

Sandy River Basin Watershed Council

P.O. Box 868 Sandy, OR 97055

RE: Timberline Ski Area Mountain Bike Trails and Skills Park Preliminary Assessment

Mr. Chris Worth, Forest Supervisor
c/o Christy Covington
Mt. Hood National Forest
Sandy, OR 97055

April 4, 2011

Dear Mr. Worth,

We appreciate the opportunity to comment on the Preliminary Assessment for the Timberline Ski Area Mountain Bike Trails and Skills Park, as well as the efforts by the Forest Service and RLK to develop a plan whose environmental impacts are mitigated.

However, we believe that in the interest of watershed health and in view of the extensive work and investment that the Forest Service and other Sandy River Basin Partners are making to otherwise protect critical designated habitat in the Still Creek basin, we recommend that you adopt the "No Action" alternative as the best course for managing public lands within the Timberline Special Use Permit boundary.

The Sandy River Basin Watershed Council is a non-profit, citizen led organization whose mission is to restore and protect the natural, cultural, and historical resources of the Sandy River Basin Watershed. The Council has worked in partnership with the US Forest Service, other agencies, private landowners and volunteers for over 10 years to restore portions of the Sandy River Basin. The Council has secured financial and organizational support for collaborative efforts in the Sandy and its tributaries, including planned projects in the Still Creek subbasin not far downstream from the proposed project. Our recommendation of No Action is based on several factors identified in the assessment, particularly: the significance of the aquatic and watershed resources within the project area for ESA listed salmonids and other wildlife, the current 'not properly functioning' condition of those resources, and the cumulative impact that the assessment suggests that proposed project would have on habitat, water quality, and other important ecological factors.

We have reached this No Action recommendation based on the following key points:

- The PA indicates that the aquatic resources within the area are of high importance – Sandy salmonids and their tributary habitats are key elements of the Oregon Department of Fish and Wildlife's Recovery Plan for the Lower Columbia region, yet the PA indicates that the project area habitats currently are not in properly functioning condition, and anticipates further negative impact to the aquatic and wildlife resources.
- The Forest Service appropriately is relying on performance goals to reduce the impacts of this project yet there are problems, due to past activities, that have not been corrected.
- The PA does not adequately address the cumulative impacts of this project in light of current and planned future projects on watershed and wildlife resources.

The Council works closely with the recreational community as well, recognizing that sustainable recreation can be an essential element of watershed protection and key way to bring a broad audience into the effort to restore and protect the Sandy. The Council's standard for such projects is whether the net effect is positive for watershed health, habitat and water quality. We believe the proposed project in this case and in its current form does not meet acceptable cumulative impact in the headwaters of the Still Creek subwatershed in its current condition. We are not suggesting that recreation or mountain biking in general is incompatible with restoration.

The proposed watershed restoration projects, described in the PA, are needed independently to address lingering problems within the Timberline Special Use Permit area, regardless of proposed development of a bike park. The assessment indicates that even if carried out, the compensatory restoration benefits would "no longer offset" negative sediment impacts produced under less than optimal, wet operating conditions. The Forest Service and permit holder should implement the restoration projects to correct existing erosion and water quality problems, before new ground disturbing activities are approved that would further degrade habitat conditions in the same critical habitat subwatershed.

1.5 Management Direction

Comment 1 - Land designations within the project area include a portion of the Salmon River *Tier 1 Key Watershed* (Northwest Forest Plan) and a significant amount of land identified as *Riparian Reserves* (Northwest Forest Plan) in the headwaters of tributary streams. "*The objective of Key Watersheds is to contribute directly to conservation of at-risk anadromous salmonids and resident fish species*" (p. 3, Appendix C - Watershed Resources Report). The construction of 17 miles of new bike trails and the ongoing ground disturbance and sediment produced by the long-term operation of these trails is not consistent with the Key Watershed objective. This project as proposed is not compatible with the Forest Service's responsibility to protect watershed health.

Comment 2 - Still Creek has been designated as "Critical Habitat" for Lower Columbia River Steelhead trout up to the West Leg Road at the Jeff Flood ski lift base terminal. However, the disturbed soils in the base station area and on some sections of the ski slopes are still devoid of vegetation years after the lift was constructed. In particular given that this designation occurred after the previous lift development was approved, the continuing erosion of sediment into Still Creek and potential for additional sediment is unacceptable and may be large enough to have a significant, negative, and avoidable effect on listed steelhead trout and their critical habitat.

