

Bureau of Development Services Lunch and Learn Presentation

Draft Erosion and Sediment Control Manual

Bureaus of Development Services and Environmental Services

October 11, 2021
noon – 1 p.m.



Agenda

Background

- Why and What and When?
- How to comment

Overview of the Manual

- Where the Manual applies
- How it is organized

New administrative rule for enforcement of projects reviewed and inspected by BDS

Highlights

- Simple Sites
- Permanent Stabilization
- Ongoing Inspections and Maintenance

Q& A



Background



Why?

- Compliance with EPA Clean Water Act and MS4 permit
- Regular Maintenance

What?

- Amendments to City Code, Title 10, Erosion and Sediment Control Regulations
- Updated Erosion and Sediment Control Manual
- New Administrative Rule on Enforcement for BDS reviewed and inspected projects

When?

- 1st of 2 public review drafts
- 2nd public review draft of Manual and Enforcement Rule in January 2022, including public hearings
- Title 10 amendments to City Council in late March 2022
- Effective June/July 2022

How to Comment

[Comment Portal](#) open through October 31, 2021.



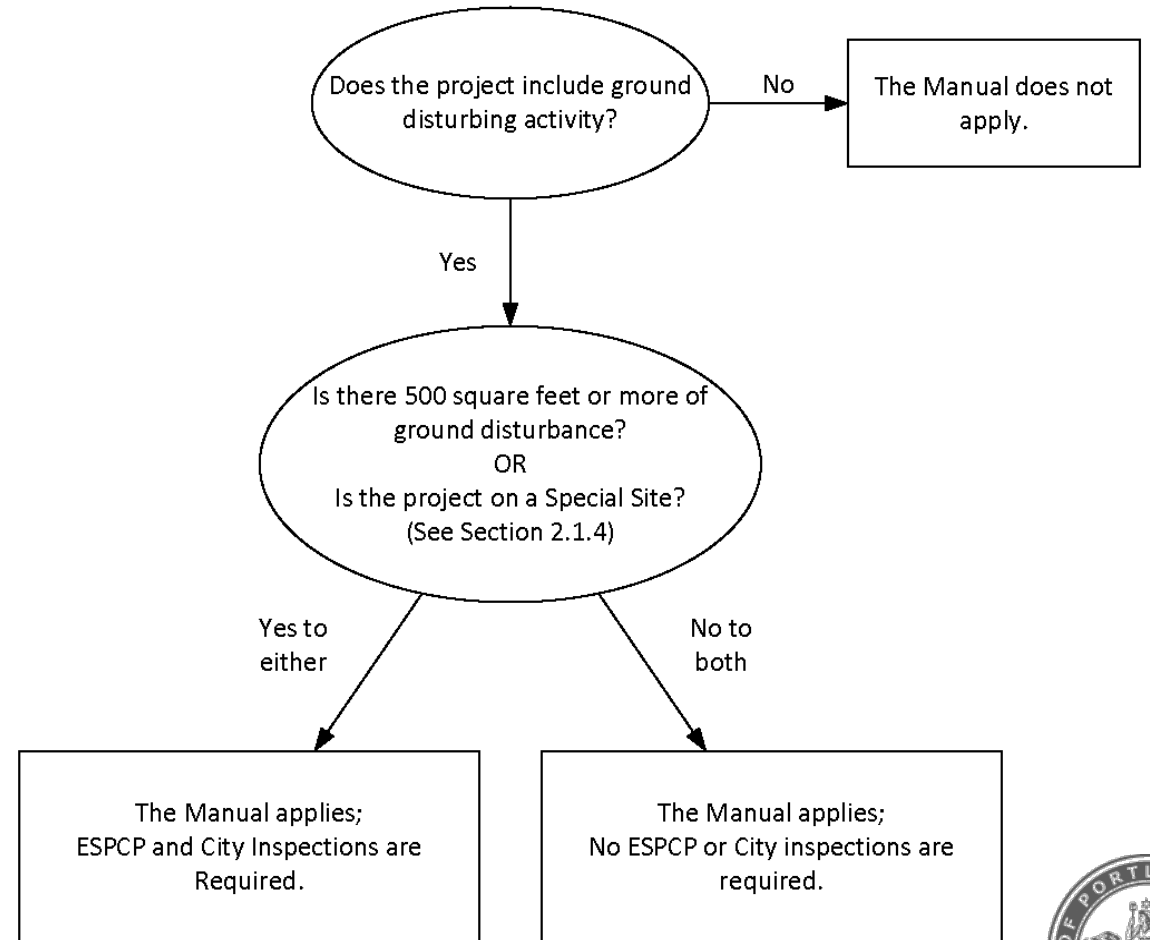
Chapter 1: Introduction

Background

- Compliance with EPA Clean Water Act, NPDES MS4 Permit

Where the Manual Applies

- All ground disturbing activity
- Permit and inspections required for disturbance over 500 square feet OR Special Sites
- Applies to private and public projects



