the LA group
Landscape Architecture
and Engineering, P.C.

# Year 2002-2007

# Supplemental Unit Management Plan

and

# Final ~~Draft~~ Generic Environmental Impact Statement

GORE

GORE MOUNTAIN SKI CENTER

Prepared for:

Olympic Regional Development Authority

April 2002

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# STATEMENT OF FINDINGS PREPARED BY THE OLYMPIC REGIONAL DEVELOPMENT AUTHORITY

**Draft and Final Generic Environmental Impact Statements**
**Gore Mountain Ski Center**

**Supplemental Unit Management Plan**

## I. PROCEDURE

A. Section 816 of the Adirondack Park Agency Act directs the Department of Environmental Conservation (DEC) to develop, in consultation with the Adirondack Park Agency (APA), Unit Management Plans (UMPs) for each unit of land under its jurisdiction classified in the Adirondack Park State Land Master Plan (SLMP). The Olympic Regional Development Authority (ORDA), pursuant to its enabling law and agreement with the NYSDEC for the management of Gore Mountain Ski Center, prepared an initial UMP in 1987, together with an EIS for such action. An Update and Amendment to the UMP was completed in 1995.

B. In March 2001, ORDA made a determination to update and amend the UMP for Gore Mountain for the next five-year program primarily to modernize the facility and remain competitive with other ski areas.

C. ORDA designated itself as Lead Agency pursuant to 6 NYCRR 617.6, the State Environmental Quality Review Act (SEQRA), and on April 17, 2001, notified the involved agencies, which agreed with ORDA becoming the Lead Agency.

D. ORDA issued a positive declaration for SEQRA thereby expressing its intention to prepare a Generic Environmental Impact Statement.

E. A public scoping session was held by ORDA on June 21, 2001 and a scoping document was developed with public input.

F. The scoping document was adopted by ORDA on July 21, 2001.

G. Subsequently, a Supplemental UMP/DGEIS was prepared along with a plan for the mountain upgrades. The Supplemental UMP/DGEIS was accepted as complete for review by ORDA, as lead agency, on March 1, 2001, and a Public Hearing was held on April 9, 2001.

H. The close of the SEQRA comment period was May 1, 2001.

I. The FGEIS was accepted and deemed complete for review by ORDA on January 31, 2002. Notice of its publication was made in the NYSDEC Environmental Notice Bulletin and the FGEIS was made available for review by all interested and involved agencies and the public.

J. The Supplemental Unit Management Plan and Generic Environmental Impact Statement (GEIS) for Gore Mountain Ski Center is composed of three volumes: Volume I is the March 2001 Supplemental Unit Management Plan and Draft Generic Environmental Impact Statement (UMP/DGEIS); Volume II is the January 2002 Final Generic Environmental Impact Statement (FGEIS) which includes all substantive comments made on the DGEIS together with responses to such comments; and Volume III is the Final Unit Management Plan which incorporates all substantive comments and revisions resulting from the SEQRA process (which will be prepared following adoption of the Supplemental UMP/GEIS).

K. The GEIS provides sufficient site specific information for approval and permitting the management actions proposed on the Gore Mountain Intensive Use Area. No additional SEQRA analyses are anticipated to be required for any management action in the Supplemental UMP, provided that such actions are carried out pursuant to the duly adopted management plan, the GEIS and this Findings Statement. This process does not include actions to be taken by the Town of Johnsburg, only actions by the state on the intensive use area.

## II. PROJECT DESCRIPTION

A. Gore Mountain Ski Center is a year-round recreational, day-use area owned by the State of New York under the administrative jurisdiction of the Department of Environmental Conservation. Gore is currently managed by ORDA under an agreement with the DEC.

B. The facility is classified as an "Intensive Use Area" under the State Land Master Plan (SLMP). Gore targets winter sports enthusiasts for downhill and cross-country skiing. The resort includes 50 downhill trails extending 25.1 miles, 14.6 miles of nordic ski trails, a gondola from the base to the summit of Bear Mountain, eight other lifts, a ski school program, two lodges, a nursery program and a cocktail lounge/restaurant. There are five car and bus parking lots covering approximately 12.4 acres.

C. The SLMP specifically calls for the modernization of Gore Mountain to the extent that physical and biological resources allow.

D. The primary motivation behind this Supplemental UMP is to continue implementing and complement the work begun as part of the 1987 and 1995 UMP's with new improvements.

E. The Supplemental Unit Management Plan (UMP) and Draft Generic Environmental Impact Statement (DGEIS) for Gore Mountain Ski Center is an update to the approved 1995 Unit Management Plan for the ski center. The Supplemental UMP and DGEIS reports on progress made on the 1995 UMP, and incorporates by reference the 1995 UMP and GEIS in its entirety. This Supplemental UMP reviews the status of the 1995 UMP management actions and identifies those management actions which have been completed, those which are pending, and those which are modified or abandoned within the 2002-2007 Supplemental UMP/DGEIS.

New management actions are identified and analyzed in the 2002 UMP. The potential environmental impacts and the attendant proposed mitigation measures for any new or modified management actions are identified and discussed in the 2002 UMP. The potential impacts and the identified mitigation measures for the approved 1995 UMP management actions are described in detail in the 1995 UMP and remain in effect and will not be reported herein, but are incorporated by reference.

The Supplemental UMP/DGEIS refers to the 1995 UMP/DGEIS where no revisions in the UMP text or mapping are required, such as the existing environmental setting for such resources as geology, soils, topography and slope, climate, etc. Any available updated information on environmental resources, such as the results of the stream monitoring program conducted since 1995, is presented in the 2002 UMP.

F. The following specific goals were identified for the upgrade and development program in the 1995 UMP and have been refined in this Supplemental Document:

1. Improve infrastructure reliability. Some of the infrastructure at Gore Mountain is at least 30 years old and has exceeded its life expectancy, and consequently is subject to frequent breakdown. Much has been upgraded over the past five years.

2. Reduce operations and maintenance costs. Because of its advanced age and in some cases outdated design, certain equipment and infrastructure at Gore Mountain has relatively high operational and maintenance costs.

3. Assure environmental compatibility. It is desirable to develop a facility which is compatible with the natural environment in order to preserve existing ecosystems, keep facility maintenance to a minimum, increase the longevity of the facility components, and make the facility operate more economically. Gore's commitment to participate in the "sustainable slopes doctrine" advanced by the National Ski Areas Association is a definitive path to achieve these goals.

4. Stabilize the local economy. The Ski Center, if operated in harmony with the local business community, should act as a catalyst to stabilize local businesses and support the local economy. The proposed alpine ski trail connection to Ski Bowl Park will help promote economic activity in the region. It will also broaden the variety of ski and winter sports opportunities offered to the public. It will certainly make the region more attractive to the destination vacationer.

5. Trail improvements. There are a number of trails which could be negotiated more easily if they were widened. Several trail intersections could also be made more clear.

6. Improve trail selection. Gore Mountain has improved its terrain selection, and wants to continue to improve the range of terrain. A better trail selection would appeal to a greater cross-section of skiers and thus attract more skiers.

7. Improve economic return. By improving and modernizing Gore's facilities, the mountain will become more attractive to skiers, and earn a better economic return.

8. Increase public access. In addition to downhill skiing, many other types of compatible public recreation access are possible at Gore Mountain, such as sleigh riding, tubing, back country skiing, hiking, mountain biking, snowshoeing and connection to the local cross-country ski network. All would provide for greater public use of the Ski Center. The scenic gondola rides and recently installed educational and interpretive messages in the gondolas has been well received by Gore visitors. This system will continue to be expanded.

9. Improve overall skier satisfaction. Skier surveys have identified a number of specific areas which could be improved to provide a better overall skier experience.

G. The proposed plan, which has a five-year horizon, continues to achieve a balance of facility components. That is, the capacity of each individual mountain component is similar to the capacity of other components. Capacities are traditionally planned for "peak" use times (on weekends and holidays). The completion of all improvements in the approved 1995 UMP would increase peak capacity to about 7,000 SAOT. Currently, the lack of lodge and parking facilities are out of balance with lift capacity and trail capacity. The peak ticketed day at the Ski Center reached approximately 5,400 during Presidents' Week in February of 2001. At times skiers were turned away due to a lack of available parking and lodge space that was proposed and approved in the 1995 UMP but not yet constructed. In 2001, this peak capacity was reached on occasion. SAOT at the mountain exceeded parking and lodge capacity on all of these occasions, and, if constructed, the improvements planned and approved in the 1995 UMP would accommodate this demand.

H. The following new improvements and upgrades are proposed in this Supplemental UMP and are the subject of this Generic Draft Environmental Impact Statement:

Improve Infrastructure Reliability

Continue to implement a long term replacement and modernization program to restore all equipment, machinery, infrastructure and structures which are at the end of their useful life. Much of the mountain infrastructure has been replaced over the past five years including snowmaking water pump capacities, snowmaking air compressor capacity, ski lifts and grooming equipment.

Mountain Lodges and Amenities

Rehabilitate and construct an addition to the Saddle Lodge (rather than demolish, relocate and build a new Saddle Lodge as proposed and approved in the 1995 UMP). Construct a new ski patrol/warming hut at the summit of the newly proposed Burnt Ridge ski pod.

New Downhill Trails and Lifts

Widen selective trails to 200'.
Replace the triple chair (Lift #1) with a new Quad chair lift (potentially with a bubble).
Develop new lifts and trails to create a connection with Ski Bowl Park (Pods #11 and #12) and install a transportation lift, Lift #13, up the west side of Burnt Ridge from the Twister and Tahawus trails.
Re-extend and replace Lift #6 to its original termination point.
Relocate and extend Lift #3 to the abandoned gondola lift line and replace with a new detachable triple chair lift.
Relocate and replace Lift #4 (J-Bar).
Add 2 magic carpet lifts at the proposed learning center.

Tubing Hill

Develop runs and one surface lift on Bear Mountain for tubing.

Snowmaking

Install tower guns on steep, wide trails and other trails which this equipment would lead to more efficient and effective snowmaking.
Increase water and compressed air capacity.
Modernize the air plant.
Increase the inventory of snowmaking guns and hoses.

Bear Mountain Observation Tower

Install an observation tower on the Bear Mountain Summit in proximity to the mountain top lodge.

The above improvements will increase the amount of downhill ski trails on the mountain from approximately 28.5 miles of approved (some not yet constructed) alpine ski trails to 33.9 miles, or a 5.4 mile increase (well below the 40 miles as authorized by the New York State Constitution).

In addition to the above, the improvements identified in the 1995 Unit Management Plan, which remains in effect today, are still valid. Certain of the improvements in the 1995 UMP have been modified and updated in this Supplemental UMP. Many improvements identified in the 1995 UMP have been constructed, while others are under construction or have not been implemented to date. The status of actions in the 1995 UMP are summarized completely in this Supplemental UMP.

The actions approved in the 1995 UMP/GEIS which remain a part of the 2002-2007 plan include:

Construct POD 10 including lift and trails (some trails have already been constructed).
Develop the Learning Center at the old gondola loading building location.
Construct the Bear Mountain Summit Lodge.
Implement the Base Lodge Rehabilitation Improvements and Additions.
Complete the parking lot and access road/drop off improvements.
Complete development of the new beginners area with the potential consolidation of the maintenance area.
Complete approved new trail improvements and widenings.

I. The improvements identified in this Supplemental UMP are proposed to be accomplished in several phases. ORDA recognizes that implementation may take longer than the planned five years for a variety of reasons. Throughout the course of the development phases, progress evaluations will be conducted annually, work compared with the goals and objectives, and the project refocused as deemed necessary by Gore and ORDA. The results of this annual review will be a budget for the next phase of work that can be taken to the appropriate agencies for funding approval prior to the beginning of the next work period.

## III. REGULATORY ISSUES

A. New York State Constitution Article XIV establishes the "forever wild" character of Forest Preserve lands and authorizes uses and exceptions. Significant issues with respect to Gore Mountain are as follows:

1. Ski Trails

a. Article XIV was amended in 1987 to allow up to 40 miles of ski trails on certain slopes of Gore Mountain. Gore Mountain currently has 28.5 miles of approved trails (some not yet constructed). The proposed improvements to Gore Mountain will increase trail mileage to 33.9, well below the 40 miles authorized by the New York State Constitution.

2. Vegetative Cutting

a. Article XIV states that Forest Preserve land will be kept forever wild and timber is not to be removed, sold or destroyed.

b. In addition to authorizing tree cutting for ski trails, Article XIV permits cutting for appurtenances associated with the trails. These appurtenances include such facilities as ski lifts, lodges, service roadways, parking lots, utility and water lines, and other building and improvements needed for operation and management of the Ski Center.

c. The improvements identified in the Supplemental UMP will be performed in accordance with the 1991 DEC/ORDA Memorandum of Understanding, which mandates adherence to the DEC's established policy regarding cutting, removal and destruction of trees and other vegetation on all forest preserve lands as found in the Policies and Procedures of the Commissioner of Environmental Conservation (Organization and Delegation Memorandum #84-06 as amended). This policy recognizes the tree cutting sanctioned through constitutional amendment (e.g. ski trails) and Attorney General opinions. All vegetation cutting at the Gore Mountain Ski Center must be in accordance with this policy.

d. The Memorandum of Understanding requires approval of the DEC Director of the Division of Lands and Forest for the cutting of any vegetation at the State Facilities under ORDA's control. The request for approval to cut trees for the purposes of new construction, expansion or modification of projects must be submitted in writing and include specifically required detailed information. Furthermore, the DEC policy and procedures were amended in 1986 to include the requirement for adequate notice in the Environment Notice Bulletin to the public as to the number of trees proposed to be cut and the size of the land involved on specific projects. These requirements combine to assure that the test for "carefully planned and supervised selective cutting" will be met.

B. The Adirondack State Park Master Plan specifically calls for the modernization of Gore Mountain to the extent that physical and biological resources allow. The proposed improvements to Gore Mountain are consistent with the SLMP in that:

1. Public opportunities for downhill skiing, cross country skiing and similar outdoor recreational pursuits under developed conditions is provided in an intensive use area in a setting and on a scale that is in harmony with the relatively wild and undeveloped character of the Adirondack Park, and

2. The proposed facilities are located, designed and will be managed so as to blend with the Adirondack environment and to have the minimum adverse impact possible on surrounding state lands and nearby private holdings, and

3. Construction and development of such improvements in the intensive use area will avoid material alteration of wetlands, minimize extensive topographic alterations, limit vegetative clearing and preserve the scenic, natural and open space resources of the intensive use area, and

4. The proposed improvements allow rehabilitation and modernization of an existing intensive use area which is a priority in the SLMP.

C. Safety at ski areas is regulated in several areas:

1. New York State Standards for Aerial Passenger Tramways (12 NYCRR Part 32)

2. New York State Safety in Skiing Regulations (12 NYCRR Part 54)

D. Hunting, trapping and fishing at the Ski Center are prohibited pursuant to 6 NYCRR Part 190.23.

E. Gasoline and diesel fuel tanks are managed and regulated in compliance with the NYSDEC Petroleum Bulk Storage Regulations.

F. In addition to the above regulatory controls, the ski industry has voluntarily adopted a variety of safety standards covering lifts, ski slope design, etc.

## IV. IMPACTS AND MITIGATION

The following potential impacts have been identified for the actions proposed in the UMP.

Vegetation

The construction of the identified 2002 UMP management actions for new ski trails and lifts, widening of existing trails and construction of other improvements such as the ski trail connection to Ski Bowl Park, will result in the cutting of trees. Approximately 48,564 trees, slightly less than half of which will be small (less than 4" diameter at breast height) will be cut as a result of the plan. All vegetative cutting will be conducted in compliance with DEC tree cutting policies and New York State Constitution Article XIV.

Water and Wetland Resources

Wetland resources will be avoided by project components; therefore, there will be no impact to such resources.

Significant quantities of groundwater are not needed for the Ski Center; therefore, there will be no impact to such resources.

Soils

Construction of improvements on the mountain has the potential to result in soil erosion. Construction Pollution Prevention Plans (CPPP) appended to the SPDES permit for work on Ski Center property identify specific stabilization and erosion control measures to mitigate or eliminate the possibility of this impact. The CPPP is maintained on-site and includes construction site inspection reports per NYSDEC SPDES regulations.

Visual Resources

The proposed improvements to the Ski Center will not be significantly visible from area roadways because they are located below those trails which are currently visible. The trails proposed in Ski Bowl Park utilize trails historically used for skiing, and will be partially visible.

Fish and Wildlife

No rare, threatened or endangered species will be affected by the project.

Transportation

The proposed Ski Center improvements will result in reductions in the level of service at the intersection of the Gore Mountain Access Road and Peaceful Valley Road and Peaceful Valley Road and NY Route 28 during peak ski visitor arrival and, especially, departure times. This impact is proposed to be mitigated by construction of a turning lane on Peaceful Valley Road at its intersection with NY Route 28 as approved in the 1995 UMP when the goal of 7,000 SAOT is realized.

Community Services

There will be some increase in demand for community services such as fire, police, rescue, solid waste and health care. However, the Ski Center presently makes very little demand on such services and the increase in such demand is anticipated to be small and can be accommodated by the service providers.

Local Land Use Plan

The actions in the Supplemental UMP are consistent with local planning documents such as the Town of Johnsburg Master Plan and the North Creek Action Plan. The UMP contains specific actions and commitments to foster cooperation and links between the Ski Center and community, such as the connection of Gore Mountain to the North Creek Ski Bowl.

Economics

Actions identified in the proposed Supplemental UMP will have positive economic impacts through direct construction purchases, payroll and through new hires. In addition, new skiers drawn to Gore will spend money. All such spending will be positively multiplied throughout the community. According to McKinsey & Company, Final Report to the Marketing Task Force-National Ski Area Association, "For every dollar spent on skiing, another six dollars are spent in the local and regional economies on ski shop purchases, transportation, real estate, lodging, food and drink, and entertainment."

