

## Basic instructions for the West Virginia MS4 Stormwater Compliance Spreadsheet

### Site Data Tab:

- *Input the acreage for forest, turf, and impervious cover for each drainage area.*
- Using the various Rv coefficients, the spreadsheet will calculate a site Rv
- *Select the appropriate development credits to apply.*
- Based on the credits selected, the spreadsheet will determine the runoff reduction event and the corresponding target runoff reduction volume

### D.A. Tabs:

- The spreadsheet will indicate the acreage for forest, turf, and impervious cover for the Drainage Area based on input on the Site Data Tab.
- Select the runoff reduction practices to implement.
- *For each practice, indicate the impervious acreage and turf acreage in the drainage area.*
- The spreadsheet will then calculate the volume received by the practice.
- *Input either the Disconnection Area, or the Storage Volume of the practice.* (Note: In order to provide the most flexibility for the designer, this spreadsheet does not prescribe a storage volume to fully treat the runoff received by the practice)
- Using the % credit, the spreadsheet will calculate volume reduced by the practice and any remaining runoff volume.
- *Select a downstream practice, if applicable.*
- The spreadsheet will direct the remaining runoff volume from the first practice to the selected downstream practice.
- The total runoff reduction volume achieved for the drainage area is summed at the bottom of the table.

### Runoff Reduction Summary Tab:

- The target runoff reduction volume, the total runoff reduction achieved for all of the drainage area, the remaining runoff reduction volume, and the mitigation volume are shown here.

### Channel and Flood Protection Tab:

- Input the required storm event to manage (1-year, 10-year, etc.) and the associated rainfall depth.
- The spreadsheet assigns curve numbers to each land use type and then calculates a runoff volume for various storm events.
- The runoff reduction volume is subtracted from the runoff volume for each storm event.
- A reduced curve number is then back-calculated based on the reduced runoff volume.
- *This reduced curve number can be used for detention and other flood event calculations.*