Drainage Review for Projects Vested on or after January 22, 2016

Assistance Bulletin

#89

Revised February 2016

WWW.SNOCO.ORG Keyword: Assistance Bulletins

Snohomish County
Planning and Development Services

Visit us at :

2nd Floor Robert J. Drewel Bldg.
3000 Rockefeller Avenue
Everett, WA 98201

425-388-3311
1-800-562-4367, ext. 3311

ONLINE INFORMATION
www.snohomishcountywa.gov/1190

This Assistance Bulletin only applies to property within unincorporated Snohomish County and does not apply to property within incorporated city limits.

All projects shall comply with Chapter 30.63A SCC (Drainage**).** Land disturbing activity and many other development permits and land use approval applications must be accompanied by a stormwater site plan and related reports as needed to comply with the drainage requirements. Stormwater site plans shall comply with the targeted or full stormwater site plan submittal checklist prepared by PDS, as applicable. Further information is provided on application checklists.

Q: What do the new regulations and rules do?

A: The new regulations comply with federal requirements imposed by Snohomish County's Phase I Municipal Stormwater Permit also known as the National Pollutant Discharge Elimination System permit (NPDES Permit) issued pursuant to the federal Clean Water Act (CWA). This Permit requires the county to implement a variety of actions that prevent pollution from entering Snohomish County's rivers, streams and waterways, all of which ultimately lead to Puget Sound. The NPDES Permit regulates stormwater discharges from all new development, redevelopment and construction activities to prevent and control adverse impacts of drainage and stormwater on the public health, safety, and general welfare.

The new stormwater management requirements apply to land disturbing activities such as clearing and grading and construction or reconstruction of both private and public facilities. Development design should incorporate preservation of native vegetation and minimize impervious surfaces. Use of low impact development best management practices is required where feasible.

Q: What does the Federal Clean Water (CWA) Act do?

A: The Federal Clean Water Act prohibits anybody from discharging pollutants through a point source into a water of the United States unless they have an NPDES Permit. The Permit basically translates the CWA and state water quality laws into specific provisions. It limits what can be discharged, requires the use of best management practices (BMPs) for source control, treatment, and flow control and other provisions to ensure that discharges do not harm water quality or public health.

Q: Why is regulation of stormwater runoff important?

A: Polluted stormwater runoff is a leading contributor to water pollution in the Puget Sound Region. It can also cause and contribute to flooding. When runoff is uncontrolled it could result in the destruction property, harm to fish, and wildlife, damage aquatic habitats, loss in aesthetic values and threats to public health due to contaminated food, drinking water supplies and recreational waterways.

This bulletin is intended only as an information guide. The information may not be complete and is subject to change. For complete legal information, refer to Snohomish County Code.

Q: Where can I find the County's stormwater regulations?

A: The County's Drainage regulations are found in:

- Chapter 30.63A SCC Drainage
- Chapter 30.63B SCC Land Disturbing Activities
- Chapter 7.53 SCC
- Chapter 7.54 SCC
- Snohomish County Drainage Manual
- Engineering Design and Development Standards
- Washington State Department of Transportation Highway Runoff Manual

Q: What are low impact development best management practices?

A: "Low impact development" or "LID" is a stormwater management and land development strategy that strives to mimic pre-disturbance hydrologic processes of filtration, storage, evaporation, infiltration and transpiration by emphasizing conservation and use of on-site natural features, site planning and distributed stormwater management practices that are integrated into a project design. (SCC 30.91L.215)

"Low impact development best management practices" or "LID BMPs" are distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of filtration, storage, evaporation, infiltration and transpiration. LID BMPs include, but are not limited to, bioretention/rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, minimal excavation foundations, vegetated roofs, and water re-use. (SCC 30.91L.216).

Q: What are the drainage requirements for my project?

A: Drainage requirements vary depending on the specific scope of the proposed project and on the physical and environmental conditions on the site where the new development activity is proposed. Key considerations include:

- The quantity of hard surface to be added or replaced;
- The extent of land disturbing activity (clearing or grading);
- The size of areas to be converted from vegetation to lawn, landscaping or pasture;
- Location relative to floodplains or shorelines and potential impacts to wetlands, streams, waters of the state or natural drainage courses; and
- Drainage from the site into the municipal separate storm sewer system (MS4).

