

Chapter 3.5 — Surface Water Management

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3.5.100 Statement of Purpose

This section includes standards for conveyance of surface water in streams, creeks and channels that exist on a site at the time of development. It also addresses pollution reduction and flow control for stormwater generated from new and redevelopment. For the purpose of this ordinance, “new” and “redevelopment” refers to any man-made change to improved or unimproved real estate including, but not limited to the placement of buildings or other structures, dredging, filling, grading, or paving.

The ordinance provides performance standards for addressing infiltration, treatment, and detention of stormwater as well as design standards for facilities that serve to mitigate the water quality impacts of developments that fall below a certain size threshold.

3.5.200 Applicability

No permit for construction of new development or tenant improvements within the City of Stanfield shall be issued until a stormwater management plan is approved. Separate applicability thresholds for Pollution Reduction and Flow Control Standards are listed in section IV. Development projects shall not be phased or segmented in such a manner to avoid the requirement of these rules and regulations.

3.5.300 Stormwater Management Plan Submittal

A. Preconstruction Submittal Requirements

1. An analysis of stormwater mitigation strategies to increase infiltration and evapotranspiration (use of water by plants) and reduce the amount of stormwater runoff generated from the site. (Note: rainwater can soak into the ground where it falls or it can accumulate on a non-pervious surface, flow to a pervious area and then infiltrate into the ground. The former scenario is stormwater mitigation, while the latter scenario requires stormwater management.)
2. Calculations of the amount of impervious surface before development and the amount of impervious surface after development. Impervious surface refers only to strictly impervious surfaces including roofs of buildings, impervious asphalt and concrete pavements, and other specifically impervious pavement materials such as mortared masonry and compacted gravel.
3. An analysis of vegetative and other treatment methods used to reduce pollutants.
4. An analysis of flow reduction methods including infiltration, detention, and techniques.

5. Statement of consistency with City of Stanfield stormwater management objectives and, if applicable, the watershed management plan for the basin and/or requirements of a pollutant load reductive plan for a water quality limited stream.
 6. When the amount of impervious surface created is less than 1,000 square feet responses required by 3-5 above are waved, and of the following sections of this code only Section V., Surface Water Conveyance Standards, apply.
 7. When the amount of impervious surface created is less than 10,000 square feet and use of the design specified by the Oregon Department of Environmental Quality is proposed, responses required by 3-5 above are waived.
- B. Post Construction Submittal Requirements
1. As-built plans, stamped by a qualified professional indicating all storm water mitigation and management strategies are installed per approved plans and approved changes.
 2. Maintenance plans for all stormwater facilities installed to comply with this ordinance. The maintenance program must be approved by the City of Stanfield. Proof of maintenance shall be submitted annually. A signed maintenance agreement with a local contractor or city/county public works department can serve to meet this requirement.
 3. When the amount of impervious surface created is less than 10,000 square feet and use of the design standards specified by the Oregon Department of Environmental Quality is proposed, the requirement of 1 above is waived.

3.5.400 General Requirements

- A. All development shall be planned, designed, constructed, and maintained to:
1. Provide a system by which storm/surface water within the development will be managed without causing damage or harm to the natural environment, or to property or persons.
 2. Protect property from flood hazards.
 3. Removal of 80% of suspended solids from stormwater.
- B. Plan Review Standards
- Plans shall be submitted to the [Jurisdiction] for review. Plan approval will be based on the following criteria:
1. Plans and calculations for development proposals resulting in more than [10,000 square feet] of impervious surface and proposals not using treatment facilities built to the design criteria specified in [name document] must be stamped and signed by a [qualified professional].
 2. Design, construction and maintenance of proposed stormwater management practices will result in post construction stormwater volumes flowing off site which are substantially the same as preconstruction volumes for all storms less than or equal to the [two-year] design storm.
 3. Where required due to presence of fish, culvert installations must allow fish passage in accordance with Department of State Lands (DSL) and the U.S. Army Corps of Engineers (COE) and any other authorized federal, state, or local agency.
 4. Installation of culverts, spans or stormwater outfalls along natural water features shall be designed to emphasize preservation of natural flow conditions, allow for natural obstructions and pursue stream enhancement opportunities.

5. Stormwater mitigation strategies, such as retention of existing trees, and use of porous paving surfaces, as well as stormwater treatment and flow control facilities used to meet the requirements of this code must be included in the plans.
 6. Stormwater management plan shall be consistent with [State applicable basin or sub basin watershed management plan and/or pollutant load reduction plan].
 7. In areas of high pollutant load, stormwater infiltration shall incorporate, or be preceded by treatment as necessary to prevent siltation of the infiltration facility, protect ground water, and prevent toxic accumulations of pollutants in the soil.
 8. All vegetation used for the installation and landscaping of stormwater facilities shall be selected from plants listed in this Development Code or the Public Works Standards. Trees which are preserved or planted on site for stormwater mitigation credit do not need to meet this criterion. Planting schedule and maintenance of vegetation shall be approved by the City Engineer.
 9. All storm conveyance pipes and vaults shall be built to specifications of the City of Stanfield, as described in the Public Works Standards. See Section VI for Pollution Reduction and Flow Control standards.
 10. All stormwater infiltration, treatment, and detention facilities shall be built to the specifications of the City of Stanfield as described in the Public Works Standards.
- C. The City of Stanfield reserves the right to restrict the use of infiltration facilities in high-risk areas including those with steep slopes, unstable soils, high water tables, or sites known to be contaminated by hazardous substances.
- D. Infiltration facilities which fall under the jurisdiction of DEQ's Underground Injection Control (UIC) Program must be registered with the state and meet the requirements of the UIC Program.
- E. Bonds: Applicants shall provide a performance bond, similar surety, or irrevocable petition for public improvement acceptable to the City of Stanfield to assure successful installation and initial maintenance of surface pollution reduction and flow control facilities. During construction and for a period of one year thereafter, the bond shall be in favor of the City of Stanfield and in an amount of the anticipated construction cost.
- F. Contingency for system failure: If the storm management system fails due to lack of maintenance or breakage and causes impacts to downstream water quality or flooding as a result of the failure, the City of Stanfield may perform the maintenance or repair and charge the owner of the facility.

3.5.500 Surface Water Conveyance Standards

- A. Culverts and/or spans of streams, creeks, gulches, and other natural drainage channels shall maintain a single channel conveyance system.
- B. Culverts and/or spans are to be sized for the 24-hour post-developed tributary conditions of the 100-year storm.

- C. Conveyance calculations shall use the Rational Method for analysis. Exceptions must be documented and approved by the City of Stanfield.
- D. In-stream detention is not allowed.
- E. It shall be the responsibility of the owner that the new drainage system shall not negatively impact any natural waters, upstream or downstream from the site. The owner is responsible for providing a drainage system for all surface water, springs, and groundwater on site for water entering the property as well as management of springs and groundwater that surface during construction.