**CITY OF BUCKLEY, WASHINGTON**

**ORDINANCE NO. 26-16**

**AN ORDINANCE OF THE CITY OF BUCKLEY, PIERCE COUNTY, WASHINGTON, AMENDING TITLE 14 OF THE BUCKLEY MUNICIPAL CODE TO INCORPORATE LOW IMPACT DEVELOPMENT (LID) – REQUIREMENTS PURSUANT TO THE CITY'S PHASE II STORMWEATER NPDES PERMIT ISSUED BY WASHINGTON STATE DEPARTMENT OF ECOLOGY.**

**WHEREAS,** the Federal Environmental Protection Agency's Phase II regulations went into effect in early 2003 and apply to all regulated small municipal separate storm sewer systems; and

**WHEREAS,** on January 17, 2007 Washington State Department of Ecology (DOE) issued two Phase II Municipal Stormwater Permits, one for western Washington and one for eastern Washington. The Phase II permit for western Washington covers at least 80 cities and five counties; and

**WHEREAS,** DOE determined that the City of Buckley was to be included under this Stormwater Phase II NPDES Permit coverage; and

**WHEREAS,** DOE first issued the Western Washington Phase II Permit in 2007 and modified it in 2009. DOE reissued it unmodified on August 1, 2012 to be effective through July 31, 2013. At the same time, Ecology also reissued an updated 2013 to 2018 permit on August 1; and

**WHEREAS,** the newly reissued Phase II Permit require that each municipality meet the requirements of their NPDES Permit. Each municipality's permit for discharging stormwater is designed to reduce the discharge of pollutants, protect water quality, and meet the requirements of the Clean Water Act; and

**WHEREAS,** the newly reissued Phase II Permits require stormwater managers to develop a new "revised" *Stormwater Management Plan (SWMP)* that is a "forward only" looking document that describes what the City will do (not what was done in the past) during the next permit phase; and

**WHEREAS,** the Phase II Municipal Permits require that permittees develop—and annually update—a Stormwater Management Program (SWMP) document to submit with the annual report; and

**WHEREAS,** in compliance with the DOE Phase II NPDES Stormwater Permit requirement the City Council adopted Ordinance No. 09-16, March 22, 2016, establishing the newly revised 2016 Stormwater Management Program; and

**WHEREAS,** Task CTRL 9 – 13 of the Stormwater Management Program requires that the City review, identify, adopt and implement codes, rules, standards, and revisions to our existing standards which incorporate LID principles and LID BMPs; and

**WHEREAS,** per City Council direction City staff and City engineers have reviewed all of the City's development codes, standards and regulations and identified changes that incorporate LID principles and LID BMPs to comply with the Phase II NPDES; and

**WHEREAS,** code language needing revision was identified in BMC Titles 12, 13, 14 and 19 of the Buckley Municipal Code and Chapter 4 of the City's Design Guidelines and Public Works Standards; and

**WHEREAS,** due to ongoing review and incorporating additional changes to the various titles, each section will be presented for amendment separately; and

**WHEREAS,** the City Council desires to amend BMC Title 14 to incorporate the LID principles and LID BMPs to comply with the Phase II NPDES requirements;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BUCKLEY, PIERCE COUNTY, WASHINGTON, DO ORDAIN AS FOLLOWS:**

**Section 1.** Chapter 14.30 of the Buckley Municipal Code is amended to read as follows:

**14.30.011 Findings of fact.**
The City Council adopts the findings of the model stormwater management ordinance provided by the Department of Ecology that:

(1) Stormwater pollution is a problem associated with land utilization and development and the common occurrence of potential pollutants such as pesticides, fertilizers, petroleum products, pet wastes and numerous others. Land utilization and development is also known to increase both the volume and duration of peak flows. The resulting erosion, scouring and deposition of sediment affect the ecological balance in the stream. Sedimentation and stormwater pollution cause diversity of species to decrease and allow more tolerant (and usually less desirable) species

to remain. Stormwater pollution can cause or contribute to restrictions on public use of the waters within Buckley.

(2) An expanding population and increased development of land have led to: water quality degradation through discharge of nutrients, metals, oil and grease, toxic materials, and other detrimental substances including, without limitation, insect and weed control compounds; drainage and storm and surface water runoff problems within the city; and safety hazards to both lives and property posed by uncontrolled water runoff on streets and highways.

(3) Continuation of present stormwater management practices, to the extent that they exist, will lead to water quality degradation, erosion, and property damage, and endanger the health and safety of the inhabitants of the city.

(4) In the future such problems and dangers will be reduced or avoided if existing properties and future developers, both private and public, provide for stormwater quality and quantity controls.

(5) Stormwater quality and quantity controls can be achieved when land is developed or redeveloped by implementing appropriate best management practices (BMPs).

(6) Best management practices can be expected to perform as intended only when properly designed, constructed and maintained.

**14.30.012 Need.**
The City Council adopts the needs set forth in the model stormwater management ordinance provided by the Department of Ecology that this chapter is necessary in order to:

(1) Minimize or eliminate water quality degradation;

(2) Prevent erosion and sedimentation in creeks, streams, ponds, lakes and other water bodies;

(3) Protect property owners adjacent to existing and developing lands from increased runoff rates which could cause erosion of abutting property;

(4) Preserve and enhance the suitability of waters for contact recreation, fishing, and other beneficial uses;

(5) Preserve and enhance the aesthetic quality of the water;

(6) Promote sound development policies which respect and preserve City surface water, ground water and sediment;

(7) Ensure the safety of City roads and rights-of-way;

(8) Decrease stormwater-related damage to public and private property from existing and future runoff;

(9) Protect the health, safety and welfare of the inhabitants of the city.

**14.30.013 Purpose.**
The City Council adopts the purpose set forth in the model stormwater management ordinance provided by the Department of Ecology that the provisions of this chapter are intended to guide

and advise all who conduct new development or redevelopment within city. The provisions of this chapter establish the minimum level of compliance which must be met to permit a property to be developed or redeveloped within the city. It is the purpose of this chapter to:

(1) Minimize water quality degradation and sedimentation in streams, ponds, lakes, wetlands and other water bodies;

(2) Minimize the impact of increased runoff, erosion and sedimentation caused by land development and maintenance practices;

(3) Maintain and protect ground water resources;

(4) Minimize adverse impacts of alterations on ground and surface water quantities, locations and flow patterns;

(5) Decrease potential landslide, flood and erosion damage to public and private property;

(6) Promote site planning and construction practices that are consistent with natural topographical, vegetational and hydrological conditions;

(7) Maintain and protect the City stormwater management infrastructure and those downstream;

(8) Provide a means of regulating clearing and grading of private and public land while minimizing water quality impacts in order to protect public health and safety; and

(9) Provide minimum development regulations and construction procedures which will preserve, replace or enhance, to the extent practical, existing vegetation to preserve and enhance Buckley.

(10) The provisions of this chapter are also intended to guide and advise all residential and commercial property owners within the City on regulations pertaining to the introduction of pollutants into the stormwater system to protect water quality within the city.

**14.30.020 Definitions.**
For the purposes of this chapter, the following definitions shall apply:

"AKART" means all known, available, and reasonable methods of prevention, control and treatment. See also the State Water Pollution Control Act, RCW 90.48.010 and 90.48.520.

"American Public Works Association" or "APWA" means the adopted edition of the Washington State Chapter of the American Public Works Association.

"Approval" means the proposed work or completed work conforms to this chapter in the opinion of the administrator.

"As-graded" means the extent of surface conditions on completion of grading.

"Basin plan" means a plan that assesses, evaluates, and proposes solutions to existing and potential future impacts to the beneficial uses of, and the physical, chemical, and biological properties of waters of the state within a basin. Basins typically range in size from1 to 50 square miles. A plan should include but not be limited to recommendations for:

(a) Stormwater requirements for new development and redevelopment;

(b) Capital improvement projects;

(c) Land Use management through identification and protection of critical areas, comprehensive land use and transportation plans, zoning regulations, site development standards, and conservation areas;

(d) Source control activities including public education and involvement, and business programs;

(e) Other targeted stormwater programs and activities, such as maintenance, inspections, and enforcement;

(f) Monitoring;

(g) An implementation schedule and funding strategy.

"Bedrock" means the more or less solid rock in place either on or beneath the surface of the earth. It may be soft, medium or hard and have a smooth or irregular surface.

"Bench" means a relatively level step excavated into earth material on which fill is to be placed.

"Best management practice" or "BMP" means the schedule of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts of stormwater. BMPs are listed and described in the Stormwater Management Manual.

"Certified Erosion and Spill Control Lead (CESCL)" means an individual who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by the Department of Ecology. 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.

"Civil engineer" means a professional engineer licensed in the state of Washington in civil engineering who is experienced and knowledgeable in the practice of soils engineering.

"Civil engineering" means the application of the knowledge of the forces of nature, principles of mechanics and the properties of materials to the evaluation, design and construction of civil works for the beneficial uses of mankind.

"Clean Water Act" means the federal Water Pollution Control Act (33 U.S.C. Section 1251 et seq.), and any subsequent amendments thereto.