Based on these key considerations, a project may be exempt from drainage requirements (see SCC 30.63A.200); qualify for an exception from certain drainage requirements (see SCC 30.63A.210 and Bulletin #107); require compliance only with minimum requirement 2 to prepare a stormwater pollution prevention plan (SWPPP) - this could be either a small SWPPP (see SCC 30.63A.810) or a full SWPPP; require a targeted stormwater site plan and compliance with minimum requirements 1 through 5; or require a full stormwater site plan and compliance with minimum requirements 1 through 9 (see Figures 1.1 and 1.2 in this bulletin; see also SCC 30.63A.300 or 30.63A.310 as applicable for new development or redevelopment).

Q: What is a SWPPP and how do I know if I need a small SWPPP or a full SWPPP?

A: A "Stormwater pollution prevention plan" or "SWPPP" is a narrative and site plan that identifies measures to prevent and control sedimentation, erosion and point source contamination of stormwater. SWPPP requirements are located in SCC 30.63A.445 and .450 and are described in the Snohomish County Drainage Manual, Volume II, Chapter 3. The criteria to determine if you qualify as a small project are located in SCC 30.63A.810. If your project meets the necessary criteria you may submit a small, or abbreviated SWPPP. SWPPP submittal requirements for small projects are described in the Snohomish County Drainage Manual, Volume I, Appendix I-F. See also Bulletins #90, #91 and #92.

Q: What are the "minimum requirements" or "MRs"?

A: "Minimum requirements " or "MRs" refers to a set of requirements related to stormwater management. The MRs are set forth in SCC 30.63A.400 through 30.63A.605.and are described in greater detail in the Snohomish County Drainage Manual, Volume I, Chapter 2. In general the MRs include:

- MR 1: Preparation of Stormwater Site Plans
- MR 2: Stormwater Pollution Prevention Plans (SWPPPs)
- MR 3: Source Control of Pollution
- MR 4: Preservation of Natural Drainage Systems and Outfalls
- MR 5: On-Site Stormwater Management
- MR 6: Runoff Treatment
- MR 7: Flow Control
- MR 8: Wetlands Protection
- MR 9: Operation and Maintenance

The applicable MRs depends on the thresholds described above for the targeted (MR 1-5) or full (MR 1-9) stormwater site plans.

Q: What is included in a Stormwater Site Plan?

A: When minimum requirement 1 applies to a project, the applicant shall prepare a stormwater site plan consistent with the requirements described below. A stormwater site plan is a comprehensive report containing all of the technical information and analysis necessary for the evaluation of a proposed new development or redevelopment project for compliance with the requirements of Chapter 30.63A SCC. The stormwater site plan is described in the Snohomish County Drainage Manual, Volume I, Chapter 3 and summarized below:

- Site analysis including a boundary survey, topographic map, utility infrastructure map, vegetation map, soils report, site analysis and existing conditions summary;
- Preliminary development layout following the specified design principals showing locations of proposed buildings, roads, parking areas, landscaping areas, on-site stormwater managements BMPs, and buffers for proposed development;
- Off-site upstream and downstream analysis addressing water quality, stream channel erosion, slope stability, conveyance system capacity, drainage impacts associated with the proposed project and a mitigation report;
- Determination of applicable minimum requirements for either a targeted stormwater site plan or a full stormwater site plan;
- Preparation of permanent stormwater control plan showing the final best management practices (BMPs) and facilities which will serve the project site in its developed condition. Low impact development (LID) BMPs are required where feasible. *(Note that BMP selection requires a feasibility analysis—see Bulletin #__);*
- Preparation of a SWPPP; and
- Documentation to include narrative description of the proposed project, a vicinity map, stormwater plan sheets, existing conditions summary, feasibility analysis for LID BMPs, special reports, operations and maintenance manual, and security device.

Q: When is a Targeted Stormwater Site Plan required?

(SCC 30.63A.300 or .30.63A.310)

A: A targeted stormwater site plan is required to comply with new development and redevelopment projects when the new and replaced impervious surfaces and the land disturbed by the new development or redevelopment will:

- Result in or add 2,000 square feet or more, but less than 5,000 square feet of new, replaced or new plus replaced hard surface area; or
- Cause land disturbing activity of 7,000 square feet or greater.

