Planting Verification Policy Update

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Outline

- Permit/Ordinance Requirement
- Previous Process
- Planting Verification Working Group
- Policy Update
- Example Planting Verification Layout and Reporting Form
- Guidance Documents

Waukesha County Stormwater Permit Requirements

- **Sec. 14-335. Stormwater Permit Requirements.**

  (d) Construction and Planting Verification.

  1. As-built Survey.

  2. Verification.

  3. Design Summaries

For sites that include WI native vegetation, a qualified professional is required to oversee and verify the successful establishment of the vegetation

Previous Planting Verification Process

- Required for all proposed infiltration practices included in Stormwater Management Plans submitted to Waukesha County
- Line Intercept Method
  - Sometimes difficult to implement
  - Many plants are missed if not directly in contact with the line
  - Yields a significant number of “false negatives”
  - Prevented some basins from passing
- As a result many projects requiring a planting verification have not be closed, creating compliance issues with the County

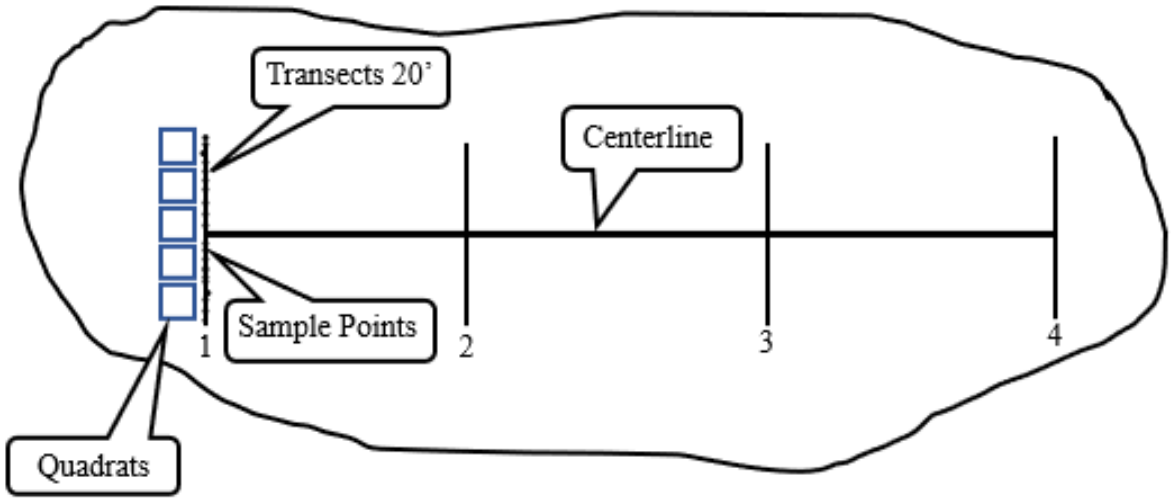
Planting Verification Working Group 2022

- Issues and limitations of the line intercept method
- Discuss alternate methods to assist in full establishment of infiltration practices and closures of permits
- Quadrat method introduced
  - Commonly used in other survey protocols such as wetland delineations
  - What is considered a “pass”?
- Timeline for successful planting verifications
  - 2-3 years is considered “ideal”. Basins not passing in this time frame will likely have issues with invasive species and improperly prepared seed beds. Major corrective actions are likely needed ($)

Policy Update

- Quadrat method was added as an acceptable survey method for collecting Planting Verification results
- At least one transect survey must be performed per 5,000 square feet of designed warm season or wetland planting area (8/acre).
  - Quadrat Method: Replace transect tape with five 1-meter square quadrat samples. The verifier must record a minimum of 3 native plants within each quadrat to utilize the quadrat as a “pass” in the percent cover calculation. Detections above and beyond 3 do not need to be recorded.
- Standards of minimum of 70% vegetative cover and minimum of 4 species still apply
  - Quadrat Method: Divide number of quadrats containing 3 native plants or more by total number of quadrats.

Example Planting Verification Layout and Reporting Form



Infiltration Basin

Quadrat Transect Reporting Form

Project Name: Kettle Ridge Prairie Woods Subdivision

Date of Plant Inventory/Survey: August 12, 2013

Name of Person Conducting Survey: A. Botanist

Company: Prairie Consultants

Phone #: xxx-xxx-xxxx Email: xxxxx@xxx.com

Quadrat No.	Transect 1	Transect 2	Transect 3	Transect 4
1	Rudbeckia hirta Andropogon gerardii Elymus canadensis	Rudbeckia triloba Ratibida pinnata	Elymus virginicus Rudbeckia hirta Sorghastrum nutans	Monarda fistulosa Andropogon scoparius Elymus canadensis
2	Elymus canadensis Rudbeckia triloba Echinacea purpurea	Elymus canadensis Andropogon scoparius Rudbeckia triloba	Andropogon gerardii Andropogon scoparius	Tradescantia ohiensis Sorghastrum nutans Sorghastrum nutans
3	Monarda fistulosa Andropogon scoparius	Monarda fistulosa Elymus virginicus Sorghastrum nutans	Elymus virginicus Sorghastrum nutans Echinacea purpurea	Andropogon gerardii Elymus virginicus
4	Rudbeckia hirta Andropogon gerardii Andropogon gerardii Sorghastrum nutans	Tradescantia ohiensis Ratibida pinnata Andropogon scoparius	Sorghastrum nutans Ratibida pinnata	Monarda fistulosa Rudbeckia hirta Echinacea purpurea
5	Elymus canadensis Rudbeckia hirta Andropogon gerardii Monarda fistulosa	Rudbeckia hirta Andropogon gerardii Andropogon scoparius	Elymus virginicus Andropogon scoparius Ratibida pinnata	Ratibida pinnata Andropogon scoparius Sorghastrum nutans
Total	**16**	**14**	**13**	**14**

Total quadrats = 20 No. Of detections from the planting list found = 57

Attach a copy of the original basin planting list / plan, with the observed plant species highlighted.

Coverage % = (quadrats w/ at least 3 natives plant detections)/(total quadrats) = 15/ 20 = 75 % coverage. Number of species observed is 11.

Other notes:

Planting Verification Guidance Documents

- Planting Verification Letter
- Guidelines for Planting Verification
  - Line Intercept Transect Reporting Form
  - Quadrat Transect Method Reporting Form
- Example Plan for Using Native Plantings for Storm Water Infiltration

All documents can be found on our webpage at

https://www.waukeshacounty.gov/landandparks/land-and-water-conservation/stormwater/

Questions?

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