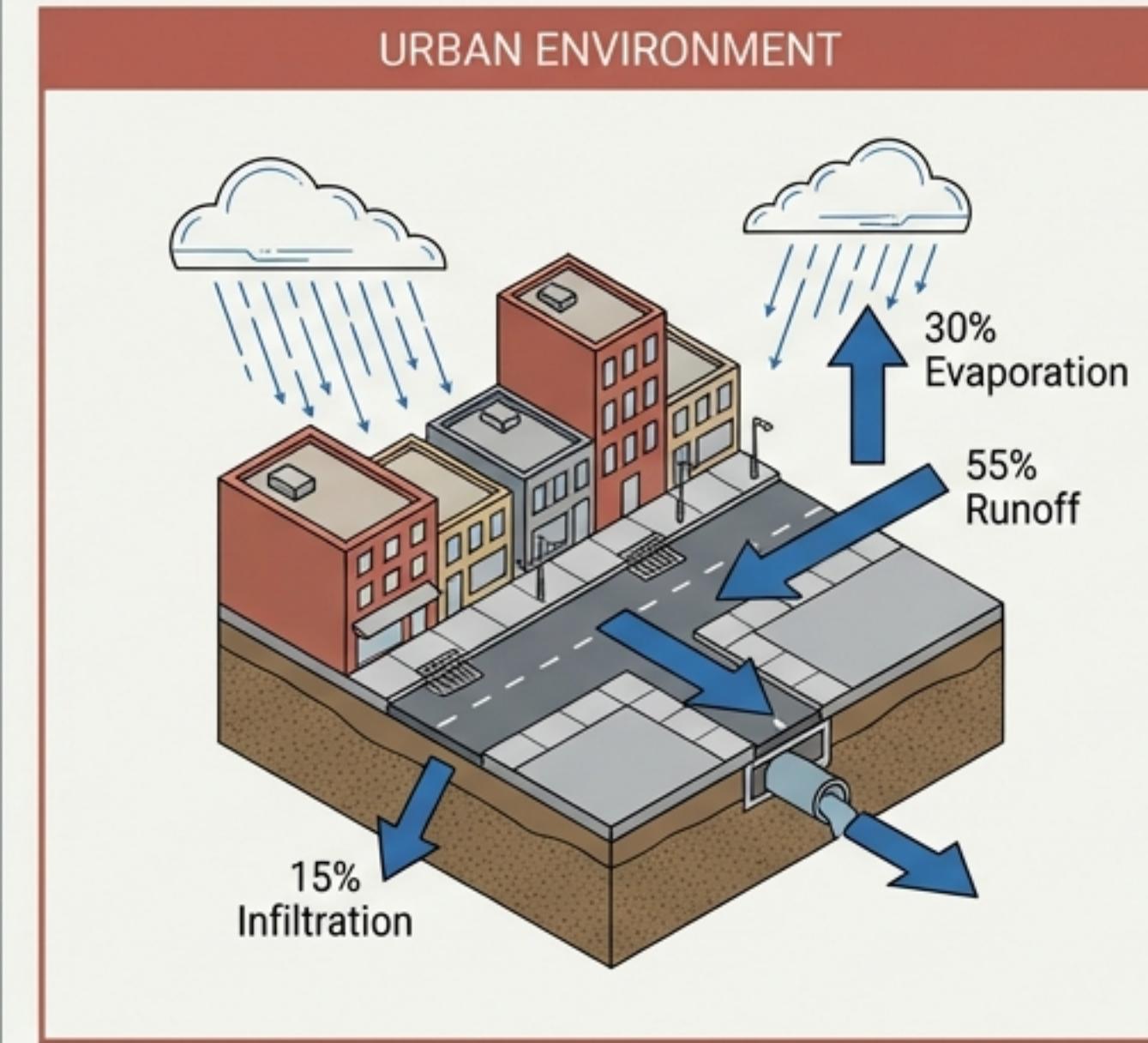
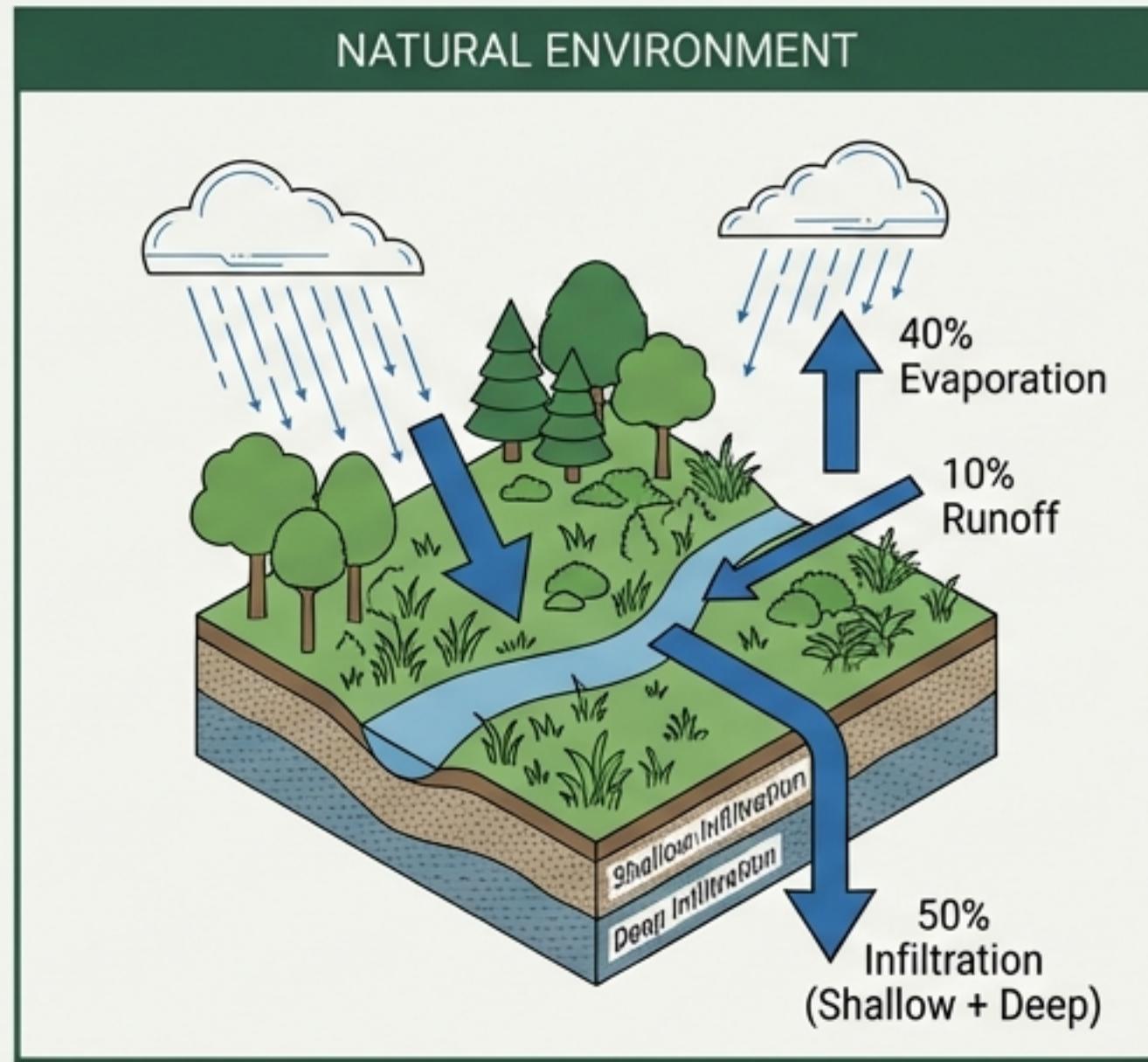