"Clearing" means the destruction and removal of vegetation by manual, mechanical or chemical methods.

"Commercial agriculture" means those activities conducted on lands defined in RCW 84.34.020(2), and activities involved in the production of crops or livestock for wholesale 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.

"Compaction" means densification of a fill by mechanical means.

"Construction Stormwater Pollution Prevention Plan" or "construction SWPPP" means a plan that includes a narrative, drawings, and details for describing construction practices, stabilization techniques, and structural BMPs that are to be implemented to prevent erosion and sedimentation, and control other pollutants at a construction site.

"Conveyance system" means the drainage facilities, both natural and manmade, which collect, contain, and provide for the flow of surface and stormwater from the highest points on the land down to receiving water. The natural elements of the conveyance system include swales and small drainage courses, streams, rivers, lakes, and wetlands. The human-made elements of the conveyance system include gutters, ditches, pipes, channels, and most retention/detention facilities.

"Critical areas" mean, at a minimum, areas which include wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, including unstable slopes, and associated areas and ecosystems.

"Design storm" means a prescribed hyetograph and total precipitation amount (for a specific duration recurrence frequency) used to estimate runoff for a hypothetical storm of interest or concern for the purposes of analyzing existing drainage, designing new drainage facilities or assessing other impacts of a proposed project on the flow of surface water. (A hyetograph is a graph of percentages of total precipitation for a series of time steps representing the total time during which the precipitation occurs.)

"Detention" means the release of stormwater runoff from the site at a slower rate than it is collected by the stormwater facility system, the difference being held in temporary storage.

"Detention facility" means 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.

"Director" means the City administrator or designated appointee.

"Drainage basin" means a geographic and hydrologic subunit of a watershed.

"Earth material" means any rock, natural soil or fill and/or any combination thereof. Earth material shall not be considered topsoil used for landscape purposes. Topsoil used for landscaped purposes shall comply with ASTM D 5268 specifications. Engineered soil/landscape systems are also defined independently.

"Ecology" means the Washington State Department of Ecology.

"Effective impervious area" means those impervious surfaces that are connected via sheet flow or discrete conveyance to a drainage system. Impervious surfaces 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 Stormwater Management Manual for Western Washington (2012, amended in 2014); 2) residential roof runoff is infiltrated in accordance with Downspout Full Infiltration System sin BMP 5.10A Volume III; or 3) approved continuous runoff modeling methods indicate that the entire runoff file is infiltrated.

"Engineering geologist" means a geologist experienced and knowledgeable in engineering geology.

"Engineering geology" means the application of geologic knowledge and principles in the investigation and evaluation of naturally occurring rock and soil for use in the design of civil works.

"Erosion" means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep and detachment and movement of soil or rock fragments by water, wind, ice or gravity.

"Erosion and sedimentation control" means any temporary or permanent measures taken to reduce erosion; control siltation and sedimentation; and ensure that sediment-laden water does not leave the site

"Excavation" means the mechanical removal of earth material.

"Fill" means a deposit of manmade and natural material placed by artificial means.

"Forest practice" means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting or processing timber, including, but not limited to:

(a) Road and trail construction;

(b) Harvesting, final and intermediate;

(c) Precommercial thinning;

(d) Reforestation;

(e) Fertilization;

(f) Prevention and suppression of diseases and insects;

(g) Salvage of trees;

(h) Brush control.

"Frequently flooded areas" means the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program or as defined by the City.

"Geologically hazardous areas" means areas that, because of their susceptibility to erosion, sliding, earthquake or other geological events, are not suited to the siting of commercial, residential or industrial development consistent with public health or safety concerns.

"Grade" means the slope of a road, channel or natural ground; the finished surface of a canal bed, roadbed, top of embankment, or bottom of excavation; or any surface prepared for the support of construction such as paving or the laying of a conduit.

(To) "grade" means to finish the surface of a canal bed, roadbed, and top of embankment or bottom of excavation.

"Gradient terrace" means an earth embankment or a ridge-and-channel constructed with suitable spacing and an acceptable grade to reduce erosion damage by intercepting surface runoff and conducting it to a stable outlet at a stable nonerosive velocity.

"Ground water" means water in a saturated zone or stratum beneath the surface of land or a surface water body.

"Hazardous materials" means any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical or infectious characteristics may cause, or significantly contribute to a substantial present or potential hazard to human health, safety, property or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

"Hydroperiod" means the seasonal occurrence of flooding and/or soil saturation; it encompasses depth, frequency, duration, and seasonal pattern of inundation.

"Hyperchlorinated" means water that contains more than 10 mg/liter chlorine.

"Illicit connection" means any manmade conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

"Illicit discharge" means non-stormwater discharge to stormwater drainage systems that cause or contribute to a violation of state water quality, sediment quality or ground water quality standards, including but not limited to sanitary sewer connections, industrial process water, interior floor drains, car washing, and greywater systems.

"Impervious surface" means a non-vegetated surface area which 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 pavement, gravel roads, packed

earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater. Open, uncovered retention/detention facilities shall not be considered as 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.

"Interflow" means that portion of rainfall that infiltrates into the soil and moves laterally through the upper soil horizons until intercepted by a stream channel or until it returns to the surface, for example, in a roadside ditch, wetland, spring or seep. Interflow is a function of the soil system depth, permeability, and water-holding capacity.

"Land clearing" or "clearing" means the destruction or removal of vegetation from a site by physical, mechanical, chemical or other means. This does not mean mowing, landscape maintenance or pruning consistent with accepted horticultural and arboricultural practices, which does not impair the health or survival of the trees and associated vegetation.

"Land disturbing activity" means any activity that results in a movement of earth or a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, 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" means a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

"Manual" or "Stormwater Management Manual" means the latest edition of the Washington State Department of Ecology "Stormwater Management Manual for Western Washington" ( 2012 as amended in 2014) prepared by Ecology, which manual is adopted by reference as though set forth herein in full with modifications provided herein.

"Mitigation" means, in the following order of preference:

(a) Avoiding the impact altogether by not taking a certain action or part of an action;

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

(c) Rectifying the impact by repairing, rehabilitating or restoring the affected environment;

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and

(e) Compensation for the impact by replacing, enhancing or providing substitute resources or environments.

"Municipal separate storm sewer system" or "MS4" means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(a) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to water of the United States;

(b) Designed or used for collecting and conveying stormwater;

(c) Which is not a combined sewer; and

(d) Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2.

"National Pollutant Discharge Elimination System Stormwater Discharge Permit" or "NPDES permit" means a permit issued by EPA (or by a state under authority delegated pursuant to 33 U.S.C. Section 1342(b)) that authorizes the discharge of pollutants to the waters of the state, whether the permit is applicable on an individual, group, or general area-wide basis.

"Native vegetation" means vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur 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 location" means the location of those channels, swales, and other non-manmade conveyance systems as defined by the first documented topographic contours existing for the subject property, either from maps or photographs, or such other means as appropriate. In the case of outwash soils with relatively flat terrain, no natural location of surface discharge may exist.

"New development" means the following activities: land disturbing activities; structural development, including construction, installation of a building or other structure; creation of hard surfaces; Class IV – general forest practices that are conversions from timber land to other uses; and subdivision and short subdivision of land as defined in RCW 58.17.020. All other forest practices and commercial agriculture are not considered new development. Projects meeting the definition of redevelopment shall not be considered new development.

"Nonstormwater discharge" means any discharge to the storm drain system that is not composed entirely of stormwater.

"On-site stormwater management BMPs" means a synonym for low impact development BMPs.

"Permanent Erosion and Sediment Control" means the continuous on-site and off-site control measures that are needed to prevent accelerated erosion, sedimentation or related pollution from occurring after completion of the grading activity or the construction project.

"Permanent stormwater quality control (PSQC) plan" means a plan which includes permanent BMPs for the control of pollution from stormwater runoff after construction and/or land disturbing activity has been completed.

"Person" means any individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, agency of the state, or local government unit, however designated.

"Pollutant" means any substance which, when added to water, would contaminate or alter the chemical, physical, or biological properties of any waters of the city's drainage system or of the state. This includes a change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the city's drainage system or of the state and will or is likely to create a nuisance. It also includes any substance which renders such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial use, or to livestock, wild animals, birds, fish, or other aquatic life.

"Pollution" means contamination or other alteration of the physical, chemical or biological properties of waters of the state, including change in temperature, taste, color, turbidity or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

"Pollution-Generating Hard Surface (PGHS) means 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)" means 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; or 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 Surface (PGPS)" means any nonimpervious surface subject to vehicular use, industrial activities (as further defined in the Manual); or storage of erodible or leachable materials, wastes or chemicals, and that receive direct rainfall or run-on or blow-in of rainfall, use of pesticides, fertilizers, or 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).

"Predeveloped condition" means the native vegetation and soils that existed at a site prior to the influence of Euro-American settlement. The predeveloped 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.

"Premises" means any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

"Project site" means that portion of a property, properties, or right-of-way subject to land disturbing activities, new hard surfaces, or replaced hard surfaces.

