Special Protection Area Quantity Plan

for

City of Columbia City Limits

City of Columbia

Effective 6/13/2023

Background

City of Columbia Code of Ordinances Section 21-46(c) states:

To assist in the compliance with state and federal laws and regulations, the stormwater division may develop special protection areas which require additional control of stormwater quality and quantity than provided by minimum design standards. Such areas may consist of watersheds corresponding to adopted TMDLs, known flooding problems and pollution impairments, or other areas necessary to protect, maintain, and enhance water quality and the environment of the city and the public health, safety, and general welfare of the citizens of the city. These areas can be expected to change with time as development continues and federal and state law demands.

Reasoning

The City of Columbia municipal boundary contains several areas that have been prone to flooding issues Gills Creek, Penn Branch, 5 Points, and Maxcy Gregg Park, which all have issues with flood events during certain storm events. The City of Columbia has initiated several projects and conducted studies to help reduce the risk of these events in the past. These projects cost the City substantial amounts of money to initially build as well as maintain. Another way to help reduce the chance of flood events is to decrease flows from storm events leaving properties. The Rocky Branch watershed study performed by McCormick and Taylor notes that upstream storage should reduce downstream flooding by reducing flows and delaying peaks. This Special Protection Area (SPA) will give property owner's incentives through credits for their stormwater utility fee for reducing flows from their properties through best management practices (BMP). The reductions in flows can help reduce flooding, which will reduce the chance for loss of life or property.

Special Protection Area (SPA) Boundary

The Special Protection Area includes the entire City of Columbia municipal boundary to help with flood and erosive flow issues in the City (i.e. Five Points, Smith Branch, Whaley street and Main street), as well as help prevent future ones in other areas of the City.

Special Protection Area Credit Requirements

There are two possible ways to achieve credits through this SPA, with different credits available based on the option used for treating stormwater flow rates leaving from a site. A Land disturbance permit must be applied for, including a SWPPP with pre-construction and post-construction drainage calculations, to receive utility fee credits for either option.

Option A

A property owner that reduces flow rates pre-construction to post-construction for the 2-year and 10-year storm events by 20% or more will receive a 30% credit on the property's stormwater utility fee, as long as the permanent control is properly maintained.

Option B

To help support the City of Columbia's push for better water quality and green infrastructure, a property owner that reduces flow rates pre-construction to post-construction for the 2-year and 10-year storm events by 20% or more, through either a reduction in impervious area and/or green infrastructure permanent controls (ex. Raingardens, Green roofs, Bio-cells) with educational signage, will receive a 45% credit for the remaining utility fee, as long as the area that achieved the credit remains pervious and the permanent control(s) with educational signage are properly maintained.

Retrofits

Retrofit projects for BMP's are generally more expensive than if a BMP is installed during initial development. All projects that are only for the purpose of retrofitting a BMP to meet the requirements for option A or option B of this SPA will receive an additional 15% utility fee credit over the credit they would normally receive for whichever option is chosen.

*option A and option B cannot be combined.

** 60% is the maximum credit allowed for the stormwater utility fee

*** Sites located in the lower areas of watersheds will be reviewed on a case-by-case basis to determine if a reduction in run-off rates will be a benefit to the overall storm drainage system, before the site can qualify for a credit