

Chapter 18.30

STORMWATER MANAGEMENT

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18.30.000 Purposes.

A. To set forth standards for managing stormwater runoff from construction and development sites to minimize:

1. Degradation of surface water quality by controlling the scouring and sedimentation of creeks, streams, wetlands, ponds, lakes, other water bodies.
2. Degradation of groundwater quality.
3. Damage to adjacent and other downstream private properties from erosion or other impacts from stormwater runoff.
4. Damage of City-owned parcels, City roads, rights-of-way and associated infrastructure.

B. To comply with requirements in the Phase II National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit as issued by the Washington State Department of Ecology (Ecology).

C. To complement site planning activities that minimize:

1. Impervious surfaces area.
2. The loss of native or non-native site vegetation.
3. The generation of stormwater runoff.

D. To make low impact development (LID) the preferred and commonly used approach to site development; to require LID be considered at the site planning stage; and to implement LID BMPs unless they are infeasible.

E. To require that all publicly-owned and privately-owned Stormwater Treatment and Flow Control best management practices (BMPs)/Facilities are operated, maintained and repaired in manner that conforms to this chapter.

F. To require design and maintenance of appropriate source control BMPs at publicly-owned and privately-owned businesses and sites.

G. To provide the authority for the City to inspect privately-owned Stormwater Treatment and Flow Control BMPs/Facilities and to conduct source control inspections at publicly-owned and privately-owned businesses/sites.

H. To provide enforcement procedures for ensuring compliance with this chapter.

18.30.010 Definitions.

For the purposes of this chapter, the following definitions shall apply:

Arterial. A road or street primarily for through traffic. The term generally includes roads or streets considered collectors. It does not include local access roads which are generally limited to providing access to abutting property. See also RCW 35.78.010, RCW 36.86.070, and RCW 47.05.021.

Adjustment. A variation in the application of a minimum requirement to a particular project. Adjustments provide substantially equivalent environmental protection.

Applicant. The owning individual(s) or corporations or their representatives applying for the permits or approvals described in this chapter.

Approval. The proposed work or completed work conforming to this chapter as approved by the public works Director or their designee.

Best management practices (BMPs). The schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the City that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

Bioretention BMPs. Engineered facilities that treat stormwater by passing it through a specified soil profile, and either retain or detain the treated stormwater for flow attenuation. Refer to the *2019 Stormwater Management Manual for Western Washington (SWMMWW)*, Volume V for bioretention BMP types and design specifications.

Category 1 Project Site. A project site subject to Minimum Requirements No.1 through No.5. See ECDC 18.30.60.C.

Category 2 Project Site. A project site subject to Minimum Requirements No.1 through No.9. See ECDC 18.30.60.C.

Certified Erosion and Sediment Control Lead (CESCL). An individual who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the SWMMWW). A CESCL is knowledgeable in the principles and practices of erosion and sediment control. The CESCL must have the skills to assess site conditions and construction activities that could impact the quality of stormwater and, the effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges. Certification is obtained through an Ecology approved erosion and sediment control course. Course listings are provided online at Ecology's website.

City's municipal separate storm sewer system or "MS4." A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that are owned or operated by the City of Edmonds, designed or used for collecting or conveying stormwater, and are not a combined sewer nor part of a publicly owned treatment works as defined in 40 Code of Federal Regulations (CFR) 122.2, and which is defined as "large" or "medium" or "small" or otherwise designated by Ecology pursuant to 40 CFR 122.26.

Clearing. The destruction and removal of vegetation by manual, mechanical, or chemical methods.

Commercial Agriculture. Those activities conducted on lands defined in RCW 84.34.020(2) and activities involved in the production of crops or livestock for commercial trade. An activity ceases to be considered commercial agriculture when the area on which it is conducted is proposed for conversion to a nonagricultural use or has lain idle for more than five years, unless the idle land is registered in a federal or state soils conservation program, or unless the activity is maintenance of irrigation ditches, laterals, canals, or drainage ditches related to an existing and ongoing agricultural activity.

Common plan of development or sale. A site where multiple separate and distinct construction activities may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phase projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used to determine permit requirements.

Converted vegetation (areas). The change in land cover changed from native vegetation, pasture scrub/shrub, or unmaintained non-native vegetation to lawn or landscaped areas, or where native vegetation is converted to pasture.

Creek. Is synonymous with “streams,” which is defined in ECDC 23.40.320.

Detention facility. An above or below ground facility, such as a pond or tank, that temporarily stores stormwater runoff and subsequently releases it at a slower rate than it is collected by the drainage facility system. There is little or no infiltration of stored stormwater.

Development. Land-disturbing activities, including Class IV general forest practices that are conversions from timber land to other uses. Creation or addition of hard surfaces, or replacement of hard surface that is not part of a routine maintenance activity. Structural development, including construction, installation, replacement, or expansion of a building or other structure. Subdivision, short subdivision, and binding site plans, as defined and applied in Chapter 58.17 RCW

Director. The City’s Public Works and Utilities Director or a designee with an appropriate background in engineering or another related discipline.

Discharge point. The location where a discharge leaves the municipal separate storm sewer system (MS4) through the City’s MS4 facilities/BMPs designed to infiltrate.

Ecology. The Washington State Department of Ecology.

Effective impervious surface. Those impervious surfaces that are connected via sheet flow or discrete conveyance to a drainage system. Impervious surfaces on residential development sites are considered ineffective if: 1) the runoff is dispersed through at least 100 feet of native vegetation in accordance with BMP T5.30 – “Full Dispersion,” as described in Chapter 5 of Volume V of the SWMMWW; 2) residential roof runoff is infiltrated in accordance with downspout Full Infiltration Systems in BMP T5.10A in Volume III of the SWMMWW; or 3) approved continuous runoff modeling methods indicate the entire runoff file is infiltrated.

Erodible or leachable materials. Wastes, chemicals, or other substances that measurably alter the physical or chemical characteristics of runoff when exposed to rainfall. Examples include erodible soils that are stockpiled, uncovered process wastes, manure, fertilizers, oily substances, ashes, kiln dust, and garbage dumpster leakage.

Erosion. The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep. Also, detachment and movement of soil or rock fragments by water, wind, ice, or gravity. See the SWMMWW Glossary for examples of types of water erosion.

Excavation. The mechanical removal of earth material.

Exception. Relief from the application of a minimum requirement to a project.

Fill. A deposit of earth material placed by artificial means.

Groundwater. Water in a saturated zone or stratum beneath the land surface or below a water body.

Hard surface. An impervious surface, a permeable pavement, or a vegetated roof.

Highway. A main public road connecting towns and cities. In Edmonds, this includes State Route 99, State Route 524, and portions of State Route 104, that are classified as principal arterials in the City's comprehensive transportation plan.

Illicit discharge. Any direct or indirect non-stormwater discharge to the City's MS4, groundwaters, or a water body, except as expressly allowed by ECDC Chapter 7.200.

Impervious surface. A non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces that similarly impede the natural infiltration of stormwater. Open, uncovered retention/detention facilities shall not be considered impervious surfaces for purposes of determining whether the thresholds for application of minimum requirements are exceeded. Open, uncovered retention/detention facilities shall be considered impervious surfaces for purposes of runoff modeling. Outdoor swimming pools shall be considered impervious surfaces in all situations. In addition, lawns, landscaping, sports fields, golf courses, and other areas that have modified runoff characteristics resulting from the addition of underdrains and impermeable or low permeability liners are to be considered impervious surfaces. If no liner is installed, these areas (lawns, landscaping, sports fields, golf courses, etc.) served by underdrains may be considered partially pervious if the underdrain is set a minimum of 8 inches above the in-situ soils in a manner to allow infiltration over the facility bottom.

Lake. An inland body of fresh water surrounded by land.

Land disturbing activity. Any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land-disturbing activities include but are not limited to demolition, clearing, grading, filling, and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered a land-disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land-disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.

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

LID Best Management Practices (BMPs). Distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation 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.

LID principles. Land use management strategies that emphasize conservation, use of on-site natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.

Maintenance. Repair and maintenance activities conducted on currently serviceable structures, facilities, and equipment that involves no expansion or use beyond that previously existing and results in no significant adverse hydrologic impact. It includes those usual activities taken to prevent a decline, lapse, or cessation in the use of structures and systems. Those usual activities may include replacement of dysfunctional facilities, including cases where environmental permits require replacing an existing structure with a different type of structure, as long as the functioning characteristics of the original structure are not changed. One example is the replacement of a collapsed, fish blocking, round culvert with a new box culvert under the same span, or width, of roadway. In regard to stormwater facilities, maintenance includes assessment to ensure ongoing proper operation, removal of built up pollutants (i.e., sediments), replacement of failed or failing treatment media, and other actions taken to correct defects as identified in the maintenance standards of Appendix A, Volume V of the SWMMWW.

