



STATE OF NEW HAMPSHIRE
DEPARTMENT of RESOURCES and ECONOMIC DEVELOPMENT
DIVISION of FORESTS and LANDS
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Director

**Comments on Proposed Chairlift, Glade Skiing, and Ski Trail Construction
in Polygon 23 at Mt Sunapee State Park**

March 20, 2000 (revised March 29, 2000)

To: Commissioner Bald

cc: Tom Miner

From: Phil Bryce and David VanLuvan 

As you requested, we have summarized the Division of Forest & Land's position on potential compensation for construction of a chairlift, glade skiing, and ski trail in Polygon 23 at Mt Sunapee State Park. We have considered this issue very carefully over the past two years, and our staff has worked closely together to develop a better understanding of the forest within Polygon 23.

Much information has already been provided establishing the ecological importance of Polygon 23 at a statewide level, and on the types of deleterious impacts that would result from the Resort's proposed activities. This information includes:

January 1999	<i>Old Forests and Rare Plants at the Mt Sunapee Ski Lease Area report</i>
April 19, 1999	Comments on Proposed 1999 Mount Sunapee State Park annual operating plan
May 21, 1999	Comments on proposed trail widening and trail building in the 1999 Mount Sunapee State Park annual operating plan
November 2, 1999	Comments on proposed ski area development within Polygon 23 in the Mt Sunapee State Park ski lease area

Further, we have seen no information indicating that the construction activities would *not* harm the polygon's significant forest, an important consideration in light of your assertion on May 11, 1999 that we assume projects near old growth will have a deleterious effect unless there is convincing evidence to the contrary. Our position on Polygon 23 therefore remains the same: any development activities within the polygon will have a detrimental effect on Mt Sunapee's old forests.

We have identified three options in response to the Resort's request: approval, denial, or approval with mitigation. The mitigation plan proposed by the Forest Society (SPNHF) had four components summarized here and explained in further detail below:

Forest Protection (603) 271-2217
Forest Management (603) 271-3456



Land Management (603) 271-3456
Information & Planning (603) 271-3457

Natural Heritage Inventory (603) 271-3623

1. The acquisition by the resort for the state of areas of "old growth forests" on land abutting Sunapee State Park;
2. A limitation on any future expansion of the lease boundary into the East Bowl;
3. A limitation on future expansion or addition of trails in the East Bowl area;
4. Designation of the East Bowl area as an "old forest restoration reserve."

Now that we have knowledge of the significance of Polygon 23 and the surrounding area to the State's ecological heritage, items 2, 3, and 4 above should be implemented regardless of any intent on the part of the State or resort to install this particular lift and trail.

In order to determine the relevance to the mitigation proposed in item 1, a cursory field survey was conducted of those portions of the abutter's property identified as "old growth." The results of the review indicate that while these areas have old trees and have some significance ecologically, they are inferior to Polygon 23. Therefore, we recommend that the request for the lift, trail and glades be denied or that the resort provides additional mitigation to support old growth forests in our state.

We suggest this mitigation be in the form of a Natural Heritage Inventory survey and analysis of the old forests in Mt. Sunapee State Park, including the East Bowl area. We estimate the cost of this additional mitigation to the resort would be from \$25,000 to \$30,000.

Details regarding the SPNHF recommendations are as follows:

On November 4, 1999, the Society for the Protection of NH Forests (SPNHF) proposed a mitigation plan for the impacts from the Resort's proposed activities in Polygon 23. They were:

1. *"That as direct mitigation for the approval of the new trail and lift construction, the State request that Okemo finance the purchase (including all costs associated with the acquisition) of certain old forest areas within the adjacent Northwoodlands, Inc. ownership. These are lands adjoin the state park boundary in the vicinity of the Andrews Brook trail corridor. [SPNHF understands that] there may be as much as 50-100 acres of true old growth immediately adjacent to the state park boundary. . . Our purpose for proposing this is to consolidate as much of the remaining true old growth forest [as possible] into contiguous public ownership."*

Northwoodlands owns several properties on the south end of Mt Sunapee State Park. The property of interest for mitigation purposes is a 682.2 acre lot that currently has an LCIP conservation easement on it. The terms of the easement preclude development, but they allow timber harvests, and SPNHF indicates that harvesting has taken place on the property in recent years.

