

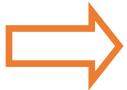
## Worksheet B5

### Downspout Dispersion (BMP T5.10B)



Downspout Dispersion can only be utilized for roofs if full dispersion, downspout full infiltration, and rain gardens/bioretention are all infeasible. Applicants must submit this completed worksheet and an accompanying site plan if selecting this technology. To complete this worksheet, applicant must:

1. Review infeasibility criteria below to determine if this BMP is feasible
2. Check that applicable design criteria below is met
3. Submit Site plan showing approximate location of technology and relevant setbacks, etc.



#### { Step 1: Review Infeasibility Criteria }

If any of the following infeasibility criteria are met, this technology is considered infeasible. Applicant must list the specific infeasibility criteria below on the Stormwater Site Plan (Worksheet A1) and move on to the next BMP technology.

Infeasibility Criteria
Downspout dispersion would cause erosion or flooding problems on adjacent properties.
The available vegetated flow path is less than 25 feet from the outlet of the trench and any property line, structure, stream, lake, wetland, or impervious surface.
The available vegetated flow path is less than 50 feet from the outlet of the trench to any slope steeper than 15%.
Runoff would be discharged to a landslide hazard area or erosion hazard area.
The downspout dispersion system cannot feasibly be located downgradient from a septic system.
When using splash blocks, the available vegetated flow path is less than 50 feet from the downspout to the downstream property line, structure, slope over 15%, stream, wetland, or other impervious surface.
A setback of 5 feet between the trench and any structure or property line cannot be achieved.



**{ Step 2: Review Applicable Design Criteria }**

Complete the following checklist (list "N/A" where design criteria does not apply).

Design Criteria for Downspout Dispersion		
Applicant	Reviewer	Criteria
		Project does not trigger any of the infeasibility requirements above
		Cover the vegetated flowpath with well-established lawn or pasture, landscaping with well-established groundcover, or native vegetation with natural groundcover
		The groundcover of the vegetated flow path must be dense enough to help disperse and infiltrate flows and to prevent erosion (manicured lawns are not acceptable as dense cover)
		The outer edge of the vegetated flowpath segment for the dispersion trench must not overlap with other flowpath segments, except those associated with sheet flow from a non-native pervious surface
		The total length of the trench must not exceed 50 feet
		There must be 10 feet of trench for every 700 square feet of roof area draining to it
		If the trench is serving less than or equal to 700 square feet of roof area, the trench may be 10 foot long by 2 feet wide
		If the trench is serving greater than 700 square feet of roof area, the trench must include a notch grade board per Figure 3.1.6 of this worksheet

Roof Area = \_\_\_\_\_ (Square Feet) ÷ 700 (Square Feet) = Multiplier = \_\_\_\_\_ = Feet Required

**Example:**  
 Roof Area = **2800 (Square Feet)** ÷ 700 (Square Feet) = Multiplier = **4** = **4X10 Feet =40 Feet of Trench Required**

Additional Design Criteria for Splash Blocks*		
Applicant	Reviewer	Criteria
		Ground is sloped away from building foundation
		A maximum of 700 square feet of roof area may drain to each splash block
		The vegetated flowpath segment must not overlap with other flowpath segments. <b>(Exception: sheet flow run-on from adjacent non-native pervious surfaces is allowed)</b>
		Place a splashblock or a pad of crushed rock (2 feet wide by 3 feet long by 6 inches deep) at each downspout discharge point.

\*Downspout extensions can include piping to a splashblock/discharge point a considerable distance from the downspout, as long as the runoff can travel through a well-vegetated area.



### { Step 3: Submit Site Plan }

Submit a site plan that contains all of the following information:

- Scale and North arrow
- Location of proposed splash blocks or dispersion trench(s)
- Area of hard surface draining to dispersion
- Dimensions of proposed splash pad or dispersion trench (L x W x H)
- Length of vegetated flow path
- Dimension to nearby property lines, structures, steep slope, lake, wetland, or other impervious surface where applicable