Maximum extent practicable (MEP). Refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MS4. The City's municipal separate storm sewer system.

Native vegetation. Vegetation comprised of plant species, other than noxious weeds, indigenous to the coastal region of the Pacific Northwest which could have been reasonably expected to occur naturally on the site. Examples include trees such as Douglas fir, western hemlock, western red cedar, alder, big-leaf maple, and vine maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

Natural drainage systems and outfalls. The location of the channels, swales, and other non-manmade conveyance systems as defined by the earliest documented topographic contours existing for the subject property, either from maps or photographs, or such other means as appropriate.

New Development. Land disturbing activities, including Class IV-general forest practices that are conversions from timberland to other uses; structural development, including construction or installation of a building or other structure; creation of hard surfaces; and subdivision, short subdivision, and binding site plans, as defined and applied in Chapter 58.17 RCW. ECDC 18.30 does not distinguish the difference between new development and redevelopment; all projects in Edmonds shall meet the requirements for new development.

New Impervious Surface. A surface that is: 1) changed from a pervious surface to an impervious surface (e.g., resurfacing by upgrading from dirt to gravel, a bituminous surface treatment ("chip seal"), asphalt, concrete, or an impervious structure); or 2) upgraded from gravel to chip seal, asphalt, concrete, or an impervious structure; or 3) upgraded from chip seal to asphalt, concrete, or an impervious structure. Note that if asphalt or concrete has been overlaid by a chip seal, the existing condition should be considered as asphalt or concrete.

Outfall. A point source as defined by 40 CFR 122.2 at the point where a discharge leaves the City's MS4 and enters a surface receiving waterbody or surface receiving waters. Outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other surface waters and are used to convey primarily surface waters (i.e., culverts).

On-site Stormwater Management BMPs. A synonym for Low Impact Development BMPs.

Permeable pavement. Pervious concrete, porous asphalt, permeable pavers or other forms of pervious or porous paving material intended to allow passage of water through the pavement section. It often includes an aggregate base that provides structural support and acts as a stormwater reservoir.

Pervious Surface. Any surface material that allows stormwater to infiltrate into the ground. Examples include lawn, landscape, pasture, native vegetation areas, and permeable pavements.

Person. Any individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, agency of the state, or City government unit, however designated.

Pollution-generating hard surface (PGHS). Those hard surfaces considered to be a significant source of pollutants in stormwater runoff. See the listing of surfaces under pollution-generating impervious surface.

Pollution-generating impervious surface (PGIS). Those impervious surfaces considered to be a significant source of pollutants in stormwater runoff. Such surfaces include those which are subject to: vehicular use; industrial activities (as further defined in the glossary of the SWMMWW); storage of erodible or leachable materials, wastes, or chemicals, and which receive direct rainfall or the run-on or blow-in of rainfall; metal roofs unless they are coated with an inert, non-leachable material (e.g., baked-on enamel coating); or roofs that are subject to venting significant amounts of dusts, mists, or fumes from manufacturing, commercial, or other indoor activities.

Pollution-generating pervious surfaces (PGPS). Any pervious surface subject to 1) vehicular use, 2) industrial activities (as further defined in the glossary of the SWMMWW); or 3) storage of erodible or leachable materials, wastes, or chemicals, and that receive direct rainfall or run-on or blow-in of rainfall, 4) use of pesticides and fertilizers, or 5) loss of soil. Typical PGPS include permeable pavement subject to vehicular use, lawns, and landscaped areas including: golf courses, parks, cemeteries, and sports fields (natural and artificial turf).

Pre-developed condition. The native vegetation and soils that existed at a site prior to the influence of Euro-American settlement. The pre-developed condition shall be assumed to be a forested land cover unless reasonable, historic information is provided that indicates the site was prairie prior to settlement.

Project: Any proposed action to alter or develop a site.

Project site. That portion of a property, properties, and/or right-of-way subject to land-disturbing activities, new hard surfaces, or replaced hard surfaces. For projects that involve land disturbing activity on one or more parcels and/or land disturbing activity in the City right-of-way, the "Project site" includes all areas of land disturbance. If the project is part of a common development plan or sale, the disturbed area of the entire plan shall be used in determining permit requirements.

Rain garden. A non-engineered shallow landscaped depression, with compost-amended native soils and adapted plants. The depression is designed to pond and temporarily store stormwater runoff from adjacent areas, and to allow stormwater to pass through the amended soil profile.

Receiving waterbody or Receiving waters. Naturally and/or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, lakes, wetlands, estuaries, and marine waters, or groundwater, to which a MS4 discharges.

Redevelopment. ECDC 18.30 does not distinguish the difference between new development and redevelopment; all projects in Edmonds shall meet the requirements for new development. Where existing unmitigated surfaces are to remain, the additional "retrofit" requirement per ECDC 18.30.060.D.5.b.i applies.

Replaced hard surface. For structures means the removal and replacement of hard surfaces down to the foundation. For other hard surfaces, it means the removal down to bare soil or base course and replacement.

Replaced impervious surface. For structures, the removal and replacement of any exterior impervious surfaces down to the foundation. For other impervious surfaces, it means the removal down to bare soil or base course and replacement.

Roadway. Traveled hard surface portion of any public or private road or street.

Road-related project. A project that all of, or the majority of, the new or replaced hard surface consist of roadway, shoulders, curbs, gutters, sidewalks, or walkways, either publicly or privately funded. Frontage improvements constructed as a requirement for a development project are not considered a road-related project.

Runoff. Water originating from rainfall and other precipitation that is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes and wetlands, as well as shallow groundwater. It also means the portion of rainfall or other precipitation that becomes surface flow and interflow.

Site. The area defined by the legal boundaries of a parcel or parcels of land that is (are) subject to development. For road projects, or utility projects in the right-of-way, the length of the project site and the right-of-way boundaries define the site. Note that drainage impacts are generally assessed for the "project site", under separate definition.

Slope. The degree of deviation of a surface from the horizontal; measured as a numerical ratio, percent, or in degrees. Expressed as a ratio, the first number is the horizontal distance (run) and the second is the vertical distance (rise), as 2:1. A 2:1 slope is a 50 percent slope. Expressed in degrees, the slope is the angle from the horizontal plane, with a 90-degree slope being vertical (maximum) and 45 degrees being a 1:1 or 100 percent slope.

Soil. The unconsolidated mineral and organic material on the intermediate surface of the earth that serves as a natural medium for the growth of land plants.

Source control BMPs. A structure or operation that is intended to prevent pollutants from coming into contact with storm water through physical separation of areas or careful management of activities that are sources of pollutants. The SWMMWW separates source control BMPs into two types. *Structural source control BMPs* are physical, structural, or mechanical devices, or facilities that are intended to prevent pollutants from entering stormwater. *Operational Source Control BMPs* are non-structural practices that prevent or reduce pollutants from entering stormwater. See Volume IV of the SWMMWW for details.

Stormwater facility. A constructed component of a stormwater drainage system, designed and constructed to perform a particular function or multiple functions. Stormwater facilities include, but are not limited to, pipes, swales, ditches, culverts, street gutters, detention ponds, retention ponds, constructed wetlands, infiltration devices, catch basins, oil/water separators, and biofiltration swales.