N.J.A.C. 7:8 Stormwater Management Rules

A Framework for Green Infrastructure, Climate Resilience, and Hydrologic Restoration.

"Purpose: Transformation from uncontrolled development to planned management."

The Paradigm Shift: From Disposal to Management



Regional planning represents a fundamental shift. The goal is no longer to move water off-site quickly, but to replicate the natural hydrologic cycle disrupted by urbanization.

"Traditionally, stormwater has been managed on a site-by-site basis... creating unintended consequences."

The Trigger: Defining “Major Development”

Compliance is mandatory if a project meets ANY of the following criteria:

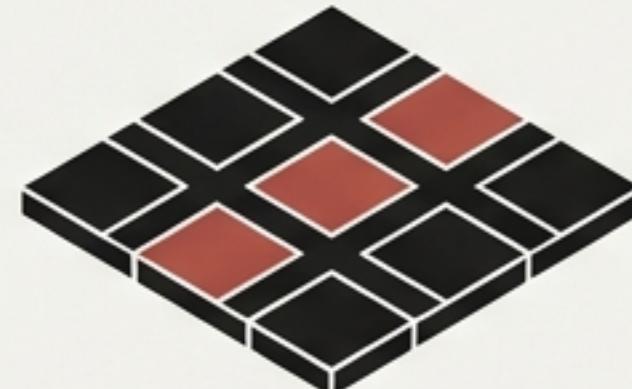
Disturbance



1 or more acres of land disturbance.

(Includes soil movement or clearing vegetation)

Impervious Surface



Creation of 0.25+ acres of regulated impervious surface.

(Net increase or newly collected)

Motor Vehicle Surface



Creation of 0.25+ acres of regulated motor vehicle surface.

(Or 0.25+ acres of reconstruction effective Jan 2026)

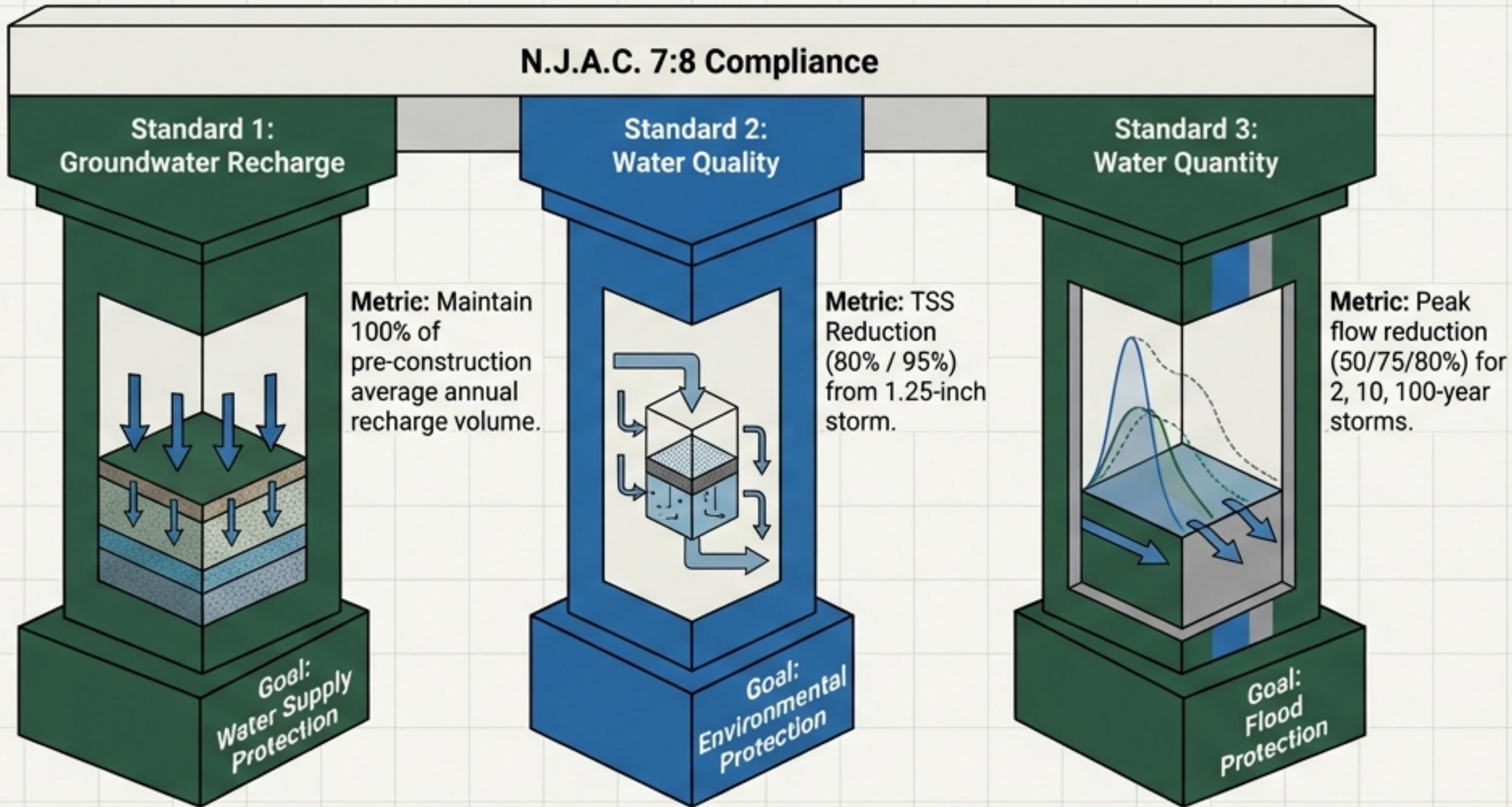
REGULATORY DEFINITION SUMMARY

“Major development” is defined as any individual or multiple projects that collectively result in:

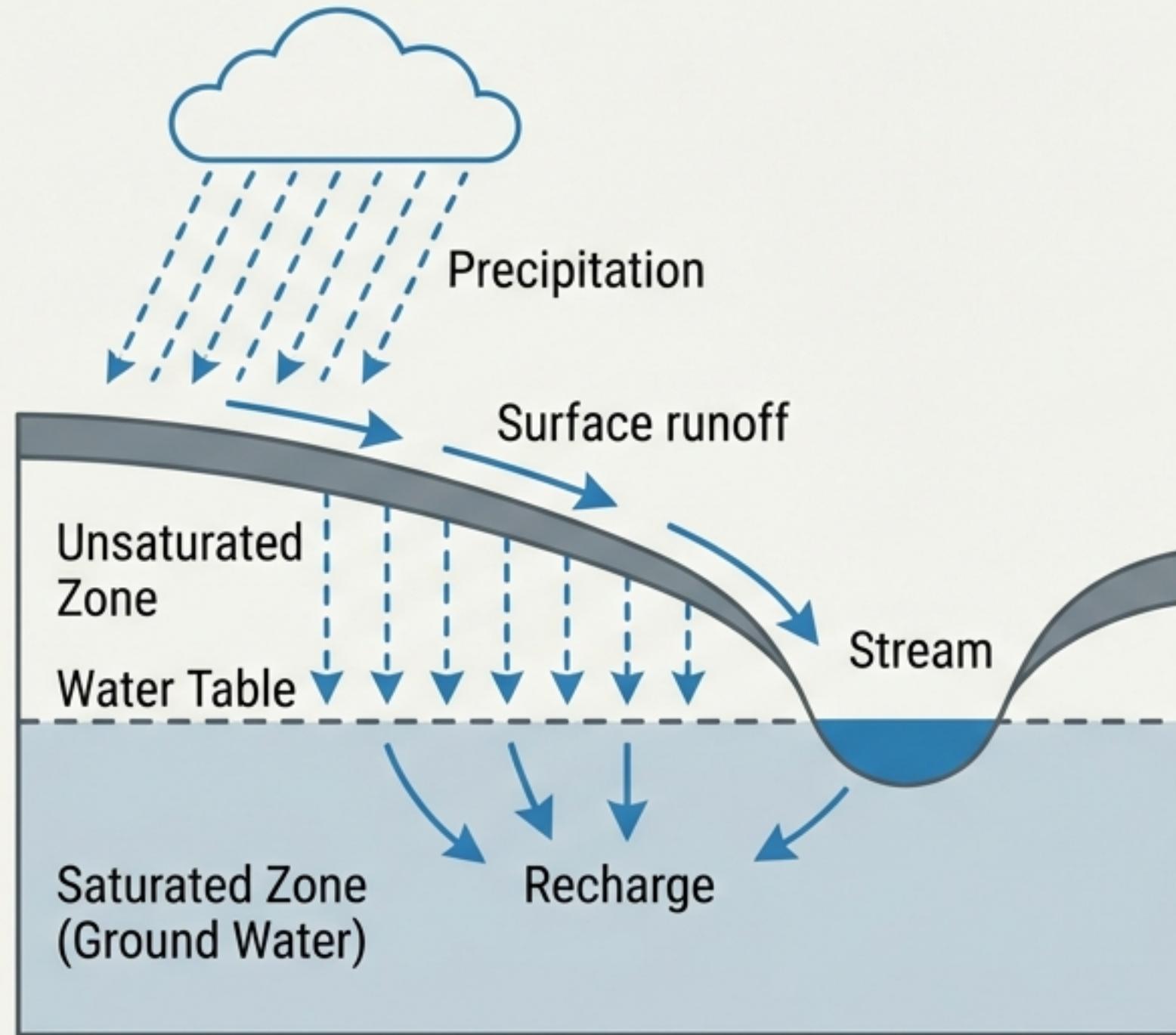
- (1) Disturbance of one or more acres since Feb 2, 2004;
- (2) Creation of **one-quarter (0.25+)** acre or more of “regulated impervious surface” since Feb 2, 2004; or
- (3) Creation of **one-quarter (0.25+)** acre or more of “regulated motor vehicle surface” since March 2, 2021; or
- (4) Reconstruction of 0.25+ acres of “motor vehicle surface” or “impervious surface” since Jan 20, 2026; or
- (5) A combination of (2), (3), and (4) totaling 0.25+ acres.

Includes all developments part of a common plan, with the critical threshold being 0.25 acres for impervious and motor vehicle surfaces.

The Three Pillars of Performance



Standard 1: Groundwater Recharge



Core Requirement:

- Maintain 100% of the average annual pre-construction groundwater recharge volume.

Why?:

- Groundwater supports stream baseflow during dry periods.

Methodology:

- NJGS Report GSR-32 (Annual Recharge Budget).