Comment 3 - The Sandy River Partners' analysis and prioritization of sub-watersheds within the Sandy basin ranked Still Creek number 3, and the Salmon River number 2, among a total of 14 areas that were identified as highest priority geographic area for habitat restoration (Sandy River Basin Working Group. 2007. Sandy River Basin Aquatic Habitat Restoration Strategy: an anchor habitat-based prioritization of restoration opportunities). The lower elevation sections of Still Creek produce very significant numbers of salmon including spring Chinook and Coho. Given the importance of Still Creek and the West Fork of

the Salmon River in the production of wild salmon it is imperative that water quality be maintained at the highest possible level, and sediment load from headwaters areas limited.

Comment 4 – The habitat provided by the rivers and tributaries within the Sandy River basin is of great importance to efforts to recover listed fish populations in the Lower Columbia region. The Sandy basin is a key part of the Oregon Department of Fish and Wildlife's Recovery Plan for the Lower Columbia region. "Thus, the Salmon River and Still Creek provide the majority of critical spawning and juvenile rearing habitat for LCR spring Chinook, and consequently play a critical role in the recovery of that ESU [Evolutionarily Significant Unit]. (p. 23, Appendix G - Draft Aquatics Biological Assessment citing a report by the Sandy River Basin Partners).

2.1.3 Watershed Restoration

Comment 1 - We appreciate the proposed actions to restore some existing service roads and disturbed areas within the permit area. However, these measures should already have been implemented by the permit holder as part of meeting their stewardship responsibilities under the terms of the Special Use Permit that enables them to operate on public land. We recommend that the restoration activities described in the PA be implemented independent of the mountain bike park. Given that a typical establishment period for restoring vegetation is two-three years, development activities in or near the restoration areas would need to occur after the restored areas are established to gain their true ecological benefit.

2.1.6 Project Design Criteria

Comment 1 - We support efforts by the Forest Service to develop and use performance based standards and outcomes (PDC's) to reduce the impacts of the proposed trails. However, in light of existing problems including soil erosion, lack of re-vegetation of disturbed areas, and chemical contamination / Total Dissolved Solids (TDS) resulting from salting, we have concern as to the implementation of additional PDC's that the project envisions and the degree to which additional standards can be enforced.

Comment 2 - The effectiveness of the PDC's would depend to a very large degree on their being executed consistently during construction and operation, evaluated by on-going monitoring, and adapted as needed to ensure that the standards are met and the resources within the area are protected as intended. The PDC's would need to be integrated into construction contracts, Special Use Permit conditions and other relevant documents to guide construction and operation and be enforced by Forest Service personnel. For the PDC's to succeed it would be necessary for the Forest Service to have adequate funding and staff, in each year that the bike park is in operation, to ensure that the permit holder is fully implementing each of the Project Design Criteria. It would also be necessary for resource staff specialists on the Zigzag Ranger District to have full access to all of the monitoring data that is generated by the permit holder.

3.2 Hydrology, Geology, and Water Resources

Comment 1 - Existing sediment problems in Still Creek and the West Fork Salmon River suggest that additional impacts anticipated by the PA are contrary to management goals and restoration objectives. The current conditions in the upper reaches of these drainages are not acceptable as baseline conditions let alone in light of the results of the Forest Service's sediment model analysis of sediment expected to be generated by the proposed project (Table 7, p. 38, Appendix G - Draft Aquatics Biological Assessment). *"Bike Park construction/operation will significantly increase short and long term fine sediment into Still Creek and the West Fork Salmon River" and "... may be large enough to have a negative, significant affect on listed steelhead trout and critical habitat"* (p. 38 and 39, Appendix G). Table 7 indicates that under "dry" operating conditions moderate use levels of the bike park will produce 2 times as much sediment (i.e. 40 tons) as would be generated at baseline conditions. Heavy use under "dry" conditions will produce 20 times the baseline amount or a total of 400 tons of sediment.

This demonstrates how critical it will be for the trails to be used only under "dry" operating conditions. *"The reason for the distinction between 'dry' and 'non-dry' conditions is that the amount of annual sediment generated by the Bike Park increases by orders of magnitude if the operation/construction occurs during saturated soil conditions, at which point, the watershed restoration actions will no longer offset the sediment generated from this project"* (p. 38, Appendix G). Unless the trails are closed during saturated soil conditions heavy use has the potential to generate 1000 tons of sediment (= 50 times baseline; while in the 1200 - 3000 mm moisture range) and 2400 tons (= 120 times baseline; while in the > 3000 mm moisture range). Here again, we would point out that the PDC's must be consistently implemented in order to be effective. We anticipate that closing some or all trails during wet periods will be tough to sell to riders who may have travelled a great distance to ride the trails.

