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Street Drainage Overview Fanno and Tryon Creek Watersheds



curbed street with storm drains and pipes system



uncurbed street with partially developed stormwater system



unimproved street eroded from heavy sheetflow

The 2005 Fanno and Tryon Watershed Management Plan identified stormwater runoff from impervious surfaces as a watershed problem. Streets increase the volume and velocity of stormwater runoff, and route pollutants to streams. About one third of the Fanno Creek Watershed and about one fourth of the Tryon Creek Watershed are covered by impervious surface of which about half are streets. The two watersheds together have more than 200 miles of streets.

The Bureau of Environmental Services' Street Drainage Overview supplements the watershed plan and addresses some of the questions raised about street stormwater management. It provides additional information about the street drainage system, management responsibilities for streets, watershed impacts, regulatory requirements, runoff, stormwater facilities and design criteria, and strategies for reducing the impacts of street runoff on Fanno and Tryon creeks and their tributaries.

There are three types of streets in southwest Portland:

- **Curbed streets** with developed storm sewer systems (42%)
- **Uncurbed streets** with varying levels of developed storm sewer systems which may include pipes, roadside ditches, or undefined sheet flow (50%)
- **Unimproved streets** typically have no storm sewer system (8%)

Streets have different impacts on watershed health:

Flow Impervious area and piped storm systems increase stormwater flow rates and runoff volumes.

Pollutants Pollutants in runoff from streets negatively affect water quality in streams.

Fine Sediment Erosion from unimproved street surfaces can deposit fine sediments in streams.

Biological Communities Fine sediment, water quality and flow changes can have negative impacts on federally-listed fish habitat and other aquatic species.



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Dan Saltzman, Commissioner
Dean Marriott, Director

continued

Several federal and state regulatory requirements affect city street drainage management.

- Portland's stormwater permit requires the city to have an approved Stormwater Management Plan;
- Total Maximum Daily Load (TMDL) regulations establish discharge allowances for water quality-limited streams including Tryon Creek and Fanno Creek.
- Lower Columbia River coho salmon and steelhead, which are listed as threatened under the federal Endangered Species Act, are present in Tryon Creek.

The Street Drainage Overview outlines strategies to manage stormwater runoff to meet regulatory obligations and improve watershed health.

For an executive summary or the full report, please contact:

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