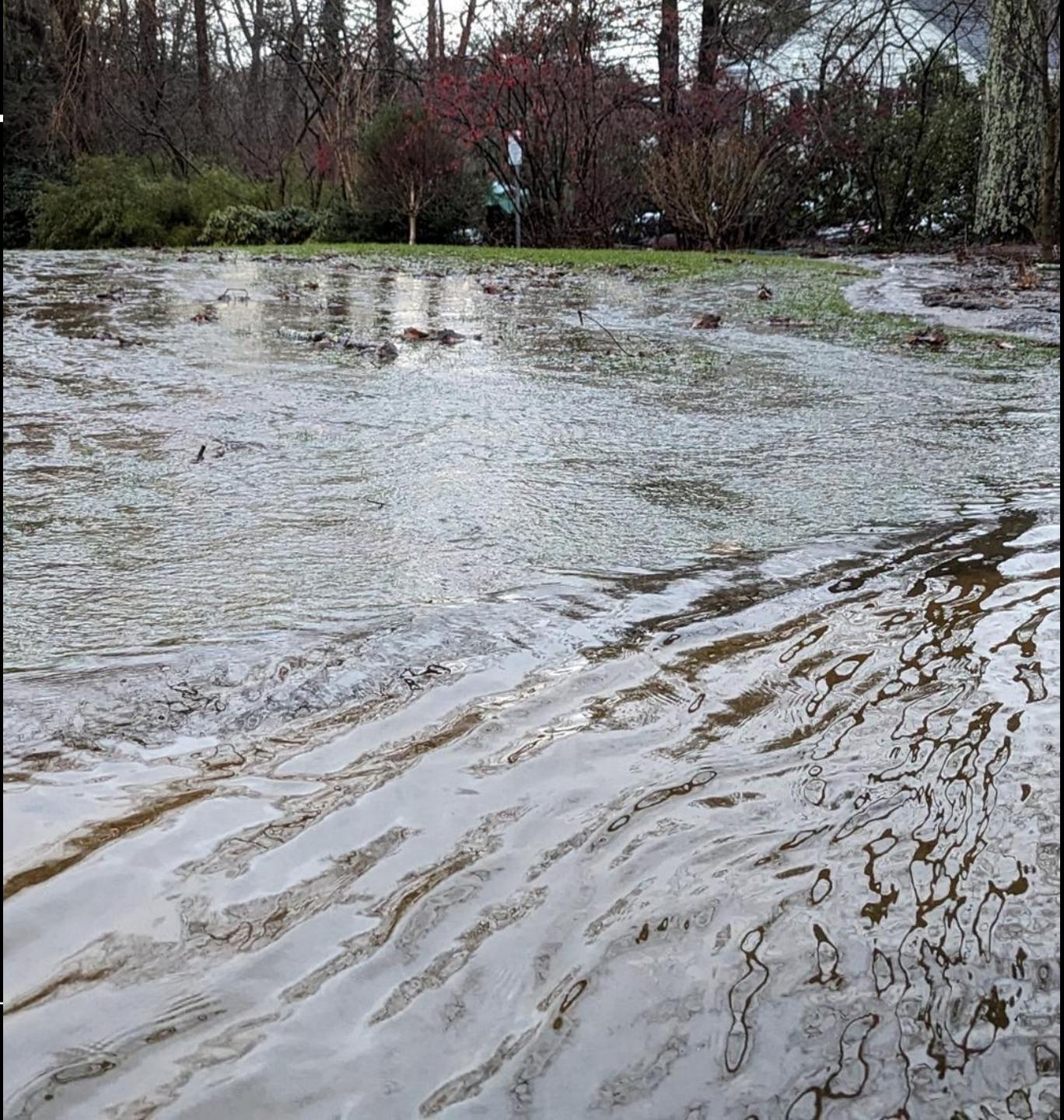

QR CODE FOR STORMWATER MANAGEMENT BYLAW



ARTICLE: 20

