Bioswales and Raingardens

Chuck Kozak Go Native, Inc What is a Bioswale?

A bioswale is a ditch that allows for rainwater to soak into the earth slowly, rather than flooding streets or going into the ocean.

Here's how it works:

Stormwater runoff from streets and parking lots enters the bioswale through a gradual slope.

The water slowly filters through the roots of native plants, where a majority of automobile pollutants are removed.

Once the water enters the bioswale, it slowly seeps into the soil.

The water enters a secondary filtration level usually made of sand, gravel, or rock.

Lastly, the purified water slowly makes its way to the local aquifer.

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Energy Efficiency and Conservation Block Grant - Los Angeles

Bioswale Configurations



Lake County, Illinois

Pogonip Park, Santa Cruz CA



Kitsap County Surface and Storm Water Management (SSWM)

Rain Garden Configurations

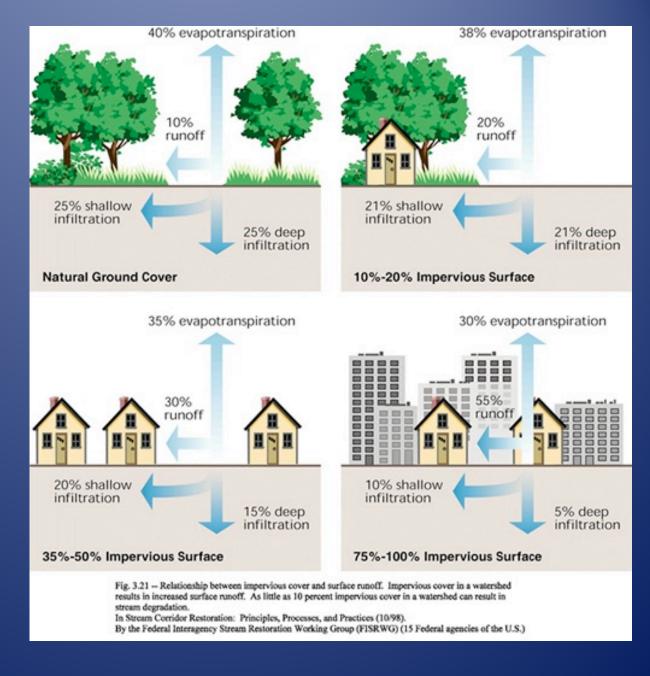




Residential Rain Garden in Southern California - Riverside County Flood Control and Water Conservation District

Rain garden in Portland Oregon fed by street runoff.

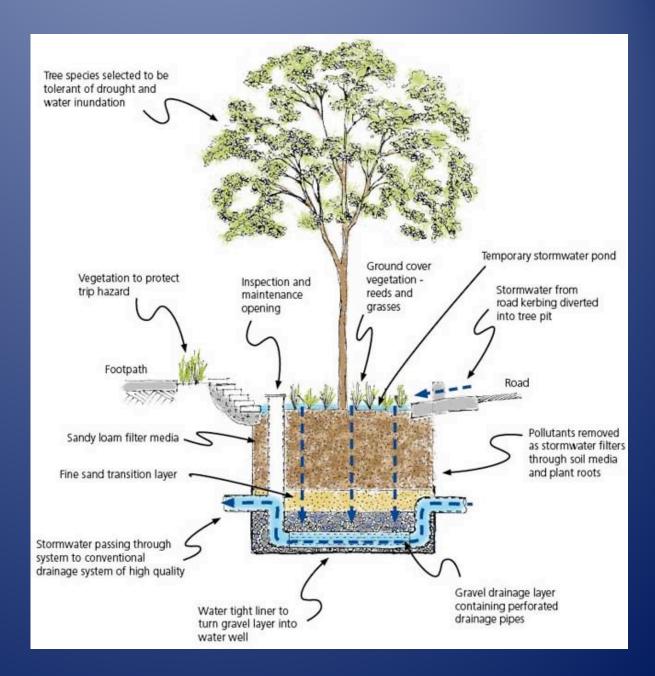
Why is Bio-rention needed?

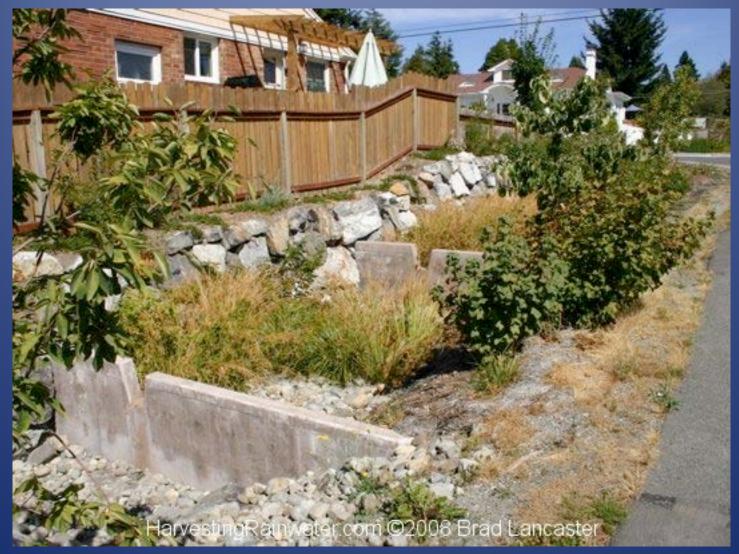


US EPA

Bio-filtration systems of Rain Gardens and Bioswales

City of West Torrens, Australia





Design Considerations

SEA Streets Seattle drainage ditch retrofitted with terraced planting areas and check dams to increase water infiltration

Bioswale Test Sites

Cypress Ave

Juliana Ave





Cypress Ave Trench



Juliana Ave Trench





Installation of filer fabric, drain rock and rain pipe at Juliana Swale



Installation of biosoil and erosion control material at Juliana Swale



Construction of rock weirs at Juliana Swale



Finished rock weirs and paver installation at Juliana Swale



Installation of Native Plants at Cypress Swale

Finish Work at Juliana



Completed Cypress Swale