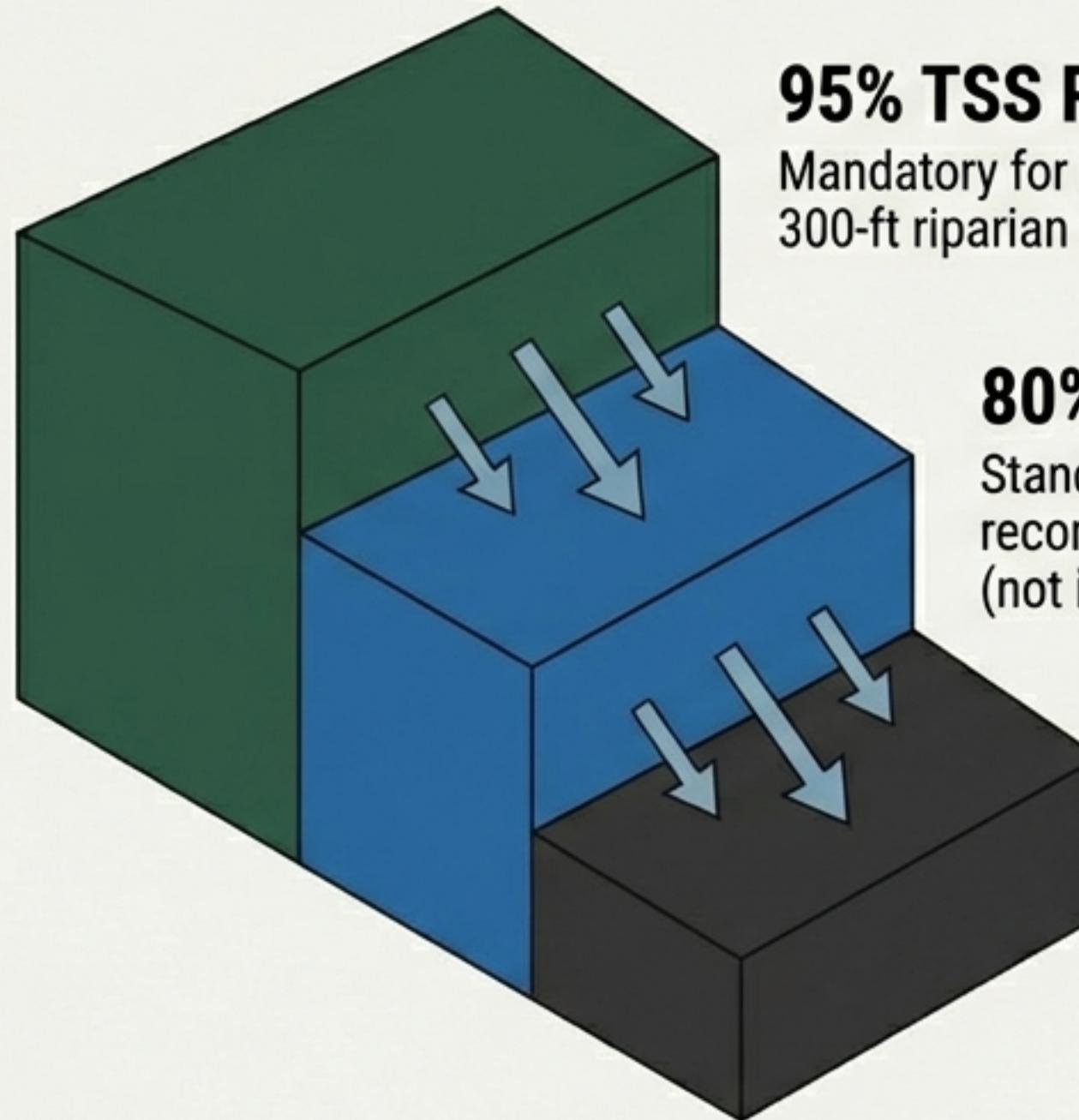
Warning

CRITICAL EXEMPTIONS (Do Not Recharge):

- Urban Redevelopment Areas
- High Pollutant Loading Areas (Gas Stations, Industrial Sites)
- Areas with Source Material (Industrial Storage)

Standard 2: Water Quality & TSS Removal

Targeting Motor Vehicle Surfaces



95% TSS Removal

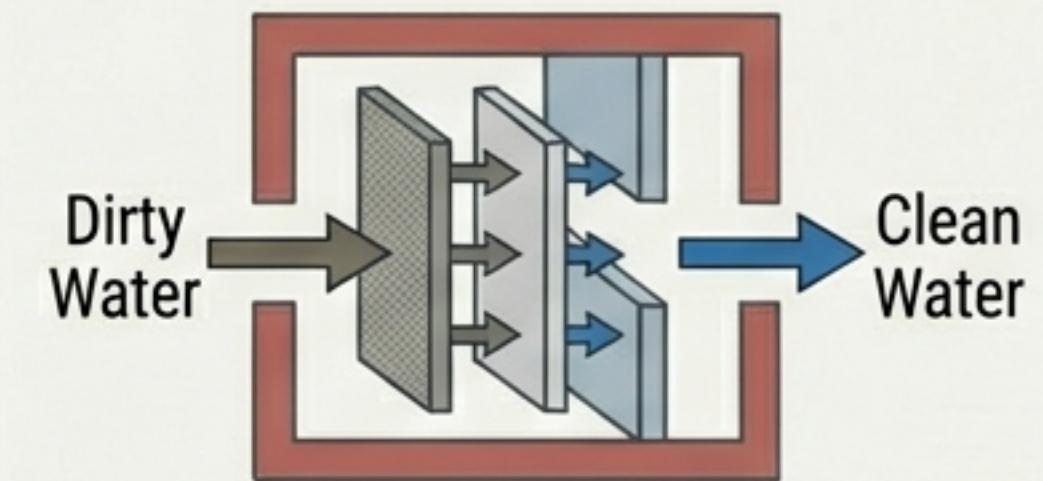
Mandatory for discharges within/draining to a 300-ft riparian zone of Category One (C1) waters.

80% TSS Removal

Standard requirement for new or reconstructed motor vehicle surfaces (not in C1 zones).