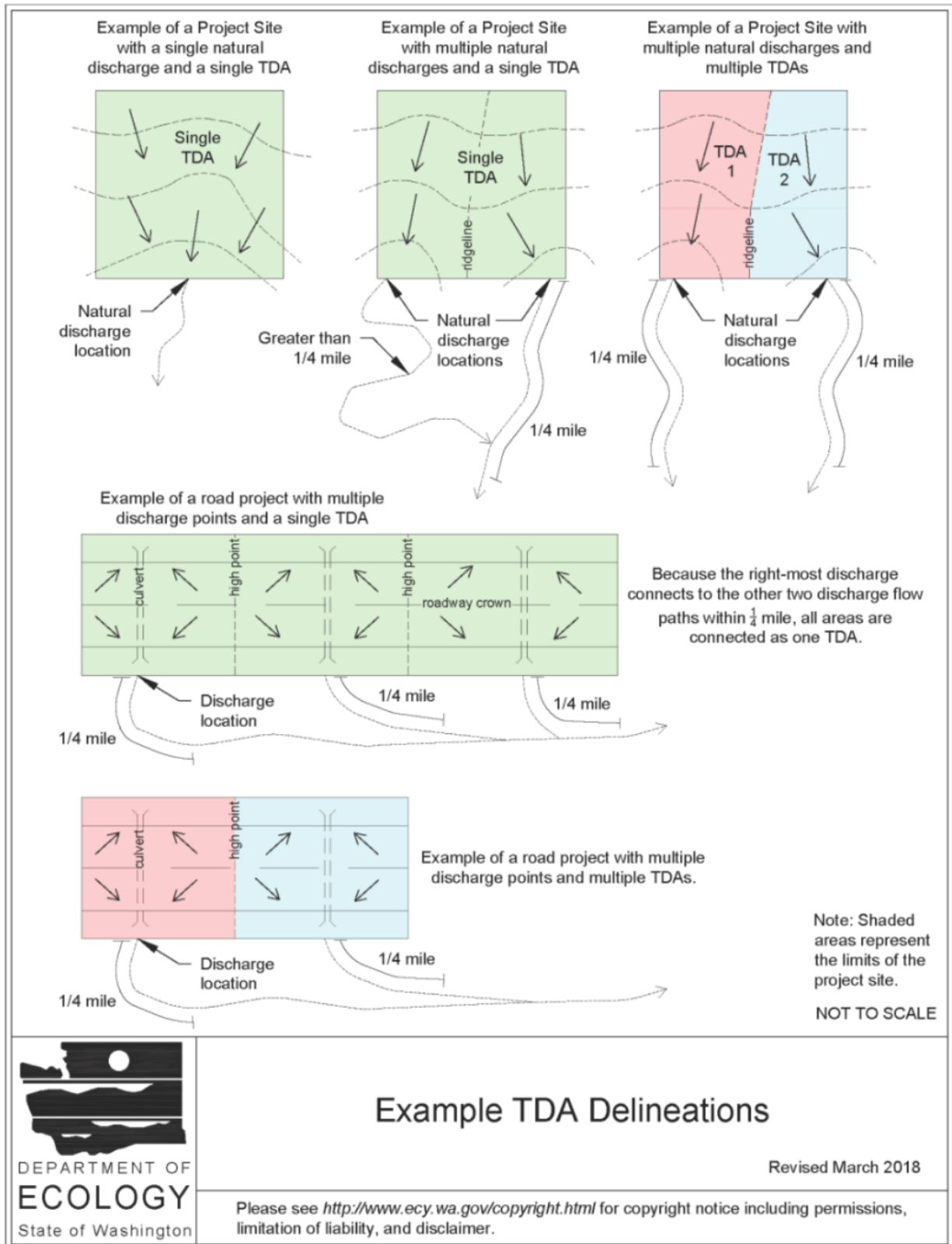
Stormwater Management Manual for Western Washington (SWMMWW). The Washington State Department of Ecology's 2019 Stormwater Management Manual for Western Washington. Referred to as the 2019 SWMMWW.

Stormwater site plan. The comprehensive report containing all of the technical information and analysis necessary for regulatory agencies to evaluate a proposed development project for compliance with stormwater requirements. Contents of the Stormwater Site Plan will vary with the type and size of the project, and individual site characteristics. It includes a Construction Stormwater Pollution Prevention Plan (Construction SWPPP) and a Permanent Stormwater Control Plan (PSC Plan). Guidance on preparing a Stormwater Site Plan is contained in Chapter 3 of Volume I of the SWMMWW.

Stormwater Treatment and Flow Control BMPs/Facilities. Detention facilities, treatment BMPs/facilities, bioretention, vegetated roofs, and permeable pavements that help meet Minimum Requirements No.6 (Treatment), Minimum Requirement No.7 (Flow Control), or both as described in ECDC 18.30.060.

Threshold discharge area. An area within a project site draining to a single natural discharge location or multiple natural discharge locations that combine within one-quarter mile downstream (as determined by the shortest flowpath). The examples in *Figure 1: Example TDA Delineations* below, illustrate this definition. The purpose of this definition is to clarify how the thresholds of this code are applied to project sites with multiple discharge points.

Figure 1: Example TDA Delineations



Vehicular Use. Regular use of an impervious or pervious surface by motor vehicles. The following are subject to regular vehicular use: roads, un-vegetated road shoulders, bike lanes within the traveled lane of a roadway, driveways, parking lots, unrestricted access fire lanes, vehicular equipment storage yards, and airport runways.

The following are not considered subject to regular vehicular use: sidewalks not subject to drainage from roads for motor vehicles, paved bicycle pathways separated from and not subject to drainage from roads for motor vehicles, restricted access fire lanes, and infrequently used maintenance access roads.

Waterbody. Surface waters including rivers, streams, lakes, marine waters, estuaries, and wetlands.

Waters of the state. Includes those waters defined as “waters of the United States” in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State, and “waters of the state” as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the state of Washington.

Wetlands. As defined in ECDC 23.40.005. [Ord. 4026 § 1 (Att. A), 2016].

18.30.020 Authority and Regulation.

A. The Public Works and Utilities Director shall administer this chapter and shall be referred to as the Director.

B. The Director shall have the authority to develop, implement, and enforce policies and procedures to administer and enforce this chapter per ECDC 18.30.110 and 18.30.120, such as the *Edmonds Stormwater Addendum*.

C. The requirements of this chapter are minimum requirements. They do not replace, repeal, abrogate, supersede, or affect any other more stringent requirements, rules, regulations, covenants, standards, or restrictions. Where this chapter imposes requirements that are more protective of human health or the environment than those set forth elsewhere, the provisions of this chapter shall prevail. When this chapter imposes requirements that are less protective of human health or the environment than those set forth elsewhere, the provisions of the more protective requirements shall prevail.

D. The Director shall have the authority to impose additional requirements on a project or site to meet the purpose of this chapter based on site-specific factors including, but not limited to, location, soil conditions, slope, and designated use.

E. Approvals and permits granted under this chapter are not waivers of the requirements of any other laws, nor do they indicate compliance with any other laws. Compliance is still required with all applicable federal, state and local laws and regulations, including rules promulgated under authority of this chapter.

F. Compliance with the provisions of this chapter does not necessarily mitigate all impacts to the environment. Thus, compliance with this chapter should not be construed as mitigating all drainage water or other environmental impacts, and additional mitigation may be required to protect the environment pursuant to other applicable laws and regulations. The primary obligation for compliance with this chapter and for preventing environmental harm on or from property is placed upon the applicant. [Ord. 3792 § 1, 2010].

18.30.030 Applicability.

A. This chapter applies to applications:

1. Submitted on or after July 1, 2022, and
2. Submitted prior to January 1, 2017, which have not started construction by January 1, 2022, and
3. Submitted prior to July 1, 2022, which have not started construction by July 1, 2027.

- B. This chapter applies to the following actions on sites that discharge to the City's MS4 or discharges to waters of the state whether or not a City-issued permit is required:
1. Land-disturbing activity, or
 2. Creation of new hard surfaces, or
 3. Replacement of existing hard surfaces, or
 4. Conversion of pervious surfaces, or
 5. New connections to the City's MS4, or
 6. Any other actions that can increase the volume or rate of stormwater runoff, or cause the generation of pollutants, from the site.

18.30.040 Exemptions.

A. Full Exemptions. The following land uses and land-disturbing activities are exempt from the provisions of this chapter:

1. Forest practices regulated under WAC Title 222, except for Class IV general forest practices that are conversions from timberland to other uses, are exempt from the provisions of the minimum requirements.
2. Commercial agriculture practices that involve working land for production are generally exempt. However, land conversion from timberland to agriculture and the construction of impervious surfaces are not exempt.
3. Construction of drilling sites, waste management pits, and associated access roads, and construction of transportation and treatment infrastructure such as pipelines, natural gas treatment plants, natural gas pipeline compressor stations, and crude oil pumping stations are exempt. Operators are encouraged to implement and maintain best management practices to minimize erosion and control sediment during and after construction activities to help ensure protection of surface water quality during storm events.
4. The following pavement maintenance practices or activities are exempt: pothole and square-cut patching, overlaying existing asphalt or concrete pavement with asphalt or concrete without expanding the area of coverage, shoulder grading, reshaping/regrading drainage systems, crack sealing, resurfacing with in-kind material without expanding the road prism, pavement preservation activities that do not expand the road prism, and vegetation maintenance.

