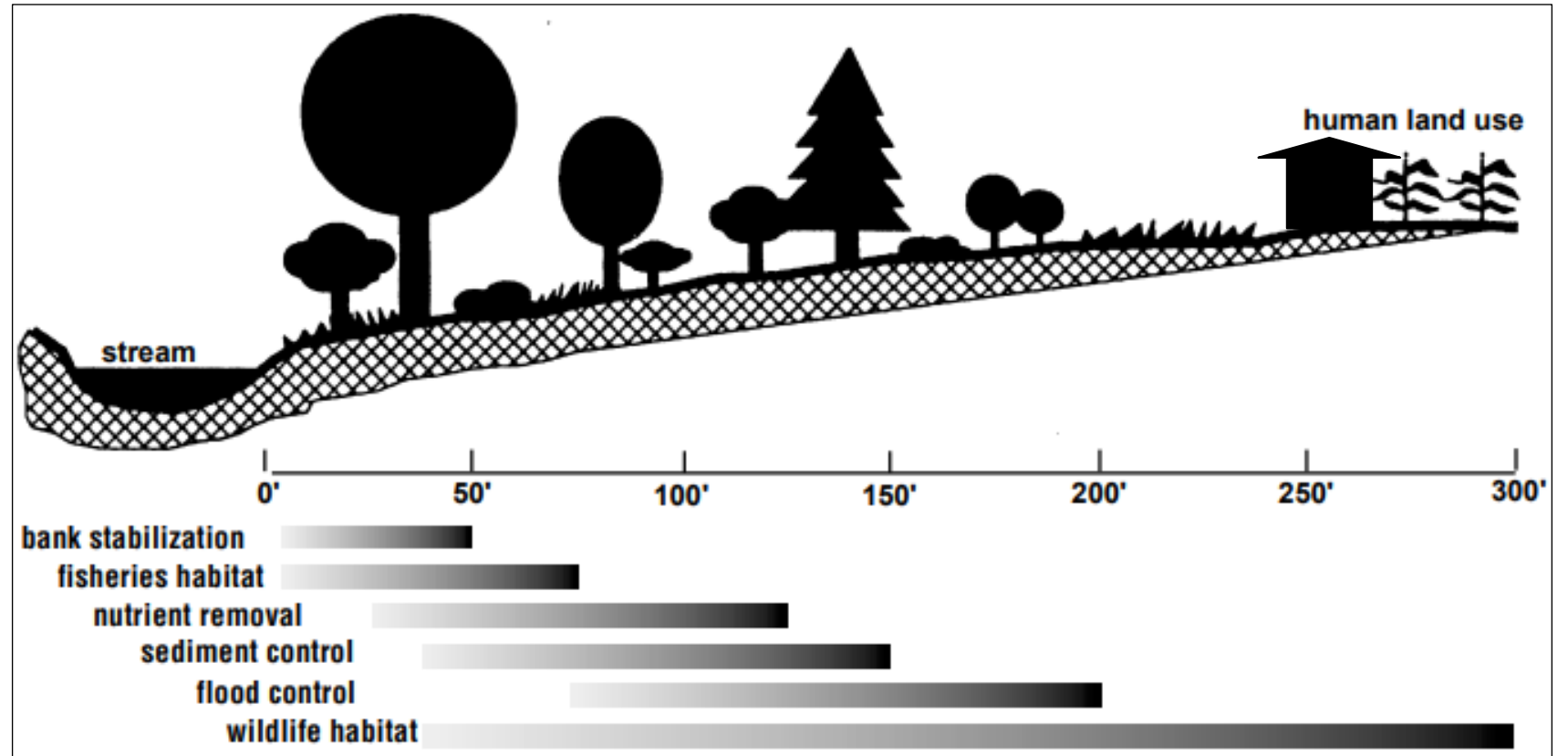
Public Interests Currently Protected Under the Wetlands Protection Act	Public Interests Proposed to be Protected by the Wetlands Protection Bylaw
<p style="text-align: center;"><u>Protection of:</u></p>	<ul style="list-style-type: none"> All public interest in the left table AND...
<ul style="list-style-type: none"> Public & Private Water Supply Groundwater Supply Fisheries Wildlife Habitat Land Containing Shellfish 	<p style="text-align: center;"><u>Protection of:</u></p> <ul style="list-style-type: none"> Agriculture Recreation Rare Species Habitat Water Quality Aquaculture
<p style="text-align: center;"><u>Prevention of:</u></p>	<p style="text-align: center;"><u>Prevention of:</u></p>
<ul style="list-style-type: none"> Pollution Storm Damage 	<ul style="list-style-type: none"> Storm Damage from Coastal Storm Flowage
<p style="text-align: center;"><u>Control of:</u></p>	<p style="text-align: center;"><u>Control of:</u></p>
<ul style="list-style-type: none"> Floods 	<ul style="list-style-type: none"> Erosion & Sedimentation