Chapter 1: Introduction

Minimum Requirements

- **Purpose (No Change)**

1. Visible and measurable sediment or pollutant exiting the site, entering the public right-of-way, or depositing into any water body or storm sewer and drainage system is prohibited.
2. Depositing or washing soil into a water body or the storm sewer and drainage system is prohibited.
3. Ground-disturbing activities requiring a permit must provide adequate public notification of the City's Erosion Control Complaint Hotline.

- **Performance standards**

NEW Clarification: All exposed soil must be covered by permanent stabilization BMPs allowed by this Manual, structures, or paving, prior to project completion.

Chapter 2: Project Requirements and Processes

Plan Requirements

- Simple Sites: written erosion and sediment control plan allowed
- Other Sites: graphical erosion and sediment control plan required

Inspections

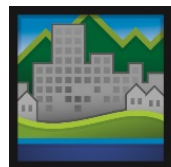
- City inspections
- On-site Inspections
- Log requirement

Maintenance and Monitoring

Continued maintenance and adjustment of BMPs

Alternative Methods and Materials

Enforcement



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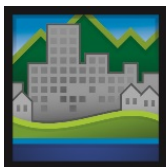
Chapter 3: Best Management Practices (BMPs)

6 steps (Figure 3-1):

1. Select BMPs that apply to all sites
2. Select BMPs that apply based on special site conditions
3. Ensure BMPs to do not conflict with required tree protection fencing
4. Select Pollution Control BMPs (Chapter 4)
5. Monitor, maintain, and adjust BMPs
6. Project closeout

BMP Categories (Table 3-1):

- General Controls
- Site Entry
- Erosion Prevention
- Sediment Controls
- Site Stabilization



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Manual Overview-Chapter 3: Best Management Practices (BMPs)

**Table 3-1:
BMP
Applicability**

Table 3-1. BMP Applicability Guidelines (Minimum and Enhanced BMP Selection)

Step 1. Apply MINIMUM BMPs to all ground disturbing projects.		Step 2. Apply ENHANCED BMPs based on Special Site conditions and characteristics. Additional BMPs (not reflected in this table) may be required based on individual project needs.			
		Ground Disturbance >10,000 SF	Projects in Environmental, River, or Greenway overlay zones, or within 50 ft. of a water body or wetland	Slopes >10%	Culverts/ In-Water
General Controls <i>(Apply all)</i>	<ul style="list-style-type: none"> Reporting and Monitoring (Sect. 2.8) Trash Debris Containment, Removal, and Disposal (Sect. 4). Erosion Control Signage (Sect. 2.4) 	Project Scheduling and Sequencing (Sect. 2.3.4 and Sect. 2.3.5)			Turbidity Monitoring (Sect. 2.8.3)
Site Entry Controls	<ul style="list-style-type: none"> BMP 3.12: Stabilized Construction Access 	BMP 3.13: Wheel Wash Structures and Equipment			
Erosion Prevention <i>(Apply as required)</i>	<ul style="list-style-type: none"> BMP 3.1: Preserve Natural Vegetation BMP 3.4: Temporary Vegetative Cover BMP 3.5: Mulch BMP 3.6: Rolled Erosion Control Products BMP 3.7: Plastic Sheeting Other relevant BMPs BMP 3.11. Dust Control 	BMP 3.4: Temporary Vegetative Cover	BMP 3.18: Vegetative Buffers	<ul style="list-style-type: none"> BMP 3.5: Mulch (with tackifier) BMP 3.6: Rolled Erosion Control Products BMP 3.10: Hydroseeding Fiber Rolls and Wattles 	
Sediment Controls <i>(Apply as required)</i>	<ul style="list-style-type: none"> BMP 3.15: Temporary Sediment Control (Silt) Fence BMP 3.16: Filter Bags and Socks BMP 3.17: Fiber Rolls and Wattles BMP 3.19: Storm Drain Inlet Protection Other relevant BMPs 				BMP 3.29: Turbidity Curtains
Site Stabilization	<p>During construction, apply BMPs as required to ensure temporary site stabilization.</p> <ul style="list-style-type: none"> BMP 3.3: Surface Roughening BMP 3.4: Temporary Vegetative Cover BMP 3.5: Mulch (for specific applications) All other relevant BMPs <p>Following construction, apply BMPs as required for permanent stabilization (Sect. 2.5.1):</p> <ul style="list-style-type: none"> BMP 3.5: Mulch (for specific applications) BMP 3.27: Permanent Vegetative Stabilization BMP 3.28: Non-Vegetative Permanent Stabilization 	<ul style="list-style-type: none"> BMP 3.2: Soil Management BMP 3.3: Slope Roughening BMP 3.4: Temporary Vegetative Cover All other relevant BMPs 	BMP 3.2: Soil Management	BMP 3.2: Soil Management	

