



Meeting Inspection Requirements of the New ERP Stormwater Rules

FOR THE

#GATORGOOD

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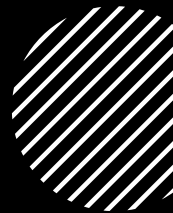
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Overview

- ERP Updates: Qualified Stormwater Inspector Requirements
- Stormwater Qualified Inspector Training Program Overview
- Training Program Logistics



ERP Stormwater Rule Updates



Provide minimum stormwater treatment performance criteria.



Increase treatment and removal of nutrients (TP and TN)



Ensures consistent application of net improvement performance standards.



Establish updated stormwater best management practices that more accurately reflect latest scientific information on their performance.



Strengthens requirements for operation and maintenance of stormwater systems.

Inspections and Reporting

(1) The operation and maintenance entity shall provide for the inspection of the permitted project after conversion of the permit to the operation and maintenance phase as provided in section 12.5 ~~12.4~~ of Volume I. **Inspections are to be conducted and reported as described in section 12.5 of Volume I. ~~Minimum inspection frequencies will be established in Volume II for each District as applicable, but actual inspection~~** Inspection and reporting frequencies for the specific project are subject to review by the Agency. The Agency may require additional and more frequent inspections for projects that are subject to operation and maintenance.

(2) Within 30 days of the completion of a stormwater project, the Agency will require the submission of an inspection report. **Inspections using checklists (or similar format) will be required periodically for projects.** If any failure or deviation is identified, the Agency will require the submission of a "Failure or Deviation Report" (eff. date) (October 1, 2013) (insert link) (<http://www.flrules.org/Gateway/reference.asp?No=Ref-02502>), incorporated by reference herein, describing the remedial actions taken to resolve the failure or deviation.

(3) **The inspection report shall include the information required in Form 62-330.311(3), "Inspection Checklists," (eff. date) (insert link), as provided in section 12.5 of Volume I, on that form or in another format which includes the required information.**

Table 12-1: Inspection Frequencies for common BMPs

TYPE OF SYSTEM	INSPECTION FREQUENCY
Dry Retention basins	Once every 3 years
Exfiltration trenches	Once every 2 Years
Underground retention	Once every Year
Sand or Media Filters	Once every Year
Underdrain System	Once every 2 Years
Underground vault/chambers	Once every Year
Pump Systems	Twice every Year
Swales (treatment)	Once every 3 years
Wet Detention systems	Once every 3 years
Wet Detention systems with littoral zones	Once every 2 years
Vegetated Natural Buffers	Once every 5 years
Manufactured Devices	As manufacturer recommends in specifications, minimum once every year
Dam Systems	Once every Year
All other	Once every Year

Stormwater Inspections

ERP Applicant Handbook Vol. 1 – 12.5(c)

For stormwater management system inspections conducted on or after **June 28, 2025** a **qualified inspector** for conducting, certifying, and submitting inspection reports must, at a minimum, either:

- (i) be a registered professional, (e.g. PE)
- (ii) include documentation that the inspector conducted the inspection under the supervision of a registered professional (e.g. PE), or
- (iii) have completed training, and be able to provide documentation of completion, no more than five years prior to the date of the inspection that covers the following topics:

Requirements for Stormwater Qualified Inspector Training

A.H. Volume I 12.5.(c)

1. The ability to read construction drawings, plans, specifications and modeling of recovery timeframes;
2. Principles of traditional BMPs, as listed in Form 62-330.311(3), [Inspection checklists] for stormwater treatment, including functions that convey and remove pollutants from stormwater;
3. For traditional BMPs, the potential causes of failure or malfunction, replacement needs, and reduction in treatment efficiency;
4. Understanding of the purpose, design, and function of manufactured devices or non-traditional BMPs and the ability to ensure the device meets manufacturers' specifications and maintenance requirements; and
5. Performance of inspections, including field inspection experience and the completion of required reports and documentation, consistent with the requirements of section 12 of this Volume, any relevant requirements of the applicable Volume II, and all other applicable rules and regulations.

Inspection Checklists: 62.330.311(3)

Stormwater Facility Inspection Checklist

Instructions

Prior to the inspection, the Inspector should review the permit for the facility and the design or as-built drawing for the facility.