B. Partial Exemptions. The following land uses and land-disturbing activities are partially exempt from the provisions of this chapter:

1. Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics are only subject to Minimum Requirement No. 2, Construction Stormwater Pollution Prevention.
 - a. Utility installations as part of a development project, whether in the right-of-way or on private property, are not considered an underground utility project for the sake of this partial exemption.
2. The following pavement maintenance practices or activities are considered development, and therefore are not categorically exempt.
 - a. Removing and replacing an asphalt or concrete pavement to base course or lower, or repairing the pavement base. These are considered replaced hard surfaces.

- b. Extending the pavement edge without increasing the size of the road prism or paving graveled shoulders: these are considered new hard surfaces.
- c. Resurfacing by upgrading from dirt to gravel, asphalt, or concrete; or upgrading from gravel to asphalt or concrete; or upgrading from a bituminous surface treatment (“chip seal”) to asphalt or concrete: these are considered new hard surfaces.

18.30.050 Administration.

A. Application, Submittals, and Review.

- 1. The Director shall review all plans and all other submittals required by ECDC 18.30.050.A.3 for compliance with this chapter when:
 - a. An application for a City permit is required under all other chapters of ECDC Title 18 or 19, or
 - b. A subdivision application is submitted per ECDC 20.75.040.
- 2. In all other situations when actions under ECDC 18.30.030 apply to a project site, review shall be under a Stormwater permit.
- 3. All stormwater review submittals shall contain, in addition to the information required under any other applicable City code, a Stormwater Site Plan as described in the *Edmonds Stormwater Addendum* (see ECDC 18.30.060) and any other information required by the Director.

B. Inspections.

- 1. The Director shall inspect projects at various stages of the work to determine if they comply with the requirements of this chapter, and enforcement actions shall be taken as necessary. These inspections will include, but not be limited to, the following:
 - a. Prior to site clearing and construction to assess site erosion potential, and
 - b. During construction to verify proper installation and maintenance of required erosion and sediment controls and other approved plan components, and
 - c. All permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every six months until 90 percent of the lots are constructed (or when construction is stopped and the site is fully stabilized) to identify maintenance needs and enforce compliance with maintenance standards as needed, and
 - d. Upon completion of construction and prior to final approval to ensure proper installation of permanent stormwater control facilities and verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities, and
 - e. Post-Construction inspections per ECDC 18.30.090.
- 2. When reasonably required by the Director to accomplish the purpose of this chapter or to comply with local, state or federal law or regulation on stormwater, special inspection or testing shall be performed by the applicant.

C. Fees. Application, review and inspection fees as set in ECDC Chapter 15.00 shall be paid.

18.30.060 Requirements.

A. Documents. The sources of the stormwater management requirements for the City are from the following documents:

1. *Western Washington Phase II Municipal Stormwater Permit*, Appendix 1, modification date August 1, 2019
2. *2019 Stormwater Management Manual for Western Washington (SWMMWW)*
3. *The Edmonds Stormwater Addendum*

In the event of conflicts between the various provisions, the more stringent provision shall apply.

B. Illicit Discharges and Connections. Non-stormwater illicit discharges, including spills, into the MS4, groundwaters, or a water body from any developed or undeveloped lands are prohibited per ECDC Chapter 7.200.

C. Thresholds and Applicability

1. The thresholds outlined in this section are only applicable to ECDC 18.30.060.C. See also the *Edmonds Stormwater Addendum* for supplemental information on thresholds.
 - a. All development shall be required to comply with Minimum Requirement No. 2.
 - b. Category 1 project sites shall comply with Minimum Requirements No. 1 through No. 5. Category 1 includes projects that:
 - i. Result in 2,000 square feet, or greater, of new plus replaced hard surface area, or
 - ii. Have land disturbing activity of 7,000 square feet or greater.
 - c. Category 2 project sites shall comply with Minimum Requirements No. 1 through No. 9. Category 2 includes projects that:
 - i. Result in 5,000 square feet, or greater, of new plus replaced hard surface area, or
 - ii. Convert 0.75 acres, or more, of vegetation to lawn or landscaped areas, or
 - iii. Convert 2.5 acres, or more, of native vegetation to pasture.
2. Additional Requirements for road-related projects. For road-related projects, runoff from the new and replaced hard surfaces (including pavement, shoulders, curbs, and sidewalks) and the converted vegetation areas shall meet all the minimum requirements only 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. Otherwise, the minimum requirements only apply to the new hard surfaces and the converted vegetation areas that exceed the thresholds in (1) above. The project limits shall be defined by the length of the project and the width of the right-of-way.
3. New Connections to the City's MS4 when the proposed connection does not involve activity that meets the definition of development. Sites that are not currently connected to the City's MS4 but that wish to connect directly or indirectly to the City's MS4 may be allowed on a case-by-case basis, subject to City approval. For sites that propose to drain greater than or equal to 2,000 square feet of hard surface area to the City's MS4, the project shall comply with the requirement of this chapter, treating all hard surfaces to be drained to the City system as new hard surfaces, unless applicant can demonstrate that the site will discharge in the same manner and quantities prior to the proposed project. Applicant shall account for natural dispersion and/or infiltration which may be occurring if these new hard surfaces currently drain through pervious areas.
4. Minimum requirements may be met for an equivalent (flow and pollution characteristics) area. The equivalent area may be within the same TDA. If the equivalent area is outside the TDA, or off-site, the equivalent area must drain to the same receiving water and the guidance for equivalent facilities using in-basin transfers must be followed, as detailed in Appendix D of Volume I of SWMMWW.

D. Minimum Technical Requirements. This section describes the minimum technical requirements for stormwater management at development sites.

1. Minimum Requirement No. 1 – Preparation of Stormwater Site Plans

The City shall require a Stormwater Site Plan from all projects meeting the thresholds in ECDC 18.30.060.C. Stormwater Site Plans shall use site-appropriate development principles to retain native vegetation and minimize impervious surfaces to the extent feasible. Stormwater Site Plans shall be prepared in accordance with Chapter 3 of Volume I of the SWMMWW and the requirements in the *Edmonds Stormwater Addendum*.

2. Minimum Requirement No. 2 – Construction Stormwater Pollution Prevention Plan (SWPPP)

a. Thresholds:

- i. All development projects are responsible for preventing erosion and discharge of sediment and other pollutants into receiving waters. Compliance with this minimum requirement can be achieved for an individual site if the site is covered under Ecology's General NPDES Permit for Stormwater Discharges Associated with Construction Activities and fully implementing the requirements of that permit.
- ii. A Construction SWPPP is required for all projects which a) result in 2,000 square feet or more of new plus replaced hard surface area, b) where a structure with an exterior hard surface area of at least 2,000 square feet is being demolished, c) which disturb 7,000 square feet or more of land, or d) when the site falls within the Earth Subsidence Landslide Hazard Area, Landslide Hazard Area or steep slope critical area. Projects that do not meet any of the above criteria are not required to prepare a Construction SWPPP, but must consider all of the elements listed below for Construction SWPPPs and develop controls for all Construction SWPPP elements that pertain to the project site.

b. General Requirements:

- i. The SWPPP shall include a narrative and drawings. All BMPs shall be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative shall include documentation to explain and justify the pollution prevention decisions made for the project. Each of the thirteen elements referenced below must be considered and included in the SWPPP unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the narrative of the SWPPP.
- ii. Clearing and grading activities for developments shall be permitted only if conducted pursuant to an approved site development plan (e.g., building permit, subdivision approval) that establishes permitted areas of clearing, grading, cutting, and filling. These permitted clearing and grading areas and any other areas required to preserve critical or sensitive areas, buffers, native growth protection easements, or tree retention areas as required by the City, shall be delineated on the site plans and the development site.
- iii. The SWPPP shall be implemented beginning with initial land disturbance and until final stabilization. Sediment and Erosion control BMPs shall be consistent with the BMPs contained in Chapter 4 of Volume II of the SWMMWW.

c. Seasonal Work Limitations:

From October 1 through April 30, clearing, grading, and other soil disturbing activities may only be authorized by the City if it can be demonstrated that silt-laden runoff will be prevented from leaving the site through a combination of the following:

- i. Site conditions including existing vegetative coverage, slope, soil type, and proximity to receiving waters; and
- ii. Limitations on activities and the extent of disturbed areas; and
- iii. Proposed erosion and sediment control measures, in accordance with ECDC 18.30.060.D.2.d below.