Chapter 3: Best Management Practices (BMPs)

3.1 Preserve Natural Vegetation

3.2 Soil Management

3.3 Surface Roughening

3.4 Temporary Vegetative Cover

3.5 Mulch

3.6 Rolled Erosion Control Products

3.7 Plastic Sheeting

3.8 Armoring

3.9 Biotechnical and Soil Bioengineering

3.10 Hydroseeding

3.11 Dust Control

3.12 Stabilized Construction Access

3.13 Wheel Wash Structures and Equipment

3.14 Sidewalk Subgrade Barriers

3.15 Temporary Sediment Control (Silt) Fence

3.16 Filtration Bags and Socks

3.17 Fiber Rolls and Wattles

3.18 Vegetated Buffers

3.19 Storm Drain Inlet Protection

3.20 Filtration Berms

3.21 Diversion Dikes and Swales

3.22 Check Dams

3.23 Pipe Slope Drains

3.24 Stormwater Runoff Barriers

3.25 Sediment Traps and Ponds

3.26 Dewatering

3.27 Permanent Vegetative Stabilization

3.28 Non-vegetative Permanent Stabilization

3.29 Turbidity Curtain

Instream Control Practices

Chapter 4: Pollution Control BMPs

Construction Site Pollutants

Equipment Operations, Concrete Work, Framing and Roofing, Painting, others

Trash and Debris Containment and Disposal

Hazardous Waste



Appendices

- **Appendix A Standard Details**
Referenced in BMPs in Chapter 3
- **Appendix B Recommended Standard Notes**
- **Appendix C Universal Soil Loss Equations**
- **Appendix D Checklists and Logs**
 - Plan Preparation Checklist, Checklist for City Inspection Preparation, Templates for Inspection Report and Logs
 - Small projects that do not require a permit
- **Appendix E Simple Site Plan**
- **Appendix F BMP Project Examples**
Examples for visual reference of typical projects; Accessory structures, new single family, commercial, small disturbance on sloping sites.
- **Appendix G Guidance for Projects not Requiring a Permit**

BDS Enforcement Administrative Rule

- Escalating
- Reflects nature of continuing monitoring and maintenance needs throughout construction process
- Sets penalties relative to nature and recurrence of violations
- Administrative review



Highlights-Simple Sites

Definition of Simple Sites (No change)

- Flat (less than 10 percent slope before development)
- Less than 10,000 sq. ft. of ground disturbance
- More than 50 feet from a wetland or waterbody
- Not a land division of 10,000 sq. ft. or more
- Outside of Environmental, River, or Greenway overlay zones

Simple Sites Submit a Written Plan (Appendix E)

Simple Site “Form” is now Simple Site “Plan”

Plan Requires Selection of Specific BMPs (Appendix E)

Highlights-Permanent Stabilization



Required at the end of construction

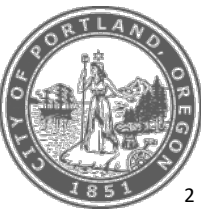
NEW: Explicit Minimum Requirement-clarifies intent and practice

Can be vegetative or non-vegetative

May explore more specific materials requirements for sloped sites



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Highlights- Ongoing Inspections and Maintenance

Current Draft Requirements:

- Daily from October 1 through April 30.
- Weekly or within 24 hours of significant rain event (.5-inch) from May 1 through September 30.
- At any time, once prior in anticipation of holidays, site inactivity, or site inaccessibility.
- If the site is inaccessible due to inclement weather, inspections must occur daily at a relevant and accessible discharge point or downstream location.

Alternate Standard Under Consideration For Smaller, Simple Sites:

- October 1 through April 30: Within 24 hours following a rain event (.25-inch) and once every seven days
- May 1 through September 31: Within 24 hours following a rain event (.25-inch)
- Other alternatives may be considered

Ongoing maintenance and adjustment required

- Working on parameters of formal plan revisions vs. in-field changes and documentation

Thank You for Attending

[Comment](#) through October 31, 2021

Contact: Nancy Thorington
Nancy.Thorington@portlandoregon.gov

More info:

www.portland.gov/bds/erosion-control/2021-22-updates

Next Review Draft Available: January 2022