This inspection checklist is required for the documentation of the annual inspection of all permitted stormwater systems. Complete all parts of the general data section for the project site. Attach any additional required documentation, if necessary. In the "All Technologies" category, mark all items as "satisfactory" or "unsatisfactory." For all other categories, either select "N/A" and minimize the category or mark all inspection items as "satisfactory" or "unsatisfactory." If the system described does not contain a component that is listed for inspection mark that item as "N/A"

For any item marked unsatisfactory, provide a comment below the BMP technology describing maintenance action needed to bring the system back into compliance. Within 30 days of any failure of a stormwater management system or if any components of the constructed system are found to be not in substantial conformance with the permitted system, a report shall be submitted by the permittee or their authorized representative to the Agency using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," ((effective date)), as per 62-330.331(2) F.A.C., describing the remedial actions taken to resolve the failure or deviation.

Inspection reports will be submitted by the permittee or their authorized representative to the applicable permitting agency. Each inspection report must be signed by a certified inspector or a registered professional to certify its authenticity.

Inspection Checklist

General Data

Inspection Date _____ Project Name _____
 Location _____ Permit Number _____

Time since last storm event <24 hours 24-48 hours 48-72 hours >72 hours
 Permit Holder _____ Permit Effective Date _____
 Inspector Name _____
 Inspector Contact Information _____

Multiple BMP types in the system No Yes List All: _____

Permit drawings have been reviewed No Yes
 Additional Photos Attached N/A
 Compliance Activity Record Attached N/A

All (or other unlisted) Technologies

Items for inspection	Satisfactory	Unsatisfactory
General		
BMPs and treatment facilities are in good repair and operational	<input type="checkbox"/>	<input type="checkbox"/>
BMPs and treatment facilities are free from debris buildup that may impair function	<input type="checkbox"/>	<input type="checkbox"/>
Berms, embankments, curbing, or other methods used to impound, divert, and direct discharges are adequate and in good condition	<input type="checkbox"/>	<input type="checkbox"/>
The discharge (if any) is free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam, or any other signs of contamination	<input type="checkbox"/>	<input type="checkbox"/>
Vegetation		
Mowing done when needed	<input type="checkbox"/>	<input type="checkbox"/>
Grass clippings removed	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of erosion	<input type="checkbox"/>	<input type="checkbox"/>
Inlets		
Good condition, no need for repair	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of erosion*	<input type="checkbox"/>	<input type="checkbox"/>
Outlets/overflow spillway		
Good condition, no need for repair	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of erosion*	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

Traditional BMPS

Swales N/A

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Swales and contributing areas clear of debris*	<input type="checkbox"/>	<input type="checkbox"/>
Vegetation		
No evidence of erosion*	<input type="checkbox"/>	<input type="checkbox"/>
No weeds or invasive plants present	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of nutrient deficiency	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of disease	<input type="checkbox"/>	<input type="checkbox"/>
Grasses/sod are not in need of replanting/resodding	<input type="checkbox"/>	<input type="checkbox"/>
No signs of drought stress	<input type="checkbox"/>	<input type="checkbox"/>
No signs of plant overgrowth	<input type="checkbox"/>	<input type="checkbox"/>
Recovery		
Swale recovers between storms within permitted timeframe	<input type="checkbox"/>	<input type="checkbox"/>
Swale clean of sediments		
Good condition, no need for repair	<input type="checkbox"/>	<input type="checkbox"/>
No areas of sediment buildup*	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of erosion*	<input type="checkbox"/>	<input type="checkbox"/>
Inlet Structure / Pretreatment:		
Good condition, no need for repair	<input type="checkbox"/>	<input type="checkbox"/>
No trash/debris/sediment in or around inlet structures*	<input type="checkbox"/>	<input type="checkbox"/>
No evidence that runoff is short-circuiting the inlet	<input type="checkbox"/>	<input type="checkbox"/>

Emergency Overflow / Outlet Structure	Satisfactory	Unsatisfactory
Good condition, no need for repair	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of accumulation of trash, debris, or sediment in or around outlet structure(s)*	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of erosion, or flooding around structures*	<input type="checkbox"/>	<input type="checkbox"/>
Swale Blocks N/A <input type="checkbox"/>		
If swale blocks or other structures are present, there is no evidence of erosion at downstream toe of structure*	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

