
South Bethany Memorandum

To: Town Council

From: Edie Dondero, Mayor

RE: Possible amendment to South Bethany Code §145-14.3

Date: August 14, 2026

One of the potential amendments to the zoning code currently under consideration would require 100% of all property setbacks (front, rear and sides) to contain pervious materials. This change is being considered to enhance the infiltration of rainfall and reduce stormwater runoff. Reducing runoff is critical to prevent roadway flooding, as the stormwater infrastructure existing in many areas of Town is insufficient to handle the rate of flow it currently experiences, thereby leading to ponding and flooding.

The Town is nearly built-out and has minimal area of open land. Individual lots contain a high amount of impervious surface, with minimal areas of vegetation or lawn. Further, the Town's definition of "pervious materials" is generous, including materials like stone and shells that are often considered as impervious or semi-impervious. Because of all of these factors, there are limited options for reducing runoff beyond regulating materials in setbacks. Keeping setbacks pervious would provide ample space for on-lot infiltration of rainfall thereby reducing stormwater runoff flowing onto streets or neighboring properties.

The following text is excerpted from the Resiliency Implementation Plan prepared for the Town in 2023 by engineers at George, Miles, & Buhr (GMB). Using the most common lot size in South Bethany (50'x100' or 5,000sq ft), runoff rates were calculated based on the amount of impervious surface covering each lot. The included table shows a significant difference in runoff rates between a lot with setbacks that are 100% pervious and those with a higher amount of coverage.

[Note: For reference, the full text of the Resiliency Implementation Plan can be found on the Resiliency Committee page of the Town website, under Studies & Reports.]

Excerpt from Resiliency Implementation Plan prepared by GMB, 2023

[From the section *Pervious/Impervious Allowances on Private Property*, page 11]

Table 2 depicts the runoff volumes from a single lot during differing rainfall events and under different lot coverage rates.

- The 0% coverage lot is a fully grassed lot in good condition. There is hardly any runoff from the lot, as should be expected.
- The 36% coverage lot depicts the buildable area envelope completely covered in roof area, but all areas within the setback are pervious materials such as grass in good condition or an engineered pervious paver system.
- The 50% coverage represents a fully maximized building envelope with the addition of a paved or concrete driveway, and the remaining area in grass.
- The 72% coverage represents maximizing the allowable coverage per code, fully impervious building envelope, 45% impervious coverage in the setback, and remaining area in grass.
- The last one, the “maxed out” coverage, represents a fully impervious building envelope in roof area, the maximum 45% impervious coverage in the setback, and the remaining area in gravel as an allowable pervious material per code.

Lot Coverage	1-yr rainfall	10-yr rainfall	100-yr rainfall
0%	12 cf	131 cf	392 cf
36%	87 cf	610 cf	1263 cf
50%	218 cf	871 cf	1612 cf
72%	479 cf	1350 cf	2221 cf
Maxed Out	827 cf	1830 cf	2701 cf

Table 2: Runoff Volumes from a 5,000 sf Lot with Various Lot Coverages During Various Storm Events