

Keeping the Balance: A Guide to NJ's Groundwater Recharge Rules

Simplified guide to New Jersey Stormwater Management rules for groundwater recharge, explaining why they exist and outlining the required process for land development projects.

The Requirement: Maintaining Pre-Development Recharge

Land Development Can Create a "Recharge Deficit"

Impervious surfaces block rainfall from replenishing underground aquifers.



Developers Must Meet One of Two Performance Standards

An analysis must prove compliance with either the annual volume or storm-specific standard.



Standard 1: Maintain 100% of Annual Recharge

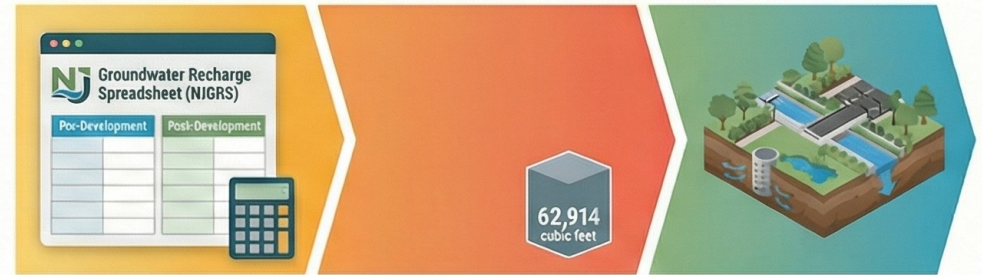
The site's stormwater measures must maintain the average annual pre-construction recharge volume.



Standard 2: Infiltrate Increased Storm Runoff

Infiltrate the increase in runoff volume from a two-year storm event.

The Process: From Calculation to Construction



1. Calculate Pre- & Post-Development Recharge

Use the NJ Groundwater Recharge Spreadsheet (NJGRS) to find the deficit.

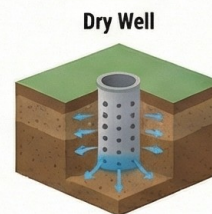
2. Case Study: NJ Turnpike Interchange 14A

Post-development analysis revealed a recharge deficit of 62,914 cubic feet.

3. Design a Best Management Practice (BMP)

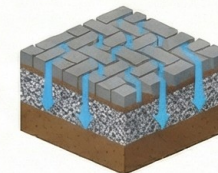
An engineered system is designed to capture runoff and meet the recharge deficit.

Best Management Practice (BMP) Examples



Dry Well

Pervious Paving System

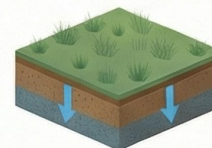


Small-Scale Bioretention Basin



✓ Supports Groundwater Recharge?

Small-Scale Infiltration Basin



✓ Supports Groundwater Recharge?

