



CONSIDERATIONS

- 9 Soils
- : Area Required
- 9 Slope
- 9 Water Availability
- : Aesthetics
- : Hydraulic Head
- 9 Environmental Side Effects

DESCRIPTIONS:

Extended detention basins are dry between storms. During a storm the basin fills. A bottom outlet releases the stormwater slowly to provide time for sediments to settle.

APPLICATION:

- < Objective is to remove only particulate pollutants.
- < Use where lack of water prevents the use of wet ponds, wetlands or biofilters.
- < Use where wet ponds or wetlands would cause unacceptable mosquito conditions.

INSTALLATION/APPLICATION CRITERIA:

- < Basin volume is sized to capture a particular fraction of the runoff.
- < Drawdown time of 24 to 40 hours.
- < Shallow basin with large surface area performs better than deep basin with same volume.
- < Place energy dissipators at the entrance to minimize bottom erosion and resuspension.
- < Vegetate side slopes and bottom to the maximum extent practical.
- < If side erosion is particularly severe, consider paving or soil stabilization.
- < If floatables are a problem, protect outlet with trash rack or other device.
- < Provide bypass or pass through capabilities for 100-year storm.

LIMITATIONS:

- < May be less reliable than other treatment control BMPs. Inability to vegetate banks and bottom may result in erosion and resuspension.
- < Limitation of the orifice diameter may preclude use in small watersheds.
- < Requires differential elevation between inlet and outlet.

MAINTENANCE:

- < Check outlet regularly for clogging.
- < Check banks and bottom of basin for erosion and correct as necessary.
- < Remove sediment when accumulation reaches 6-inches, or if resuspension is observed.



TARGETED POLLUTANTS

- ▬ Sediment
- : Nutrients
- : Heavy Metals
- : Toxic Materials
- : Oxygen Demanding Substances
- : Oil & Grease
- : Floatable Materials
- 9 Bacteria & Viruses

- ▬ High Impact
- : Medium Impact
- 9 Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ▬ Capital Costs
- : O&M Costs
- : Maintenance
- 9 Training

- ▬ High : Medium 9 Low