Q: What are the requirements for a Targeted Stormwater Site Plan? (SCC 30.63A.805)

A: Targeted stormwater site plans shall be submitted to document compliance with chapter 30.63A SCC and minimum requirements 1 through 5 (SCC 30.63A.400 through 30.63A.525). The targeted stormwater site plan submittal shall include both the items required by SCC 30.63A.440 and the targeted stormwater site plan submittal checklist items adopted by the department pursuant to SCC 30.70.030. Targeted stormwater site plan submittal requirements include a development layout of the proposed drainage system. The layout shall depict the results of the site planning process and shall include the nature and extent of the work proposed and a written executive summary explaining how the drainage system will function. When a targeted stormwater site plan is required, a full SWPPP will also be required for compliance with minimum requirement 2.

Q: Are there additional requirements for Targeted Stormwater Site Plans?

A: In addition to compliance with minimum requirements 1 through 5, compliance with minimum requirements 6, 7 and 8 pertaining to runoff treatment, flow control and detention or treatment in wetlands and their buffers may be required based upon the site plan, scope of the proposed project and the results of the hydrologic analysis. The site planning requirement most often will require an accurate set of plans and calculations prepared by a professional engineer licensed in Washington State.

Q: When is a Full Stormwater Site Plan required? (SCC 30.63A.300 or 30.63A.310)

A: A full stormwater site plan and full construction SWPPP is submitted for new development and redevelopment projects when the new impervious surfaces and converted pervious surfaces if the new development will:

- Result in or add 5,000 square feet or more of new, replaced or new plus replaced hard surface area.
- Convert three-quarters of an acre or more of vegetation to lawn or landscaped areas.
- Convert 2.5 acres or more of native vegetation to pasture.

Q: What are the requirements for a Full Stormwater Site Plan? (SCC 30.63A.815)

A: Full stormwater site plans shall be submitted to document compliance with chapter 30.63A SCC and minimum requirements 1 through 9 (SCC 30.63A.400 through 30.63A.605). The full stormwater site plan submittal shall include items on the full stormwater site plan submittal checklist items adopted by the department pursuant to SCC 30.70.030.

Q: Are there any additional requirements for road redevelopment projects? (SCC 30.63A.310)

A: Yes. Additional requirements for redevelopment apply to the proposal if:

- The runoff from new hard surfaces and converted pervious surfaces is not separated from runoff from other surfaces on the project site, stormwater treatment facilities must be sized for the entire flow that is directed to them.
- Runoff from the replaced and new hard surfaces (including pavement, shoulders, curbs and sidewalks) and converted vegetation areas shall meet minimum requirements 1 through 9 (SCC 30.63A.400 through 30.63A.605) if the new hard surfaces total 5,000 square feet or more and total 50 percent or more of the existing hard surfaces within the project limits (i.e. length of the project and the width of the right-of-way).

Q: What are “hard surfaces”? (SCC 30.91H.035)

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

Q: Are there special requirements for other types of redevelopment projects? (SCC 30.63A.310(6))

A: Yes. All redevelopment projects, except road-related projects covered by SCC 30.63A.310(5), shall comply with minimum requirements 1 through 9 (SCC 30.63A.400 through 30.63A.605) for the new plus replaced impervious surfaces when:

- The total of the new plus replaced impervious surfaces totals 5,000 square feet or more.
- The value of proposed improvements including interior improvements exceeds 50 percent of the assessed value of the existing site improvements.

Q: Can a Full Stormwater Site Plan be submitted in phases? (SCC 30.63A.820)

A: Yes, the submittal of a full stormwater site plan may be submitted in phases when a project requires a full stormwater site plan, and the proposed development activity is subject to a public hearing where the hearing examiner has original jurisdiction, an applicant may submit a targeted stormwater site plan pursuant to SCC 30.63A.805, along with the underlying permit application, to initiate review.

Q: If I want to submit a phased Full Stormwater Site Plan are there additional criteria I must address in my submittal of the Targeted Stormwater Site Plan? (SCC 30.63A.820)

A: Yes, when submitting a phased plan, in addition to compliance with chapter 30.63A SCC and minimum requirements 1 through 5 (SCC 30.63A.400 through 30.63A.605), the targeted stormwater site plan shall address additional stormwater site planning components. If the site analysis required by minimum requirement 1 identifies site conditions that require compliance with minimum requirements 6, 7 or 8, the targeted stormwater site plan shall address water quality treatment, flow control, and wetlands protection pursuant to SCC 30.63A.530 through SCC 30.63A.570 so the conceptual plan may be thoroughly reviewed for:

- Minimum requirements 6 Water Quality Treatment
- Minimum requirements 7 Flow Control
- Minimum requirements 8 Wetland Protection

Detailed engineering and design information shall be provided when required by the director for site-specific conditions, development in the public right-of-way, or compliance with any required conveyance sizing, on-site stormwater management BMPs, or detention or treatment design, as needed to protect the public health, safety and welfare.