Wet Pond N/A

Items for inspection	Satisfactory	Unsatisfactory
Vegetation		
No signs of damage from animal activity	<input type="checkbox"/>	<input type="checkbox"/>
No signs of stress or disease	<input type="checkbox"/>	<input type="checkbox"/>
No emergent invasive plant life	<input type="checkbox"/>	<input type="checkbox"/>
No areas need replanting	<input type="checkbox"/>	<input type="checkbox"/>
Dead plant material is removed, if necessary	<input type="checkbox"/>	<input type="checkbox"/>
Upland banks are maintained	<input type="checkbox"/>	<input type="checkbox"/>
Structural		
Embankment condition	<input type="checkbox"/>	<input type="checkbox"/>
Side slopes are stable	<input type="checkbox"/>	<input type="checkbox"/>
Fences/access repairs		
Fence(s) condition	<input type="checkbox"/>	<input type="checkbox"/>
Lock(s) and gate(s) function are adequate	<input type="checkbox"/>	<input type="checkbox"/>
Inlets		
Inlet(s) condition	<input type="checkbox"/>	<input type="checkbox"/>
Runoff is not short-circuiting the inlet	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of trash/debris/sediment in or around inlet *	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of erosion, gullies, rills, or flooding around inlet *	<input type="checkbox"/>	<input type="checkbox"/>
Outlets/overflow spillway/ drain gate		
Outlet(s) condition	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of trash/debris/sediment in or around outlet *	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of erosion, gullies, rills, or flooding around outlet *	<input type="checkbox"/>	<input type="checkbox"/>
Weir System: drawdown and overflow weir		
Weir system condition	<input type="checkbox"/>	<input type="checkbox"/>
No evidence of clogging *	<input type="checkbox"/>	<input type="checkbox"/>
Clear of debris*	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

Dry Pond N/A

Type of dry pond _____

Certification Form

OPERATION AND MAINTENANCE INSPECTION CERTIFICATION

Instructions: Submit this form to the Agency within 30 days of completion of the inspection, or after any failure of a stormwater management system or deviation from the permit. This form will be used to document inspections required under Section 12.5 of Applicant's Handbook Volume I.

Permit No.: _____ Application No.: _____ Date Issued: _____

Identification or Name of Stormwater Management System: _____

Phase of Stormwater Management System (if applicable): _____

Inspection Date: _____

Included Documentation: (check all that are attached)

- Form 62-330.311(X) "Inspection Checklist" (Required for permitted inspection frequency)
- Updated O&M cost estimate
- Updated O&M Plan
- Monitoring Reports

Inspection results: (check all that apply)

- The undersigned hereby certifies that the works or activities are functioning in substantial conformance with the permit. This certification is based upon on-site observation of the system conducted by me or my designee under my direct supervision and my review of as-built plans.
- The following maintenance was conducted since the last inspection (attach additional pages if needed):

- The undersigned hereby certifies that I or my designee under my direct supervision has inspected this surface water management system and the system does not appear to be functioning in substantial conformance with the permit. I am aware that maintenance or alteration is required to bring the system into substantial compliance with the terms and conditions of the permit. As appropriate, I have informed the owner of the following:
 - a) The system does not appear to be functioning properly;
 - b) That maintenance or repair is required to bring the system into compliance; and
 - c) If maintenance or repair measures are not adequate to bring the system into compliance, the system may have to be replaced or an alternative design constructed subsequent to approval by the agency below.

The following components of the system do not appear to be functioning properly (attach additional pages if needed):

Any components of the constructed system that are not in substantial conformance with the permitted system shall require a written request to modify the permit in accordance with the provisions of Rule 62-330.315, F.A.C. If such modification request is not approved by the agency below, the components of the system that are not in conformance with the permit are subject to enforcement action under Sections 373.113, 373.125, 373.136, and 373.430, F.S.

OPERATION AND MAINTENANCE INSPECTION CERTIFICATION

Name of Inspector: _____ Florida Registration Number
Or Qualified Inspector Number: _____

Entity providing Inspector Training: _____

Date of completion of Inspector Training: _____

Inspector's Company Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____ Email: _____

Signature of Inspector _____ Date _____

Report Reviewed by Permittee:

Name of Permittee: _____

Signature of Permittee _____ Date _____

Title (if any) _____

Online (Video) Modules

1. Fundamentals of GSI
2. Types of GSI
3. Site Inspection
4. Performance Indicators
5. Flow Maintenance
6. Plant Maintenance
7. Safety

Field Module



Fundamentals of GSI

Recognize the role of GSI in stormwater management and the importance of proper maintenance practices.

