

**Department of Planning and Community Development**

**Memorandum**

**Date:** October 12, 2017

**To:** Heather Wright

Current Planning Manager

**From:** Christy Carr, AICP

Senior Planner

**Subject:** PLN50767 HMP Review

This memo provides comments on the Habitat Management Plan (HMP) submitted by Bainbridge Island School District (applicant) for the Blakely Elementary School (subject property). This memo provides an update to my June 16, 2017 memo to address revisions to the HMP provided by the applicant.

In accordance with the development standards in BIMC 16.20.160.D.2, an applicant shall provide either the prescribed habitat buffer or an approved habitat management plan, pursuant to BIMC 16.20.060, that clearly provides greater habitat functions and values in perpetuity than the prescribed habitat buffers.

A Category I/II wetland is located off-site to the northeast of the subject property. Due to the wetland characteristics and impact of proposed land use (high), the off-site wetland has a 100-foot water quality buffer and a 200-foot habitat buffer, for a total of 300 feet (BIMC 16.20.160.D). The applicant is proposing to maintain the entirety of the 100-foot water quality buffer while reducing the habitat buffer; therefore, a HMP is required. The applicant submitted a *Critical Areas and Habitat Management Report* (HMP) dated June 1, 2017 (updated July 19, 2017; revised drawings dated September 25 and October 11, 2017).

According to the HMP submitted by the applicant, approximately 160,376 square feet of prescriptive buffer exists on the site. This is the area of the prescribed 300-foot buffer before any proposed reduction. Of this total, 12,015 square feet is water quality buffer and the remaining 148,361 square feet is habitat buffer.

The original HMP provided that existing uses within the habitat buffer include undeveloped forest (64,945 square feet), buildings and hardscape (20,145 square feet) and lawn (63,416 square feet). Subsequent drawings submitted by the applicant provide that the existing buffer conditions include undeveloped forest (73,508 square feet), buildings and hardscape (20,746 square feet) and lawn (66,122 square feet). The applicant has not provided a rationale for why these figures have changed, and it is difficult for staff to review the HMP given this discrepancy.

The June 1, 2017 HMP presented only 8,815 square feet of “buffer loss,” which is an area of undeveloped forest. Development within this area included removal of over 20 mature trees to accommodate the fire lane, outdoor learning space, and a portion of the school building. The HMP did not address the remaining 139,691 square feet of habitat buffer on the site and proposed only 9,820 square feet of compensatory mitigation through enhancement of both the water quality and habitat buffer. The June 1, 2017 HMP did not clearly demonstrate that greater protection of the functions and values of critical areas can be achieved through the HMP than could be achieved through providing the prescribed habitat buffer as required by BIMC 16.20.060.A. The applicant has not submitted an updated HMP report that demonstrates greater protection of the functions and values of critical areas will be achieved by the current proposal. The current proposal was generated by an architect. The input and opinion of the project biologist were not provided and are unknown.

The latest iteration of drawings provided by the applicant show proposed uses within the habitat buffer including undeveloped forest (73,508 square feet), buildings and hardscape (26,257 square feet), lawn and grass paving (45,817 square feet) and habitat restoration planting (11,199 square feet).

The “prescribed habitat buffer” in this case is the entire 200-foot habitat buffer, or 148,362 square feet (total buffer, 160,376 minus water quality buffer, 12,014). HMPs cannot be used to reduce the water quality buffer. While the applicant does not propose to reduce the water quality buffer, it does include it in the overall buffer square footage. It should be noted that approximately 3,595 square feet of the proposed habitat restoration planting is located within the water quality buffer, not the habitat buffer. As such, the total proposed restoration planting within the prescribed habitat buffer is 11,199, not 14,794. It should also be noted that the proposal includes 40,081 square feet of existing undeveloped forest to be protected in perpetuity outside of and contiguous with the prescribed habitat buffer.

The central question in determining the adequacy of the HMP is whether or not there is greater protection of the functions and values of critical areas by the proposal or the prescribed habitat buffer. The “prescribed habitat buffer” means the entire project is constructed completely outside the 200-foot habitat buffer. Staff finds the answer to this question is no based on an analysis of the current proposal within the context of the HMP requirements in BIMC 16.20.060, below.