Growth Inducing, Secondary and Cumulative Impacts

The proposed UMP is likely to cause growth in the lodging, housing, restaurant and retail sectors. Such growth is directly regulated by the APA outside of the Hamlet of North Creek. Within the Hamlet, such growth is consistent with the North Creek Action Plan. Induced growth is likely to have positive impacts such as the stabilization and creation of jobs, taxes and spending.

There are no other significant sources of growth in the Johnsburg community, other than subdivision activity which is itself probably, in part, a result of the presence of Gore Mountain. Few cumulative impacts are, therefore, anticipated.

## V. ALTERNATIVES

The Supplemental UMP and DGEIS considers alternative lift configurations, alternative trail improvements, alternative lodge improvements, alternative sewer and water services for the mountain-top lodges, and the No-Action alternative. The discussion covers the feasibility of each alternative.

## VI. CONCLUSIONS

Based on the foregoing, ORDA, as Lead Agency finds that the proposed Gore Mountain Ski Center Supplemental UMP and GEIS is consistent with the State Land Master Plan and the SEQRA regulations, and that:

A. The lead agency has given consideration to the Final GEIS;

B. The requirements of 6 NYCRR 617 have been met;

C. Consistent with social, economic and other essential considerations from among the reasonable alternatives thereto, the action to be carried out, funded or approved is one which minimizes or avoids adverse environmental effects to the maximum extent practicable; including the effects disclosed in the relevant environmental impact statement;

D. Consistent with social, economic and other essential considerations, to the maximum extent practicable, adverse environmental effects revealed in the environmental impact statement process are minimized or avoided by incorporating as conditions to the decision those mitigative measures which were identified as practicable; and

E. This Statement of Findings contains the facts and conclusions in the GEIS relied upon to support the decision and indicates the social, economic and other factors and standards which formed the basis of the decision.

F. Therefore, ORDA approves the project as represented in the Supplemental UMP/GEIS.

# Gore Mountain Ski Center
# Year 2002-2007
# Supplemental Unit Management Plan
# and
# Draft Generic Environmental Impact Statement

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**Date of Acceptance of UMP/DGEIS: March 1, 2001**
**Date of Public Hearing: April 9, 2001**
**Close of Comment Period: May 1, 2001**

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**Submitted: March 2001**
**Revised: April 2002**

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## Approach to the Year 2002-2007 Gore Mountain Ski Center Supplemental Unit Management Plan and Draft Generic Environmental Impact Statement

This Supplemental Unit Management Plan (UMP) and Draft Generic Environmental Impact Statement (DGEIS) for Gore Mountain Ski Center is an update to the approved 1995 Unit Management Plan for the ski center. The Supplemental UMP and DGEIS reports on progress made on the 1995 UMP, and incorporates by reference the 1995 UMP and GEIS in its entirety. This Supplemental UMP reviews the status of the 1995 UMP management actions and identifies those management actions which have been completed, those which are pending, and those which are modified or abandoned within the 2002-2007 Supplemental UMP/DGEIS.

New management actions are identified and analyzed in the 2002 UMP. The potential environmental impacts and the attendant proposed mitigation measures for any new or modified management actions are identified and discussed in this 2002 UMP. The potential impacts and the identified mitigation measures for the approved 1995 UMP management actions are described in detail in the 1995 UMP and remain in effect and will not be reported herein, but are incorporated by reference.

The Supplemental UMP/DGEIS refers to the 1995 UMP/DGEIS where no revisions in the UMP text or mapping are required, such as the existing environmental setting for such resources as geology, soils, topography and slope, climate, etc. Any available updated information on environmental resources, such as the results of the stream monitoring program conducted since 1995, is presented in the 2002 UMP.

## EXECUTIVE SUMMARY

Section 816 of the Adirondack Park Agency Act directs the Department of Environmental Conservation (DEC) to develop, in consultation with the Adirondack Park Agency (APA), Unit Management Plans (UMPs) for each unit of land under its jurisdiction classified in the Adirondack Park State Land Master Plan (SLMP). Concurrent with the development of UMPs is the preparation of a Generic Environmental Impact Statement (GEIS) which analyzes the significant impacts and alternatives related to each UMP. The Olympic Regional Development Authority (ORDA), pursuant to its enabling law and agreement with the NYSDEC for the management of Gore Mountain Ski Center, prepared the units initial UMP in 1987, together with an EIS for such action. The 1987 UMP was updated and amended in 1995.

This UMP/DGEIS is a supplement to the 1995 UMP and GEIS for the Gore Mountain Ski Center ("Gore" or "Gore Mountain"). As a Supplemental Unit Management Plan which incorporates by reference the 1995 UMP/GEIS, it satisfies the requirements that such plans contain an inventory of existing resources, facilities, systems and uses, a discussion of management policy, a description of proposed management actions, a discussion of the potential impacts of such actions, a description of mitigating measures and a description of alternative actions which have undergone change since the 1995 document. As an environmental impact statement, it meets the requirements of the State Environmental Quality Review Act (SEQRA), which are similar to those for UMPs, as well as requirements unique to SEQRA, such as a discussion of growth inducing aspects.

The preparation, review and approval of the UMP requires compliance with SEQRA. The SEQRA aspects of this document are presented as a Generic Environmental Impact Statement (GEIS). A Generic EIS' may be used to assess the environmental effects of a sequence of actions contemplated by a single agency or an entire program or plan having wide application (6NYCRR 617.15(a)(2) and (4)). They differ from a site specific EIS in that it applies to a group of common and related activities which have similar or related impacts. It is the intent of this GEIS to provide sufficient, site specific information for all aspects of the UMP except the proposed improvements to the Town of Johnsburg Ski Bowl Park, which differs from the other actions in this UMP in that it is an off-site project proposed in conjunction with another governmental entity. In conformance with SEQRA these related actions are being considered in this DGEIS. The analysis in this DGEIS identifies threshold issues and alternatives at a level of detail sufficient to demonstrate the environmental feasibility of the Ski Bowl Park proposal. No additional SEQRA analyses are anticipated to be required for any other management action in this UMP, provided that such actions are carried out in accordance with the recommendations of this document. Similarly, no additional UMP approvals are anticipated to be required upon completion of this process.

This Supplemental Unit Management Plan (UMP) and Draft Generic Environmental Impact Statement (DGEIS) for Gore Mountain Ski Center is composed of two documents, the 1995 UMP/DGEIS and this 2002 Supplemental Unit Management Plan. The 1995 UMP/GEIS is incorporated by reference and consists of three volumes. Volume I is the November 1994 Unit Management Plan Update and Amendment and Draft Generic Environmental Impact Statement (UMP/DGEIS), Volume II is the March 1995 Final Generic Environmental Impact Statement (FGEIS), and Volume III is the August 1995 restatement of the Unit Management Plan which incorporates all substantive comments and review resulting from the SEQRA process.

The DGEIS evaluates the potential impacts of the proposed improvements included in the Gore Mountain Ski Center Unit Management Plan on the environment and provides supporting documentation for the consideration of the adoption of the Supplemental Unit Management Plan by the Department of Environmental Conservation in consultation with the Adirondack Park Agency.

A public scoping session was held on June 21, 2000. The UMP/DGEIS was accepted as complete for review by ORDA, as lead agency, on March 1, 2001, and a Public Hearing on the document was held on April 9, 2001.

Following the close of the SEQRA comment period, May 1, 2001, the Final Generic Environmental Impact Statement was prepared and included all substantive comments made on the DGEIS together with responses to such comments. The FGEIS was deemed complete for review by ORDA, the SEQRA lead agency, notice of its publication was made public on February 6, 2002 and the FGEIS was reviewed by all interested and involved agencies and the public. After a minimum ten day contemplation period the NYSDEC, APA and any other involved agencies each prepared a written statement of Findings of Fact which specified potential impacts and mitigating measures, as appropriate. The DEC adopted the UMP and the Supplemental UMP has been filed with the APA.

All volumes of the GEIS are available for review at the following offices: ORDA in Lake Placid, Gore Mountain, APA headquarters in Ray Brook, DEC in Ray Brook and Warrensburg, Johnsburg Town Hall and the Warren County Planning Department at the Warren County Municipal Center.

Gore Mountain Ski Center is a year-round recreational, day-use resort owned by the State of New York under the administrative jurisdiction of the Department of Environmental Conservation. Gore is currently managed by ORDA under an agreement with the DEC. Gore is located off NY Route 28 approximately two miles south of the Hamlet of North Creek, and 15 miles northwest of Warrensburg, and is in the Town of Johnsburg, Warren County, New York.

Gore is fostering environmentally compatible economic development activity. A strong year round tourism industry is growing in the North Creek Region. Since the

implementation of the 1995 UMP, a minimum of 15 new businesses have been established locally. Additionally, the economic viability of existing businesses has been strengthened as a result of this increased tourism activity. Many of these businesses are serving the ever growing skier community that rediscovered Gore Mountain due to much improved skiing opportunities.

The facility is classified as an "Intensive Use Area" under the SLMP. Gore targets winter sports enthusiasts for downhill and cross-country skiing. The resort includes 50 downhill trails extending 25.1 miles, 14.6 miles of nordic ski trails, a gondola from the base to the Bear Mountain summit, eight other lifts, a ski school program, two lodges, a nursery program and a cocktail lounge/restaurant. There are five car and bus parking lots covering approximately 12.4 acres.

The 1995 UMP set out a much needed program of modernization and improvement for Gore Mountain. This program was based on a comprehensive master plan for the mountain facilities including gondola, chair lifts, and snowmaking improvements. Many of the mountain side facility improvements have been completed, or are well underway or need modification as described in this document. The skier facilities at the lodges, Pod 10, and parking lots/arrival area are the major items of facility improvement which must still be completed as originally described in 1995. Some of the parking lot improvements in the main lot (closest to the lodge) were partially completed in Summer 2000.

The primary motivation behind this Supplemental UMP is to continue implementing and complement the work begun as part of the 1995 UMP with new improvements.

The following specific goals were identified for the upgrade and development program in the 1995 UMP and have been refined in this Supplemental Document:

1. Improve infrastructure reliability. Some of the infrastructure at Gore Mountain is at least 30 years old and has exceeded its life expectancy, and consequently is subject to frequent breakdown. Much has been upgraded over the past five years.

2. Reduce operations and maintenance costs. Because of its advanced age and in some cases outdated design, certain equipment and infrastructure at Gore Mountain has relatively high operational and maintenance costs.

3. Assure environmental compatibility. It is desirable to develop a facility which is compatible with the natural environment in order to preserve existing ecosystems, keep facility maintenance to a minimum, increase the longevity of the facility components, and make the facility operate more economically. Gore's commitment to participate in the "sustainable slopes doctrine" advanced by the National Ski Areas Association is a definitive path to achieve these goals.

4. Stabilize the local economy. The ski area, if operated in harmony with the local business community, should act as a catalyst to stabilize local businesses and support the local economy. The proposed alpine ski trail connection to Ski Bowl

Park will help promote economic activity in the region. It will also broaden the variety of ski and winter sports opportunities offered to the public. It will certainly make the region more attractive to the destination vacationer.

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8. Increase public access. In addition to downhill skiing, many other types of compatible public recreation access are possible at Gore Mountain, such as sleigh riding, tubing, back country skiing, hiking, mountain biking, snowshoeing and connection to the local cross-country ski network. All would provide for greater public use of the ski center. The scenic gondola rides and recently installed educational and interpretive centers and messages in the gondolas has been well received by Gore visitors. This system will continue to be expanded.

9. Improve overall skier satisfaction. Skier surveys have identified a number of specific areas which could be improved to provide a better overall skier experience.

The development of this Supplemental UMP followed a logical sequence which included an update to the inventory of existing conditions, an analysis of potential improvements, and the creation of the proposed plan for new improvements or management actions which is the subject of this Supplemental UMP that complements and builds on the 1995 UMP.

The proposed plan, which has a five-year horizon, continues to achieve a balance of facility components. That is, the capacity of each individual mountain component is similar to the capacity of other components. Capacities are traditionally planned for "peak" use times (on weekends and holidays). The completion of all improvements in the approved 1995 UMP would increase peak capacity to about 7,000 SAOT. Currently, the lack of lodge and parking facilities are out of balance with lift capacity and trail capacity. The peak ticketed day at the Ski Center reached approximately 5,400 during Presidents' Week in February of 2000. At times skiers were turned away due to a lack of available parking and lodge space that was proposed and approved in the 1995 UMP but not yet constructed. In 2001, this peak capacity was reached on occasion. SAOT at the mountain exceeded parking and lodge capacity on all of these occasions, and, if constructed, the improvements planned and approved in the 1995 UMP would accommodate this demand.

The following new improvements and upgrades are proposed in this Supplemental UMP and are the subject of this Generic Draft Environmental Impact Statement:

Improve Infrastructure Reliability

Continue to implement a long term replacement and modernization program to restore all equipment, machinery, infrastructure and structures which are at the end of their useful life. Much of the mountain infrastructure has been replaced over the past five years including snowmaking water pump capacities, snowmaking air compressor capacity, ski lifts and grooming equipment.

Mountain Lodges and Amenities

Rehabilitate and construct an addition to the Saddle Lodge (rather than demolish, relocate and build a new Saddle Lodge as proposed and approved in the 1995 UMP). Construct a new ski patrol/warming hut at the summit of the newly developed Burnt Ridge ski pod.

New Downhill Trails and Lifts

Widen selective trails to 200'.
Replace the triple chair (Lift #1) with a new Quad chair lift (potentially with a bubble).
Develop new lifts and trails to create a connection with Ski Bowl Park (Pods #11 and #12) and install a transportation lift, Lift #13, up the west side of Burnt Ridge from the Twister and Tahawus trails.
Re-extend and replace Lift #6 to original termination point.
Relocate and extend Lift #3 to the abandoned gondola lift line and change to a new detachable triple.
Relocate and replace Lift #4 (J-Bar).
Add 2 magic carpet lifts at the learning center.

Tubing Hill

Develop runs and one surface lift on Bear Mountain for tubing.

Snowmaking

Install tower guns on steep, wide trails and other trails which this equipment would lead to more efficient and effective snowmaking.
Increase water and compressed air capacity.
Modernize the air plant.
Increase the inventory of snowmaking guns and hoses.

Bear Mountain Observation Tower

Install an observation tower on the Bear Mountain Summit in proximity to the mountain top lodge.

The above improvements will increase the amount of downhill ski trails on the mountain from approximately 28.5 miles of approved (some not yet constructed) alpine ski trails to 33.9 miles, or a 5.4 mile increase (well below the 40 miles as authorized by the New York State Constitution).

In addition to the above, the improvements identified in the 1995 Unit Management Plan, which remains in effect today, are still valid. Certain of the improvements in the 1995 UMP have been modified and updated in this Supplemental UMP. Many improvements identified in the 1995 UMP have been constructed, while others are under construction or have not been implemented to date. The status of actions in the 1995 UMP is summarized completely in this Supplemental UMP.

The actions approved in the 1995 UMP/GEIS which remain a part of the 2002-2007 plan include:

Construct POD 10 including lift and trails (some trails have already been constructed).
Develop the Learning Center at the old gondola building location.
Construct the Bear Mountain Summit Lodge.
Implement the Base Lodge Rehabilitation and Additions.
Complete the parking lot and access road/drop off improvements.
Complete development of the new beginners area with the potential consolidation of the maintenance area.
Complete approved new trail improvements and widenings.

The improvements identified in this Supplemental UMP are proposed to be accomplished in several phases. ORDA recognizes that implementation may take longer than the planned five years for a variety of reasons. Throughout the course of the development phases, progress evaluations will be conducted annually, work compared with the goals and objectives, and the project refocused as deemed necessary by Gore and ORDA. The results of this annual review will be a budget for the next phase of work that can be taken to the appropriate agencies for funding approval prior to the beginning of the work period.

The implementation of the proposed Supplemental UMP is governed by a variety of laws and regulations. Article XIV of the State Constitution governs the cutting of trees in the Forest Preserve. The proposed UMP actions on all state lands at Gore Mountain will be conducted in accordance with the provisions of Article XIV as they apply.

The SLMP classifies State lands in the Adirondack Park Forest Preserve according to their character and capacity to withstand use and sets forth general guidelines and criteria

for the management and use of State lands. The SLMP classifies the Ski Center as an Intensive Use Area. Intensive Use Areas are provided to allow for a significant number of visitors and a high level of use. The SLMP contains a number of management guidelines, including a recommendation that Gore be modernized to the extent that physical and biological resources allow. The actions in this UMP are in conformance with the guidelines in the SLMP.

The following potential impacts have been identified for the actions proposed in the UMP.

Vegetation

The construction of the identified 2002 UMP management actions for new ski trails and lifts, widening of existing trails and construction of other improvements such as the ski trail connection to Ski Bowl Park, will result in the cutting of trees. Approximately 48,564 trees, slightly less than half of which will be small (less than 4" diameter at breast height) will be cut as a result of the plan. All vegetative cutting will be conducted in compliance with DEC tree cutting policies and New York State Constitution Article XIV.

Water and Wetland Resources

Wetland resources will be avoided by project components; therefore, there will be no impact to such resources.

Significant quantities of groundwater are not needed for the ski center; therefore, there will be no impact to such resources.

Soils

Construction of improvements on the mountain has the potential to result in soil erosion. Construction Pollution Prevention Plans appended to the SPDES permits for work both on and off ski center property will identify specific stabilization and erosion control measures to mitigate or eliminate the possibility of this impact.

Visual Resources

The proposed improvements to the Ski Center will not be significantly visible from area roadways because they are located below those trails which are currently visible. The trails proposed in Ski Bowl Park utilize trails historically used for skiing, and will be partially visible.

Fish and Wildlife

No rare, threatened or endangered species will be affected by the project.

Mountain. Few cumulative impacts are, therefore, anticipated.

Alternatives

The Supplemental UMP and DGEIS considers alternative lift configurations, alternative trail improvements, alternative lodge improvements, alternative sewer and water services for the mountain-top lodges, and the No-Action alternative. The discussion covers the feasibility of each alternative.

