



Avila Center

Rain Gardens & Infiltration Trench



This project proposes to install a 250 foot infiltration trench with valley gutter in the paved parking lot, and a 500 square foot rain garden between administrative buildings.

A Rain Garden is a shallow depression or hole that uses water-tolerant native plants to prevent stormwater run-off from paved, impervious surfaces and instead to be absorbed into the ground. This greatly reduces run-off flowing into storm drains and nearby bodies of water. Rain Gardens can reduce the amount of pollution reaching creeks and rivers by 30%.

Buildings & Parking Lot

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790 S. Franklin St., Fort Bragg



Benefit Table

- Primary
 - In-Stream flow improvement
 - Reduce stormwater run-off rate and volume
- Secondary
 - Re-establishment of natural hydrographs
 - Re-establishment of groundwater supply
- Cost
 - \$80,000.00
- Metric
 - Annual Rainfall – 43 inches
 - Impervious Area – 1.5 acres
 - Volume Captured (85th percentile) – 4.6 Acre-Feet per Year
 - Cost per Acre-Foot (over 20 years) - \$868.00

An infiltration trench is a type of best management practice (BMP) which manages stormwater run-off, prevents flooding and downstream erosion, and improves water quality in an adjacent river, stream, lake, or ocean. It is a shallow excavated trench filled with gravel or crushed stone that is designed to infiltrate stormwater through permeable soils into the groundwater aquifer. The trench is designed to capture stormwater run-off in the void spaces between the rock and gravel and allow it to slowly infiltrate through the bottom of the trench and eventually through the soil beneath. They are highly effective in removing targeted pollutants from stormwater run-off.