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First name: Tiana Last name: Luke

Organization: Conservation Northwest Title: NE WA Conservation Associate Comments: November 6, 2018

RE: Conservation Northwest, Kettle Range Conservation Group and The Lands Council Forest Plan Objection

Submitted to: objections-chief@fs.fed.us Dear Objection Reviewing Official,

Conservation Northwest, Kettle Range Conservation Group and The Lands Council appreciate the opportunity to provide this Objection to the Colville National Forest (CNF) Land Management Plan (LMP) and Final Environmental Impact Statement (FEIS).

Conservation Northwest (CNW) is a regional conservation organization focused on connecting, protecting and restoring wildlife and wild places from the Washington Coast to the British Columbia

Rockies. Throughout our history, we've been deeply involved in forest management and conservation in the Northwest. Our members and support depend on public land to conserve biodiversity, provide ecosystem services such as clean air and clean water, and provide recreational activities such as bird watching and hiking.

Kettle Range Conservation Group (KRCG) is a rural-based conservation group with over 500 members, founded in Ferry County in 1976, with a mission to defend wilderness, protect biodiversity and restore ecosystems to the Columbia River Basin. Inherent in this mission and that applies to this project proposal is the need to restore and protect ecosystems.

The Lands Council (TLC) was formed in 1984 to protect our public forests and rivers. We strive to find balanced solutions to resource issues in the Inland Northwest and build support for Wilderness and rare species.

Road Density

The selected alternative sets desired conditions for road densities in the Focused Restoration and General Restoration Management Areas at 1 mile of road per square mile and 2 miles of road per square mile, respectively (LMP p 107, 109). However, the Draft Record of Decision (DROD) and the road density desired conditions make it clear that the road density calculations do not include maintenance level 1 roads that have been hydrologically stabilized (DROD p 11, 18).

The FEIS is clear about the impact of closed roads on hydrological processes:

Inclusion of maintenance level 1 (closed) roads in road density calculations provides a better metric for improvement in aquatic and riparian function because closed roads have an effect on hydrologic processes (FEIS p 349).

Since road density desired conditions do not consider closed maintenance level 1 roads [in No Action Alternative], they do not adequately address the potential impacts of the road system on hydrologic and aquatic function and habitat (FEIS p 346).

And that hydrologically stabilized roads continue to impact hydrology:

While road decommissioning treatments have been found to reduce erosion and sedimentation, the technique does not eliminate all road-related sediment delivery to streams (Madej 2001), and erosion and sedimentation may increase in the first 2 to 3 years after treatment (Luce et al. 2001).

Effectiveness of hydrologic road decommissioning and storm damage risk reduction treatments was evaluated across the Pacific Northwest using GRAIP (Nelson et al. 2012, Cissel et al. 2014). Road decommission was monitored on 68 km of road and hydrologic connectivity was reduced by 58 percent, and sediment delivery was reduced by 64 percent. Storm damage risk reduction treatments were monitored on 86 km of road and hydrologic connectivity was reduced by 9 percent, and sediment delivery was reduced by 51 percent. Post-storm inventories of decommissioned and control roads found that connectivity was reduced by 44 percent and fine sediment delivery was reduced by 80 percent.

Roads treated through storm damage risk reduction showed a 67 percent reduction in fine sediment delivery, but an 11 percent increase in hydrologic connectivity post storm (FEIS p 323).

The exclusion of hydrologically stabilized roads, which make up an unknown proportion of Forest System roads, could grossly underestimate the hydrological impacts on the Colville National Forest. There are approximately 4500 miles Forest Service System roads1 on the Colville National Forest and almost 2100 miles are Level 1 Forest Service System Road but the proportion of hydrologically stabilized roads in unknown. Indeed, the effects analysis included all roads within administrative boundary of the forest including decommissioned and hydrologically stabilized roads because the data were unavailable (FEIS p 321). How can the effects of excluding the hydrologically stabilized roads be quantified or qualified in the analysis without knowing the proportion of roads excluded from the road density calculations?

