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First name: Melissa Last name: Lorentz

Organization: MN Center for Environmental Advocacy

Title:

Comments: [External Email]Lutsen Mountains Ski Area Expansion Project

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Ms. Cummins,

Please accept the attached comment on the draft environmental impact statement for the Lutsen Mountain Corporation's application for a special use permit in the Superior National Forest.

Sincerely,

Melissa Lorentz

--

Melissa L. Lorentz

Staff Attorney

Minnesota Center for Environmental Advocacy

Direct Line: 651-287-4879

Website: www.mncenter.org

Facebook: www.facebook.com/MCEA1974

Twitter: @MCEA1974

Instagram: @MCEA1974

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mncenter.org

December 9, 2021

Constance Cummins, Forest Supervisor VIA E-MAIL

c/o Michael Jimenez, Project Leader

Superior National Forest

8901 Grand Avenue Place

Duluth, MN 55808

comments-eastern-superior@usda.gov

RE: Comment on Draft EIS for the Proposed Special Use Permit to the Lutsen Mountain Corporation

Dear Ms. Cummins,

Thank you for the opportunity to comment on the Draft Environmental Impact Statement ("Draft EIS") for Lutsen Mountain Corporation's application for a Special Use Permit (the "Proposed Permit") for a potential ski resort expansion. The undersigned organizations have reviewed the Draft EIS and found the analysis to be incomplete in key areas that are important to the ultimate decision as to whether to grant the Proposed Permit. Specifically, the Draft EIS fails to prioritize the rights of Tribes, overlooks water-quality impacts, and unreasonably concludes that the loss of unique forests would be reversible. We urge the Forest Service to revise the Draft EIS accordingly. Based on the information available so far, it appears that the Proposed Permit should be denied.

I. The Proposed Permit Would Impact Forests Important To Treaty Rights, Watershed Health, And Scenic Character.

The purpose of the EIS is to inform the ultimate decision of whether to grant the Proposed Permit,1 which must be evaluated in light of governing mandates and the unique values of the affected lands. The National Forest Management Act requires that all permits "for the use and occupancy of National Forest System Lands shall be consistent with [governing] land management plans."2 Overall, governing laws and management documents establish that the affected lands must be managed to protect treaty rights, old-growth forest, native vegetation, water quality, and scenic character.

1 U.S. Forest Service, Lutsen Mountains Ski Area Expansion Project, Draft Environmental Impact Statement, at 2 (hereinafter "Draft EIS").

2 16 U.S.C. [sect] 1604(i).

Established from Ojibwe lands ceded by the 1854 Treaty of La Pointe, the Superior National Forest contains rich and varied resources. The lands subject to the Proposed Permit are home to unique old-growth ecosystems of deep economic, cultural, and ecological significance. They include high-quality, undisturbed forests, with northern white cedar estimated to be over 140 Constance Cummins December 9, 2021 Page 2

years old.3 And they hold rivers and streams that are integral to the forest habitat and the scenic character enjoyed by visitors. These watersheds that drain directly to Lake Superior[mdash]an important cultural and ecological resource in its own right, as well as an important source of freshwater.

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3 Draft EIS, at 235.

4 Id. at 9.

5 USDA Forest Service, Superior National Forest Land and Resource Management Plan, at 3-14 (2004) (hereinafter "Forest Plan").

6 Id. at 3-14 ("Viewsheds are managed for scenic beauty and big-tree character.").

7 Id. at 2-8.

8 Id. at 3-15.

9 Id. at 3-14.

10 Id.

11 Treaty of LaPointe, Sept. 30, 1854, 10 Stat. 1109.
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13 Scoping Comment of the Fond du Lac Band of Lake Superior Chippewa, at 1 (May 28, 2020).

