

June 1, 2015

Jeffrey J. Rose, Commissioner
N.H. Department of Resources and Economic Development
172 Pembroke Road
P.O. Box 1856
Concord, N.H. 03302-1856

Re: Mount Sunapee Resort MDP/EMP 2015-2019; RSA 217-A; Exemplary Natural Communities

Dear Commissioner Rose:

Please accept these written comments on behalf of our client, Friends of Mount Sunapee, with respect to Mount Sunapee Resort's (the "Resort") proposed West Bowl expansion. We do not attempt to address all legal issues relevant to the proposed expansion or your April 16, 2015 Draft Decision. These comments address the exemplary natural communities existing in the West Bowl and the responsibility of the Department of Resources and Economic Development (DRED) under RSAs 216-A and 217-A to protect these communities.

The MDP/EMP submitted by the Resort proposes the construction of two new ski trails (W4 and W6) and a new chairlift (Lift M) through Polygons C and D. The MDP/EMP also proposes to construct new ski trails (W8 and W9) immediately to the south of Polygon D. In your Draft Decision, you propose to move the W6 trail to a location just to the south of Polygon D (in between Polygon D and trails W8 and W9) and to make trail W4 and the Lift M corridor narrower.

Currently, Polygons C and D and the forest immediately to the south are undeveloped except for a portion of a ski trail through Polygon C and a hiking trail through Polygon D. Polygons C and D contain exemplary natural communities, as described by the Natural Heritage Bureau (NHB), with Polygon D's forest including what has been described as forest that has never been cut.

I. Polygons C and D Contain Exemplary Natural Communities

On at least two occasions, the NHB has evaluated the West Bowl area in connection with the Resort's proposed expansion in the West Bowl. The NHB issued a report dated November 23, 2004 (2004 Report) and an addendum dated January 26, 2015 (2015 Addendum). The NHB is the



state office with the authority to designate rare or high-quality natural communities as "exemplary natural communities." RSA 217-A:3, VII.

The NHB has determined that exemplary natural communities occur in Polygons C and D of the West Bowl. In 2004, the NHB described Polygon C as "ecologically significant in a statewide context as it is one of only a few known examples of *high-elevation spruce-fir forest* south of the White Mountains." 2004 Report at 5. With respect to Polygon D, the NHB described "a mature, possibly old-growth patch of *northern hardwood-spruce-fir forest*." <u>Id.</u> Polygon D's *northern hardwood-spruce-fir forest* was "added to the existing exemplary *northern hardwood-conifer forest* system" existing across Mount Sunapee's East and West Bowls. 2015 Addendum at 2.

In its 2004 Report, the NHB stated the likelihood that the spruce in Polygon D had likely never been harvested, contrasting it with the spruce of Polygon B. The NHB compared Polygon D "to other old growth *northern hardwood-spruce-fir forests* in the state." 2004 Report at 5 (emphasis added). The NHB further concluded that Polygon D's forest is

of statewide significance for the following reasons: 1) the condition is good to very good in that it appears to have never been logged (indicators of this are the forest history, the considerable dead and downed woody debris, and the old trees); 2) even small patches of old examples of this natural community type (*northern hardwood-spruce-fir forest*) are rare in throughout [sic] central and southern NH; 3) it is part of a larger mosaic of mature and old growth patches of exemplary forest on Mt. Sunapee; and 4) it is contiguous with and forms the northern extent of the large, unfragmented forest block to the south (the Sunapee-Pillsbury Highlands).

Id.

In 2014, the NHB revisited Polygons A and D and "confirmed the original assessment of the forest condition." 2015 Addendum at 3. With regard to Polygon D, the NHB reiterated that it has not previously experienced timber management, as indicated by the absence of old cut stumps. Old growth forests, such as that described by the NHB in 2004 and 2015 as existing in Polygon D, "result from a lack of or at least very minimal anthropogenic disturbance. . . . To date, the old growth stands on Mount Sunapee are the only old growth forest remnants known to NHB in Merrimack County." Id. at 1–2.

Both the Resort's MDP/EMP and the Draft Decision would introduce development into the exemplary natural communities of Polygons C and D, thereby threatening their continued existence. As evidenced by NHB's evaluations, the forest clearing and construction associated



with the expansion would be the first significant human disturbance and timber removal that the centuries-old rare forest in Polygon D will have experienced.

II. The Size of the West Bowl's Exemplary Natural Communities Does Not Lessen Their Significance

Polygon C's high-elevation spruce-fir forest is 21 acres in size, and Polygon D's northern hardwood-spruce-fir forest is 16 acres. The size of these forests does not diminish their importance. As the NHB stated in its 2004 Report, Polygon C's forest is one of only a few such examples south of the White Mountains, and any diminishment in its statewide importance is attributable to nearby ski trails, not its size. 2004 Report at 5. And although Polygon D "is small compared to other old growth northern hardwood-spruce-fir forests in the state, and ski trails and roads to the north are fragmenting features," the NHB found it to be of statewide significance for four separate reasons. Id.