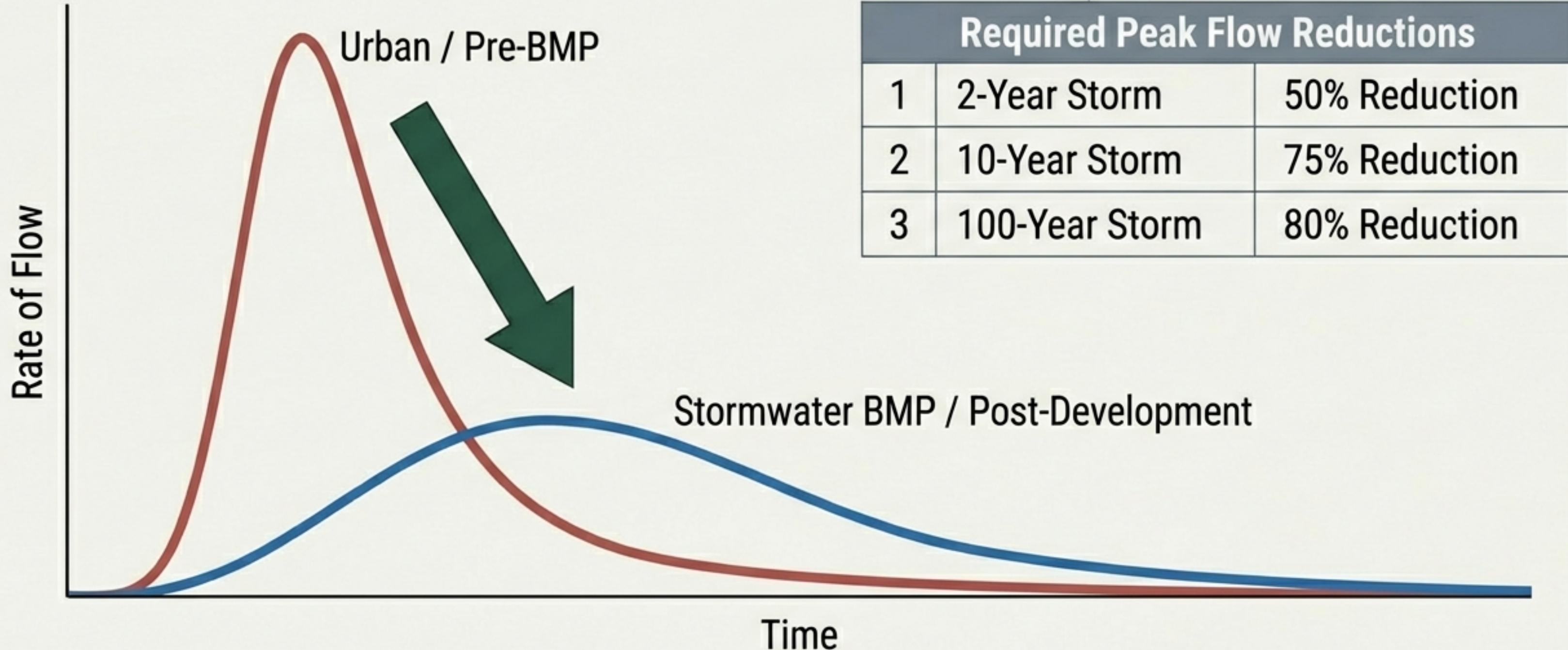
50% TSS Removal

Limited allowance for existing public roadway retrofits where 80% is impracticable.



Design Storm: 1.25 inches of rainfall in 2 hours.

Standard 3: Water Quantity & Flood Control

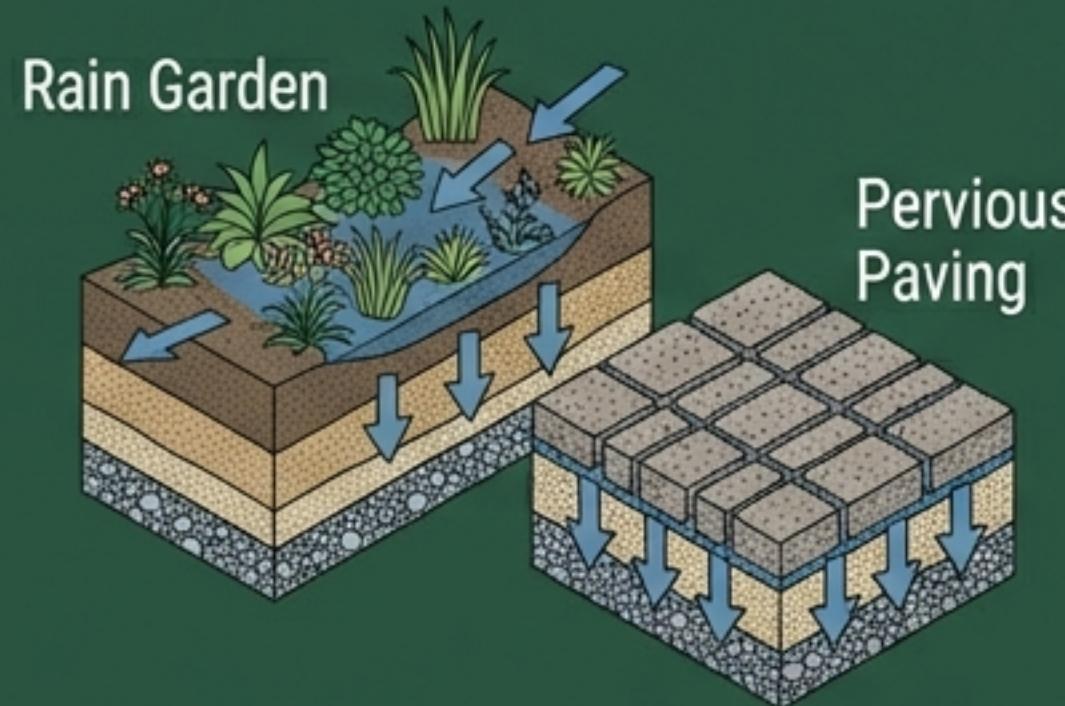


Objective: Flatten the curve to prevent downstream flooding and erosion.

The Methodology: Green Infrastructure First

GI-BMPs are the mandatory primary compliance pathway.

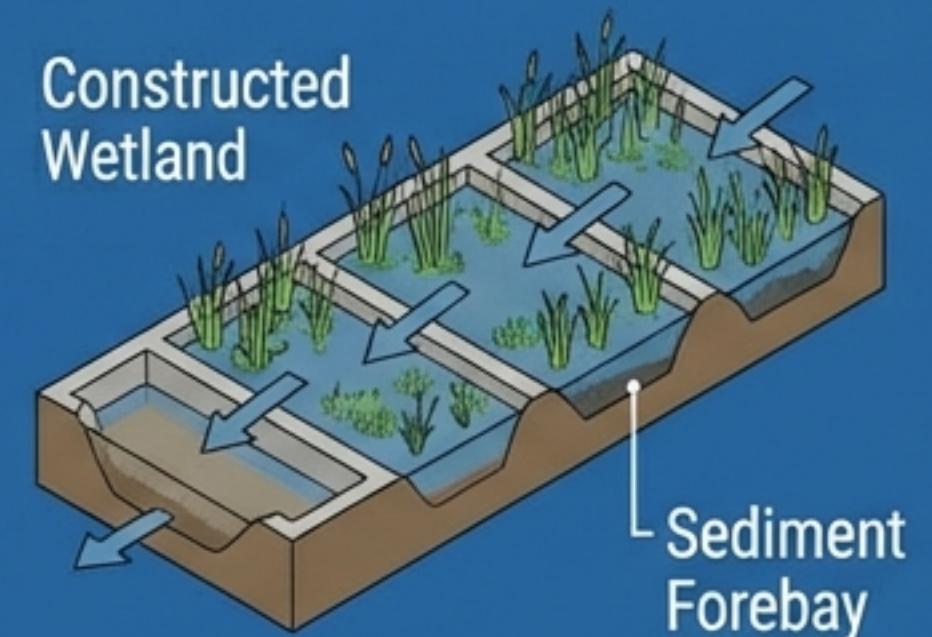
1. Small-Scale GI



Preferred. Can meet Recharge, Quality, and Quantity.