Timber stand maps provided to the Division of Forests & Lands by Northwoodlands identify two patches totaling approximately 39 acres of mature and over mature yellow birch (see Figure 1). Our hope was that the old forests on the Northwoodlands property would be of the same type and quality as those in Polygon 23. A cursory survey by Division of Forests & Lands foresters last week, however, found that this is not the case.

The old forest on the Northwoodlands property is composed of scattered old yellow birch within younger yellow birch, white birch, and beech. The trees are short, with the canopy reaching only 30' or so, probably due to rocky, shallow soils and what appears to be a history

of disturbance from storms and perhaps even fire. The forest site in Polygon 23, on the other hand, is somewhat enriched, and therefore supports white ash, sugar maple, alternate leaf dogwood, and a relatively high species richness of herbaceous plants. Further, the forest structure in Polygon 23 is different, with the canopy reaching 80' to 90'.

The forest natural communities in Polygon 23 and in the proposed mitigation area are not the same. As such, the forest that would be lost in Polygon 23 would be "replaced" with the protection of a very different type of forest. As such, components of the semi-rich sugar maple-beech forest natural community in Polygon 23 may simply be lost.

Acidic old forests on ridges are rare and significant, but the semi-rich old forest in Polygon 23 is even more unusual. We are comparing apples and oranges here, and it is hard for us to quantify relative values, but what we will be losing in Polygon 23 is very different and may be greater than what we would be gaining on the Northwoodlands property.

With this in mind, we feel that any land exchange needs to go a step further and include resources for an intensive assessment of old forest in the Mt Sunapee State Park. We do not have a good understanding of the age, composition, extent, or dynamics of old forests in Mt Sunapee State Park. The old forest on the Northwoodlands property appears to extend into the state park, but we do not know how far. Our brief assessment of the Northwoodlands old forest stands provides only cursory information because we could not assess herbaceous vegetation, see potential signs of human disturbance, place their stands in the broader landscape context, or even determine what forest natural community is present. It is imperative that DRED follow up on its commitment to the Mt Sunapee Advisory Committee and have NH Heritage conduct a thorough assessment of Mt Sunapee's old forests.

2. *"That Okemo waive any future consideration of expansion of the lease boundary further into the East Bowl area, for the duration of their lease, and that any future lessee be prohibited from such as a condition of the lease."* In *Old Forests and Rare Plants at the Mount Sunapee Ski Lease Area*, we noted that there is most likely additional old growth forest in the East Bowl. Surveys by NH Heritage ecologists are necessary to confirm the status and extent of old forests there.
3. *"That Okemo agree to forego any future expansion of new or existing trails within or adjacent to the high priority old forest polygons in the East Bowl area, for the duration of its lease, and that any future lessee be prohibited from such as a condition of the lease."* The most significant portion of this area is Polygon 20 (see Figure 2). Jay Gamble has noted to us on several occasions that the Resort is not interested in pursuing trail construction in Polygon 20 because the topography is unsuitable (any ski runs would be funneled into a ravine that would be very difficult to connect with existing ski runs).
4. *"That the State of NH permanently and formally designate (whether by administrative decree, administrative rule, or statute) the East Bowl area of Mt Sunapee State Park as an "old forest restoration reserve," where no road construction, timber harvesting, or other significant management activities may take place."* We recommend that NH Heritage ecologists survey the East Bowl before such a designation is made to confirm the status and extent of old forests there.