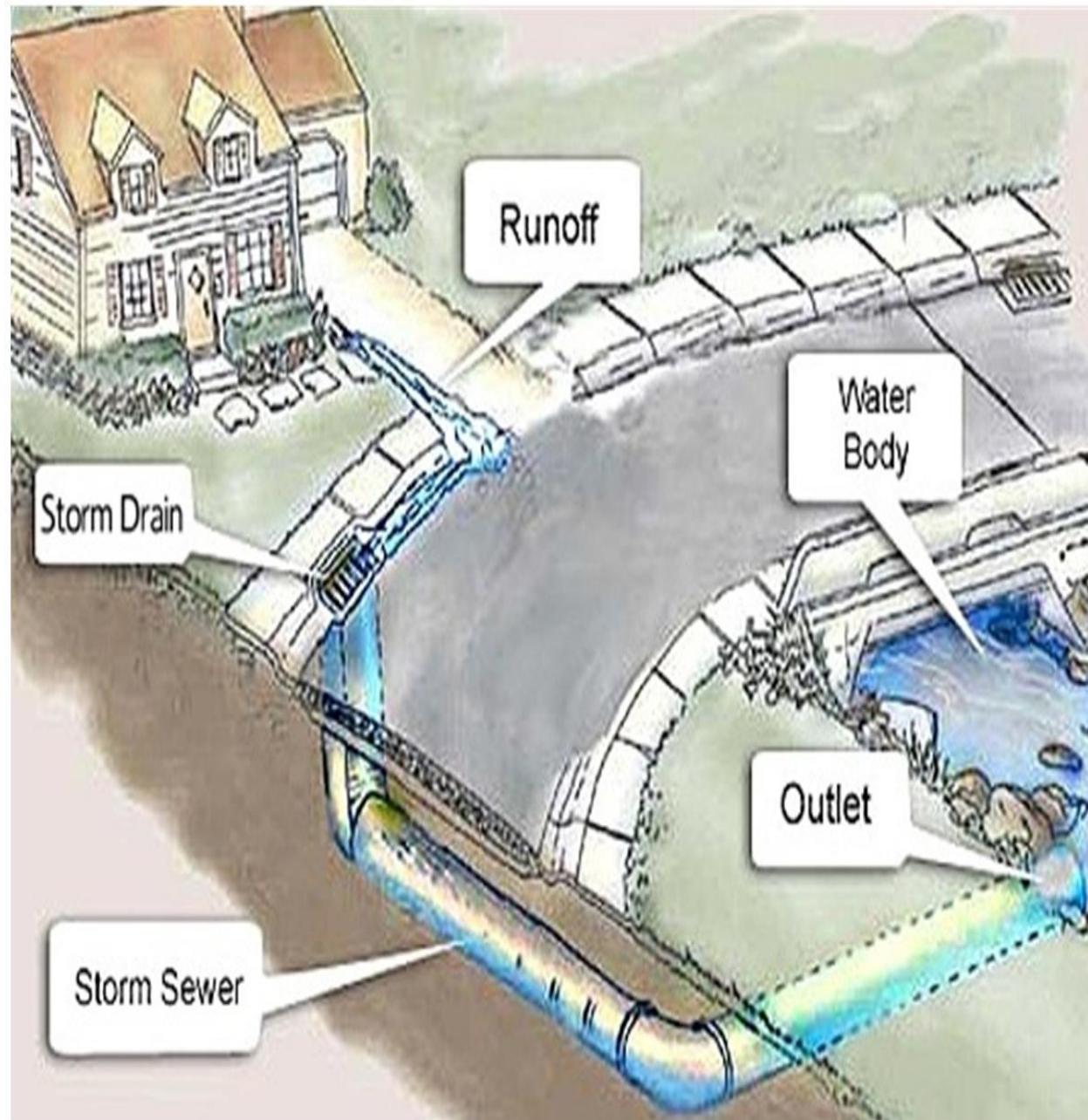
STORMWATER
MANAGEMENT
BYLAW:

2024 AMENDMENTS



WHAT IS STORMWATER?

