## Preventing Storm Water Pollution: What We Can Do

#### ~Employee Training Series~ Land Disturbances

#### Land Disturbances

- Employees can help reduce water pollution by making sure dirt and debris aren't washed into the storm drain system.
  - Utility repairs
    - » water and sanitary sewer lines
    - »storm drain system
  - Street repairs
  - Sidewalk construction and repairs
  - Landscaping (parks, buildings, medians)
  - —Power pole installation and replacement

#### Land Disturbances

- Note: Projects that disturb one acre or more 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.



#### Land Disturbances

- All projects must be managed to prevent or reduce soil or other pollutants from being washed into storm drains, creeks, or lakes.
- In addition to soil, potential pollutants on construction sites include trash, debris, oil, grease, lime, concrete truck wash water, etc.





#### **Definitions**

- Erosion the removal or wearing away of soil due to the action of water (or wind).
- Sediment soil particles that settle 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.





## General Principles

- Locate dirt 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.





- Best Management Practices (BMPs) are tools used to reduce or prevent water pollution.
  - Erosion Control BMPs are used to protect disturbed soils from being washed off by rainfall and/or runoff.
  - Sediment Control BMPs are used to trap sediment carried by runoff and 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 BMPs (continued):
  - 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.

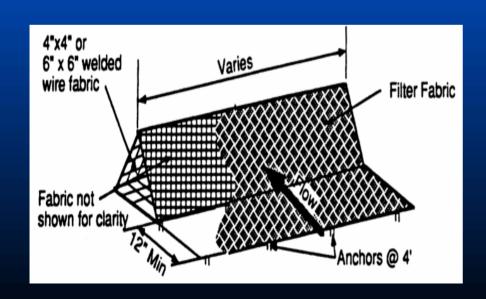


- Sediment Control BMPs:
  - Organic filter berm a 1 to 3 foot high berm of mulch and compost placed around a disturbed area.
  - Silt fence filter fabric trenched into the soil and attached to supporting posts.





- Sediment Control BMPs (continued):
  - Triangular sediment dike 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.





- Waste Management BMPs (continued):
  - Concrete washout use designated facilities to capture wash water from concrete truck cleaning.





# Preventing Storm Water Pollution: What We Can Do

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





