BIORETENTION AREAS FACT SHEET

Jefferson Parish
State of Louisiana

Commonly referred to as rain gardens or stormwater planters in some settings; bioretention areas consist of shallow basins (bioretention cells) or linear conveyances (bioswales) that utilize vegetation and engineered soil media to slow, filter, detain and infiltrate stormwater runoff.

Bioretention may be appropriate for rural, urban, and suburban environments and in varied types of land uses. Bioretention areas can work well in spaces where other types of vegetated planters would traditionally be located, so long as runoff can be directed to them. Application areas may include urban planters, street bulb-outs, parking lot islands, roadside swales, and residential yards. Bioretention areas incorporating high flow rate media may be incorporated into Detention Basins for additional storage or runoff.

Rain Garden Installation in Hollygrove completed by the Small Center at Tulane University, in partnership with the Carrollton Hollygrove Community Development Corporation; source: small.tulane.edu

Rain garden with a permeable footpath located in Bayou Metairie Park; credit: Richard Gillen

Recessed Rain Garden located in Ankeny, Iowa; source: Ankenyiowa.gov

HYDROLOGIC FUNCTION

Provides volume and flow control while promoting groundwater infiltration

POLLUTANT REMOVAL

Removes up to 98% of Total Suspended Solids, 76% of Nitrates, and 65% of Total Phosphorus

SOIL SUITABILITY

Most soil types, a distance of 2 feet or more is recommended between the bottom of the feature and the water table

HABITAT VALUE

Plants and vegetation provide shelter and food for birds, reptiles and small mammals

COMMUNITY VALUE

Plants and vegetation provide visual beautification, reduce urban heat island effect and help clean the water

Scan here for more information