## SRC 70.005 - Definitions

The following words, terms and phrases, when used in SRC chapters 70 through 73, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Best management practice (BMP) means activities, prohibitions of practices, operational and maintenance procedures, structural facilities, or managerial practices or devices that, when used singly or in combination, prevent, reduce, or treat contamination in drainage water, prevent or reduce soil erosion, or prevent or reduce other adverse effects of drainage water on receiving waters. BMPs prescribed by the Director, whether or not adopted by ordinance, shall be the BMPs required for compliance with this Code.

Building drain means that part of the lowest horizontal piping of a building drainage system which receives the discharge from soil, waste, and other drainage pipes within or adjoining the building or structure and conveys the same to the building sanitary or storm sewer. The building drain is considered to end at a point five feet outside the established line of the building or structure.

Cooling water means water other than sewage or industrial waste which is used as a medium for carrying away excess heat from any apparatus, appliance, mechanism, device, or thing, and which, in the course of such cooling process, is not mixed or commingled with any other substance or used as a means of carrying off any other substance, in suspension or in solution, thereby exiting such cooling process in substantially the same condition, save for temperature as when it entered.

Defective sewer is any private or building wastewater collection system that:

- (1) Fails a tightness test as described in SRC 73.080; or,
- (2) Is built in such a way that existing pipe material, condition or installation is found unacceptable by the director;
- (3) Fails to pass low air pressure test or hydrostatically. The test shall last 15 minutes; minimum test pressure shall be 3.5 pounds per square inch in either method. A new sewer shall have no loss when tested by either method. When tested, existing building sanitary sewers shall be tested for water tightness in the same manner as new building sanitary sewers except that a 50 percent loss of pressure will be allowed in the 15-minute test;
- (4) Exceeds a maximum allowable infiltration/inflow rate of more than 300 gallons per day per single detached living unit or 1,200 gallons per acre per day; or
- (5) Is connected to any plumbing device which introduces stormwater into the sewer system.

*Design storm event* means the size of the storm event used to calculate runoff volumes and peak rates of discharge when designing stormwater facilities. The design storm event is the total inches of rainfall, distributed during a 24-hour period using a standard synthetic rainfall distribution identified as Type I-A by the Natural Resources Conservation Service.

*Drainage waste* means stormwater, groundwater, surface drainage, subsurface drainage, spring water, well overflow, roof drainage, or other like drainage other than sewage or industrial waste.

*Extraneous water* means water entering a building wastewater system from any source except that domestic sewage is not considered extraneous water.

*Fire protection service* means an unmetered connection to the public water mains intended only for the extinguishment of fires and the flushing necessary for its proper maintenance.

Flow control facility means a stormwater facility designed to control the flow rate, flow volume, or flow duration of drainage water.

*Green stormwater infrastructure* means a stormwater facility that mimics natural surface hydrologic functions through infiltration or evapotranspiration, or that involves stormwater reuse.

*Ground disturbing activity* means any activity that exposes earth material through the use of mechanical equipment.

*Illicit connection* means any drain or conveyance system that results in a discharge to a stormwater system or receiving water that is not entirely drainage water.

Impervious surface means any surface exposed to rainwater from which most water runs off.

*Improved premises* means a unit or units of land containing improvements, such as a parking lot, building or structure, that is connected to a City utility, including stormwater, sewer, or water utilities. Improved premises does not include a unit of land that has no improvements and is connected only to the City water utility for irrigation purposes only.

Large project means: a project including 10,000 square feet or more of new <u>pervious</u> <u>surface</u>, <u>or new</u> impervious surface, or replaced\_impervious surface, individually or combined, <u>on private property</u>; or, a <u>project including 10,000 square feet or more of new pervious surface</u>, new impervious surface, or replaced impervious surface, individually or combined, in public right-of-way, <u>or 10,000 square feet or more of ground disturbing activity</u>.

*Line* means a pipe connecting a meter to a building's plumbing system.

Maximum extent feasible means the extent to which a requirement or standard must be complied with as constrained by the physical limitations of the site, practical considerations of engineering design, and reasonable considerations of financial costs and environmental impacts.

New pervious surface means any pervious surface that is exposed to ground disturbing activity and is neither made impervious nor returned to its predevelopment condition through soil amendment, landscaping, or other surface that mimics natural hydrologic functions.

*Pollutant* means any substance that affects, or has the potential to affect, water quality in a manner that is detrimental to human health or safety or to the environment.

Pollution generating activity means any activity conducted outside with the potential of releasing pollutants into the public stormwater system, a private stormwater system, or receiving waters, and for which source controls may be prescribed.

*Post-development* means the conditions that reasonably may be expected or anticipated to exist after completion of development activity on a site.

*Predevelopment* means the conditions on a site in its natural, undeveloped state, generally characterized by a mixture of trees, brush, weeds, and grass, and which is used to determine the allowable post-development discharge peak rates and flow volumes.