0030FINALUMPAPRIL2002EXECSUMM-TOC.DOC

**Gore Mountain Ski Center**
**Year 2002-2007**
**Supplemental Unit Management Plan**
**and**
**Draft Generic Environmental Impact Statement**

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## List of Abbreviations

| | |
|---|---|
| APA | Adirondack Park Agency |
| cfm | cubic feet per minute |
| cfs | cubic feet per second |
| dbh | diameter at breast height |
| DEC | Department of Environmental Conservation |
| ECL | Environmental Conservation Law |
| EIS | Environmental Impact Statement |
| GEIS | Generic Environmental Impact Statement |
| gpd | gallons per day |
| gph | gallons per hour |
| gpm | gallons per minute |
| HR | hour |
| MVA | Megavolt amperes |
| LLUP | Local Land Use Plan |
| MOU | Memorandum of Understanding |
| MSL | Mean Sea Level |
| NHP | Natural Heritage Program |
| NYCRR | New York Codes, Rules and Regulations |
| NYS | New York State |
| ORDA | Olympic Regional Development Authority |
| psi | pounds per square inch |
| SAOT | skiers at one time |
| SLMP | State Land Master Plan |
| SPDES | State Pollutant Discharge Elimination System |
| TDH | total dynamic head |
| UMP | Unit Management Plan |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |
| VTF | vertical transport feet |
| WIN | Watershed Index Number |

Table 1-1
STATUS OF 1995 UMP (W/CARRYOVER 1987 ACTIONS)

| | | MANAGEMENT ACTION | COMPLETED | UNDER CONSTRUC-TION | PENDING CONSTRUC-TION | ABANDONED | MODIFIED & UPDATED IN 2002 UMP/EIS |
|---|---|---|---|---|---|---|---|
| 2 | | Downhill Trails | | | | | |
| | | • New Trails & Crossovers | | | | | |
| | | | | | | | |
| | | 1N-M | | | | X | |
| | | 1N-N | | | | X | |
| | | 1N-O | | X (glade) | | | |
| | | 1N-P | | X (glade) | | | |
| | | 1N-Q (Sunway to 1N-R) | X | | | | |
| | | 1N-Q (1NR to 1B) | | | | X | |
| | | 1N-R | X | | | | |
| | | | | | | | |
| | | 2N-L | | | | X | |
| | | Lift 2 Summit Relocation | X | | | | |
| | | | | | | | |
| | | 6N-O | | | | X | |
| | | | | | | | |
| | | Lift 6 Base | X | | | | |
| | | | | | | | |
| | | 7N-L | X | | | | |
| | | 7N-M | X | | | | |
| | | 7N-M (Cutoff S. Branch) | | | X | | |
| | | 7N-O | X | | | | |
| | | 7N-P | | | X | | |
| | | 7N-Q | | | X | | |
| | | | | | | | |
| | | 9-A | ½ Width | | ½ Width | | |
| | | | | | | | |
| | | 10-A | X | | | | |
| | | 10-B (Upper) | | X | | | |
| | | 10-B (Lower) | X (To Straight Brook lift) | | X (Straight Brook lift to C-1) | | |
| | | 10-C | | | X | | |
| | | 10-D | | | X | | |
| | | 10-E (Upper) | | X | | | |
| | | 10-E (Lower) | | | X | | |
| | | 10-F | | | X | | |
| | | 10-G (Summit to 10-H) | | X | | | |
| | | 10-G (10-H to C-5) | | X | | | |
| | | 10-G (C-5 to 10-H) | | | X | | |
| | | 10-H (Upper) | | | X | | |
| | | 10-H (Lower) | | | X | | |
| | | | | | | | |
| | | C-4 | X | | | | |
| | | C-5 (Upper) | | | X | | |

# Table 1-1
## STATUS OF 1995 UMP (W/CARRYOVER 1987 ACTIONS)

| | | MANAGEMENT ACTION | COMPLETED | UNDER CONSTRUC-TION | PENDING CONSTRUC-TION | ABANDONED | MODIFIED & UPDATED IN 2002 UMP/EIS |
|---|---|---|---|---|---|---|---|
| | | C-5 (Lower)<br>• Widening Existing Trails | | X | | | |
| | | Upper 1-F | | | X | | |
| | | Upper 1-G | | | X | | |
| | | 1-H | | | X | | |
| | | 1-K | | | X | | |
| | | Upper 1-D | | | X | | |
| | | Lower 1-D | | | X | | |
| | | 2-A | | | X | | |
| | | 2-C | | | X | | |
| | | 2-D | | | X | | |
| | | 2-E | | | X | | |
| | | 6-D-E | | | X | | |
| | | 6-F | | | X | | |
| | | 7-A | | | X | | |
| | | Upper Loop | | | X | | |
| | | 3-A | | | X | | |
| | | Upper 3-C | | | X | | |
| | | | | | | | |
| 2 | B | Lifts | | | | | |
| | | Lift #5 | | | | | |
| | | Abandon | | | X | | |
| | | Remove | | | X | | |
| | | Lift 8 (Old Gondola) | | | | | |
| | | Abandon | X | | | | |
| | | Remove | | | X | | |
| | | | | | | | |
| | | Lift 8 (New Gondola) | X | | | | |
| | | Replace Lift #2 | X | | | | |
| | | #3 | | | X | | |
| | | #4 | | | | | X |
| | | #7 | X | | | | |
| | | Upgrade Lift #1 | X | | | | X (New Quad w/Bubble) |
| | | #6 | X | | | | X |
| | | | | | | | |
| | | Lift #9A | X (Surface Lift/Not Chair) | | | | |
| | | Lift #9B | | | | | X |
| | | Lift #10 | | | X | | |

# Table 1-1
## STATUS OF 1995 UMP (W/CARRYOVER 1987 ACTIONS)

| | | MANAGEMENT ACTION | COMPLETED | UNDER CONSTRUC-TION | PENDING CONSTRUC-TION | ABANDONED | MODIFIED & UPDATED IN 2002 UMP/EIS |
|---|---|---|---|---|---|---|---|
| 3 | | Lodges | | | | | |
| | A | Base Lodge | | | | | |
| | | • Lodge Renovation w/ s.w. | | | X | | |
| | | • Gondola Bldg. Renov. | | | X | | |
| | | • Entry Drive/Drop Off/ Parking Renov. | X | | | | |
| | | • Add'l Parking | | | X | | |
| | | • Jitney Path | | | X | | |
| | | • Base Lodge Patio | X | | | | |
| | | | | | | | |
| | B | Saddle Lodge | | | | | |
| | | • Demolish/Move/Build New | | | | X | |
| | | • Add'n & Renov. Ski Patrol/RR | | | | | X (Add'n to 17,000 SF & Renov.) |
| | | • Sewer Upgrade on Mountain | | | | X | X (Pipe to Base STP) |
| | | | | | | | |
| | C | Bear Mountain Lodge Dev. | | | | | |
| | | • Build New Lodge | | | X (In Design) | | |
| | | • Build Car Barn | | X | | | |
| | | • Sewer | | | | X | X (Pipe to Base STP) |
| | | | | | | | |
| 4 | | Cross Country Trails | | | | | |
| | | • New Trails | | X | | | |
| | | | | | | | |
| 5 | | Snowmaking | | | | | |
| | | • Hudson River Intake & Pipeline | X | | | | |
| | | • Hudson River Pump House<br>3200 GPM<br>5000 GPM | <br><br>X | <br><br>X | | | |
| | | | X | | | | |
| | | • 2nd Pump House @ N. Creek Reservoir | | | | X | |
| | | • New 12" Supply Line Res. To Saddle<br>• New/Relocate Valve House C @ Saddle | X<br>X | | | | |

# Table 1-1
## STATUS OF 1995 UMP (W/CARRYOVER 1987 ACTIONS)

| | | MANAGEMENT ACTION | COMPLETED | UNDER CONSTRUC-TION | PENDING CONSTRUC-TION | ABANDONED | MODIFIED & UPDATED IN 2002 UMP/EIS |
|---|---|---|---|---|---|---|---|
| | | • Dist. Lines on New Trails | | | X | | |
| | | • Rental Diesel Air Compressors Add'n w/Fuel | | X | | | |
| 6 | | Power/Electrical | X | | | | |
| | | | | | | | |
| 7 | | Maintenance Fac. | | | | | |
| | | • Relocate Bldgs/Renovate, Add Garages | | | X | | |
| | | • New Petrol.-Storage | | X | | | |
| | | | | | | | |
| 8 | | Trail Markers & Interpretive Systems | | | | | |
| | | • Town/Hamlet Trail Head | X (w/Registry) | | | | |
| | | • Trails Marked | X | | | | |
| | | • Interpretive Systems | | | X | | |
| | | | | | | | |
| 9 | | Sand Pit Reclamation | | X | | | |
| | | | | | | | |
| 10 | | Community Relations | X (Used for 1 Year) | | | X (By Town/Chamber) | |
| | | | | | | | |
| 11 | | Misc. Items | | X | X | | |
| | | | | | | | |
| | | | | | | | |

# SECTION I INTRODUCTION

## A. Project Purpose

The Olympic Regional Development Authority (ORDA) is supplementing the 1995 Unit Management Plan (UMP) and Generic Environmental Impact Statement (EIS) for Gore Mountain Ski Center in North Creek, Town of Johnsburg, Warren County, New York. This document serves as a supplement to both the Unit Management Plan and the Generic Environmental Impact Statement that was approved in 1995 and has been subsequently in the process of being implemented, though not yet completed. As a Unit Management Plan, it satisfies the requirements that such plans contain an inventory of existing resources, facilities, systems and uses, a discussion of management policy, a description of proposed management actions, a discussion of the potential impacts of such actions, a description of proposed mitigating measures and a description of alternative actions. As a supplemental environmental impact statement, it meets the requirements of the State Environmental Quality Review Act (SEQRA), which are similar to those for UMPs, as well as requirements unique to SEQRA, such as a discussion of growth inducing aspects. The document is organized in a logical fashion in order that each section meets SEQRA requirements.

The UMP covers a five year period; consequently, the management actions are presented in a series of prioritized phases.

The SEQRA aspects of this document are presented as a generic environmental impact statement. A Generic EIS may be used to assess the environmental effects of a sequence of actions contemplated by a single agency or an entire program or plan having wide application (6NYCRR 617.15(a)(2) and (4)). It differs from a site specific EIS in that it applies to a group of common and related activities which have similar or related activities. It is also the intent of this GEIS to provide sufficient, site specific information for all aspects of the Supplemental UMP improvements specifically related to the Town of Johnsburg Ski Bowl Park plans for winter uses and improvements only. This Supplemental UMP/DGEIS document presents a conceptual plan for the improvements to Ski Bowl Park, in sufficient detail to allow for final adoption of such a plan. The analysis in this GEIS identifies threshold issues and alternatives at a level of detail sufficient to demonstrate the environmental feasibility of the proposal to improve Ski Bowl Park. No additional SEQRA analyses are anticipated to be required for any other management action in this UMP, provided that such actions are carried out in accordance with the recommendations of this document. Similarly, no additional UMP approvals are anticipated to be required upon completion of this process.

The primary motivation behind this UMP is the need to continue to upgrade improve, and modernize facilities at Gore Mountain. Some facilities at Gore Mountain are at least 30 years old and many are aging beyond their practical ability to be readily and economically maintained and/or operated. As such, ORDA and Gore Mountain management recognize that the mountain infrastructure is in need of replacement and modernization. Snowmaking, trail variety, lift capacity, ease of arrival and skier drop-

off, and lodge facilities need to be improved and often lead to skier dissatisfaction. Additionally, many minor, but important, deficiencies are recognized to exist and continue to be in need of remediation.

The following specific goals were identified for the next five year upgrade and development program.

1. Improve infrastructure reliability. Some of the infrastructure at Gore Mountain is at least 30 years old and has exceeded its life expectancy, and consequently is subject to frequent breakdown. Much has been upgraded over the past five years.

2. Reduce operations and maintenance costs. Because of its advanced age and in some cases outdated design, certain equipment and infrastructure at Gore Mountain has relatively high operational and maintenance costs.

3. Assure environmental compatibility. It is desirable to develop a facility which is compatible with the natural environment in order to preserve existing ecosystems, keep facility maintenance to a minimum, increase the longevity of the facility components, and make the facility operate more economically. Gore's commitment to participate in the "sustainable slopes doctrine" advanced by the National Ski Areas Association is a definitive path to achieve these goals.

4. Stabilize the local economy. The ski area, if operated in harmony with the local business community, should act as a catalyst to stabilize local businesses and support the local economy. The proposed alpine ski trail connection to Ski Bowl Park will help promote economic activity in the region. It will also broaden the variety of ski and winter sports opportunities offered to the public. It will certainly make the region more attractive to the destination vacationer.

5. Trail improvements. There are a number of trails which could be negotiated more easily if they were widened. Several trail intersections could also be made more clear.

6. Improve trail selection. Gore Mountain has improved its terrain selection, and wants to continue to improve the range of terrain. A better trail selection would appeal to a greater cross-section of skiers and thus attract more skiers.

7. Improve economic return. By improving and modernizing Gore's facilities, the mountain will become more attractive to skiers, and earn a better economic return.

8. Increase public access. In addition to downhill skiing, many other types of compatible public recreation access are possible at Gore Mountain, such as sleigh riding, tubing, back country skiing, hiking, mountain biking, snowshoeing and connection to the local cross-country ski network. All would provide for greater public use of the ski center. The scenic gondola rides and recently installed

educational and interpretive centers and messages in the gondolas has been well received by Gore visitors. This system will continue to be expanded.

9. Improve overall skier satisfaction. Skier surveys have identified a number of specific areas which could be improved to provide a better overall skier experience.

The planning process for this Supplemental UMP consisted of distinct phases including an update of existing conditions, an analysis of proposed new improvements, and the creation of the proposed plan which is the subject of this Supplemental UMP.

The planning process included a refinement of feasible elements into a Five-Year-Plan, identified as the action for which this document has been prepared.

Key to this effort was the development of a plan for the mountain that would "balance" all facility components. Balancing facility components means that the capacity of each individual component is similar to the capacity of other components as well as responds to environmental conditions. As such, a balanced ski area will have lift capacity, trail capacity by skier ability distribution, snowmaking, parking, lodge services, utility services and maintenance/grooming services capable of supporting about the same number of skiers. Capacities are traditionally planned for "peak" use times (on weekends and holidays). Peak capacity of Gore Mountain during the (1999-00 Season) was approximately 5,400 ticketed skiers. With buildout of the ski trail and lift improvements and lodge and parking facilities in the previously approved 1995 UMP, the peak capacity will increase to about 7,000 SAOT. The proposed upgrades in the approved 1995 UMP are intended to increase skier satisfaction and subsequently attendance, resulting in higher average utilization. The capacity when all improvements discussed in the 1995 plan are implemented will be approximately 7,000 SAOT. To date, this has not been completed. Many of the 1995 management actions need to be implemented. Currently there is a lack of lodge and parking facilities and this creates an imbalance in the facility, which will be corrected as these 1995 UMP management actions are completed.

The 2002-2007 Five Year Plan that has been developed for Gore Mountain continues to achieve the goal of balancing facilities on the mountain. Components which involve completing the 1995 UMP include actions such as replacing outdated lifts; widening trails for added skier capacity, safety and satisfaction; accommodating snowboarders; renovating the Saddle Lodge; and building the new Bear Mountain Lodge. Some new components are proposed, mainly a tubing park and trails, and two lifts which would create a connection with the Town of Johnsburg Ski Bowl Park, with an additional short ski lift to assure skier return to the Burnt Ridge summit for return to the North Creek Ski Bowl.

The 2002-2007 Five Year Plan is phased in a logical progression based on need, proper construction sequencing and cost. Four phases are planned to be implemented over the next five years. It should be recognized that implementation is dependent on funding and that implementation may take in excess of five years. It should also be noted that each

phase is planned to be self-sufficient and not rely on the completion of the subsequent phases to operate and improve conditions at Gore. Through the course of the four phases, progress evaluations will be conducted annually, work compared with the goals and objectives, and the project refocused as deemed necessary by Gore and ORDA. The result of this annual review will be a budget for the next phase of work that can be taken to the appropriate funding agencies for approval prior to the beginning of the work period.

It should be noted that the 1995 Unit Management Plan for Gore Mountain remains in effect today. This supplement serves as a restatement and update of that UMP and GEIS, as well as for the new management actions identified herein. The 1995 UMP includes many improvements that have not to date been implemented. Many of these approved improvements are incorporated into this supplement and are still valid upgrades, repairs or additions to the ski area which are already approved and are not the subject of SEQRA review and approval. They have already been authorized. They will be identified as part of the five year update, and will be noted as already approved in the 1995 UMP. Section I.F of this document, "Status of 1995 Unit Management Plan," lists those 1995 management actions, including projects which are pending construction, such as construction of the POD 10 lift and trails, creation of the Learning Center, Bear Mountain Summit Lodge construction, base lodge rehabilitation, extended parking and arrival/drop-off facilities, and certain trail improvements.

Improvements in this supplement which are in addition to those already approved in the 1995 UMP included the following:

**B. Proposed New Management Actions**

Improve Infrastructure Reliability

Create a long-term replacement and modernization program to restore all equipment, machinery, infrastructure and structures which are at the end of their useful life. The modernization program includes installation of monitoring systems for all components of the ski center facilities infrastructure.

Mountain Lodges and Amenities

Rehabilitate and construct an addition to the Saddle Lodge (rather than demolish, relocate and build a new Saddle Lodge as proposed and approved in the 1995 UMP)

New Downhill Trails and Lifts

Widen selective trails to 200'
Replace triple chair (Lift 1) with a new Quad chair lift (potentially with a bubble)
Develop new lifts and trails to create a connection with Ski Bowl Park (Quad Lifts #11, 12 and 13).
Re-extend and replace Lift #6 to original termination point.
Relocate and replace Lift #4 (J-Bar).
Install two "Magic Carpet" lifts at the Learning Center.

Tubing Hill

Develop runs and one surface lift on Bear Mountain for tubing.

