

1. Overview

We would like to submit the following comments on the draft update of the Programmatic Backcountry Trails permit (L09CG158) and associated draft SEPA findings. We commend the County for updating this existing Programmatic Permit, which has been in effect for almost nine years now. We view the current draft to be a significant improvement over the existing permit. However, we strongly believe that the draft Permit has one major shortcoming, and that is the lack of a “General Permit Condition” that would avoid a trail density that could seriously jeopardize the ability of County-owned lands to protect and enhance wildlife and wildlife habitat. This is particularly the case on lands designated as Natural Area and the ‘low intensity use’ areas of Multi-use Open Space lands - where the overriding goal is to “*protect, preserve and enhance important natural resource habitat, biological diversity, and the ecological integrity of natural systems*”. This major concern is described below, and our recommendation for addressing this shortcoming is described in Section 7. We also suggest a few other, less-critical enhancements to the draft Permit in Section 8.

2. Current Permit Condition to limit trail density

Under the existing permit, Condition #31 effectively limited trail density on any given site, stating “*The trail surface must not exceed 1% of the total site area.*” This condition originated with the previous KC Stormwater Services blanket adjustment (L09V0028) for substituting U.S. Forest Service (USFS) trail construction standards in place of standards in the 2009 and 2005 KC Surface Water Design Manuals (SWDM) for management of stormwater. This <1% condition has been interpreted to mean that the total tread area of all trails on the site must not exceed 1% of the total site area. As such, this condition was simple to communicate and understand, and was simple to evaluate for any proposed trail project submitted under this programmatic permit. As such, this condition served as an effective cap on maximum trail density on any particular site.

3. New proposed conditions which limit trail density

We understand Stormwater Services has updated their blanket adjustment decision regarding conditions necessary for substituting USFS trail standards for KC SWDM standards. In this update, from a surface water management perspective, they have replaced the simple <1% *trail surface* condition with two, somewhat related conditions – (1) “*protected native vegetated surfaces shall make up no less than 92 percent of the site*”, and (2) “*Total impervious surfaces including trails shall not exceed 4 percent of total site area.*” The draft update to the Programmatic Permit has incorporated this change as well, and has dropped the prior <1% *trail surface* condition. For brevity purposes, we will refer to the two new proposed conditions as the “>92% condition” and the “<4% condition”.

While these two substitute conditions certainly serve to limit maximum trail density on any particular site, they are: (a) more subjective and much more difficult to communicate and to assess; and (b) have a much higher potential for allowing a trail density that can seriously jeopardize key Open Space objectives, while still satisfying the Surface Water management goals as determined by Stormwater Services.

4. Definition of “protected native vegetated surface”

With regards to the 92% condition, it is critical that “*protected native vegetated surface*” be clearly and unambiguously defined. Presumably, the complement to these protected surfaces – i.e., the remaining <8%, would include:

- roads
- parking areas
- restroom areas
- signage areas
- lawn and landscaped areas

- any other infrastructure on the site
- open water areas
- rock outcroppings
- other non-vegetated areas
- areas dominated by non-native, invasive species (e.g., blackberry thickets, scotch broom fields)
- the tread area of all trails on the site

Two cases that should be explicitly addressed as to whether they should be included in this list, are: (1) the area along both sides of the trail, that is cleared of all brush and periodically maintained in that cleared condition; and (2) the area under BPA powerline right-of-ways, where BPA periodically comes through and removes all the trees that are growing on the right-of-way. While both of these cases may be “vegetated” with “native” species, they certainly aren’t “protected” in a “native” state. Given that backcountry trail tread widths tend to average between 2’ and 3’, while total cleared area for the trail commonly runs approximately 6’ in width, whether the cleared, non-tread portion of trails are included within this definition can have a substantial impact on satisfying the >92% condition. And on some County Open Space sites, BPA powerline rights-of-way can occupy a substantial proportion of the site – again, potentially having a major impact on the >92% condition.