III. RSA 217-A:7 Does Not Allow Avoidable State Action that Will Jeopardize the Continued Existence of Exemplary Natural Communities

RSA 217-A is the New Hampshire Native Plant Protection Act. The Act charges DRED and the Commissioner of DRED with its administration. The Act provides the Commissioner with several tools to further the administration of the Act and to protect exemplary natural communities. See, e.g., RSA 217-A:6, I (requiring the Commissioner to establish programs for the protection of exemplary natural communities); RSA 217-A:6, II (authorizing the Commissioner to enter into agreements with, among others, "individuals or private organizations . . . for the protection of listed plant species or exemplary natural communities"); and RSA 217-A:7-a (establishing a natural heritage bureau fund to "accomplish the purposes of this chapter").

Perhaps the most effective provision for protecting exemplary natural communities is RSA 217-A:7, which mandates: "All state agencies, consistent with their authority and responsibilities, shall assist and cooperate with the commissioner to carry out the purposes of this chapter. To the extent possible actions funded or carried out by state agencies shall not jeopardize the continued existence of any protected plant species or exemplary natural community." RSA 217-A:7. Although RSA 217-A:7 applies to the actions of all state agencies, it is the Commissioner of DRED who is primarily charged with ensuring that the continued existence of exemplary natural communities is not jeopardized.

The language "to the extent possible" acknowledges that it may not always be possible for state action to avoid jeopardizing the continued existence of an exemplary natural community. Such a situation might arise in the face of substantial public safety needs. Nevertheless, under the



"to the extent possible" standard, if it is possible to avoid state action that will jeopardize the continued existence of an exemplary natural community, then RSA 217-A:7 requires that the agency—in this case DRED—avoid the action.

The proposed construction of ski trails and a chair lift through and around an exemplary natural community is a prime example of a purely discretionary action that is "possible" to avoid. The development of ski infrastructure in these forests is avoidable, and there is no overriding state need that makes it necessary for these ski trails and ski lift to occur in Polygons C or D or their buffers.

As stated in DRED's April 16, 2015 Summary and Response to Written Public Comments received as of 12.31.2014 ("DRED Summary and Written Response"), "DRED's first emphasis is to avoid these [exemplary natural] communities altogether." DRED Summary and Written Response at 14. This mandate comes not only from the plain language of RSA 217-A:7, but also from RSA 216-A:1, which provides that DRED's first duty—above duties related to recreation, tourism, etc.—is "[t]o protect and preserve unusual scenic, scientific, historical, recreational, and natural areas within the state."

Finally, RSA 217-A does not provide for mitigating harm that state action may cause to an exemplary natural community. Unlike other circumstances in which mitigation might be appropriate (wetlands mitigation, for example), exemplary natural communities are unique and cannot be replicated. Thus, although the Friends of Mount Sunapee applaud the Commissioner's proposal to require the Resort to conserve additional land, RSA 217-A does not contemplate the substitution of land to make up for avoidable loss to an exemplary community. Had the legislature seen fit to make such a provision, it could have done so.

IV. The Proposed Construction in Exemplary Natural Communities is Without Precedent

DRED provided examples in which recreation already takes place "in direct proximity or within an exemplary natural community," however, the impact on the exemplary natural communities was not addressed. See DRED Summary and Written Response at 14. Moreover, the examples of Mittersill Ski Area, Ossipee Lake Natural Area, and Mount Washington State Park are very different from each other and are not appropriate comparisons for Mount Sunapee's West Bowl.

The Mittersill example concerns the protection of a neo-tropical bird named Bicknell's Thrush in a ski area. The birds only come to the site in the spring and summer to breed (when there is no skiing) and then leave for the winter. The issue at Mittersill is the continued protection of Bicknell's Thrush nesting, habitat in the skiing off-season, which in theory



is possible to accommodate with skiing because the uses are not mutually exclusive. In the case of Mount Sunapee, however, the intended expansion is an outright loss or taking of the habitat itself; the protection of the exemplary natural communities and the construction of ski infrastructure in those forests are mutually exclusive activities.

The Ossipee Lake Natural Area contains a globally rare and exemplary natural community as well as several rare plants. Because the habitat is a sandy beach, it became a popular recreational destination. The decision to allow recreation on a portion of the beach while closing the remaining beach and surrounding forest to the public was a compromise that dealt with an ongoing crisis that threatened the destruction of an exemplary natural community. In 2010, at least 25 citations were issued for trespassing into the restricted area. Thus, the impact of recreation within or in direct proximity to the exemplary natural community requires further evaluation, and is not addressed in DRED's Summary and Written Response. The Mount Sunapee situation is quite different, as the primary threat to Polygon D's exemplary natural community is the State action itself (i.e., the expansion) rather than the State's action to curb a threat.