Note: The Act and proposed bylaw each presume that every wetland resource area protects multiple interests or resource area values

Why is it Important to have a Wetlands Bylaw that Protects the Buffer Zone as a Resource Area?

- Wide, vegetated buffers around wetlands **provide hydrologic stabilization by slowing and infiltrating rain water which reduces drastic fluctuations of water levels in wetlands during precipitation events**
- This allows wetlands to **better protect the community from storm damage and to provide better flood control**. In a changing climate that is seeing an increased number of storms, with increased amounts of precipitation, this **better protects residential and town infrastructure and ultimately, saves residents and the Town money**
- By protecting buffer zones as resource areas in the bylaw, the Commission will include design standards and performance specifications for proposed activities in the buffer zone in its regulations. This provides **stronger protections for the buffer zone and ultimately ensures that wetlands can properly function and provide integral community benefits**
- Additionally, having defined design standards and performance specifications for proposed activities in the buffer zone **creates a more equitable permitting process**. Anyone proposing a project can review these before filing and the Commission can consistently apply the same standards when permitting activities in the buffer zone

How do Wetland Buffer Zones Provide Community Benefits?

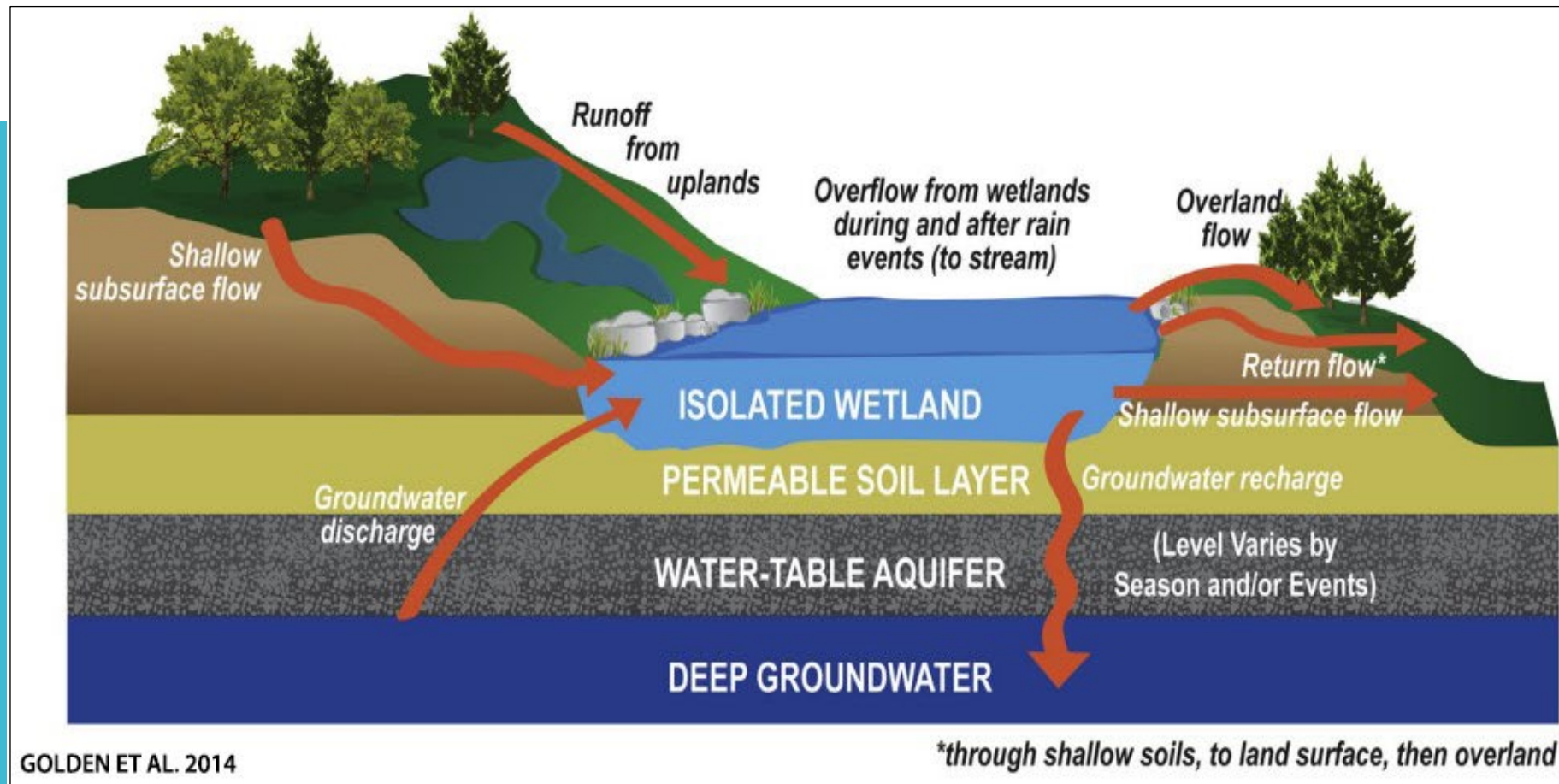


Each foot of undisturbed, naturally vegetated buffer around a wetland provides greater benefits for the community. Examples include vegetation and leaf litter **slow sediment-laden runoff water**, soils **capture and store carbon** and **break down nitrogen and pollutants making them less