



Stormwater Review Worksheet

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This worksheet is required if your project:

- Adds or replaces any amount of [hard surface](#)
- Creates any amount of [land disturbing activity](#)

Hard surfaces and land disturbing activity increase stormwater runoff, which can impact downstream properties. Your project size and location determine stormwater requirements. Answer the questions on the following pages to determine which stormwater requirements apply to your project.

Part 1 Project Details

1. Use the Type of Hard Surface column to categorize surface areas. Use the blank fields, if needed. Include all hard surfaces, existing and proposed. **Ensure that information is consistent with your site plan and onsite conditions.**
2. Enter all existing hard surface areas in the second column. Enter all proposed hard surface areas in the third column. Add the total values of **each column separately**. If using the PDF form, totals will generate for you.
3. The Total New and/or Replaced (sq ft) and Total land-disturbing activity will be used in **Part 2**.

Type of Hard Surface	Existing (sq ft)	New and/or Replaced (sq ft)
Building + attached garage roof area (include eaves)		
Detached garage + carport roof area (include eaves)		
Accessory dwelling unit roof area (include eaves)		
Parking area + driveway (include gravel surfaces)		
Patio + deck area (covered or uncovered)		
Non-Res Buildings (i.e., commercial, industrial)		
Permeable pavement or vegetated roof		
Parking Lot		
Sidewalk		
Totals for each column		

Land Disturbance and Lot Coverage Information

Excavation volume (cubic yards)	
Fill volume (cubic yards)	
Total land disturbing activity (sq ft)	
Total existing plus new/replaced hard surface (sq ft)	
Total lot size (sq ft)	
Percentage hard surface lot coverage (= total hard surfaces/total lot size)	

Part 2 Stormwater Requirement Threshold Determination

Use the numbers and information you generated from **Part 1** to guide you through stormwater requirements for your project.

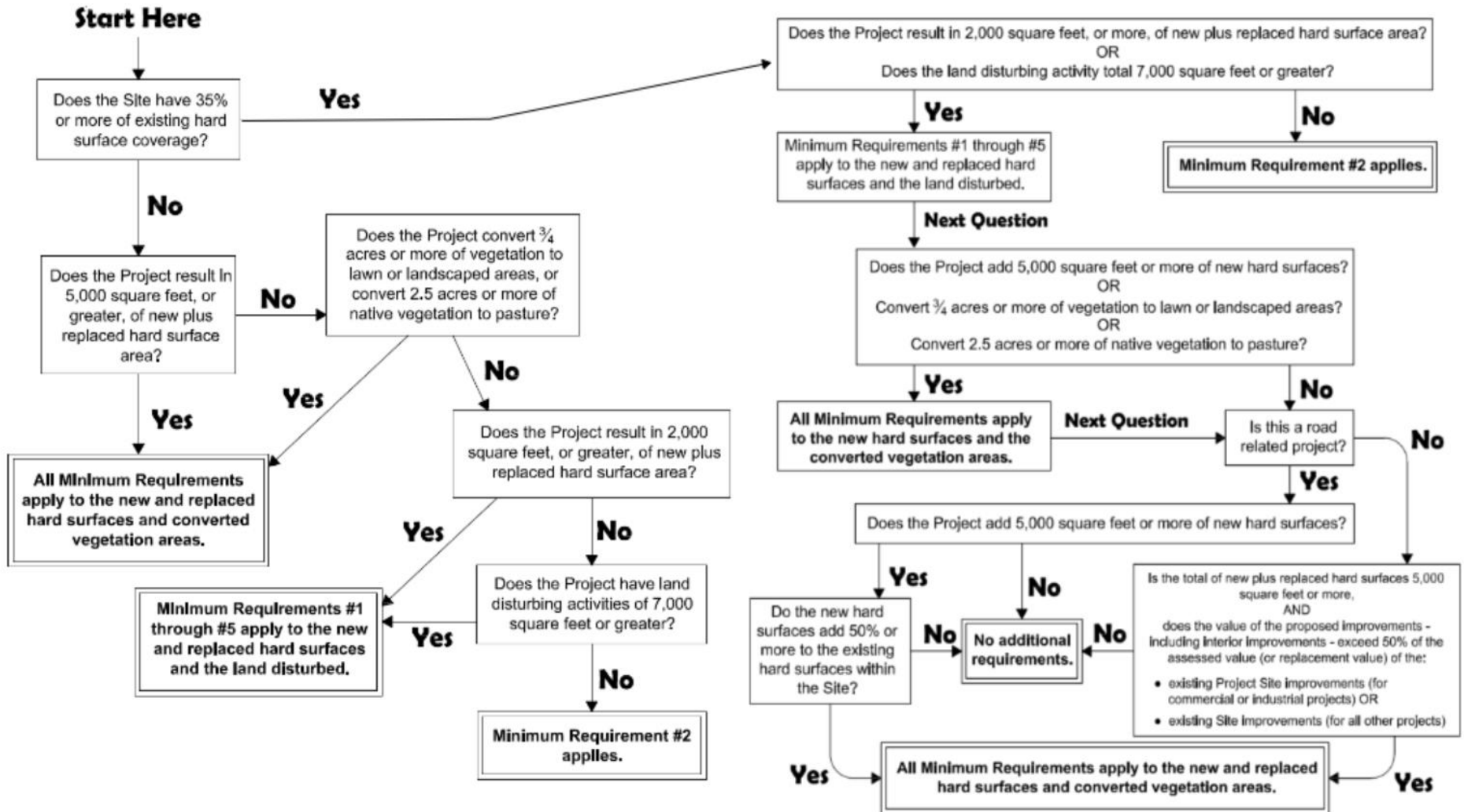
Q1: Is any portion of your project site within the County's NPDES Permit Area, within an Urban Growth Area, or is your project commercial, industrial, institutional, or multifamily residential?
<input type="checkbox"/> Yes. Go to Q2. <input type="checkbox"/> No. Go to Q3.
Q2: Does your project add 2,000 sq ft or more of impervious/hard surface OR include land disturbing activity of 7,000 square feet or more?
<input type="checkbox"/> Yes. Go to Flow Charts in Part 4a to determine which Minimum Requirements of the Stormwater Management Manual apply to this project. <input type="checkbox"/> No. Go to Q5.
Q3: Does your project include any of the following: <ul style="list-style-type: none">• Add or replace 10,000 sq ft of hard surface?• Convert 1.5 acres or more of vegetation to lawn?• Convert 5 acres or more of vegetation to pasture?• Result in 50% or greater hard surface coverage of the lot?• Include fill or grade volumes of 500 cubic yards or more?
<input type="checkbox"/> Yes to <u>any</u> of the above questions – All nine Minimum Requirements apply. A stormwater site plan and drainage report prepared by a licensed engineer are required to demonstrate compliance. Turn in this worksheet and attach a drainage report. <input type="checkbox"/> No to <u>all</u> the above questions. Go to Q4.
Q4: Does your project propose 4,000 sq ft or more of new/replaced hard surface OR include land disturbing activity of 14,000 sq ft or more?
<input type="checkbox"/> Yes. Minimum Requirements #1-5 apply. Please refer to Guidance on Projects that Require only Minimum Requirements #1-5 in Part 4a <input type="checkbox"/> No. Go to Q5.
Q5: Is your project in the floodplain or coastal flood area (Special Hazard Flood Area/ SFHA)?
<input type="checkbox"/> Yes. Floodplain Low Impact Development (LID) Compliance is required. Complete Part 3 , and continue to Part 4b <input type="checkbox"/> No. Turn in this worksheet after completing Part 3 .