The third example cited by DRED is Mount Washington State Park. Whereas visitors to the *alpine tundra system* exemplary natural community are there to view the plants, and therefore have a vested interest in not damaging them, the natural communities in the West Bowl would be cleared to make way for a different and mutually exclusive use.

V. The Proposed West Bowl Expansion Will Jeopardize the Continued Existence of the Exemplary Natural Communities

RSA 217-A:7 does not require that it be proven that a proposed action will destroy an exemplary natural community in order for avoidable action to be avoided. Rather, the statute prohibits avoidable action that will "jeopardize" the community's existence. The Oxford English Dictionary defines "jeopardize" as "to put (someone or something) into a situation where there is a danger of loss, harm, or failure."

By cutting swaths through and adjacent to these exemplary communities, the proposed ski infrastructure will jeopardize the continued existence of these exemplary natural communities by opening the closed forest canopy, fragmenting them into smaller parcels, and allowing a number of environmental changes that would jeopardize their continued existence. Even relatively narrow swaths change the conditions that these forests have enjoyed for hundreds of years. The negative effects include the following:

• <u>Increased wind damage</u>: The cut swaths will allow wind to penetrate the forests, which will result in broken branches, tops, and stems. Additionally, windthrow will occur



whereby whole trees and root systems will topple. Red spruce is particularly susceptible to windthrow because of its very shallow root system. See United States Forest Service, Red Spruce, at http://na.fs.fed.us/spfo/pubs/silvics_manual/Volume_1/picea/rubens.htm. Currently, the trees are relatively protected from the wind that has been blowing there for centuries.

- <u>Increased snow damage</u>: The cut swaths will allow increased loads of snow and ice to penetrate the forests' canopies, which will result in increased broken branches and tops.
- <u>Damage from sunscald</u>: Trees growing on the edge of the new swaths will be susceptible to sunscald, which occurs during the winter and summer when there is intense sunlight. Reflection off the snow of the new ski trails will increase this problem. The trees are currently protected from intense sunlight.
- <u>Insect damage and disease</u>: Increased wind, snow, and sun damage will weaken the trees and leave them more susceptible to insect damage and disease.
- Invasive plants and animals: The high-elevation spruce-fir forest and northern hardwood-spruce-fir forest are closed canopy forests, which are much less vulnerable to invasive plants than open areas for a variety of reasons (e.g., less available light, little or no exposed mineral soil, less available water, occupation by different bird species with less reliance on invasive plants for food, etc.). The construction of new ski trails and a chair lift will open the forest and inevitably facilitate the introduction of invasive plant species such as spotted knapweed, which already occurs on existing ski trails on Mount Sunapee. Invasive seeds and invasive earthworms will be introduced by construction equipment (including log skidders, excavators, and dump trucks), in seed mixes used on new ski trails, and by non-forest-dwelling birds that will enter the newly open forest. Earthworms, which are not native, degrade forest soils by consuming the organic layer.
- Native bird predation: The swaths will subject the forest-dwelling bird species to increased nest predation by opportunistic predators such as blue jays, crows, raccoons, and house cats that will use the cut swaths as "access highways." Nest parasitism by brown-headed cowbirds will also increase. Brown-headed cowbirds do not enter forested areas, but when forests are fragmented they will parasitize nests along the newly created edges. All of these predators are contributing to the decline of forest-nesting birds.

The NHB is well aware of these negative effects, having concluded that "[l]arge, intact systems are more resistant to impacts from natural disturbance, insects and disease, and human disturbance." 2015 Addendum at 5. Further, the NHB has acknowledged that effects such as these



threaten the very "viability" of exemplary natural communities, stating: "In general, the larger and more unfragmented a community or group of communities, the more viable it will be over time. Habitat loss affects the viability of remaining natural communities by reducing their total area, the population size of constituent species, internal microhabitat and species diversity, and the integrity of certain area-related ecological processes." NHB, Significant Biodiversity Features in the CT Lakes Headwaters Natural Areas, 2005, at 14.

In the same report, the NHB described the importance of buffers: "Buffers help protect natural communities from the deleterious effects of increased nutrients, reduced water quality, altered water quality, invasion by exotic species, windthrow, loss of secondary plant or animal habitat, and detrimental changes in surrounding land use that may increase threats over the long term." Id. at 24.

