

Green Stormwater Infrastructure (GSI) Resolution

Draft proposal submitted by Environment Texas for consideration by the Austin City Council

February 21, 2017

A RESOLUTION establishing that Green Stormwater Infrastructure is an essential component of the City's policies for water resource management, environmental protection, and land development; and adopting a goal for increasing its use in Austin by 2018.

WHEREAS, there has been a steady increase in the amount of land in Austin covered by impervious surfaces, and a steady decrease in the amount of ground capable of absorbing rain; and

WHEREAS, the result has been a sharp rise in the amount of runoff that flows off-site from developed properties and into stormwater drains, and then into creeks, rivers, and lakes; and

WHEREAS, this increase in runoff has contributed to increases in flooding severity, erosion problems, and water pollution; and

WHEREAS, Green Stormwater Infrastructure can capture rain on-site where it falls, thus sharply decreasing the amount of runoff that flows off-site; and

WHEREAS, Green Stormwater Infrastructure (GSI), also known as Low-Impact Development (LID), refers to a set of design features in buildings and landscapes that can retain and re-use rainwater; and

WHEREAS, GSI design features such as rain gardens and bioswales (shallow basins and channels planted with vegetation), green roofs, and permeable pavements can allow rainwater to slowly soak into the soil or evaporate into the air; and

WHEREAS, GSI design features such as rain harvesting cisterns and barrels can store rainwater for later use in landscape irrigation; and

WHEREAS, GSI design features have been shown to absorb up to 50–90 percent of rainfall on-site, and to trap up to 45–99 percent of solid particles contained in stormwater; and

WHEREAS, GSI can provide additional benefits, such as increased tree canopy, better pedestrian safety, improvements to streetscapes or bikeways that provide appreciable economic and aesthetic value, and climate mitigation and adaptation value; and

WHEREAS, Green Stormwater Infrastructure has been endorsed by the Imagine Austin Comprehensive Plan (2012), the Water Resource Planning Task Force (2014), the Flood Mitigation Task Force (2016), and the Green Infrastructure Working Group (2016);

WHEREAS, the CodeNEXT revision of the Land Development Code and Zoning Map will increase the maximum percentage allowed for impervious cover on many properties, leading to a further decrease in stormwater infiltration across Austin;

WHEREAS, properties with impervious cover of 80 percent or higher will be required to offset their runoff by participating in the Functional Green program;

THEREFORE, BE IT RESOLVED THAT THE COUNCIL DIRECTS THE CITY TO:

Develop and deliver a “Ten-Year Master Plan for Green Stormwater Infrastructure” by June 30, 2018;

Coordinate the work of all departments with responsibility for GSI, including Watershed Protection, Water, Parks and Recreation, Public Works, Transportation, and Development Services;

Conduct an inventory of the total amount of stormwater currently handled by existing public and private GSI installations in Austin, including rain gardens, bioswales, green roofs, permeable pavements, and rain harvesting cisterns and barrels;

Set an ambitious but realistic target for increasing this amount;

Encourage the use of GSI design features in the construction of new developments and redevelopments, and in the retrofitting of existing developments;

Prioritize the use of GSI design features in watersheds with known flood hazard zones;

Apply the Functional Green program to properties on which the current impervious coverage maximums will be raised to levels below the proposed 80 percent threshold;

Explore opportunities for lowering the amount of impervious cover on previously developed properties whenever feasible;

Incentivize the installation of GSI by expanding the City's existing WaterWise program for homeowners and business;

Increase the use of GSI design features in the City's public works projects whenever feasible;

Integrate all aspects of water management in the City's departments, including drinking water, wastewater, stormwater, and natural water sources;

Provide for the funding of GSI plans through adequate budget appropriations, bond issues, and new financing and partnership opportunities.