THE STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

DOCKET NO.2008-04

RE: APPLICATION OF GRANITE RELIABLE POWER, LLC
FOR CERTIFICATE OF SITE AND FACILITY
FOR GRANITE RELIABLE POWER WINDPARK
IN COOS COUNTY

TESTIMONY OF WILL STAATS AND JILLIAN KELLY ON BEHALF OF THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT

DECEMBER 2008

The Fish and Game Department has concerns regarding impacts on a number of species of wildlife that depend on or use the rare and unique high elevation forested habitat this project is located within.

Qualifications – Will Staats

Please state your name and business address.

William Staats. New Hampshire Fish and Game Department 629B Main Street, Lancaster, New Hampshire 03584-3612.

Who is your current employer and what position do you hold?

I am currently employed at the New Hampshire Fish and Game Department (NHFGD), 629B Main Street, Lancaster NH 03584, as a Regional Wildlife Biologist.

As the regional Wildlife Biologist I am responsible for a wide range of duties including; providing regional perspectives and data regarding wildlife and related issues

for statewide game and non-game programs. My responsibilities include providing technical assistance to landowners regarding wildlife habitat, including large timber investment management organizations and the US Forest Service. I work closely with partners including the US Fish and Wildlife Service and a variety of NGO's.

What is your background and qualifications?

I earned a Bachelor of Science degree in Wildlife Biology from the University of Vermont in 1980. I was hired by F&G in January of 1993. I am a certified wildlife biologist. During my career I have been employed as a forester and wildlife specialist for Champion International and provided wildlife recommendations on their 460,000-acre land base located in New Hampshire, Vermont and New York. I also worked as a biological technician for the Vermont Fish and Wildlife Department based out of a district office in northern Vermont.

I have extensive experience working on issues related to high elevation areas in New Hampshire and Vermont. This includes: performing environmental review in high elevations areas through the Act 250 development law in Vermont, providing technical assistance to forest landowners on high elevation areas in New Hampshire, chairing the high elevation subcommittee as part of the NH forestry roundtable, and participating in the formulation of the High Elevation MOU. I am also consulted by the Coos County Unincorporated Towns Planning Board to review timber harvests and development projects pertaining to designated wildlife areas and high elevation habitats. On a non-professional basis, I have spent countless days at these elevations over the last 30 years hunting and trapping in this unique environment.

Qualifications – Jillian Kelly

Please state your name and business address.

Jillian Kelly. New Hampshire Fish and Game Department 629B Main Street, Lancaster, New Hampshire 03584-3612.

Who is your current employer and what position do you hold?

I am currently employed by the New Hampshire Fish and Game Department (NHFGD), 629B Main Street, Lancaster NH 03584, as an Assistant Regional Wildlife Biologist.

As the Assistant Regional Wildlife Biologist, I am responsible for a wide range of duties. I spend a little more than half of my time managing a 25,000-acre Wildlife Management Area in northern NH. Management of the property includes: general maintenance duties, maintaining public access, identifying and coordinating habitat management for wildlife, and monitoring the use of the property by wildlife. The remainder of my time is spent assisting the Regional Wildlife Biologist in Regional duties that include, providing technical assistance to landowners on wildlife and habitats; as well as, providing a regional perspective on both game and non- game programs.

What is your background and qualifications?

I earned a Bachelor of Science degree in Wildlife Management from the University of New Hampshire in 2000. I have worked full time for NHFG since 2000, excluding a 16-month leave of absence for my masters program. I earned a Masters of Science in Wildlife and Fisheries Conservation from the University of Massachusetts in September of 2005. The title of my thesis is ***Recent Distribution and Population***

Characteristics of American Marten in New Hampshire and Potential Factors Affecting Their Occurrence, which can be found on the NH Fish and Game Department website at (http://wildlife.state.nh.us/Wildlife/Wildlife_PDFs/Pine_marten_thesis_JKelly.pd). I have spent the majority of my professional career working with marten. From this thesis there is currently one paper submitted for peer review and publication and another that is proposed to be submitted.

I am also a certified Wildlife Biologist and active member of The Wildlife Society.

Purpose of Testimony:

Q. What is the purpose of your testimony?

The purpose of this testimony is to present New Hampshire Fish and Game's assessment of the impacts of the proposed Granite Reliable Power Project (GRP Project) in Coos County, New Hampshire, on the wildlife of the region.

