M E M O R A N D U M



Date: September 21, 2016

To: City of Bellevue Development Services Department

From: The Watershed Company

Project Number: 160349

Project Name: Bellevue CAO Update

Subject: Proposed CAO Revisions

Revisions to the Bellevue critical areas ordinance (CAO) are needed to ensure consistency with the 2015 Comprehensive Plan update, the Growth Management Act (GMA), and with Best Available Science (BAS). The basis for and effects of proposed changes are discussed below. This memo classifies the proposed revisions as either substantive (Part 1) or non-substantive (Part 2). Non-substantive revisions include those changes that do not change the way the CAO is administered or measurably affect the applicant in terms of scope of work or amount of time associated with obtaining a permit. This memo provides a summary discussion of each of the proposed revisions classified as substantive.

Part 1 – Substantive Revisions

Proposed revisions to the CAO classified as substantive with respect the effect on the applicant are set forth below in Table 1. For each proposed revision, Table 1 indicates whether the revision is primarily proposed for consistency with the City's Comprehensive Plan or the GMA, or for consistency with BAS, or both. Following Table 1 is a summary discussion of each proposed revision, including the basis for the revision and its potential impact on the property owner.

Table 1. Proposed substantive revisions to CAO (in order of potential significance)

| Item | Substantive Revision | LUC Section | GMA/ Comp Plan | BAS |
|------|--|-------------|----------------------|-----|
| 1 | Update this section to classify wetlands and assign wetland buffers based on the most recent version of the Washington State Wetland Rating System for Western Washington. | 20.25H.095 | | ✓ |

| 2 | Revise the minimum toe-of-slope setback verbiage, currently a minimum of 75 feet, to site-specific geotechnical studies to reflect uniqueness of individual landslide hazard sites and that adjustments in the toe-of-slope setback may be required depending on site topography and conditions that may be conducive to fast moving, shallow debris slides and flows. | 20.25H.120 | √ |
|---|--|------------|----------|
| 3 | Revise language for trails on single-family lots in LUC 20.25H.055.C.3.f. | 20.25H.055 | ✓ |

Item 1 Discussion

Proposed Revision

Update reference to 2014 Wetland Rating System, as amended. The updated wetland rating system uses different wetland scoring scales. The City's standard wetland buffer widths in LUC 20.25H.095.C.1.a.i (displayed in Table 2) should be updated to correspond with the updated wetland rating system.

Table 2. Current City of Bellevue wetland buffers under 2004 and 2014 rating systems. Proposed changes to required buffers are highlighted and noted in parentheses.

| | Habitat Score | | |
|---|---------------|----------|-------------|
| | Low | Moderate | High |
| 2004 Rating System | <20 | 20-28 | 29-36 |
| 2014 Rating System | <4 | 5-7 | 8-9 |
| Category I wetlands | 75 | 110 | 225 |
| Natural heritage wetlands and bogs | 190 | | 190 (225)* |
| Category II wetlands | 75 | 110 | 225 |
| Category III wetlands | 60 | 110 | N/A (225)** |
| Category IV wetlands over 2,500 square feet | | 40 | |

^{*} Buffer for Category I natural heritage wetlands and bogs is presently 190 feet, but for wetlands with a high habitat score, the buffer should be increased to 225.

^{**}Buffer for Category III wetlands with a high habitat score is not specified under current City code. Per Ecology guidance, a buffer of 225 feet should be applied where this occurs.

Basis

City code currently requires the classification of wetlands based on the Washington State Wetland Rating System for Western Washington, Ecology Publication Number 04-06-025, published August 2004. Ecology updated this publication in 2014.

While local jurisdictions are not required to use the revised rating system, Ecology strongly encourages its use. If a local jurisdiction chooses not to use Ecology's wetland rating system, it must provide a rationale for this decision according to WAC 365-190-090(3).

