

April 17, 2023

To: Kevin McLaughlin, Boulder District Ranger, and Staff
U.S. Forest Service, Arapaho-Roosevelt National Forest

Thank you for a second opportunity to comment on the St. Vrain Forest Health Project (SVFHP). The Preliminary Environmental Assessment documents are thorough and well organized.

Overall, I support the project's six goals and the proposed actions. In addition, I offer the following specific comments.

1. Rocky Mountain Bighorn Sheep

- a. Thank you for the clarification that domestic sheep and/or goats are not planned as a control method for non-native and invasive weeds. I support the Non-Native and Invasive Mitigation management card's description to "Utilize the best available science based methods to prevent and reduce detrimental ecological impacts of invasive species and thereby sustain resilient forests." Bighorn sheep are part of the ecology of resilient forests in the SVFHP area. There is ample scientific literature demonstrating the risk of disease transmission from domestic sheep and goats to bighorn sheep resulting in respiratory disease in bighorn sheep with negative herd level impacts. See link for a relevant document and literature cited:
<https://wildlife.org/tws-and-aawv-joint-issue-statement-domestic-sheep-and-goats-disease-transmission-risk-to-wild-sheep/>
- b. I concur that proposed actions as described have the potential to improve and restore bighorn sheep habitat while at the same time improve forest resilience. However, the Wildlife Biological Assessment and Evaluation underestimates the potential for negative impacts of proposed actions in or near bighorn sheep lambing habitat and wintering areas without clearly articulated timing restrictions. I am happy to see that GL 103 from the 1997 Forest Plan was included on page 97 under the section on Forest Plan Consistency. In addition, ST 102, or similar language, should be included in the Environmental Assessment to clearly articulate timing restrictions to protect bighorn lambing areas from disturbance.

102. (ST) Restrict new developments, including new facilities, roads and trails, and concentrations of humans, within a one-mile sight distance of

bighorn sheep lambing and mountain goat kidding areas if they would adversely impact lambing or kidding. Restrictions on activities are usually required from May 1 to July 15.

- c. The only citation and much of the information for Rocky Mountain bighorn sheep in the Species Information section of the Wildlife Biological Assessment and Evaluation is dated and some information is no longer accurate. For example, the only literature citation is the 30 year old first edition of the Mammals of Colorado (Fitzgerald et al. 1994). An example of outdated information is that while respiratory disease is still considered a major limiting factor to bighorn sheep population performance and sustainability, lungworm-pneumonia hasn't been considered the root cause for many years. Current peer reviewed literature indicates introduced pathogens such as *Mycoplasma ovipneumoniae* and others cause respiratory disease in bighorn sheep populations (Besser et al. 2013).

The bighorn sheep population trend information listed is for 1997-2004, which is also almost 20 years old. Likewise, the population estimate of 80 for the S37 St. Vrain Bighorn Sheep herd listed on page 51 is several years out of date. According to Colorado Parks and Wildlife (CPW), the S37 herd was estimated at 60 animals in 2022. Note the significant decline indicated by the current population estimate of 60 bighorn compared to the estimated 184 bighorn for the North St. Vrain herd in 1996 (Goodson et al. 1996). CPW bighorn sheep population estimates can be found here:

<https://cpw.state.co.us/thingstodo/Pages/Statistics-Rocky-Mountain-Bighorn-Sheep.aspx>

To assure credibility and accuracy of the Environmental Assessment, the population trend for bighorn sheep should be updated to include the population data since 2004, the current population estimate for the S37 bighorn sheep herd updated to 60, and relevant literature for Rocky Mountain bighorn sheep from the last 30 years, especially related to respiratory disease, should be incorporated and cited.

2. River Otter

In the Wildlife Biological Assessment and Evaluation on Page 30, Table 19 indicates that the river otter is a Region 2 Forest Service Sensitive Species, but that "No known occurrences or suitable habitat is present." However, there have

been numerous reports and sightings over the last 20 years of river otters within the SVFHP area specifically in the Lefthand and St. Vrain drainages. I was fortunate to observe a pair of river otters on March 25, 2023 in the North St. Vrain River on City of Longmont property. Indeed, CPW considers several drainages within Boulder and Larimer Counties to have river otter populations as maps in the follow links illustrate:

https://cpw.state.co.us/Documents/LandWater/WetlandsProgram/PrioritySpecies/Factsheet-and-Habitat-Scorecard_RiverOtter.pdf#search=river%20otter%20distribution

<https://cpw.state.co.us/learn/Lists/Wildlife%20Species/DispForm.aspx?ID=77>

River otter should be included in the Environmental Assessment based on evidence of their persistent presence in the St. Vrain River drainage.