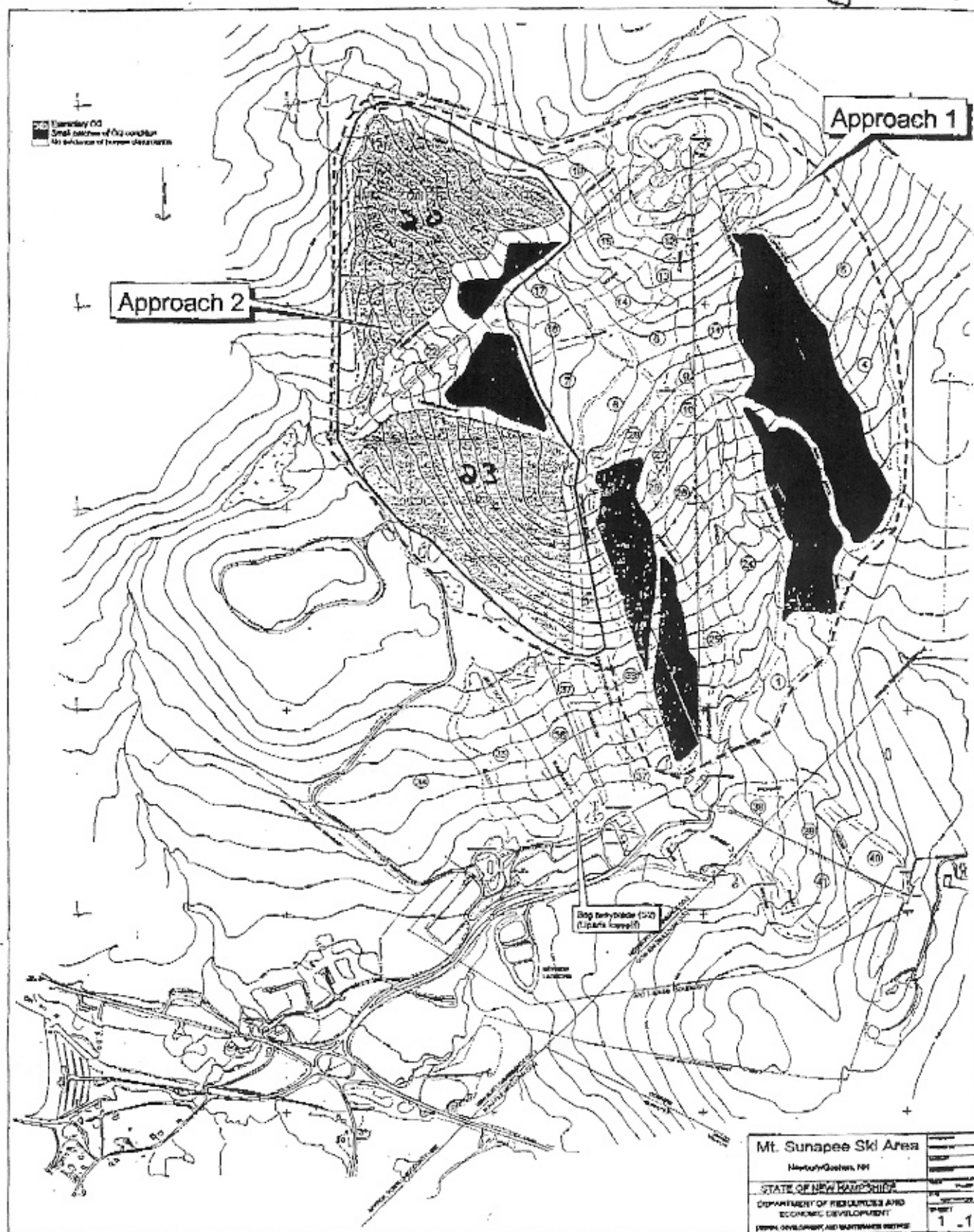


Figure 3. Map of Mount Sunapee ski lease area. Polygons within dotted line all had little or no evidence of human disturbance ("No Evidence of Human Disturbance"); blue polygons had high quality forest with small areas of old growth conditions ("Small patches of OG Condition"); and red polygons had a high proportion of exemplary old growth ("Exemplary OG"). Approach 1 (within dotted line) refers to the best conservation approach; Approach 2 (within solid line) refers to the less conservative approach (see Recommendation 1). A yellow dot marks the approximate location of bog twayblade.