

SITE

SOFT/GREEN INFRASTRUCTURE TO PREVENT FLOODING

Green infrastructure is an approach that communities can choose to maintain healthy waters, provide multiple environmental benefits and support sustainable communities...By weaving natural processes into the built environment, green infrastructure provides not only stormwater management, but also flood mitigation, air quality management, and much more.

EPA, *Green Infrastructure* (<http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>)



Rain gardens are an example of soft infrastructure that enhances natural water management on a building site. Image: Keith Giamportone.

STRATEGIES

- **Build grassy swales or bioswales along roadsides to enhance ground water infiltration and reduce erosion.**
Biofiltration Swale Design Guidance, CA Dept. of Transportation¹
- **Provide on-site stormwater retention and detention basins, natural and constructed wetlands.**
 - Both natural and constructed wetlands collect stormwater and prevent erosion during severe storm events. Wetland vegetation also provides cooling effect through evapotranspiration.
Green Building and Climate Resilience C 71²
 - On-site ponds collect stormwater from a site or defined area in order to prevent flooding, and can be used as emergency fire protection water supplies.
Green Building and Climate Resilience, C-65³
- **Plant and preserve more trees near building.**
FEMA Mitigation Ideas. P 24
- **Plant vegetative buffers and vegetative islands in parking areas.**
National Menu of Stormwater Best Management Practices⁴
- **Use permeable pavements, driveways, and surfaces to reduce runoff and increase groundwater recharge**
National Menu of Stormwater Best Management Practices⁵
FEMA Mitigation Ideas. P 24⁶
- **Before development, inquire about environmental programs (e.g. easement or development rights) to keep property vacant.**
FEMA Mitigation Ideas P 30⁷