

# Preventing Storm Water Pollution: What We Can Do ~Land Disturbances~

## GENERAL TOPICS

**Employees can help reduce water pollution by preventing dirt and debris from being washed into the storm drain system during the following activities:**

- Utility repairs
  - »Water and sanitary sewer lines
  - »Storm drain systems
- Street repairs
- Sidewalk construction and repairs
- Landscaping (parks, building, medians)
- Power pole installation and replacement

■ **Note:** Projects that disturb more than one acre must comply with the state's storm water permit for construction activities.



■ If a permit is required, your supervisor or environmental coordinator will provide specific instructions.



■ Potential pollutants on construction sites include soil, trash, debris, oil, grease, lime, concrete truck wash water, etc.

■ Projects must be managed to prevent or reduce soil and other pollutants from entering storm drains, creeks, or lakes.



## DEFINITIONS

■ Erosion is the removal or wearing away of soil due to water or wind.



■ Sediment is the soil that settles out of flowing water.

## GENERAL PRINCIPLES

■ Preventing erosion is more effective than trying to remove sediment from runoff.



■ Minimize the amount of disturbed area.



■ Divert runoff or flowing water away from disturbed areas.

■ Locate stockpiles out of the street and away from runoff or flowing water to prevent sediment from washing into storm drains.



■ Cover stockpiles or provide a barrier such as an organic filter berm or silt fence around the pile.



# Preventing Storm Water Pollution: What We Can Do ~Land Disturbances~

## BEST MANAGEMENT PRACTICES

**Best Management Practices (BMPs) are physical devices or procedures used to reduce or prevent pollution of lakes, streams or rivers.**

- Erosion Control BMPs are used to protect disturbed soils from being washed away by rainfall or runoff.
- Sediment Control BMPs are used to trap sediment carried by runoff to keep it on the construction site.
- Waste Management BMPs are good housekeeping practices to control trash, chemicals, and debris.

## EROSION CONTROL BMPs

- Vegetation - grasses or other plants that provide permanent erosion protection.
- Mulching - a layer of straw or wood mulch.



- Erosion control blankets - mesh matting made of straw, wood fiber, or plastic.
- Plastic sheeting - may be used for short term protection of disturbed areas or dirt stockpiles.

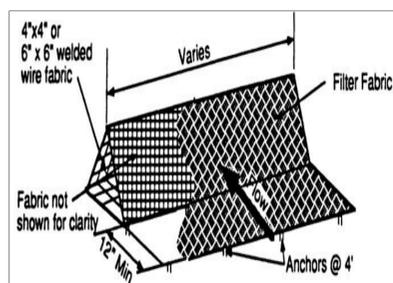
## SEDIMENT CONTROL BMPs

- Organic filter berm – a 1 to 3 foot high berm of mulch and compost placed around a disturbed area.



- Silt fence - filter fabric trenched into the soil and attached to supporting posts.

- Triangular sediment dike - filter fabric \ placed over filter fabric placed over welded wire shaped into a triangle.



- Inlet protection - filter fabric or stone placed around or in front of a storm drain inlet.



## WASTE MANAGEMENT BMPs

- Debris and trash control - use covered trash cans, bins, and/or roll off boxes for disposing trash and debris.



- Chemical management - follow proper material storage and spill cleanup procedures for chemicals used on construction sites.



- Concrete washout - use designated facilities to capture wash water from concrete truck cleaning.



## CONCLUSION

*Protecting water quality requires that all employees do their part to prevent storm water pollution.*