

VEGETATED SWALES FACT SHEET

Sometimes referred to as Vegetated Strips or Open Channels, Vegetated Swales and Areas are shallow conveyances and open spaces typically lined or stabilized with turf grass. These more traditional elements provide a benefit over impervious channel linings and pavements by increasing the time of concentration of runoff by reducing runoff velocities and helping to remove suspended and floating pollutants through filtering and deposition. Vegetated Swales and Areas can provide pretreatment of runoff before it enters other Green Infrastructure Elements or traditional storm sewer systems.

Appropriate for residential, commercial, industrial, and other land uses in rural and suburban environments wherever space is available.



- HYDROLOGIC FUNCTION**
 Provides flow control while promoting some groundwater infiltration
- POLLUTANT REMOVAL**
 Median removal efficiency of 81% of Total Suspended Solids, 39% of Nitrates, and 24% of Total Phosphorus
- SOIL SUITABILITY**
 Most soil types, a distance of at least 1/2 foot from the water table is recommended
- HABITAT VALUE**
 Tall grass and vegetation provide shelter and food for birds, reptiles and small mammals
- COMMUNITY VALUE**
 Vegetated swales provide aesthetic interest, while helping reduce the urban heat island effect



Vegetated Area;
source: US Department of Agriculture



Roadside Vegetated Swale;
source: dot.ca.gov

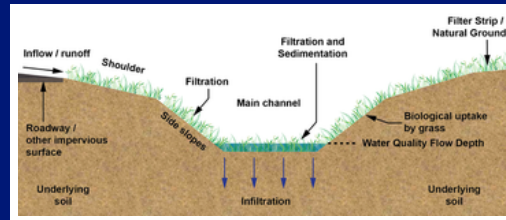


Diagram of how Vegetated Swales function;
source: NCSU, 2020

Scan here for more information