*Private stormwater facility* means any facility that is not owned or operated by the City that has been installed or constructed for the purpose of removing pollutants from stormwater, or for controlling the discharge flow rate, flow duration, or flow quantity of stormwater.

*Private wastewater collection system* means a privately-owned wastewater collection system installed on private property that is not controlled by or under the jurisdiction of the City.

*Project* means ground disturbing activity, or the addition or replacement of impervious surface.

*Receiving water* means the surface water, groundwater, or wetland receiving any discharge of drainage water or pollutants.

Replaced impervious surface means the removal of impervious surface down to earth material and replacement with new impervious surface. Replacement does not include repair or maintenance activities on structures, paved surfaces, or facilities taken to prevent decline, lapse, or cessation in the use of the existing impervious surfaces as long as no additional hydrologic impact results from the repair or maintenance activity.

*Service lateral* means a pipe connecting a water, wastewater, or stormwater main to a facility's water, wastewater, or stormwater system.

*Sewage* means the wastewater derived from human habitation and use of buildings for domestic, commercial, institutional, or industrial purpose and free from drainage waste.

Single family residential project means the construction of one single family dwelling or two attached single-family dwellings on a single existing unit of land that is zoned Single Family Residential (RS) where the total new and replaced impervious surface is 1,300 square feet or more, but less than 10,000 square feet.

*Site* means a unit of land, or portions of street, highway, or other right-of-way, or contiguous combination thereof, where a project is proposed or performed.

*Source controls* means structures or operations that minimize or prevent pollutants from coming in contact with drainage water through physical separation or management of activities.

*Stormwater* means that portion of precipitation and snowmelt that does not naturally percolate into the ground or evaporate, but flows into receiving water by overland flow, interflow, pipes, and other features of a stormwater system.

Stormwater facility means a facility designed to control the flow rate, flow volume, or flow duration of drainage water, or a facility designed to remove pollutants from drainage water.

Streetlight system means a system of streetlights, poles, fixtures, ancillary equipment, located within the City, and the provision of electricity therefor, owned or operated by the City, and the City's provision of electricity for streetlight systems owned for private utilities.

*Stormwater system* means all stormwater facilities and improvements such as catch basins, curbs, gutters, ditches, manmade channels, and storm drains, that collect, convey, or control the flow of drainage water or remove pollutants from drainage water.

*Treatment facility* means a stormwater facility designed to remove pollutants from drainage water.

*User* means any person using the City public water, wastewater, streetlight, or stormwater system.

Utility Code means SRC chapters 70 through 75.

*Utility service* means water service, wastewater service, stormwater service, streetlight service or any combination of services, provided by the City to customers of the City's water, wastewater, streetlight and stormwater systems.

*Utility system* means the City's public water, wastewater, stormwater, and streetlight systems.

*Wastewater* means all sewage and industrial wastes, treated or untreated, discharged to a collection system.

Water main means a pipe two inches or larger inside the diameter, installed in a public right-of-way or an easement, to which a service lateral is connected.

Water, wastewater, and stormwater main means a pipe installed in a public right-of-way or an easement, to which a service lateral is connected.

Sec. 71.090. - Requirements for large projects.

All persons conducting large projects shall:

- (a) Phase the project to the maximum extent feasible in order to minimize the amount of simultaneous ground disturbing activity;
- (b) Provide additional stormwater facilities or improve the public stormwater system to adequately accommodate the stormwater flows from the site if insufficient capacity exists in the public stormwater system to carry existing and anticipated discharge flows, including any flows from dewatering activities. The Director may require the developer to conduct analyses to ensure sufficient capacity exists downstream from the location where the drainage water is discharged from the site;
- (eb) Provide flow control facilities as required by this chapter; and
- (dc) Provide treatment facilities as required by this chapter.

## SRC 71.095 Flow control facilities

- (a) Applicability.
  - (1) Except as provided in subsection (a)(2) of this section, all large projects shall be provided with flow control facilities that comply with this section.
  - (2) The following projects are exempt from the requirements of this section:
    - (A) Maintenance, repair, or installation of underground or overhead utility facilities that includes replacing the ground surface with in-kind material or materials with similar runoff characteristics. By way of illustration, but not of limitation, this includes maintenance, repair, and installation of pipes, conduits, and vaults.
    - (B) The following road maintenance practices:

- (i) Pothole and square cut patching;
- (ii) Overlaying existing asphalt or concrete or brick pavement with asphalt or concrete without expanding the area of coverage;
- (iii) Shoulder grading;
- (iv) Reshaping or re-grading drainage ditches;
- (v) Crack sealing;
- (vi) Replacing existing impervious surface down to earth material; and
- (vii) Vegetation maintenance.
- (C) Projects in the right-of-way under the control of another governmental body, if:
  - The governmental body uses best management practices consistent with that government body's own stormwater management program and NPDES permit; and
  - (ii) The best management practices are at least as stringent as those required by this chapter and rules pursuant thereto.