These negative effects occasioned by the introduction of a ski trail and chair lift through the natural communities, and multiple new ski trails through the communities' buffer will threaten the continued viability of the rare forests in the West Bowl and also threaten their status as "exemplary." For example, with a ski trail and lift corridor through Polygon D and multiple trails carved into Polygon D's southern buffer, the *northern hardwood-spruce-fir forest* that has never experienced timber harvesting will be degraded and no longer worthy of exemplary status. Without its existing buffer, Polygon D may not have attained exemplary status in the first place, as the buffer protects the rare forest. In its 2004 Report, the NHB acknowledged that *nearby* ski trails lessen the level of statewide significance of Polygon C. 2004 Report at 5. It is therefore unquestionable that the statewide significance of Polygon D's forest will be reduced with ski trails and a chair lift actually going *through* (and around) it.

The NHB has ably explained the risks that human activities pose to the continued existence of exemplary natural communities:

While some rare plant species and exemplary communities may require management to compensate for altered disturbance regimes, most have the best opportunity to persist when they are insulated from human activities. For example, tree removal in exemplary natural communities has an immediate and lasting negative impact to biological legacies and intrinsic ecological conditions that characterize these communities. Ideally, they are protected within large unmanaged areas to minimize edge effect on populations and natural communities and to maximize potential for population expansion.

NHB, Significant Biodiversity Features in the CT Lakes Headwaters Natural Areas, 2005, at 13. The NHB has a consistent record of recommending best forest management practices and advising against tree removals in and around exemplary natural communities, for example:



- "Normally, NHB recommends that management activities within exemplary natural communities and natural community systems be restricted to those with specific ecological goals, such as invasive control or prescribed burning." NHB, Ecological Inventory of Pisgah State Park, 2009, at 22 (citations omitted).
- "[I]n areas where timber harvesting is possible, we recommend that commercial management activities be excluded from exemplary natural communities and natural community systems. In addition, for occurrences of rare plants which occur outside the exemplary natural communities, we recommend these populations, and suitable adjacent habitat, be buffered from logging activity by a suitable distance." NHB, Ecological Inventory of Cape Horn State Forest, 2007, at 33.
- "NHB recommends that commercial timber management activities be excluded from exemplary natural communities." NHB, Ecological Inventory of Coleman State Park, 2009, at 16.
- "From an ecological perspective, recommended management . . . would include the reservation of exemplary natural communities as natural areas (i.e., maintained in a natural condition by allowing physical and biological processes to operate, with management actions limited to ecological restoration or to preserve natural communities and rare species at risk). Tree removal in exemplary and otherwise significant natural communities can have an immediate and lasting negative impact to biological legacies and intrinsic ecological conditions that characterize these communities (e.g., vegetation structure, species composition, coarse woody debris, soil structure). While some exemplary communities may require management to compensate for altered disturbance regimes, most have the best opportunity to persist when they are insulated from human activities." NHB, Ecological Inventory of Black Mountain State Forest, 2005, at 15 (emphasis added).

These management recommendations by the NHB contemplate a very limited level of management activities that are generally ephemeral in nature and that pale in comparison to the level of activity and intrusiveness occasioned by the construction, maintenance, and use of ski trails and a chair lift. The level of activity proposed in the West Bowl's exemplary communities by the Resort and by the Draft Decision appears not only to be without precedent but also a stark departure from the NHB's record of stewardship-based forest management recommendations.

The degradation of Polygons C and D would further fragment what the NHB has described as the "larger mosaic of mature and old growth patches of exemplary forest on Mt. Sunapee." 2004



Report at 5. There will be one less "patch" of old-growth (i.e., "never been logged") forest making up the larger mosaic. See 2015 Addendum at 2. Thus, not only will the expansion jeopardize the exemplary natural communities in Polygons C and D, it will jeopardize the continued existence of the larger exemplary natural community system.

The cutting, grading, seeding, maintenance, and use of a ski trail and the installation of a chair lift through exemplary natural communities, while also carving their buffers with three new ski trails, will undoubtedly degrade the exemplary communities and jeopardize their continued existence. Exemplary natural communities in New Hampshire are inherently rare and superb assemblages of plants and animals found in particular physical environments; these natural "communities" are comprised of the plants, trees, birds, soil, soil microbes, etc. that have created a rare web of life, and it is for this reason that such exemplary communities are protected by law. Once these communities are gone, they are gone forever.

The applicable legal standard is a high one. If it is "possible" for a state agency to avoid action that will threaten the continued existence of an exemplary natural community, that action is prohibited under 217-A:7. DRED, as the steward of the Native Plant Protection Act, must not compromise that with which is has been entrusted. As observed by the NHB, Polygon D has apparently "never been logged," and "the old growth stands on Mount Sunapee are the only old growth forest remnants known to NHB in Merrimack County." 2015 Addendum at 2. The unnecessary and avoidable introduction of skiing into this exemplary natural community would not satisfy the "to the extent possible" standard of RSA 217-A:7 or the prioritization set forth in RSA 216-A:1.

Thank you for your dedication to Mount Sunapee.

Very Truly Yours,

Jason D. Reimers, Esq.

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