



Low Impact Development (LID) Checklist

The City of Lake Stevens' primary method of managing stormwater on property within city limits is infiltration using Low Impact Development (LID) techniques. This policy is consistent with the Department of Ecology's 2012 (2014 Amended) Stormwater Management Manual for Western Washington (2014 SWMMWW) which the City of Lake Stevens adopted as its regulatory standard for stormwater management.

This LID Checklist is designed to help citizens and developers determine how to meet the requirements of City code, protect downstream properties from flooding, and to improve water quality in Lake Stevens and Ebey Slough.

1. Determine Which Minimum Requirements Apply. This will depend on the size of your project. Use the New Development or Redevelopment Flow Chart (pages 5 and 6) of this checklist.

2. Review Each Minimum Requirement and Prepare as Needed. If you have questions, help is available. Contact the City Stormwater Engineering Technician, Leah Everett at (425) 622-9442 or leverett@lakestevenswa.gov.

Minimum Requirement #1 – Preparation of a Stormwater Site Plan (2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 3, page 77)

- Survey prepared by a registered land surveyor
- Soils report by a professional soil scientist¹
- Survey of existing vegetation by a qualified individual (if significant trees on site)
- Preliminary development layout
- Off-site analysis
- Stormwater control plan
- Maps prepared as part of the stormwater site plan must show:
 - o Existing development (on and near site, if available)
 - o Minor and major hydrologic features
 - o Flood hazard areas (on and near site)
 - o Geologic hazard areas
 - o Aquifer and wellhead protection areas (on or near site)
 - o Topographic information (>10% slope, 2 ft. contours); 10%-20%, 5 ft. contours, >20%, 10 ft. contours)
 - o Elevations at 25 ft. intervals

¹ For sites needing Minimum Requirements #1-9, the soils report must be produced by a professional soil scientist certified by the Soil Science Society of America (or an equivalent national program), or by other suitably trained persons working under the supervision of a professional engineer, geologist, hydrogeologist, or engineering geologist registered in the State of Washington. For sites needing only Minimum Requirements #1-5, in addition to the qualified professionals previously listed, a locally licensed on-site sewage designer may produce the soils report.

Minimum Requirement #2 – Construction Stormwater Pollution Prevention Plan (SWPPP)

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 43)

- Prepare a pollution prevention plan addressing all 13 elements for protection of stormwater during construction. Guidance and templates from Ecology are available on-line and at the permit counter. A simplified SWPPP template (only for single family homeowners) is available upon request.

Minimum Requirement #3 – Source Control of Pollution

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 53)

- Describe all known, available, and reasonable source control and structural source control best management practices (BMPs).

Minimum Requirement #4 – Preservation of Natural Drainage Systems and Outfalls

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 54)

- Describe how the project will maintain existing natural stormwater drainage and outfalls.

Minimum Requirement #5 – On-site Stormwater Management

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 55)

Choose ONE of the following options:

EITHER

- Use the LID performance standard **and** BMP T5.13: Post-Construction Soil Quality and Depth.

OR

- Use List #1 or #2 (depending on the size of the site). (Sites triggering only Minimum Requirements #1 - #5 may substitute BMP T5.14A: Rain Gardens for BMP T7.30: Bioretention Cells, Swales, and Planter Boxes.)

****NOTE: Use SITE SPECIFIC DATA to determine infiltration feasibility. Glacial till soils do not instantly negate infiltration potential for all BMPs in the 2014 SWMMWW.****

Minimum Requirement #6 – Runoff Treatment

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 43)

- If your site has more than 5,000 square feet of pollution-generating hard surface (PGHS), determine appropriate runoff treatment.

Minimum Requirement #7 – Flow Control

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 64)

- If your site has more than 10,000 square feet of effective impervious surface, determine appropriate flow control.

Minimum Requirement #8 – Wetlands Protection

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 68)

- If your site discharges stormwater to wetlands directly, or indirectly via a conveyance system, special conditions apply.

Minimum Requirement #9 – Operation and Maintenance

(2012/2014 SWMMWW Ecology manual, Volume 1, Chapter 2, Page 70)

- Develop O&M manual for all proposed stormwater facilities on your site

Final plat/binding site plans

- Right of entry for City staff for the purpose of inspection, auditing, maintenance, or repair of storm drainage facilities (emergency and non-emergency.)
- In the event of failure to repair or maintain storm drainage facilities within a reasonable time period, include the right of the City to repair or maintain storm drainage facilities at the expense of the owners' or homeowners' association.