GSI MAINTENANCE

Stormwater Qualified Inspector Training Requirements for Course

A.H. Volume I 12.5.(c)

1. The ability to read construction drawings, plans, specifications and modeling of recovery timeframes; - ADD MODULE UNDERSTANDING ENGINEERING PLANS AND MODELLING
2. Principles of traditional BMPs, as listed in Form 62-330.311(3), [Inspection checklists] for stormwater treatment, including functions that convey and remove pollutants from stormwater; - MOSTLY COVERED BY GSI MAINTENANCE TRAINING
3. For traditional BMPs, the potential causes of failure or malfunction, replacement needs, and reduction in treatment efficiency; - MOSTLY COVERED BY GSI MAINTENANCE TRAINING
4. Understanding of the purpose, design, and function of *manufactured devices* or *non-traditional BMPs* and the ability to ensure the device meets manufacturers' specifications and maintenance requirements; and - ADD MODULE ON MANUFACTURED AND NON-TRADITIONAL BMPS
5. Performance of inspections, including field inspection experience and the completion of **required reports and documentation**, consistent with the requirements of section 12 of this Volume, any relevant requirements of the applicable Volume II, and all other applicable rules and regulations. - ADD MODULE ON FDEP DOCUMENTATION & REPORTING



Stormwater Qualified Inspector Training Program

Training Scope

- Intended Audience
 - Primarily landscapers
 - add-on course to GI-BMP
 - Technicians, Engineers
 - Designers, Landscape Architects
- Inspection & Maintenance
 - Documentation of performance
 - Minor maintenance, replanting, debris removal
 - Major maintenance: inform supervisor, request outside assistance.
- Pre- & Post Test Evaluation

Primary Functions of GSI

- Flow Control
 - Receive stormwater
 - Eliminate or discharge at non erosive flow rate
 - Recover volume between storm events
 - Safely bypass high flows
- Water Quality
 - Reduce pollutants between inflow and outflow
 - Sediments, nutrients, metals, bacteria
- Additional Functions
 - Aesthetics
 - Wildlife Habitat

Modules

1. Fundamentals of BMPs
2. Types of BMPs
3. Safety
4. Site Inspection
5. Reading Plans and Modeling Results
6. Performance Indicators
7. Flow Maintenance
8. Plant Maintenance
9. Inspection and Reporting



Module 1: Fundamentals of BMPs



- Define BMPs
 - Traditional
 - Manufactured & Non-Traditional
- What is the purpose of BMPs?
- Why are BMPs used?
- Importance of Maintenance
- Maintaining Function

Module 2: Types of BMPs

- Identify the orientation/siting in landscape
- Identify the elements of BMPs
 - Detention & Retention
 - On-line vs. Online
 - Inlets & Outlets
- Identify and describe the functions of
 - Flow Control Practices
 - Filtration Practices
 - GSI Practices
 - Manufactured Devices
 - Non-Traditional BMPs
- **Identify types of BMPs***



Module 3: Safety



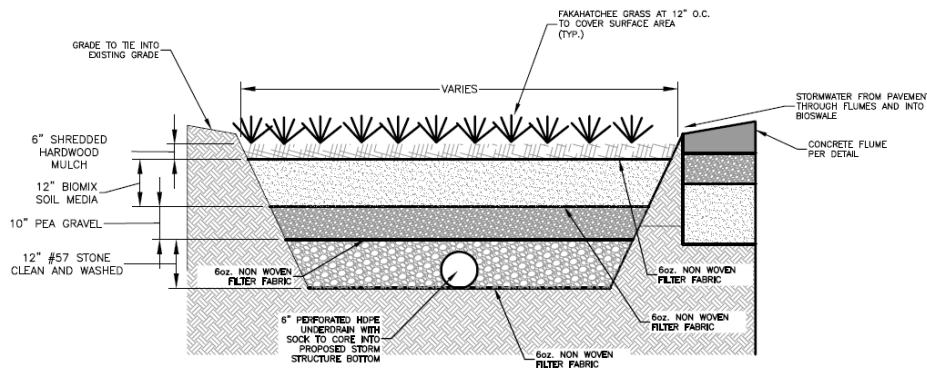
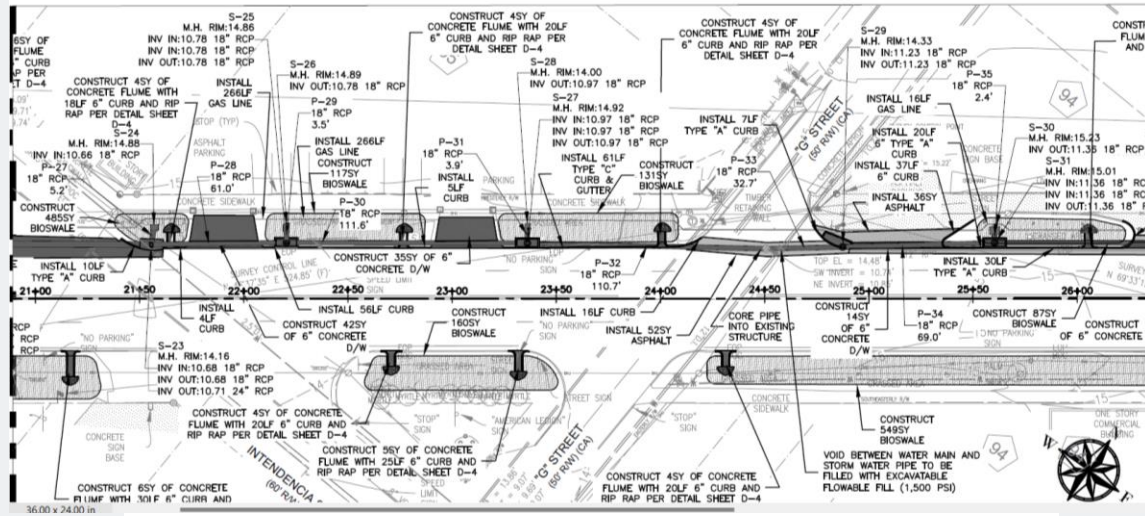
- Risks in the field
- Personal protective equipment
- Weather (heat, lightening)
- Poisonous plants
- Insect bites and disease
- Snake bites
- Wildlife
- First aid and emergency situations

