

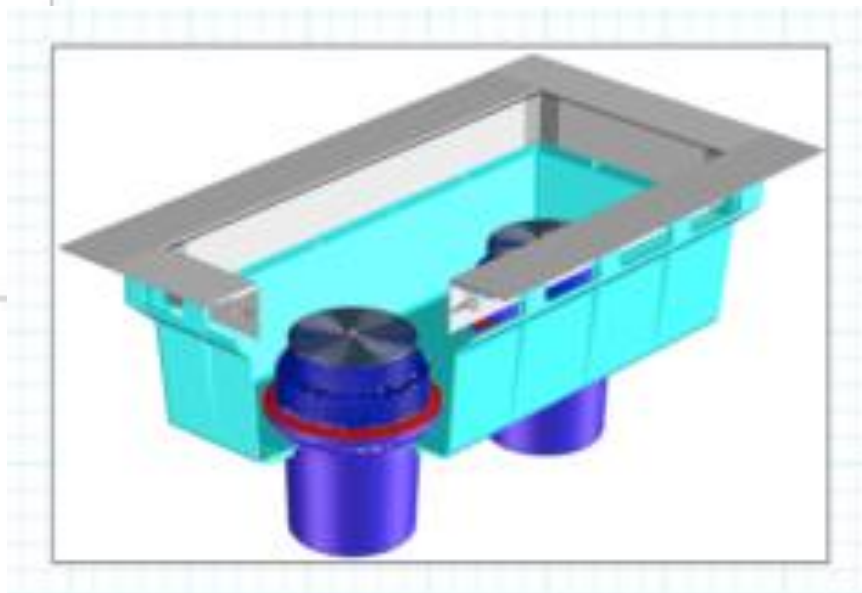
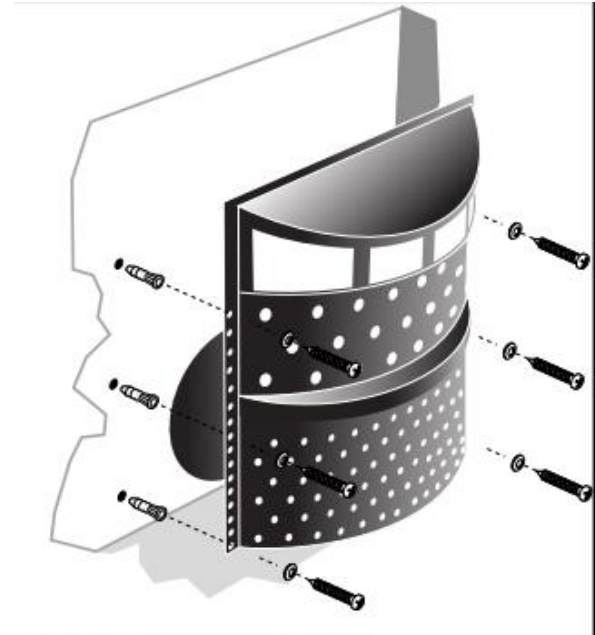


Storm Draining Cleaning





- periodic removal of gross solids from storm drain catch basins
 - may include organic debris, litter, coarse sediments
 - Unaltered basin or with installed device
- Wet weight of removed solids converted to labile weight N & P





- Potentially useful at all basins
 - Location, size, drainage area, tree canopy, tree species
- Comply with Existing Development rules
- Conversion factors
 - 0.00207 lb labile N / lb wet weight
 - 0.00014lb labile P / lb of wet weight
- Range available
 - labile TN 0.10 to 11 lb/ac/yr
 - labile TP 0.01 to 1 lb/ac/yr for





Responsibilities include

- Collection of solids
- Weighing of solids
- Disposal of solids
- Annual Reporting includes weight per location per collection



Constraints

- Not for street sweeping, streetside leaf pickup, instream devices, or removal of leaves and other gross solids from ditches, gutters, or swales.



Design / Installation Guidance

- Dependent upon manufacturer guidelines
- Location may determine highest collection potential
- Need to consider localized flooding



Operation and Maintenance

- Manufacturer's guidelines
- Inspection and harvest as necessary, every 3 months



Annual Reporting

- types of devices
- the wet weight gross solids collected and total pounds of labile N and P removed per
 - collection
 - site
 - annual total
- *number of sites*
- *frequency of cleaning)*



Design Specifications and Nutrient Accounting for Storm Drain Cleanout

I. Summary

A. Description:

The practice of Storm Drain Cleanout involves the periodic removal of gross solids from storm drain catch basins. Gross solids may include organic debris, litter, or coarse sediments. Gross solids may be collected from unaltered catch basins, or catch basins with gross solids collection devices installed. Devices are designed to alter catch basins such that they store more gross solids than unaltered catch basins. To determine the nutrient removal credit, the wet weight of gross solids removed is converted to a representative labile weight of nitrogen and phosphorus removed from the system.

B. Utility:

The practice is potentially useful in any stormwater collection setting involving structural inlets and may also provide ancillary pollutant removal benefits. Credit is directly quantified, proportional to the amount of gross solids collected. Targeted placement of collection devices in storm drains receiving the greatest gross solids loads can increase practice efficiency. This would include areas with the greatest tree canopy or outfalls with the highest sediment or debris loads.

C. Applicability

This practice applies toward compliance with Existing Development rules and may be implemented by local governments. Use in new development settings would require adoption of the practice by the NC Division of Energy, Mineral and Land Resources stormwater permitting program.

D. Credit Overview

To obtain nutrient reduction credits for this practice, the wet weight of gross solids collected is measured, and conversion factors of 0.00207lb T N/lb and 0.00014lb TP/lb of wet weight gross solids are applied to determine the weight of labile N and P removed from the system. Gross solids collection shall occur at a (target) minimum frequency of every 3 months to avoid leaching significant amounts of nitrogen or phosphorus and thereby merit the assigned credit factors (though this frequency is watershed dependent)