This checklist is based on the requirements of Ecology's 2012 Stormwater Manual for Western Washington, as amended in 2014 (2012/2014 Ecology manual). For more detail, consult the searchable .pdf file of this manual, available online:

<https://fortress.wa.gov/ecy/publications/documents/1410055.pdf>

Figure I-2.4.1 Flow Chart for Determining Requirements for New Development

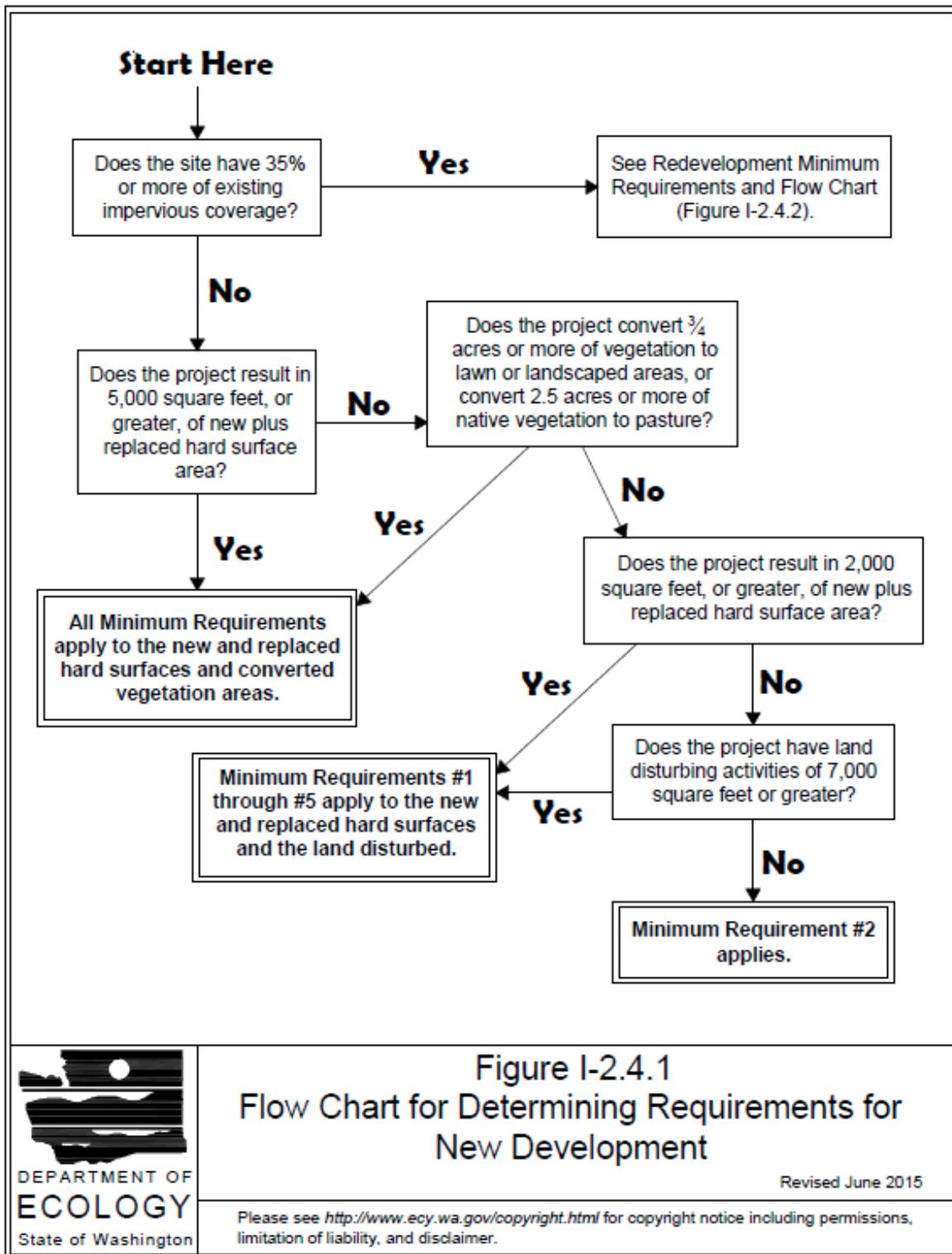