The Superior National Forest Land and Resource Management Plan ("Forest Plan") emphasizes the value of these old-growth landscapes. Specifically, the lands that would be affected by the Proposed Permit are designated for Recreational Use in a Scenic Landscape.4 The desired conditions "emphasize[] a large tree and old forest character."5 The "big-tree character" of these scenic viewsheds are key to local forest management.6

Relatedly, the Forest Plan recognizes water quality as important to maintaining scenic and ecological functions.7 To preserve the unique character of the landscape, the Forest Plan emphasizes semi-primitive recreational opportunities.8 Although Scenic Landscape management areas are often located near "roads where developed recreation activities may already be provided,"9 the Forest Plan does not contemplate large-scale private development. Rather, the Forest Plan discusses "[d]ispersed recreation facilities such as campsites and trails."10 Development that does not fit within this framework should receive greater scrutiny, particularly as to impacts that could eviscerate the unique contributions of old-growth forests.

Yet, the Draft EIS overlooks significant potential impacts to forest and water resources that are important to the ecological, economic, and scenic character of this landscape. To adequately inform the public and the ultimate permit decision, the environmental impact statement must fully analyze the considerations described below.

II. The EIS And The Permit Decision Must Prioritize Tribal Rights.

First and foremost, the EIS and permit decision must recognize and uphold Tribal rights. All of the federal lands subject to the Proposed Permits are within 1854 Treaty territory and subject to the usufructuary rights of the federally recognized tribes that signed those treaties.11 This area contains sugar maple, white cedar stands, and old-growth native plant communities that provide traditional food and medicines.12 The Proposed Permit would impact the Tribes' ability to exercise reserved rights on nearly 500 acres of land.13 Constance Cummins December 9, 2021 Page 3

The undersigned organizations defer to the Tribes as to whether consultation and coordination have been adequate or whether the Draft EIS addresses Tribal concerns. Similarly, we defer to any analysis by the Tribes

as to how this Proposed Permit would impact resources of cultural or economic significance to the Tribes, such as old-growth white cedar stands.14

- 14 See Draft EIS, at 142.
- 15 Scoping Comment of the Fond du Lac Band of Lake Superior Chippewa, at 2.
- 16 Draft EIS, at 5.
- 17 See Indigenous Peoples Subcomm. of the Nat'l Envtl. Justice Advisory Council, Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making, at 3, 5 (2000), available at https://www.epa.gov/sites/production/files/2015-03/documents/ips-consultation-guide_0.pdf (describing consultation responsibilities of the federal government).
- 18 Organic Administration Act, 16 U.S.C. [sect] 475; Multiple Use Sustained-Yield Act, 16 U.S.C. [sect] 528.
- 19 Forest Plan, at 2-5.
- 20 See 36 C.F.R. [sect] 251.56(a)(1)(i)(A)-(B).

However, we note that the Tribes raised troubling concerns during the scoping process that have not been addressed in the Draft EIS. Among other issues, the Fond du Lac Band stated that the Forest Service had been slow to provide the Band with information that would be necessary for effective participation in environmental review[mdash]including potential measures to mitigate reduced land access.15 Yet even after receiving these comments, the Draft EIS does not demonstrate meaningful government-to-government consultation. For example, the Draft EIS places responsibility on the Tribes to provide elder interviews.16 This approach overlooks that it is the United States that proposes an action that may infringe on the reserved rights of other sovereigns.

The Forest Service has a trust responsibility to meaningfully consult with Tribal Nations before issuing a permit that has the potential to impact reserved rights. Meaningful consultation includes more than discussion; it requires actively collaborating with Tribes to ensure their rights are recognized and protected.17 A failure to adequately consult with Tribal Nations reflects poorly on the federal government and the citizens of Minnesota. We rely on the Forest Service, as representative of the United States, to uphold the trust relationship and binding agreements between nations. Accordingly, we expect the Forest Service to engage in meaningful consultation, fully analyze Tribal impacts of the proposed Lutsen expansion, and deny the Proposed Permit if necessary.

III. The EIS Must Analyze Water-Quality Impacts And Mitigation.

Watershed protection is a core purpose of the National Forest System.18 Accordingly, the primary goals of the Forest Plan include promoting ecosystem health to "sustain this nation's forests and watersheds" and protecting soil and water resources.19 Special use permits must "carry out the[se] purposes" and incorporate mitigation to protect water resources.20 Yet, the Draft EIS Constance Cummins December 9, 2021 Page 4

overlooks significant water-quality impacts that history has shown are likely consequences of ski resort development in this very location.