We are familiar with the GRP Project. We have reviewed the plans submitted by the applicant, as well as the testimony of Adam J. Gravel and Steven K. Pelletier, also submitted by the applicant. We have also reviewed the results of the Winter Tracking survey (Appendix. 25) submitted by the applicant.

Will Staats has visited the proposed site numerous times in a professional capacity; as well as, personal manner. During 2008 alone, he estimates that he has been to the project area seven times both during winter months; as well as, during snow free periods. Jillian Kelly has also visited the proposed site numerous times, primarily in a professional capacity. During 2008, she has been to the site four times both during winter months; as well as, during snow free periods. In preparing the testimony, we relied upon the Master's thesis of Jillian Kelly, dated September of 2005, which is

attached to the testimony as Exhibit 1. (Exhibit 1 is available online at (http://wildlife.state.nh.us/Wildlife/Wildlife_PDFs/Pine_marten_thesis_JKelly.pd. A paper copy will be made available on request.) This same thesis is cited by the applicant's consultants in the 2007 Winter Track Survey that has been submitted to the Site Evaluation Committee and referenced in the applicant's testimony.

Q. What is the State's responsibility in reviewing a project of this nature?

The Fish and Game Department is the sole state agency that has been tasked with the protection and management of the state's wildlife. See RSA 206:10. Additionally, the New Hampshire Fish and Game Department is authorized to review this project and offer comments pursuant to RSA 212-A: 9. RSA 212-A: 9 states that "All other state departments and agencies shall take such action as is reasonable and prudent to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such species or result in the destruction or modification of habitat of such species which is determined by the executive director to be critical."

Although critical habitat has not been defined or designated for any species in New Hampshire, the high elevation forested habitats within the project area have been identified as core American marten (state threatened species) habitat in NH (Exhibit 1 (Kelly 2005)). Habitats found within the project area, specifically on Dixville Peak and Mt. Kelsey, are especially critical to marten due to their location on the landscape and the extensive amount of suitable habitat found at these locations. For these reasons, the habitats found in these areas would meet any definition or designation criteria that would be developed by the Department.

Q. What is unique about high elevation habitat?

High elevation lands have long been recognized by our Department as a critical component of the landscape and provide unique habitat features for a variety of wildlife, which include state and federally listed species. The forest cover on these lands is characterized by a high percentage of spruce and fir. New Hampshire Fish and Game's Wildlife Action Plan contains a section devoted exclusively to High Elevation Spruce-Fir Forest. This profile asserts that these forests offer some of the last blocks of large, remote contiguous blocks of spruce-fir habitat. In addition, this profile outlines the rarity of this habitat, accounting for only about 4% of the state's land area and this habitat type supports sixty-six vertebrate species. Under the proposed project, significant portions of high elevation habitat will be greatly impacted.

At elevations of 2700 feet and higher, spruce and fir forest dominate the species composition along the ridgelines and upper slopes of these higher mountains. The remaining forest type is composed of mixed wood stands in the transition zones. Both spruce-fir and mixed wood at these elevations can provide complex forest stand structure, including larger diameter cavity trees, snags and large woody debris for wildlife. Mountain ash is found interspersed among these stands, providing an important soft mast food source for many species of wildlife ranging from the American marten to black bear.

High elevation forests are subject to natural disturbances that result in a variety of tree size classes and stand distribution. Patches of blown down trees as a result of, "fir waves" and insect or wind events, create small openings and dense early successional spruce and fir. These areas provide ideal habitat for lynx or Bicknell's thrush, while

dead and dying trees create habitat conditions suitable for three-toed woodpeckers and provide den sites or feeding opportunities for marten.

Q. What involvement have you and your Department had regarding the long-term management or protection of high elevation lands in New Hampshire?

Due to the value and high sensitivity of these habitats, the NH Fish and Game Department has initiated and/or participates in two levels of involvement in the management of high elevation lands. The Coos County Unincorporated Towns Planning Board has designated these areas as a Protected District (PD), which is defined as an "*area where development would jeopardize significant natural, recreational, and or historic resources".* Areas above 2700 feet in this case are defined as PD6 zones, which include steep slopes and high elevations. The specific purpose of the PD6 zone is to: "*regulate certain land use activities in mountain areas in order to preserve the natural equilibrium of vegetation, geology, slope, soil and climate in order to reduce danger to public health and safety posed by unstable mountain areas, to protect water quality, and to preserve mountain areas for their scenic values and recreational opportunities."* Due to their designation as a PD6 zone, any activities at these elevations must acquire a permit from the Coos County Planning Board. Historically, the Board has relied on NH Fish and Game to review and comment on these permit applications.

