

# Helpful Acronyms

|     |   |                 |   |
|-----|---|-----------------|---|
| BMP | Best Management Practice                            | NOT             | Notice of Termination                           |
| CCD | County Conservation District                        | NPDES           | National Pollutant Discharge Elimination System |
| CN  | Curve Number  | MRC             | Managed Release Concept                         |
| E&S | Erosion & Sedimentation                             | MS <sub>4</sub> | Municipal Separate Storm Sewer System           |
| GP  | General Permit                                      | O&M             | Operation and Maintenance                       |
| IP  | Individual Permit (NPDES)                           | PCSM            | Post Construction Stormwater Management         |
| LOD | Limits of Disturbance                               | PNDI            | Pennsylvania Natural Diversity Inventory        |
| NOI | Notice of Intent (part of NPDES permit application) | POI             | Point of Interest                               |

# How does imperviousness impact stormwater?

**Curve Number (CN)**- an empirical parameter used in hydrology for predicting direct runoff or infiltration from rainfall excess.

Table 2-2a Runoff curve numbers for urban areas <sup>1/</sup>

| Cover description   | Average percent impervious area <sup>2/</sup> | Curve numbers for hydrologic soil group |    |    |    |
|---|---|---|----|----|----|
|   |   | A                                       | B  | C  | D  |
| <i>Fully developed urban areas (vegetation established)</i>               |   |   |    |    |    |
| Open space (lawns, parks, golf courses, cemeteries, etc.) <sup>3/</sup> : |   |   |    |    |    |
| Poor condition (grass cover < 50%) .....                                  |   | 68                                      | 79 | 86 | 89 |
| Fair condition (grass cover 50% to 75%) .....                             |   | 49                                      | 69 | 79 | 84 |
| Good condition (grass cover > 75%) .....                                  |   | 39                                      | 61 | 74 | 80 |
| Impervious areas:   |   |   |    |    |    |
| Paved parking lots, roofs, driveways, etc. (excluding right-of-way) ..... |   | 98                                      | 98 | 98 | 98 |
| Streets and roads:  |   |   |    |    |    |
| Paved; curbs and storm sewers (excluding right-of-way) .....              |   | 98                                      | 98 | 98 | 98 |
| Paved; open ditches (including right-of-way) .....                        |   | 83                                      | 89 | 92 | 93 |
| Gravel (including right-of-way) .....                                     |   | 76                                      | 85 | 89 | 91 |
| Dirt (including right-of-way) .....                                       |   | 72                                      | 82 | 87 | 89 |



# CN Value Explained

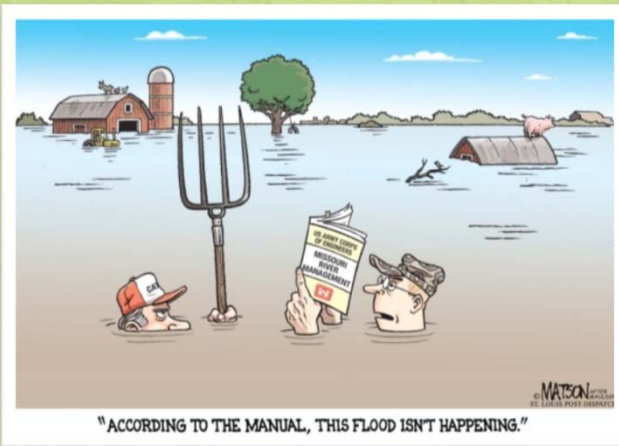
Think of a sponge. The lower the CN value the more you can saturate the sponge.

As the CN value goes up, there is more runoff generated from that material.



## Municipal Separate Storm Sewer System (MS4)

Federal mandate program for reducing pollution causes by stormwater



### Volume Control

Deals with extra volume of runoff created by land use change

*Examples:* infiltration BMPs, capture & reuse or evapotranspiration, and "managed release BMPs"

### Rate Control

Slows down the rate in which the water leaves the site

*Example:* traditional detention basins

### Water Quality

Treats runoff to remove pollutants

*Examples:* Plantings, soil amendments, water quality inserts

# Managed Release Concept (MRC) BMPs and MS<sub>4</sub>

A municipality may take credit for stormwater BMPs that go above and beyond the minimum Chapter 102 NPDES permit requirements.

**Above  
And  
Beyond**





Rain Gardens