A. The Draft EIS Fails To Discuss The Impacts of Erosion And Artificial Snowmaking On Water Quality.

The Superior National Forest goals acknowledge the profound impact that land use has on watersheds. Forests[mdash]particularly old-growth forests[mdash]have been linked to high water quality.21 Research in the

Lake Superior watershed has shown that forest disturbance is a predictor of increased sediment, nutrients, and turbidity.22 These impacts extend from local streams and tributaries to nearshore areas of Lake Superior.23

21 Titus S. Seilheimer et al., Landscape-Scale Modeling of Water Quality in Lake Superior and Lake Michigan Watersheds: How Useful Are Forest-Based Indicators?, 39 Journal of Great Lakes Research 211, 212 (2013), available at https://doi.org/10.1016/j.jglr.2013.03.012.

22 Id.; Naomi E. Detenbeck et al., Region, Landscape, and Scale Effects on Lake Superior Tributary Water Quality, 40 Journal of the American Water Resources Association 705, 713-15 (2004).

23 Seilheimer et al., supra note 21, at 211.

24 Carmen de Jong, Artificial Production of Snow, in Encyclopedia of Snow, Ice and Glaciers, at 63 (2011).

25 ld. at 65.

26 ld. at 63, 65; Brad Hansen et al., Poplar River Sediment Source Assessment, at 22 (University of Minnesota 2010), available at https://www.pca.state.mn.us/sites/default/files/wq-iw10-02j.pdf

27 de Jong, supra note 24, at 65.

28 ld.

29 Hansen et al., supra note 26, at 22.

Ski resorts impact watershed health not only through the removal of vegetative cover, but also in the application of artificial snow and ski-run maintenance. Due to its small grain size and higher degree of compaction, artificial snow is four times denser than uncompacted, fresh natural snow.24 The resulting dense snow cover can cause significant changes to soil and vegetation processes.25 Maintenance of ski slopes tends to further compact the snow and the soil underneath.26 This often causes the surface to become impermeable, increasing erosion and sedimentation.27 And when the spring melt comes, artificial snow can cause twice as much runoff as there would be under natural conditions.28 The increased flow from runoff on impervious surfaces and increased sediment load impacts water quality.

An example of this phenomenon can be found in the center of the current Lutsen ski resort. The Poplar River watershed, which runs through the center of the proposed area, has a long history of impairment for turbidity[mdash]in no small part caused by current ski resort infrastructure. Ski slopes were found to be the largest source of impairment in the Poplar River watershed, contributing one-third of the total sediment load.29 The ski slopes produced approximately ten times more sediment Constance Cummins December 9, 2021 Page 5

than immediately adjacent forested areas, even though those areas had the same soils and degree of slope.30

30 ld.

31 Draft EIS, at 65.

32 ld. at 64.

33 ld. at 215.

34 ld. at 221, 226.

35 ld. at 222.

36 ld. at 65.

37 Great Basin Res. Watch v. Bureau of Land Mgmt., 844 F.3d 1095, 1103 (9th Cir. 2016).

38 See, e.g., R.M. Rice & Samp; S.A. Sherbin, Estimating Sedimentation from an Erosion-Hazard Rating, USDA Forest Service Research Note PSW-323 (1977), available at https://www.fs.fed.us/psw/publications/rice/sherbin.pdf.

The Poplar River watershed was only removed from the list of turbidity-impaired waters impaired in 2020, after years of concerted effort by many stakeholders.31 The Draft EIS overlooks this history. Although the Draft EIS claims that the Poplar River watershed need not be included in the analysis, the history of this watershed raises serious concerns about the impact of the proposed expansion on adjacent watersheds.