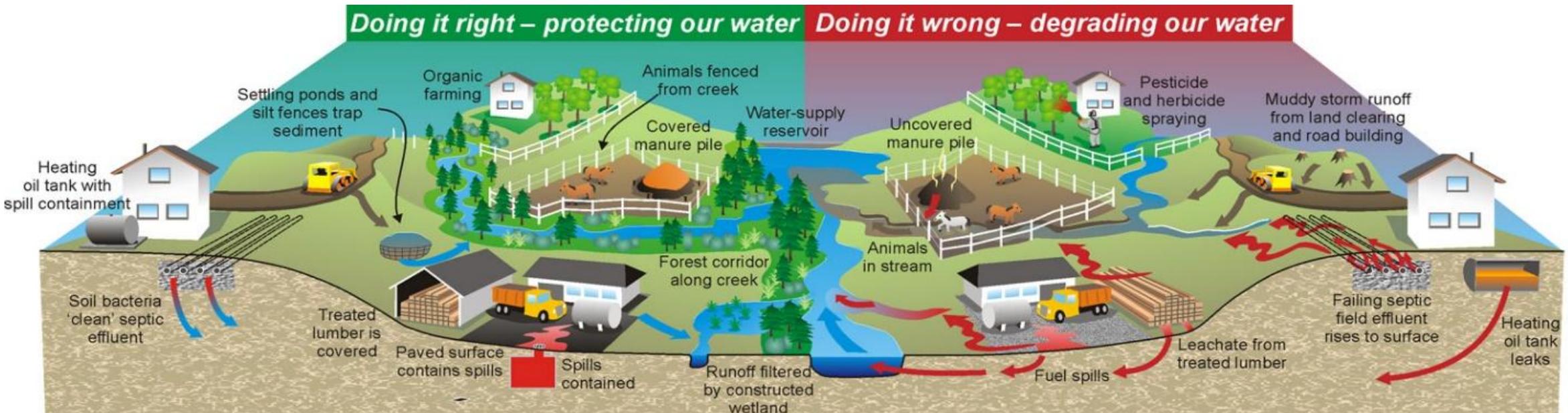
- **Stormwater** is defined by the US EPA as the runoff generated when precipitation from rain and snowmelt events flows over land or impervious surfaces without percolating into the ground
- Unfortunately, drainage systems also carry pollutants like oil, fertilizers, sediment, and trash into water resources
- Rainwater that falls on paved streets, driveways, lawns, parking lots, and sidewalks becomes polluted stormwater.



WHY DO WE NEED STORMWATER MANAGEMENT?

When stormwater management systems function well, they can:

- Reduce flooding in our community
- Remove pollution carried by stormwater runoff
- Recharge the natural groundwater supply
- Protect drinking water supplies
- Protect local stream banks from erosion
- Protect public health/ Welfare



WHY NOW?

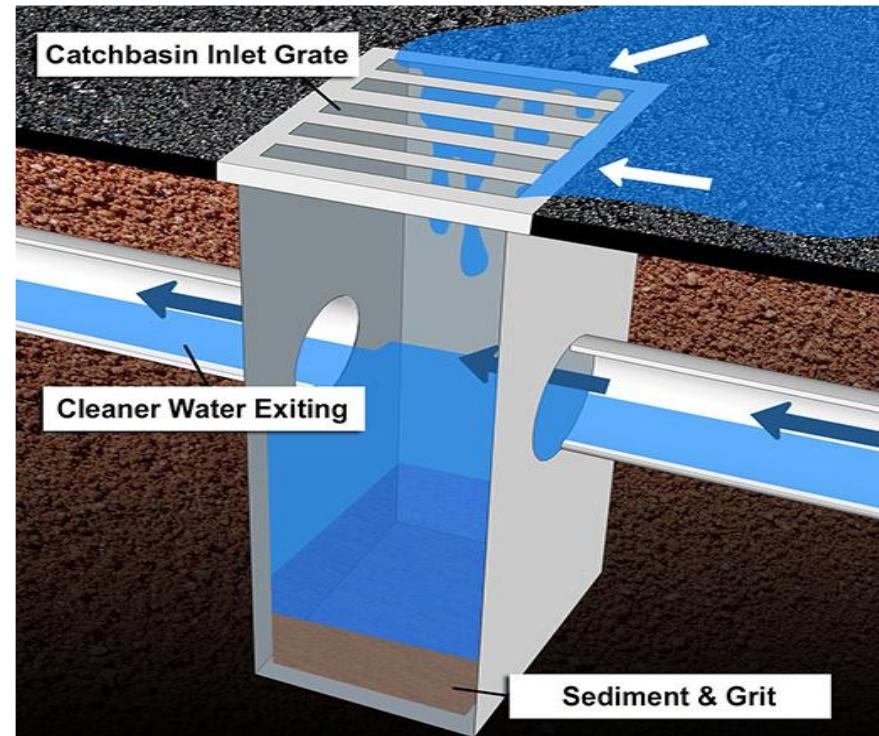
- The US Environmental Protection Agency (EPA) requires all communities to update their Municipal Separate Stormwater Sewer System (MS4) bylaws. The Dover Stormwater Management Bylaw amendments are a continuance of the process to bring our community into permit compliance.
- Climate change is contributing to increased flooding throughout Dover, and the bylaw will reduce stormwater runoff and flooding impacts on our community.