Snowmaking

Install tower guns on steep, wide trails and other trails which this equipment would lead to more efficient and effective snowmaking.
Increase water and compressed air capacity.
Modernize the air plant.
Increase the inventory of snowmaking guns and hoses.

Bear Mountain Observation Tower

Install an observation tower on the Bear Mountain Summit in proximity to the Bear Mountain lodge.

The above improvements will increase the amount of downhill ski trails on the mountain from approximately 28.5 miles of approved (some not yet constructed ) alpine ski trails to 33.9 miles, or a 5.4 mile increase (well below the 40 miles authorized by the New York State Constitution).

Select Theme for New Gondola and Trail Names

In the tradition of Adirondack history, and the pioneers who first noticed the recreational opportunities available in what has become the Adirondack Park, Gore Mountain has chosen to name its new trails, gondola, and summit lodge after the Great Camps of the Adirondacks.

The theme of Great Camps was selected by Gore Mountain management because of the image and message it brings to visitors of the ski area. The Great Camps were designed to work in harmony with the Adirondack environment, and it is Gore Mountain's goal to continue the modernization of Gore Mountain with the same respect for its surroundings.

Plans for the new Summit Lodge call for construction in a Great Camps style. The goal is for new construction at Gore to be constructed with an Adirondack vernacular to provide a classic Great Camp look.

Gore Mountain Ski Center is State Land classified as "Intensive Use" under the Adirondack Park State Land Master Plan (SLMP). The SLMP identifies the specific boundaries of the ski center. The ski area's holdings encompass slopes on the Gore Mountain range that includes the summits of Gore Mountain, Pete Gay Mountain, Bear Mountain, Burnt Ridge and "Little Gore," with approximately 2500 acres of land.

No change to this section is necessary, with the exception of the reprinting of Figure 1-1, "Intensive Use Area Boundary" with a minor correction to the map provided in the 1995 UMP which had an error in boundary description.

## C. General Facility Description

No change to this section is necessary.

The facility is classified as an "Intensive Use Area" under the Adirondack Park State Land Master Plan. Gore Mountain targets winter sports enthusiasts for downhill and cross-country skiing. It includes 25.1 miles of constructed alpine ski trails (an additional 3.4 miles of alpine trails are approved and pending construction), 14.6 miles of Nordic ski trails, a gondola from the base area to the Bear Mountain summit, eight other lifts, a ski school program, a ski racing program, two lodges, a nursery program and a cocktail lounge/restaurant. There are five parking lots for cars and buses covering approximately 12.4 acres. Figure 1-2, "Status-1995 Gore Mountain UMP Alpine Trails and Infrastructure," Figure 1-3, "Status-1995 Gore Mountain UMP Backcountry Trails," and Figure 1-4, "Mountain Biking Trails," illustrate the basic layout and components of the ski center as it exists today.

The summer and fall season program centers around hiking, mountain biking, educational interpretive opportunities and nature oriented activities. The gondola is operated as a tourist attraction year-round.

## D. History of Ski Center

No change to this section is necessary.

## E. Description of UMP/GEIS Process

The Adirondack Park State Land Master Plan, adopted in 1971, provides guidelines for the preservation, management and use of State-owned lands by State agencies in the Adirondack Park. Gore Mountain Ski Center land is classified under the plan as an "Intensive Use Area." The plan provides that the primary management guideline for Intensive Use Areas is to provide the public opportunities for a variety of outdoor recreational pursuits in a setting and on a scale in harmony with the relatively wild and undeveloped character of the Adirondack Park.

Unit Management Plans must conform to the guidelines and criteria set forth in the State Land Master Plan. The Adirondack Park Agency Act (Section 816) directs the NYSDEC to develop, in consultation with the Agency, individual unit management plans (UMPs) for each unit of land under its jurisdiction that is classified in the Adirondack Park State Land Master Plan. This Unit Management Plan has been prepared by ORDA in consultation with the NYSDEC and the Adirondack Park Agency (APA).

Gore Mountain Ski Center opened in 1964 and early management was under the direction of the Adirondack Mountain Authority and then the NYSDEC. Management was delegated to the Olympic Regional Development Authority (ORDA) on April 1, 1984 through an agreement with NYSDEC which was authorized by Chapter 99 of the Laws of 1984 (Article 8, Title 28, Section 2614, Public Authorities Law). This agreement transferred to ORDA the responsibility for the use, operation, maintenance and management of the ski area and remains in effect until March 31, 2012. Under the agreement, ORDA is to cooperate with the NYSDEC to complete and periodically update the UMP for the ski area. A UMP for Gore was completed in 1987 and 1995 and was subsequently amended once. This UMP is still in effect as the document by which Gore is managed and is implemented pursuant to a 1991 Memorandum of Understanding between the NYSDEC and ORDA.

Concurrent with the formulation of this Supplemental UMP has been the preparation of a Supplemental EIS. ORDA was declared Lead Agency for the SEQRA review and held a Scoping Session on June 21, 2000. The Scope of Issues addressed by the GEIS is presented in Appendix 1, "Scoping Outline."

An initial draft of the Supplemental UMP/GEIS for Gore Mountain Ski Center was submitted to the NYSDEC and the APA for review and comment, prior to the preparation of the final draft plan for public review. ORDA revised this document in response to the comments of the APA and DEC and on March 1, 2001, declared the document complete for public review. A SEQRA Public Hearing was held on April 9, 2001 and the comment period remained open until May 1, 2001.

The Final Generic Environmental Impact Statement was prepared after consideration of all comments and recommendations made on the DGEIS. The FGEIS was deemed complete for review by ORDA on January 31, 2002 and notice of its publication was made public in the February 6, 2002 issue of the Environmental Notice Bulletin. The Commissioner of the NYSDEC has adopted the final UMP. The final UMP is now on file with the Adirondack Park Agency.

### F. Status of 1995 Unit Management Plan, as Amended

The 1995 UMP for Gore Mountain, as amended, remains in effect today. Many of the improvements proposed under the 1995 UMP have been implemented, with the remaining improvements pending construction. Many of these approved improvements are incorporated into this Supplemental UMP and are still valid upgrades, repairs or additions to the ski area. They will be identified as part of the Supplemental UMP, and will be noted as already approved in the 1995 UMP. These include the development of a lodge on the summit of Bear Mountain, POD 10 lift and trails, and other trail modifications described in Section IV.A.4 of this document, and illustrated by Figure 1-2, "Status-1995 Gore Mountain UMP Alpine Trails and Infrastructure," and Figure 1-3, "Status-1995 Gore Mountain UMP Backcountry Trails." Figure 1-4, "Mountain Biking Trails," illustrates such trails on Gore Mountain.

Table 1-1, "Status of 1995 UMP (with Carryover 1987 Actions)" indicates which management actions approved in the amended 1987 UMP and 1995 UMP are completed, pending construction, modified in this Supplemental UMP/DGEIS, or are abandoned altogether.

As a result of development of the management actions approved in the 1995 UMP, Gore Mountain Ski Center has become more competitive and more popular.

Gore Mountain Ski Center was awarded the Skiing Company's Silver Eagle Award for Outstanding Environmental Excellence in Group Relations at the May 2000 annual National Ski Area Association meeting. Refer to the February 2000 letter in support of Gore's award from the Adirondack Park Agency, provided in Appendix 2, "Correspondence."

Gore Mountain Ski Area's new Northwoods Gondola, was named "Best New Lift," in Skiing Magazine's Best of 2000" issue.

The Northwoods Gondola is an eight-passenger, high speed, detachable POMA gondola, which transports skiers and riders to the top of Bear Mountain in approximately seven minutes. Passengers disembark at the new summit station, which provides access to all areas of the mountain from four new trails.

In a salute to the state-of-the-art in Skiing Magazine, September's issue features an article titled "Best of 2000" which lists the best gear, gadgets, people, innovations, cars, coffee, beer and more. Skiing's contributing editors, as well as professional skiers and industry insiders, were polled. Based on these nominations, the editors selected the "Best of 2000." In all, 69 best were chosen.

Gore Mountain also received notice in several other recent publications. September's issue of Ski Magazine contained its annual top ten lists, where readers voted Gore as top ten in the east in Value, Terrain, Challenge, and Weather. Capital District Parents Magazine recently voted Gore the "Best Place for Family Skiing," and Metroland Magazine voted Gore "Best Skiing/Snowboarding" in the region.

## SECTION II INVENTORY OF EXISTING RESOURCES, FACILITIES, SYSTEMS AND USE

This section discusses physical, built and natural resources. Where applicable, the discussion is divided into on-mountain and off-mountain components. The latter applies particularly to the proposed improvements to the Town of Johnsburg Ski Bowl Park for winter facilities only.

### A. Natural Resources

1. Physical

a. Geology

No revision to this section is necessary.

b. Soils

No revision to this section is necessary.

c. Topography and Slope

No revision to this section is necessary.

Off Mountain

Ski Bowl Park property contains areas where slopes range from approximately five to eight percent at the bottom of the ski area up to 40 percent at the top of the proposed ski trails.

d. Water

On Mountain

There are three streams on the site which flow to the east and are tributaries to North Creek. Straight Brook is tributary 3 of North Creek. According to the Codes, Rules and Regulations of the State of New York, Straight Brook has a watershed index number (WIN) of H-419-3. Roaring Brook is tributary 1 of North Creek (WIN# H-419-1). The unnamed brook which is crossed by the ski center entry road is tributary 2 of North Creek (WIN# H-419-2). Like all streams lying within State-owned forest preserve lands, these are excluded from classification for standards of water quality and purity (see 6NYCRR 941.4 (c)).

In accordance with the 1995 Gore Mountain Unit Master Plan (UMP), water quality in streams around Gore Mountain was monitored between 1995 and 1999. Water quality monitoring was performed in response to concerns expressed during the UMP public

review process (1995 UMP FGEIS § 2.02). Concern was expressed that construction of new ski trails and other improvements described in the 1995 UMP could potentially impact water quality in the brooks that drain the areas of proposed improvements. Water quality data collected to date indicates that ski area improvements that have been made between 1995 and 1999 have not resulted in either increased sediment loading or increased nutrient loading to the streams around Gore Mountain. Refer to Appendix 3, "Gore Mountain Water Quality Monitoring."

Off Mountain

The portion of Straight Brook that lies outside of State Forest Preserve lands has a stream classification of A with A(T) standards, indicating that the water is suitable for use as a potable water source and is a well established trout habitat. The parts of Roaring Brook and tributary 2 of North Creek that lie outside of the State Forest Preserve are assigned class C with C(T) standards (WIN# H-419-2). C(T) waters are suitable for swimming and fishing but not for use as a water source, and are a suitable trout habitat.

No revision to this section is necessary, except to note that there are no surface water resources in Ski Bowl Park. Skiers will utilize the existing bridge (constructed for the pipeline crossing) over Roaring Brook to pass between proposed ski Pods 11 and 12.

e. Wetlands

On Mountain

The 1995 UMP wetlands information was reviewed and field verified. The 1995 UMP map of the wetland locations at a scale of 1 inch = 400 feet is incorporated by reference and is available from the Lead Agency.

Off Mountain

There are no wetlands in areas proposed for improvements in the Ski Bowl Park related to winter facilities.

f. Climate and Air Quality

Over the past five ski seasons climatic conditions, have deteriorated to the point where Gore Mountain is experiencing difficulty in obtaining adequate coverage of snow and providing consistent quality early season skiing conditions for the general public. Table 2-1, "Gore Mountain Early Season Temperatures", summarizes temperature (snowmaking) conditions over the past five years. Temperatures (F) were measured at both the Base Lodge and the Saddle Lodge when Gore Mountain was in operation.

**Table 2-1, Gore Mountain Early Season Temperatures**
**(Average Temperature (F) (Standard Deviation(F)))**

**Base Lodge**

| | November | December |
|---|---|---|
| 1995 | 25.5 (10.2) | 20.4 (7.6) |
| 1996 | 25.8 (3.6) | 30.7 (7.4) |
| 1997 | 30.1 (7.8) | 26.2 (7.8) |
| 1998 | 37.0 (1.4) | 22.9 (9.5) |
| 1999 | 40.5 (3.5) | 25.5 (11.4) |

**Saddle Lodge**

| | November | December |
|---|---|---|
| 1995 | 23.7 (7.6) | 14.2 (7.2) |
| 1996 | 20.1 (6.5) | 25.9 (9.0) |
| 1997 | 25.6 (7.3) | 22.7 (6.8) |
| 1998 | 36.0 (2.0) | 19.0 (10.9) |
| 1999 | 40.0 (3.5) | 22.6 (12.3) |

As evidenced by the temperature data collected at the Base Lodge and Saddle Lodge at Gore Mountain, there has been a recent trend of increased early-season temperatures that have precluded the establishment of early-season snow.

In general, average temperatures at both the Base Lodge and Saddle Lodge have increased significantly, on the order of 10 to 15 degrees Fahrenheit, over the past five years in the month of November. Gore Mountain staff attributes this general increase in November temperatures has been attributed to the el Niño/la Niña climatic phenomena.

The table below further illustrates the recent trends in the decreased ability to make early season snow and provide suitable coverage prior to the Christmas holiday. Listed in the table below are the number of days when temperatures were measured at Gore Mountain, which is also an indicator of actual days of operation in November and December (up until Christmas, 25 days possible).

**Table 2-2**
**Number of Days of Temperature Measurements/Operation at Gore Mountain 1995-1999**

**Base Lodge**

| | November | December (pre-Christmas) |
|---|---|---|
| 1995 | 6 | 25 |
| 1996 | 8 | 25 |
| 1997 | 10 | 22 |
| 1998 | 2 | 14 |
| 1999 | 1 | 19 |

**Saddle Lodge**

| November | December (pre-Christmas) |
|---|---|
| 6 | 25 |
| 8 | 25 |
| 10 | 22 |
| 2 | 12 |
| 3 | 23 |

Possibly more important than the total number of days of operation, is the sequences of days of operations. Opening a ski center then only to have weather conditions force a closure due to inadequate snow cover has serious affects that can extend beyond the short term. Skier uncertainty as to whether a particular ski area is open or closed can lead to skiers staying away for longer periods of time for the early part of the season and possibly later in the year as well. Interruptions in periods of operations have occurred in the last three years at Gore Mountain during the pre-Christmas period. In 1997, 1998 and 1999 Gore Mountain was able to open in late November or early December only to have to close until weather conditions allowed for production of additional adequate amounts of snow to provide safe skiing conditions.

2. Biological

a. Vegetation

On Mountain

No revision to this section is necessary.

An updated search of the files of the NHP did not identify any records of rare, threatened, or endangered species of plants or animals on the Gore Mountain Ski Center site. Refer to the July 17, 2000 letter from DEC, provided in Appendix 2, "Correspondence."

Off Mountain

The off-mountain portion of proposed Pod 12 and the other Ski Bowl Park improvements passes through beech-maple mesic forest similar to that found in the lower elevation portions of the Gore Mountain Ski Center site.

b. Wildlife

No revision to this section is necessary.

c. Fisheries

No revision to this section is necessary.

d. Unique Areas

On Mountain

No revision to this section is necessary.

Off Mountain

No unique areas are known to occur at Ski Bowl Park or adjacent lands.

e. Critical Habitat

No revision to this section is necessary.

3. Visual Resources

No revision to this section is necessary.

**B. Human Resources**

1. Transportation

No revision to this section is necessary.

2. Community Services

No revision to this section is necessary, except to note that in addition to the Johnsburg Volunteer Emergency Squad, Empire Ambulance Service, Inc. is also now available to serve the site.

3. Local Land Use Plans

No revision to this section is necessary, with the following note.

The easternmost portion of Ski Bowl Park is classified as "Hamlet." The majority of Ski Bowl Park is classified as "Low Intensity Use." Refer to Figure 2-1, "Surrounding Land Use Classification."

**C. Man-Made Facilities**

1. Inventory of Constructed Facilities

a. Downhill Ski Slopes

Gore Mountain Ski Center currently includes downhill terrain on 50 trails which are located predominantly on north and east facing slopes of the peaks which make up Gore Mountain, as shown on Figure 1-2, "Status-1995 Gore Mountain UMP Alpine Trails and Infrastructure."

The alpine trails constructed to date total approximately 25.1 miles, with 100% snowmaking capability. In terms of acreage, the trails provide approximately 249.5 acres of downhill skiing. An additional 3.4 miles of trails are approved per the 1995 UMP, and are pending construction.

b. Backcountry, Hiking and Mountain Biking Trails

Gore Mountain has approximately 14.6 miles of groomed backcountry or cross country ski trails, with terrain ranging from "easiest" to "most difficult." The trails form several loops located on the lower part of Gore Mountain, as illustrated on Figure 1-3," Status 1995 Gore Mountain UMP Backcountry Trails."

The trails average 12 feet in width. All trails are accessible from the base lodge and are routinely patrolled by professional ski patrol members. Trails are open from early December to late March as weather permits. Lessons, rentals and repair service are available from the base lodge, as well as access to other amenities and services.

The existing hiking trails at Gore Mountain, allowed by an amendment to the 1995 UMP, are located as shown on Figure 1-3, "Status 1995 Gore Mountain UMP Backcountry Trails." There are approximately 10 miles of such trails, generally consisting of a 5.5 mile trail to the top of Gore Mountain, known as the Schaefer Trail, a 3 mile loop referred to as the Rabbit Pond and Oak Ridge Trails (about half of this trail is on ski center lands), and the Roaring Brook Trail which is about 1.5 miles long.

Existing trails for mountain biking are located as shown on Figure 1-4, "Mountain Biking Trails." There are 22 such trails, which are accessed from the base or via the Northwoods

Gondola to the summit of Bear Mountain. The gondola runs for the mountain biking season from June 30th to September 3rd, 2000, on Friday, Saturday and Sunday, and from September 9th to October 9th, 2000, from 10:30 AM through 5:30 PM. Helmets are required. Gore Mountain has mountain bike staff which patrol the trails during operation.

c. Lifts

There are nine existing ski lifts at Gore Mountain including the new Northwoods Gondola (Lift #8), one detachable triple chair lift (Lift #1), three double chair lifts (Lifts #3, #5, and #6), two quadruple chairs (Lifts #2 and #7), one poma surface lift (Lift #9A) and one J-bar (Lift #4). Lift locations are illustrated on Figure 1-2, "Status 1995 Gore Mountain UMP Alpine Trails and Infrastructure." Lift types and lift ages are indicated below in Table 2-3, "Gore Mountain Lifts."