Examples: Bioretention, Pervious Paving, Sand Filters. (Max drainage approx 2.5 acres).

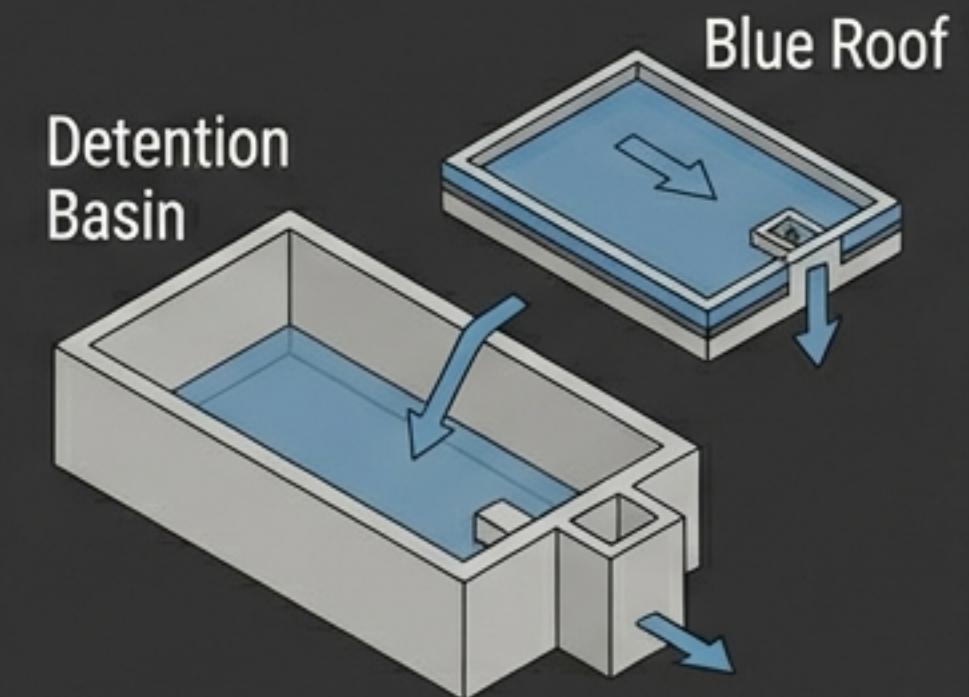
2. Large-Scale GI



Use for Quantity Control.

Examples: Infiltration Basins, Standard Constructed Wetlands.

3. Non-GI BMPs



Restricted.

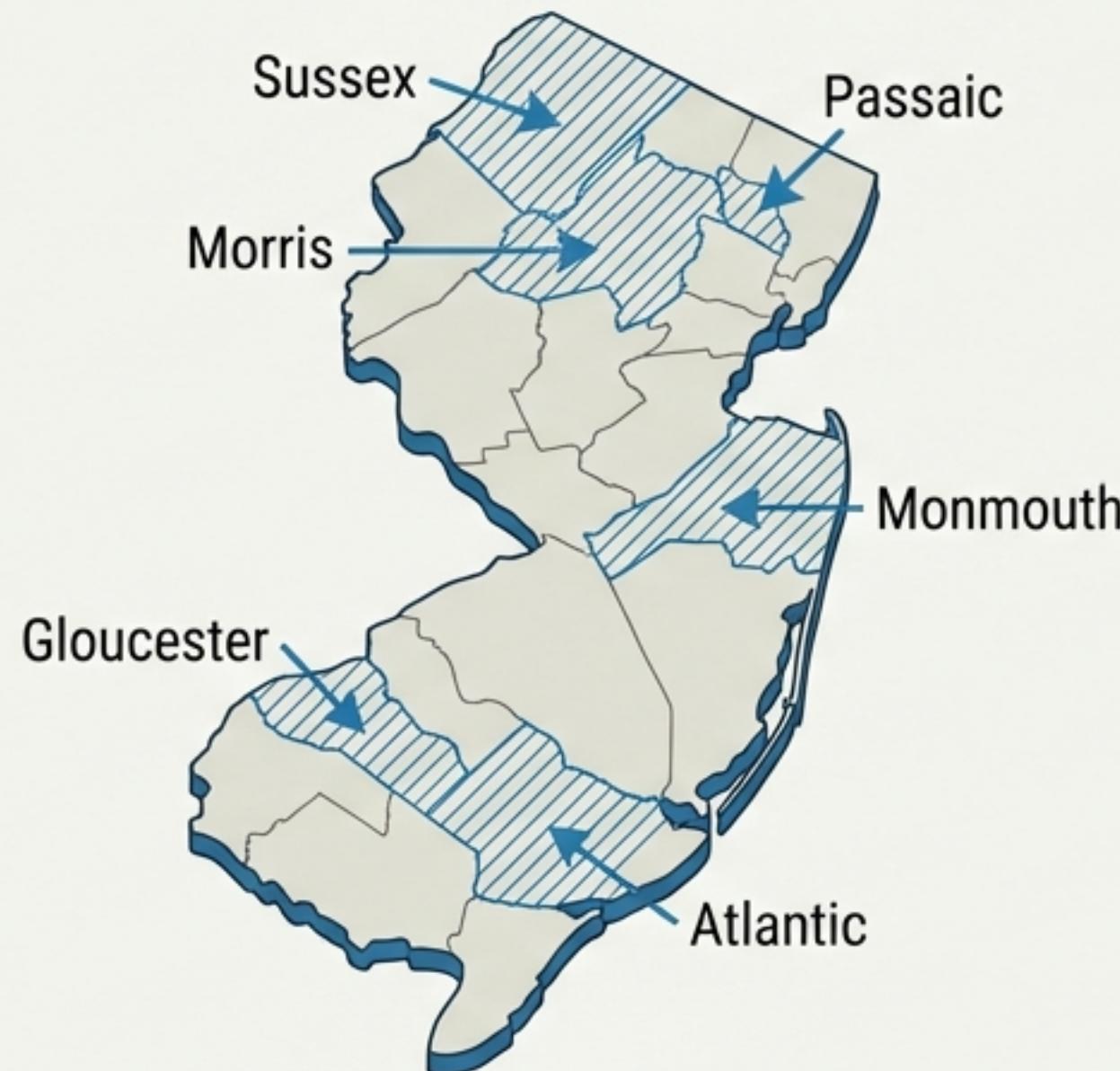
Allowed ONLY with a waiver or variance.