"Properly Functioning Soil System (PFSS)" means an equivalent to engineered soil/landscape system. This can also be a natural system that has not been disturbed or modified.

"Redevelopment," on an already substantially developed site (i.e., has 35 percent or more of existing hard surface coverage), means the creation or addition of hard surfaces, structural development including construction, installation or expansion of a building footprint or addition or replacement of a structure, and/or replacement of a hard surface that is not part of a routine maintenance activity, and land disturbing activities.

"Regional retention/detention system" means a stormwater quantity control structure designed to correct existing excess surface water runoff problems of a basin or sub-basin. The area downstream has been previously identified as having existing or predicted significant and regional flooding and/or erosion problems. This term is also used when a detention facility is used to detain stormwater runoff from a number of new developments or areas within a catchment.

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

"Retention/Detention Facility (R/D)" means a type of drainage facility designed either to hold water for a considerable length of time and then release it by evaporation, plant transpiration, and/or infiltration into the ground; or to hold surface and stormwater runoff for a short period of time and then release it to the surface and stormwater management system.

"Sediment" means fragmented material that originates from weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

"Sedimentation" means the process by the depositing or formation of sediment.

"Site" means the area defined by the legal boundaries of a parcel or parcels of land subject to new development or redevelopment. For road projects, the length of the project site and the right-of-way boundaries define the site.

"Slope" means 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-degree being a 1:1 or 100 percent slope.

"Soil" means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. See also topsoil, engineered soil/landscape system, and properly functioning soil system.

"Source control BMP" means a structure or operation that is intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. The Manual 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 BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater.

"Stormwater" means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels or pipes or other features of a stormwater system into a defined surface water body, or a constructed infiltration facility.

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

"Stormwater site plan" means the comprehensive report containing all of the technical information and analysis necessary to evaluate a proposed new development or redevelopment 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).

"Surface and stormwater" means 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 ground water.

"Threshold discharge area" means an on-site area draining to a single natural discharge location or multiple natural discharge locations that combine within one-quarter mile downstream (as determined by the shortest flow path).

"Topsoil" means the upper portion of a soil, usually dark colored and rich in organic material. It is more or less equivalent to the upper portion of an A horizon in an ABC soil.

"Treatment BMP or facility" means a BMP that is intended to remove pollutants from stormwater. A few examples of treatment BMPs are wetponds, oil/water separators, biofiltration swales and constructed wetlands.

"Unstable slopes" mean those sloping areas of land which have in the past exhibited, are currently exhibiting, or will likely in the future exhibit mass movement of earth.

"Vegetation" means all organic plant life growing on the surface of the earth.

"Water body" means surface waters including rivers, streams, lakes, marine waters, estuaries and wetlands.

"Water quality design storm" means the 24-hour rainfall amount with a six-month return frequency. It is commonly referred to as the six-month, 24-hour design storm.

"Watershed" means a geographic region within which water drains into a particular river, stream, or body of water as identified and numbered by the State of Washington Water Resource Inventory Areas (WRIAs) as defined in Chapter 173-500 WAC.

"Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including but not limited to irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds and landscape amenities or those wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

"Wetpool" means a pond or constructed wetland that stores runoff temporarily and whose normal discharge location is elevated so as to maintain a permanent pool of water between storm events.

**14.30.030 Abrogation and greater restrictions.**
It is not intended that this chapter repeal, abrogate or impair any existing regulations, easements, covenants or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

**14.30.032 Interpretation.**
The provisions of this chapter shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of this chapter.

**14.30.040 Applicability.**
When any provision of any other chapter of the Buckley Municipal Code conflicts with this chapter, that which provides more environmental protection shall apply unless specifically provided otherwise in this chapter.

The City is authorized to adopt written procedures for the purpose of carrying out the provisions of this chapter.

(1) Actions. All persons taking any of the following actions or applying for any of the following permits and/or approvals may be required to submit for approval a stormwater site plan with their application and/or request:

(a) Creation or alteration of new or additional impervious surfaces;

(b) New development;

(c) Redevelopment;

(d) Building permit;

(e) Subdivision approval;

(f) Short subdivision approval;

(g) Binding site plan approval;

(h) Commercial, industrial, or multifamily site plan approval;

(i) Planned unit development;

(j) Development within or adjacent to critical areas;

(k) Franchise utility right-of-way use or other right-of-way use;

(l) Conditional and special use permits;

(m) Substantial development permit; and

(n) Logging, clearing, grading and other land disturbing activities.

(2) Exemptions. The following are exempt from the provisions of the Minimum Requirements described in BMC 14.30.051:

(a) Forest practices regulated under WAC Title 222, except for Class IV – general forest practices that are conversions from timber land to other uses;

(b) Commercial agricultural practices involving working the land for production are generally exempt. However, the conversion from timberland to agriculture, and the construction of impervious surfaces are not exempt; and

(c) The following road maintenance practices 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, and vegetation maintenance. See the Manual for road activities not exempt.

(3) Beginning Construction. Commencement of construction work under any of the actions, permits, or applications set forth in this section shall not begin until the stormwater site plan is approved.

(4) Preparation of Plan. Guidance on preparing a stormwater site plan is contained in BMC 14.30.052.

(5) Conflicting Requirements. When any provision of any other chapter of the City code and state or federal requirements conflicts with this chapter, that which provides more environmental protection shall apply unless specifically provided otherwise in this chapter.

(6) Minimum Requirements. The provisions of this chapter shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of this chapter.

**14.30.050 Minimum requirement thresholds.**

(1) New Development. The Minimum Requirements discussed in this section are described in BMC 14.30.051. All new development shall be required to comply with Minimum Requirement No. 2. In addition, new development that exceeds certain thresholds shall be required to comply with additional Minimum Requirements described in BMC 14.30.051 as follows:

(a) The following new development shall comply with Minimum Requirement Nos. 1 through 5 for the new and replaced hard surfaces and the land disturbed:

(i) Development that results in 2,000 square feet or greater, of new, replaced, or new plus replaced hard surface area; or

(ii) Development that includes land disturbing activity of 7,000 square feet or greater.

(b) The following new development shall comply with Minimum Requirement Nos. 1 through 9:

(i) Results in 5,000 square feet or greater, of new plus replaced hard surface area; or

(ii) Converts three-fourths acres or more of native vegetation to lawn or landscaped areas; or

(iii) Converts two and one-half acres or more of native vegetation to pasture.

(2) Redevelopment. All redevelopment shall be required to comply with Minimum Requirement No. 2. In addition, redevelopment that exceeds certain thresholds shall be required to comply with additional Minimum Requirements described in BMC 14.30.051 as follows:

(a) The following redevelopment shall comply with Minimum Requirement Nos. 1 through 5 for the new and replaced hard surfaces and the land disturbed:

(i) The new, replaced, or total of new plus replaced hard surfaces is 2,000 square feet or more; or

(ii) Redevelopment that includes land disturbing activity of 7,000 square feet or more.

(b) The following redevelopment shall comply with Minimum Requirement Nos. 1 through 9 for the new impervious surfaces and converted pervious surfaces:

(i) Redevelopment that adds 5,000 square feet or more of new hard surfaces; or

(ii) Redevelopment that converts three-fourths acres or more of native vegetation to lawn or landscaped areas; or

(iii) Redevelopment that converts two and one-half acres or more of native vegetation to pasture.

(c) Commingled Stormwater. If the runoff from the new impervious surfaces and converted pervious surfaces is not separated from runoff from other surfaces on the project site, the stormwater treatment facilities must be sized for the entire flow that is directed to them.

(d) Equivalent Area. The director may allow the Minimum Requirements to be met for an equivalent (flow and pollution characteristics) area within the same site. For public road projects, the equivalent area does not have to be within the project limits, but must drain to the same receiving water.

(e) Road Related Projects. Runoff from the replaced and new impervious surfaces (including pavement, shoulders, curbs, and sidewalks) shall meet all the Minimum Requirements 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. The project limits shall be defined by the length of the project and the width of the right-of-way.

(f) Regional Facilities. The director may exempt or institute a stop-loss provision for redevelopment projects from compliance with Minimum Requirements for on-site stormwater management, treatment, flow control, and wetlands protection as applied to the replaced hard surfaces if the City has adopted a plan and schedule that fulfills those requirements in regional facilities.

**14.30.051 Minimum Requirements.**
This section identifies the 9 Minimum Requirements for stormwater management applicable to new development and redevelopment sites. See the Manual for additional details related to each of the Minimum Requirements.

(1) Minimum Requirement No. 1 – Preparation of Stormwater Site Plans. All projects meeting the thresholds in BMC 14.30.050 shall prepare a Stormwater Site Plan in accordance with Chapter 3 of Volume 1 of the Manual.

(2) Minimum Requirement No. 2 – Construction Stormwater Pollution Prevention (SWPP). All new development and redevelopment shall comply with construction SWPP Element Nos. 1 through 13 below.

Projects in which the new, replaced, or new plus replaced hard surfaces total 2,000 square feet or more or disturb 7,000 square feet or more of land must prepare a construction SWPP plan (SWPPP) as part of the stormwater site plan. Each of the 13 elements must be considered and included in the construction SWPPP unless the director decides that site conditions render the element unnecessary and the exemption from that element is clearly justified in the narrative of the SWPPP.