**Table 2-3**
**Gore Mountain Lifts**

| | | | |
|---|---|---|---|
| 1 | 1984 Von Roll | Triple | Oldest high speed in North America |
| 2 | 1997 CTEC | Quad | |
| 3 | 1986 Riblet | Double | |
| 4 | 1963 Hall | J Bar | |
| 5 | 1964 Hopkins | Double | Remote beginners area |
| 6 | 1967 Riblet | Double | Parts from 1987 Riblet & 1996 CTEC |
| 7 | 1995 CTEC | Quad | |
| 8 | 1999 Poma | Gondola | |
| 8 | 1967 Von Roll | Gondola | Retired 1999, removal required |
| 9 | 1997 Poma | Platter | Old lift modernized & installed by Gore |

The Adirondack Express, Lift #1, runs from the base to an intermediate point on the mountain referred to as the Saddle. The North Quad, Lift #2, services the north side of the mountain and also discharges passengers in the Saddle area. Two lifts run from an intermediate point to the summit (High Peaks Chair - Lift #6 and the Straight Brook Quad - Lift #7). Only the Northwoods Gondola, Lift #8, runs directly from the base to the summit of Bear Mountain. The Sunway Chair, Lift #3, runs from the base to approximately the midpoint of the Sunway trail. The Gor-e-Gully Chair, Lift #5, is a beginner facility located to the north of the base lodge. The Bear Cub Poma, Lift #9A, is a beginner facility located southwest of the base lodge. The J-Bar, Lift #4, is another beginner facility located to the east of the base lodge.

d. Parking

Skier and visitor parking is currently provided in five lots located adjacent to the base lodge and gondola area. Four of these lots are dedicated to cars and one to buses. The combined parking acreage totals approximately 12.4 acres. The location and configuration of these lots is illustrated on Figure 1-2, "Status-1995 Gore Mountain UMP Alpine Trails and Infrastructure."

Using an industry standard range of 140 to 180 cars per acre of parking, Gore Mountain's parking facilities can handle between 1,736 and 2,232 cars. During a typical ski weekend, the resort also accommodates between 10 and 12 buses. At present, the current available parking area is not adequate to handle the parking demand. New lots that were approved in the 1995 UMP need to be built as soon as possible since parking regularly overflows the existing lots onto the access roadway shoulders. Such overflows have occurred regularly during the 2000-2001 ski season. Photo 2-1, "Overflow Car Parking on Access Road," and Photo 2-2, "Overflow and Random Car Parking in Main Lot," illustrates such parking conditions.

e. Access Road

No revision to this section is necessary, except to note that the access road now terminates in the redesigned entry, circulation and ski center arrival/drop-off area approved in the 1995 UMP. The entry road will become a one way circular roadway with 3 lanes available in the passenger vehicle drop-off area, and 2 lanes available in the drop off area for buses. The improved circulation and drop-off area will be a significant asset by improving the efficiency and safety of the ski center.

f. Buildings

The ski area has two lodges available for use by skiers and visitors. The main lodge is located at the base of the mountain and the Saddle Lodge is located mid-way up the mountain. The resort also includes a warming hut located at the Straight Brook area.

The main lodge has a total area of approximately 45,000 square feet and consists of two stories. Facilities in the main lodge include food and beverage services, restrooms, ski school, retail sales, ski rental, public lockers, ticket office, bar/lounge, and nursery. Administrative offices, first aid and ski patrol, maintenance and equipment storage, and employee lockers are housed in the various other buildings at the base. Remodeling and an expansion of the main lodge and relocation of children's facilities and teaching space to the old gondola loading building with an addition was approved in the 1995 UMP. This item should be completed as soon as possible since overcrowding of the main lodge now regularly occurs. Photos 2-3 and 2-4, "Typical Occupancy Overcrowding in Main Lodge," and "Typical Overcrowding on Main Lodge Patio," respectively, illustrate this condition.

The Saddle Lodge at mid-mountain is a small structure of approximately 3,500 square feet providing restrooms and minimal kitchen and kitchen storage space with some food service seating.

A warming hut is located at the Straight Brook area. This building is 20' x 35' in size. There is no indoor plumbing or food service available in this structure, however, the building is heated. The ski patrol uses the former forest ranger's structure. There are pit privies available.

Photo 2-1 Overflow Car Parking on Access Road

Photo 2-2 Overflow and Random Car Parking in Main Lot

Photo 2 - 3 Typical Occupancy Overcrowding in Main Lodge

Photo 2-4 Typical Overcrowding on Main Lodge Patio

These three buildings are the only ones at the ski center for specific public use. There are 65 other structures located on the property. See Appendix 4, "Inventory of Man-Made Facilities," for a detailed account of these structures.

g. Maintenance Roads

Approximately 9 miles of maintenance roads traverse the ski area (this figure is provided as an errata to the 15 miles of maintenance roads identified in the 1995 UMP). These roads are used to accomplish summer maintenance of slopes and lifts and to access particular areas such as the saddle, the summit, pumphouse, reservoir, etc.

h. Summit

Various structures are located at the summit of Gore Mountain. These include a warming hut (see Section II.B.1.f, "Buildings"), NYSDEC firetower, Ski Patrol Building and a NYSDEC communications tower.

Although the NYSDEC communications tower is located approximately 100' from the main summit area and is screened by forest vegetation, the tower is not secured from public use by fencing or any other barrier. The public is discouraged from using the tower area through posted signs, however, the tower is accessible by skiers or summer hikers. The tower is 145' tall.

i. Electric Distribution

Power is supplied by the Niagara Mohawk Power Corporation to the site and is distributed throughout the ski area via 34,500 volt and 4800 volt aerial power lines. The Gore Mountain power station is set for a 34,500 volt power supply at a maximum demand load of 7.5 megavolt amperes (MVA). The current peak demand is approximately 7 MVA. Of the total MVA currently used during peak operational periods, 3 MVA operates the air compressors. Niagara Mohawk Power Corporation has allocated a peak load power demand of 7.5 MVA to Gore Mountain. All primary lines originate at a substation where 34,500 incoming volts are distributed. Distribution is then accomplished via 34,500 volt aerial lines to some parts of the mountain, and by 4800 volt aerial lines to other parts of the mountain.

j. Solid Waste Management

Solid waste from the ski center is hauled by ski center employees to the transfer station in North Creek. The town then transports refuse to the Adirondack Resource Recovery Facility in Hudson Falls. Approximately 448 cubic yards of compacted waste per year is generated by the ski center.

k. Snowmaking

Snowmaking is provided on almost 100% of Gore Mountain's trail system which covers approximately 250 acres. The total system combines both air and airless snowmaking technology. The Ski Center has increased its water use from the snowmaking reservoir from 109 million gallons in 1995-96, to 233 million gallons during the 1999-00 season. The amount of water pumped from the Hudson River via the snowmaking pump station was 20 million gallons in 1996-97, and increased to 74 million gallons in 1999-00. Refer to Table 2-4, "Snowmaking Components-Season Totals." Table 2-5, "Increase in Snowmaking Capacities," illustrates that the water pumping capacity from the reservoir increased from 1,200 gpm in 1994 to 3,600 gpm in 2000. Also noted in Table 2-5 is that water withdrawal from the Hudson River has been at 3,200 gpm since 1996 when the system was installed. The approved 1995 Unit Management Plan allows for maximum withdrawal of up to 5000 gpm. Current pump capacity limits the withdrawal to 3200 gpm and will be increased in the future as availability of funds allow. The number of air/water snowmaking guns has been increased from 45 in 1994 to 97 in 2000.

**Table 2-4**
**Snowmaking Components – Season Totals**

**Season Totals**
**1994-1999**

| Year | Compressed Air in | Water in Million Gallons | | SMI Hours | Gun Placements | Days of Operation |
|---|---|---|---|---|---|---|
| | Billion Cubic Feet | Reservoir | Hudson | | | |
| 1994-95 | 1.021 | 120 | | | 5,591 | 88 |
| 1995-96 | 1.169 | 109 | | 3,155 | 7,173 | 83 |
| 1996-97 | 1.881 | 160 | 20 | 4,742 | 9,580 | 92 |
| 1997-98 | 1.88 | 165 | 40 | 5,478 | 8,540 | 92 |
| 1998-99 | 1.52 | 196 | 59 | 4,941 | 6,515 | 97 |
| 1999-00 | 2.302 | 233 | 74 | 4,664 | 10,091 | 102 |

**Table 2-5**

**Increase in Snowmaking Capacities**
**1994-2000**

| Year | Compressed Air | | Water | | Air/Water Guns | Fan Guns |
|---|---|---|---|---|---|---|
| | Electric | Diesel | Reservoir | Hudson | | |
| 1994 | 13,500 cfm | | 1,200 gpm | | 45 | 0 |
| 1995 | 13,000 cfm | 6,000 cfm | 2,000 gpm | | 50 | 6 |
| 1996 | 13,500 cfm | 6,000 cfm | 3,600 gpm | 3,200 gpm | 60 | 7 |
| 1997 | 13,500 cfm | 6,000 cfm | 3,600 gpm | 3,200 gpm | 60 | 7 |
| 1998 | 13,500 cfm | 6,000 cfm | 3,600 gpm | 3,200 gpm | 77 | 7 |
| 1999 | 16,500 cfm | 18,000 cfm | 3,600 gpm | 3,200 gpm | 97 | 7 |
| 2000 | 16,500 cfm | 18,000 cfm | 3,600 gpm | 3,200 gpm | 137 | 6 |
| Total | 34,000 cfm | | 3,600 gpm | 3,200 gpm | 137 | 6 |

The air capacity has increased from 13,500 cfm in 1994 to 34,500 cfm in 2000, and is delivered by a combination of electric and diesel fuel air compressors. The inventory of electric compressors is aged, as indicated below in Table 2-6, "Snowmaking Air Compressors." Similarly, Table 2-7, "Snowmaking Pumps," presents an inventory of Gore Mountain's water pumps for snowmaking.

**Table 2-6**
**Snowmaking Air Compressors**

| ID# | Make | Model | Serial # | Year | Hours |
|---|---|---|---|---|---|
| Joy #1 | Joy Twistair | TA1200 EAA4AE | 137004 | 1978 | 27,048 |
| Joy #2 | Joy Twistair | TA1200 EAA4AE | 137003 | 1978 | 25,262 |
| Joy #3 | Joy Twistair | TA1200 EAA4AE | 141282 | 1979 | 26,798 |
| Joy #4 | Joy Twistair | TA1200 EAA4AE | 141280 | 1979 | 25,309 |
| Joy #5 | Joy Twistair | TA1200 EAA4AE | 141281 | 1979 | 25,023 |
| IR #1 | Ingersoll-Rand | 1500 H | 56135 | 1985 | 9,762 |
| IR #2 | Ingersoll-Rand | 1500 H | 56138 | 1985 | 9,687 |
| IR #3 | Ingersoll-Rand | 1500 H | 56130 | 1985 | 9,433 |
| IR #4 | Ingersoll-Rand | 1500 H | 56139 | 1985 | 9,890 |
| IR #5 | Ingersoll-Rand | Pac Air 300 | 84214 | 1973 | 28,219 |
| CTC #1 | Cooper | T-3000 | F11671 | 1998 | 912 |

## Table 2-7
## Snowmaking Pumps

| Pump make | Model | Serial # | Year | Capacity | Motor make | Horsepower | Model | Serial # | Hours | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| Johnson | DHC | 96JH2348A | 1996 | 800 gpm | US Motor | 500 | Titan | 2122500766K-1 | 3920 | Reservoir |
| Johnson | DHC | 96JH2348B | 1996 | 800 gpm | US Motor | 500 | Titan | 2122500766K-2 | 3770 | Reservoir |
| Gould | VIC | 302587 | 1975 | 400 gpm | US Motor | 250 | RV4 | C601974-666 | 20620 | Reservoir |
| Johnson | DHC | 95JH2014A | 1995 | 800 gpm | US Motor | 500 | Titan | Y12Y2440684R-2 | 5100 | Reservoir |
| Johnson | DHC | 95JH2014B | 1995 | 800 gpm | US Motor | 500 | Titan | Y12Y2440684R-1 | 4590 | Reservoir |
| Gould | VIT-FF | 24319-1 | 1996 | 1200 gpm | US Motor | 600 | M10249/ Z127256 | 24319-1 | 627 | Hudson |
| Gould | VIT-FF | 24319-2 | 1996 | 1200 gpm | US Motor | 600 | M102449/ Z127256 | 24319-2 | 1150 | Hudson |
| Johnson | 148 DHC | LJ1716-1 | 1975 | 400 gpm | US Motor | 250 | C2030204/53 | LJ1716-A | 19900 | Hudson |
| Johnson | 148 DHC | LJ1716-2 | 1975 | 400 gpm | US Motor | 250 | C2030204/53 | LJ1716-B | 20100 | Hudson |

l. Grooming Equipment

Grooming of alpine and nordic trails is accomplished with a fleet of seven groomers.

The snow grooming fleet consists of two Logan Manufacturing Company 3700 c units of 1991 and 1993 vintage, which are used as needed, two Piston Bully Winch cats which are used on steep terrain and problem areas, three Piston Bully free fall cats which are used on all terrain, and one pipe shredder attachment which is used for grooming the snowboard half-pipe. Table 2-8, "Grooming Equipment," presents an inventory of Gore Mountains snow grooming equipment. As noted in C.1.k. above, current withdrawal from the Hudson River is 3,200 gpm and will be increased to meet the 5,000 gpm maximum withdrawal that was approved in 1995 once funds are available.

**Table 2-8**
**Grooming Equipment**

| Year | Make | Model | Hours | Winch Hours | Comments |
|---|---|---|---|---|---|
| 1992 | LMC | 3700C | 6097 | | Maintenance only, retrofit with PB parts |
| 1994 | LMC | 3700C | 4145 | | |
| 1995 | Kassbohrer | PB280DW | 2094 | 337 | Winch Cat |
| 1996 | Kassbohrer | PB280 | 4019 | | Front Hydraulics |
| 1998 | Kassbohrer | PB280 | 2902 | | Front Hydraulics |
| 1999 | Kassbohrer | PB300W | 421 | 94 | Winch cat, front hydraulics |
| 1999 | Kassbohrer | PB300 | 1697 | | Front hydraulics |
| 1998 | Bachler | PBHPS*0 | | | Half pipe shredder |

m. Water Supply for Snowmaking

Snowmaking water is stored and drawn from the North Creek Reservoir located northwest of the base area. ORDA has a lease agreement with the Town of Johnsburg for use of the North Creek Reservoir through the year 2013. The reservoir has a storage capacity of approximately 25 million gallons of water and is capable of recharging itself approximately four times per ski season. The Hudson River intake and pipeline was constructed, as proposed on the 1995 UMP, and water is now pumped from the river to the reservoir, and distributed on the mountain. Refer to Table 2-4, "Snowmaking Components-Season Totals," and Table 2-5, "Increase in Snowmaking Capacities," for additional detail.

n. Water Supply for Domestic Use

Potable water for the base area is provided by a drilled well located approximately 75 feet from the J-Bar lift. The well is 280 feet deep and has a capacity of 60 gpm at a depth of 46 to 48 feet. All water mains and hydrants are 6-inch cast iron. On demand, water is fed to a 100,000 gallon holding tank located at the top of the J-Bar hill. From there, the system is gravity fed and metered as it enters the lodge. During periods of high water demand in the lodge, when the well pump is running, water is routed directly into the lodge's distribution system.

Water supply for the Saddle Lodge located at mid-mountain is now supplied by a new 6" diameter drilled well. It is located in the vicinity of the Saddle Lodge. The well is 180 feet deep and yields 6+ gpm. The water is transmitted via a new main to the existing 5000 gallon static storage tank and then pumped to an existing 600 gallon pressure tank. The water is high in minerals and a filter is being installed to meet potable drinking standards. It will also be chlorinated. Until such time that this equipment is added it is not being used for potable consumption. Food is currently prepared at the base lodge and transported to the Saddle Lodge. Potable water is currently supplied by bottled water.

o. Sewage Treatment System

Gore Mountain's base area wastewater treatment plant underwent a major upgrade in 1991-1992. During the winter season (peak use period), wastewater is treated by a microbiologically activated sludge process consisting of equalization/pre-treatment, oxidation ditch and a tertiary microscreen and post-aeration. The plant capacity is 65,000 gallons per day (gpd) and can accommodate all of the proposed improvements to the ski center which are included in this UMP (including the on-mountain lodges). During the off-season, the oxidation ditch is taken off-line and wastewater is treated in a sequencing batch reactor in an extended aeration mode using the activated sludge process. Effluent polishing in the tertiary stage is accomplished by microscreen. The upper limit capacity is 20,000 gpd.

Wastewater generated at the Saddle Lodge is now piped to the base area treatment plant via a 4" polyethylene butt fused pipe buried in the "Showcase" trail. In the future, wastewater from the new Bear Mountain Lodge will also be piped to the base area treatment plant via an extension of this pipe. More than adequate capacity exists at the base area treatment plant to accommodate these flows.

p. Equipment Inventory

The ski area owns and maintains equipment ranging from office and computer equipment to furniture, carpentry equipment, trail grooming equipment, vehicles and snowmaking equipment. A complete listing of "Inventory Equipment" is available for review at ORDA headquarters in Lake Placid, New York.

