



819 SE Morrison Street
Suite 310
Portland, OR 97214
503.274.2010 **phone**
503.274.2024 **fax**

www.esassoc.com

memorandum

date March 18, 2019
to Vera Kolias, AICP
from Sarah Hartung, Senior Biologist
subject Natural Resource Review for Elk Rock Estates

This memorandum summarizes ESA's technical review of land use application materials relating to site natural resources regulated by Milwaukie's Municipal Code, including Habitat Conservation Areas (HCAs) and Water Quality Resources (WQRs). Responses to specific technical review tasks are identified in *italics*.

1. Conduct a site visit to assess existing conditions and generally corroborate the figures and narrative provided in the application submittal.

Response: ESA personnel (Sarah Hartung) visited the project site on March 16, 2019 to confirm the description of existing site conditions in the application. Existing conditions are generally as described in the application. The site consists of an open field with two single-family residences along SE 19th Avenue. Several tire ruts and a few piles of firewood and debris were noted in the open field. The field consisted of newly emerged grasses and forbs with a few patches of nuisance weeds such as lesser celandine. Himalayan blackberry has formed a dense thicket on the steep slope (greater than 25%) adjacent to the slough. Mature black cottonwood trees are growing along the southern and western boundaries of the site, although it's not clear if these trees are rooted within the subject property boundaries. Canada geese were observed foraging in the field.

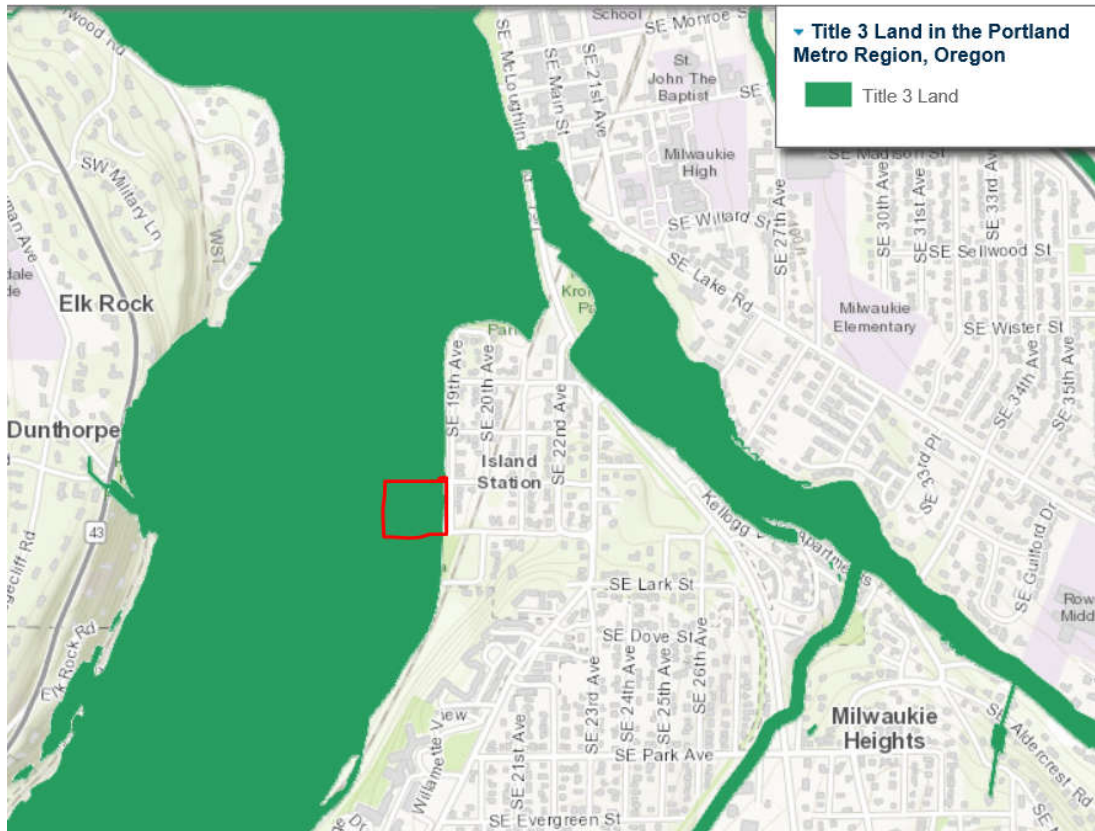


Photo 1: Looking west at the subject property which includes an open field with grasses and forbs as well as debris piles. A handful of black cottonwood trees are growing along the western boundary – although it’s not clear if these should be included on the site plans. March 16, 2019.

2. Review the Natural Resource materials prepared by ETC. Assess and comment on the applicant's responses to the following requirements:
 - a. WQR & HCA Boundaries:
 - Confirm the applicant’s assessment of the WQR, particularly with respect to steep slopes at the slough and the measurement of the vegetated corridor, as well as the WQR classification (i.e., Good, Marginal, or Poor).