It's clear that road density goals are essential to ensure progress toward restoration aquatic ecosystem function, preventing further degradation, and improving conditions for imperiled trout. These road density goals must include the full picture of the effects. From the CNW Comment Letter:

Roads have wide ranging, chronic and long term impacts to aquatic processes and functions (DEIS, p. 182, 198, 280-1). Aquatic conditions would continue to be impaired with road densities above 2.4 miles per square mile,

generally considered indicative of a not properly functioning watershed and not conducive to supporting strong fish populations (DEIS, p. 221).

The road density goals also reflect climate adaptation. Flood risk is expected to increase as temperatures rise and more precipitation falls as rain during the winter, along with earlier more

rapid spring snowmelt (DEIS, p. 118). Erratic weather is also expected, including more heavy downpours and dramatic floods (DEIS, p. 118). Reducing road density removes vectors for sedimentation and channeling water into streams, and increases aguatic ecological resilience to anticipated storm-related disturbance events.

We ask that this desired condition be modified to include hydrologically stabilized roads the road density calculations to "insure" watershed, hydrologic and aquatic viability as required by the National Forest Management Act (NFMA). 16 U.S.C. [sect] 1604. The plans fail to do so and thus the plan's approach to road density calculations is a violation of NMFA's viability requirement and NEPA's requirement to follow best available science.

Requested Relief

[middot] Modify MA-DC-FR-05. Travelways, Roads (LMP p 107) and MA-DC-GR-05. Travelways, Roads (LMP p 109) to include all roads include open, closed and hydrologically stabilized roads in the road density calculation. Aquatics

The objectives for Riparian Management Areas are to maintain and restore riparian and aquatic structure and function of intermittent and perennial streams, confer benefits to riparian-dependent plant and animal species, enhance habitat conservation for species dependent on the riparian/upslope transition zone, improve water quality and flows, and contribute to greater habitat connectivity in the watershed [FEIS p 227].

Watersheds, streams, and riparian areas and associated fish and wildlife are sustained by properly functioning ecosystem functions and processes. Given the habitat quality and species viability issues on the Forest, the FEIS highlights a specific need to accelerate improvements in watershed condition across the forest, and to provide management direction to maintain and restore properly functioning watersheds (FEIS p 339). The Region's Aquatic and Riparian Conservation Strategy (ARCS) ensures a consistent broad scale baseline approach to conserving fish and aquatic habitat that is essential to wide- ranging species, while allowing local conditions to dictate modifications. The purpose of aquatic and riparian management in the region is to maintain and restore the ecological health of watersheds and aquatic and riparian ecosystems, including networks of properly functioning watersheds that support fish and wildlife, and dynamic ecological processes responsible for creating and sustaining habitats (FEIS p 232-222).

Given the importance of maintaining functional conditions and restoring degraded conditions, the Plan Revision should specify that National Forest lands will maintain and restore aquatics rather than simply to contribute to

aquatics. Maintaining and restoration aquatics will insure that the viability requirements of NFMA are met. 16 U.S.C. [sect] 1604.

We gratefully appreciate the changes made to the plan based on the comments we provided.

Request Relief

[middot] Modify the Forest Wide Desired Conditions for Water Resources by replacing "contribute" with "maintain and restore"

[middot] for the following: FW-DC-WR-01, 02, 04, 05, 06, 07, 08, 09, 11

[middot] using the following as an example:

FW-DC-WR-01. Natural Disturbance Regime of Aquatic and Riparian Systems

National Forest System lands maintain and restore the distribution, diversity and resiliency of watershed and landscape-scale features[hellip]" Underlined text added to existing content.

Habitat Connectivity

The Selected Alternative designates approximately 63 of the forest as Focused Restoration and General Restoration but (DROD p 9). One of the main differences between the two designations is present in the Habitat Desired Conditions (FEIS p 106, 109).

From CNW Comments to the DEIS:

Habitat connectivity describes the ability of fish and wildlife to move within and among habitat patches, and is a major factor in maintaining population viability and responding to climate change. Wildlife need to be able to move around to find food and shelter, hook up with suitable mates, and satisfy other basic needs. Populations that are recovering from over-exploitation or habitat degradation, like many at-risk species, need to be able to access unoccupied habitat and maintain genetic interchange between groups. Robust connections among habitat areas helps wildlife adapt to a changing climate by allowing movement to new habitat as existing areas become increasingly inhospitable.