BYLAW OBJECTIVES

The purpose of this bylaw is to establish minimum requirements and controls to **protect** and safeguard the general health, safety, and welfare of Dover citizens from the adverse impacts of stormwater runoff.

- Protect water resources
- Comply with current state/federal regulations
- Prevent illegal connections to the municipal storm drainage systems and our waterways
- Reduce sediment and erosion into the municipal storm drainage systems, waterways, and neighborhoods
- Control and mitigate construction site runoff and post-construction runoff
- Create stormwater management systems in new developments and redevelopment



WHAT ACTIVITIES ARE IMPACTED

Thresholds for requiring a stormwater review include:

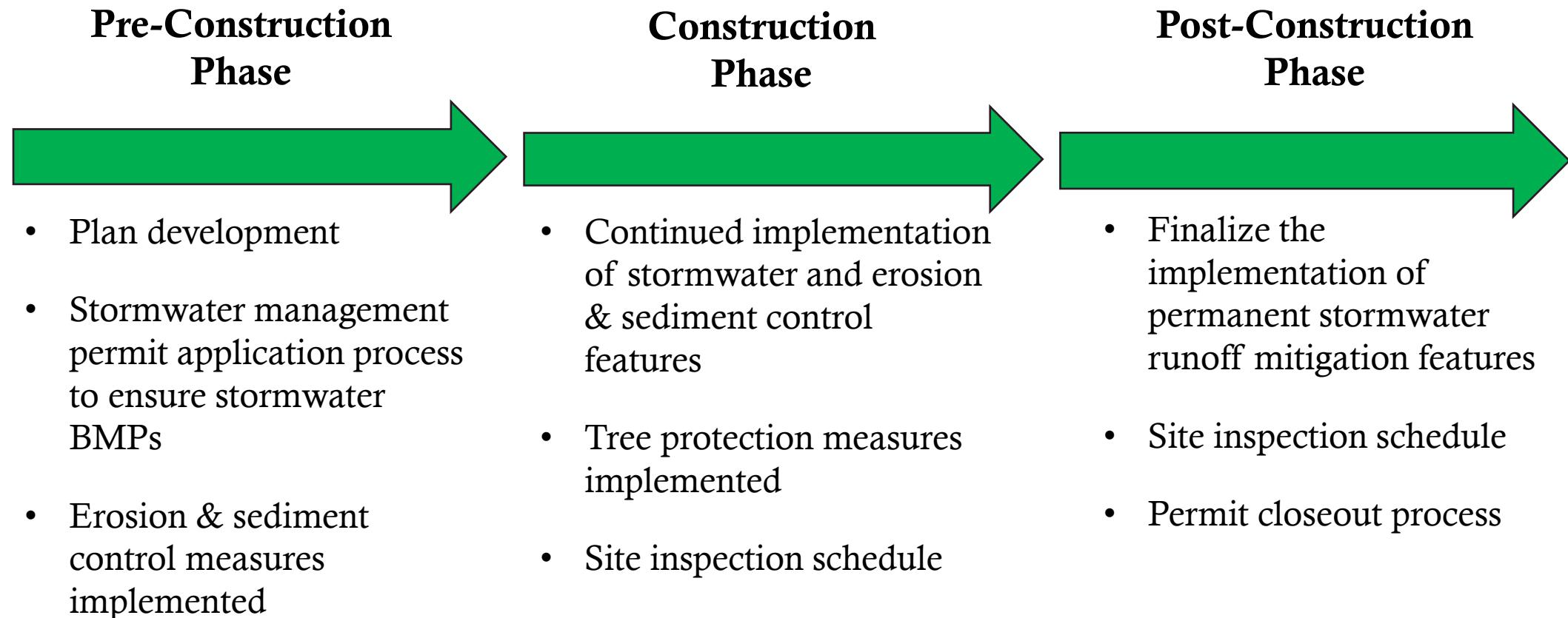
- A. Land disturbance activity \geq 5,500 sq. ft or 25% of a lot, whichever is smaller
- B. Any activity which would alter or modify an existing Town-owned drainage system
- C. Storage of more than 100 cubic yards of excavate or fill
- D. Activity requiring a wetland permit