3. Effective Wildlife Habitat

Effective Wildlife Habitat acreage and trends are most likely overestimated in the 2020 HE remodel results in Tables 22 and 23 on page 18 of the Wildlife Biological Assessment and Evaluation due to the many miles of unauthorized and illegally constructed single track trails created since the 1997 Forest Plan. Please clarify if unauthorized, user created trails and roads were used in the 2020 HE remodel. Since unauthorized trails have not been systematically mapped, I will assume non-system trails were not included in the 2020 HE model.

While several miles of motorized roads have been closed to motorized use with the implementation of the 2005 Travel Management Rule, most closed roads within the SVFHP area are still being used by non-motorized recreationists. Moreover, many miles of social trails and illegally constructed mountain bike trails have been created since 1997. The increase in effective habitat within the North St. Vrain geographic area presented in Tables 22 and 23 is especially questionable considering that in one 15 square mile area, the mileage of illegally constructed and unauthorized trails (49.4 miles) is more than 5 times greater than the system trail mileage (8.6 miles) for both motorized and non-motorized trails. Furthermore, use on unauthorized trails occurs year-around, and with new LED technology in headlamps, night time mountain bike and trail running is increasing. There are other unauthorized trail systems within the SVFHP area that have not been mapped in the St. Vrain and Lefthand drainages that impact wildlife habitat effectiveness.

Effective Wildlife Habitat should be remodeled by including both system and unauthorized user created trails for the Environmental Assessment to determine compliance with the 1997 Forest Plan.

4. Unauthorized and Illegally Constructed Trails

I appreciate the acknowledgement within the SVFHP Environmental Assessment documents of the hundreds of miles of unauthorized and illegally constructed trails and the clarifying wording to address potential expansion of unauthorized motorized trails in Design Feature Recreation 6. However, there are no actions presented to address the miles of illegally constructed mountain bike trails or the potential for growth of more unauthorized trails for mechanized use when SVFHP management actions open up the forest understory.

I respectfully request creation of actions to inventory, control and manage unauthorized and illegally constructed trails within the SVFHP, especially for those unauthorized trails within the North St. Vrain Research Natural Area (RNA). Controlling unauthorized motorized and mechanized use trails supports the goals of the SVFHP.

5. North St. Vrain Research Natural Area

The North St. Vrain RNA is one of the least fragmented habitats within the Boulder Ranger District and Boulder County. The area also has Tier 1 Roadless designation and contains several species of sensitive wildlife and native plant associations as discussed in the SVFHP Environmental Assessment documents. Unfortunately, there are approximately 5 miles of illegally constructed mountain bike trails within the North St. Vrain RNA portion of the SVFHP area. These illegally constructed trails are out of compliance with the 1997 Forest Plan:

2.2 Research Natural Areas (pp. 345-350):

Theme: Research Natural Areas form a **long-term network of ecological reserves designated for nonmanipulative research, education, and the maintenance of biodiversity.**

Relevant Standards:

4. (ST) **Prohibit the construction of new roads and trails**, except when new trails are necessary to correct resource damage occurring from existing trails.
5. (ST) Prohibit motorized **and mechanized use**, except when they provide necessary access for scientific, administrative, or educational purposes.

I respectfully request removal of illegally constructed and unauthorized trails within the North St. Vrain RNA be incorporated into the SVFHP to improve compliance with the 1997 Forest Plan and protection of effective wildlife habitat.

I appreciate the amount of work that US Forest Service staff has put into the SVFHP Environmental Assessment documents. Thank you for the opportunity to comment in the spirit of stewardship of our public natural resources.

Respectfully,

Janet George

Literature Cited:

Besser, T. E., E. F. Cassirer, M. A. Highland, P. Wolff, A. Justice-Allen, K. Mansfield, M. A. Davis, W. Foreyt. 2013. Bighorn sheep pneumonia: sorting out the cause of a polymicrobial disease. Preventive Veterinary Medicine. 108:85-93.

Goodson, N. J., D. R. Stevens, S. King. 1996. Establishment of altitudinal migration in a reintroduced bighorn sheep population. Bienn. Symposium Northern Wild Sheep and Goat Council. 10:45-56. <http://www.nwsgc.org/proceedings/NWSGC-1996/1996-Goodson%20et%20al.pdf>. (This document also contains historic information on the North St. Vrain bighorn sheep herd that is not in writing elsewhere to my knowledge).