



STORMWATER BY-LAW REVIEW

FREQUENTLY ASKED QUESTIONS

Town of Needham Stormwater By-Law Working Group

Q: What is the purpose of the proposed Stormwater By-Law update?

A: The purpose of this review and update is to examine the existing stormwater by-law and provide recommendations to improve clarity, applicability, and effectiveness. The review focused on ensuring the by-law continues to support the Town's ability to manage stormwater runoff, protect water quality, and reduce flooding. Recommended changes address how construction projects and land development are required to manage stormwater, with the goal of improving stormwater control, treatment, and recharge into the ground. Strengthening the by-law in these ways will help prevent pollution and flooding, while protecting our local lakes, rivers, and wetlands for future generations.



Q: Why is it important to manage stormwater runoff from development?

A: Stormwater runoff occurs when rain or snowmelt flows over impervious surfaces (like roofs and driveways) and carries pollutants into local waterways. Without proper management, this runoff can cause:

- **Flooding:** Increased runoff can overwhelm stormwater systems, leading to flooding in streets, yards, and basements.
- **Water Pollution:** Pollutants like oil, debris, and fertilizers from streets and parking lots can contaminate lakes, rivers, and wetlands.
- **Erosion:** Runoff can erode the land around waterways, damaging habitats and water quality.

By requiring better management of stormwater, we can reduce these risks and help protect the environment.



Q: How does this update benefit the community in the long term?

A: By improving the management of stormwater, this by-law update will:

- **Protect our water resources:** Clean, healthy lakes, rivers, and wetlands are crucial to our environment and quality of life.
- **Reduce flooding risks:** Proper stormwater management reduces the likelihood of floods, which can damage homes, roads, and infrastructure.
- **Support sustainable development:** These regulations help ensure that growth in our community is balanced with environmental protection.

Property value: Well-managed stormwater systems and cleaner local water bodies can enhance property values.

Q: Do we anticipate this will decrease the likelihood of flooding to adjacent properties?

A: Yes, because there will be an engineer requirement to design the stormwater mitigation system and design to ensure less run off rate and volume to adjacent properties.



Q: How will the recommended changes impact the cost to build, renovate or add onto property?

A: Revisions to the stormwater by-law requiring greater infiltration may affect costs during project planning, design, and construction.

Overall, while increased infiltration requirements will improve groundwater recharge and water quality, they may also impose added costs, technical requirements, and responsibilities of property owners.

Although cost implications to permittees may vary based on site-specific conditions, physical constraints, material and labor pricing, and reliance on professional services, the incremental design difference between meeting an infiltration requirement of 1.0 inch versus 1.5 inches is generally not substantial. In most cases, the additional storage volume can be accommodated



through modest adjustments to system dimensions or configuration rather than a fundamental change in design approach.

Importantly, the increased infiltration standard provides a significant benefit to the town by reducing peak stormwater flows, mitigating localized flooding, and improving water quality through enhanced pollutant removal. These measures also yield a residual benefit to the property owner, such as reduced risk of on-site drainage issues, compliance with evolving regulatory requirements, and potential long-term cost savings through decreased erosion, flooding damage, or system maintenance needs.

Q: Why was 1.5 inches of rain the amount chosen to mitigate for? Will it meaningfully improve flooding mitigation efforts? Is going higher too burdensome or impractical for property owners to meet the requirement?

A: The new volume amount was based on discussions and agreement, also for a treatment aspect, infiltrating a 1-1/2" will remove almost 100% of the phosphorous load.

It is estimated that for every 1,000 SF of impervious area an additional 7' x 4' x 2.5' chamber will be needed above already required. Material cost approximately \$800.



Q: Definition of Land-Disturbing Activity or Land Disturbance – this is very broad. As an example, it reads to me that creating a new garden in your backyard might apply. How do we define this more clearly and narrowly in the regulations?

A: Land disturbance may trigger a review for activities such as tree clearing, adding impervious surfaces, re-grading the site. Creating gardens without substantially re-grading the property should not trigger a review, but we will identify thresholds in the regulations or guidance for clarity.



Q: How will the town enforce these new regulations?

A: The town will enforce these regulations through the permitting process and ongoing inspections. Developers and property owners will need to submit stormwater management plans for review and approval before starting any major construction. The Permitting Authority will monitor compliance throughout the construction process and may conduct inspections both during and after construction. If stormwater systems are not properly maintained, the town can issue fines or orders to correct the issue.

Q: What activities trigger stormwater review?

A: Existing properties not proposing construction or connection to the drain system have no requirements. Construction that triggers review may have to add drainage mitigation.

- Additions under 25% (Building permit) requirements set in regs
- New construction (and for more than 50% addition)-Under and Over 4,000 sf impervious (Building Permits)- additional requirements for more than 4,000 sf
- Additions 25-50% (Building Permit) infiltration newly constructed area
- Grading or impervious areas that redirect stormwater flows (including, but not limited to sports courts, large driveways)

Q: What is an impervious surface?

A: An impervious surface is an area within a parcel which prevents or significantly impedes the infiltration of stormwater into the soil. Common impervious areas include, but are not limited to, buildings, driveways (including paving, concrete, stone, gravel and dirt), parking lots, paved walkways, pools, patios, tennis and basketball courts, and other similar non-porous areas.