The second level of involvement involves a High Elevation Memorandum of Understanding (MOU), initiated by NH Fish and Game and others, which set out to protect the values of high elevation habitats. In a collaborative effort involving nearly all of the large landowners in northern NH, the MOU allows logging but provides guidelines

and specific goals for forest size class distribution above 2700 ft. This document also makes recommendations on road building and the timing of harvesting activities.

Will Staats was chair of the scientific sub-committee on developing best management practices for high elevation areas, deer yards, riparian areas and other wildlife habitats for the Forestry Laws Recodification Roundtable. It was the consensus of this group that no timber harvest was the most effective strategy to safeguard the natural resource attributes at these elevations. Recognizing that landowners had a desire to harvest some timber from these areas, this subcommittee initiated the high elevation MOU, which represents a compromise to achieve some protection of this habitat.

Q. What kinds of human activity occur currently at these elevations?

Due to the inaccessibility of these high elevation forests in New Hampshire, many of the mountains north of the White Mountains see little disturbance by human activity. This area is unlike the remainder of northern New Hampshire, where there is a multitude of logging roads found at lower elevations, providing humans access to much of the landscape. In fact most of the high elevation summits in Northern New Hampshire have no organized high elevation hiking trails. Human activity is limited to occasional hunters and peak baggers. Recognizing that there already exists many miles of hiking trails in the White Mountain National Forest, concerns about concentrated human activity in these sensitive areas have prompted our Department to recommend organized hiking trails be moved out of high elevation forests, if possible. As an example, during the development of the Coos Trail we worked with trail designers to keep the trail off ridgelines above 2700 feet to the extent possible. Logging operations at these areas

represent the majority of disturbance and these occur very infrequently, perhaps every 80 to a hundred years, due to the slow growth of trees on these sites.

Q. How would you characterize the human activity on the ridgelines slated for this project?

Like most of the high elevation ridgelines in Coos County, there is very little activity on the ridges that have been targeted for turbine erection. In all likelihood, fewer than a dozen people visit the summits of some of these ridges over the year and some summits are not visited by people in consecutive years. We base this assessment in part by entries recorded into journals located in containers placed at the top of mountains 3000 feet and higher by AMC and other peak baggers. Dixville Peak would be the exception due to the trail leading to its summit. This gets frequent snowmobile traffic during the winter months.

We strongly disagree with the statement “wildlife at the site have adapted to an environment with frequent disturbances and changing conditions and are accustomed to management activities and vehicle traffic?” (Page 27 of the Gravel testimony)

While the above statement may be true for some species and habitats at lower elevations on the GMO and Bayroot properties, this is not the case within the high elevation habitats bisected by the proposed project. On both properties these areas remain the last remote, largely undisturbed areas where management activities and vehicle traffic are essentially non-existent.

If this development moves forward as proposed, there will be human activity far more frequent then these areas have ever experienced before. We also believe it will be exceedingly difficult, if not impossible, to limit human access to these ridgelines once

developed with an extensive road system. This increased human activity has the potential to alter wildlife movements, breeding and feeding behaviors and may create a zone of avoidance extending out some distance from the project footprint.

Q. How do these high elevation areas relate to the landscape as a whole on the Phillips Brook area?

In the project area, Kelsey and Dixville peaks comprise the two larger patches of high elevation forest (1667 acres on Mt. Kelsey and 1873 acres on Dixville Peak). Of these, Mt. Kelsey is the least disturbed in recent history. According to the 2001 Granit Land cover layer, approximately 846 acres of Mt. Kelsey is classified as the spruce and fir forest type, with the remaining acreage above 2700 feet classified as mixed wood, while over 900 high elevation acres are classified as spruce and fir on Dixville Peak. Tree ring counts of tree growth on newly cut fir stumps at the meteorological (met) tower location on Mt. Kelsey, indicated that these trees were between 80 and one hundred years of age. Existing forest stands on Kelsey include a variety of size classes, including larger diameter red spruce, balsam fir; as well as, dense thickets of sapling and pole sized spruce and fir. Ledge outcrops and boulders on this mountain are additional features beneficial to wildlife.

