

## Post Construction Stormwater Management Requirements MCM #5

Chris Cotton  
OEPA - Division of Surface Water  
Southwest District Office

## Post construction goals

- Reduce hydrologic impacts
- Minimize release of pollutants

## “Water Quality Volume”

$$WQv \text{ (acre-feet)} = C \times P \times A/12$$

C = runoff coefficient

P = .75 inches precipitation

A = area draining to BMP

## Post-con exceptions

- Projects that don't create impervious surfaces
  - gas pipeline installation
  - Athletic fields
  - Abandoned mine land reclamation
  - Stream or wetland restoration, mitigation

## Structural Post-construction Controls

Structures designed to treat runoff or increase infiltration

- Extended Detention Basins
- Infiltration Trench
- Enhanced Swales
- Pocket wetlands

## Examples



## Non-structural controls

- ⇒ Lower C reduces WQv => less runoff
  - increased open space
  - riparian, wetland setbacks
  - vegetated filter strips
  - conservation development
  - pervious pavement
  - green roofs, rain barrels

## Advantages of LID-oriented Design

- Lower construction & maintenance costs
- Increased property values
- More open space
- Pedestrian friendly neighborhoods
- Preservation of natural areas
- Improved aesthetics

## Alternative Post-con BMPs

- ⇒ OEPA approval required
- ⇒ As effective as Table 2 options
- ⇒ Justify why Table 2 options won't work
- ⇒ Unique site features => case by case

## Post-con Operations, Maintenance

- ⇒ Long term maintenance agreements
  - designated entity to inspect, maintain
  - specific tasks to be done
  - schedules for inspections, maintenance
  - legally binding easements/agreements
  - maps showing access and easements

## Post-con requirements, etc.

- ⇒ Variety of features can be effective
- ⇒ Off site mitigation now possible

## Additional Information

Updated "Rainwater and Land  
Development Manual"

Ohio Dept of Natural Resources'  
Division of Soil and Water Conservation