***BIMC 16.20.060.A -- General. A habitat management plan shall comply with the requirements of this section, and shall clearly demonstrate that greater protection of the functions and values of critical areas can be achieved through the HMP than could be achieved through providing the prescribed habitat buffers.***

Much discussion took place between City staff and the applicant regarding the condition of the existing habitat buffer. There is agreement that the existing buffer is degraded (i.e., low functioning), and staff notes that “HMPs are primarily intended as a means to restore or improve buffers that have been degraded by past activity” (BIMC 16.20.060.B, see below). The extent to which it is degraded (i.e., low functioning), and the extent to which this matters, is not agreed upon. The applicant spent considerable time demonstrating the difference between what is in the habitat buffer now and what they are proposing to locate in the habitat buffer. This is the wrong comparison. What the HMP needs to demonstrate is the difference between the prescribed habitat buffer and the habitat buffer they are proposing after the completion of the proposed development. It must then demonstrate a greater protection of the functions and values of critical areas through the HMP than through providing the prescribed habitat buffer. The HMP fails to do so.

***BIMC 16.20.060.B -- Intent. HMPs are primarily intended as a means to restore or improve buffers that have been degraded by past activity, and should preserve, and not reduce, existing high quality habitat buffers. While not primarily intended as a means to reduce buffers, the HMP may propose a reduction of the habitat buffer width where it is shown that the HMP will comply with the other requirements of this section. An HMP shall not reduce the prescribed water quality buffer width as listed in BIMC 16.20.130 and 16.20.160 under any circumstance.***

Approximately half of the existing habitat buffer has been degraded by past activity, including buildings, hardscape, play areas and lawn. The other half of the existing habitat is mature forest and will be preserved. It appears, however, that a number of mature trees located within the existing habitat buffer will be impacted by construction due to the close proximity of project components (e.g.; playfield, fire lane). The HMP is not proposing a reduction of the habitat buffer width, it is proposing a reduction in the overall area of prescriptive habitat buffer. The applicant is not proposing to reduce the prescribed water quality buffer.

The prescriptive habitat buffer is 148,362 square feet. The area of habitat buffer proposed by the applicant is 84,707 square feet, comprised of the existing undeveloped forest (73,508 square feet) and proposed habitat restoration area (11,199 square feet). The proposed buffer area is 57 percent of the prescriptive buffer area. The question is: Does the proposed 84,707 square feet provide habitat functions and values that are greater than would be provided by the prescribed habitat buffer? Note, the 73,508 square feet of existing undeveloped forest is included in both the proposed buffer and prescriptive buffer; that is, it would remain in place if the project were constructed entirely outside of the prescriptive buffer. Therefore, the only additional area of habitat buffer is the 11,199 square feet of habitat restoration area. The code provides that an HMP may propose a reduction of the habitat buffer width where it is shown that the HMP will comply with the other requirements of the section. Staff finds that the HMP does not comply with the other requirements of the section, as detailed below.

***BIMC 16.20.060.C -- Effect of Buffers. An HMP shall provide habitat functions and values that are greater than would be provided by the prescribed habitat buffers. When habitat buffers are a component of an HMP, they shall be at least the minimum size necessary to accomplish the objectives of the HMP. The HMP may propose, but the city shall not require, a habitat buffer containing a greater area than is required by the prescribed habitat buffer.***

The Washington Department of Ecology (Ecology) defines buffers as vegetated areas adjacent to aquatic resources that can, through various physical, chemical, and/or biological processes, reduce impacts to these resources from adjacent land uses. Buffers also provide some of the terrestrial habitats necessary for wetland-dependent species that require both aquatic and terrestrial habitats.

The proposed adjacent land use is an elementary school, which the City characterizes as a high impact land use. The relative measure (high, medium, low) of the intensity of land use is used to determine the appropriate buffer width. The effect – or function – of the prescriptive habitat buffer is to minimize specific environmental impacts of the project including impacts on wildlife from noise, light, human disturbance (presence/movement) and introduction of invasive species. Ecology’s technical guidance on establishing buffer width assumes the buffer is vegetated with native plant communities that are appropriate for the ecoregion and provides that if the vegetation in the buffer is disturbed (grazed, mowed, etc.), proponents planning changes to land use that will increase impacts to wetlands need to rehabilitate the buffer with native plant communities that are appropriate for the ecoregion, or with a plant community that provides similar functions.