Based on the information provided and/or local weather conditions, the City may expand or restrict the seasonal limitation on site disturbance. The following activities are exempt from the seasonal clearing and grading limitations, except for sites lying in whole or in part within an earth subsidence and landslide hazard area as defined by ECDC 19.10.020.F:

- i. Routine maintenance and necessary repair of erosion and sediment control BMPs,
 - ii. Routine maintenance of public facilities or existing utility structures that do not expose the soil or result in the removal of the vegetative cover to soil, and
 - iii. Activities where there is one hundred percent infiltration of surface water runoff within the site in approved and installed erosion and sediment control facilities.
- d. Construction SWPPP Elements
- i. Construction SWPPP elements are required in accordance with Chapter 3, Section 3.4.2 of Volume I of the SWMMWW and the requirements in the *Edmonds Stormwater Addendum*.

3. Minimum Requirement No. 3 – Source Control of Pollution

All known, available and reasonable source control BMPs must be required for all projects approved by the City. Source control BMPs must be selected, designed, and maintained in accordance with Volume IV of the SWMMWW. All single family residential projects shall incorporate required applicable source control BMPs from SWMMWW Volume IV which may include,

- i. S401 – BMPs for the Building, Repair, and Maintenance of Boats and Ships
- ii. S411 – BMPs for Landscaping and Lawn/Vegetation Management
- iii. S433 – BMPs for Pools, Spas, Hot Tubs, and Fountains
- iv. S434 – BMPs for Dock Washing
- v. S438 – BMPs for Construction Demolition
- vi. S440 – BMPs for Pet Waste
- vii. S441 – BMPs for Fertilizer Application
- viii. S452 – BMPs for Building, Repair, Remodeling, Painting, and Construction

4. Minimum Requirement No. 4 – Preservation of Natural Drainage Systems and Outfalls

Natural drainage patterns shall be maintained, and discharges from the project site shall occur at the natural location, to the maximum extent practicable. The manner by which runoff is discharged from the project site must not cause a significant adverse impact to downstream receiving waters and down gradient properties. The discharge must have an identified overflow route that is safe and certain, and leads to the ultimate outfall location (such as a receiving water or municipal drainage system). All outfalls require energy dissipation.

To demonstrate compliance with this core requirement, all projects shall submit an off-site qualitative analysis. If an existing problem (or potential future problem after development) is identified, mitigation will be required to prevent worsening of that problem. A quantitative analysis may be required for any project deemed to need additional information or where the project proponent or the City determines that a quantitative analysis is necessary to evaluate the off-site impacts or the capacity of the conveyance system. See the *Edmonds Stormwater Addendum* for additional details on complying with this requirement.

5. Minimum Requirement No. 5 – On-site Stormwater Management

a. Applicability:

On-site Stormwater Management BMPs are required in accordance with the following project thresholds, standards, and lists to infiltrate, disperse, and retain stormwater runoff on-site to the extent feasible without causing flooding or erosion impacts. See the SWMMWW and the *Edmonds Stormwater Addendum* for additional details on On-site Stormwater Management BMP infeasibility.

b. Project Thresholds:

There are six project scenarios outlined below that determine the applicability of Minimum Requirement No. 5 – On-site Stormwater Management. The first four scenarios apply to projects that discharge directly or indirectly to the City's MS4. The fifth scenario applies to project discharges that do not enter the City's MS4. The sixth scenario applies to small projects that discharge to an existing stormwater facility with a surface overflow. Note that more than one of the six scenarios may apply to a given project:

- i. Retrofit. Projects that discharge directly or indirectly to the City's MS4 and that contain existing hard surfaces on the parcel or common plan of development that do not drain to an approved stormwater management facility are required to provide On-site Stormwater Management BMPs to manage a portion of those existing hard surfaces that will remain after project completion. BMPs from List No.1 (See ECDC 18.30.060.D.5.d) shall be applied to a minimum of 25 percent of those existing unmanaged surfaces, but to no more than the area equal to the proposed new plus replaced hard surfaces.

Within the Perrinville Creek basin, the retrofit value shall be increased from 25 percent to 50 percent.

Only for those existing unmanaged hard surfaces that remain after project completion, applicants are not required to evaluate BMPs in priority order or document infeasibility for these existing surfaces (as is required under ECDC 18.30.060.D.5.b [ii] and [iii] below). However, if it is determined that the minimum percentage requirement cannot be met due to BMP infeasibility, documentation of BMP infeasibility is required. In addition, when runoff from unmanaged hard surfaces is mixed with runoff from managed hard surfaces, those BMPs must be selected and designed for all areas which contribute runoff to the BMP (per sections [ii] and [iii] below). See the SWMMWW and the *Edmonds Stormwater Addendum* for additional details on On-site Stormwater Management BMP infeasibility.

This requirement is specific to Minimum Requirement No. 5 only. The surfaces treated by this requirement do not need to be added to project thresholds or mitigated under other minimum requirements. Impervious surfaces disturbed solely for installation of BMPs proposed to satisfy this requirement need not be considered as *replaced* hard surfaces for the project.

- ii. Category 1. Category 1 project sites that discharge directly or indirectly to the City's MS4 and are required to comply with Minimum Requirements No. 1 through No. 5 (per ECDC 18.30.060.C) shall either:

- a. Use On-site Stormwater Management BMPs from List No.1 for all new plus replaced hard surfaces and land disturbed (See ECDC 18.30.060.D.5.d); or
 - b. Demonstrate compliance with the LID Performance Standard (See ECDC 18.30.060.D.5.c). Projects selecting this option cannot use rain gardens. They may choose to use bioretention BMPs as described in the SWMMWW.
- iii. Category 2. Category 2 project sites that discharge directly or indirectly to the City's MS4 and are required to comply with Minimum Requirements No. 1 through No. 9 (per ECDC 18.30.060.C) shall either:
 - a. Use On-site Stormwater Management BMPs from List No.2 for all new plus replaced hard surfaces and land disturbed (See ECDC 18.30.060.D.5.e); or
 - b. Demonstrate compliance with the LID Performance Standard (See ECDC 18.30.060.D.5.c). Projects selecting this option cannot use rain gardens. They may choose to use bioretention BMPs as described in the SWMMWW.
- iv. Direct Discharge Requirement. Projects that discharge directly to Puget Sound through the City's MS4 (in accordance with the restrictions applicable to direct discharges to Puget Sound presented in Section 3.4.7 of Volume I of the SWMMWW) do not have to achieve the LID Performance Standard, nor consider bioretention, rain gardens, permeable pavement, or full dispersion, but must implement BMP T5.13 (Post-Construction Soil Quality and Depth); BMPs T5.10A Downspout Full Infiltration Systems, T5.10B Downspout Dispersion Systems, or T5.10B Perforated Stub-out Connections; and BMP T5.11 Concentrated Flow Dispersion or T5.12 Sheet Flow Dispersion; if feasible for all new plus replaced hard surfaces and land disturbed. See the SWMMWW and the *Edmonds Stormwater Addendum* for additional details on On-site Stormwater Management BMP infeasibility
- v. Projects that do not drain directly or indirectly to the City's MS4 are required to implement one of the following:
 - a. Project sites may discharge to the downstream private property (e.g., projects located above BNSF property) with approval from the downstream property owner(s).
 - b. Project sites may discharge runoff to an on-site system.
 - i. For sites located within earth subsidence and landslide hazard areas or their buffers, a geotechnical design, analysis, and report by a geotechnical engineer is required for the on-site system. On-site Stormwater Management BMPs from List No.1 in ECDC 18.30.060.D.5.d shall be evaluated for all new plus replaced hard surfaces and land disturbed. Projects are not required to evaluate BMPs in priority order or document infeasibility. The project applicant may be subject to an extra permit processing fee for City review of the geotechnical analysis. Projects are required to comply with all other applicable City requirements, such as ECDC 19.10 (earth subsidence and landslide hazard areas).
 - ii. For sites located outside earth subsidence and landslide hazard areas or their buffers, ECDC 18.30.060.D.5.ii and ECDC 18.30.060.D.5.iii shall be followed to evaluate site appropriate BMP's.
 - c. Subject to prior approval by the City, project sites may pump on-site runoff to the City's MS4. A quantitative downstream analysis in accordance with Minimum Requirement No. 4 and the *Edmonds Stormwater Addendum* will be required. If the City's MS4 does not have adequate capacity to receive the applicant's pumped flows, the applicant is

required to install an on-site detention system to store runoff and pump it to the MS4 at an approved rate.