2. Inventory of Systems

a. Management

No revision to this section is necessary.

b. Organization

No revision to this section is necessary.

c. Operations

Personnel employed at Gore Mountain Ski Center varies with the season. During the winter season there are approximately 30 permanent and 300 seasonal staff. The ski school employs approximately 13 full-time and 120 part-time personnel. The ski patrol operates with 26 staff and approximately 90 volunteers. During the summer months, there are approximately 25 fulltime staff and a maintenance crew which totals approximately 70 personnel.

Figure 2-2, "Organizational Structure," details the ski center's organizational structure.

Table 2-9, "2000/2001 Snow Season Rack Rates and Dates" provides a summary of the most recent ski season fee structure.

d. Contractual Arrangements

- Concessionaire - In accordance with its management agreement with DEC, ORDA has an exclusive cafeteria and cocktail lounge concession agreement at Gore Mountain Ski Center with Boston Concessions. The agreement was made in 1993 and is valid until August 31, 2003.

- Ski Shop and Ski Rental Operation - In accordance with its management agreement with DEC, ORDA has an exclusive ski shop and ski rental agreement with Boston Concessions. The agreement will terminate on August 31, 2003.

  The summer mountain bike rental concession agreement is with the Mountain and Bordertown of North Creek, New York.

- Snowmaking Water Supply - In accordance with the management agreement with DEC, ORDA continues to abide by the license granted by the Town of Johnsburg for the use of water in the North Creek Reservoir in connection with snowmaking operations at Gore Mountain Ski Center. This lease agreement runs through the year 2013.

# TABLE 2-9
## 2000/2001 Snowseason
## Rack Rates & Dates

**PEAK SEASON**
*December 16th through March 18th*

| Weekend & Holiday | 1-Day | 2-Day | 3-Day | 4-Day | 5-Day |
|---|---|---|---|---|---|
| Adults (ages 20+) | $44 | $80 | $114 | $136 | $160 |
| Teens & Seniors (13-19 / 65-69) | $35 | $66 | $93 | $108 | $125 |
| Juniors (Ages 7-12) | $19 | $38 | $57 | $76 | $95 |
| 6 and under / 70 and over | Free | Free | Free | Free | Free |

| Mid-Week / Non-Holiday | 1-Day | 2-Day | 3-Day | 4-Day | 5-Day |
|---|---|---|---|---|---|
| Adults (ages 20+) | $34 | $64 | $90 | $112 | $130 |
| Teens & Seniors (13-19 / 65-69) | $29 | $54 | $75 | $92 | $110 |
| Juniors (Ages 7-12) | $19 | $38 | $57 | $76 | $95 |
| 6 and under / 70 and over | Free | Free | Free | Free | Free |

*1999 / 2000 Holiday Periods*
*Christmas Week – December 23, 2000 through January 1, 2001*
*Martin Luther King Weekend – January 13, 2001 through January 15, 2001*
*President's Week – February 17, 2001 through February 25, 2001*

**EXTRA VALUE SEASON**
*Opening day through December 15th & March 19th through closing day*

| Weekend | 1-Day | 2-Day |
|---|---|---|
| Adults (ages 20+) | $34 | $64 |
| Teens & Seniors (13-19 / 65-69) | $29 | $54 |
| Juniors (Ages 7-12) | $19 | $38 |
| 6 and under / 70 and over | Free | Free |

| Mid-Week | 1-Day | 2-Day | 3-Day | 4-Day | 5-Day |
|---|---|---|---|---|---|
| Adults (ages 20+) | $29 | $54 | $75 | $92 | $110 |
| Teens & Seniors (13-19 / 65-69) | $25 | $46 | $63 | $76 | $95 |
| Juniors (Ages 7-12) | $19 | $38 | $57 | $76 | $95 |
| 6 and under / 70 and over | Free | Free | Free | Free | Free |

*All Gore Mountain Rates & Dates are subject to change without notice.*

3. Inventory of Facilities and Improvements Pending Construction

The following facilities were approved in the 1995 UMP and are pending construction.

a. Downhill Ski Slopes

As part of the 1995 UMP, the following trails to be constructed include, Lift 7 access routes 7N-N, 7N-P, 7N-Q and Pod 10 trails. The new beginners area is half completed and requires one more lift. Two "Magic Carpets" will be installed in already developed areas of the beginners ski facility and are included in the 2002 UMP. The following trails will be widened: North Star, Pete Gay (in Pod 2); Showcase, Twister and Sleighride (in Pod 1); Chatiemac (in Pod 7).

b. Lifts

The Topridge Quad (Lift #10) from the base of Straight Brook to the top of Bear Mountain, is pending construction.

c. Lodges

The construction of the lodge at the summit of Bear Mountain, the base lodge rehabilitation, and development of the Learning Center in the former gondola base building, are all pending construction.

d. Parking and Access Road

The improved looped one way entry way and the designated car and bus drop-off areas have been constructed. The expansion of parking areas as approved in the 1995 UMP is pending construction, as is the reconfiguration of the maintenance complex.

**D. Public Use of the Ski Center**

1. Ski Season Use

With reference to Table 2-10, "Public Usage of Gore Mountain Ski Center," it can be seen that ticketed winter visits to the Ski Center increased by approximately 20% from 1994 to 2000, from 100,461 to 120,017 ticketed skier visits.

The number of season pass holder visits has increased over 400% over the same period. From 6,344 to 25,233, based on industry standard multipliers.

**Table 2-10**
**Public Usage of Gore Mountain Ski Center**

Winter Trend from 94-95 until 99-00 (includes pass holders):
*

| Snow Season | Ticketed Visits | Pass Holder Visits | Total Visits |
|---|---|---|---|
| 94-95 | 100,461 | 6,344 | 106,805 |
| 95-96 | 121,803 | 7,514 | 129,317 |
| 96-97 | 130,334 | 7,202 | 137,536 |
| 97-98 | 132,209 | 8,008 | 140,217 |
| 98-99 | 116,853 | 7,813 | 124,666 |
| 99-00 | 120,017 | 25,233 | 145,250 |

| Peak Day (ticketed visits): | | |
|---|---|---|
| 94-95 | 4,649 | 02/19/95 |
| 95-96 | 4,148 | 12/29/95 |
| 96-97 | 5,283 | 02/15/97 |
| 97-98 | 4,666 | 01/02/98 |
| 98-99 | 4,341 | 01/16/99 |
| 99-00 | 5,391 | 02/20/00 |

| Presidents Holiday Week (ticketed visits): | |
|---|---|
| 94-95 | 26,091 |
| 95-96 | 16,579 |
| 96-97 | 22,526 |
| 97-98 | 22,503 |
| 98-99 | 23,129 |
| 99-00 | 28,234 |

The peak ticketed days of attendance continue to be within the February Presidents' Week, with a peak day of 5,391 on February 20, 2000.

2. Skier Characteristics

A random skier survey was taken by Gore Mountain staff of 204 individuals, during the period extending from the first weekend of the President's Week Holiday (February 19-20, 2000) until closing day (April 2, 2000). The survey results are summarized in Appendix 5, "Marketing Research Report."" The survey indicates the following general information:

1. At Gore, approximately 60% are male recreators and 40% are female, fairly representative of these figures nationally which are 57% and 43%, respectively.

2. 85% of respondents are alpine skiers, 9% are snowboarders, 2.5% participate in both alpine skiing and snowboarding, 1% are telemark skiers and 1% use snow blades. National data indicates that 94% of people on the slopes are alpine skiers and 30% are snowboarders (with some overlap as about 25% participate in both sports).

Over one-half of the Gore sample categories themselves as intermediate skiers or riders, one-third as experts, and less than one-tenth as beginners.

85 respondents, or 41.7%, visited Gore on an overnight trip. Their average stay was 3.188 nights. Nationally, the average stay is 4.8 nights (Leisure Trends, 1999).

The average number of ski days per year in the Gore Mountain sample is 16.925. Nationally, this figure is 14 days. Of the approximate 17 ski days per year, the sample skis 6.744, or spends 40% of their ski time at Gore.

54.4% of respondents said that access was the primary factor influencing their decision to come to Gore. Value was chosen by 33.33% of respondents, Terrain 18.1%, Snow Quality 14.22%, Challenge 11.27%, Lifts 7.35%, Service 5.4%, Weather 5.4%, and Grooming 3.4%. These figures exceed 100% because respondents were asked to circle two factors. Other various factors included family atmosphere, tradition, being local, word of mouth, "kids" and "learn to ski" programs, the race program, and the scenery.

The sample is significantly similar to the national average concerning sex and equipment type. The sample skis approximately three more days per year than the average skier, and spends 40% of their ski time at Gore Mountain, making it an avid group of downhillers that are familiar with the ski area.

Despite the rapid growth of snowboarding, it still remains a small fraction of the downhill segment, with alpine skiers at least five times the number of snowboarders. Although this will likely change in the future, the market is currently strongly dominated by alpine skiers.

Telemark skiers and snowbladers do not constitute a significant market.

Over half of the sample skis Gore because of the easy access, one-third for the value.

Gore's trail distribution matches nicely to the sample's ability level. Beginner skiers =9%, Beginner trails =10%; Intermediate skiers =51%, Intermediate trails=60%; Expert skiers=33%, Expert trails=30%.

Word of mouth remains the strongest marketing tool, with approximately 60% using friends and family as their main Gore Mountain information source. The website was the closest second at 16.7%.

Aspects of the Gore Mountain experience that most samples disliked:

1. Flat Areas
2. Nothing!
3. No direct access to summit
4. Gondola location/Bear Mountain trails
5. Food/Bar prices
6. Lack of grooming
7. Crowded Lodge/Parking (Tie)
8. Lift Unloading Areas
9. Rental Process/Conditions (Tie)
10. Long ticket lines/lack of comfortable seating/weather (Tie)

Aspects of the Gore Mountain experience that most samples liked:

1. Terrain
2. Gondola
3. Lack of crowds
4. Family appeal
5. Lifts
6. Grooming/Employees/Everything (Tie)
7. Scenery
8. Conditions
9. Snowmaking
10. Half-pipe/summit area/Glades (Tie)

Areas that deserve the most focus over the next 5 years:

1. Trails (48%)
2. Snowmaking
3. Lifts
4. Grooming
5. Lodges
6. Parking
7. Food
8. Conditions Reporting/Additional Activities (Tie)
9. Children's Programs/Safety (Tie)
10. Ski School

Guests feel that new lifts, including the Northwoods Gondola, have made the greatest improvement to the mountain (45%). Snowmaking (20%) and added terrain (16%) were also frequently mentioned.

3. Non-Ski Season Use

Hikers and mountain bikers, as well as sightseers, use the Ski Center lands in the off-season. Other non-ski season activities at the ski center include a fall foliage festival and mountain bike races which are held in the summer months. Gondola rides occur during the fall foliage season at Gore Mountain.

Summer use for hiking, mountain biking and sight-seeing is approximately 10,400 recreators.

Hunting, trapping and fishing are prohibited at the Gore Mountain Ski Center. Only non-consumptive use of wildlife resources is permitted on ski center lands.

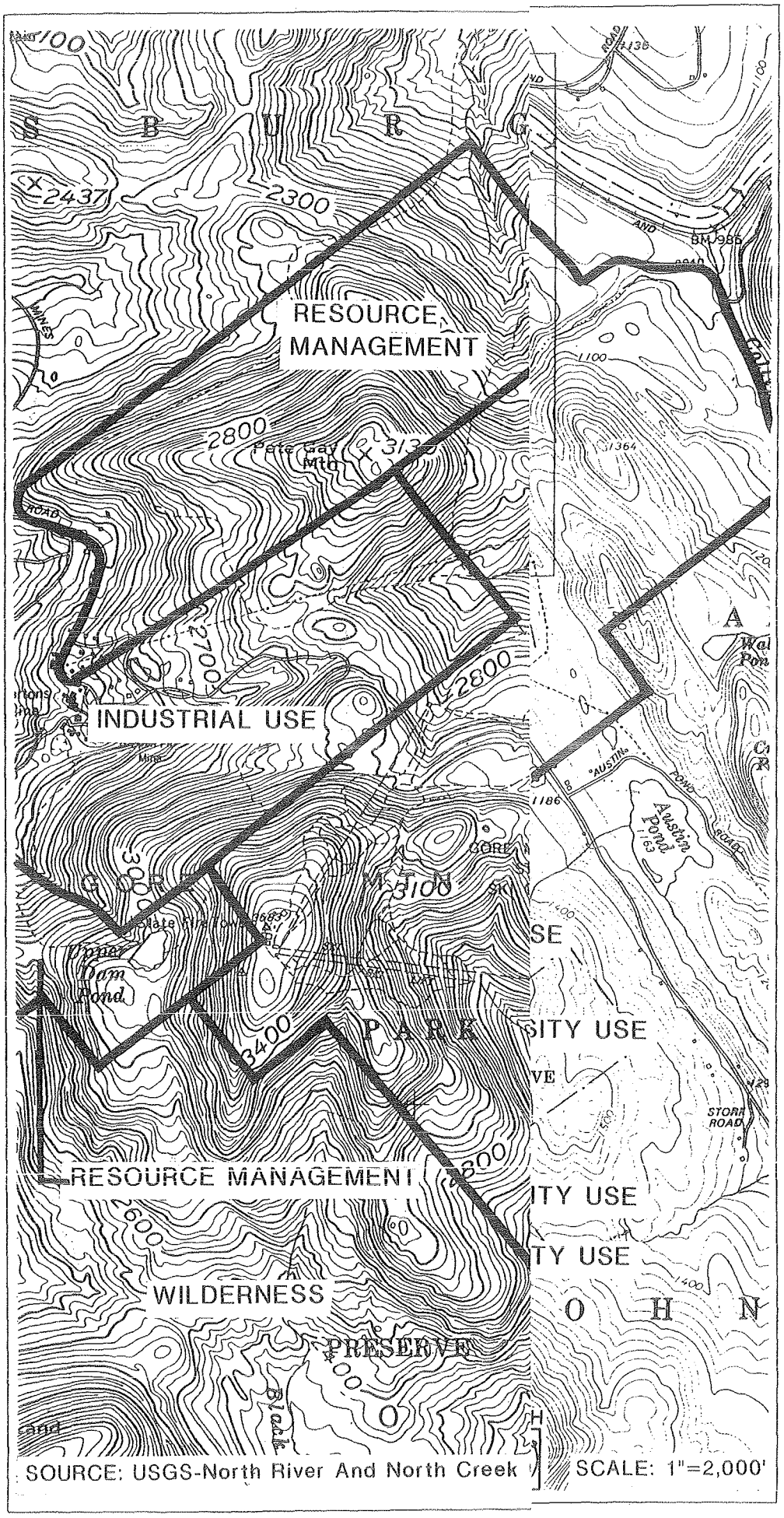
4. Annual Energy Consumption

Various forms of energy, including electricity and fossil fuels, are used to operate the Ski Center. The following chart quantifies energy consumption projections for the 1999-00 season:

| | |
|---|---|
| Electricity | 8,499,483 total kilowatt hours |
| Fuel Oil (heating) | 23,898 gallons |
| Diesel Fuel (machinery) | 318,884 gallons |
| Gasoline (automotive) | 23,567 gallons |
| Propane | 14,520 gallons |

5. Potable Water Consumption

Average daily water use for the base lodge, during the winter season, is 20-35,000 gpd. The back-up system has a 7,500 gph pump capacity. Average daily water use for the Saddle Lodge is 2-4,000 gpd.