Module 4: Site Inspection



- Initial Site Visit
- Inspection Materials
- Inspection Checklists
- Inspection Documentation & Submission
- **Building Inspection Toolkit**

Module 5: Reading Plans and Modeling Results



BIORETENTION CELL DETAIL

SCALE: N.T.S.

NOTE:

THE BIOMIX MEDIA SHOWN IN THE ABOVE DETAIL FOR THE BIORETENTION CELLS SHALL BE THE BOLD AND GOLD CTS PRODUCT OR APPROVED EQUIVALENT. THE MANUFACTURER'S SPECIFICATION FOR THE BOLD AND GOLD CTS PRODUCT IS INCLUDED IN THE SPECIFICATIONS. THE APPLICATION AND CONSTRUCTION OF THE BIORETENTION SWALES SHALL FOLLOW THESE SPECIFICATIONS/INSTRUCTIONS.

- Locating site plans
- Navigating site plans and details
- Understanding plan elements
- Identify BMP elements & structures on plans
- Locating modeling results
- Navigating modeling documents
- Interpreting modeling results

Module 6: Performance Indicators

- Read the site
- Water Levels (past and present)
- Sediment & erosion (flow and energy)
- Plants (long-term indicators)
- Identify site function characteristics (rack lines, standing water)



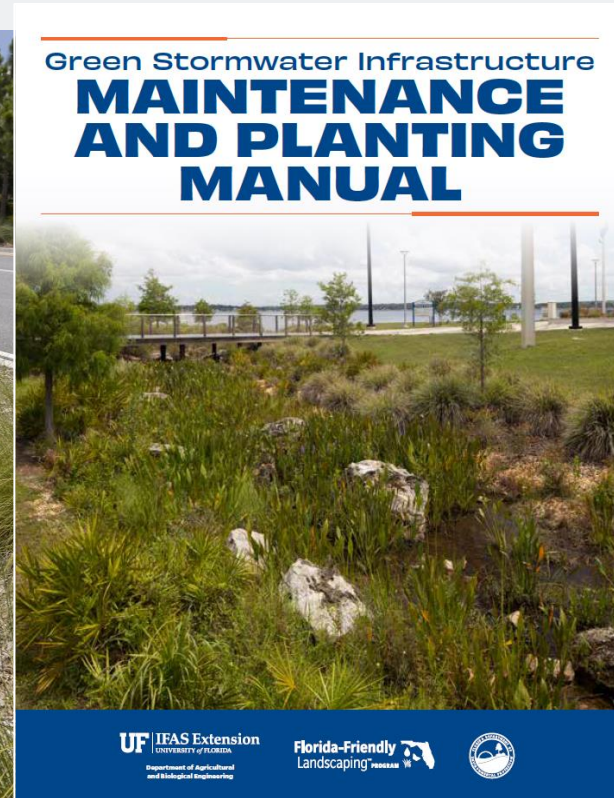
Module 7: Flow Maintenance



- Identify actions to maintain
 - Flow across watershed
 - Flow through BMP inlets
 - Flow through BMP outlets
 - Storage recovery of BMP
- Addressing erosion
- Addressing sedimentation
- Identify flow issues within various BMPs

Module 8: Plant Maintenance

- Identifying plant issues
- General plant maintenance for BMPs
- Resources for BMP plants:
 - Planting information
 - BMP plant lists
- Interpreting plant health and proper plant maintenance



Module 9: Inspection Documentation and Reporting

- Overview of reporting
- Forms and resources
- Regulatory background
- Inspection checklists
- Submitting reports
- Certification and renewal

**OPERATION AND MAINTENANCE INSPECTION
CERTIFICATION**

Instructions: Submit this form to the Agency within 30 days of completion of the inspection, or after any failure of a stormwater management system or deviation from the permit. This form will be used to document inspections required under Section 12.5 of Applicant's Handbook Volume 1.