3.3 Wildlife

Comment 1 - Increasing the intensity and duration of summer recreation within the project area is very likely to displace the large animals that use this forested area as summer range. This is some of the best summer range and forage on this part of the mountain and it's also a gentle slope which elk prefer. The quality, quantity, and availability of summer forage can affect elk productivity and thus the viability of elk populations. Due to their location in existing forest stands the bike trails also have the potential to alter the use of those stands as hiding cover.

Comment 2 – The PA should address the potential effects on elk calving, abandonment of calves by cows due to human disturbance, and potential effects of both abandonment and also predation on calves due to disturbance of cows by humans and bikes.

Comment 3 – The PA should quantify how much or what percent of Summer Range (B11) type habitat will be lost as a result of the project. We are concerned that lands currently used as summer range will not still be capable of supporting elk if this bike proposal moves forward.

3.4 Botany

Maintaining healthy communities of native trees and associated plants is a very important component of healthy watersheds. As outlined below we are concerned that the project has the potential to harm the plant communities within the project area and in the case of invasive plants become an area from which new invasive plants could spread to other areas nearby.

Comment 1 - Upper elevation plant communities are sensitive to disturbance and very slow to recover. Although the project design calls for a narrow trail tread and construction impact zone the trail related disturbance that occurs in the forested zones between the existing ski runs will further disrupt the native plant communities. Efforts to re-vegetate disturbed areas will be challenged by the short growing season. Although efforts were made to re-vegetate the disturbed areas at the Jeff Flood base station and on associated ski runs they have not yet been successful. Effectively re-vegetating disturbed areas is an important component of preventing soil erosion and continued sediment problems in headwaters of Still Creek and other tributaries within the project area. Re-vegetation efforts could potentially be negated by trampling along trail corridors as large numbers of spectators try to view race events that are planned for the bike park. As mentioned above, the typical establishment period for vegetative restoration is two-three years. The project plan does not indicate how restored areas will be protected during establishment if immediate operation of the bike park is implemented following construction.

Comment 2 – The project risks introduction or expansion of invasive plant species within the project area. The potential for introduction of non-native, invasive plants is very high given the number of riders that the permit holder hopes to attract and the large geographic area that they are likely to come from. Steps must be taken to reduce the likelihood of invasive plant introduction, to monitor the permit area for invasives and rapidly control any invasive plants that are found. The proposed bike cleaning station (PDC Veg-16) is a good idea but this will only work if the permit holder ensures that all bikes are cleaned before they enter the trail system.

Comment 3 – Ecosystem-altering invasive plants – The threat posed by plants such as False brome, Garlic mustard and others must be addressed thoroughly in any such project. The Forest Service cannot afford to have any of these species become established in the project area. It is inconsistent with existing management goals, commitments and multi-agency, basin-wide efforts to risk altering the function of the native plant communities and thus the function of the headwaters of the streams that originate in the area. As mentioned below Garlic mustard chemically disrupts interactions between plants and fungi. This can inhibit the natural establishment of tree seedlings within the affected area. Appendix E – Botany report outlines the threats posed by invasive plants -- *“False brome is a highly invasive ecosystem-altering grass, capable of invading and overrunning roadsides, trailsides, openings, and forest interiors. This non-native grass is a species of particular concern in the Willamette Valley where it has invaded thousands of acres on the Willamette National Forest and Eugene BLM District. Populations of false brome have now spread along roads and trails in the Columbia River Gorge. The Nature Conservancy and East Multnomah County Soil and Water Conservation District are treating populations in the Columbia River Gorge with herbicide on an annual basis. Threats: This plant is a serious threat to forests and meadows on the west side of the Cascade Range and can spread rapidly (like wildfire). It could easily be transported by mountain bikers from infested areas (upper Willamette Valley, Columbia River Gorge) to the proposed Timberline mountain bike park.”* (p. 91, Appendix E)

“Garlic mustard is another highly invasive ecosystem-altering plant species, capable of invading and overrunning roadsides, trailsides, openings, and forest interiors. This nonnative herb has invaded thousands of acres of forest in the northeastern and midwestern United States (e.g., New England, Wisconsin, Minnesota). It is now present along trails in the Columbia River Gorge and in Forest Park in downtown Portland. Populations in the Columbia River Gorge were probably spread from what is thought to be the source population in the nearby town of Corbett. Garlic mustard exudes a chemical into the soil that disrupts beneficial mycorrhizal associations between native plants, especially trees, and fungi. Threats: This plant is a serious threat to forests and meadows on the west side of the Cascade Range and can spread rapidly (like wildfire). It could easily be transported by mountain bikers from infested areas (Columbia River Gorge) to the proposed Timberline mountain bike park. This plant is very difficult to eradicate or control.” (p. 91 - 92, Appendix E)