Response: The WQR of the delineated slough appears accurate as shown in the figures. The 50-foot setback is established from top of bank. The preliminary site plan and other maps show top of bank as a relatively straight line that cuts across contours and appears incorrect; however, when measuring the 50-foot setback from the slough on the site plan, it does appear to be from the break in slope at the top of the steep (greater than 25-foot percent) slope.

The application states that Wetlands A and B are secondary protected features, but then correctly identifies a 50-foot buffer that overlaps with the study area. The off-site wetlands (A and B) are primary protected features with 50-foot buffers because they occur within Title 3 Land as mapped by Metro – see snippet below. The project site is approximated in red – west of SE 19th Ave and within Metro’s Title 3 Lands: <https://databasin.org/maps/new#datasets=88691cc47cbd4992838864c29dbb147f>



The natural resource documentation concludes that the WQR is “degraded” which appears accurate based on the lack of shrub and tree cover on-site; however, the applicant did not follow the methods provided in Chapter 19.402 in order to reach this conclusion.

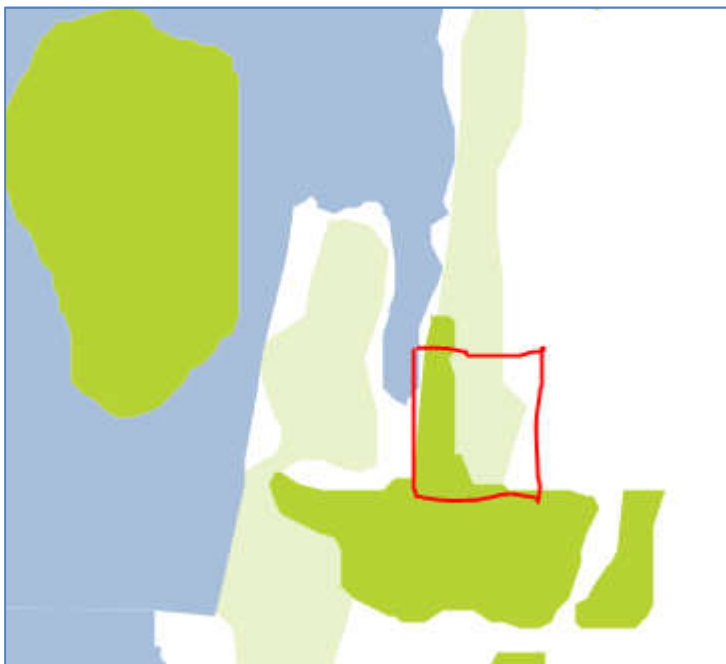
- Review the applicant’s detailed boundary verification for the HCA to confirm the accuracy of the proposed adjustments to the City’s Natural Resource Administrative Map (according to the procedures outlined in MMC Subsection 19.402.15.A.2.b).

Response: The applicant’s boundary verification is inaccurate and incomplete according to MMC Subsection 19.402.15.A.


The code (19.402.15.A.2.a.) allows map adjustments for a few reasons: errors in the original mapping; changes to boundaries of the WQR since the most recent NR administrative map; and due to legal filling, culverting or development prior to January 16, 2003, the effective date of Ordinance #1912. The applicant is contending that the site was developed and should not be subject to HCA requirements because fill was placed in the floodplain several decades ago (circa 1930s and 1940s). According to definitions in the code, “development” can include site modification such as placement of fill; however, the subject property is currently mapped as the 100-year floodplain of the Willamette River and is vegetated, therefore is providing floodplain functions despite the placement of historic fill.

The application is missing the following mapped data as part of the HCA verification: All flood areas within 100 feet of the property; and vegetative cover status as identified on Metro's Vegetative Cover Map (see <https://gis.oregonmetro.gov/metromap/> - or ESA can send the pdf version). The site qualifies as Class I Riparian Area. Class I Riparian Areas remain as mapped regardless of development value [Table 19.402.15.A.2.b(2)(c)].

Metro's vegetative cover map identifies shrub/scrub (light green shading) as well as forested cover (medium green shading) on the site which is approximated by the red polygon below. Even if the vegetative cover were to be downgraded to Class II, the HCA mapping would still hold up regardless of the development value.



Landcover Type

-  Tree Canopy
-  Shrub/Scrub Canopy
-  Exposed Soils/Grass Canopy

- b. Inventory of existing vegetation, identification of the ecological functions of riparian habitat, and categorization of the existing condition of the WQR on the subject property?