Permit No.: _____ Application No.: _____ Date Issued: _____

Identification or Name of Stormwater Management System: _____

Phase of Stormwater Management System (if applicable): _____

Inspection Date: _____

Included Documentation: (check all that are attached)

- Form 62-330.311(X) "Inspection Checklist" (Required for permitted inspection frequency)
- Updated O&M cost estimate
- Updated O&M Plan
- Monitoring Reports

Inspection results: (check all that apply)

- The undersigned hereby certifies that the works or activities are functioning in substantial conformance with the permit. This certification is based upon on-site observation of the system conducted by me or my designee under my direct supervision and my review of as-built plans.
- The following maintenance was conducted since the last inspection (attach additional pages if needed):

- The undersigned hereby certifies that I or my designee under my direct supervision has inspected this surface water management system and the system does not appear to be functioning in substantial conformance with the permit. I am aware that maintenance or alteration is required to bring the system into substantial compliance with the terms and conditions of the permit. As appropriate, I have informed the owner of the following:
 - a) The system does not appear to be functioning properly;
 - b) That maintenance or repair is required to bring the system into compliance; and
 - c) If maintenance or repair measures are not adequate to bring the system into compliance, the system may have to be replaced or an alternative design constructed subsequent to approval by the agency below.

The following components of the system do not appear to be functioning properly (attach additional pages if needed):

Any components of the constructed system that are not in substantial conformance with the permitted system shall require a written request to modify the permit in accordance with the provisions of Rule 62-330.315, F.A.C. If such modification request is not approved by the agency below, the components of the system that are not in conformance with the permit are subject to enforcement action under Sections 373.119, 373.125, 373.136, and 373.430, F. S.

Form 62-330.311(1) – Operation and Maintenance Inspection Certification
Incorporated by reference in subsection 62-330.311(2), F.A.C. (June 28, 2024) Page 1 of 2

**OPERATION AND MAINTENANCE INSPECTION
CERTIFICATION**

Name of Inspector: _____ Florida Registration Number
Or Qualified Inspector Number: _____

Entity providing Inspector Training: _____

Date of completion of Inspector Training: _____

Inspector's Company Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____ Email: _____

Signature of Inspector _____ Date _____

Report Reviewed by Permittee:

Name of Permittee: _____

Signature of Permittee _____ Date _____

Title (if any) _____

Form 62-330.311(1) – Operation and Maintenance Inspection Certification
Incorporated by reference in subsection 62-330.311(2), F.A.C. (June 28, 2024) Page 2 of 2

Stormwater Qualified Inspector Training

- Offered online (April 2025)
- Cost: < \$150 (Go towards updating trainings and resources)
- ~8 hours of content (non-continuous)
- 9 training modules
- 10 interactions (10-15 mins each)
- Must pass test to be certified
 - 75% minimum
 - Retake once before needing to complete course again
- Recertify every 5 years
- Database of certified individuals (not companies)
- Certification number and information through searchable website

A blue-tinted photograph of a university campus. In the foreground, there are several palm trees and a paved walkway. In the background, a large, multi-story building with a central tower is visible. The overall scene is a typical university setting.

GSI Maintenance Training Program

GREEN STORMWATER INFRASTRUCTURE (GSI)

Managing stormwater runoff at a community level can require an engineered solution. Green stormwater infrastructure (GSI), also known as Low Impact Development (LID), is a cost-effective, resilient approach to managing wet weather impacts that provides many community benefits.

GSI includes the range of structural and non-structural, retention and detention measures that infiltrate, evaporate, detain, filter, or store stormwater runoff closer to the source. The goal of GSI is to mitigate the runoff produced from site development.

The Florida Department of Environmental Protection has an extensive [Green Infrastructure Website](#), including how to get started, technical guidance and funding opportunities.