3.6 Recreation

Comment 1 – Proposed activities in the project would increase the cumulative effects of the bike park project beyond its direct impact. Parking at the lodge is identified a problem. *“Under the Proposed Action, the current parking limitation at Timberline would continue to be a problem. The addition of 169 cars on a capacity day would further tax the parking lots. The existing parking lots would continue to limit the number of visitors in the SUP area and this issue would be somewhat exacerbated on a capacity day at the bike park. During mountain bike events and busy days, RLK would manage parking by segregating user groups into different parking areas. RLK would also implement parking and spectator management provisions in the Spectator Management Plan (Rec-5). RLK has indicated that they would use shuttles to transport spectators from Government Camp as a primary means of reducing the demand for parking during events,” (p. 140, PA)*

The PA fails to address the fact that parking is already limited in Government Camp on busy summer days and it says nothing about the pressure that may arise to build new parking capacity in Government Camp or some other site on the south side of the mountain. If additional parking is built it is likely to increase the amount of impervious surface in the drainage area of one of the creeks. That could result in additional impacts to the creek by altering runoff patterns, ground water recharge or other factors. This could further degrade creeks that currently are not in functioning condition thus increasing the cumulative effects of the bike park project.

Comment 2 – The projected level of use on the bike trails will certainly alter the recreation experience of hikers, casual visitors, guests at the lodge, and those heading west to the Mt. Hood Wilderness Area as they use the existing foot trails in the area.

The existing Mountaineer Trail can serve as an example of how trails intended to provide new recreation opportunities can disrupt existing, popular recreation opportunities. The Mountaineer Trail traverses across the slopes as it travels west, from Timberline Lodge, before turning uphill to climb above treeline. *“The Mountaineer Trail is a popular, 2.6 mile long trail, and is the highest elevation trail on the south side of Mt. Hood. It leaves from Timberline Lodge next to the Magic Mile Express chairlift and also serves as a connector to the PCNST. Typical use on the Mountaineer Trail is family day hiking, sightseeing and viewing wildflowers.” (p. 134, Preliminary Assessment)*

The Mountaineer Trail is located down slope of the top terminal for the Jeff Flood ski lift. This terminal will be the unloading station for riders using the proposed downhill bike trails. When they reach the top of the lift riders will start out on a green trail and then have the choice between a green or blue skill level trail. Both of these trails will cross the Mountaineer Trail as riders descend the slope into the network of bike trails. *"The proposed MTB Park trail system would cross the Mountaineer Trail twice on the southwest section of trail."* (p.143, Preliminary Assessment) This means that on every run each bike will cross the Mountaineer hiking trail. The PA describes how the trail crossing will be designed and signed to reduce conflicts but it fails to mention ~~how frequently bikes will be crossing the hiking trail.~~

Estimated use levels for the bike park are described on page 139-40 of the PA. In Year 6 the Forest Service projects 296 visits (i.e. riders) per day on weekdays and *"... near capacity on weekends (i.e. 338 PAOT)."* Using the lower weekday number and assuming that each of the 296 riders makes 4 runs down the trails during the day and uses the Green Exit trail three times to return to the lodge (for lunch; a bathroom stop; and at end of day) then ~~each rider would cross the Mountaineer Trail seven times.~~ Thus a total of 2,072 crossings (296 x 7) could occur on an average weekday. The frequency of crossings is likely to vary during the day with the heaviest periods in the time following the opening of the park for the day, around lunch time, and in the period when the park closes for the day. This sets the stage for many potential conflicts between hikers, sightseers, and bike riders. The Mountaineer Trail doesn't provide a wilderness experience but it is an enjoyable trail that provides scenic vistas, glimpses of alpine flowers, and an opportunity to walk through a high elevation forest. ~~Heavy predicted traffic on the bike trails will diminish those experiences.~~

3.9 Aquatics

Comment 1 - Still Creek and the West Fork of the Salmon River are critical to the recovery of salmonids in the Lower Columbia region. Impacts from the project could adversely affect efforts to recover ESA listed fish.

- Within the Sandy basin Still Creek is very significant for production of salmonids. Still Creek ranked as number 3 among a total of 14 areas that were identified for restoration efforts (Sandy River Basin Working Group. 2007. Sandy River Basin Aquatic Habitat Restoration Strategy: an anchor habitat-based prioritization of restoration opportunities).
- The Sandy River basin is a key part of the Oregon Department of Fish and Wildlife's Recovery Plan, for the recovery of wild fish populations that are listed under the federal Endangered Species Act, within the Lower Columbia region.