The characteristics of the affected environment indicate that history could repeat itself. The proposed Lutsen expansion would impact high-quality waters in relatively undisturbed landscapes. The mean water quality score for the Rollins Creek/Moose Mtn-Frontal Lake Superior Watershed is 97.25, and for the Eagle-Mtn-Frontal Lake Superior Watershed the mean score is 91.7.32 Roughly 30% of impacted watersheds are classified with a Very Severe Erosion Hazard.33 Much of the proposed tree removal and grading would occur on soils with severe or very severe erosion ratings.34 Increased watershed yield from tree removal combined with terrain grading and production of artificial snow could result in additional runoff and sediment input into the watersheds' streams.35

Yet, the Draft EIS does not address the connection between this erosion and water quality. Instead, the Draft EIS summarily concludes that the Proposed Permit would not cause any waters to be listed as impaired.36 There is no explanation as to how the Draft EIS arrived at this conclusion, especially in light of high erosion potential and the past turbidity issues associated with the current ski resort.

The EIS is an opportunity for the Forest Service to ensure that the Poplar River experience does not repeat itself in adjacent watersheds. Baseline data is an essential first step and critical to an adequate analysis.37 That baseline data must account for the connection between increased erosion, sedimentation, and water quality. At minimum, the EIS should discuss potential water-quality impacts caused by removing old-growth forest cover, maintaining ski runs, and applying artificial snow[mdash]including sediment and nutrient loading to perennial streams, changes in flow patterns, and impacts on channel morphology.38 Constance Cummins December 9, 2021 Page 6

B. The Draft EIS Fails To Adequately Discuss Mitigation In Light Of The Regulation Governing Special Use Permits.

The Poplar River listing and delisting is a lesson on the need for proactive watershed management. The process took years of cooperation and concerted effort between Tribes, local governments, neighboring landowners, and the Lutsen Mountain Corporation. To the extent that the Forest Service is relying on such measures to obviate water-quality discussion in the EIS, such mitigation must be described in enough detail to facilitate public comment.

Concrete mitigation measures inform environmental review. An "important ingredient of an EIS is the discussion of steps that can be taken to mitigate adverse environmental consequences."39 "[M]itigation plans go to the very heart of the question before [an agency] in preparing its environmental impact statement-whether the project should proceed at the present time in view of its environmental consequences."40 A clear identification of the mitigation measures relied upon is essential to transparency.41

39 Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 355 (1989).

40 Env't Def. Fund, Inc. v. Froehlke, 473 F.2d 346, 351-52 (8th Cir. 1972).

41 Council on Env't Quality, Memorandum on the Appropriate Use of Mitigation and Monitoring, at 3 (2011), available at https://ceq.doe.gov/docs/ceq-regulations-and-guidance/MitiGation_and_Monitoring_Guidance_14Jan2011.pdf

42 ld. at 6.

43 Dubois v. U.S. Dep't of Agric., 102 F.3d 1273, 1288 (1st Cir. 1996) (quoting Robertson, 490 U.S. at 352).

44 Gaule v. Meade, 402 F. Supp. 2d 1078, 1084 (D. Alaska 2005).

45 ld.

46 36 C.F.R. [sect] 251.56(a)(1)(i)(B); see Trout Unlimited v. U.S. Dep't of Agric., 320 F. Supp. 2d 1090, 1096, 1107-08 (D. Colo. 2004) (finding mitigation inadequate under regulation and the Federal Land Policy and Management Act).

47 Trout Unlimited, 320 F. Supp. 2d at 1107-08 (applying statutory provision with similar language).

When mitigation measures are intended to obviate the need to discuss certain impacts in an EIS, those mitigation measures should be "clearly described"42 with "sufficient detail to ensure that environmental consequences have been fairly evaluated."43 "[A] mere listing" of potential mitigation measures is not helpful.44 Rather, there must be sufficient detail for the public to ensure that the agency took a "hard look" at the environmental consequences of its proposed action and alternatives.45

Further, mitigation is essential to the ultimate decision to be made by the Forest Service. The regulation governing special use permits requires each special use authorization to contain "[t]erms and conditions which will . . . [m]inimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment."46 Given this language, the Forest Service may not "ignore options that would minimize environmental degradation," even in the face of "costs to private parties" or "difficulty in implementation."47 Without a transparent, Constance Cummins December 9, 2021 Page 7

thoughtful analysis, the Forest Service and the public cannot effectively evaluate whether proposed terms and conditions adequately minimize environmental impacts as required. The EIS is the place to provide that analysis.

