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FROM: ERIC CHRISTENSEN
SUBJECT: STORMWATER RETROFIT THRESHOLDS FOR REDEVELOPMENT
DATE: NOVEMBER 23, 2015
CC: UTILITY ADVISORY COMMITTEE

Background

This memo discusses a number of issues with how the City of Olympia determines the threshold for requiring a complete stormwater retrofit with redevelopment. The City of Olympia is in the process of drafting a new Drainage Design and Erosion Control Manual for Olympia (DDECM). Adoption of a new manual equivalent to Ecology's 2012 Stormwater Management Manual for Western Washington (SWMMWW) is a requirement of the City's 2012 Phase II Municipal Stormwater Permit (NPDES Permit). With adoption of a new manual, how the City determines the threshold needs to be remedied. Note that the thresholds for roadway projects are neither included in this discussion nor being considered for modification.

Since adoption of the 2005 DDECM, the City of Olympia's threshold for requiring a complete stormwater retrofit with redevelopment has differed from Ecology's SWMMWW. The intent of the deviation was to increase the number of sites where retrofits were required. Improvements to water quality and flow control of runoff will only occur with retrofit of existing stormwater drainage systems.

When the 2009 DDECM was adopted, the development community and City Council requested that the retrofit threshold be reconsidered with the intent of helping facilitate brown field redevelopment. At the time, the City's 2007 NPDES Permit did not permit backsliding of stormwater regulations. However, the restriction on backsliding was removed with issuance of the City's 2012 NPDES Permit. Therefore, there is an opportunity at this time to reconsider our stormwater retrofit thresholds.

Current Regulations Regarding Stormwater Retrofit Thresholds

From Ecology's 2012 SWMMWW:

Redevelopment projects shall comply with Minimum Requirements #1 through #9 for the *new* and *replaced* hard surfaces and the converted vegetated areas if the total of new plus replaced hard surfaces is 5,000 square feet or more, and the valuation of proposed improvements – including interior improvements – exceeds 50% of the assessed value of the existing site improvements.

Interpretation

- Ecology has no threshold for retrofitting all hard surfaces unless they are replaced.
- Ecology has a simple threshold of 50% of the assessed value.

From Olympia's 2009 DDECM:

Redevelopment projects shall comply with all the Minimum Requirements for all impervious surfaces if the total of new plus replaced impervious surfaces is 5,000 square feet or more and the new impervious surfaces add 50% or more to the existing impervious surfaces within the project limits, or the valuation of proposed improvements – including interior improvements – exceeds 25% of the assessed value of the existing site improvements, minimum \$500,000. The \$500,000 value shall be inflation adjusted from January 2005 to today's dollars using Engineering News Record (ENR) national 20-city construction cost index (the index value was 7297 January 2005). The square footage and improvement value thresholds shall be cumulative and include all projects permitted on or after January 1, 2000.

The total cost of stormwater improvements to mitigate existing impervious surfaces shall be capped at 30% of the total project costs.

Interpretation

- Olympia requires retrofitting to manage *all* hard surfaces when redevelopment exceeds the threshold.
- Olympia's assessed value threshold (25%) is half of Ecology's threshold (50%). Although there is a minimum \$500,000 project value to trigger the retrofit, we know that this has been problematic for redevelopment in Olympia.
- Olympia's threshold is complicated and difficult to implement.
- Adjusting the \$500,000 threshold to the ENR is problematic. The City does not have an ENR account to determine the construction cost index (CCI). The date of the CCI is also not clear (date of vesting?).
- Olympia's threshold is cumulative whereas Ecology's is not. This provides a greater potential for retrofit and deters phasing a project to avoid the retrofit.
- Olympia has a cap on the cost of stormwater improvements (stop loss) relative to total improvements (30%).
- Both Olympia and Ecology require 5,000 square feet of new or replaced impervious surface in the threshold.

Options

There are several options for revising the retrofit threshold that can be evaluated. These options can be considered to stand alone or in a combination.

1. Accept Ecology's current threshold determination without modification
 - This option is simple and fulfills NPDES Permit obligations.
 - This option does not achieve retrofit of *all* hard surfaces unless they are replaced.
 - This option eliminates the cap on costs and the dollar value (\$500,000) threshold difficulties.
 - As described above, this option will be less restrictive than Olympia's current threshold and would be considered backsliding by the environmental community.
 - This option does not address the cumulative costs of improvements. Projects could be strategically phased over years to avoid retrofit.
2. Modify Ecology's threshold determination to establish a lower percentage value (possibly 40%).
 - This option is similar to Option 1, but it may appease those in the environmental community that would like to see/maintain a lower retrofit threshold.
 - Determining the threshold percentage value may be rather arbitrary and would be scrutinized.
3. Modify Ecology's threshold to require retrofit of *all* hard surfaces if the threshold is met.
 - This option, though similar to Option 1, would result in more complete retrofits with redevelopment.
 - Without a cap on costs, this option could discourage redevelopment and result in greater green field development rather than brown field development.
 - Because this option is more rigorous than Ecology's, a stop loss clause may be considered to keep it from becoming too difficult for development to achieve.

4. Modify Ecology's threshold determination to include cumulative improvements
 - Again this option is similar to Option 1, but it could avoid getting phased projects to skirt the threshold.
5. Modify Ecology's threshold determination to eliminate the need for 5,000 square feet of new or replaced impervious surface
 - This option would result in more projects being retrofit, but there may not be adequate nexus for a stormwater retrofit.
6. Maintain Olympia's current threshold determination without modification.
 - This option has been problematic. It is more rigorous than Ecology's requirements and has been questioned by the development community and City Council.
 - This option does fulfill NPDES Permit obligations.
 - Refer to interpretation above for additional concerns.

Recommendation

My recommendation is a combination of Options 3 and 4. Specific proposed language follows:

Redevelopment projects shall comply with all the Core Requirements for *all* hard surfaces if the total of new plus replaced impervious surfaces is 5,000 square feet or more and the new hard surfaces add 50% or more to the existing hard surfaces within the project limits, or the valuation of proposed improvements – including interior improvements – exceeds 50% of the assessed value of the existing site improvements. The square footage and improvement value thresholds shall be cumulative and include all projects permitted on or after January 1, 2000. The total cost of stormwater improvements to mitigate *existing* impervious surfaces shall be capped at 30% of the total project costs.