Part 3 Construction Stormwater Pollution Prevention Plan (Construction SWPPP)

A Construction SWPPP is required to ensure your project includes proper methods to control erosion and sediment. PDS provides a Model Construction SWPPP, or you can draft your own consistent with the Stormwater Management Manual for Western Washington. **Make sure to add your Construction SWPPP elements to your Site Plan.** Choose one:

- I will use the Model Construction SWPPP (for non-civil engineered residential projects only). **Make sure to attach all 10 pages.**
- I will use a custom Construction SWPPP, which I have attached.
- I want to defer submittal of a Custom Construction SWPPP. Only projects that require coverage under the Ecology Construction General Stormwater Permit (clearing, grading, and excavating activities that disturb one or more acres) may defer submittal. The Construction SWPPP must be submitted prior to permit issuance. Deferred submittal may delay your permit approval. The County reviews the Construction SWPPP but has no role in review or issuance of the Ecology Construction General Stormwater Permit.

Part 4a Flow Chart for Determining Stormwater Minimum Requirements.



Guidance for complying with the Stormwater Management Manual is on the next page →.

Part 4a Continued - Stormwater Management Manual Compliance

Determination of Minimum Requirements:

Based on the flow chart on the previous page identify which Minimum Requirements apply to your project:

- My project is subject to Minimum Requirements **1 through 5 only**.
- My project is subject to Minimum Requirements **1 through 9**. A Drainage Report prepared by a licensed engineer is required to demonstrate compliance. Turn in this worksheet and attach a drainage report and engineered stormwater site plan.

Guidance on Projects that Require only Minimum Requirements #1-5:

Minimum Requirement #5 in the Stormwater Management Manual requires Low-Impact Development techniques (BMPs) to manage stormwater onsite. Use the lists below to select LID techniques for managing stormwater onsite. You must include a narrative describing feasibility/infeasibility criteria used to choose BMPs from the list below*. The narrative must address criteria specified in the [PDS Stormwater Sizing and Design Guidelines](#), the [Infiltration Test Worksheet](#), or Volume V of Stormwater Management Manual for Western Washington. Data to support your narrative may include septic soil logs, infiltration test results, a geo-technical report, or location of well protection areas.

*For single family residential projects **outside** the NPDES Permit Area you may select any feasible BMPs from the list, except perforated stub-out connections, to manage stormwater onsite. A narrative describing infeasibility is not required for residential site outside the NPDES Permit area.

