

IMPROVING STORMWATER QUALITY

STORMWATER MANAGEMENT

When it rains, **pollutants** that accumulate on the streets and parking lots, including oil, vehicle fluids, trash and litter, get washed into our storm drain system and flow directly to San Francisco Bay. These pollutants in **stormwater runoff** can be harmful to our waterways and the Bay. The green landscaped areas you see in the parking lot and along the street help treat stormwater by **naturally retaining and filtering** runoff through the soil and plants. The specially designed soils in the landscape allow stormwater to soak into the ground, removing pollutants and replenishing our underground water supply.



The arrows indicate the direction of flow of stormwater runoff from the parking lot and nearby rooftops.

SUSTAINABLE GREEN DESIGN

This is a natural system. All the plants are **California natives**, chosen for their ability to withstand long periods without water and survive short periods of flooding during rain events. Plant choices include Sedges, Rushes, Wild Lilacs, Barberry, Irises, and Valley Oaks. The two boardwalks across the Rain Garden were built using recycled, engineered lumber as part of a sustainable design for the garden to allow pedestrians to cross the Rain Garden without damaging the plants or compacting the soil.



RAIN GARDEN

The landscaped area you see in the parking lot is called a **Rain Garden**, or **bioretention basin**. Stormwater runoff from the parking lot surface and nearby rooftops flows into the Rain Garden. The rocks along the edge of the Rain Garden slow the flow of runoff as it enters the basin to prevent erosion. Stormwater filters through the vegetation and infiltrates into the specially designed soil. Beneath is a one-foot thick rock reservoir that acts as a storage system, allowing stormwater to gradually soak into the native soils below. In an extreme storm event, if the runoff can not soak into the ground fast enough, water will pond to a depth of one foot within the garden before ultimately overflowing to the street through the three sidewalk drains.



CURB EXTENSION

Stormwater runoff from the street enters a separate stormwater treatment system, called a **Vegetated Curb Extension**. The rocks at the entrance are used to dissipate the flow of water entering the landscaped area to prevent erosion. Similar to the Rain Garden, the plants and soils are selected to filter pollutants as water soaks into the ground.



This project was funded in 2009 by a "Sustainable, Green Streets and Parking Lots" grant from the San Mateo Countywide Water Pollution Prevention Program, a program of the City/County Association of Governments of San Mateo County. To learn more about what you can do to keep stormwater clean, visit the Countywide Program's website at www.flowstobay.org.