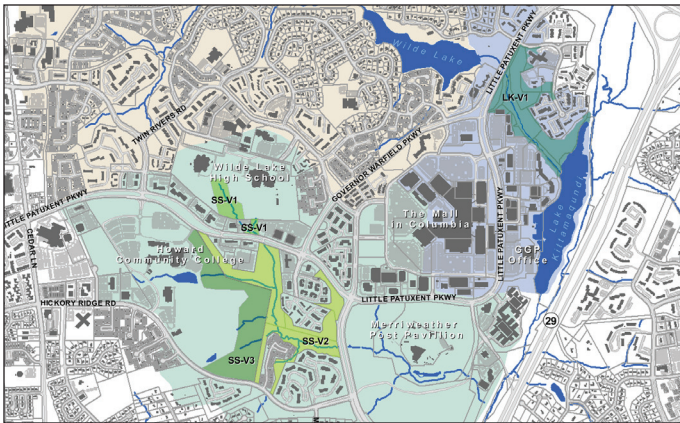


Downtown Columbia Watershed Planning

Columbia, Maryland



Over one mile of stream will be restored and reconnected to its floodplain, and more than 40 acres of impaired urban woods will be restored and reforested as part of this major redevelopment of one of the country's first planned community.

Biohabitats developed restoration strategies for the watersheds of the two streams that flow through the center of Columbia, one of the nation's first planned communities.

Biohabitats conducted extensive GIS analysis, stream and upland field assessments, and pollutant load modeling for two watersheds. A retrofit reconnaissance investigation identified opportunities for stormwater retrofit practices in the upland areas of the watersheds. Of the 60 sites

visited, Biohabitats identified 49 opportunities to implement stormwater retrofits, including bioretention, bioswales, modification of existing stormwater basins, rain gardens and rain barrels, rainwater cisterns, sand filters, permeable pavement, wooded wetlands, and regenerative stormwater conveyance. For each retrofit opportunity, Biohabitats estimated the potential annual pollutant load reduction and planning-level design and construction costs.

Biohabitats developed riparian corridor restoration opportunities along ten impacted stream reaches. These opportunities included floodplain reconnection, riparian buffer enhancement, stream restoration, bank stabilization, and regenerative stormwater conveyance.

Biohabitats also developed a watershed restoration implementation strategy for each watershed which optimizes the pollutant removal capabilities of stormwater retrofits and, where feasible, associates the stormwater retrofits with riparian corridor restoration and integrated vegetation management opportunities.

A riparian corridor assessment was conducted to identify outfall locations, severely eroded stream banks, utility crossings, impacted riparian buffers, trash dumping, stream crossings, and channel modifications along two miles of stream corridors.

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