BMP Selection Matrix

BMP Type	TSS Removal	Quantity?	Recharge?	Separation from Water Table
Pervious Paving	80%	Yes	Yes	2 feet (1ft w/ underdrain)
Green Roof	0%	Yes	No	N/A
Small-Scale Bioretention	80-90%	Yes	Yes	2 feet
Vegetative Filter Strip	60-80%	No	No	-
Dry Well	0%	No	Yes	2 feet

Climate Resilience: Designing for Future Rainfall

Rule: BMPs must be sized using both Current AND Projected design storms.



Future Precipitation Change Factors (100-Year Storm)

Selected data, Table 5-6

Sussex County:	1.0x → 1.50x
Passaic County:	1.0x → 1.50x
Morris County:	1.0x → 1.46x
Gloucester County:	1.0x → 1.41x
Atlantic County:	1.0x → 1.39x
Monmouth County:	1.0x → 1.26x

Engineering for the past is no longer compliant.
We must engineer for the climate of tomorrow.

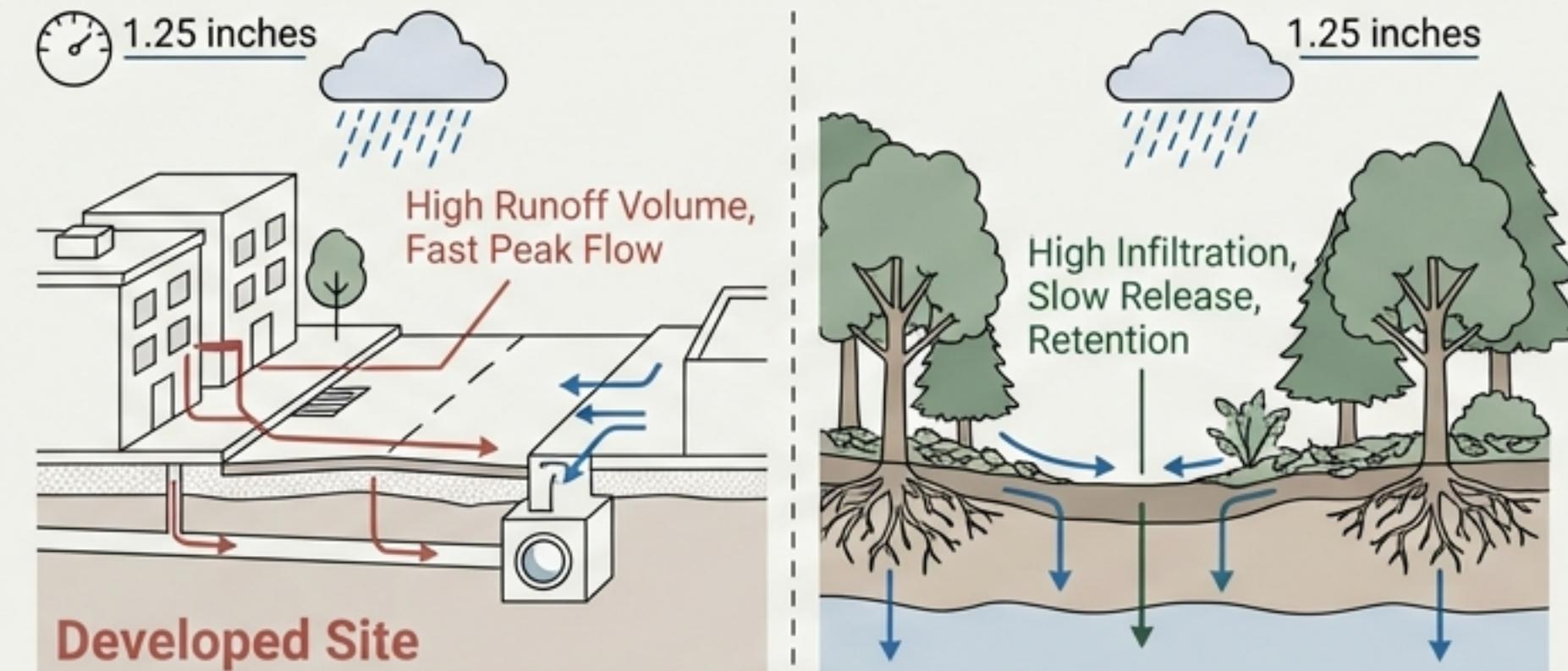
Small-Storm Retention (2026 Amendment)

Replicating the hydrology of a forest for frequent rain events.

The Rule:

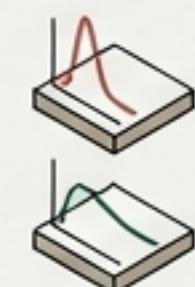
BMPs must RETAIN the Water Quality Design Storm (1.25 inches) on-site.

Developed Site vs. Woods Condition



Impracticability Standard

If infiltration is technically impracticable (e.g. poor soil), you must meet the "Woods Condition" Standard:



- Peak Flow: Must be < runoff from Woods cover type.
- Duration: Runoff duration must be > Woods hydrograph.