Projects that add or replace less than 2,000 square feet of hard surface or disturb less than 7,000 square feet of land are not required to prepare a construction SWPPP, but must consider all of the 13 elements of construction stormwater pollution prevention and develop controls for all elements that pertain to the project site.

(a) Element 1 – Preserve Vegetation/Mark Clearing Limits.

(i) Prior to beginning land disturbing activities, including clearing and grading, all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area should be clearly marked, both in the field and on the plans, to prevent damage and off-site impacts.

(ii) The duff layer, native top soil, and natural vegetation shall be retained in an undisturbed state to the maximum degree practicable. Clearing, grading, and other soil disturbances should be limited to the building footprint when possible. Disturbed soils shall be amended with compost to restore or improve upon their original infiltration potential.

(iii) Plastic, metal, or stake wire fence may be used to mark the clearing limits.

(b) Element 2 – Establish Construction Access.

(i) Access Limited. Construction vehicle access and exit shall be limited to one route if possible.

(ii) Tracking Sediment. Access points shall be stabilized with quarry spall or crushed rock or other equivalent BMPs to minimize the tracking of sediment onto public roads.

(iii) Wheel Wash. Wheel wash or tire baths should be located on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.

(iv) Clean Public Roads. Public roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from roads by shoveling, pickup, or sweeping and shall be transported to a controlled sediment disposal area. Street washing will be allowed only after sediment is removed in this manner.

(v) Street Wash Water. Street wash wastewater shall be controlled by pumping back on site, or otherwise be prevented from discharging into systems tributary to state surface waters.

(c) Element 3 – Control Flow Rates.

(i) General. Properties and waterways downstream from development sites shall be protected from erosion and the associated discharge of turbid waters due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the project site.

(ii) Downstream Analysis. Downstream analysis is necessary if changes in flows could impair or alter conveyance systems, stream banks, bed sediment or aquatic habitat.

(iii) BMPs Functional. Stormwater retention/detention facilities shall be constructed as one of the first steps in grading. Detention facilities shall be functional prior to construction of site improvements (e.g., hard surfaces).

(iv) Additional Flow Standards. The director may require pond designs that provide additional or different stormwater flow control if necessary to address local conditions or to protect properties and waterways downstream from erosion due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the project site.

(v) Permanent Infiltration Ponds. If permanent infiltration ponds are used for flow control during construction, these facilities should be protected from siltation during the construction phase.

(d) Element 4 – Install Sediment Controls.

(i) Natural Vegetation. The duff layer, native top soil, and natural vegetation shall be retained in an undisturbed state to the maximum extent practicable.

(ii) Sediment Control Design. Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.

Minimize Sediment Discharges. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle size expected to be present on the site.

(iv) BMPs Functional. Construct sediment control BMPs (sediment ponds, traps, filters, etc.) as one of the first steps in grading. These BMPs shall be functional before other land disturbing activities take place.

(v) Sediment Removal. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard in Element No. 3.

(vi) Location. Locate BMPs intended to trap sediment on-site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.

(vii) Outlet Structures. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

(e) Element 5 – Stabilize Soils.

(i) General. All exposed and unworked soils shall be stabilized by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base early on areas to be paved, and dust control.

(ii) Volume and Velocity. Control stormwater volume and velocity within the site to minimize soil erosion.

(iii) Stormwater Discharges. Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlet and to minimize downstream channel and streambank erosion.

(iv) Seasonal Work Limitations. From October 1st through April 30th, no soils shall remain exposed and unworked for more than two days. From May 1st to September 30th, no soils shall

remain exposed and unworked for more than seven days.[1] This condition applies to all soils on site, whether at final grade or not.

(v) Soil Stabilization. Soil stabilization measures selected should be appropriate for the time of year, site conditions, estimated duration of use, and potential water quality impacts that stabilization agents may have on downstream waters or ground water. Stabilize soils at the end of the shift before a holiday or weekend of needed based on the weather forecast

(vi) Soil Stockpiles. Soil stockpiles must be stabilized and protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways and drainage channels.

ii) Soil Exposure. Minimize the amount of soil exposed during construction activity, minimize disturbance to steep slopes and minimize soil compaction and, unless infeasible, preserve topsoil.

(f) Element 6 – Protect Slopes.

(i) Cut and Fill Slopes. Design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).

ii) Diverted Flows. Divert off-site stormwater (run-on) or ground water away from slopes and disturbed areas with interceptor dikes, pipes and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.

(v) Collected Flows. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion. Temporary pipe slope drains must handle the peak volumetric flow rate calculated using a 10-minute time step from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year and1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rate from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped" area.

(vii) Excavation. Excavated material shall be placed on the uphill side of trenches, consistent with safety and space considerations.

(viii) Check Dams. Check dams shall be placed at regular intervals within constructed channels that are cut down a slope.

(g) Element 7 – Protect Drain Inlets.

(i) General. All storm drain inlets made operable during construction shall be protected so that stormwater runoff shall not enter the conveyance system without first being filtered or treated to remove sediment.

Storm Drain Inlets. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).

(h) Element 8 – Stabilize Channels and Outlets.

(i) General. All temporary on-site conveyance channels shall be designed, constructed and stabilized to prevent erosion from the following expected peak flows. Channels shall handle the expected peak flow as calculated from a 10-minute time step from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, one-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis shall use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis shall use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model to predict flows, bare soil areas should be modeled as "landscaped area."

(ii) Stabilization. Stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream reaches shall be provided at the outlets of all conveyance systems.

(i) Element 9 – Control Pollutants.

(i) General. All pollutants, including waste materials and demolition debris, that occur on site during construction shall be handled and disposed of in a manner that does not cause contamination of stormwater.

(ii) Design and Installation. Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants.

(iii) Vandalism. Cover, containment, and protection from vandalism shall be provided for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.

v) Equipment Maintenance. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.

v) Wheel Wash. Wheel wash, or tire bath wastewater, shall be discharged to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland application, or to the sanitary sewer, only if expressly allowed by the local sewer district authority.

(vi) Agricultural Chemicals. Application of fertilizers and pesticides shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations shall be followed for application rates and procedures.

(vii) pH Management. Management of pH-modifying sources shall prevent contamination of runoff and stormwater collected on the site. These sources include, but are not limited to, bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, and concrete pumping and mixer washout waters. Adjust the pH of stormwater if necessary to prevent violations of water quality standards. Obtain written approval from Ecology before using chemical treatment other than CO2 or dry ice to adjust ph.

(viii) Concrete Washout. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams. Do not dump excess concrete on-site, except in designated concrete washout areas. Concrete spillage or concrete discharge to surface waters of the State is prohibited.

(j) Element 10 – Control Dewatering.

(i) General. All foundation, vault, and trench dewatering water, which have similar characteristics to stormwater runoff at the site, shall be discharged into a controlled conveyance system, prior to discharge to a sediment trap or sediment pond. Channels must be stabilized, as specified in Element No. 8.

(ii) Clean Water. Clean, nonturbid dewatering water, such as well-point ground water, can be discharged to systems tributary or directly into surface waters of the State, as specified in Element No. 8, provided the dewatering flow does not cause erosion or flooding of the receiving waters. These clean waters should not be routed through sediment ponds with stormwater. Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.

(iii) Contaminated Water. Highly turbid or otherwise contaminated dewatering water shall be handled separately from stormwater at the site.

(iv) Other Disposal Options. Depending on site constraints, dewatering may include: infiltration; transport off site in vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters; on-site treatment using chemical treatment or other suitable treatment technologies; sanitary sewer discharge with [local sewer district approval] approval if there is no other option, or a sedimentation bag that discharges to a ditch or swale for small volumes of localized dewatering.

(k) Element 11 – Maintain BMPs.

(i) General. All temporary and permanent erosion and sediment control BMPs shall be maintained and repaired as needed to assure continued performance of their intended function. All maintenance and repair shall be conducted in accordance with BMPs specifications.

i) Remove BMPs. All temporary erosion and sediment control BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

(l) Element 12 – Manage the Project.

(i) Phasing of Construction. Development projects shall be phased where feasible in order to prevent, to the maximum extent practicable, the transport of sediment from the project site during construction. Revegetation of exposed areas and maintenance of that vegetation shall be an integral part of the activities for any phase. Clearing and grading activities for developments shall be permitted only if conducted pursuant to an approved site development plan (e.g., subdivision approval) that establishes permitted areas of clearing, grading, cutting, and filling. When establishing these permitted clearing and grading areas, consideration should be given to minimizing removal of existing trees, especially conifers, and minimizing disturbance/compaction of native soils except as needed for building purposes. 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 may be required by the director, shall be delineated on the site plans and the development site.

(ii) Seasonal Work Limitations. From October 1st through April 30th, clearing, grading, and other soil disturbing activities shall only be permitted if shown to the satisfaction of the director that silt-laden runoff will be prevented from leaving the construction site through a combination of the following:

(A) Site conditions including existing vegetative coverage, slope, soil type and proximity to receiving waters; and

(B) Limitations on activities and the extent of disturbed areas; and

(C) Proposed erosion and sediment control measures.