As proposed, the applicant is planning changes that will increase impacts to the off-site wetland. Providing the prescribed habitat buffer would mean that the entire project would be built outside the buffer. If the whole width (200 feet) of the habitat buffer was provided, it would provide a greater distance between the school and its associated impacts (impacts on wildlife from noise, light, human disturbance and introduction of invasive species) and the wetland itself. In total, the applicant is proposing 26,257 square feet of buildings and hardscape and 5,579 square feet of grass paving (fire lane) within the habitat buffer. The existing habitat buffer contains 3,232 square feet of building (1,423 square feet building, 1,809 square feet portable). It is anticipated that these buildings would be removed if the prescribed habitat buffer were provided. The existing habitat buffer also contains approximately 17,514 square feet of hardscape, comprised of play area and other miscellaneous hard surfaces. It is unknown whether these hardscape areas would be removed if the prescribed habitat buffer were provided. To summarize:

* If the prescriptive buffer were provided, zero square feet of buildings would be located within the habitat buffer and 17,514 square feet of remnant hardscape may remain.
* If the proposal were approved, 24,323 square feet of buildings, 1,934 square feet of hardscape and 5,579 square feet of grass paving would be located within the habitat buffer.

The proposal also includes 11,199 square feet of new habitat restoration planting and 40,238 square feet of lawn, both native “ecolawn” and maintained playfield lawn, within the habitat buffer and an additional area of preserved existing forested area outside the habitat buffer (40,081 square feet). Existing and proposed conditions within the habitat buffer are shown below for a side-by-side comparison:

The “new habitat restoration planting” is described on the October 11, 2017 drawing as “45% of area: herbaceous perennials, 75% of area: native drought tolerant shrubs.” In addition, an area of 40,238 square feet is proposed as lawn, both native “ecolawn” and maintained playfield lawn. This does not follow Ecology’s guidance that the buffer should be replanted with native plant communities that are appropriate for the ecoregion, or with a plant community that provides similar functions. The new habitat restoration planting does not provide similar functions – minimizing the direct (human presence/movement) and indirect (noise/light/introduction of invasive species) impacts of the adjacent school – as the existing forested habitat buffer. This is supported by recent research that confirms that although preferences for the type of vegetation in a buffer are very species specific, as a general rule, most researchers have recommended that buffers be maintained or restored to a forested condition if only for the screening function they provide – not perennials, shrubs and lawn.

***BIMC 16.20.060.D -- Impact Mitigation – General. The HMP shall encompass an area large enough to provide mitigation for buffer reduction below the standard required buffers, and shall identify how the development impacts resulting from the proposed project will be mitigated. The developer of the plan shall use the best available science in all facets of the analyses. The Washington Department of Fish and Wildlife Priority Habitat and Species Management Recommendations, dated May 1991, and/or bald eagle protection rules outlined in WAC 232-12-292, as now or hereafter amended, may serve as guidance for this report. For habitat management plans addressing wetland buffers, Method for Assessing Wetland Functions, Ecology Publication No. 99-116 shall be used for guidance in determining function equivalency.***

The HMP does not utilize a functional methodology to demonstrate that the proposed “new habitat restoration area” and/or proposed preserved forested area is an area large enough to provide mitigation for development impacts resulting from the proposed project. The functional assessment methodology used in the HMP documents existing functions of the wetland but does not tie it directly to the functions of the buffer. No analysis or rationale is provided as to whether a mitigation area of approximately 8 percent of the habitat buffer is large enough. Further, not all of the proposed mitigation measures provided in the HMP adequately identify how the development impacts resulting from the proposed project will be mitigated:

(1) Improving screening of the wetland from noise and light intrusion from the school and associated outdoor activities. Comment: The project will likely result in an increase in noise and light intrusion due to the siting of the school building closer to the wetland. The proposed “new habitat restoration planting” and “ecolawn” will not provide adequate screening.

(2) Increasing area within the buffer that provides forage and nesting for wildlife. Comment: The proposed “new habitat restoration planting” and “ecolawn” will likely increase forage and nesting opportunities.

(3) Increasing large woody debris recruitment to wetland to improve water quality. Comment: The HMP is not intended to improve water quality.

(4) Protecting large coniferous trees that are suitable for cavity nesting birds and mammals. Comment: Protecting existing trees does not improve habitat functions and values nor mitigate impacts of the proposed project*.*

(5) Maintaining groundwater discharge to Wetland 18. Comment: Maintaining groundwater discharge does not improve habitat functions and values.

***BIMC 16.20.060.E -- HMP Review. All habitat management plans shall be submitted to the Washington State Department of Fish and Wildlife habitat biologist and to the Suquamish Tribe for review and comment. Within that same time frame, the city’s environmental technical advisory committee shall be asked to review the HMP and provide comments.***

The WDFW habitat biologist provided comments on the June 1 and October 11, 2017 HMP which were provided to the applicant. The City’s ETAC reviewed the June 1 and July 19, 2017 HMPs and conducted a site visit, after which they provided comments on October 6, 2017. The committee did not find the HMP to be adequate.