Available information indicates that mitigation will be necessary during both construction and operation. The proposal that the Forest Service has identified as its Preferred Alternative would impact quality forested slopes that have no existing drainage issues or signs of ongoing erosion problems. 48 This indicates that there are stream channels that may require additional consideration and protection from increased flow and removal of old growth forests.

48 Draft EIS, at 221.

49 ld. at 221.

50 ld. at A10.

51 See Hansen et al., supra note 26, at 62 (discussing sediment loads from ski hills, roads, and forested areas).

52 Csilla Hudek et al., Mid and Long-Term Ecological Impacts of Ski Run Construction on Alpine Ecosystems, 10 Nature Research: Scientific Reports 11654 (2020), available at https://doi.org/10.1038/s41598-020-67341-7.

53 See Draft EIS, at 219 ("Without mitigation, the proposed snowmaking, tree removal, and grading projects would increase watershed yield by approximately 8 to 29 percent relative to existing conditions.").

54 ld. at 221.

The Draft EIS admits that there could be substantial soil erosion unless adequate Project Design Criteria are implemented.49 Yet, the Project Design Criteria are largely limited to mitigation for construction activities. The Project Design Criteria for facility operation is limited to the following: "The Forest Service will develop a watershed monitoring plan to identify changes in hydrology and water quality (e.g., flow, turbidity) on Rollins Creek. The Forest Service will collect pre-project implementation information to establish a baseline where needed."50

This description of potential mitigation measures is inadequate. First, baseline information should be collected before issuing the Proposed Permit, because that data will inform the analysis of water-quality impacts. This is the very purpose of environmental review. Second, the proposed mitigation ignores the long-term impacts of ski resort operation. Historically, impacts of ski development on the area have been caused not only by construction, but by operation of ski facilities.51 Maintenance of ski runs throughout the life of the facility is critical to maintaining the mechanical and hydrological properties of soils.52 Further, the proposed mitigation does not account for increased watershed yield from snowmaking.53

As to construction impacts, the Draft EIS acknowledges that tree removal, terrain grading, and construction of new roads could lead to concentrated runoff, soil erosion, sediment transport, and substantial alteration of drainage patterns.54 But rather than analyzing these potential impacts, the Draft EIS vaguely refers to unformulated plans that "would be critical to avoid or minimize" Constance Cummins December 9, 2021 Page 8

increased sediment input into local watersheds.55 These "critical" measures should be described to inform public comment on the Draft EIS and the Proposed Permit.

55 ld. at 222. See also id. at A-6 (referring to submittal of plans to Forest Service as mitigation).

56 40 C.F.R. [sect] 1502.16(a)(4).

57 Draft EIS, at 164.

58 ld. at 175.

59 ld. at 175, 179.

60 ld.

61 ld. at 175.

62 ld. at 51.

63 ld. at 184.

64 Mark A. White, Long-Term Effects of Deer Browsing: Composition, Structure and Productivity in a Northeastern Minnesota Old-Growth Forest, 269 Forest Ecology & Deep Management 222 (2012),

Although a detailed, concrete mitigation plan may not be required for every EIS, more detail is required when[mdash]as here[mdash]a proposal implicates concerns central to the decision to be made and the EIS relies on mitigation in lieu of analysis. The mitigation options currently described are not detailed enough to for the public to evaluate.

IV. The Draft EIS Fails To Acknowledge Potentially Irreversible Or Irretrievable Commitments Of Resources.

An EIS must discuss "[a]ny irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented."56 Here, the proposed expansion would impact high-quality native plant communities that are difficult to restore. Nearly the entire impacted area is a Site of Biodiversity Significance, and much of it contains native plant communities of outstanding ecological integrity.57 Given the goals of the Superior National Forest Plan and the unique characteristics of the impacted site, the EIS must consider the possibility that these native plant communities will be irretrievably lost.