Q: May I re-use an existing stormwater site plan?

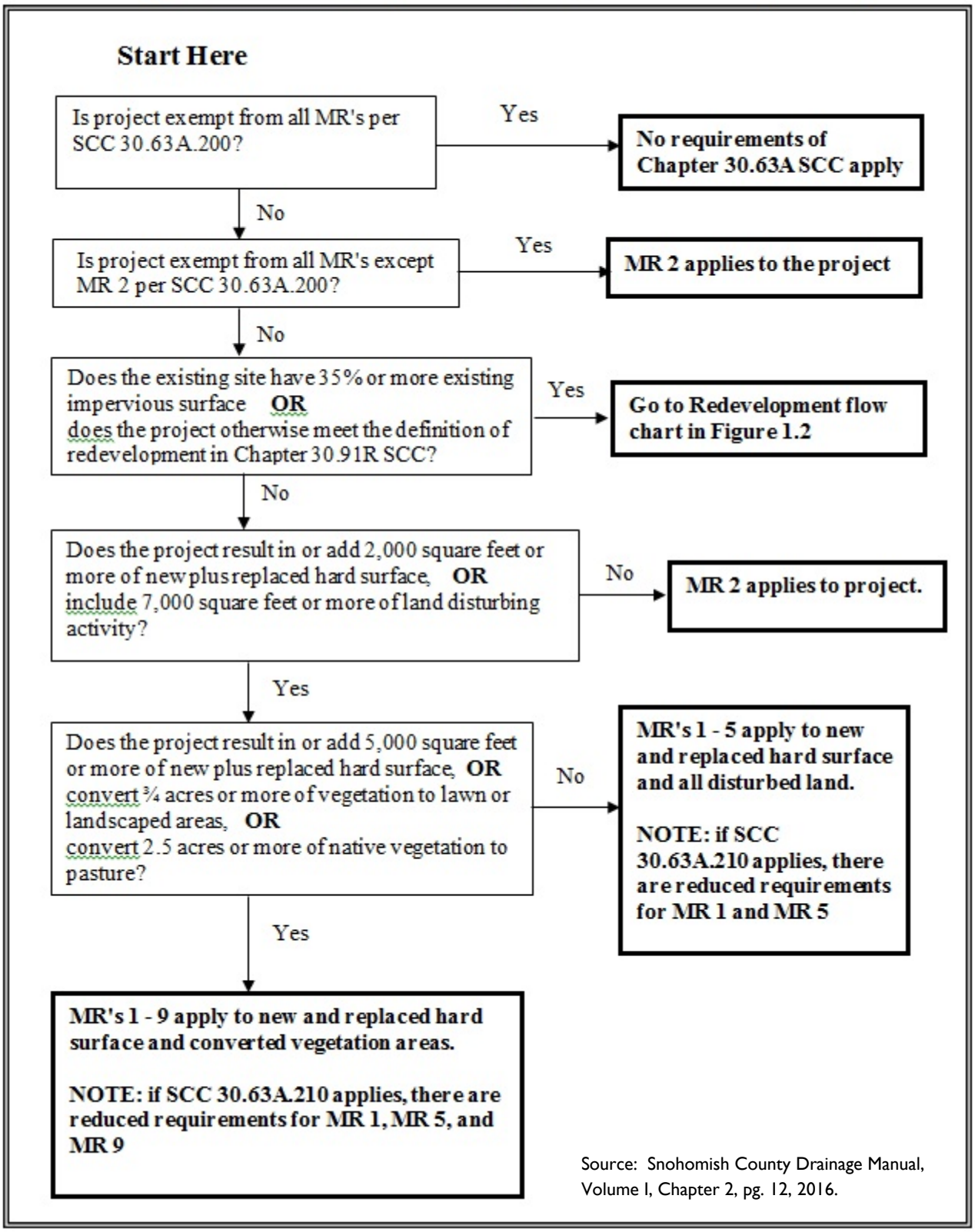
A: A plan or portions of a drainage plan submitted for one permit or approval can be used for a new submittal if the plan addresses the site and meets current requirements of Title 30 SCC. The plan must bear a current stamp of the professional engineer that prepared the original plans. Payment of review fees is required by chapter 30.86 SCC. The plan will be subject to review under the current standards.