On the Phillips Brook GMO property, lower elevation forests have been harvested aggressively. The ice storm of 1998 prompted heavy harvesting to salvage damaged trees in a number of these harvest areas. Thus, the high elevation forests represent some of the last intact older aged forest stands in the area. Mt. Kelsey as an example is a large block of forest that has not seen any recent harvest above 2700 feet in elevation. The same could be said for Dixville Peak, as well.

Q. Does the current landowner have a permit to harvest timber above 2700 feet on Mt. Kelsey?

It is true that there is a current permit to harvest timber on this mountain that we have reviewed and approved in a letter to the Coos County Planning Board. We looked at this area twice with the forester during 2008, in an effort to design a cutting plan that would work to protect habitat on the mountain. The cutting prescription outlined for this permit details a set of conditions, including no timber harvest above 3000 feet.

Q. What significance do the high elevation areas on the GMO property have to the greater Northern New Hampshire landscape?

In the context of the northern New Hampshire landscape, Mt. Kelsey, and Dixville Peak both represent large areas of high elevation land and significant habitat patches of spruce and fir. As a comparison, two high elevation areas including the summits of Rice and Cave Mountains to the north of the project area, have only 350 acres classified as the spruce and fir forest type combined.

The impacts of recent timber harvest on high elevation lands is clearly demonstrated in the recent publication entitled "North Country Timber Harvest Trends Survey" produced by the Society for the Protection of New Hampshire Forests. This Landsat analysis of timber harvest in 41 north country municipalities revealed the following:" One unexpected finding of this project is that considerable timber harvest has been occurring above 2700 "during all three periods."... And continues, "Generally, about 6100 acres or 27% of private land above 2700' has been harvested since 1988. " The report adds," satellite data show significant areas have been predominantly cleared since 1992." Despite protective efforts in the last decade as a result of the high

elevation MOU, timber harvests in some instances have reduced spruce and fir forests on ridgelines to narrow corridors of older aged, relatively undisturbed high elevation forests. Recent heavy timber harvest on Mt. Kelsey for example, extends to the 2700-foot elevation with harvests slated above 2700 feet in the near future. Given the slow recovery of forest stands at these high elevations, it may be decades before many of these acres provide viable habitat for wildlife species of concern. Thus, the remaining lightly disturbed patches on the project area represents some of the best remaining habitat capable of supporting viable populations of marten, three toed wood pecker and Bicknell's thrush.

Will Staats has personally supervised timber harvests at high elevations as an industrial forester. It is his assertion that these harvests can result in damage to the terrain in these fragile areas that is long lasting. Road building and excavated skid trails are extremely intrusive, necessitating considerable earth moving and steep road cuts. Erosion to the thin soils can be extreme. He has witnessed the length of time trees have taken to recolonize a site after heavy timber harvest and feels it can be much longer than at lower elevations.

Q. Could you describe for us in general terms the impacts of this proposal on wildlife?

Impacts by this project can be characterized as impacts on habitat and impacts to individual animals or their populations. As described in the GRP High Elevation Mitigation plan, total impact to lands above 2700 feet, as described by the applicant is estimated at 58 acres. NH Fish and Game acknowledges that while only 58 acres of habitat will be directly affected through clearing or road building above 2700 feet, the impact of this project is far greater. The project bisects the remaining parcels of high

elevation habitat, and as a result, severely compromises the integrity and value of all the high elevation management areas in the project. Therefore, New Hampshire Fish and Game asserts that the full impact of this project extends to all the high elevation lands (3747 acres, as recorded by the applicant) found on the four high elevation ridgelines slated for development.

Impacts to individual wildlife and the potential to influence population viability are more difficult to quantify with this project because no similar project of this magnitude has ever occurred in New Hampshire, or anywhere in New England at such high elevations. Accordingly, literature on the direct and indirect impacts of these turbine strings and associated infrastructure is scarce.

While the proposed wind energy project has the potential to impact numerous wildlife species and their habitats, we will focus specific concerns for species that were identified in New Hampshire's Wildlife Action Plan, as "species in greatest need of conservation" or species that are typically of concern when reviewing a large-scale wind energy development. Two of these species, the American marten and the American three-toed woodpecker, are state-listed threatened species, and one, the Canada lynx, is a federally listed threatened species.

Q. Could you describe the impacts of this project to the American marten?

High elevation habitats are extremely important to marten in the project area due to increased snow depths, unique soil composition, inclement weather and infrequent logging. Each of these factors has dramatically impacted tree species composition and more importantly microhabitat features such as coarse woody debris and prey availability (Exhibit 1 (Kelly 2005)). American marten in the northeast can be found in

forests dominated by mixed coniferous; as well as, deciduous stands as long as they contain complex horizontal and vertical structure. In New Hampshire, this type of habitat is most common and most extensive at elevations above 2700 feet.

