

Chester County *Watersheds* Plan Information for Managing Facilities and Properties

1. Public Education and Staff Training

- Provide public educational signs to encourage water conservation
- Stencil storm drains with “don’t dump” or equivalent messages
- Provide training and information to staff regarding facility management practices to protect and preserve water quality and quantity
- Wherever practicable, include public trails or recreational opportunities for public to access water features

2. Parking facilities

- Use porous paving everywhere possible!
- Minimize the extent of impervious cover wherever possible (i.e., reduce the width of roadways and parking stalls, etc.)
- Install stormwater quality pre-treatment technologies (e.g., oil/water separators, water quality inlets, biofiltration methods, etc.) to remove pollutants from runoff prior to release to streams

3. Landscape maintenance (turf and landscape plant management / watering)

- Avoid introducing unnecessary chemicals into the environment
- Utilize “integrated pest management” wherever practicable
- Employ “drought emergency” water conservation practices year-round (see handout)
- Reduce the application of chemicals and nutrients to the land surface to the minimum amount and location necessary to support healthy plant production

4. Vehicle maintenance facilities

- Eliminate hydrocarbons and chemicals from rainfall runoff through appropriate handling, storage and disposal of materials
- Install stormwater collection and pre-treatment system (e.g., oil/water separators, water quality inlets, biofiltration methods, etc.) to remove pollutants prior to release of stormwater to streams

5. Corridors along streams and water bodies (Riparian areas)

- Don’t mow all the way up to the stream bank!
- Protect up to 100’ of vegetated riparian buffer along each side of all streams, water bodies and wetlands (see buffer design guidance in *Watersheds* Figure 2-6, pg. 33 and pg. 179-182)
- On small lots (less than 1 acres), maintain a 5-to-15 ft “no-mow” zone along each side of waterways
- Keep streams and waterways clear of trash and fallen debris
- Identify and protect first order streams (provide vegetated riparian buffer, protect from erosion and water quality impacts, etc.)
- Avoid construction and storage within designated floodplains to eliminate flood debris
- Design bridges and other structural stream crossings to intersect as closely as practicable to perpendicular with the stream (preferably within 15 degrees) to protect stream channel from scour and erosion
- Design instream culverts to ensure fish and water passage at low stream flows and to protect stream channel from scour and erosion
- Do not pipe or hard-channel streams or drainage ways
- Design all stream discharges to protect the receiving stream from erosion, scour and sedimentation

6. Maintenance facilities

- Protect all chemicals and hazardous substances from rainfall and runoff
- Implement spill prevention and control measures
- Eliminate chemicals from rainfall runoff through appropriate handling, storage and disposal of materials and stormwater collection and pre-treatment system

7. Wastewater discharges

- Do not discharge untreated wastewater to any waterbody
- Clean out septic tanks on a regular basis (at least once every 2 years)
- For new wastewater discharges, avoid discharges to streams whenever practicable by first considering land application technologies

8. Water supply

- Where new water supplies are needed, first consider local ground water sources
- Avoid encouraging the extension of public water supply (or wastewater) pipelines through areas designated for rural, agricultural, natural landscapes within “Landscapes”
- Develop and implement well and wellhead protection programs
- Properly plug and seal abandoned ground water wells consistent with Chester County Health Department regulations

9. Water conservation and re-use

- employ “drought emergency” water conservation techniques all the time (with obvious exception of totally prohibited uses)
- wherever practicable, consider re-use of water or treated wastewater
- utilize water conservation fixtures in buildings and facilities
- provide ongoing educational information to encourage residents to practice water conservation
- Monitor for and promptly repair leaks in plumbing fixtures, indoor pipelines and water mains

10. Design of new buildings and facilities

- Eliminate and/or infiltrate stormwater runoff
- Implement the “10 principles of stormwater management” within new building designs (see *Watersheds* pgs. 187 –192)
- Eliminate the generation of unnecessary stormwater runoff by minimizing the total area covered by impervious cover (pavement and buildings) and maximizing the use of infiltration of stormwater
- Disconnect areas of impervious cover and discharge runoff from them to infiltration areas
- Provide public educational signs (i.e., “don’t dump” stencils on storm drains; water conservation reminders, etc.) to encourage protection and preservation of water
- Consider rooftop gardens and rain gardens within the design to reduce stormwater runoff
- For urban buildings constructed as re-development of existing urban sites, reduce the volume of annual rainfall runoff from the site (pre-redevelopment to post-redevelopment) by 5 to 10%.
- Utilize conservation design and/or low impact development design techniques on new facilities
- Explore opportunities for redevelopment of Brownfields and Industrial Site restoration
- Ensure that effective erosion and sedimentation practices are employed at all construction sites at all times
- When stormwater basins are necessary, utilize wet retention or extended detention ponds over dry detention basins to improve pollutant removal and infiltration

11. Waste disposal

- Avoid introducing unnecessary chemicals into the environment
- Dispose of used and waste substances, chemicals and fluids in an appropriate manner
- Don’t dispose of liquid or chemical wastes by pouring on land surfaces, into storm drains or into other water channels or streams
- Support (and utilize) Health Department’s Household Hazardous Waste Drop Off/Collection events