Q: What are common acronyms used in the stormwater regulations?

A: Common acronyms include:

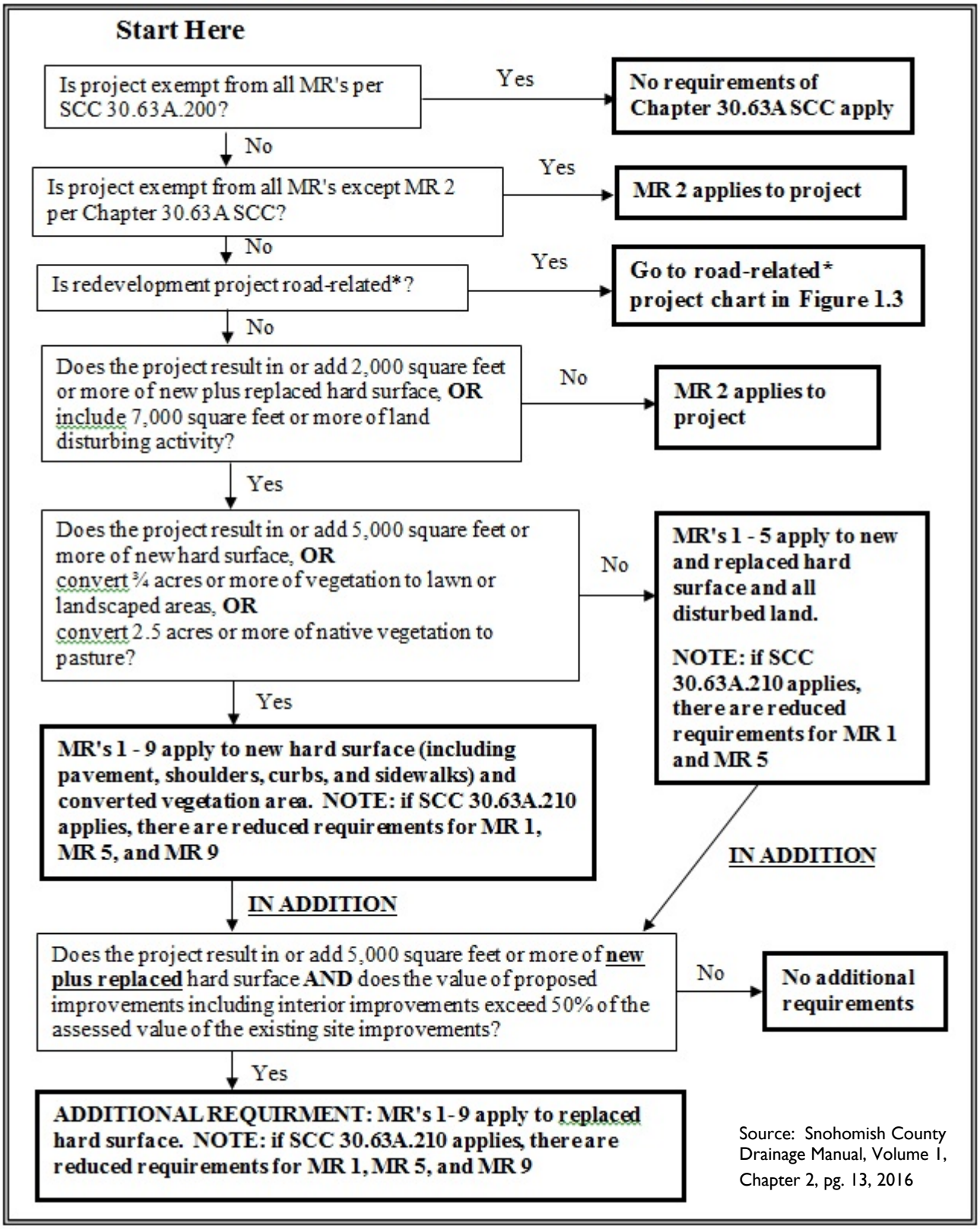
- BMP = Best management practices
- CESCL = Certified Erosion and Sediment Control Lead
- CWA = Clean Water Act
- EDDS = Engineering Design & Development Standards
- LDA = Land disturbing activity
- LID = Low Impact Development
- MR = Minimum requirement
- NPDES = National Pollutant Elimination Discharge System
- SWPPP = Stormwater pollution prevention plan (MR 2)

