

## Text of testimony to City Council 7/6/2016

I'm here to ask you to delay approval of the Stormwater Manual until it addresses stormwater management in southwest Portland better than it does now. I had submitted comments to BES before and during the comment period concerning section 1.3 but I received no response addressing these concerns. These sections are about how stormwater is to be discharged.

Portland needs a different approach to stormwater management for southwest Portland. Southwest Portland is geologically different than on the other side of the Willamette River and for that reason the stormwater, now and in the past has always followed a different pathway. Portland's stormwater management approach needs to be expanded to accommodate that different pathway.

All stormwater runoff in southwest Portland eventually ends up in the Willamette River, mainly by way of Tryon Creek and Fanno Creek, not as ground water like on the other side of the Willamette.

These two creeks are fed by numerous named and unnamed creeks which in turn are fed by smaller creeks, seeps and springs. Most of this last group do not flow year around and when the area was settled, the practice was to fill them in and install field drains to keep pastures from getting soggy.

When the area became urbanized stormwater still has to find its way to the Willamette and in many cases our street system became the uppermost part of the drainage system, to the detriment of the street system.

The guiding principle stated in Section 2 of the Ordinance "controlling stormwater runoff before it runs off of individual sites" simply doesn't mimic nature in southwest Portland.

A better guiding principle would be like the one I offered in my comments to BES. It reads "The City of Portland's approach to stormwater management in southwest Portland emphasizes the use of various facilities to treat and convey stormwater through natural and constructed features, to a natural stream in a manner not detrimental to the stream or natural areas."

Please delay approval of the Stormwater Manual until it does a better job of addressing stormwater management issues in southwest Portland.

This is the text of the testimony I gave a week later.

As Commissioner Fish stated at the July 6<sup>th</sup> Council meeting, this is a complicated subject. The basic principle of whether stormwater infiltrates into the water table or is conveyed to natural streams is not that complicated though. If there is still any question that infiltration, as the primary method of stormwater management in southwest Portland, is not appropriate I recommend consulting a hydrogeologist to definitively make that determination.

BES has made two claims that I would like to comment on. The first is that the changes I am asking for can now be done by exemption. This is easier said than done. The Stormwater manual and City Code do not give BES's Development Review Team the flexibility it needs for approving better stormwater solutions. Builders are under pressure to optimize infiltration and infiltrating to the "maximum extent practicable" often becomes the "maximum extent possible" with bad results. The infiltration test itself is subject to error because it does not differentiate between infiltration to groundwater and lateral subsurface conveyance to adjoining properties.

At the last Hayhurst Neighborhood meeting a homeowner told me about stormwater from the bioswale that was required on his neighbor's new house. The stormwater from the bioswale reemerges at the surface on his property and runs along his foundation. An infiltration test for the new house showed an infiltration rate of four inches per hour, good enough to be in category 1 of the stormwater hierarchy. What passed for a good infiltration rate is actually lateral subsurface conveyance of stormwater onto the neighboring property. This is common in hilly area where the bottom of a bioswale is at a higher elevation than downslope properties. A good infiltration rate in southwest Portland is often not true infiltration at all but instead is lateral subsurface conveyance, like in this example.

The second claim I would like to comment on is that infiltration is required by DEQ's MS4 permit. This is not completely true. The actual text reads "Incorporate site-specific management practices that target natural surface or predevelopment hydrologic functions as much as practicable. The site-specific management practices should optimize on-site retention based on the site conditions". To me, for southwest Portland "predevelopment hydrologic functions" means conveyance to natural streams. I would also like to mention that I am a DEQ MS4 permit stakeholder representing SWNI.

Inadequate stormwater management affects three specific facets of life in southwest Portland. I became interested because of transportation issues, specifically sidewalks. Second, a large number of residents are concerned about damage to their property and houses as in the example from my Hayhurst neighbor. The third aspect affects all ratepayers, and that is stormwater that inadvertently enters the sanitary system. Around ninety percent of the pumping capacity of the new \$140 million

Fanno/86<sup>th</sup> Ave pump station is for stormwater. If we had a well function stormwater system in southwest Portland most of that stormwater would be going to creeks and streams instead of the sanitary sewer and the pump station could have been smaller.

My reason for asking to delay approval of the 2016 Stormwater Manual is that it seemed like the best place to start the process of changing stormwater management policy in southwest Portland. This is not an issue where one group's gain is another group's loss, so to me it seems that this change should be easier than it is. Please help in changing this policy that simply does not work well here.

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