High elevation habitats found in the project area are considered part of core marten habitat in New Hampshire (Exhibit 1 (Kelly 2005)). Marten occurrence in this area has likely significantly contributed to marten re-colonization in New Hampshire and continues to serve as important core marten habitat. Occurrence records for marten are most numerous just north of the proposed project area. Yet marten occurrence has been documented in the project area as early as the 1980's (Exhibit 1 (Kelly 2005)).

Marten are exceptionally sensitive to low levels of fragmentation. Fragmentation results in increased isolation and decreases habitat suitability and stability. Marten have been documented in lower densities, in areas bisected by roads and associated with human activity.

Finally, while not well documented, it is very likely that the noise associated with the turbines will impact the use of a much larger area by marten. Therefore, forest fragmentation, habitat loss and disturbance could contribute to an exponential decline of marten in the project area.

Forest fragmentation and habitat use by marten has been extensively studied. Many of the statements above are supported by that research, as well as by Kelly 2005.

Q. Are there some areas in the project area slated for development that has greater significance to marten then others?

Dixville Peak and the habitats above 2700' around this peak are important core habitat; as well as, providing an important linkage to facilitate marten movement across

the landscape in New Hampshire. Based on the probability of marten occurrence maps (Exhibit 1 (Kelly 2005)), this mountain complex is the natural connecting feature between high elevation habitats to the north and the ridgeline to the south. The primary corridor for marten would extend off of Dixville along the Nash Stream/GMO boundary south. Dixville Peak is also the largest contiguous block in the proposed project area. The total area above 2700 feet is 1843 acres. Marten presence was documented on Dixville Peak as early as the 1980s. In general the habitat on Dixville Peak is composed of smaller diameter spruce/fir than that found on Mt. Kelsey. It would appear that compared to Kelsey, the habitat on Dixville has less complex horizontal and vertical diversity, yet it still has all the attributes needed to be considered good marten habitat.

Mount Kelsey is the second largest contiguous block of high elevation habitat in the project area with 1463 acres on Kelsey, directly adjacent to another 184 acres located on Owlhead Mountain. There appears to be extensive forest stands that have the complexity, which is ideal for marten on Kelsey. With the exception of tree cutting for the placement of the two met towers, no recent timber harvest has occurred on the mountain above 2700 feet. On site visits, marten sign was extensive (i.e. scat and tracks). As a result, the Department considers Mount Kelsey the best marten habitat within the project area.

Q. What are your concerns regarding Canada lynx in the area?

In the Northeast, important lynx habitat is highly associated with increased snow depths and prey availability. High elevation habitats have been identified as some of the most important areas for lynx in the state. As a result, NH Fish and Game is concerned that any net loss of habitat and fragmenting features, will limit future lynx distribution.

Lynx are potentially pioneering back into the state with confirmed reports of lynx tracks in northern New Hampshire; as well as, northern Vermont in recent years. During the winter of 2008, NH Fish and Game received anecdotal reports of lynx tracks observed in the Phillips Brook drainage. No lynx tracks were detected on the track surveys performed by the applicant. As a result, we would recommend that the applicant conduct directed searches for this species.

Our field reconnaissance reveals that snowshoe hare, a major prey species of lynx, are found commonly in the spruce and fir forests of the higher elevations. We found this to be true on visits to Mt. Kelsey in the winter of 2008. Human activity, infrastructure on the ridgeline and the operation of turbines could dissuade lynx from frequenting this previously relatively undisturbed habitat. The presence of this infrastructure on the ridgeline may prevent lynx from occupying this habitat and serve as a deterrent to movement through this landscape to other similar habitats.