Figure 1.1 Minimum Requirements (MR's) for New Development Projects



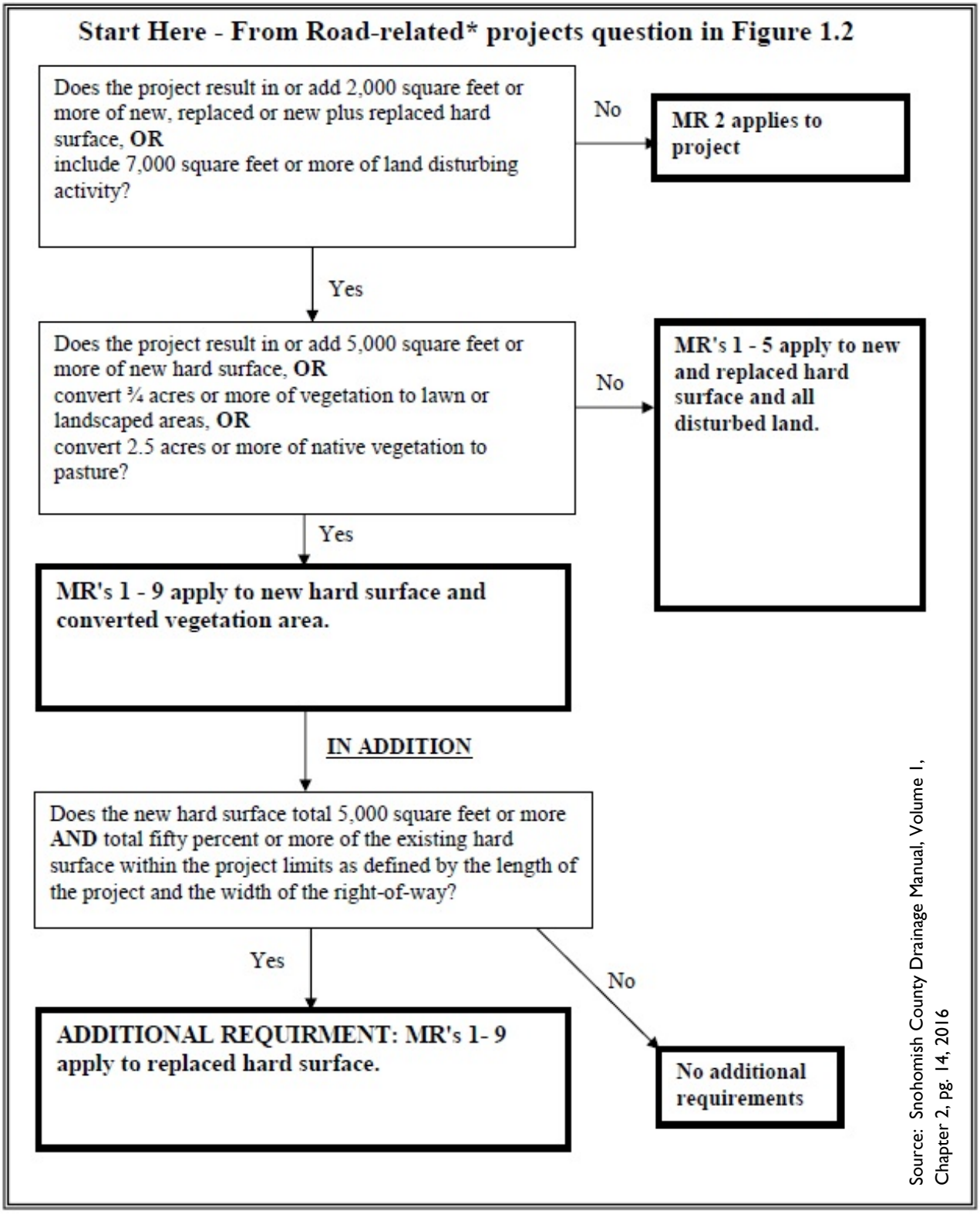
Source: Snohomish County Drainage Manual, Volume I, Chapter 2, pg. 12, 2016.

Figure 1.2 Minimum Requirements (MR's) for Redevelopment Projects
*** "road-related" refers only to public roads, not private roads**



Source: Snohomish County Drainage Manual, Volume 1, Chapter 2, pg. 13, 2016

Figure 1.3 Minimum Requirements (MR's) for Road-related* Redevelopment Projects
*** "road-related" refers only to public roads, not private roads**



Source: Snohomish County Drainage Manual, Volume I, Chapter 2, pg. 14, 2016