

Interstates & Green Stormwater Infrastructure



Key Points

Highways generate significant amounts of stormwater runoff that contribute to urban flooding and water quality problems.

The Turner Field neighborhoods have suffered periodic urban flooding and combined sewer overflows. A survey of over 1,000 residents identified stormwater management as the number one community concern.

To address these issues and to provide for beautification of this high-profile area, the Georgia Department of Transportation (GDOT) will be installing green stormwater infrastructure (GSI) at the intersection of I-75/85 & I-20 to reduce polluted stormwater runoff.

This pilot GSI project will benefit the communities of Peoplestown and Summerhill by reducing the amount of stormwater in the combined sewer system by 106,227 of gallons during a 1.8-inch storm.

GSI will be designed to capture the first 1.8 inches of rainfall using bioretention, as recommended in the recent Turner Field Neighborhoods Livable Centers Initiative plan.

The project team is a collaboration among GDOT, Central Atlanta Progress, City of Atlanta Department of Watershed Management, University of Georgia School of Environmental Design, and American Rivers.

Pilot project construction is scheduled to begin in Fall 2017.

Green Stormwater Infrastructure and Atlanta's Core Interstates



*Pilot Project Study Area Highlighted In Green
(Google Earth Image)*

To address urban flooding and polluted stormwater runoff and enhance quality of life in downtown Atlanta, the Georgia Department of Transportation (GDOT) and Central Atlanta Progress (CAP) have partnered with American Rivers to conduct a pilot project to implement green stormwater infrastructure (GSI) at the crossroads of Atlanta's two major highways, I-75/85 and I-20.

GSI Feasibility Assessments

In 2016, American Rivers worked collaboratively with the Turner Field communities and Livable Centers Initiative planning process to develop two GSI feasibility assessments focused on the Turner Field stadium and parking lots and surrounding interstate highways. American Rivers was invited to develop these assessments as part of the Livable Centers Initiative planning process after the Turner Field Community Benefits Coalition conducted a survey of community residents and determined that stormwater runoff and flooding were their number one concern. The assessments analyzed the potential for GSI to manage stormwater runoff through both infiltration and reuse. The assessments demonstrated that GSI could be used to infiltrate and reuse 3.6 million gallons per 1.8-inch storm.

Information on the Project Area

The selected site for GSI construction is located in the heart of downtown Atlanta at the intersection of I-75/85 and I-20 (See Map on Page 2). It is north and up-slope of the Turner Field neighborhoods that have struggled with stormwater runoff and flooding for decades. Area A (see map), which is the largest drainage area, was selected for the pilot project's construction and is estimated to infiltrate 106,227 gallons of stormwater per 1.8-inch storm. The project design will be developed by the landscape architecture firm Solidago and will incorporate the GSI recommendations in the LCI plan using bioswales and bioretention. The engineering design phase is currently underway, with construction planned to begin in Fall 2017.



Interstate Feasibility Assessment Overview

Additional Resources

To learn more about the Turner Field neighborhoods Livable Centers Initiative, visit the following link:

<http://www.stadiumneighborhoodslci.org/the-lci-plan/>

View the Turner Field interstate GSI feasibility assessment:

www.americanrivers.org/LCIINTERSTATEGSI

View the Turner Field core area GSI feasibility assessment:

www.americanrivers.org/LCICOREGSI