AMENDMENTS TO THE STORMWATER BYLAW

- Improvements and updates to the bylaw definitions and terminology
- Clarification of Stormwater Enforcement Authority (BOS & DPW) and enforcement process
- Requirement of Stormwater and Erosion Control plan review and implementation prior to large land disturbance activities
- Requirement of water recharge areas on construction site
- Utilization of best management practices (BMP): retention of natural resources, tree buffers, grading, and layering of vegetation for preventing sediment and water runoff
- Establishes tree protective and mitigation measures in the zoning perimeter setback area
- Updates site inspection process and post-construction stormwater management plan

EXAMPLE OF STORMWATER MANAGEMENT TIMELINE



THANK YOU

Kevin McCabe, Director
Department of Public Works
Phone number 508-785-0058 ext. 161
Email address KMcCabe@Doverma.gov



APPENDIX

EPA STORMWATER & EROSION CONTROL BEST MANAGEMENT PRACTICES

Vegetated Buffers [Web Link Here](#)

- Preserving natural, existing or established vegetation in clumps, block or strips.
- Preserving natural, existing or established vegetation on unstable, steep slopes.
- Making sure slopes are shallow enough to allow establishment of vegetation.
- Making sure soils are not compacted.
- Where possible, intermixing layers of vegetation (native vegetation in particular), including grasses, deciduous and evergreen shrubs, and understory and overstory trees.

MA STORMWATER HANDBOOK

Standard 8: (Erosion, Sediment Control)

A plan to control construction-related impacts, including erosion sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan), must be developed and implemented.

Menu of Strategies to Reduce Runoff or Peak Flows and/or Increase Recharge

- Rehabilitate the soils
- Plant trees and other vegetation
- Install a green roof
- Maximize naturally vegetated areas
- Reduce impervious surfaces
- Disconnect roof runoff from direct discharge to the drainage system
- Install porous pavement and/or other recharge measures (where sustainable and maintainable for promoting infiltration)
- Apply LID techniques for runoff reduction

