



UNIVERSITY OF MINNESOTA

Stormwater Treatment: Assessment and Maintenance

Field Data Sheet for Level 1 Assessment: Visual Inspection Bioretention Practices (including Rain Gardens)

Inspector's Name(s): _____

Date of Inspection: _____

Location of the bioretention practice: _____

Address or Intersection: _____

Latitude, Longitude: _____

Date the bioretention practice began operation: _____

Bioretention practice area (ft. x ft.): _____

Time since last rainfall (hr): _____

Quantity of last rainfall (in): _____

Rainfall Measurement Location: _____

Site Sketch (include inlets, outlets, north arrow, etc.)

Based on visual assessment of the site, answer the following questions and make photographic or video-graphic documentation:

1. Has visual inspection been conducted at this location before? ☐ Yes ☐ No ☐ I don't know

1. a) If yes, enter date: _____

1. b) Based on previous visual inspections, have any corrective actions been taken?

☐ Yes ☐ No ☐ I don't know (If yes, describe actions in comments box)

2. Has it rained within the last 48 hours at this location? ☐ Yes ☐ No ☐ I don't know

3. Does this bioretention practice utilize pretreatment practices upstream?

☐ Yes ☐ No ☐ I don't know (If yes, describe pretreatment practices in comment box)

4. Access

4. a) Access to the bioretention practice is:

☐ Clear ☐ Partially obstructed ☐ Mostly obstructed ☐ Inaccessible

4. b) If obstructed, the obstruction is (choose and provide comments) :

☐ temporary **and** ☐ no action needed **or** ☐ action needed

☐ permanent **and** ☐ before or during installation **or** ☐ new since installation

4. c) Access to the upstream and downstream drainage is:

☐ Clear ☐ Partially obstructed ☐ Mostly obstructed ☐ Inaccessible

4. d) If obstructed, the obstruction is (choose and provide comments) :

☐ temporary **and** ☐ no action needed **or** ☐ action needed

☐ permanent **and** ☐ before or during installation **or** ☐ new since installation

Comments

Biologically Enhanced Practices

5. Inlet Structures

5. a) How many inlet structures are present? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ > 5

5. b) Are any of the inlet structures clogged? (If yes, mark location on site sketch above and fill in boxes below with items causing clogging (i.e., debris, sediment, vegetation, etc.)

	Inlet #:	Inlet #:	Inlet #:	Inlet #:	Inlet #:
Partially					
Completely					
Not Applicable					

5. c) Are any of the inlet structures misaligned from the original design or otherwise in need of maintenance? (if yes, write in reason: frost heave, vandalism, unknown, etc.)

	Inlet #:	Inlet #:	Inlet #:	Inlet #:	Inlet #:
Reason					

6. Is there standing water in the bioretention practice? ☐ Yes ☐ No

6. a) If yes, does the water have:

- ☐ Surface sheen (from oils or gasoline)
- ☐ Murky color (from suspended solids)
- ☐ Green color (from algae or other biological activity)
- ☐ Other (describe in comment box)

7. Is there evidence of illicit storm sewer discharges?

☐ Yes ☐ No ☐ I don't know (if yes, describe in comment box)

8. Does the bioretention practice smell like gasoline or oil? ☐ Yes ☐ No

9. What is the approximate percentage of vegetation coverage in the practice? _____ %

9. a) Does the current vegetation match the original design? ☐ Yes ☐ No ☐ Unknown

9. b) Is there the presence of:

- ☐ Weeds
- ☐ Wetland vegetation
- ☐ Invasive vegetation
- ☐ None of the above
- ☐ Other, specify _____

9. c) Does the vegetation appear to be healthy? ☐ Yes ☐ No (if no, describe in comment box)

9. d) Is the vegetation the appropriate size and density? ☐ Yes ☐ No (if no, describe in comment box)

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Comments

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10. Are there indications of any of the following in the bioretention practice? (If yes, mark on site sketch)

- ☐ Sediment deposition
- ☐ Erosion or channelization
- ☐ Excessive or undesirable vegetation (that needs mowing or removal)
- ☐ Litter or debris
- ☐ Other
- ☐ No

10. a) If sediment deposition is evident, what is the source?

- ☐ Erosion or channelization inside the infiltration practice
- ☐ Erosion or channelization outside the infiltration practice
- ☐ Construction site erosion
- ☐ Other
- ☐ Unknown

11. Are there indications of any of the following on the banks of the bioretention practice:

- ☐ Erosion or channelization
- ☐ Soil slides or bulges
- ☐ Excessive animal burrows
- ☐ Seeps and wet spots
- ☐ Poorly vegetated areas
- ☐ Trees on constructed slopes
- ☐ None of the above, the banks are in good condition
- ☐ Other, specify _____

12. Are any overflow or bypass structures clogged? ☐ No ☐ Partially ☐ Completely ☐ NA

12. a) If yes, specify the clogging material (i.e. debris, sediment, vegetation, etc.) in the box below.

	Outlet #:	Outlet #:	Outlet #:
Material			
Partial or Comp.			

12. b) Are any of the overflow or bypass structures misaligned from the original design or otherwise in need of maintenance? (if yes, write in reason: frost heave, vandalism, unknown)

	Outlet #:	Outlet #:	Outlet #:
Reason			

13. Inspector's Recommendations. When is maintenance needed?

- ☐ Before the next rainfall
- ☐ Before the next rainy season
- ☐ Within a year or two
- ☐ No sign that any is required

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14. Summarize the results of this inspection and write any other observations in the box below.

Summary and other observations