- vi. Projects under 2,000 square feet of new plus replaced hard surfaces which discharge to an existing stormwater facility with a surface overflow, shall expand the stormwater facility size for the proposed new plus replaced hard surfaces based on existing design data.
 - i. Alternatively, or where existing design data cannot be found, the project shall discharge to a separate stormwater facility appropriately sized per the designer.

c. LID Performance Standard

For projects that elect to meet the LID Performance Standard to comply with ECDC 18.30.060.D.b (ii) and (iii), stormwater discharges shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8 percent of the 2-year peak flow to 50 percent of the 2-year peak flow from the project site. Refer to the Standard Flow Control Requirement section in Minimum Requirement No. 7 for information about the assignment of the pre-developed condition. Project sites that must also meet Minimum Requirement No. 7 shall match flow durations between 8 percent of the 2-year flow through the full 50-year flow.

- i. Projects meeting the LID performance criteria are still required to comply with the requirements for BMP T5.13: Post-Construction Soil Quality and Depth, to the maximum extent feasible.
- d. List No.1 for Category 1 project sites: On-site Stormwater Management BMPs for Projects Triggering Minimum Requirements No. 1 through No. 5.

For projects that elect to use List No. 1 to comply with ECDC 18.30.060.D.b (ii), for each surface, consider the BMPs in the order listed for that type of surface. Use the first BMP that is considered feasible. No other On-site Stormwater Management BMP is necessary for that surface. Feasibility shall be determined by evaluation against design criteria, limitations, and infeasibility criteria identified for each BMP in the SWMMWW and the *Edmonds Stormwater Addendum*; and Competing Needs Criteria listed in Chapter 3 of Volume I of the SWMMWW.

Lawn and landscaped areas:

- i. Post-Construction Soil Quality and Depth in accordance with BMP T5.13 in Volume V of the SWMMWW.

Roofs:

- i. Full Dispersion in accordance with BMP T5.30 in Volume V of the SWMMWW.
- ii. Downspout Full Infiltration Systems in accordance with BMP T5.10A in Volume V of the SWMMWW.
- iii. Rain Gardens in accordance with BMP T5.14 or Bioretention in accordance with BMP T7.30 of Volume V of the SWMMWW. The rain garden or bioretention facility must have a minimum horizontal projected surface area below the overflow which is at least 5 percent of the area draining to it.
- iv. Downspout Dispersion Systems in accordance with BMP T5.10B in Volume V of the SWMMWW.
- v. Detention Vaults or Pipes in accordance with the *Edmonds Stormwater Addendum Section 6.3*.

- vi. Perforated Stub-out Connections in accordance with BMP T5.10C in Volume V of the SWMMWW.

Other Hard Surfaces:

- i. Full Dispersion in accordance with BMP T5.30 in Volume V of the SWMMWW.
 - ii. Full Infiltration for equivalent surfaces areas per BMP T5.10A and/or Permeable Pavement in accordance with BMP T5.15 in Volume V of the SWMMWW, or
 - iii. Rain Gardens in accordance with BMP T5.14 or Bioretention in accordance with BMP T7.30 of Volume V of the SWMMWW. The rain garden or bioretention facility must have a minimum horizontal projected surface area below the overflow which is at least 5 percent of the area draining to it.
 - iv. Sheet Flow Dispersion in accordance with BMP T5.12, or Concentrated Flow Dispersion in accordance with BMP T5.11 in Volume V of the SWMMWW.
 - v. Detention Vaults or Pipes in accordance with the *Edmonds Stormwater Addendum Section 6.3*.
- e. List No.2 for Category 2 project sites: On-site Stormwater Management BMPs for Projects Triggering Minimum Requirements No. 1 through No. 9.

For projects that elect to use List No. 2 to comply with ECDC 18.30.060.D.b (iii), for each surface, consider the BMPs in the order listed for that type of surface. Use the first BMP that is considered feasible. No other On-site Stormwater Management BMP is necessary for that surface. Feasibility shall be determined by evaluation against design criteria, limitations, and infeasibility criteria identified for each BMP in the SWMMWW; and Competing Needs Criteria listed in Chapter 3 of Volume I of the SWMMWW.

Lawn and landscaped areas:

- i. Post-Construction Soil Quality and Depth in accordance with BMP T5.13 in Volume V of the SWMMWW.

Roofs:

- i. Full Dispersion in accordance with BMP T5.30 in Volume V of the SWMMWW.
- ii. Downspout Full Infiltration Systems in accordance with BMP T5.10A in Volume V of the SWMMWW.
- iii. Bioretention in accordance with BMP T7.30 of Volume V of the SWMMWW. The bioretention facility must have a minimum horizontal projected surface area below the overflow which is at least 5 percent of the area draining to it.
- iv. Downspout Dispersion Systems in accordance with BMP T5.10B in Volume III of the SWMMWW.
- v. Detention Vaults or Pipes in accordance with the *Edmonds Stormwater Addendum Section 6.3*.
- vi. Perforated Stub-out Connections in accordance with BMP T5.10C in Volume III of the SWMMWW.

Other Hard Surfaces:

- i. Full Dispersion in accordance with BMP T5.30 in Volume V of the SWMMWW.
 - ii. Full infiltration for equivalent surfaces areas per BMP T5.10A in Volume III of the SWMMWW and/or Permeable pavement in accordance with BMP T5.15 in Volume V of the SWMMWW.
 - iii. Bioretention (See Volume V of the SWMMWW) facilities that have a minimum horizontally projected surface area below the overflow which is at least 5 percent of the total surface area draining to it.
 - iv. Sheet Flow Dispersion in accordance with BMP T5.12, or Concentrated Flow Dispersion in accordance with BMP T5.11 in Volume V of the SWMMWW.
 - v. Detention vaults or pipes in accordance with the *Edmonds Stormwater Addendum Section 6.3*.
- f. Overflows: All non-dispersion BMPs sized solely for Minimum Requirement No. 5 are anticipated to have an overflow discharge on a semi-regular basis and therefore requires a sub-surface piped connection directly to the MS4 system.
- i. In order to eliminate a piped overflow connection, the project shall be designed to infiltrate 100 percent of the modeled 100-year storm per continuous modeling. A safe and certain surface overflow path must still be provided and may not negatively impact adjacent properties.
 - ii. In cases where the City MS4 is not in a location where a reasonable connection can be made for a project incapable of fully infiltrating per ECDC 18.30.060.D.5.f.i above:
 - Extensions equal to or less than the length of the project frontage would be anticipated and generally not considered for an exception to 18.30.060.D.5.f.i.
 - Extension exceeding the project frontage length will be considered on a case-by-case basis for an exception to 18.30.060.D.5.f.i.

6. Minimum Requirement No. 6 – Runoff Treatment

- a. Project Thresholds: When assessing road-related projects against the following thresholds, only consider those hard and pervious surfaces that are subject to this minimum requirement per ECDC 18.30.060.C.2. For all other projects, the requirements apply to the new plus replaced hard surfaces and the converted vegetation areas. The following require construction of stormwater treatment facilities:
 - i. Projects in which the total of pollution-generating hard surface (PGHS) is 5,000 square feet or more in a threshold discharge area of the project, or
 - ii. Projects in which the total of pollution-generating pervious surfaces (PGPS) – not including permeable pavements – is 0.75 acres or more in a threshold discharge area, and from which there will be a surface discharge in a natural or man-made conveyance system from the site.
- b. Treatment-Type Thresholds and Facility Sizing:
 - i. Treatment-Type Thresholds in accordance with Section 1.2, Volume III of the SWMMWW. Phosphorus treatment shall be required for projects draining to Hall Creek and Lake Ballinger.
 - ii. Treatment Facility Sizing, including Water Quality Design Storm Volume, Water Quality Design Flow Rate, and Downstream Facilities, in accordance with Chapter 3, Section 3.4.6, Volume I of the SWMMWW.
- c. Treatment Facility Selection, Design, and Maintenance

Stormwater treatment facilities shall be:

- i. Selected in accordance with the process identified in Chapter 1 of Volume III of the SWMMWW,
 - ii. Designed in accordance with the design criteria in Volume V of the SWMMWW, and
 - iii. Maintained in accordance with the maintenance schedule in Appendix V-A in Volume V of the SWMMWW.
- d. Additional Requirements

The discharge of untreated stormwater from pollution-generating hard surfaces to groundwater will not be authorized by the City except for infiltration or dispersion of runoff through BMPs designed and implemented per ECDC 18.30 and the SWMMWW.

7. Minimum Requirement No. 7 – Flow Control

- a. Applicability: Flow control is required on projects meeting the thresholds summarized below to reduce the impacts of stormwater runoff from hard surfaces and land cover conversions.

Flow control in accordance with Minimum Requirement No. 7 is not required for projects that discharge directly to, or indirectly through the City's MS4 to Puget Sound subject to the restrictions of the TDA Exemption (aka. direct discharge exemption) per SWMMWW Section 3.4.7 of Volume I (other minimum requirements may still apply). See ECDC 18.30.060.D.5.b.iv and Section 3.4.7 of Volume I of the SWMMWW for additional restrictions applicable to direct discharges to Puget Sound.

