



## Legislation Details (With Text)

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**Title:** New Stormwater Regulations & Location of Stormwater Facilities

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**Attachments:** 1. BMP Examples, 2. Vienna Review and Submittal SOP\_Final\_7-29-2014, 3. Vienna Stormwater Facility Maintenance and Inspection SOP\_Final\_7-29-2014, 4. Vienna Stormwater Management Record Keeping SOP\_Final\_7-29-2014, 5. Sample Maintenance Agreement, 6. ARTICLE\_3.\_\_\_STORMWATER\_MANAGEMENT, 7. 03-09-15 Nutrient Credit Option for BMP (2)

Date	Ver.	Action By	Action	Result
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### Subject:

New Stormwater Regulations & Location of Stormwater Facilities

### BACKGROUND SUMMARY :

The new stormwater regulations that went into effective July 1, 2014 apply to all land disturbing activities greater than 2,500 sf of land disturbance, including residential single lot tear-downs as well as all Town projects. The regulations, which are attached, include both water quantity and water quality components. These regulations require stormwater facilities must be either publicly or privately owned and maintained. But should private land development provide for stormwater management on private property or provide public infrastructure? Who should maintain a facility that collects or treats runoff from both public and private property? Staff hopes that these questions can be considered and answered during this work session.

### OVERVIEW :

#### Water Quantity

Water quantity requirements have not changed significantly under the new regulations except for calculation and technical procedures used by engineers. Essentially a construction project must demonstrate post development runoff is non-erosive for the existing receiving channels or pipes for the 1-year storm event; and demonstrate flood protection during the 10-year storm event.

#### Water Quality

Water quality requirements can be met using various types of Best Management Practices (BMPs):

- Conventional (non-proprietary) BMP measures (ex.: infiltration trenches).

- Manufactured BMPs (proprietary). (ex.: Filterra tree-box curb inlets, or the underground Stormceptor that we use at the Northside Property yard which filters out trash, sediments, oils and grease.)
- Offsite credits (when the development is less than 5 acres.) The offsite credit program is administered and monitored directly by Virginia DEQ. Applicants must show Vienna staff proof of purchase prior to final plan approval or final occupancy in the case of single family re-builds.

#### How Subdivisions and Single Family Tear-downs are impacted

In general DPW staff recommends and urges developers, during the review process, to provide private facilities to meet both the water quantity and quality requirements with privately owned systems. However we don't have an official policy or regulation in this regard, except that the Town has never allowed or accepted public dry ponds.

Historically, stormwater requirements have been met for some larger subdivisions with an over-sized underground public storm pipe for storage. Under the new regulations the use of small BMP facilities are expected to meet both water quantity and quality requirements. However, subdivisions (under 5 acres) that opt to purchase offsite water quality credits will then need only to meet water quantity onsite making on-lot private facilities unlikely to be proposed in these cases. The smaller, simple lot-split subdivisions typically use small private infiltration facilities that meet the stormwater quantity and quality requirements.

For the most part the single family tear downs (also known as in-fill lot development) don't have water quantity issues because they have sheet-flow run-off (meaning no water is concentrated into a pipe or channeled offsite). Over 95% of the single family tear-downs since July 1, 2014 have opted to purchase offsite credits. Offsite credits are a popular choice and it is assumed will continue to be as long as credits are available, economical and local policies easily allow them. Fairfax County is considering a policy to limit the use of offsite credits by requiring engineers to justify why onsite facilities are not feasible. Attached is a draft policy being considered by Fairfax County. Town staff recommends considering a similar policy.

#### Private Maintenance Requirements

DPW has developed comprehensive Standard Operating Procedures (SOPs) for plan review, inspections, and reporting of stormwater facilities and they are attached for your reference.

DPW staff routinely inspects all public and private stormwater facilities installed before July 1, 2014 and will continue to do so going forward. For all of the existing private facilities that require maintenance or repair, the property owners are issued letters detailing the required maintenance work.

For all new facilities designed and installed under the new regulations on private property, the inspection and maintenance are required to be performed by the facility owner. Additional formal maintenance agreements that are to be recorded in the land records are required prior to any final approvals. As stated in the Facility Maintenance and Inspection SOP attached, staff will provide a notice to the property owner six months prior to an inspection being due with an explanation of the maintenance and inspections requirements; then again 30 days prior if no inspection report provided

giving an addition 60 days to comply. Since the inspection is required to be performed by a certified 3<sup>rd</sup> party professional, the exact cost is unknown, but could run as much as a few hundred dollars.

### Public Projects

Linear public improvement projects (roads and sidewalks) are no longer exempt from meeting stormwater management regulations. Therefore we must either: incorporate BMPs into our street designs, build BMPs elsewhere in Town, or purchase offsite credits. Additionally some grants may require BMPs to be installed within project limits. Providing new BMPs in Town would provide for the best stewardship of our local waterways and is therefore our preference. Offsite credits are important to meeting our overall Chesapeake Bay water quality improvements, but they provide no improvement to our in-Town waterways and therefore would only be considered if in-Town facilities are determined to be in-feasible.

### How Surrounding Jurisdictions Address Stormwater Management Facilities

There are no surrounding jurisdictions which allow underground detention within the public right of way, though they do allow for dry ponds and provisions for HOAs, which Vienna does not for most residential development. The following is a summary of how neighboring jurisdictions address issues of public maintenance.

Town of Herndon: For single family residential the Town maintains dry ponds and infiltration facilities serving more than one lot.

City of Fairfax: May accept facilities for maintenance if system provides drainage from public streets.

Town of Leesburg: Town maintains systems for drainage function; the property owner or HOA must maintain facilities for aesthetics.

Fairfax County: Because the public right of way is VDOT's there are no stormwater management facilities allowed in the right of way. The County will only maintain dry ponds for land development applications.

### **SUMMARY/STAFF IMPRESSIONS :**

Stormwater management is a significant issue that all land development activities over 2500 square feet are required to address. All developers, public and private, are liable to meet the regulations. Any new Town improvement projects must propose public facilities either within the project limits or elsewhere in Town; or purchase offsite water quality credits if in-Town facilities are determined to be in-feasible. Private development should also share the responsibility of maintaining the facilities that are required to keep our waters clean. Staff recommends establishing a policy to require private land development and subdivisions to provide on-lot private stormwater facilities to meet their stormwater management requirements.

### **RECOMMENDATION :**

If Council agrees with a policy to require (or encourage) developers to provide private BMP facilities on private property for land development activities, then the DPW Director can draft a policy document for review and approval by the Council.