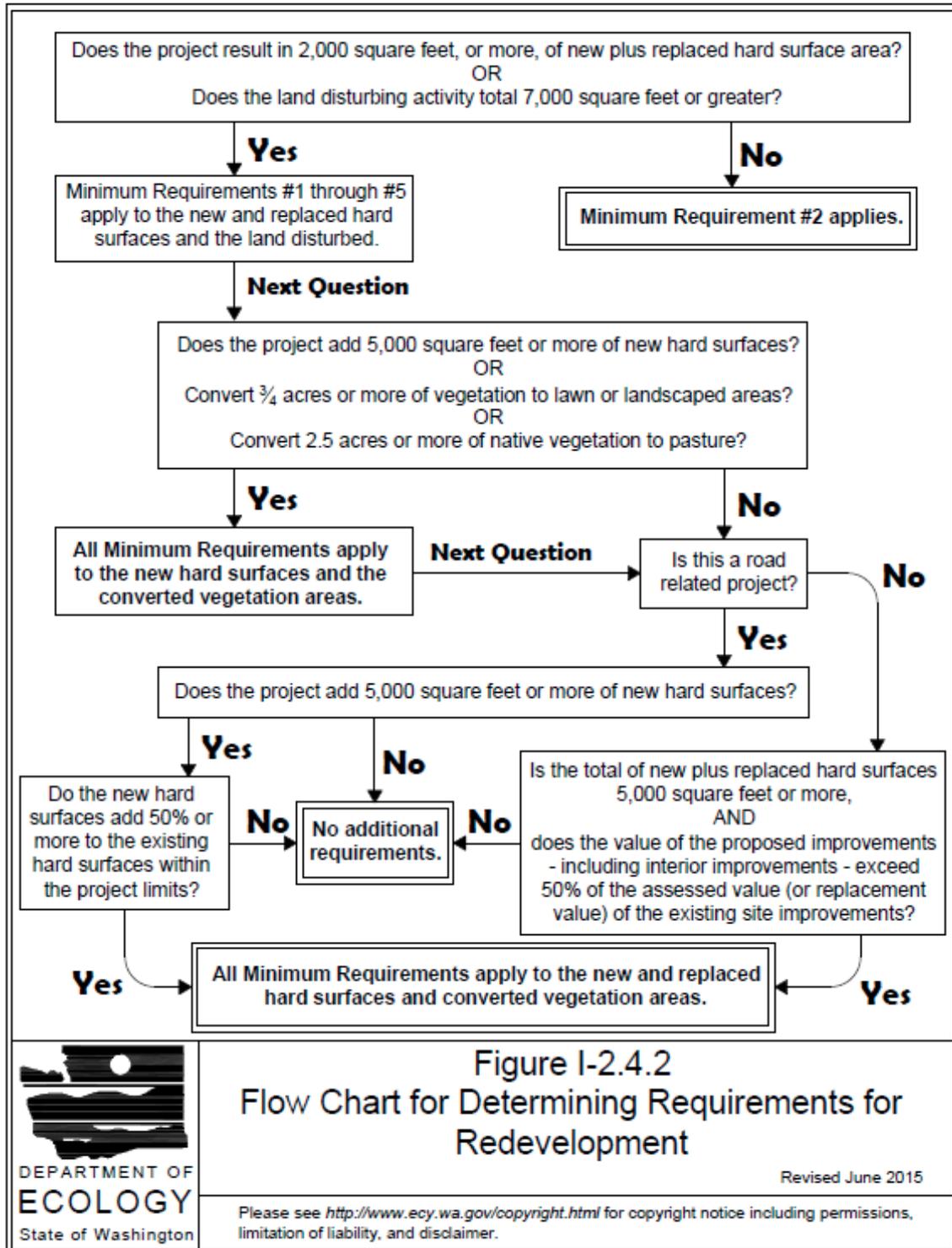


Figure I-2.4.1
Flow Chart for Determining Requirements for New Development

Revised June 2015

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Figure I-2.4.2 Flow Chart for Determining Requirements for Redevelopment



**Figure I-2.4.2
Flow Chart for Determining Requirements for Redevelopment**



Revised June 2015

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