(iii) Modify Seasonal Limits. Based on the information provided, and/or local weather conditions, the director may expand or restrict the seasonal limitation on site disturbance. If, during the course of any construction activity or soil disturbance during the seasonal limitation period, silt-laden runoff leaving the construction site causes a violation of the surface water quality standard or if clearing and grading limits or erosion and sediment control measures shown in the approved plan are not maintained, the director shall take enforcement action according to BMC 14.30.803.

(vii) Exemptions. The following activities are exempt from the seasonal clearing and grading limitations:

(A) Routine maintenance and necessary repair of erosion and sediment control BMPs;

(B) 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

(C) Activities where there is 100 percent infiltration of surface water runoff within the site in approved and installed erosion and sediment control facilities.

(viii) Coordination with Other Contractors. The primary project applicant shall evaluate, with input from utilities and other contractors, the stormwater management requirements for the entire project, including the utilities, when preparing the construction SWPPP.

(ix) Inspection. All BMPs shall be inspected, maintained, and repaired as needed to assure continued performance of their intended function.

(x) Certified Professional. A certified erosion and sediment control lead (CESCL) shall be identified in the construction SWPPP and shall be on site or on call at all times. The CESCL shall have the skills to assess the site conditions that could impact the quality of stormwater and the effectiveness of erosion and sediment control measures. They shall examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. They shall evaluate the effectiveness of BMPs and determine of it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges. Problems shall be corrected by reviewing the SWPPP for compliance with the 13 construction SWPPP elements and making appropriate revisions within 7 days of the inspection. The CESCL shall also immediately begin the process of fully implementing and maintaining appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, the construction site operator may request an extension within the initial 10-day response period. BMP implementation and maintenance shall be documented in a site log. The CESCL shall inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. The CESCL may reduce the inspection frequency for temporary stabilized, inactive sites to once every calendar month.

(xi) Sampling. Sampling and analysis of the stormwater discharges from a construction site may be necessary on a case-by-case basis to ensure compliance with standards. Monitoring and reporting requirements may be established by the director when necessary.

(xii) Modify SWPPP. Whenever inspection and/or monitoring reveals that the BMPs identified in the construction SWPPP are inadequate, due to the actual discharge of or potential to discharge a significant amount of any pollutant, the SWPPP shall be modified, as appropriate, in a timely manner.

(xiii) Construction SWPPP. The construction SWPPP shall be retained on site or within reasonable access to the site. The construction SWPPP shall be modified whenever there is a significant change in the design, construction, operation, or maintenance of any BMP.

(m) Element 13 – Protect Low Impact Development BMPs.

(i) General. Protect all bioretention and rain garden BMPs from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the bioretention and/or rain garden BMPs. Restore the BMPs to their fully functioning condition if they accumulate sediment during construction. Restoring the BMP must include removal of sediment and any sediment-laden bioretention/raingarden soils, and replacing the removed soils with soils meeting the design specification.

(ii) Compaction. Prevent compacting bioretention and rain garden BMPs by excluding construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.

(iii) Erosion Control. Control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Muddy construction equipment shall not be allowed on the base material or pavement. Sediment-laden runoff shall not be allowed onto permeable pavements or base materials.

(iv) Pavement. Pavement fouled with sediments or no longer passing an initial infiltration test must be cleaned using procedures in accordance with this manual or the manufacturer's procedures.

(v) Heavy Equipment. All heavy equipment shall be kept off existing soils under LID facilities that have been excavated to final grade to retain the infiltration rate of the soils.

(3) Minimum Requirement No. 3 – Source Control of Pollution. All known, available and reasonable source control BMPs shall be applied to all projects. Source control BMPs shall be selected, designed, and maintained according to the Manual.

(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 all runoff is discharged from the project site must not cause a significant adverse impact to downstream receiving waters and downgradient properties. All outfalls require energy dissipation.

The manner by which runoff is discharged from the project site must not cause a significant adverse impact to downstream receiving waters and downgradient properties. Downstream properties shall not be unreasonably burdened with increased flow rates, negative impacts or unreasonable changes in manner of flow from upstream properties. Drainage problems shall not be transferred from one location to another. However, downstream properties cannot block natural or existing runoff through their site and shall accept runoff from upstream properties.

Planning and design of drainage systems shall not be based on the premise that stormwater can be transferred from one basin to another unless part of an adopted City regional drainage system plan.

The flow of storm runoff shall be maintained within its natural drainage course unless reasonable use is demonstrated otherwise. When stormwater is discharged into an existing drainage course, the peak discharge into the water course shall not adversely affect or cause damage to property along the drainage course now or in the future based on existing zoning. Erosional impacts due to concentration of flows and increased flow durations shall be evaluated and mitigated.

(5) Minimum Requirement No. 5 – On-Site Stormwater Management. Projects shall employ On-site Stormwater Management BMPs in accordance with the following projects thresholds, standards, and lists to infiltrate, disperse, and retain stormwater runoff on-site to the extent feasible without causing flooding or erosion impacts.

(a) Exemptions. Projects qualifying as flow control exempt in accordance with Minimum Requirement No. 7 (Flow Control) do not have to achieve the LID performance standard, nor consider bioretention, rain gardens, permeable pavement, and full dispersion if using List No. 1 or List No. 2. However, those projects must implement BMP T5.13: Post-Construction Soil

Quality and Depth; BMP T5.10A: Downspout Full Infiltration or BMP T5.10B: Downspout Dispersion Systems or BMP T5.10C: Perforated Stub-out Connections; and BMP T5.11: Concentrated Flow Dispersion or BMP T5.12: Sheet Flow Dispersion, if feasible.

(b) Thresholds.

(i) Projects triggering only Minimum Requirements No. 1 through No. 5 shall either:

(A) Use On-site Stormwater Management BMPs from List #1 for all surfaces within each type of surface in List No. 1; or

(B) Demonstrate compliance with the LID Performance Standard. Projects selecting this option cannot use Rain Gardens. They may choose to use Bioretention BMPs as described in Chapter V-7 - Infiltration and Bioretention Treatment Facilities to achieve the LID Performance Standard (Manual).

(ii) Projects triggering Minimum Requirements No. 1 through No. 9, shall meet the requirements in Minimum Requirement No. 5: On-site Stormwater Management. New development and redevelopment shall meet the Low Impact Development Performance Standard and BMP T5.13: Post-Construction Soil Quality and Depth; or List No. 2 (applicant option).

(c) Low Impact Development Performance Standard. Stormwater discharges shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8% of the 2-year peak flow to 50% of the 2-year peak flow. 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 – flow control - must match flow durations between 8% of the 2-year flow through the full 50-year flow.

(i) List No. 1: On-site Stormwater Management BMPs for Projects Triggering Minimum Requirements No. 1 through No. 5. 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 Manual and Competing Needs Criteria listed in Chapter V-5 - On-Site Stormwater Management (Manual).

(A) Lawn and landscaped areas. Post-Construction Soil Quality and Depth in accordance with BMP T5.13: Post-Construction Soil Quality and Depth.

(B) Roofs:

(1) Full Dispersion in accordance with BMP T5.30: Full Dispersion, or Downspout Full Infiltration Systems in accordance with BMP T5.10A: Downspout Full Infiltration

(2) Rain Gardens in accordance with BMP T5.14A: Rain Gardens, or Bioretention in accordance with BMP T7.30: Bioretention Cells, Swales, and Planter Boxes. The rain garden or bioretention facility must have a minimum horizontal projected surface area below the overflow which is at least 5% of the area draining to it.

(3) Downspout Dispersion Systems in accordance with BMP T5.10B: Downspout Dispersion Systems

(4) Perforated Stub-out Connections in accordance with BMP T5.10C: Perforated Stub-out Connections

(C) Other Hard Surfaces:

(1) Full Dispersion in accordance with BMP T5.30: Full Dispersion

(2) Permeable pavement in accordance with BMP T5.15: Permeable Pavements, or Rain Gardens in accordance with BMP T5.14A: Rain Gardens, or Bioretention in accordance with BMP T7.30: Bioretention Cells, Swales, and Planter Boxes. The rain garden or bioretention facility must have a minimum horizontal projected surface area below the overflow which is at least 5% of the area draining to it.

(3) Sheet Flow Dispersion in accordance with BMP T5.12: Sheet Flow Dispersion, or Concentrated Flow Dispersion in accordance with BMP T5.11: Concentrated Flow Dispersion.

(ii) List No. 2: On-site Stormwater Management BMPs for Projects Triggering Minimum Requirements No. 1 through No. 9. 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 this manual; and Competing Needs Criteria listed in Chapter V-5 - On-Site Stormwater Management.

(A) Lawn and landscaped areas. Post-Construction Soil Quality and Depth in accordance with BMP T5.13: Post-Construction Soil Quality and Depth.

(B) Roofs:

(1) Full Dispersion in accordance with BMP T5.30: Full Dispersion, or Downspout Full Infiltration Systems in accordance with BMP T5.10A: Downspout Full Infiltration.