The Preferred Alternative would clear vegetation on a large portion of Moose-Mountain's Upland White Cedar Forest, including trees that are over 147 years old.58 Either action alternative would remove a significant portion of critically imperiled spruce-fir woodland59 and high-quality, mature mesic hardwood forests.60 In addition to these direct impacts, all of these ecosystems will be indirectly impacted by forest fragmentation, edge effects, and the potential introduction of invasive species.61 Given this combination of effects, the impacts are likely permanent.62 Yet, the Draft EIS concludes that there are no irreversible and irretrievable commitments of these resources "because facilities could be removed and, in time, areas could be reclaimed and revegetated, restoring their natural condition."63

It is unreasonable to assume that the destruction of old-growth forest and removal of native plant communities would be reversible. Old-growth forest restoration in northeastern Minnesota is complicated by overbrowsing, changing climate conditions, shade, moisture retention, and invasive species.64 For example, scientists have struggled to regenerate northern white cedar in the Constance Cummins December 9, 2021 Page 9

available at https://doi.org/10.1016/j.foreco.2011.12.043.See also John L. Willis et al., Can Coppicing Planted Saplings Improve the Growing Position of Mid-Tolerant Northern Hardwood Tree Species in Harvest Gaps?, 483 Forest Ecology & Ecology &

65 Meredith W. Cornett et al., Conservation Implications of Browsing by Odocoileus virginianus in Remnant Upland Thuja occidentalis Forests, 93 Biological Conservation 359, 359-60 (2000), available at https://doi.org/10.1016/S0006-3207(99)00129-9.See also Rueling, supra note 64, at 9.

66 Meredith W. Cornett et al., Comparing the Importance of Seedbed and Canopy Type in the Restoration of Upland Thuja occidentalis Forests of Northeastern Minnesota, 9 Restoration Ecology 386, 392-93 (2001), available at https://doi.org/10.1046/j.1526-100x.2001.94008.x.

67 Cornett et al. (2000), supra note 65, at 366.

northern Great Lakes region, leading to concerns about local extinction.65 As late-successional species, northern

white cedar benefits from specialized safe sites, such as decayed wood of the appropriate species, for germination and establishment[mdash]conditions that would be removed by the proposed expansion.66 And impacts from deer browsing are likely to be even more pronounced near Lake Superior, where there is a higher density of deer compared to other parts of northeastern Minnesota.67

In evaluating irreversible or irretrievable commitments of resources, the Draft EIS fails to account for the difficulty of restoring important native plant communities, particularly in light of climate change and shifting local ecology. The Draft EIS should be revised to account for these factors. And the Forest Service should account for the loss of these forest resources in its final permitting decision, particularly in light of the foreseeable difficulty of any restoration efforts.

V. The Draft EIS Does Not Support Permit Issuance.

The Draft EIS does not provide a reasonable assessment of key impacts. Before issuing a final environmental impact statement, the Forest Service should engage in meaningful tribal consultation, revise the Draft EIS in accordance with tribal recommendations, assess impacts of erosion and sedimentation on water quality, and evaluate whether it would be possible to ever restore the old-growth ecosystems that would be destroyed by the proposed expansion. Based on the information currently available, the Forest Service should deny the Proposed Permit application. Constance Cummins December 9, 2021 Page 10

Sincerely,

/s/ Melissa Lorentz

Melissa Lorentz, Staff Attorney

JT Haines, Northeastern Minnesota Director

Michael Damasco, Legal Fellow

Nadia Alsadi, Water Policy Associate

Minnesota Center for Environmental Advocacy (authoring entity)

1919 University Avenue W, Suite 515

Saint Paul, MN 55104

651-287-4879

mlorentz@mncenter.org

/s/ Jill Crafton

Jill Crafton, National Director

Minnesota Division - Izaak Walton League of America

P.O. Box 385403

Bloomington, MN 55438

952-944-5583

jillgreatlakesike@gmail.com

/s/ Lori Andresen

Lori Andresen, President

Save Lake Superior Association

P.O. Box 101

Two Harbors, MN 55616

218-340-2451

andres01@charter.net

/s/ Elanne Palcich

Elanne Palcich, Director

Save Our Sky Blue Waters

P.O. Box 3661

Duluth, MN 55803

218-969-9557

epalcich@cpinternet.com