

12

Inlet Protection



Description/Goals

Inlet protection systems are structures designed to filter runoff as it flows into the storm drain system. Sediment can clog pipes or discharge directly to receiving waters through the storm drain system. In most inlet protection systems, a filtering system on or around an inlet filters runoff.

Techniques

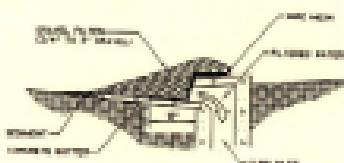
There are a few variations on inlet protection devices. The use of concrete block wrapped with wire and stones is quite common. Other alternatives include using a silt fence around the inlet or placing geotextile fabric and stones directly over a grate inlet or in front of a curb inlet. Periodic inspection and maintenance of inlet protection systems are crucial. Maintenance includes removing sediment and replacing stones.

Limitations/Challenges

When designed or maintained improperly, inlet protection devices can pose a hazard both in terms of traffic safety and flooding. Inlet protection structures can often become clogged, restricting flow into the storm drain system, and causing flooding. They can be a traffic hazard if located on busy streets. Inlet protection devices are generally not very effective at filtering fine-grained sediment or large loads of sediment.

Innovations/Improvements

Synthetic commercial products are now available to cover both curb and grate inlets. Synthetic material is wrapped over the inlet



Source: The Construction BMPs Handbook - State of CA
California State Water Resources Control Board

APPROXIMATE

COST: \$150 - \$250/inlet

	Effectiveness	Low	Med	High
Erosion/ Sediment Control	✓			
Long Term Pollutant Reduction	✓			
Wetland/ Stream Protection	✓			

EASE OF APPLICATION

Difficult Average Easy

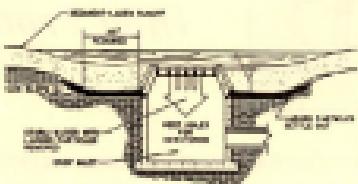
Installation	✓
Maintenance	✓

LIMITATIONS

- High traffic areas

to filter runoff. These products are relatively inexpensive at \$30 to \$35 plus installation, and do not hinder traffic. There are some concerns that these products can clog or cause flooding, like traditional inlet protection.

Another option is available for curb inlets. A curb inlet is a concrete box with a horizontal slot at the curb face. When the inlet is installed, the slot can be blocked with concrete (only perforations to mark the inlet). Then, the inlet can be "panched out" after the site is stabilized. Although this method does not filter runoff, it acts as a barrier to flow, protecting the new storm drain inlets.



Source: The Conservation Matrix Handbook - State of CA
California State Water Resources Control Board