5. Request for Concurrence (RFC) must include accounting of ‘protected native vegetated surface area’ and ‘impervious surface area’

Besides needing to clearly define this “*protected native vegetated surface*” metric, this relatively complex condition presents challenges to evaluating a particular trails proposal to determine whether it will satisfy the >92% condition, or not. To be effective, it will be important that the trails project applicant provide a detailed accounting of all the component areas that fall outside the *protected native vegetated surface* classification, including the proposed trails. And this accounting should be a mandatory part of the Request for Concurrence (RFC) submittal. Similarly, the RFC should also include an itemized accounting of Total Impervious Surface area, including the proposed trails, so the <4% condition can be assessed.

6. Our major concern

We are of the opinion that neither of these substitute conditions will limit the maximum allowed trail density to a point conducive to protecting and enhancing wildlife and wildlife habitat. These two conditions were apparently developed to specifically address stormwater run-off from the trails and other impervious surfaces - NOT for addressing wildlife habitat issues.

6a. Current ‘<1% Trail Surface’ Condition is inadequate for protecting wildlife

To illustrate this concern, let’s start by considering the existing Permit, with its <1% *trail surface* condition. If one had a hypothetical, perfectly square, 100-acre site (2,087’ on a side), under the existing <1% *trail surface* condition, one would be allowed to construct up to 17,424 ft. (3.3 miles) of trail, at an average tread width of 2.5 ft. If this 17,424 ft. of trail were perfectly located to “*maximize flow path lengths through forested areas to manage stormwater flowing off the trail*” (Condition #4 under the draft Programmatic Permit), there is essentially NO place one could stand on this 100-acre site that is not within 100 ft. of a trail. This situation may be totally adequate for stormwater management, and may even be fine from a recreational trail usage standpoint in some settings. But it is NOT conducive to protecting wildlife and wildlife habitat, where an animal cannot find a place in this 100-acre tract that is not within ~100 ft. of an actively-used trail. And this situation certainly does not contribute to the County’s goal to “*protect, preserve and enhance ... the ecological integrity of natural systems*”. And a more typical site, that is not perfectly square; contains confining water resources and other restrictions; and has a trail network that is not perfectly located, will tend to exacerbate the wildlife challenges even beyond this hypothetical case. As such, we have serious concerns that even the existing Programmatic Backcountry Trail Permit, with its <1% *trail surface*

requirement, is NOT compatible with preserving, nor enhancing, wildlife and wildlife habitat. [By way of reference, a single “traditional” 2.5 ft. wide backcountry trail meandering through this perfect 100-acre site would only occupy ~0.2% of the total site area. Two separate trails through the site would occupy ~0.4% of the area – far less than the 1% limit imposed by the current Programmatic Permit.]

6b. Impact of new proposed Conditions on wildlife habitat

This raises the question as to what impact the two new substitute conditions embedded in the new draft Programmatic Permit will have on maximum trail density; as these substitute conditions appear to allow even higher trail densities than under the current Permit.

The <4% impervious surface condition will generally not serve as a significant limitation on maximum trail density. Even allowing for a relatively large parking/staging/restroom area (~53,000 square feet; similar to the large parking area at Black Diamond Open Space) on a relatively small, 50 acre site, the <4% condition would still allow for 34,000 square feet of trail tread surface (2.6 miles of trail at 2.5 ft. average tread width); implying a permitted maximum trail surface area of up to 1.6% - significantly above the current <1% *trail surface* limitation.

With regards to the more-complex, >92% *protected native vegetated surface* condition; the impact on maximum trail density is very dependent on the specific characteristics of the site in question. As a test of the impact of this new criteria on maximum allowable trail density, we analyzed the 268-acre former Herbrand property (Black Diamond Open Space-Southeast; BDOS-SE) recently acquired by King County. There are few authorized trails on this property, and this is an area of very high interest for future trails for mountain bikers, hikers and equestrians. Our assessment of the area NOT qualifying as “*protected native vegetated surface*” on this site (i.e., the remaining <8%) is as follows:

- Allowance for parking/staging/restroom/signage/landscaped area: 53,000 square feet
- Existing Roads (including Route 66): 81,200 square feet
- Open water (wetlands, creeks): 279,000 square feet
- Non-vegetated (mostly former landings): 56,000 square feet
- Non-native brush: assume zero (assumes invasives are adequately controlled)
- SUBTOTAL: 469,200 square feet (10.77 acres = 4.0% of site)