Calculating Compliance

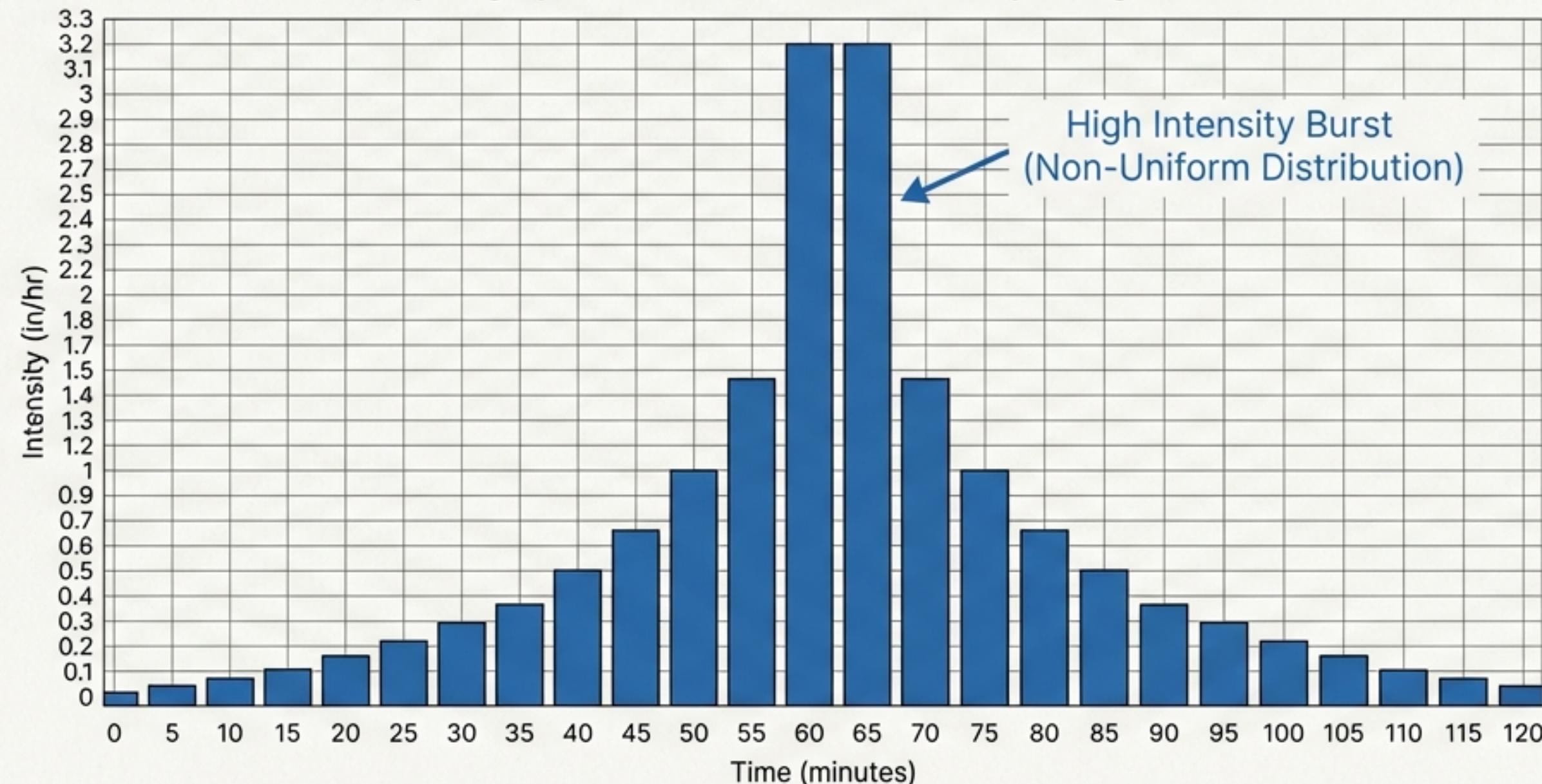
The NJ Water Quality Design Storm

Methodology: NRCS Runoff Equation & Dimensionless Unit Hydrograph.

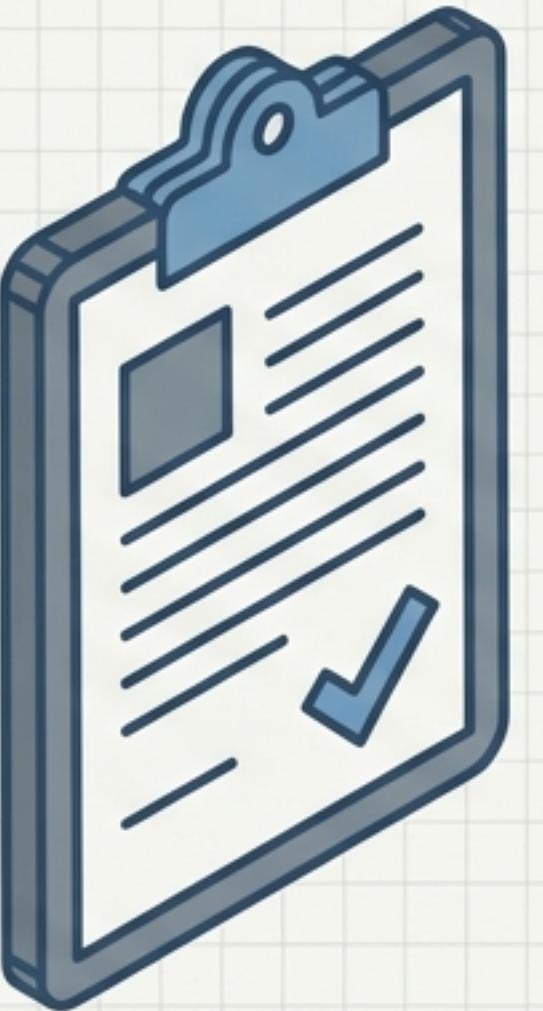
Design Storm: 1.25 inches / 2 hours.

Constraint: BMPs must be designed to handle this specific intensity distribution, not just total volume.

Hyetograph of the NJDEP Water Quality Design Storm



“Maintenance is Forever”



- **✓ Maintenance Plan:** Design engineer must prepare detailed tasks, schedules, and cost estimates (including sediment/trash removal).
- **Deed Recording:** Plan must be recorded on the deed of record.
- **Detailed Logs:** Inspections and work orders must be logged and kept.
- **⚠ Responsibility:** Cannot be assigned to individual residential property owners. Must be HOA, public agency, or equivalent.

N.J.A.C. 7:8-5.8

Project Approval Checklist

- 1. **Applicability:** Does the project meet “Major Development” thresholds?
- 2. **Strategy:** Are Green Infrastructure BMPs prioritized?
- 3. **Performance:** Recharge (100% maintained, in [Technical Blue](#)), Quality (80/95% TSS removal), Quantity (Peak reductions met, in [Technical Blue](#))?
- 4. **Resilience:** Are Future Precipitation Change Factors applied?
- 5. **Lifecycle:** Is the Maintenance Plan recorded on the deed?

**Resilient development protects our water resources,
our communities, and our future.**