## (b) Design.

- (1) Flow control facilities shall be designed and installed to receive all flows from that portion of the site being developed and for the flows discharging to the flow control facility from other areas, including existing impervious surfaces and off-site areas, when the other flows cannot be separated or bypassed. By way of illustration, but not of limitation, as used in this section, development includes all new impervious surfaces, all replaced impervious surfaces, all disturbed land areas, and any associated flows from dewatering.
- (2) Green stormwater infrastructure as a flow control facility shall be used to the maximum extent feasible.
- (3) The Director may reduce the total area of the site requiring flow control upon a consideration of the following:
  - (A) Areas retained in a natural, undisturbed state.
  - (B) Disturbed land areas within the site that have had soils amended.
  - (C) Disturbed land areas that have been replaced with permeable pavement or green roofs.
  - (D) The total number existing trees that are preserved or new trees that are planted.
- (4) The Director may allow construction of a flow control facility at a location other than the site if:
  - (A) The Director has determined that it is in the public interest to construct a flow control facility at a location other than the site. This determination shall consider the feasibility of constructing the flow control facility on the site; the costs associated with construction, operations, and maintenance of the flow control facility; and the benefits provided by the flow control facility in terms of accomplishing the purposes of this chapter; and

- (B) The flow control facility constructed at a location other than the site will mitigate similar impacts that have been identified as a consequence of the project.
- (c) Flow control facility performance standard.
  - (1) The post-development peak runoff rates from design storm events equal to or less than one-half the two-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for one-half the two-year, 24-hour design storm event;
  - (2) The post-development peak runoff rates from design storm events equal to or less than the ten-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for the ten-year, 24-hour design storm event; and
  - (3) If a volume based stormwater flow control facility is used, the detention volume shall be sufficient to detain a 100 year design storm event without overflow. The post-development peak runoff rates from design storm events equal to or less than the twenty-five-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for the twenty-five-year, 24-hour design storm event; and
  - (4) The post-development peak runoff rates from design storm events equal to or less than the one-hundred-year, 24-hour design storm event shall not exceed the predevelopment peak runoff rate for the one-hundred-year, 24-hour design storm event.

## SRC 601.070. - Provisions for flood hazard reduction.

- (a) General standards. In all SFHAs, the following standards shall be adhered to:
  - (1) Alteration of watercourses. Require that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained. Require that maintenance is provided within the altered or relocated portion of said watercourse to ensure that the flood carrying capacity is not diminished. Require compliance with SRC 601.040(d) and SRC 601.040(e).
  - (2) Anchoring.
    - (A) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
    - (B) All manufactured dwellings shall be anchored per SRC 601.075(c)(4).
  - (3) Construction materials and methods.
    - (A) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage

- (B) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- (4) Water supply, sanitary sewer, and on-site waste disposal systems.
  - (A) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
  - (B) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
  - (C) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.
- (5) Electrical, mechanical, plumbing, and other equipment.

Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated no less than one foot above the base flood elevation or and shall be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding. In addition, electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall, if replaced as part of a substantial improvement, shall-meet all the requirements of this section.

- (6) Tanks.
  - (A) Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.
  - (B) Above-ground tanks shall be installed no less than one foot above the base flood elevation or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.
- (7) All new construction and substantial improvements shall be located no closer than 15 feet to the waterway centerline, or ten feet to the top of a recognizable bank, whichever is greater, except that this provision shall not apply to the Willamette River floodplain.
- (b) Subdivision proposals and other proposed developments.
  - (1) All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions)

- greater than 50 lots or five acres, whichever is the lesser, shall include within such proposals, Base Flood Elevation data.
- (2) All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) shall:
  - (A) Be consistent with the need to minimize flood damage;
  - (B) Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage; and
  - (C) Have adequate drainage provided to reduce exposure to flood hazards.
- (c) Use of other base flood data.
  - (1) When Base Flood Elevation data has not been provided in accordance with SRC 601.030(a) the local floodplain administrator shall obtain, review, and reasonably utilize any Base Flood Elevation data available from a federal, state, or other source, in order to administer SRC 601.070 All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) must meet the requirements of SRC 601.070(b).
  - (2) Base Flood Elevations shall be determined for development proposals that are five acres or more in size or are 50 lots or more, whichever is lesser in any A zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding. The test of reasonableness includes, but is not limited to, the use of historical data, high water marks, FEMA provided Base Level Engineering data, and photographs of past flooding, where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.
- (d) Structures located in multiple or partial flood zones.
  - (1) In coordination with the State of Oregon Specialty Codes:
    - (A) When a structure is located in multiple flood zones on the community's Flood Insurance Rate Maps (FIRM) the provisions for the more restrictive flood zone shall apply.
    - (B) When a structure is partially located in a SFHA, the entire structure shall meet the requirements for new construction and substantial improvements.