If the discharge drains to a stream that leads to a wetland, or to a wetland that has an outflow to a stream, both this minimum requirement (Minimum Requirement No. 7) and Minimum Requirement No. 8 apply.

- b. Thresholds: When assessing road-related projects against the following thresholds, only consider only those impervious, hard, and pervious surfaces that are subject to this minimum requirement per ECDC 18.30.060.C.2. For all other projects, the requirements apply to the new plus replaced hard surfaces and the converted vegetation areas. The following circumstances require achievement of the standard flow control requirement for western Washington:
- i. Projects in which the total of effective impervious surfaces is 10,000 square feet or more in a threshold discharge area, or
 - ii. Projects that convert 0.75 acres or more of vegetation to lawn or landscape, or convert 2.5 acres or more of native vegetation to pasture in a threshold discharge area, and from which there is a surface discharge in a natural or man-made conveyance system from the site, or
 - iii. Projects that through a combination of hard surfaces and converted vegetation areas cause a 0.15 cubic feet per second (cfs) increase or greater in the 100-year flow frequency from a threshold discharge area as estimated using the Western Washington Hydrology Model or other approved model using a 15-minute time steps.
- c. Standard Flow Control Requirement (applies to discharges directly or indirectly to the City's MS4, except for projects that meet the direct discharge requirements outlined in "a" above and/or projects discharging to Perrinville Creek): Stormwater discharges shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 50 percent of the 2-year peak flow up to the full 50-year peak flow. The pre-developed condition to be matched shall be a forested land cover unless reasonable, historic information is available that indicates the site was prairie prior to settlement (modeled as "pasture" in the Western Washington Hydrology Model). This

standard requirement is waived for sites that will reliably infiltrate all the runoff from hard surfaces and converted vegetation areas.

- d. Perrinville Creek Basin Flow Control Standard (applies to all discharges within the Perrinville Creek Basin) shall be an elevated level of flow control design. Discharges to the Perrinville Creek Basin shall maintain the durations of high flows at their predevelopment levels for all flows greater than one-half of the 2-year flow up to the 50-year flow AND holding the 100-year peak flow rate at its predevelopment level. The predevelopment peak flow rates for the 2-year and 10-year runoff events are also intended to be maintained.
- e. Additional Requirement: Flow Control BMPs shall be selected, designed, and maintained in accordance with Volume III and Volume V of the SWMMWW.

8. Minimum Requirement No. 8 – Wetlands Protection

- a. Applicability: The requirements below apply only to projects whose stormwater discharges into a wetland, either directly or indirectly through a conveyance system.
- b. Thresholds: The thresholds identified in Minimum Requirement No. 6 – Runoff Treatment, and Minimum Requirement No. 7 – Flow Control shall also be applied to determine the applicability of this requirement to discharges to wetlands.
- c. Standard Requirement: Projects shall comply with Appendix I-C of the SWMMWW. The hydrologic analysis shall use the existing land cover condition to determine the existing hydrologic conditions unless directed otherwise by a regulatory agency with jurisdiction.
- d. Additional Requirements: Stormwater treatment and flow control facilities shall not be built within a natural vegetated buffer, except for:
 - i. Necessary conveyance systems as approved by the City; or
 - ii. As allowed in wetlands approved for hydrologic modification or treatment in accordance with Appendix I-C of the SWMMWW.

An adopted and implemented basin plan prepared in accordance with the provisions of Section 7 of Appendix 1 of the Phase II NPDES Municipal Stormwater Permit.

9. Minimum Requirement No. 9 – Operation and Maintenance

An operation and maintenance manual that is consistent with the provisions in Volume I and Volume V of the SWMMWW is required for proposed Stormwater Treatment and Flow Control BMPs/facilities. The party (or parties) responsible for maintenance and operation shall be identified in the operation and maintenance manual. For private facilities approved by the City, a copy of the operation and maintenance manual shall be retained on-site or within reasonable access to the site, and shall be transferred with the property to the new owner. For public facilities, a copy of the operation and maintenance manual shall be retained in the appropriate department. A log of maintenance activity that indicates what actions were taken shall be kept and be available for inspection.

18.30.070 Exceptions, Adjustments, and Appeals.

A. Exceptions.

- 1. The Director may approve a request for an exception to the minimum requirements of this chapter following legal public notice of an application for an exception and of the Director's decision on the application. All legal public notice related to this request for an exception shall be in the manner prescribed in ECDC 20.03.002 and the applicant shall pay all costs to publish the legal public notices required by this provision. The Director shall provide and keep written findings of fact of the decision.

2. The approval of the exception shall only be granted when the applicant demonstrates that the requirement would cause a severe and unexpected economic hardship. To determine whether the requirement imposes a severe and unexpected economic hardship on the project applicant, the applicant must document for City review and approval, all of the following, at a minimum:
 - a. The current, pre-project use of the site; and
 - b. How application of the requirement(s) for which an exception is being requested restricts the proposed use of the site compared to the restrictions that existed prior to adoption of this chapter; and
 - c. The possible remaining uses of the site if the exception were not granted; and
 - d. The possible uses of the site that would have been allowed prior to the adoption of this chapter; and
 - e. A comparison of the estimated amount and percentage of value loss as a result of the requirements versus the estimated amount and percentage of value loss as a result of requirements that existed prior to adoption of the requirements of this chapter; and
 - f. The feasibility of the applicant to alter the project to apply the requirements of this chapter.
3. Any exception must meet the following criteria:
 - a. The exception will not increase risk to the public health and welfare, nor be injurious to other properties in the vicinity and/or downstream, and to the quality of waters of the state; and
 - b. The exception is the least possible exception that could be granted to comply with the intent of the minimum requirements.
4. An exception to the requirements shall only be granted to the extent necessary to provide relief from the economic hardship as determined by the Director, to alleviate the harm or threat of harm to the degree that compliance with the requirement becomes technically feasible, or to perform the emergency work that the Director determines is warranted.
5. The Director may require an applicant to provide additional information at the applicant's expense, including (but not limited to) an engineer's report or analysis.
6. When an exception is granted, the Director may impose new or additional requirements to offset or mitigate harm or the threat of harm that may be caused by granting the exception, or that would have been prevented if the exception had not been granted.

B. Adjustments.

1. The Director may approve a request for adjustments to the requirements of this chapter when the Director finds that:
 - a. The adjustment provides substantially equivalent environmental protection; and
 - b. The objectives of safety, function, environmental protection, and facility maintenance are met, based on sound engineering practices.
2. During construction, the Director may require, or the applicant may request, that the construction of drainage control facilities and associated project designs be adjusted if physical conditions are discovered on the site that are inconsistent with the assumptions on which the approval was based, including (but not limited to) unexpected soil or water conditions, weather-generated problems, or changes in the design of the improved areas; and
3. A request by the applicant for an adjustment shall be submitted to the Director for review and approval prior to implementation. The request shall be in writing and shall provide facts substantiating the

requirements of subsection (C)(1) of this section, and if made during construction, the factors in subsection (C)(2) of this section. Any such modifications made during the construction of drainage control facilities shall be included with the final approved drainage control plan.

C. Appeal.

1. The Director's decision on an application for an exception or adjustment may appeal to the hearing examiner in accordance with a Type II appeal process in ECDC Chapter 20.06.
2. The applicant shall carry the burden of proof.
3. The decision of the hearing examiner is appealable to superior court in accordance with Chapter 36.70C RCW. [Ord. 3792 § 1, 2010].

18.30.080 Access and Covenants.

A. Access. Proper ingress and egress shall be provided to the City to inspect or perform any duty imposed upon the City by this Title. The City shall notify the responsible party in writing of a failure to provide access. If the responsible party fails to respond within seven days from the receipt of notification, the City may order the work required to be completed or otherwise address the cause of improper access. The obligation for the payment of all cost that may be incurred or expended by the City in causing such work to be done shall be imposed on the person holding title to the subject property.

B. Covenants. Maintenance covenants shall be required for each site/lot that will be maintained by a private entity such as an individual, corporation, or homeowner's association. The maintenance covenant shall address or append requirements and responsibilities for long-term management and maintenance the applicable BMP(s). Maintenance covenants shall be as specified in City Engineering Division documents or approved by the Director, and recorded with Snohomish County and on all proper deeds [Ord. 3792 § 1, 2010].

