

**Municipalities provide stormwater services to comply with a variety of federal and state laws:**

- Most prominently, over 130 of the state's 550+ municipalities implement stormwater programs pursuant to their **federal Phase I or Phase II permits**.
- However, these same municipalities also implement a myriad of **state-mandated stormwater programs**, overlapping their federal mandates. Examples of these state programs include water supply watershed rules or nutrient management rules such as Jordan Lake, Falls Lake, Neuse, and Tar-Pam rules.
- In addition, most jurisdictions account for stormwater runoff to control for flooding.

The change to the definition of gravel in S.L. 2013-413 poses concerns to municipalities and the engineering staff they employ to administer mandated federal and state stormwater programs. The fact that most compacted gravel materials function as impervious surface puts standard practices at odds with the new statutory definition of gravel. For cities and towns, chief concerns with this new definition come up in the context of redevelopment sites as well as sufficiency of stormwater control designs.

**REDEVELOPMENT. The change to the definition of gravel increases the costs of redevelopment:**

- Previously, most of the federal and state stormwater rules allowed programs to "grandfather" all impervious surfaces – including gravel surfaces – when a site was redeveloped. Therefore, the newly redeveloped site did not need to install stormwater controls for the surface area covered by gravel.
- The new definition takes away the ability of these programs to award "credit" for gravel surfaces during redevelopment. In these scenarios, gravel surfaces must now be treated as if they were forested, and developers must install stormwater controls for that square footage.
- Ultimately, the change in the definition drives up the cost of redevelopment by adding additional stormwater control requirements to these projects.
- Cities will focus more on redevelopment in the coming years because they have limited ability to annex new developments outside their jurisdiction.

**SUFFICIENCY OF DESIGNS. The change to the definition of gravel complicates design and approval of stormwater control devices:**

- Professional engineering standards require stormwater control designers to account for runoff from impervious surfaces. Regardless of the statutory definition of gravel, designers must adhere to their professional standards and utilize the appropriate co-efficient when calculating runoff from a site.
- In the end, parsing out the definition of gravel will likely require plan reviewers to exercise significant judgment calls as to the sufficiency of the design to control for stormwater run-off on sites, setting the stage for inconsistent approvals across the state.