(2) Bioretention (See BMP T7.30: Bioretention Cells, Swales, and Planter Boxes) facilities that have a minimum horizontally projected surface area below the overflow which is at least 5% of the total surface area draining to it.

(3) Downspout Dispersion Systems in accordance with BMP T5.10B: Downspout Dispersion Systems

(4) Perforated Stub-out Connections in accordance with BMP T5.10C: Perforated Stub-out Connections

(C) Other Hard Surfaces:

(1) Full Dispersion in accordance with BMP T5.30: Full Dispersion

(2) Permeable pavement[2] in accordance with BMP T5.15: Permeable Pavements

(3) Bioretention BMPs (BMP T7.30: Bioretention Cells, Swales, and Planter Boxes) that have a minimum horizontally projected surface area below the overflow which is at least 5% of the total surface area draining to it.

(4) Sheet Flow Dispersion in accordance with BMP T5.12: Sheet Flow Dispersion, or Concentrated Flow Dispersion in accordance with BMP T5.11: Concentrated Flow Dispersion

(6) Minimum Requirement No. 6 – Runoff Treatment.

(a) Thresholds. The following require construction of stormwater treatment facilities:

(i) Projects in which the total of effective, pollution-generating hard surface (PGIS) 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 three-quarters of an acre or more in a threshold discharge area, and from which there is a surface discharge in a natural or manmade conveyance system from the site.

(b) Treatment Facility Sizing. Treatment facilities shall be sized for the entire area that drains to them, even if some of those areas are not pollution-generating, or were not included in the project site threshold decisions of the treatment threshold decisions of this Minimum Requirement.

(i) The water quality design volume shall be predicted from a 24-hour storm with a 6-month return frequency. Wetpool facilities are sized based upon the volume of runoff predicted through use of the Natural Resource Conservation Service curve number equations in Chapter 2 Of Volume III of the Manual, for the 6-month,24-hour storm. Alternatively, when using an approved continuous runoff model, the water quality design storm volume shall be equal to the simulated daily volume that represents the upper limit of the range of daily volumes that accounts for 91% of the entire runoff volume over a multi-decade period of record.

(ii) Water quality design flow rate:

(A) For preceding detention facilities or when detention facilities are not required. The flow rate shall be the flow rate at or below which 91% of the runoff volume, as estimated by an approved continuous runoff model, will be treated. Design criteria for treatment facilities are assigned to achieve the applicable performance goal (e.g., 80% TSS removal) at the water quality design flow rate. At a minimum, 91% of the total runoff volume, as estimated by an approved

continuous runoff model, must pass through the treatment facility(ies) at or below the approved hydraulic loading rate for the facility(ies) .

(B) Downstream of Detention Facilities. The water quality design flow rate must be the full 2-year release rate from the detention facility.

(iii) The director may allow alternative methods if they identify volumes and flow rates that are at least equivalent.

(c) Treatment Facility Selection, Design, and Maintenance. Stormwater treatment facilities shall be:

(i) Selected in accordance with the process identified in Chapter 4 of Volume I of the Manual;

(ii) Designed in accordance with the design criteria in Volume V of the Manual; and

(iii) Maintained in accordance with the maintenance schedule in Volume V of the Manual.

(d) Untreated Stormwater. Direct discharge of untreated stormwater from pollution-generating hard surfaces to ground water is prohibited, except for the discharge achieved by infiltration or dispersion of runoff through use of on-site stormwater management BMPs, in accordance with Chapter 5, Volume V and Chapter 7, Volume V (Manual); or by infiltration through soils meeting the soil suitability criteria in Chapter 3 of Volume III (Manual).

(7) Minimum Requirement No. 7 – Flow Control.

(a) Applicability.

(i) Flow Control. Projects must provide flow control to reduce the impacts of stormwater runoff from hard surfaces and land cover conversions. The requirement below applies to projects that discharge stormwater directly, or indirectly through a conveyance system, into a fresh waterbody.

(ii) Exempt Areas. Flow control is not required for projects that discharge directly to, or indirectly to a water listed in Appendix I-E of the Manual subject to the following restrictions:

(A) The area must be drained by a conveyance system that is comprised entirely of manmade conveyance elements (e.g., pipes, ditches, outfall protection, etc.) and extends to the ordinary high water line of the receiving water; and

(B) Any erodible elements of the manmade conveyance system for the area must be adequately stabilized to prevent erosion; and

(C) Surface water from the area must not be diverted from or increased to an existing wetland, stream, or near-shore habitat sufficient to cause a significant adverse impact.

(D) Direct discharge to the exempt receiving water does not result in the diversion of drainage from any perennial stream classified as Types 1, 2, 3, or 4 in the State of Washington Interim

Water Typing System, or Types "S", "F", or "Np" in the Permanent Water Typing System, or from any category I, II, or III wetland.

(E) Flow splitting devices or drainage BMPs are applied to route natural runoff volumes from the project site to any downstream Type 5 stream or category IV wetland:

(1) Design of flow splitting devices or drainage BMPs will be based on continuous hydrologic modeling analysis. The design will assure that flows delivered to Type 5 stream reaches will approximate, but in no case exceed, durations ranging from 50% of the 2-year to the 50-year peak flow.

(2) Flow splitting devices or drainage BMPs that deliver flow to category IV wetlands will also be designed using continuous hydrologic modeling to preserve pre-project wetland hydrologic conditions unless specifically waived or exempted by regulatory agencies with permitting jurisdiction.

When assessing a project against the following thresholds, only those impervious, hard and pervious surfaces that are subject to this minimum requirement shall be considered.

(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 three-fourths acres or more of native vegetation to lawn or landscape, or convert two and one-half 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 manmade conveyance system from the site; or

(iii) Projects that, through a combination of effective hard surfaces and converted vegetation areas, cause a one-tenth cubic foot per second increase in the 100-year flow frequency from a threshold discharge area as estimated using the Western Washington Hydrology Model or other model and one-hour time steps (or a 0.15 cfs increase using 15-minute time steps) authorized by the director.

(v) The director may require flow control for individual lots due to sensitive areas, historical flooding, or other relevant reasons as deemed necessary by the director.

(c) Standard Requirement.

(i) Peak Flows. Stormwater discharges shall match developed discharge durations to predeveloped durations for the range of predeveloped discharge rates from 50 percent of the two-year peak flow up to the full 50-year peak flow.

(ii) Predeveloped Condition. The predeveloped condition to be matched shall be a forested land cover unless:

(A) Reasonable, historic information is provided that indicates the site was prairie prior to settlement (modeled as "pasture" in the Western Washington Hydrology Model); or

(B) The drainage area of the immediate stream and all subsequent downstream basins have had at least 40 percent total impervious area since 1985. In this case, the predeveloped condition to

be matched shall be the existing land cover condition. Appendix I-F in the Manual provides a map which depicts those areas which meet this criterion. Where basin-specific studies determine a stream channel to be unstable, even though the above criterion is met, the predeveloped condition assumption shall be the "historic" land cover condition, or a land cover condition commensurate with achieving a target flow regime identified by an approved basin study.

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

(iv) Flow Control Facility Selection, Design, and Maintenance. Flow control facilities shall be selected, designed, and maintained in accordance with Volume III of the Manual.

(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 for discharges to wetlands.

(c) Standard Requirement. Projects shall comply with Guide Sheets No. 1 through No. 3 in Appendix I-D of the Manual. The hydrologic analysis shall use the existing land cover condition to determine the existing hydrologic conditions unless directed otherwise by the Director.

(d) Additional Requirements. The standard requirement does not excuse any discharge from the obligation to apply whatever technology is necessary to comply with state water quality standards, Chapter 173-201A WAC, or state ground water standards, Chapter 173-200 WAC or successor regulations. Stormwater treatment and flow control facilities shall not be built within a natural vegetated buffer, except for: necessary conveyance systems as approved by the director; or as allowed in wetlands approved for hydrologic modification and/or treatment in accordance with the Manual. An adopted and implemented basin plan, or a total maximum daily load (TMDL) may be used to develop requirements for wetlands that are tailored to a specific basin.

(9) Minimum Requirement No. 9 – Operation and Maintenance. An operation and maintenance manual that is consistent with the Manual shall be provided for all proposed stormwater facilities and BMPs, and the party (or parties) responsible for maintenance and operation shall be identified. At private facilities, a copy of the 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 manual shall be retained by the director or other appropriate location. A log of maintenance activity that indicates what actions were taken shall be kept and be available for inspection by the director.

**14.30.052 Contents of a stormwater site plan.**

(1) Site Plan Required. All projects for new development or redevelopment, which exceed the thresholds of 2,000 square feet for hard surfaces or 7,000 square feet for land disturbance, must prepare a stormwater site plan.