harmful**, vegetation **improves water quality** by providing temperature regulation, and naturally vegetated buffers **provide wildlife corridors** around wetlands and waterways. It is often **those who are down slope or downstream of wetlands that experience the greatest benefits of wetlands protection.**

Why is it Important to have a Bylaw that Protects Smaller Ponds and Isolated Wetlands?

- Small ponds and isolated wetlands **provide habitat to a variety of species** including waterfowl and amphibians
- Small ponds and isolated wetlands **provide groundwater recharge and flood control** helping to minimize storm damage and protect groundwater
- Because they are cut off from other surface waters, the slow flow path of isolated wetlands **provides up to 2x better retention of nutrients and pollutants** compared to wetlands that border surface waters
- The lack of surface water connection also allows isolated wetlands to **store water during precipitation events** then slowly discharge this water into the ground (groundwater recharge)
- This **provides the community better protection of public and private water supplies, better control of floods, and better prevention of storm damage**

How do Isolated Wetlands Work?



Isolated wetlands may appear disconnected from other waters, but they have important connections to groundwater, shallow subsurface flows, and even runoff or overland flows during rain events. The slow flow of water out of isolated wetlands makes them **great at improving water quality by absorbing nutrients and pollutants, reducing flood impacts, and preventing against storm damage.** It is often **those who are down slope wetlands that experience the greatest benefits of wetlands protection.**

Why is it Important to have a Bylaw that Protects All Vernal Pools and a 100-foot Vernal Pool Habitat Area?