Comment 2 - The current baseline conditions of Still Creek are Not Properly Functioning (NPF) for Suspended Sediment/Turbidity, Substrate Embeddedness, Road Density & Location and six other important habitat parameters (Table 6, p. 35, Appendix G - Draft Aquatics Biological Assessment). Current conditions in the West Fork Salmon River are also listed as Not Properly Functioning (NPF) for Suspended Sediment/Turbidity and Road Density & Location. *"In Still Creek, surface fines were at 52% (Not Properly Functioning) and in the West Fork Salmon River, surface fines were at 44% (Not Properly Functioning) within the Action Area"* (p. 38, Appendix G). These high levels of surface fine sediments on the stream bed are very significant in light of the fact that they greatly exceed the threshold for being classified as Not Properly Functioning (values over 20% surface fine sediment are considered NPF). Constructing a trail system with a total of 44 new stream crossings will greatly increase the 'stream

network' because the trail segment on both sides of a crossing has the potential to route sediment to the stream. Additional sediment delivery to Still Creek and the West Fork Salmon River will further degrade their condition.

Comment 3 - Chemical Contamination / Total Dissolved Solids (TDS) resulting from salting - In 1996, RLK & Company negotiated with Oregon DEQ to establish in-stream water quality conditions to limit the amount of **Total Dissolved Solids (TDS)** and NaCl in runoff from the Palmer snowfield (see p. 42 of Appendix G - Draft Aquatics Biological Assessment for more detail). However, Table 9 (p. 42 -43) indicates that the standard for TDS, in Still Creek, has been exceeded every year since 1997 (the permit holder applies large quantities of salt as a tool for managing snow conditions). As a result, the baseline determination for Still Creek is that it is Functioning At Risk.

If the water quality standard has been exceeded every year then actions must be implemented to correct the problem. In the absence of improved performance the permit holder should not be allowed to develop a trail system that will result in additional impacts to Still Creek.

Comment 4 – Scott's Apatanian caddisfly - Given the very limited information on the distribution and abundance of this species it is not prudent to proceed with the construction and operation of a trail system that poses a risk to the viability of a Survey and Manage species. *"Scott's Apatanian Caddisfly: (Allomyia scotti) may be a truly rare species (Wissman, 2010). ... The species is present in both the Project Area and Action Area which includes the majority of its known habitat range in Oregon. Habitat for this species occurs in both Still Creek and West Fork Salmon although in the most recent surveys, this caddisfly was only observed in the West Fork Salmon."* (p. 29, Appendix G - Draft Aquatics Biological Assessment). Further, *"The results of this survey, i.e. presence of the species only in the West Fork Salmon River tributaries, and not in the Still Creek headwater tributaries, suggest that the habitat requirements for this species is very narrow. Perhaps it formerly occurred in the Still Creek tributaries. It seems evident that these Still Creek tributaries have already experienced a much greater level of human impact than seen in the West Fork Salmon River tributaries (Wissman, 2010)."* (p. 30, Appendix G). *"Turbidity and sediment increases may also adversely effect Region 6 Sensitive Scotts appatanian caddisfly populations in both the West Fork Salmon and Still Creek."* (p. 40, Appendix G)

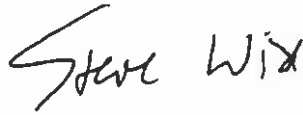
Comment 5 - We are concerned that adverse effects due to sediment from the bike park may result in a "take" of LCR winter Steelhead a species listed under the federal Endangered Species Act. *"Turbidity increases from the operation and maintenance of the Bike Park on and near LCR winter steelhead habitat in Still Creek may be large enough to have a negative, significant affect on listed steelhead trout and critical habitat. ... Although operation plans and maintenance work will use PDC's designed to minimize sediment increases in streams and steelhead habitat, turbidity may increase enough to temporarily affect steelhead distribution within the action area and annual sediment increases may reduce the quality and quantity of designated critical habitat for steelhead."* (p. 40, Appendix G)

Conclusion

At a time when the Forest Service and more than a dozen other agencies, along with hundreds of individuals and volunteers, are working toward restoration of the Sandy River Basin and tributaries including Still Creek and the West Fork Salmon River, we need to choose actions that further the protection and ultimate continued viability of species and habitats whose critical habitat encompasses the project area. Because of the project's predicted negative impacts that are contrary to existing goals, programs and activities, we recommend the No Action option in this case.

We would be pleased to answer any questions you have about these comments. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Steve Wise". The signature is written in a cursive, slightly slanted style.

Steve Wise
Executive Director

Steve Rayne
Watershed Council Chair