MA STORMWATER HANDBOOK BEST PRACTICES

- Vol 2, Ch 2, Pg 18

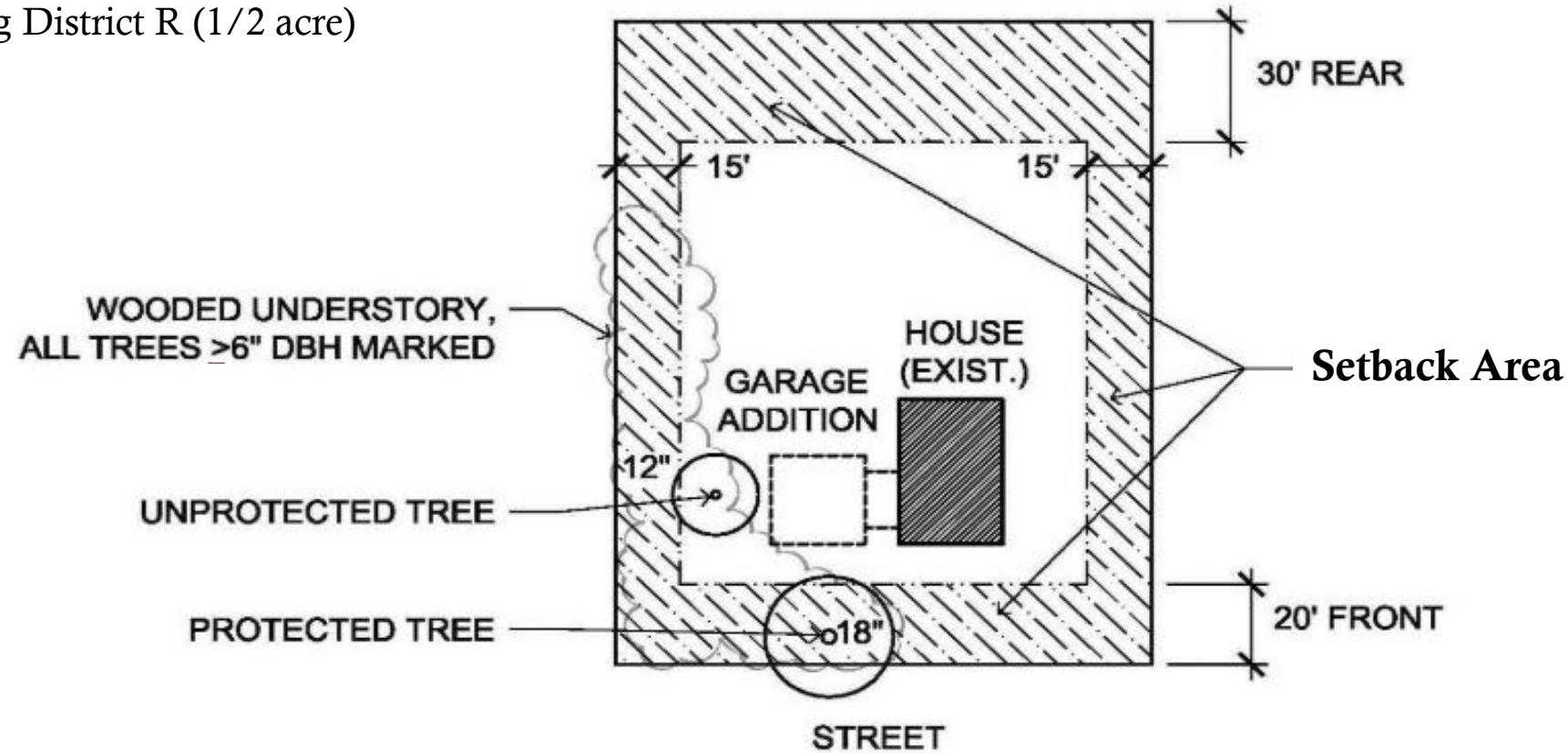
“Vegetated filter strips, also known as filter strips, grass buffer strips and grass filters, are uniformly graded vegetated surfaces (i.e., grass or close-growing native vegetation) that receive runoff from adjacent impervious areas. Vegetated filter strips typically treat sheet flow or small concentrated flows that can be distributed along the width of the strip using a level spreader. Vegetated filter strips are designed to slow runoff velocities, trap sediment, and promote infiltration, thereby reducing runoff volumes”

SURROUNDING COMMUNITIES WITH TREE BYLAWS

Name of Town/City	Stormwater Bylaw	Erosion Control Bylaw	Stand Alone Tree Bylaw	Stormwater & Erosion Control Combined
Lexington	x	x	x	x
Concord	x	x	x	
Wellesley	x	x	x	
Lynnfield	x	x	x	
Brookline	x	x	x	x
Natick	x	x	x	x
Medfield	x	x		x
Westwood	x	x		x
Wayland	x	x	x	
Needham	x	x		x

TREE PROTECTION ZONE

Example of Zoning District R (1/2 acre)



DOVER SCHEDULE OF DIMENSIONAL REQUIREMENTS

Schedule of Dimensional Requirements [Amended ATM 5-2-1994 by Art. 22; ATM 5-2-1994 by Art. 23]

District	Minimum Lot Size (acres)	Minimum Street Frontage (feet)	Perfect Square (feet)	Minimum Setback ³ (feet)			Maximum Height ³		Maximum Lot Coverage
				Front	Side	Rear	Stories	Feet	
R	½	100	100 x 100	20 ¹	15	30	2.5 ^{2,3,4}	35	20%
R-1	1	150	150 x 150	40 ¹	30	30	2.5 ^{2,4}	35	20%
R-2	2	200	200 x 200	60 ¹	40	40	2.5 ^{2,4}	35	20%
O				40	20		2.5	35	40%
B				40	20	10 ⁵	2.5 ⁴	35	40%
M-P				40	20	10 ⁵	2.5 ⁴	35	40%
M				40	20	10 ⁵	2.5 ⁴	35	40%
R-M	8	200		50	50	50	2.5 ⁴	35	25%

DPW 2023 REQUEST LOG

- Concerns about flooding = 14 calls
- Concern about berms = 12 calls
- Concern about drainage = 31 calls
- **Total calls = 57**