

Department of Legislative Services
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FISCAL AND POLICY NOTE
Revised

House Bill 1117

(Delegates Hershey and Jameson)

Environmental Matters

Education, Health, and Environmental Affairs

Zoning, Construction, and Stormwater - Permits and Variances - Solar Panels

This bill specifies that, for the purposes of issuing a permit or variance relating to zoning, construction, or stormwater for a project to install a solar panel, any calculation relating to the impervious surface of the project required by the State or local governing authority issuing the permit or variance may include only the foundation or base supporting the solar panel. The bill does not apply in the Chesapeake and Atlantic Coastal Bays Critical Area.

Fiscal Summary

State Effect: The bill does not directly affect State finances.

Local Effect: The bill is not expected to have a direct, material impact on local government finances.

Small Business Effect: Potential meaningful.

Analysis

Current Law/Background:

Regulation of Impervious Surface

The Maryland Department of Planning indicates that regulating impervious surface on a property, either by establishing a maximum allowable area or a ratio of impervious surface to the total lot area, is a common zoning performance standard used by local governments to manage stormwater and open space/green areas. Local governments typically set higher impervious surface area and ratio standards for industrial and

commercial zoning districts compared to residential zoning districts due to the size of the buildings and parking lots relative to their lot area. Inclusion of impervious surface standards in a zoning ordinance depends on the community. Each jurisdiction sets its own standards to reflect the character of the community, as well as typically specifying how impervious surface should be measured.

With respect to stormwater management, counties and municipalities are required to implement stormwater management programs that meet requirements established by the Maryland Department of the Environment (MDE). MDE establishes technical requirements and provides a model ordinance, and counties are required to adopt an ordinance that meets the regulatory requirements. A municipality can either adopt its own ordinance or rely on the county program.

Pursuant to Chapters 121 and 122 of 2007, MDE regulations require the implementation of “environmental site design” to the maximum extent practicable for new development and similar, but less stringent, measures for redevelopment. Environmental site design is defined in State law and includes “minimizing use of impervious surfaces, such as paved surfaces, concrete channels, roofs, and pipes.” Under MDE regulations, the term “impervious area” is defined as any surface that does not allow stormwater to infiltrate into the ground. The level of imperviousness of a site affects the extent of environmental site design practices that must be implemented.

MDE indicates that impervious surfaces prevent rainwater from naturally soaking into the ground (groundwater recharge) and slowly seeping into streams (groundwater discharge), and stormwater runoff volume and velocity can increase in areas covered by impervious surfaces. MDE’s *Maryland Stormwater Design Manual* cites a number of studies as establishing a fundamental connection between impervious cover and watershed impairment.

Comprehensive information is not readily available regarding the extent to which local governments may currently include the surface of solar panels and not only the foundation or base supporting the solar panels in calculations relating to the impervious surface of a project to install a solar panel for the purpose of a permit or variance relating to zoning, construction, or stormwater. For a small number of large-scale solar installations in the past, MDE has advised that the surface of the solar panels, being impervious surfaces, should be accounted for with respect to stormwater management requirements.

Because of the disconnected nature of solar panel surfaces in a large-scale solar installation allowing for infiltration of rainwater into the ground, depending on the conditions of the site (*e.g.* slope, soils), no additional stormwater management measures may be needed. However, in cases where, for example, a site is on a slope and consists

of hard soils, additional measures may be needed to adequately control stormwater runoff from the site.

Chesapeake and Atlantic Coastal Bays Critical Area

The Chesapeake and Atlantic Coastal Bays Critical Area generally consists of land within 1,000 feet of Maryland tidal waters and tidal wetlands as well as the waters of the Chesapeake Bay, the Atlantic Coastal Bays, their tributaries, and the land underneath those waters. The Critical Area Program, implemented through local programs subject to State criteria and oversight, regulates land use and development activity within the Critical Area to minimize damage to water quality and natural habitats.

“Impervious surface” limitations that were imposed in the Critical Area under the program were recast in 2008 (Chapter 119) as “lot coverage” limitations to maintain limitations on developed area despite the use of permeable surfaces such as gravel or permeable pavement as part of development. The lot coverage limitations apply in limited development areas and resource conservation areas (two of the three land classifications under the program – intensely developed areas being the third) and limit lot coverage to a percentage of a parcel or lot (15% for new development). “Lot coverage” is defined as the percentage of a total lot or parcel that is (1) occupied by a structure, accessory structure, parking area, driveway, walkway, or roadway; or (2) covered with gravel, stone, shell, impermeable decking, a paver, permeable pavement, or any manmade material.

Certain stormwater pollutant loading reduction requirements apply to development and redevelopment in intensely developed areas, but there are not specific impervious surface limitations for intensely developed areas. The stormwater management requirements discussed above also apply to development in the Critical Area as with any other development.

Solar Development and Zoning, Generally

With respect to the interaction of zoning restrictions and solar energy development in general, the American Law of Zoning, a treatise on zoning, planning, and subdivision control policy in the United States, discusses ways that states and local jurisdictions have sought to facilitate installation of solar energy systems through zoning-related laws and regulations. Some states, for example, have enacted laws specifically preserving the right to install and use solar panels in spite of local ordinances or other community or property-based restrictions, while some local jurisdictions have relaxed zoning requirements that otherwise would prevent installation of solar panels.

In Maryland, Chapter 138 of 2008 established that a “restriction on use” regarding land use may not impose or act to impose unreasonable limitations on the installation of a solar collector system on the roof or exterior walls of improvements, as long as the property owner owns or has the right to exclusive use of the roof or exterior walls.

The American Law of Zoning also noted a law in New Jersey enacted in 2010 that, similar to this bill, exempts solar panels, with the exception of the base of the panels, from zoning limitations on impervious cover.

Small Business Effect: Small businesses involved with solar installations may benefit to the extent the bill creates more certainty in permitting/approval processes for installations, prevents an impervious surface zoning restriction from being a barrier or limitation to a project, or lessens costs to comply with stormwater management requirements. However, due in part to uncertainty of whether, and to what extent, local governments currently include solar panels in impervious surface calculations, it is unclear whether small businesses will be meaningfully impacted by the bill.

Additional Information

Prior Introductions: HB 1335 of 2011, a similar bill, received a hearing in the House Environmental Matters Committee but was subsequently withdrawn.

Cross File: None.

Information Source(s): Maryland Department of the Environment; Maryland Department of Planning; Maryland Department of Transportation; Maryland Department of Agriculture; Department of Natural Resources; Critical Area Commission; Kent, Montgomery, Washington, and Worcester counties; Baltimore City; City of Bowie; Maryland Clean Energy Center; Maryland DC Virginia Solar Energy Industries Association; Salkin, Patricia E., *American Law of Zoning* (5th ed.); Department of Legislative Services

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