(2) Contents of Plan. Contents of a stormwater site plan will vary with the type and size of the project and individual site characteristics. Two major elements included in a stormwater site plan are a construction stormwater pollution prevention plan and a permanent stormwater control plan. The following documents are to be included in a stormwater site plan:

(a) Project overview;

(b) Existing conditions summary;

(c) Off-site analysis report;

(d) Construction stormwater pollution prevention plan;

(e) Permanent stormwater control plan;

(f) Special reports and studies;

(g) Other permits;

(h) Operation and maintenance manual; and

(i) Bond quantities worksheet.

(3) Detailed Information in Manual. Additional details on the content and the procedures for preparation of a stormwater site plan, a construction stormwater pollution prevention plan, and a permanent stormwater quality control plan are included in the Manual.

**14.30.055 Exemptions.**
Commercial agriculture, except for the conversion of timberland to agriculture or the construction of impervious surfaces, and 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 this chapter. Pavement maintenance and underground utility projects as defined in Section 2.2, Volume I of the Manual are also exempt.

**14.30.061 Adoption of manuals.**
The following manuals are hereby adopted by reference as currently published and as hereinafter amended:

(1) Department of Ecology Stormwater Management Manual for Western Washington (2012);

(2) Low Impact Development Technical Guidance Manual for Puget Sound (LID Manual) by Washington State University and Puget Sound Partnership; and

(3) City of Buckley Development Guidelines and Public Works Standards (Engineering Design and Construction Standards).

**14.30.062 Stormwater best management practices – BMPs.**
(1) General. BMPs shall be used to control pollution from stormwater. BMPs shall be used to comply with the standards in this chapter. BMPs are in the Manual.

(2) Experimental BMPs. In those instances where appropriate BMPs are not in the Manual, experimental BMPs should be considered. Experimental BMPs are encouraged as a means of solving problems in a manner not addressed by the Manual in an effort to improve stormwater quality technology. Experimental BMPs must be approved in accordance with the approval process outlined in the Manual.

**14.30.063 Illicit discharges.**

Illicit discharges to stormwater drainage systems are prohibited. No person shall throw, drain, or otherwise discharge into the MS4 any pollutants or water containing pollutants, other than stormwater.

(1) The following categories of nonstormwater discharges are prohibited unless the stated conditions are met:

(a) Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted, if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.

(b) Discharges from lawn watering and other irrigation runoff. These shall be minimized through, at a minimum, public education activities and water conservation efforts.

(c) Dechlorinated swimming pool, spa and hot tub discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary, volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

(d) Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. Discharges from these sources shall be minimized through public education activities in accordance with the permit. At active construction sites, street sweeping must be performed prior to washing the street.

(e) Other nonstormwater discharges. The discharges shall be in compliance with the requirements of the stormwater pollution prevention plan reviewed by the city, which addresses control of construction site dewatering discharges.

(f) Solid or liquid wastes thrown, drained or otherwise discharged directly or indirectly into the municipal storm drain system and/or surface and ground waters. Examples of prohibited contaminants include, but are not limited to, the following:

(i) Trash or debris.

(ii) Construction materials.

(iii) Petroleum products including but not limited to oil, gasoline, grease, fuel oil and heating oil.

(iv) Antifreeze and other automotive products.

(v) Metals in either particulate or dissolved form.

(vi) Flammable or explosive materials.

(vii) Radioactive material.

(viii) Batteries.

(ix) Acids, alkalis, or bases.

(x) Paints, stains, resins, lacquers, or varnishes.

(xi) Degreasers and/or solvents.

(xii) Pesticides, herbicides, or fertilizers.

(xiii) Steam cleaning wastes.

(xiv) Soaps, detergents, or ammonia.

(xv) Domestic animal wastes.

(xvi) Recreational vehicle waste.

(xvii) Animal carcasses.

(xviii) Food wastes.

(xix) Bark and other fibrous materials.

(xx) Lawn clippings, leaves, or branches.

(xxi) Silt, sediment, concrete, cement or gravel.

(xxii) Dyes (discharged without prior notification and approval of the city).

(xxiii) Chemicals not normally found in uncontaminated water.

(xxiv) Any other process-associated discharge except as otherwise allowed in this section.

(xxv) Any hazardous material or waste not listed above.

(2) The following categories of nonstormwater discharges are exempt from the discharge prohibitions established by this section:

(a) Diverted stream flows.

(b) Rising ground waters.

(c) Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(b)(20)).

(d) Uncontaminated pumped ground water.

(e) Foundation drains.

(f) Air conditioning condensation.

(g) Irrigation water from agricultural sources that is commingled with urban stormwater.

(h) Springs.

(i) Water from crawl space pumps.

(j) Footing drains.

(k) Flows from riparian habitats and wetlands.

(l) Nonstormwater discharges covered by another NPDES or state waste discharge permit.

(m) Discharges from emergency firefighting activities.

(3) Prohibition of Illicit Connections.

(a) The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited.

(b) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(c) A person is considered to be in violation of this section if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

**14.30.070 Operation and maintenance of stormwater facilities.**

(1) Standards for maintenance of stormwater facilities existing on public or private property within the City are contained in the Stormwater Management Manual and Chapter 14.40 BMC. Any maintenance agreement submitted and approved by the City through the permit process shall supersede maintenance requirements contained in the Stormwater Management Manual and Chapter 14.40 BMC.

(2) No person shall cause or permit any drainage system/facility on any public or private property to be obstructed, filled, graded, or used for disposal of debris. Any such activity constitutes a violation of this chapter.

(3) Any modification of an existing drainage system/facility must be approved and permitted by the city. Failure to obtain permits and approvals, or to violate conditions thereof for any such alteration, constitutes a violation of this chapter.

(4) The City will maintain all elements of the storm drainage system beginning at the first catch-basin within the public right-of-way, and in easements or tracts dedicated to and accepted by the city.

(5) All private stormwater system/facilities, including, but not limited to, nonresidential stormwater facilities, roof downspout drains and driveway drains serving single-family residences, shall be maintained by the property owner.

(6) Maintenance of Nonresidential Stormwater Facilities by Owners.

(a) Any person or persons holding title to a nonresidential property for which stormwater facilities have been required by the City shall be responsible for the continual operation, maintenance, and repair of said stormwater facilities in accordance with the criteria set forth in the Stormwater Management Manual and Chapter 14.40 BMC.

(b) For nonresidential stormwater facilities, failure to meet the maintenance requirements specified in the Stormwater Management Manual and Chapter 14.40 BMC constitutes a violation of this chapter, and shall be enforced against the owner(s) of the subject property served by the stormwater facility.

(7) City Acceptance of Existing Residential Stormwater Facilities. The City may accept for maintenance those stormwater facilities serving residential developments existing prior to the effective date of the ordinance codified in this chapter that meet the following conditions:

(a) The stormwater facilities serve more than one individual house or property;

(b) An inspection by the director has determined that the stormwater facilities are functioning as designed;

(c) The stormwater facilities have had at least two years of satisfactory operation and maintenance, unless otherwise waived by the director;

(d) An inspection by the director has determined that the stormwater facilities are accessible for maintenance using existing City equipment;

(e) The person or persons holding title to the properties served by the stormwater facilities have submitted a petition containing the signatures of the title holders of more than 50 percent of the lots served by the stormwater facilities requesting that the City maintain the stormwater facilities;

(f) An easement or dedication of the property is offered by the property owner at no cost;

(g) All easements entitling the City to properly access, operate and maintain the subject stormwater facilities have been conveyed to the City and have been recorded with the Pierce County office of records and elections;

(h) The person or persons holding title to the properties served by the stormwater facilities show proof of the correction of any defects in the drainage facilities, including provision of maintenance access, as required by the director; and

(i) The City Council formally accepts said infrastructure for operation and maintenance.

(8) 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

published by the Washington State Department of Ecology for disposal of waste materials from stormwater maintenance activities; and, where appropriate, the Dangerous Waste Regulations, Chapter 173-303 WAC.

**14.30.734 Exceptions.**
Exceptions to Minimum Requirements Nos. 1 through 10 may be granted by the City Council prior to permit approval and construction. An exception may be granted following a public hearing conducted by the City Council; provided, that a written finding of fact is prepared that addresses the following:

(1) That there are special physical circumstances or conditions affecting the property such that the strict application of these provisions would deprive the applicant of all reasonable use of the site in question, and every effort to find creative ways to meet the intent of the minimum standards has been made;

(2) That the granting of the exceptions will not be detrimental to the public health and welfare, nor injurious to other properties in the vicinity and/or downstream, and to the quality of waters of the state; and

(3) The exception is the least possible exception that could be granted to comply with the intent of the minimum requirements.

**14.30.801 Administration.**
The director shall administer this chapter and shall have the authority to develop and implement administrative procedures to administer and enforce this chapter.

**14.30.802 Review and approval.**
The director may approve, conditionally approve or deny an application for activities regulated by this chapter.

**14.30.803 Enforcement authority.**
The director shall enforce this chapter.

**14.30.804 Inspection.**
All activities regulated by this chapter, except those exempt in BMC 14.30.040(2), shall be inspected by the director. The director shall inspect projects at various stages of the work requiring approval to determine that adequate control is being exercised. Stages of work requiring inspection include, but are not limited to, preconstruction; installation of BMPs; land disturbing activities; installation of utilities, landscaping, retaining walls and completion of project. When required by the director, a special inspection and/or testing shall be performed.