- Vernal pools are unique, small seasonal wetlands that **provide critical habitat for a variety of specialized animal species** that also **provide groundwater recharge and flood water control** similar to isolated wetlands
- Vernal pools support animals with life cycles that involve annual migrations of 700 to 1,800-feet from forested upland areas to vernal pools. **Protecting the upland area adjacent to vernal pools is integral to conserving vernal pool dependent species**
- Animals like the spotted salamander, whose range includes West Newbury, **rely on vernal pools for breeding habitat** due to the lack of predatory fish. Spotted salamanders return to the same vernal pool each year to breed and have a lifespan of up to 20 years. However, the **salamanders are threatened due to the loss of vernal pools and the alteration of the surrounding habitat**
- Vernal pools and the species that depend on them are better studied and understood now than when the Act was enacted. With this new information, **it is believed that the Act does not provide protections that are strong enough to meaningfully protect vernal pools**
- Additionally providing protections to all vernal pools regardless of state certification status **removes the time consuming burden of certifying a vernal pool during the permitting process**

Life Cycle Example of a Vernal Pool Dependent Species: Spotted Salamander



- **Adult salamanders spend most of their lives in upland areas.**
- Adults move to vernal pools in March and April to breed then return to their upland habitat, ultimately **spending every May through February in upland areas.**
- Eggs begin hatching in May and **larva develop in vernal pools over the summer before migrating to upland habitat as fully formed adults in September.**

How Does the Proposed West Newbury Bylaw Compare to Bylaws in Surrounding Communities?

	Protects 100-Foot Buffer Zone as Resource Area	Protects Vernal Pools Regardless of State Certification	Protects Ponds Smaller than Act (Act protects ponds $\leq 10,000$ sq. ft.)	Protects Isolated Wetlands Smaller than Act (Act protects if standing water confined to a volume of at least $\frac{1}{4}$ acre-feet to an average depth of at least 6")	Commission can Issue Fines for Work or Alteration in a Jurisdictional Area Without a Permit
West Newbury (<i>proposed</i>)	✓	✓	5,000 sq. ft	5,000 sq. ft	\$300 per violation per day
Amesbury	✓	✓	Ponds of any size	Isolated wetlands of any size	\$100 per violation per day
Andover	✓	✓	✗	Isolated wetlands of any size	\$200 per violation per day
Beverly	✓	✓	5,000 sq. ft.	1,000 sq. ft.	\$100 per violation per day
Boxford	✓	✓	5,000 sq. ft	5,000 sq. ft	\$100 1 st , \$200 2 nd then \$300 per violation per day
Georgetown	✓	✓	✗	Must hold min. 25-cubic feet of water	\$100 1 st , \$200 2 nd then \$300 per violation per day
Groveland	✓	✓	✗	5,000 sq. ft.	\$100 1 st , \$200 2 nd then \$300 per violation per day
Haverhill	✓	✓	Ponds of any size	5,000 sq. ft.	\$300 per violation per day
Merrimac	✓	✓	✗	2,000 sq. ft.	\$100 1 st , \$200 2 nd then \$300 per violation per day
Rowley	✓	✓	5,000 sq. ft.	Isolated wetlands of any size	\$25 to \$300 per violation per day
Wenham	✓	✓	✗	Isolated wetlands of any size	\$100 1 st , \$200 2 nd then \$300 per violation per day

Note: The table does not show all Essex County municipalities with bylaws. Of the 34 municipalities in Essex, only 5 (Essex, Middleton, Salisbury, Swampscott, and West Newbury) do not have wetlands protection bylaws. In communities with bylaws that don't protect smaller ponds, these ponds still likely receive reduced size threshold protections as isolated wetlands.

Question & Answer Session and Contact Information

If you have any questions regarding the proposed bylaw,
the Commission would be happy to answer them now



For questions after tonight please contact:

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www.wnewbury.org/conservation-commission