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Design
Drawn
Checked

OLYMPIC REGIONAL DEVELOPMENT AUTHORITY

CORE MOUNTAIN

Unit Management Plan And
Environmental Impact Statement

Title: Surrounding Land Use Classification

Revisions

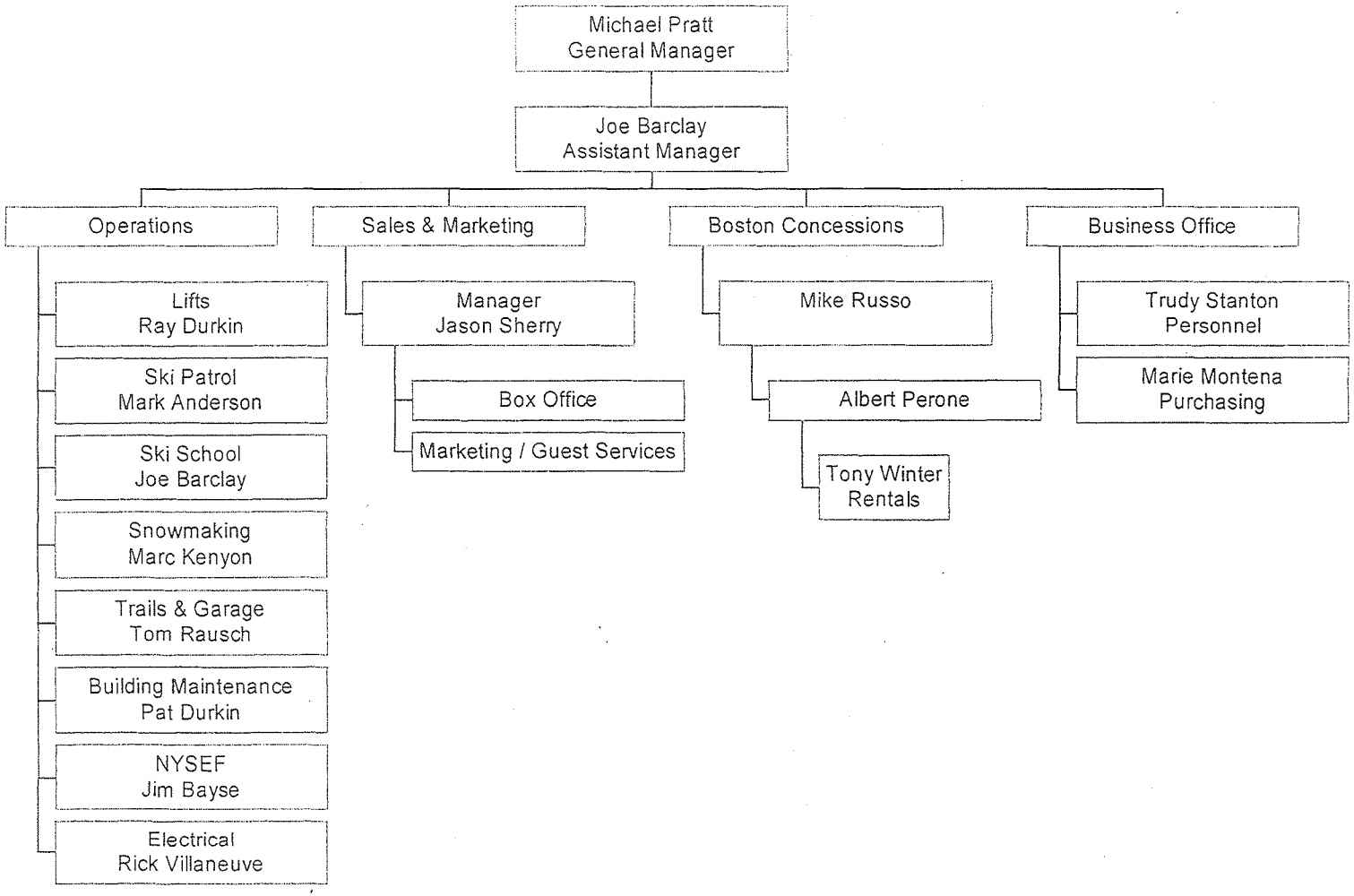
Project
Date

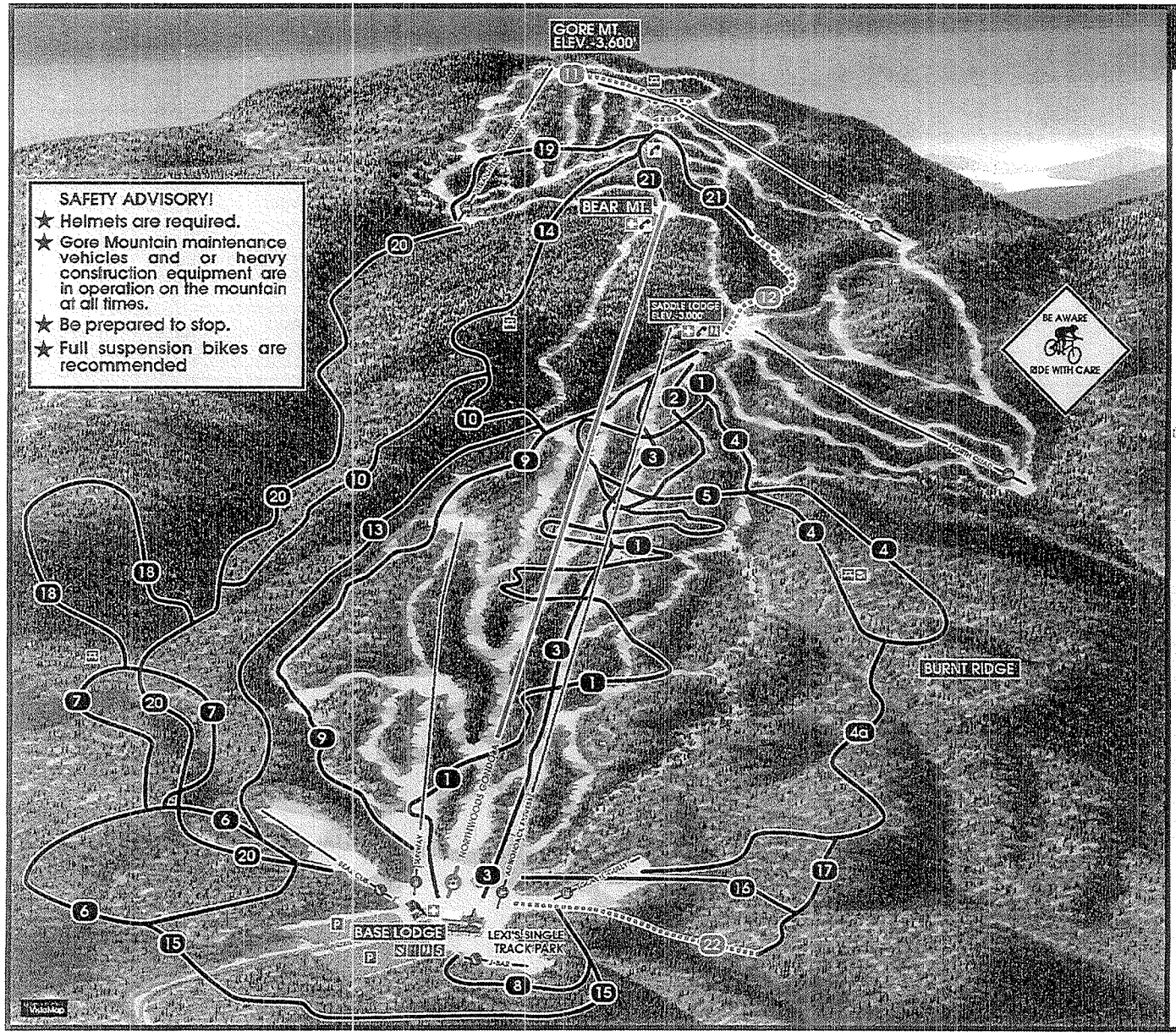
Drawing
FIGURE 2-1

Figure 2-2

## Organizational Structure

**Gore Mountain Ski Area**



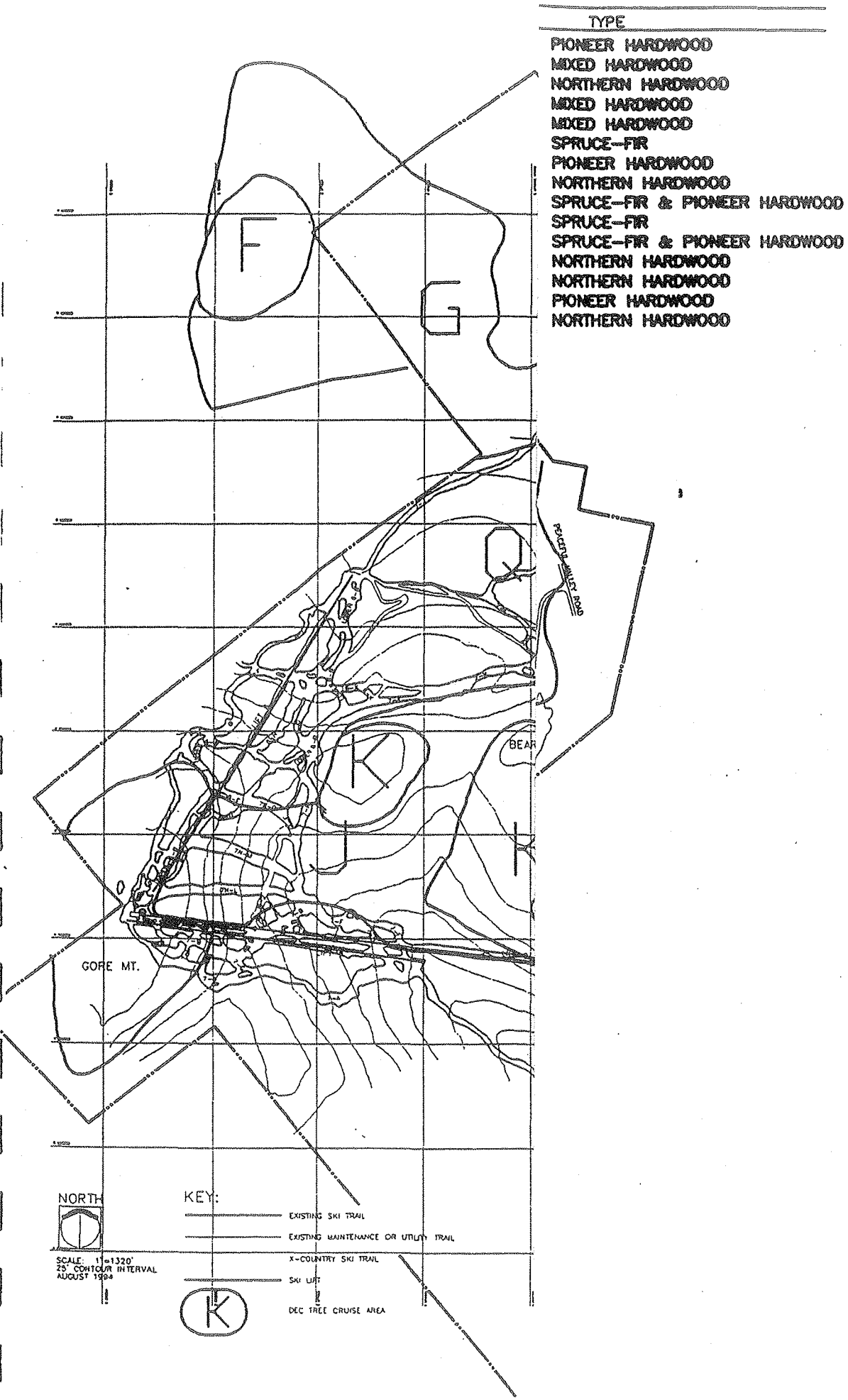



## MAP KEY

| | |
|---|---|
| 1 | SIDEWINDER |
| 2 | UPPER SLEIGHRIDE |
| 3 | SHOWCASE |
| 4 | BURNT RIDGE LOOP- north & south |
| 4a | RIDGE RUNNER |
| 5 | SKID ROAD |
| 6 | DOE BROOK LOOP |
| 7 | TANNERY LOOP |
| 8 | LITTLE NOTCH - access to LEXI'S SINGLE TRACK PARK |
| 9 | SUNWAY |
| 10 | WOLF PACK RUN |
| 11 | UPPER CLOUD WORK ROAD |
| 12 | LOWER CLOUD WORK ROAD |
| 13 | MORGAN'S GULCH |
| 14 | HARVEY'S RUN |
| 15 | ALEXA RUN |
| 16 | LOGJAM |
| 17 | KINDLIN' |
| 18 | STRAIGHTBROOK LOOP |
| 19 | RAVEN'S WAY |
| 20 | TANNERY ALPINE |
| 21 | THE BLUE LINE |
| 22 | NORTH SIDE WORK ROAD |

EMERGENCY PHONE
FIRST AID
RESTROOM
CAFETERIA
TICKETS
PICNIC TABLE
SHELTER
PARKING

GRAVEL WORK ROAD
SINGLE TRACK
LIFT
LIFT (not operating)

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Design
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Checked

OLYMPIC REGIONAL DEVELOPMENT AUTHORITY

GORE MOUNTAIN

Unit Management Plan And
Environmental Impact Statement

Title: NYSDEC Forest Cover Type Map

Revisions

Project
Date

Drawing

GORE MOUNTAIN TREE CRUISE

Type Pioneer Hardwood
Area "A"

| Species | White Birch | Yellow Birch | Balsam Fir | Red Spruce | Beech | Striped Maple | Sugar Maple | Hemlock |
|---|---|---|---|---|---|---|---|---|
| DBH | Trees A | Trees A | Trees A | Trees A | Trees A | Trees A | Trees A | Trees A |
| 3 | 18.5 | | 18.5 | | | 37.1 | | |
| 4 | 10.5 | | 20.9 | | | 31.4 | | |
| 5 | 13.3 | | 19.9 | | | 6.6 | 6.6 | |
| 6 | 9.3 | | | | | 4.6 | | |
| 7 | 10.2 | | | | | | | |
| 8 | 15.6 | | | | | | | |
| 9 | 16.4 | | 2.1 | | | | | |
| 10 | 12.0 | | | | | | 3.3 | |
| 11 | 12.4 | | | | | | | |
| 12 | 20.8 | | | | | | | |
| 13 | 8.8 | | | 1.0 | | | | |
| 14 | 3.4 | 1.7 | | | | | | |
| 15 | 4.5 | | | | | | | |
| 16 | 2.0 | | | | | | | |
| 17 | .6 | | | .6 | | | | |
| 18 | .5 | | | | .5 | | | |
| 20 | | | | | | | | |
| 21 | .4 | | | | | | | |
| 22 | | | | .3 | | | | .3 |
| 23 | | | | | | | | .3 |

Type: Mixed Hardwood Area "B"

| Species | Sugar Maple | White Birch | Red Maple | Beech | Red Oak | Red Spruce | Balsam Fir | Yellow Birch | Black Cherry |
|---|---|---|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 72.8 | | 14.6 | | 14.5 | | | | |
| 4 | 8.2 | | | 8.2 | 16.4 | | | | |
| 5 | 36.5 | 5.2 | 10.4 | 5.2 | 5.2 | | 5.2 | | 5.2 |
| 6 | 43.7 | | | 7.3 | | | | | |
| 7 | 8.0 | | 5.3 | | 2.7 | | | 2.7 | |
| 8 | 12.3 | 6.1 | 8.2 | 2.0 | | 6.1 | | | |
| 9 | 4.8 | | | 3.2 | 1.6 | | 1.6 | | |
| 10 | 6.5 | 5.2 | | | 1.3 | 1.3 | | 1.3 | 1.3 |
| 11 | 3.3 | 2.2 | | | | 1.1 | | | |
| 12 | 7.2 | .9 | 1.8 | | .9 | | | .9 | |
| 13 | 1.5 | 1.5 | 1.5 | 1.5 | | .8 | | | |
| 14 | .7 | 2.0 | | | | | | | |
| 15 | .6 | | | .6 | | .6 | | | |
| 16 | | .5 | .5 | | | .5 | | | |
| 17 | | .4 | | | | | | | |
| 18 | | .4 | | | | | | | |
| 19 | | | | .4 | | | | | |
| 30 | | | | | .1 | | | | |

Type: Northern Hardwood Area "C"

| Species | Sugar Maple | Beech | Yellow Birch | White Ash | Black Cherry | Iron-wood | White Birch | Red Spruce | Red Maple | Basa-wood | Red Oak | Hemlock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 14.1 | 35.2 | | | | 7.0 | | | | | | |
| 4 | 7.9 | 4.0 | | | | | | | | | | |
| 5 | 12.5 | 2.5 | | | | 2.5 | | | 2.5 | | | |
| 6 | 17.6 | 5.3 | 5.3 | | | 1.8 | | | | | 1.8 | |
| 7 | 11.6 | 2.6 | | 2.6 | | | | | 1.3 | | | |
| 8 | 5.9 | | 2.0 | | | | | | | | | |
| 9 | 15.6 | 3.9 | | | | | 2.3 | | | | | |
| 10 | 18.3 | .6 | 4.4 | .6 | | | | | .6 | .6 | 1.3 | |
| 11 | 7.3 | 1.6 | 1.6 | .5 | | | | | | | 1.6 | |
| 12 | 5.7 | .9 | .9 | .9 | | | | .4 | | | 1.8 | |
| 13 | 5.9 | 1.5 | .7 | 1.5 | | | .4 | | | | .4 | |
| 14 | 5.2 | 1.3 | .3 | 1.6 | | | .6 | | | | 1.3 | |
| 15 | 3.4 | | .6 | .3 | | | .8 | | | | .3 | |
| 16 | 3.2 | .2 | | | | | .7 | | | | .2 | |
| 17 | 2.6 | .2 | .4 | | .2 | | .6 | | | | | |
| 18 | 2.2 | .8 | .2 | .6 | | | .2 | | | | .4 | |
| 19 | .4 | .4 | .2 | | | | .4 | | | | | |
| 20 | .8 | .2 | | | .2 | | | | | | .6 | |
| 21 | .1 | | | | | | | | | | | |
| 22 | .3 | | | .1 | | | | | | | | |
| 23 | .2 | .1 | | .1 | | | | | | | .1 | |
| 24 | .2 | .1 | | .1 | | | | | | | | |
| 25 | | | | | | | | | | | | |
| 26 | .1 | | .1 | | | | | | | | | .1 |
| 27 | | | | | | | | | | | | |
| 28 | | | .1 | | | | | | | | | |
| 32 | | | | | | | | | | | .1 | |

Type: Mixed Hardwood Area "D"

| Species | Sugar Maple | White Ash | Beech | Red Maple | Hemlock | Bass-wood | Yellow Birch | White Birch | Black Cherry | Aspen | Balsam Fir | Iron-wood |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 64.4 | | | | | | | | | | 21.5 | |
| 4 | 30.3 | 12.1 | 18.2 | 6.1 | | | 12.1 | | | | 6.1 | 6.1 |
| 5 | 15.4 | | | 11.5 | | 3.8 | 11.5 | 3.8 | | 7.7 | 3.8 | |
| 6 | 8.1 | | 8.1 | | 2.7 | 2.7 | 2.7 | 5.4 | 2.7 | | | |
| 7 | 9.8 | 2.0 | 3.9 | | | | | 2.0 | | | | |
| 8 | 12.0 | 3.0 | 1.5 | 4.5 | 1.5 | | 6.0 | | | 4.5 | | |
| 9 | 3.6 | | 3.6 | 1.2 | | | | 1.2 | | | | |
| 10 | 5.8 | | 3.9 | | | 1.0 | 1.0 | 4.8 | | 1.9 | | |
| 11 | .8 | | 2.4 | 2.4 | | .8 | 4.0 | 4.0 | | 1.6 | .8 | |
| 12 | 4.7 | | 2.0 | 1.3 | | | 1.3 | 2.0 | | 1.3 | | |
| 13 | .6 | .6 | | | | | | | | 1.1 | | |
| 14 | 1.0 | 1.0 | | | .5 | .5 | .5 | | | | | |
| 15 | 1.3 | | .4 | | | .4 | .4 | .4 | | .4 | | |
| 16 | | .8 | | | .4 | | | .4 | | .4 | | |
| 17 | .3 | | | | | | | | | | | |
| 18 | | | | | | | | | | .3 | | |
| 19 | | | | | .3 | | | .3 | | | .3 | |
| 20 | | | | | | | | | | .5 | | |
| 21 | | | | | | | | | | | | |
| 22 | | | | | | | | .2 | | | | |