Habitat connectivity is a measure of the ability of wildlife to move among separated patches of habitat. It can occur as discrete generally linear corridors, such as wildlife bridges over Interstate 90, or more broadly as landscapes that are permeable or supportive of wildlife movement. Landscape permeability can be increased by removing barriers to animal movement, such as roads or development, restoring habitat favored by dispersing individuals, and reducing exposure to poaching or vehicle collision.

The importance of maintaining and restoring habitat connectivity is a matter of national significance. The America's Great Outdoors Initiative contains direction to incorporate wildlife corridor conservation and restoration

into federal agency plans, programs, and actions, including Forest Plans. The Western Governors Association's 2008 Wildlife Corridors Initiative stated a clear intent to identify and preserve important corridors for wildlife. The initiative was followed by an MOU with the US Forest Service reflecting agreement to coordinate in the implementation of this initiative.

It is also a matter of regional significance. Given the importance of habitat connectivity in climate change adaptations and the harmful role of roads on the Colville National Forest fragmenting and degrading habitat, the Plan Revision identifies the specific need to restore connectivity of wildlife habitats and within riparian habitats (DEIS, p. 381).

The Kettle Range has unique and regionally outstanding role in providing habitat connectivity for wildlife moving between the Cascades, Rocky Mountains, and British Columbia's upper Columbia mountains.

Early habitat permeability modeling highlights the Kettle Range as a habitat concentration area and as

connectivity habitat for grizzly bear, wolverine, wolf, and Canada lynx (Figure 1. Singleton et al. 2002). Subsequent work by the Washington Wildlife Habitat Connectivity Working Group (Figure 2. http://waconnected.org) identified core and connectivity habitat for lynx, black bear, elk, and marten in the Kettle Range. More recently, in the Colville National Forest rating of inventoried roadless areas in the Kettle Range for connectivity value, six of the nine roadless areas (including its two largest and most prominent roadless areas) were rated moderate-to-high value for connectivity (Potential Wilderness

Area Evaluation 2008). Models show that "the upper elevation forests associated with the Kettle Range may provide important stepping-stone habitats that could increase the permeability of the landscapes between the Rocky Mountains and North Cascades [that are] likely important to the long-term

conservation of Canada lynx" (Gaines 2012).

However, larger portions of the Kettle Range are included in the General Restoration Management Area where "Habitat effectiveness is expected to be lower for species that are sensitive to human activities and disturbances" (LMP p 109 MA-DC-GR-02 Habitat). As a habitat concentration area and connectivity habitat for grizzly bear, wolverine, wolf, and Canada lynx, all animals that are sensitive to human activities and disturbances, the Kettle Range should be includes in the Focused Restoration area where the Habitat Desired Condition (MA-DC-FR-05) is more congruous with the findings of the best available science.

We ask that the focused and general restoration management areas be modified to "insure" wildlife viability and to protect wildlife diversity and connectivity as required by NFMA. 16 U.S.C. [sect] 1604. The plans fail to do so and thus the plan violates NMFA's viability requirement and NEPA's requirement to follow best available science.

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* Designate the 5th Field Watersheds within the core connectivity habitat area as Focused Restoration Management Area. This includes watersheds south of Republic and north of the Colville Reservation from the western boundary to the Kettle Range and then north to Owl Mountain and east through the Wedge to the northern boundary, including Upper Sanpoil, Lynx/Hall; Sherman; Curlew; Vulcan; Boulder/Deadman and North Lake Roosevelt.

We gratefully appreciate the changes made to the draft LMP & amp; DEIS based on CNW's DEIS comment letter suggestions. Thank you for the opportunity to submit this objection and we look forward to finding an agreement in resolution period.

Sincerely,

Tiana Luke

NE WA Conservation Associate Conservation Northwest

- p. (360) 901-9548
- e. tluke@conservationnw.org