Charles County Resiliency Authority Private Stormwater Prioritization

La Plata, Maryland



A publicly available characterization and ranking of more than 100 Charles County neighborhoods with increasing stormwater-related concerns due to outdated infrastructure and rainfall intensification.

SERVICES Climate Adaptation & Resilience C harles County (County) is grappling with the consequences of increased heavy rainfall frequency and intensity related to climate change. Complicating matters further is the fact that a significant portion of the County's development and stormwater infrastructure is aging, with some systems dating back two to three decades. As a result, the combination of outdated infrastructure and intensified rainfall has led to a surge in residential flooding complaints across the County. To tackle these pressing challenges, the County established the Charles County Resiliency Authority (CCRA), a nonprofit entity dedicated to financing and implementing climate change-related projects.

Biohabitats worked with the County and CCRA to characterize drainage issues and the drainage system for more than 100 neighborhoods via desktop and field assessments. Biohabitats then developed a suitability model to evaluate, rank, and prioritize neighborhoods under a suite of up to 10 criteria, including urgency of need and equity. The results reflect the incorporation of many factors into one model applied to all neighborhoods.

Biohabitats compiled prioritization results into a public facing ArcGIS Dashboard where residents can look up their neighborhood's rank and associated prioritization scores. The County is making the necessary repairs to privatelyowned stormwater drainage conveyance systems in priority order. The dashboard provides visibility and transparency for this process and allows concerned residents to understand the rationale for their neighborhood's prioritization status.