LID List #1 (Use for MR1-5 Projects)

Roof Areas	Lawn & Landscaped Areas	Other Surfaces
<input type="checkbox"/> Choose from: <input type="checkbox"/> Full Dispersion (BMP T5.30) or <input type="checkbox"/> Downspout Full Infiltration (BMP T5.10A) <input type="checkbox"/> If above is infeasible: <input type="checkbox"/> Rain Garden (BMP T5.14A) or <input type="checkbox"/> Bioretention (BMP T7.30)* <input type="checkbox"/> If all the above are infeasible use Downspout Dispersion System (BMP T5.10B) <input type="checkbox"/> If all the above are infeasible use Perforated Stub-out Connection (BMP T5.10C)	<input type="checkbox"/> Post-Construction Soil Quality and Depth (BMP T5.13)	<input type="checkbox"/> First use Full Dispersion (BMP T5.30) <input type="checkbox"/> If above is infeasible: <input type="checkbox"/> Permeable Pavement (BMP T5.15) or <input type="checkbox"/> Rain Garden (BMP T5.14) or <input type="checkbox"/> Bioretention (BMP T7.30) * <input type="checkbox"/> If all the above are infeasible: <input type="checkbox"/> Sheet Flow Dispersion (BMP T5.12) or <input type="checkbox"/> Concentrated Flow Dispersion (BMP T5.11)

*Bioretention systems require a design prepared by a licensed engineer. Projects that must meet Minimum Requirements #1-5 only, typically use Raingardens rather than Bioretention. Raingardens do not require an engineered design.

LID List #3 For Flow Control Exempt* Projects Only.

Roof Areas	Lawn & Landscaped Areas	Other Surfaces
<input type="checkbox"/> First use Downspout Full Infiltration (BMP T5.30) <input type="checkbox"/> If above is infeasible use Downspout Dispersion Systems (BMP T5.10B) <input type="checkbox"/> If all the above are infeasible use Perforated Stub-out Connection (BMP T5.10C)	<input type="checkbox"/> Post-Construction Soil Quality and Depth (BMP T5.13)	<input type="checkbox"/> Sheet Flow Dispersion (BMP T5.12) or <input type="checkbox"/> Concentrated Flow Dispersion (BMP T5.11)

*To be Flow Control Exempt a site must drain directly or indirectly through an entirely constructed conveyance system to a Flow Control Exempt Water as identified in the Stormwater Management Manual. Confirm with PDS Stormwater staff that your project is Flow Control Exempt before using this table.

Stormwater Minimum Requirements (MRs) as established in the 2019 Stormwater Water Management Manual for Western Washington

MRs 1-5 are applicable to both large and small projects.	MRs 6-9 applicable to large projects that require an engineered drainage plan.
1. Stormwater Site Plan – A site plan meeting all basic required site plan requirements plus showing temporary erosion and sediment control BMPs along with permanent stormwater management BMPs.	6. Runoff Treatment – is intended to reduce pollutant loads in stormwater runoff.
2. Construction SWPPP – intended to prevent water pollution and erosion during the construction process. See Part 3 above.	7. Flow Control – is intended to prevent increases in runoff velocity to protect from increased rates of downstream erosion
3. Source Control of Pollution –refers to pollution prevention BMPs for a site in a developed state. Generally, not applicable to residential sites.	8. Wetlands Protection – intended to ensure that wetlands are protected from increased or reduced stormwater inputs, as well as pollution.
4. Preservation of Natural Drainage Patterns and Outfalls – predevelopment drainages such as ditches, swales, slopes must be preserved, or if altered, runoff direction and volume must be restored.	9. Operations and Maintenance – intended to ensure that stormwater BMPs and facilities are maintained and operated properly.
5. Onsite Stormwater Management – intended to reduce disruption to natural hydrological patterns. See Part 4a above	

Part 4b Floodplain LID Compliance

Requirements:

- Complete the **Low Impact Development (LID) Checklist** in your [Floodplain Development Permit Application](#).
- Choose feasible BMPs for managing stormwater runoff from all new and replaced hard surfaces. LID techniques that use infiltration may not be feasible in portions of some floodplains because of high groundwater, soil quality, slope, drainage, and vegetative cover type. Even where infiltration is not feasible, other LID techniques may be used that focus on water quality (rainwater collection and reuse, vegetation retention, and bioswales). See the [Infiltration Test Worksheet](#) to determine through testing if infiltration is feasible.
- Use the [PDS Stormwater Sizing and Design Guidelines](#), or the Stormwater Management Manual for Western Washington for BMP sizing, location, and feasibility.
- Show stormwater BMPs on your Stormwater Site Plan.

Hard surface means an impervious surface, a permeable pavement, or a vegetated roof.

Impervious surface means a non-vegetated surface area that either prevents or slows the entry of water into the soil. A non-vegetated surface area increases the speed and volume of stormwater compared to naturally vegetated sites. Common impervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots, storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces, which similarly impeded the natural flow of stormwater

Land Disturbing Activity means any activity that result in a change in soil cover (both vegetative and nonvegetative) or changing topography, including clearing, grubbing, grading, filling, and excavation.

Low-Impact Development is a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.