18.30.090 Post Construction Inspection and Maintenance Roles and Responsibilities.

Proper construction inspection and maintenance of stormwater facilities and operational and structural source control BMPs at businesses/sites is essential for the protection of the City's MS4 and the environment.

A. Stormwater Maintenance and Inspection Standards. Stormwater facilities shall be inspected and maintained per the requirements of Volume I and Volume V of the SWMMWW. For systems which do not have a maintenance standard, the owner shall develop a standard based on guidelines from the manufacturer, designer, or a registered professional engineer and submit the standards to the Director for approval. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between inspections is not a violation of this chapter. Operational and structural source control BMPs shall be inspected per the requirements of Volume IV of the SWMMWW.

B. Ownership. Stormwater facilities are either privately or publicly owned and maintained. All stormwater facilities that serve private property are private, unless an agreement between the property owner and the City states otherwise. Stormwater facilities that are privately owned by a homeowner's association or similar organization also are private. The City may offer an incentive program to owners to support the proper maintenance of private stormwater facilities.

C. Public Stormwater Facilities. The City shall be responsible for operating, maintaining, repairing, and replacing public stormwater facilities as funded through the Stormwater Utility.

D. Maintenance of Permanent Stormwater Facilities. All privately owned stormwater facilities or controls shall be maintained by the owner, or the homeowner or owner association ("owner") if one is established as part of a residential or commercial development. All private storm drainage facilities shall be regularly inspected to ensure proper operation and shall monitor the facility or control as required or as set forth in the SWMMWW. The Owner shall maintain records of inspection and maintenance, disposal receipts, and monitoring results. The records shall

catalog the action taken, the person who took it, the date said action was taken, how it was done, and any problems encountered or follow-up actions required. The records shall be made available to the City upon request. The Owner shall maintain a copy of the Stormwater Operations and Maintenance Manual (if required) on site, and shall make reference to such document in real property records filed with Snohomish County, so others who acquire real property served by the privately owned stormwater facilities or controls are notified of their obligation to maintain such facilities or controls.

E. City Inspection of Private Stormwater Facilities. The City shall have the authority to periodically inspect private stormwater facilities, including LID stormwater facilities, for compliance with this chapter.

F. City Inspection of Existing Businesses/Sites. The City shall have the authority to periodically inspect private businesses and sites for compliance with Minimum Requirement No. 3 – Source Control of Pollution (ECDC 18.30.060.D.3).

G. Right of Entry. An authorized representative of the City may enter private property at all reasonable times to conduct inspections, tests or to carry out other duties imposed by a state or Federal program provided that the City makes a good faith effort to notify the property owner or person responsible for the premises prior to entering and presents proper credentials to that person. If entry is refused or cannot be obtained, the Director shall have recourse to every remedy provided by law to secure entry, including but not limited to, obtaining an administrative warrant for entry.

H. Right of Entry for Illicit Discharge. In the event of an illicit discharge from a privately-owned stormwater facility caused by improper maintenance or operation or other circumstance, the provisions of ECC 7.200 shall apply.

I. Maintenance Responsibilities. Upon written notice by the City, a private stormwater facility shall be promptly repaired and/or brought up to applicable standards by the property owner or the person responsible for said facility. If a private stormwater facility serves multiple lots and the responsibility for maintenance has not been specified on a recorded subdivision plat, short plat, or other legal document, maintenance, operation and repair responsibility shall rest with the homeowners' association, if one exists, or otherwise with the properties served by the facility, or finally, with the owners of the property on which the facilities are located. Operational and structural source control BMPs are also required to be repaired and/or brought up to applicable standards by the property owner or the person responsible for the business/site.

J. Disposal of Waste from Maintenance Activities. Disposal of waste from maintenance activities shall be conducted in accordance with the minimum Functional Standards for Solid Waste Handling, Chapter 173-304 WAC, guidelines for disposal of waste materials from storm water maintenance activities, and where appropriate, the Dangerous Waste Regulations, Chapter 173-303 WAC.

18.30.100 Enforcement Procedures.

A. General enforcement action shall be in accordance with this chapter whenever a person has violated any provision of this chapter. The choice of enforcement action is at the discretion of the City. A progressive approach is typically implemented to assist businesses and other entities, persons, and residents in achieving and maintaining compliance with this chapter. This approach emphasizes outreach, education, and technical assistance before taking further enforcement actions or assessment penalties, unless a flagrant, serious, or purposeful violation has occurred.

B. Civil Penalties Adopted. ECDC Chapter 20.110 enforcement procedures are herein adopted in full, as modified in this chapter, with the proviso that repeat offenders or violations deemed an immediate public hazard shall be subject to compliance and appeal timelines as deemed appropriate by the Director based on the specific nature of the violation.

C. Maintenance Orders. The Director shall have the authority to issue to an owner or person an order to maintain or repair a component of a stormwater facility or BMP to bring it into compliance with this chapter, the SWMMWW, the *Edmonds Stormwater Addendum*, and the Edmonds Community Development Code. The order shall include:

1. A description of the specific nature, extent and time of the violation and the damage or potential damage that reasonably might occur;

2. A notice that the violation or the potential violation cease and desist and, in appropriate cases, the specific corrective actions to be taken; and
3. A reasonable time to comply, depending on the circumstances.

D. Civil Penalty. A person who fails to comply with the requirements of this chapter, who fails to conform to an approval or order issued, who undertakes development without first obtaining approval, or who fails to comply with a stop work order issued under these regulations shall be subject to a civil penalty levied in accordance with the provisions of ECDC Chapter 20.110; provided, however, that the appeal process shall commence with a notice of violation as provided in ECDC 20.110.040.B.

1. Civil penalties for code violations shall be imposed in accordance with the provisions of ECDC Chapter 20.110; provided, however, that in addition to the penalties set forth in that chapter, the hearing examiner is authorized to levy a penalty of up to twenty thousand dollars (\$20,000) per occurrence based upon an assessment of the following factors. Where such factors are present, the hearing examiner is authorized to levy such penalty after taking into consideration the full impact of the violation and any mitigating circumstances (see subsection (2) below):
 - a. The violation created a risk to public health and the significance of the risk.
 - b. The violation damaged the environment and the significance of the damage.
 - c. The violation caused damage to public and private property and the significance of such damage.
 - d. A history of similar violations, if any.
 - e. The economic benefit of the violations, if any, to the person or entity responsible for the violations.
2. Mitigating circumstances which may be used to offset or reduce the time resulting from the application of the preceding factors are limited to:
 - a. Full compliance with a voluntary compliance agreement and no history of similar violations.
 - b. Full compliance with a voluntary compliance agreement and a history of one or two similar violations (lesser reduction).
 - c. A "voluntary compliance agreement" is defined as a legally binding agreement entered into between the City and the alleged violators, by which the violator(s) acknowledge the existence of the violation, waive all appeal rights, and agree to and do pay a fine in an amount stipulated to between the violator and the City.
3. If the violation(s) are not corrected as ordered, or a voluntary compliance agreement is not entered into within that time period and no appeal is filed, the penalty for the next 15-day period shall be 150 percent of the initial penalties, and the penalties for the next 15-day period shall be 200 percent of the initial penalties. The intent of this subsection is to increase penalties beyond the maximum penalties stated as an additional means to achieve timely compliance.
4. Unless otherwise provided in a voluntary compliance agreement, civil penalties shall be paid within 30 days of service of the notice and order or stop work order if not appealed. Payment of the civil penalties assessed under this chapter does not relieve a person found to be responsible for a code violation of his or her duty to correct the violation or to pay any and all civil penalties or other cost assessments issued pursuant to this chapter.
5. The City may suspend immediate payment of civil penalties if the person responsible for a code violation has entered into a voluntary compliance agreement. Penalties shall begin to accrue again pursuant to the terms of the voluntary compliance agreement if any necessary permits applied for are denied, canceled or not pursued, if corrective action identified in the voluntary compliance agreement is not completed as specified, or if the property is allowed to return to a condition similar to that condition which gave rise to the voluntary compliance agreement; provided, however, that additional penalties shall not be imposed

until additional notice and opportunity for hearing have been provided in accordance with ECDC Chapter 20.110.

6. Civil penalties assessed create joint and several personal obligations in all persons responsible for a code violation.

E. The determination of the hearing examiner issued in accordance with ECDC Chapter 20.110 shall be appealable to the Snohomish County superior court in accordance with the provisions of Chapter 36.70C RCW.

F. The remedies provided for in this section shall not be exclusive. The City may also use other civil and administrative remedies available to it, including but not limited to the remedies provided in ECDC Title 19 and the state building and dangerous buildings codes.