Under the draft Programmatic Permit requirement that at least 92% of the site be in *protected native vegetated surface*, trails could occupy up to 4.0% of the site, or 10.67 acres. If the total cleared width of the trails is considered to NOT qualify as *protected native vegetated surface*, and the average trail cleared width is 6 ft., then up to 14.6 miles of trail could be permitted on this 268-acre site. At an average tread width of 2.5 ft., that would translate to 4.42 acres of trail tread, or 1.65% of the total site area in trail surface – again, far above the maximum allowed under the existing Programmatic Trail Permit’s <1% *trail surface* limitation, and FAR above what is practical for protecting and enhancing wildlife and wildlife habitat. And should it be decided that the cleared area on either side of the trail does qualify as *protected native vegetated surface*, then the 92% condition would allow up to 35 miles of trail to be constructed on the site! But at that point, the <4% impervious surface condition would kick in and limit the maximum allowed trails to 25 miles; with a resulting trail tread surface of 2.8% of the total site area!

7. Additional trail density Condition is needed to protect wildlife

Clearly, while the Surface Water Management conditions embedded in the draft Programmatic Permit may be adequate specifically for managing stormwater run-off, these conditions are NOT sufficient for limiting trail density to a point where County Open Space goals of protecting and enhancing wildlife and wildlife habitat can be achieved.

As such, it is important that the Programmatic Backcountry Trail Permit also include a provision that will serve as a limit on trail density allowing wildlife and wildlife habitat goals to also be achieved.

A wildlife expert should address what maximum trail density is compatible with the Open Space goals to protect and enhance wildlife habitat. And this maximum trail density metric should then be incorporated as a General Permit Condition within the Programmatic Backcountry Trail Permit (in addition to the two Stormwater Management Conditions). We would suggest that this maximum trail density limit should also vary based on the overall objectives for the lands on which the trails are to be constructed. For lands designated as Natural Areas, and those portions of Multi-Use Open Space lands designated as *low intensity public use zones* with a primary goal to “*preserve and protect native habitat and natural resources*”, we would suggest trail tread surface be limited to no more than 0.5% of total site area (the equivalent of having 2 – 3 separate trails meandering through a 100-acre site). For those Open Space lands designated to allow heavier public use, limiting trail tread surface to 1% of the total site area, as specified in the current Programmatic Permit, would seem appropriate; keeping in mind that even on these heavier public use areas, habitat protection is still a priority goal.

8. Other Suggestions to Improve Programmatic Backcountry Trail Permit

Besides the issue of maximum allowed trail density, there are also a few procedural steps that we feel should be incorporated into the Programmatic Backcountry Trail Permit.

First, given the extremely high level of public interest in trail development and use on County-owned lands, there should be a notification system in place to notify interested citizens, and citizens living within a designated distance of the site, any time an RFC trails application is submitted; along with a public comment period to solicit input on the proposal.

The RFC submittal should clearly indicate what user groups will be allowed to use the proposed trails, and what yield hierarchy will apply on these trails (e.g., bikers yield to hikers and horses; hikers yield to horses). In addition, the Programmatic Permit should specify the user group signage that will be required to be posted on these trails, once built.

The draft Permit eliminates current Condition #4, which specifies that trail work must occur in stages, with a section of trail cleared, built and stabilized before the next section is started. We believe there is value in requiring that new trail construction be stabilized as quickly as practical. As such, we recommend that some form of condition #4 be retained in the new Permit to avoid extensive delays in stabilizing new trail work vs. potentially postponing stabilization until the entire trail network has been built.

We believe existing Condition #32, which specifies that the average width of trails constructed under a Programmatic Backcountry Trail Permit be less than 3 ft., should be retained. Trails that average over 3 ft. in width are NOT what most people would consider to be “backcountry trails”. The current draft drops this *<3 ft. average width* condition.

It would seem the RFC should include an estimate of total project duration; not just project start date.

9. Submittal of Comments / Contact Information

We submit these comments and suggestions for the County’s serious consideration to further improve the Programmatic Backcountry Trails permit. If you have questions on these recommendations, feel free to contact us, at:

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