



Stormwater Infiltration Basin and Pétanque Terrain

Project Status
Project Year: 2016
Status: Completed

Category: Water Quality

Location: Peltier Park, Thibodaux, LA Project Partners: City of Thibodaux

Background and Problem Addressed:

The BTNEP Stormwater Infiltration Basin and Pétanque Terrain is a novel idea that combines water filtration and storage with increased recreational opportunities and economic benefits. With increased urban development of the bayou region, there will be an increase in impermeable surfaces, such as streets, parking lots, sidewalks and rooftops leading to an increase of problems with stormwater. Impermeable surfaces increase water runoff and decrease the natural process of groundwater recharge. Increased runoff can lead to increased flooding and pollution of surface waters, such as bayous, rivers and lakes.

An infiltration basin is a human-made sump or hollow where stormwater can be temporarily stored until it gradually infiltrates into the surrounding soil. This technique helps improve water quality because it filters the stormwater through the soil and promotes groundwater recharge. Surrounding trees and vegetation will benefit from the capture and slow release of stormwater from rain events.





In addition to retaining and storing stormwater within the infiltration basin, this project will also serve as a recreational surface for the game of pétanque (peh-tənk). Pétanque is an outdoor game of target bowling that originated in France. In this game, players standing in a ring throw hollow steel balls with an underhanded throw with the goal of trying to be the team closest to a small, wooden target ball. The game can be played by all ages including people with disabilities. As a popular social game easily picked up in an afternoon, the terrain can serve as a local meeting place for family and friends to gather and "pass a good time." With the addition of organized tournaments, tourist dollars can be brought in to the local economy. This innovative idea combining environmental and recreational resources can be promoted regionally in the estuary and nationally throughout the country.





Stormwater Infiltration Basin and Pétanque Terrain

Project Description:

The goal of the Stormwater Infiltration Basin and Pétanque Terrain Project was to build a feature within a local park that would function as a stormwater infiltration basin and as a surface for playing the game of pétanque. As the bayou region becomes more urban with more impervious surfaces, inventive projects such as this one will be needed to decrease the rate and volume of stormwater released to drainage networks and natural waterbodies while still providing groundwater recharge. Parks and recreational areas have available open areas that can be used to conserve green space by combining stormwater storage with recreation space. Costs for this project included building materials and supplies for construction and educational signs installed at the site about how the feature functions to protect water resources and how to play the game of pétanque.

The Stormwater Infiltration Basin and Pétanque Terrain was built by digging a basin (66' x 66' x 1') and filling it with a base of coarse crushed rock to provide pore space and volume for stormwater storage, water filtration and groundwater recharge. The top of the basin was made of fine, compacted, crushed rock for the pétanque playing surface. The BTNEP Stormwater Infiltration Basin and Pétanque Terrain is estimated to be able to store approximately 8,600 gallons of stormwater.







CCMP Action Items Addressed:

Storm Water Management (Ecological Management # 12)

Nature-Based Tourism and Recreation (Economic Growth EG-2)

Citizen Involvement Program and Activities (Sustained Recognition # 3)

Urban Green Spaces (Sustained Recognition # 6)