GSI MAINTENANCE MATERIALS

- [GSI Maintenance & Planting Manual](#)
- [GSI Plant Guide](#)
- [Inspection Checklists](#)
 - [Cisterns - online - pdf](#)
 - [Greenroof - online - pdf](#)
 - [Stormwater Ponds - online - pdf](#)
 - [Pervious Pavement - online - pdf](#)
 - [Bioretention/Swales - online - pdf](#)
 - [Tree Boxes - online - pdf](#)
 - [Wetlands - online - pdf](#)

GSI MAINTENANCE MATERIALS

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 - [Bioretention/Swales - online - pdf](#)
 - [Tree Boxes - online - pdf](#)
 - [Wetlands - online - pdf](#)

MORE GSI RESOURCES

- [Florida DEP Green Stormwater Infrastructure website](#)
- [Green Infrastructure in Florida Video Series](#)
- [GSI Webinar Series](#)

Site ID/Name: _____ Location: _____ Inspector: _____ Date: _____

Bioretention

Note: 'Yes' typically indicates maintenance is needed

Date of last inspection: _____
 Approximate time since last rain: < 24 h 24-48 h >48 h
 Approximate size of last rain: < 0.5 in. 0.5-1 in. >1 in.

General:

- 1. Is access to the site adequately maintained? Yes/No
- 2. Are grass clippings present in the drainage area or within the system [inlet structure, pretreatment (filter strip and grass channel), main treatment, or outlet/overflow structure]? (Note: grass clippings should be removed). Yes/No

Main Treatment Area:

- 10. Are there any signs of prolonged ponding? Yes/No
- 11. Is mulch depth at least 2 in.? Yes/No
- 12. Are there any signs of damage from wildlife? Yes/No
- 13. Are there any areas showing erosion? Yes/No
- 14. Are there any areas of sediment buildup? Yes/No
- 15. Is water in the bioretention area? Yes/No
 If yes, approx. depth: _____

Drainage Area (area contributing runoff to bioretention):

- 3. Are exposed or actively eroding areas present? Sedimentation? Yes/No
- 4. Is debris obstructing flow paths at any point (overland or within pipes)? Yes/No

Plants:

- 16. Are weeds or invasive plant species present? Yes/No
- 17. Is any dead plant material present? Yes/No
- 18. Do plants show signs of stress or disease? Yes/No
- 19. Do any areas need replanting? Yes/No
- 20. Are any plants overgrown? Yes/No

Inlet Structure / Pretreatment:

- 5. Is there any damage to the inlet structures? Yes/No
- 6. Is runoff short circuiting the inlet(s)? Yes/No
- 7. Is there trash/debris/sediment in or around inlet(s)? Yes/No
- 8. Is there evidence of erosion (gullies or rills) or flooding around inlet(s)? Yes/No
- 9. Is plant maintenance needed around inlet(s)? Yes/No

Underdrain (if installed):

- 21. Are cleanout damaged or missing? Yes/No
- 22. Indications of underdrain clogging or blockage? Yes/No

Emergency Overflow / Outlet Structure (if appropriate):

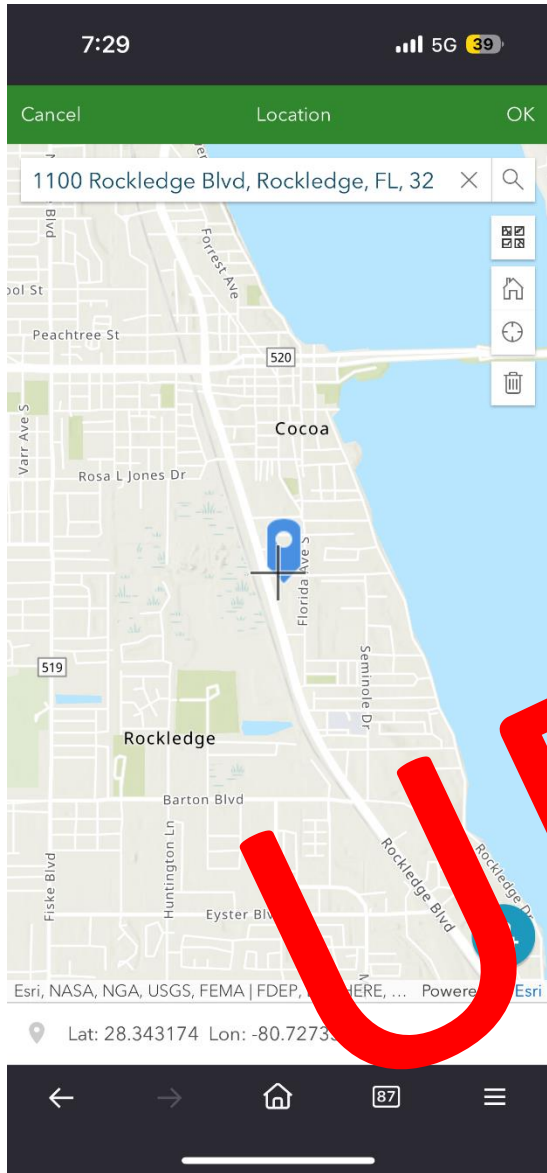
- 23. Is there any damage to the structure? Yes/No
- 24. Is there accumulation of trash, debris, or sediment in or around outlet structure(s)? Yes/No
- 25. Is there evidence of erosion or flooding around the structure? Yes/No