Q. Do you have concerns regarding the effect this development may have on Bicknell's thrush found on the project area?

Bicknell's thrush can only be found breeding in the balsam fir-dominated forests on high elevation mountain slopes of the northeastern United States and lower elevation forests, further north in the Canadian Maritime Provinces. As a result, their habitat is very patchy and isolated, making the species very vulnerable to habitat loss and fragmentation. In addition, 45% of the potential habitat for this species **in the world** is found in New Hampshire. Therefore, NH Fish and Game has a global responsibility for this species, and we share New Hampshire Audubon's concern for Bicknell's thrush and agree with their report done for the Applicant, which states: ***"the restricted breeding***

range and limited extent of its specialized habitat makes the Bicknell's thrush one of the most vulnerable bird species breeding on the project area," The report continues stating: *"reduction and fragmentation of the limited habitat may have long term negative impacts on local and regional populations of this species." According to recent data from the North American Breeding Bird Survey Bicknell's have already disappeared from Dixville Notch to the north of the project area. One recent report has suggested that should this decline continue this species could be endangered within a few decades.*

We believe this project will result in a net loss of Bicknell's habitat in this project area. By the applicants' own admission, 58 acres above 2700 feet will be removed as a result of construction and road building. It is our opinion that the fragmenting effect of this road at these elevations will pose a risk to this bird species. Given that this development is unprecedented at these elevations, we can only speculate at what the disturbance of human activity, turbine operation and noise might be to the ability of the Bicknell's thrush to live on these ridgelines. These birds are currently living in this habitat because the conditions are suitable for its life requirements. It is our opinion that to introduce this level of development into this ecosystem is not compatible with the long- term health and viability of this species. Given the extremely limited global distribution of this species, we cannot afford to take any chances with this extremely rare bird species.

Q. Do you have concerns about the effects of this project on the American three-toed woodpecker?

In New Hampshire, the American three-toed woodpecker is listed as threatened, and as a result, is profiled in the Wildlife Action Plan. Three-toed woodpeckers are

primarily found within high elevation habitats in New Hampshire, due to the higher abundance of dead and dying trees utilized by this species. Data from the North American Breeding Bird Survey (BBS) suggests a significant annual decrease in the population. In New Hampshire, according to the Atlas of Breeding Birds, there was a possible occurrence of a three-toed woodpecker in the Phillips Brook drainage in Millsfield. Audubon's breeding bird surveys conducted for the applicant indicated potential detections in 4 locations on Mt. Kelsey. Extensive logging is cited in the Wildlife Action Plan as contributing to the loss of habitat for this species. Again, any net loss of high elevation habitat has the potential to significantly impact this species in NH. The NH Fish and Game Department, therefore concurs with Audubon's report to the applicant that classifies American three-toed woodpecker as: "*one of the most vulnerable bird species on the project area",* especially due to their use of habitat structure associated with high elevation areas.

Q. What is your opinion of the mitigation package proposed by the applicant?

The proposed buffer zone surrounding the roads and project footprint is not in our opinion, appropriate or adequate mitigation. As has been stated, the impacts of the project extend to the entire zone above 2700 feet, well beyond the project footprint. Therefore, the 500' buffer on each side of the fragmenting features is likely the area that will sustain the greatest impact from the project and therefore, has the lowest value of all high elevation lands in the area for mitigation.

Q. In your opinion will this Project have an unreasonable adverse effect on the natural environment, more particularly threatened and rare species and other wildlife communities?

Yes. For the reasons put forth in this testimony, we believe the project will have an unreasonable adverse effect on the natural environment, in particular the high elevation forest ecosystem and the wildlife that rely on it. We believe that this project will fragment limited and sensitive high elevation habitat, which is a rare component of New Hampshire‘s forested ecosystem and is critical habitat for American marten, Canada lynx, Bicknell’s thrush and the American three- toed- woodpecker. We feel that in their current condition, Mt. Kelsey and Dixville Peak are blocks of relatively undisturbed habitat, which are important both locally and regionally. This project has the potential to reduce the carrying capacity of these habitats for these species by eliminating habitat and negatively influencing wildlife behavior and their use of these areas. We do not agree with the testimony of Adam Gravel and Steven Pelletier where they state, **"Consequently no adverse effects resulting from the Project to the local marten population is anticipated."** We believe this project has the potential to render unsuitable much, if not all, of the best marten habitat on the project area, or reduce the value of this habitat for these state-listed animals. The project will displace these animals and adversely influence the ability of these high elevation ridgelines to serve as corridors for marten and Canada lynx expansion. We feel that the impacts of this project will be long lasting and far more intrusive than an occasional logging operation, which might occur on a limited portion of these high elevation areas. In addition, it is our opinion that the long-term viability of the Bicknell’s thrush population is tenuous enough that it cannot afford any further permanent habitat loss or encroachment. Our Department has a long history of protecting high elevation habitat and remains convinced that it is in the best long-term interest of the wildlife resource and the public to

vigorously protect these areas. As proposed, the project will have a severe and unmitigated adverse effect on the natural environment.