**14.30.901 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 and the severity of any penalty shall be based on the nature of the violation, the damage or risk to the public or to public resources, and/or the degree of bad faith of the person subject to the enforcement action.

**14.30.905 Orders.**
The director shall have the authority to issue to an owner or person(s) representing an owner an order to maintain or repair a component of a stormwater facility or BMP to bring it in compliance with this chapter, the Stormwater Management Manual and/or other City regulations. 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 action to be taken.

(3) A reasonable time to comply, depending on the circumstances.

(4) Penalties that may be incurred by any owner of a stormwater system not in compliance with this chapter.

(5) An order to the owner to provide to the director a detailed plan showing drawings and steps that will be taken to achieve compliance within a specified time. This plan is subject to approval by the director.

**14.30.910 Enforcement, violations and penalties.**
Any person violating or failing to comply with any of the provisions of this title shall be subject to the notice requirements, enforcement, violations and/or penalty provisions of Chapter 1.12 BMC.

**14.30.920 Appeals.**
Administrative interpretations and administrative Type A-1 and Type A-2 decisions may be appealed, by applicants or parties of record, to the board of adjustment subject to the provisions of BMC 20.01.260.

**Section 2.** Chapter 14.40 of the Buckley Municipal Code is amended to read as follows:

**14.40.011 Findings of fact.**
The City Council adopts the findings of the model stormwater maintenance ordinance provided by the Department of Ecology that:

(1) Stormwater facilities are a common feature of urban development.

(2) In order to function properly so that they will perform as designed to prevent or remove pollution and/or to reduce flooding, stormwater facilities must be regularly inspected and maintained.

(3) If not adequately maintained, stormwater facilities can become sources of pollutants to surface water and ground water.

(4) If not adequately maintained, stormwater facilities could fail and cause considerable damage to the public.

**14.40.012 Need.**
The City Council adopts the need provision of the model stormwater maintenance ordinance provided by the Department of Ecology that this chapter is necessary in order to ensure maintenance of all stormwater facilities within Buckley by setting minimum standards for the inspection and maintenance of stormwater facilities. In addition, the City is required to comply with the Western Washington Phase II Municipal Stormwater Permit. The permit requires the City to establish maintenance standards that are as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the Manual.

**14.40.013 Purpose.**
The City Council adopts the purposes set forth in the model stormwater maintenance ordinance provided by the Department of Ecology that the provisions of this chapter are intended to:

(1) Provide for inspection and maintenance of stormwater facilities in Buckley to provide for an effective, functional stormwater drainage system;

(2) Authorize the public works department to require that stormwater facilities be operated, maintained and repaired in conformance with this chapter;

(3) Establish the minimum level of compliance which must be met;

(4) Guide and advise all who conduct inspection and maintenance of stormwater facilities.

**14.40.020 Definitions.**
For the purposes of this chapter, the definitions within the Manual shall apply.

"Stormwater Management Manual" or "Manual" means the 2012 Stormwater Management Manual for Western Washington prepared by Ecology that contains BMPs to prevent or reduce pollution.

**14.40.031 Abrogation and greater restrictions.**
It is not intended that this chapter repeal, abrogate or impair any existing regulations, easements, covenants or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

**14.40.032 Interpretation.**
The provisions of this chapter shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of this chapter.

**14.40.040 Applicability.**
When any provision of any other chapter of the Buckley Municipal Code conflicts with this chapter, that which provides more environmental protection shall apply unless specifically provided otherwise in this chapter.

The City is authorized to adopt written procedures for the purpose of carrying out the provisions of this chapter.

**14.40.051 Maintenance required.**
All stormwater facilities shall be maintained in accordance with this chapter and the stormwater management manual. Systematic, routine preventive maintenance is preferred.

**14.40.052 Minimum standards.**
The following are the minimum performance measures for the maintenance of stormwater facilities:

(1) The maintenance standards specified in Chapter 4 of Volume V of the Stormwater Management Manual shall be followed. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standards are not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance is not a permit violation.

(2) Unless there are circumstances beyond the city's control, when an inspection identifies an exceedance of the maintenance standards, maintenance shall be performed:

(a) Within one year for typical maintenance of facilities, except catch basins.

(b) Within six months for catch basins.

(c) Within two years for maintenance that requires capital construction of less than $25,000.

(3) All municipally owned or operated or privately owned permanent stormwater treatment and flow control facilities, other than catch basins, shall be inspected annually and cleared of debris, sediment and vegetation when they affect the functioning and/or design capacity of the facility.

(4) All catch basins and inlets owned or operated by the City or privately owned or operated shall be inspected per the conditions of the Phase II NPDES permit.

(5) A reduction of the inspection frequency shall be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the City may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience.

**14.40.053 Disposal of waste from maintenance activities.**
Disposal of waste from maintenance activities shall be conducted in accordance with Appendix 6 of the Western Washington Phase II Municipal Stormwater Permit, the minimum functional standards for solid waste handling, Chapter 173-304 WAC, guidelines for disposal of waste materials from stormwater maintenance activities, and, where appropriate, the dangerous waste regulations, Chapter 173-303 WAC.

**14.40.054 Compliance.**
Property owners are responsible for the maintenance, operation or repair of stormwater drainage systems and BMPs. Property owners shall maintain, operate and repair these facilities in compliance with the requirements of this chapter and the stormwater management manual.

**14.40.061 Director.**
The City administrator shall administer this chapter and shall be referred to as the director. The director shall have the authority to develop and implement administrative procedures to administer and enforce this chapter.

**14.40.062 Inspection authority.**
The director is directed and authorized to develop an inspection program for stormwater facilities in Buckley.

**14.40.063 Enforcement authority.**
The director shall enforce this chapter.

**14.40.071 Inspection.**
Whenever implementing the provisions of the inspection program or whenever there is cause to believe that a violation of this chapter has been or is being committed, the inspector is authorized to inspect during regular working hours and at other reasonable times all stormwater drainage systems within Buckley to determine compliance with the provisions of this chapter.

**14.40.072 Procedures.**
Prior to making any inspections, the inspector shall present identification credentials, state the reason for the inspection and request entry.

(1) If the property or any building or structure on the property is unoccupied, the inspector shall first make a reasonable effort to locate the owner or other person(s) having charge or control of the property or portions of the property and request entry.

(2) If, after reasonable effort, the inspector is unable to locate the owner or other person(s) having charge or control of the property, and has reason to believe the condition of the stormwater drainage system creates an imminent hazard to persons or property, the inspector may enter.

(3) Unless entry is consented to by the owner or person(s) in control of the property or portion of the property or unless conditions are reasonably believed to exist which create imminent hazard, the inspector shall obtain a search warrant, prior to entry, as authorized by the laws of the state of Washington.

(4) The inspector may inspect the stormwater drainage system without obtaining a search warrant provided for in subsection (3) of this section, provided the inspection can be conducted while remaining on public property or other property on which permission to enter is obtained.

**14.40.073 Inspection schedule.**
The director shall establish a master inspection and maintenance schedule to inspect appropriate stormwater facilities that are not owned by the city. Inspections shall be annual. Critical stormwater facilities may require a more frequent inspection schedule.

**14.40.074 Inspection and maintenance records.**
As existing stormwater facilities are encountered, they shall be added to the master inspection and maintenance schedule. Records of new stormwater facilities shall include the following:

(1) As-built plans and locations;

(2) Findings of fact from any exemption granted by the local government;

(3) Operation and maintenance requirements and records of inspections, maintenance actions and frequencies;

(4) Engineering reports, as appropriate.

**14.40.075 Reporting requirements.**
The director shall report annually to the City Council about the status of the inspections. The annual report may include, but need not be limited to, the proportion of the components found in and out of compliance, the need to upgrade components, enforcement actions taken, compliance with the inspection schedule, the resources needed to comply with the schedule, and comparisons with previous years.

**14.40.080 Enforcement, violations and penalties.**
Any person violating or failing to comply with any of the provisions of this title shall be subject to the notice requirements, enforcement, violations and/or penalty provisions of Chapter 1.12 BMC.

**14.40.090 Severability.**
If any provision of this chapter or its application to any person, entity, or circumstance is held invalid, the remainder of this chapter or the application of the provision to other persons, entities, or circumstances shall not be affected.

**Section 3.** Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

**Section 4.** Effective Date. A summary of this Ordinance consisting of its title shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

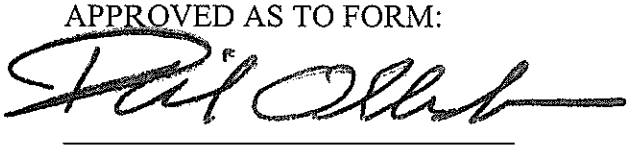
Passed by the City Council on the 13th day of December, 2016.

Pat Johnson
Mayor Pat Johnson

Attest:

Joanne Starr
Joanne Starr, City Clerk

APPROVED AS TO FORM:



Phil Olbrechts, City Attorney

PUBLISHED: December 21, 2016

EFFECTIVE: December 26, 2016