***BIMC 16.20.060.F -- Map. The habitat management plan shall contain a map prepared at an easily readable scale.***

The applicant provided an adequate map.

***BIMC 16.20.060.G. – Report. The HMP shall also contain a report which contains:***

1. A description of the nature and intensity of the proposed development; Comment: The nature of the proposed development is described but the intensity is not addressed.

2. An analysis of the effect of the proposed development, activity or land use change upon the wildlife species and habitat identified for protection. If the habitat management plan is addressing wetland habitat, the analysis shall compare an assessment of wildlife habitat suitability of the wetland applying standard buffers with an assessment of habitat suitability as proposed using Method for Assessing Wetland Functions, Washington State Department of Ecology (if available for the specific hydrogeomorphic classification); Comment: Two functional assessment methodologies to document existing wetland functions are provided; however, no comparative assessment of wildlife habitat suitability of the wetland applying standard buffers with an assessment of habitat suitability as proposed using a functional methodology is provided.

3. A plan which identifies how the applicant proposes to mitigate any adverse impacts to wildlife habitats created by the proposed development. For wetland or other habitats protected by this chapter, the application shall show, using the appropriate function assessment methodology, that habitat functions and values are greater after the development than would occur had the prescribed buffers been provided (see mitigation plan requirements, BIMC 16.20.110); Comment: No function assessment methodology addressing habitat functions and values or impact mitigation is provided.

4. All review comments received from a habitat biologist from the Washington State Department of Fish and Wildlife (WDFW) and the Suquamish Tribe. If the HMP recommends mitigation involving federally listed threatened or endangered species, migratory waterfowl or wetlands, the U.S. Fish and Wildlife Service shall receive a copy of the draft HMP; Comment: Comments received from WDFW and the Tribe are not included in the HMP.

5. For properties subject to the provisions of the city’s shoreline master program, Chapter 16.12 BIMC, a site-specific analysis of the project’s impact on shoreline fish and wildlife habitat, as currently required by the SMMP, utilizing the provisions for environmentally sensitive areas as provided in Exhibit A in BIMC 16.20.260; Comment: Not applicable.

6. The HMP shall specifically address, as appropriate, the following:

a. Enhancement of existing degraded buffer area and replanting of the disturbed buffer area with native or equivalent vegetation; Comment: A portion (11,199 square feet or 8 percent) of the existing degraded buffer is proposed for replanting.

b. The use of alternative on-site wastewater systems in order to minimize site clearing;

c. Infiltration of stormwater where soils permit; Comment: Addressed.

d. Retention of existing native or equivalent vegetation on other portions of the site in order to offset habitat loss from buffer reduction; Comment: A 40,081 square foot forested area outside the habitat buffer will be preserved. While this will improve the overall ecological function of the site, it is not in a location where it will mitigate impacts of the proposal.

e. The need for fencing and signage along the buffer edge. Comment: Addressed.

***BIMC 16.20.060.H -- Mitigation Measures. Possible mitigation measures to be included in the report, or required by the director, could include, but are not limited to:***

1. Establishment of buffer zones; Not addressed.

2. Preservation of critically important plants and trees; Not addressed.

3. Limitation of access to habitat areas; Addressed with low impact fencing.

4. Seasonal restriction of construction activities; Not addressed.

5. Establishing phased development requirements; Not addressed.

6. Monitoring plan for a period necessary to establish that performance standards have been met. Generally this will be for a period of seven to 10 years. HMP report includes monitoring plan.

***BIMC 16.20.060.I – HMP Adequacy. The HMP shall demonstrate to the satisfaction of the director that the habitat functions and values are improved by implementation of the HMP.***

The HMP does not satisfactorily demonstrate that the habitat functions and values will be improved by implementation of the HMP.

***BIMC 16.20.060.J. -- Timing. An HMP must be developed and approved either prior to preliminary plat approval or issuance of the building permit, as applicable, and must be implemented before the city grants either final plat approval or an occupancy permit, as applicable.***

The city will not issue a building permit without first approving the HMP.

***BIMC 16.20.060.K – Performance surety. The director may require that the applicant provide a performance surety to ensure conformance with mitigation requirements of the habitat management plan.***

A performance surety should be required as a condition of approval prior to building permit issuance. Monitoring should be required for seven (7) years.