Ecology guidance recommends a more graduated buffer scale from 105 to 165 feet for "moderate" habitat scores of 5 to 7, but the current buffer approach is acceptable. It should be noted that use of the standard buffer assumes that the buffer is vegetated with a native plant community appropriate for the ecoregion. The City currently addresses the quality of vegetation within the buffer through its Critical Areas Report evaluation process (LUC 20.25H.230).

Potential Impact

Process

Under the current code, all applicants proposing new development adjacent to wetlands are required to have wetland delineations and ratings completed by a qualified professional. This standard would not change under the proposed code.

Because both State and federal agencies use the 2014 Wetland Rating System, in cases where direct wetland impacts are proposed, use of the updated rating system would eliminate the need for applicants to pay consultants to conduct separate ratings under both the 2004 and 2014 Wetland Rating Systems.

With the adoption of its new rating system, Ecology is placing a new emphasis on the submittal of figures that clearly support the rating findings; this may take incrementally more time for consultants to complete. Creation of these figures was encouraged previously, but is now a standard requirement to appropriately rate wetlands. Regardless of rating system, the City should expect that applicants may face a slight increase in costs associated with preparation of these figures.

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Change in Buffer Widths

One proposed change (see highlighting in the second row of Table 2) is needed to address bogs and natural heritage wetlands with a high habitat score. Since these wetlands represent unique and vulnerable habitats, they would also be rated as Category I wetlands. Buffer widths for these wetlands should be at least as wide as other Category I wetlands. This change is not expected to affect property owners, as we are not aware of any bog or natural heritage wetlands within the City that would meet the criteria for a "High" habitat score.

A second proposed change (see highlighting in the fourth row of Table 2) is needed to address buffers for Category III wetlands with a high habitat score. While Category III wetlands with a high habitat score are unlikely to frequently occur in the City, such a rating could occasionally occur. Buffers for Category III wetlands with a high habitat score are not currently specified under current City code.

Under the current code, additional wetland buffers do not apply to properties with an established Native Growth Protection Area (NGPA) or Native Growth Protection Easement (NGPE). The proposed code revisions also indicate that additional wetland buffers do not apply to properties with previously approved wetland critical area land use permits (CALUPs).

Item 2 Discussion

Proposed Revision

- 2. Minimum Setback of Structures.
 - a. Landslide hazards Toe of slope setback of 75 feet Determined based on site-specific geotechnical studies to reflect site characteristics, including site topography and conditions that may be conducive to fast moving, shallow debris slides and flows.

Basis

Recent landslide events, such as the March 2014 Oso Landslide, have reinforced the uncertainties of runout distances associated with fast-moving debris slides or flows. The determination of setback distances from the toe of landslide hazard areas should be based on individual site characteristics that would include topography and geomorphology that occur at each site. Of particular concern are slopes with incised drainages or ravines that are sources of accumulated alluvium and slope debris and provide a source area for a debris flow or slide under specific circumstances.

Potential Impact

Process

For development projects proposed in proximity to the toe of landslide hazard areas, the proposed revision would require site-specific geotechnical review in place of a standard structure setback.

For most development in proximity to a potential landslide hazard area, site review by a geotechnical professional would be required under the existing code to 1) determine whether a slope meets the criteria of a landslide hazard area or 2) meet the requirements for a clearing and grading permit. A geotechnical engineering report is currently required for all clearing and grading permit applications. Pursuant to BCC 23.76.035, a clearing and grading permit is required for a project that involves any of eight criteria, with some exemptions. Key criteria include:

- Any clearing, filling, or excavation in a critical area or critical area buffer
- Fill and/or excavation totaling over 50 cubic yards
- Creation or addition of 2,000 square feet, or greater, of new, replaced, or new plus replaced impervious surface area
- Over 1,000 square feet of clearing, as measured at the ground level

For development projects in proximity to the toe of landslide hazard areas that would trigger geotechnical review through a clearing and grading permit, the proposed revision would only add a requirement that the geotechnical review address the appropriate setback distance from any landslide hazard areas present. For development projects proposed in proximity to the toe of landslide hazard areas that would not trigger geotechnical review pursuant to BCC 23.76.035, the proposed revision would introduce a new requirement for geotechnical review.