Response: The inventory of existing vegetation looks reasonably accurate, although it's not clear if more black cottonwood trees should be shown on the map within the subject properties. Only 2 trees are mapped at the northwest end on the landscaping plan Sheet L1. The application concludes that the study area is "degraded" based on the low cover of shrubs and trees and the high percentage of weeds in the groundcover. This characterization is assumed to meet the Class C "Poor" category per Table 19. 402.11.C. The application does not provide a detailed discussion of ecological functions of riparian habitat.

- c. Analysis of alternatives to the proposed development, including a critique of the rationale behind choosing the alternative selected

Response: An analysis of alternatives to the proposed development was not provided, presumably because the applicant is contending that the study area should not be mapped as HCA.

- d. Mitigation plan that is appropriate for the proposed disturbance and that ensures the disturbed portions of the WQR and HCA will be restored to an equal or better condition, including appropriateness of the proposed mitigation planting list. Review ETC's alternatives report to remediation of the banks of the slough.

Response: Before the mitigation plan can be assessed, the HCA mapping issue should be resolved and impacts should be recalculated. A few other issues with the application are noted: the development plan and proposed impacts shown on Sheet 8 do not match Sheet 1: Grading and Site Plan dated January 2019. The impacts on Sheet 8 do not account for the proposed dock construction, which should be accounted for as a WQR impact. The impact assessment also does not include a discussion of the proposed benches or walkway down to the dock.

If the HCA mapping is to be revised as the applicant requests, and Sheet L1 is the proposed planting plan, then deficiencies are noted as follows:

- *Sheet L1 states that "all the plants within the WQR boundary are native" but it's difficult to verify this based on the planting sheet. The planting list provided is a mix of native and non-native species for the entire site, and does not indicate which native plants will be planted within the WQRs. Please provide details on the native 50/50 mix - which species are included?*

The applicant provides a feasibility discussion of removing the Himalayan blackberry from the steep slope along the slough and concludes that the "do nothing" approach is the best option. Depending on how the HCA mapping resolves, this area may be needed for mitigation or the area across the slough that is in the same ownership. The steep slopes just south of the study area in the public park have been successfully cleared of Himalayan blackberry and replanted with native shrubs. This may be an example of how it is possible to remove nuisance plants from a steep slope while maintaining bank stability.



Photo 2: In Spring Park looking at restored, steep banks that are similar in slope to the subject property (visible in the upper left). March 16, 2019.

3. Evaluate the proposed activity with respect to the three approval criteria established in MMC Subsection 19.402.12.B:
 - a. Avoid = The proposed activity will have less detrimental impact to the WQR and HCA than other practicable alternatives.
 - b. Minimize = Where impacts cannot be avoided, the proposed activity shall minimize detrimental impacts to the extent practicable.
 - c. Mitigate = The proposed mitigation plan demonstrates appropriate and adequate mitigation for adverse impacts to the WQR and HCA.

Response: The application does not fully account for impacts to HCA and an assessment of whether the proposed activity avoids, minimizes or mitigates cannot be completed at this time.

4. Evaluate the proposed project with respect to standards and criteria for residential cluster development established in MMC 19.402.14.C.

Response: The responses provided by the applicant for 19.402.14.C appear reasonable and accurate with the following notes:

- *For 19.402.14.C.2.c.7, please clearly identify the common areas proposed east of the slough and calculate the acreage for each component of open space including the side yards etc.*

- For 19.402.14.C.2.c.8, this value will change with the consideration of HCA mapping as shown on current city maps. Please clarify what is meant by the following statement, “The 4094 ft.² created by the delineated wetland to the south side of the property is not proposed as common open space.” Does this mean the area within the Sparrow Street right-of-way that is adjacent to the site? Identifying each component of open space east of the slough could help clarify.
 - For 19.402.14.C.3.b, please clarify if the northernmost units east and west of the proposed private drive will have set backs from any proposed common areas to the north.
 - For 19.402.14.C.3.e., see response to 19.402.14.C.2.c.8 above.
 - For 19.402.14.C.4.2, please clearly show the proposed single common space tract including the areas west of the slough.
 - For 19.402.14.C.4.4, this response will likely change based on a reassessment of HCA impacts.
5. Prepare a written report that summarizes your assessment.

Response: The following deficiencies are recommended to be resolved with revised application materials prior to the issuance of a decision:

- The HCA verification is missing the analysis of flood areas and vegetative cover status per Metro mapping. The HCA mapping as drawn appears warranted, therefore the applicant should reassess impacts and mitigation to HCA/WQRs.
- Include the walkway, benches and dock construction in the impact analysis.
- Provide an alternatives analysis that meets code requirements.
- For updated mitigation plans, please clearly identify the type, quantity and condition of native plants proposed in regulated WQRs and HCAs per city code. The development layout on Sheet L1 should match the site plan.
- Provide a more detailed assessment of water quality, flood storage, and habitat functions for the site, including the slough where a dock is proposed as part of the project, in order to assess impacts to ecological functions and whether mitigation addresses the loss or modification of these functions.