



CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ■ Nick Fish, Commissioner ■ Michael Jordan, Director

Memo

Date: August 31, 2019

To: Bill Cunningham, Bureau of Planning and Sustainability

From: Stephen Himes, BES Systems Development

Re: Better Housing by Design Project

The mission of Portland's Environmental Services is to protect public health and the environment through our management of Portland's wastewater and stormwater infrastructure. As the provider of a core utility to Portland's residents, we appreciate the opportunity to participate in the development of the Better Housing by Design Project (BHD). We understand the challenges Portland is facing with expected growth and housing demands over the next twenty-five years, and the important role this project will play in helping meet those demands in a sustainable manner. We offer the following comments on the BHD Recommended Draft proposal as it relates to the City's sanitary and stormwater systems.

In general, sanitary wastewater flows from multi-dwelling residential structures constitute a minor portion of the flows carried by any given sanitary or combined sewer pipe in Portland. More specifically, new sanitary flows expected from increased dwelling units allowed by the proposed change to how intensity is regulated - i.e. building scale (FAR, building height, and other development standards) versus unit density - are unlikely to be significant enough to negatively affect the system. While it is possible the added intensity of residential units could exacerbate existing local capacity issues in isolated areas, we do not expect the zoning changes to cause significant problems, particularly given the relatively small area under consideration (areas currently zoned R1, R2, R3 and RH comprise less than 8% of Portland's total land area). In our sanitary and combined system planning efforts, Environmental Services analyzes our system to determine priority areas for both capacity and structural upgrades, as informed by planning projections from the Bureau of Planning and Sustainability. Over time, our capital program will address localized issues that may be created by increased densities allowed by BHD through project and program delivery.

The potential for this project to negatively impact the stormwater system is similarly low. Portland's stormwater runoff is managed by a varied and complex network that consists of pipes and ditches, streams and wetlands, engineered and infiltration facilities, and drainageways. The Stormwater Management Manual (SWMM) establishes requirements to minimize stormwater impacts from development of private property and public right-of-way, and in most parts of Portland these requirements will address any development-related impacts that result from the changes proposed in BHD.

We understand that the provisions in BHD are likely to result in development projects with an equivalent - if not reduced - quantity of impervious surface compared to current zoning. These provisions include: use of FAR to control intensity versus unit density; limitations on surface parking areas; limitations on asphalt paving, which could incentivize more permeable paving; and required outdoor spaces. Provisions that encourage the preservation of large trees through the transfer of development rights and required deep rear setbacks, and that allow for stormwater facilities to count toward minimum landscaping, provide additional environmental and stormwater benefits that we support. Reducing minimum parking requirements in some scenarios could also help reduce stormwater impacts.

In some parts of Portland, challenging site conditions like steep slopes and poorly draining soils can complicate stormwater management, even under current development regulations. In those areas, it is technically difficult to fully address the altered stormwater runoff patterns from increased impervious areas. In addition, in some areas of the City the existing stormwater infrastructure is utilized at its maximum capacity and solutions to address these capacity issues are limited. For these geographic areas, Environmental Services will conduct further analysis through our Stormwater System Plan (SWSP), which will inform future investments in the stormwater management system. When complete, the SWSP and the supporting analysis will provide a deeper understanding of the stormwater system's condition at the city and basin (local) scales, including the effects of altered stormwater runoff patterns and how well the storm system can handle changes. As the SWSP analysis advances, we expect it will inform future SWMM requirements by incorporating variations in conditions at the local scale, and will influence how we invest in system modifications to meet increased demand.

Environmental Services' 2018 Strategic Plan emphasizes the value of "One City" and collaboration with partner bureaus to develop mutually beneficial practices to achieve service delivery. For Environmental Services, that means considering citywide goals like housing when assessing service delivery and risk. As system planning analyses advance, we will continue to work with our partner bureaus to identify strategies that support Portland's housing and employment needs, and ensure essential and cost-effective investments in the City's stormwater and sanitary systems. We look forward to continuing to partner with Planning and Sustainability on these efforts.