Change in setback

The effect of the proposed modification is likely to vary depending on site conditions. In some cases, the resulting recommended setback may be less than required under the current code, and in other cases, the resulting setback may be greater than required under current code. The proposed revision is intended to help ensure the long-term safety of the applicant.

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Item 3 Discussion

Proposed Revision

f. Private Nonmotorized Trails. New nonmotorized trails within the critical area or critical area buffer are limited to those serving nonresidential uses, multifamily residential uses and more than one single-family lot. Private nonmotorized trails shall comply with the performance standards for trails in subsection C.3.g of this section. Nothing in this section prohibits the creation of a soft surface nonmotorized trail in a critical area buffer on a single-family lot for use of the residents of that lot. Such trail shall not exceed four feet in width, and shall not involve the removal of any significant trees or bank-stabilizing roots. In stream and wetland buffers, trails shall not be generally parallel to the stream or wetland edge-closer than a distance of 25 feet, shall be located in the outer 25 percent of the buffer, and shall be located no closer than 25 feet from the upland edge of the wetland or stream. Any clearing of brush or vegetation shall be the minimum necessary, and shall be with hand tools only.

Basis

LUC 20.25H.055.C.3.f states that in stream and wetland buffers on single-family lots, trails shall not be generally parallel to the stream or wetland edge closer than a distance of 25 feet. Guidance from Ecology currently indicates that walkways and trails should be located in the outer 25 percent of a wetland buffer area. This guidance should also apply to streams.

Potential Impact

This proposed revision would not apply to legally existing trails in stream and wetland buffers on single-family lots, which would be considered nonconforming development. For new trails on single-family lots, this proposed revision would not preclude their development in stream and wetland buffers, but would affect their proximity to streams and wetlands. The actual on-the-ground impact of the proposed revision would vary depending on the widths of the stream and wetland buffers where trail development is proposed.

Part 2 – Non-substantive Revisions

Proposed revisions to the CAO classified as non-substantive, with respect to their effect on the applicant, are set forth below in Table 3. As in Table 1, for each proposed revision, Table 3 indicates whether the revision is primarily proposed for consistency with the City's comprehensive plan or the GMA, or for consistency with BAS, or both.

Table 3. Proposed non-substantive revisions to CAO (in order of LUC section)

| Item | Substantive Revision | LUC Section | GMA/ Comp Plan | BAS |
|------|--|------------------------------|----------------------|----------|
| 1 | Clarify applicability of fish and wildlife habitat conservation areas. | 20.25H.025 (and others) | ✓ | |
| 2 | Clarify applicability of frequently flooded areas. | 20.25H.025 (and others) | ✓ | |
| 3 | Clarify applicability of critical aquifer recharge areas. | 20.25H.025 (and others) | ✓ | |
| 4 | Update culvert design guidance document referenced in LUC 20.25H.055.C.3.e. | 20.25H.055 | | ✓ |
| 5 | For buffers on eroding stream banks, require recent documentation of top-of-bank. | 20.25H.075 | | ✓ |
| 6 | Reference stormwater treatment requirements. | 20.25H.080 and 20.25H.100 | | ✓ |
| 7 | Require wetlands be delineated using the approved federal wetlands delineation manual and applicable regional supplements. | 20.25H.095 | √ | ✓ |
| 8 | Include seismic hazard areas in critical areas designation for purposes of disclosure only. | 20.25H.120 | ✓ | ✓ |
| 9 | Highlight that the City will require floodplain developments to meet National Flood Insurance Program requirements related to the protection of floodplain ecological functions. | 20.25H.180 | | ✓ |