UPDATING

Inspection	Good	Marginal	Poor
26. Estimate the sediment accumulation area of bioretention surface area.	<25%	25-50%	>50%
27. Rate the presence of debris (trash, leaves, twigs, grass clippings) in the bioretention surface area.	<25%	25-50%	>50%
28. Estimate the presence of undesirable vegetation.	<25%	25-50%	>50%
29. Rate the plant health per landscaping plan and site objectives. (Dying/stressed)	>50%	25-50%	<25%
30. Rate the condition of plant density per landscaping plan and site objectives. (Vegetation coverage)	>50%	25-50%	<25%

Examples of Potential Issues





7:29 5G 39

Date of inspection

Date of last inspection

Approximate time since last rain:

< 24 h

24-48 h

> 48 h

Approximate size of last rain:

< 0.5 in.

0.5-1 in.

>1 in.

General:

Note: Most indicators indicate a maintenance need and action

7:29 5G 39

General:

Note: Most indicators indicate a maintenance need and action

1. Is access to the site adequately maintained?

Yes

No

2. Are grass clippings present in the drainage area or within the system [inlet structure, pretreatment (filter strip and grass channel), main treatment, or outlet/overflow structure]?

(Note: grass clippings should be removed)

Yes

No

Drainage Area:

(pertains to the surrounding area that will contribute runoff to the practice, including other swales)

3. Are exposed or actively eroding areas present? Sedimentation?

...

BMP Plant List

- 118 Plants currently
- Compatible GSI
- Grouped by Plant Type
 - Annuals
 - Aquatics
 - Groundcover
 - Ornamental Grass
 - Perennial
 - Sedges & Rushes
 - Shrubs
 - Trees: Large, Medium, & Small
 - Vines
- Living document
 - Plant lists, expert input, and experience
 - Fine tune information
 - Fill open data
 - Plant specific maintenance

Groundcover

June 28, 2023



Scientific Name	Sesuvium portulacastrum	
Common Name	Sea Purslane	
Native	Native	
Planting Zone	Bank Slope	
Plant spacing	3-5 ft. apart	
Hardiness Zone	9-11	
Growth Form	Groundcover	
GSI Type	Bioretention, Stormwater Pond, Tree Box, Infiltration Basin, Swale, Green Roof, Wetlands	
Light Requirement	Full Sun/Part Shade	Native Habitat
Evergreen/Deciduous	Evergreen	Growth Rate
Height	0.5-1	Spread
Flood Tolerance	Occasional	Drought Tolerance
Soil pH	Slightly Acid to Alkaline (6.0-8.0)	Salt Tolerance
Soil Moisture		Soil Texture
Color	Pink, Purple (Flower)	Longevity
Bank Stabilization/ Erosion Control	Excellent groundcover and candidate for erosion control.	
Wildlife Benefit	Provides habitat for invertebrates used as food for waterbirds.	
Notes	Nutrient Uptake; roots known to help filter and clear water of toxins and other unwanted materials.	
Planting Guidelines		
Maintenance	Virtually no irrigation or fertilizer is needed once the plant is established in the landscape. In many ways it defines a low maintenance plant.	

Updates & Changes in Progress

- Develop interactions to reinforce and evaluate knowledge to cover most common BMP types and issues.
- Add/Appended GSI Modules :
 - Engineering Plans and Modelling
 - Manufactured and Non-traditional BMPs
 - FDEP Documentation & Submission
 - Revising GSI to BMP content
- Update available checklists to include those in Table 12-1 and include information from DEP Inspection Checklists and O&M Inspection Certification form

Timeline

2024 Nov/Dec (Now)

Complete modules, update checklists, and develop interactions

2025 Jan/Feb

Review by FDEP & FSA

2025 Feb/Mar

Incorporate edits

2025 Apr

Post course online (likely via Canvas)

Questions?

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