Type: Mixed Hardwood Area "E" (Ski Bowl) (Beach-Maple magic forest

| Species | Beech | Red Oak | Sugar Maple | Yellow Birch | White Birch | Aspen | Red Maple | Striped Maple |
|---|---|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 74.2 | | 55.6 | | | | | |
| 4 | 115.0 | 10.5 | 20.9 | 10.5 | | | | |
| 5 | 46.5 | | 33.2 | | | | 6.6 | 6.6 |
| 6 | 55.6 | | 4.6 | 4.6 | 9.3 | | 4.6 | |
| 7 | 27.2 | | 10.2 | | 6.8 | | 6.8 | |
| 8 | 39.0 | 5.2 | 2.6 | | 7.8 | | 2.6 | |
| 9 | 4.1 | 2.1 | 4.1 | 4.1 | | | | |
| 10 | 13.3 | | 5.0 | | 1.7 | | 5.0 | |
| 11 | 5.5 | | | | 4.1 | | | |
| 12 | 3.5 | | 1.2 | 2.3 | 2.3 | 1.2 | 2.3 | |
| 13 | 1.0 | | | | | | | |
| 14 | .9 | 1.7 | 1.7 | | 1.5 | | | |
| 15 | | 1.5 | | | | 1.5 | | |
| 16 | | .7 | | | | .7 | | |
| 17 | .6 | | | | | | | |
| 18 | | .5 | | | | | .5 | |
| 19 | | .5 | | | | | | |
| 20 | | 1.3 | .4 | | | | | |
| 21 | | | | | | | | |
| 22 | | 1.0 | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |
| 26 | | .2 | | | | | | |

ype: Spruce-Fir Area "F" (Pete Gay)

| Species | Red Spruce | Balsam Fir | Yellow Birch |
|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A |
| 3 | 612.0 | 204.0 | |
| 4 | 115.0 | | |
| 5 | 73.0 | | |
| 6 | 51.0 | | |
| 7 | | | |
| 8 | 57.2 | | |
| 9 | 22.6 | | 22.6 |
| 10 | 18.3 | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | 9.4 | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | 5.7 | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |

Type: Pioneer Hardwood Area "G" (Pete Gay)

| Species | White Birch | Balsam Fir | Red Spruce | Yellow Birch | Red Maple | Sugar Maple |
|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees?A | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | | 136.0 | | | | 34.0 |
| 4 | | 57.5 | | | | |
| 5 | | 12.2 | | | | |
| 6 | 17.0 | 17.0 | | 8.5 | | |
| 7 | 6.2 | 24.9 | 12.5 | | | |
| 8 | 19.1 | 19.1 | 4.8 | 9.5 | | |
| 9 | 15.1 | 3.8 | 7.5 | | | |
| 10 | 15.3 | | | | | |
| 11 | 15.2 | 7.6 | 2.5 | | | |
| 12 | 10.6 | 2.1 | | | | |
| 13 | 5.4 | 1.8 | 1.8 | | | |
| 14 | 1.6 | | 1.6 | | | |
| 15 | | 1.4 | | | 1.4 | |
| 16 | 2.4 | | | | | |
| 17 | 1.1 | | | | | |
| 18 | 1.0 | | 1.0 | | | |
| 19 | .9 | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | .6 | | |

ype: Northern Hardwood Area "H" (Pete Gay)

| Species | Sugar Maple | Beech | Red Maple | Yellow Birch | White Birch | Balsam Fir |
|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 40.8 | 40.8 | | | | |
| 4 | 46.0 | | | | | |
| 5 | 14.6 | | | 14.6 | | |
| 6 | 20.4 | 20.4 | 10.2 | 10.2 | | |
| 7 | 37.4 | | | | | |
| 8 | 11.4 | 11.4 | | | | 5.7 |
| 9 | 9.0 | | | | | 4.5 |
| 10 | 7.3 | | 3.7 | 3.7 | | |
| 11 | 9.1 | 6.1 | | 6.1 | | |
| 12 | 2.5 | 2.5 | | 2.5 | | |
| 13 | | | | | | |
| 14 | 5.6 | | | | 1.9 | |
| 15 | 1.6 | | | 1.6 | | |
| 16 | 2.9 | | | | | |
| 17 | 2.5 | | | | | |
| 18 | 1.1 | | | | | |
| 19 | 2.0 | | | | | |
| 20 | .9 | | | | | |
| 21 | .8 | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | .6 | | | | | |

Type: Spruce-Fir & Pioneer Hardwood Area "J"

| Species | Balsam Fir | Red Spruce | White Birch | Mountain Ash |
|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 122.4 | 11.5 | 40.8 | |
| 4 | 115.0 | | 69.0 | 11.5 |
| 5 | 51.1 | | 36.5 | 14.6 |
| 6 | 35.7 | 5.1 | 40.8 | 15.3 |
| 7 | 22.4 | 3.7 | 26.2 | |
| 8 | 31.5 | 5.7 | 8.6 | |
| 9 | 9.0 | | 11.3 | |
| 10 | 14.6 | | 12.8 | |
| 11 | 1.5 | | 7.6 | |
| 12 | | 1.3 | 6.4 | |
| 13 | | 1.1 | | |
| 14 | | | | |
| 15 | | .8 | | |

Type: Spruce-Fir Area "K"

| Species | Balsam Fir | White Birch | Mountain Ash | Red Spruce |
|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 136.0 | 45.3 | | |
| 4 | 127.8 | 63.9 | 12.8 | 12.8 |
| 5 | 146..0 | 16.2 | | |
| 6 | 107.7 | 17.0 | 5.7 | 5.7 |
| 7 | 49.9 | 4.2 | | |
| 8 | 22.2 | 6.4 | | 6.4 |
| 9 | 7.5 | 5.0 | | |
| 10 | 4.1 | 2.0 | | |
| 11 | | | | |
| 12 | | | | 2.8 |
| 13 | | 1.2 | | |
| 14 | | 1.0 | | |

Type: Spruce-Fir & Pioneer Hardwood Area "M"

| Species | Red Spruce | Balsam Fir | White Birch | Striped Maple | Hard Maple | Aspen |
|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | | 102.0 | 102.0 | | | |
| 4 | | 57.5 | 115.0 | 57.5 | | |
| 5 | | 36.5 | 36.5 | | | |
| 6 | | 51.0 | 25.5 | 25.5 | 25.5 | |
| 7 | 18.7 | | | 18.7 | | |
| 8 | 14.3 | 14.3 | | | 14.3 | |
| 9 | | | 11.3 | | | |
| 10 | | | | | | 18.3 |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | 5.4 | | | | | |
| 14 | | | 4.7 | | | |

ype: Northern Hardwood Area "N"

| Species | Hard Maple | Beech | White Ash | Red Spruce |
|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A |
| 3 | 68.0 | 68.0 | 68.0 | |
| 4 | | 76.7 | | |
| 5 | 24.3 | 24.3 | | |
| 6 | 51.0 | 17.0 | | |
| 7 | 62.3 | 12.5 | | |
| 8 | 66.7 | 9.5 | | 9.5 |
| 9 | 30.1 | | | |
| 10 | 24.4 | 6.1 | | |
| 11 | 10.1 | | | |
| 12 | 8.5 | | | |
| 13 | | | | |
| 14 | | | 3.1 | |
| 15 | 2.7 | 2.7 | | |

Type: Northern Hardwood Area "P" (East Slope)

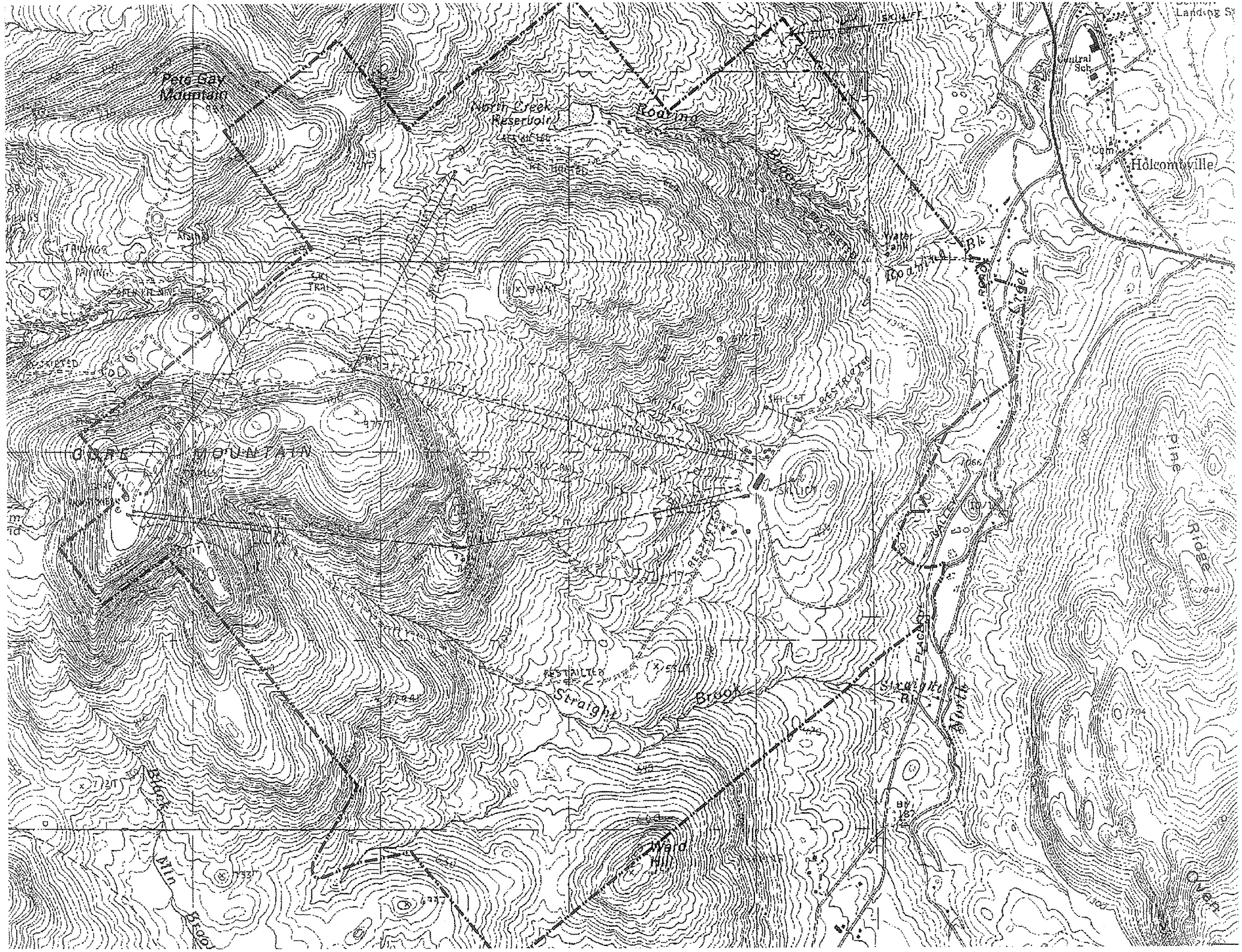
| Species | Sugar Maple | White Ash | Beech | Red maple | Bass-wood | Yellow Birch | White Birch | Iron-wood | Striped Maple | Red Oak |
|---|---|---|---|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 4 | 15.3 | | 15.3 | | | | | 7.7 | | |
| 5 | 14.6 | | 4.9 | | | | | 4.9 | | |
| 6 | 6.8 | | 13.6 | | | | | | | |
| 7 | 10.0 | | 5.0 | | | 2.5 | | | 2.5 | |
| 8 | 9.5 | | 1.9 | | 1.9 | | | 1.9 | | |
| 9 | 13.6 | | | | | | | | | |
| 10 | 6.1 | | 1.2 | | 1.2 | 2.4 | | | | |
| 11 | 4.1 | | 4.1 | | 1.0 | 1.0 | | | | |
| 12 | 10.2 | .8 | 1.7 | | | .8 | | | | |
| 13 | 6.5 | | 2.2 | | .7 | 1.4 | | | | |
| 14 | 9.4 | .6 | 1.3 | | | 1.3 | .6 | | | .6 |
| 15 | 3.8 | 1.6 | .5 | | .5 | | | | | |
| 16 | 2.9 | .5 | .5 | | | | | | | |
| 17 | 1.7 | | .8 | | | | | | | |
| 18 | 3.0 | | .8 | .4 | | .4 | | | | |
| 19 | .7 | .3 | .3 | | | | | | | .3 |
| 20 | .6 | | .6 | | .3 | .6 | | | | |
| 21 | .3 | | | | | | | | | |
| 22 | .8 | | .3 | | .3 | | | | | |
| 23 | .2 | .2 | | | | | | | | |
| 24 | .4 | | | | | .2 | | | | |
| 25 | .2 | | | | | | | | | |
| 26 | .2 | | | | | | | | | |

Type: Pioneer Hardwood Area "Q" (Saddle Lodge)

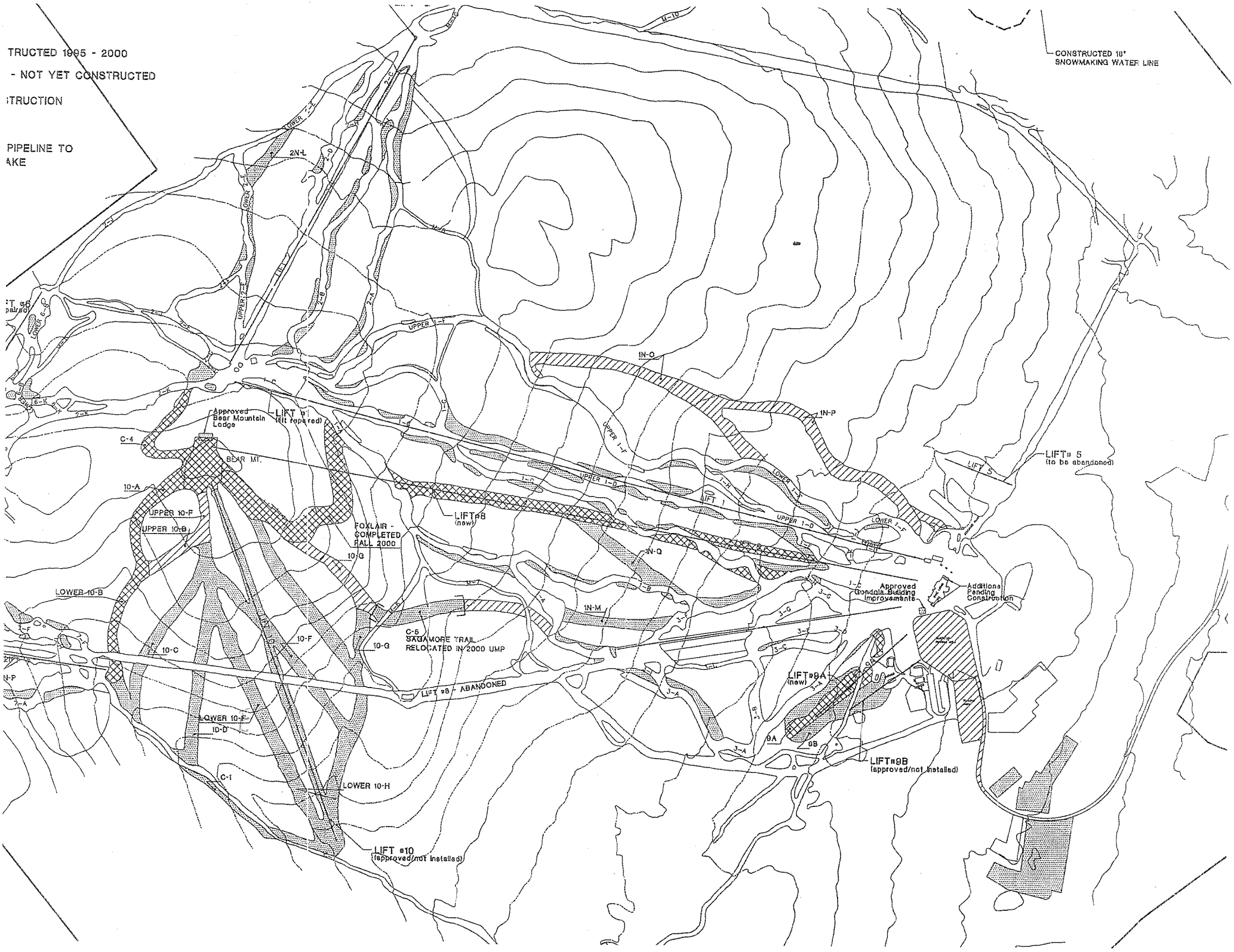
| Species | Red Maple | Yellow Birch | White Birch | Balsam Fir | Striped Maple | Red Spruce | Mountain Ash |
|---|---|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 4 | | 14.4 | 28.8 | 43.1 | 28.8 | | |
| 5 | | | 18.3 | 18.3 | 9.1 | 9.1 | |
| 6 | 6.4 | 12.8 | 25.5 | 6.4 | | 6.4 | 6.4 |
| 7 | 4.7 | | 9.4 | 4.7 | 4.7 | 4.7 | |
| 8 | 7.2 | 3.6 | 14.3 | 7.2 | 3.6 | | |
| 9 | | | 5.7 | | | 5.7 | 2.8 |
| 10 | 4.6 | 4.6 | 11.4 | 2.3 | | 2.3 | |
| 11 | | 1.9 | 1.9 | | | 1.9 | |
| 12 | | | 7.9 | | | 1.6 | |
| 13 | | | 2.7 | | | | |
| 14 | 1.2 | 1.2 | 5.9 | | | 1.2 | |
| 15 | | 1.0 | 3.1 | | | | |
| 16 | | 1.8 | | | | | |
| 17 | | | 1.6 | | | | |
| 18 | | 2.9 | .7 | | | | |
| 19 | | | | | | | |
| 20 | | .6 | | | | | |
| 21 | | | | | | | |
| 22 | | .5 | | | | | |
| 23 | | | | | | | |
| 24 | | .4 | | | | | |
| 25 | | | | | | | |
| 26 | | | | | | | |

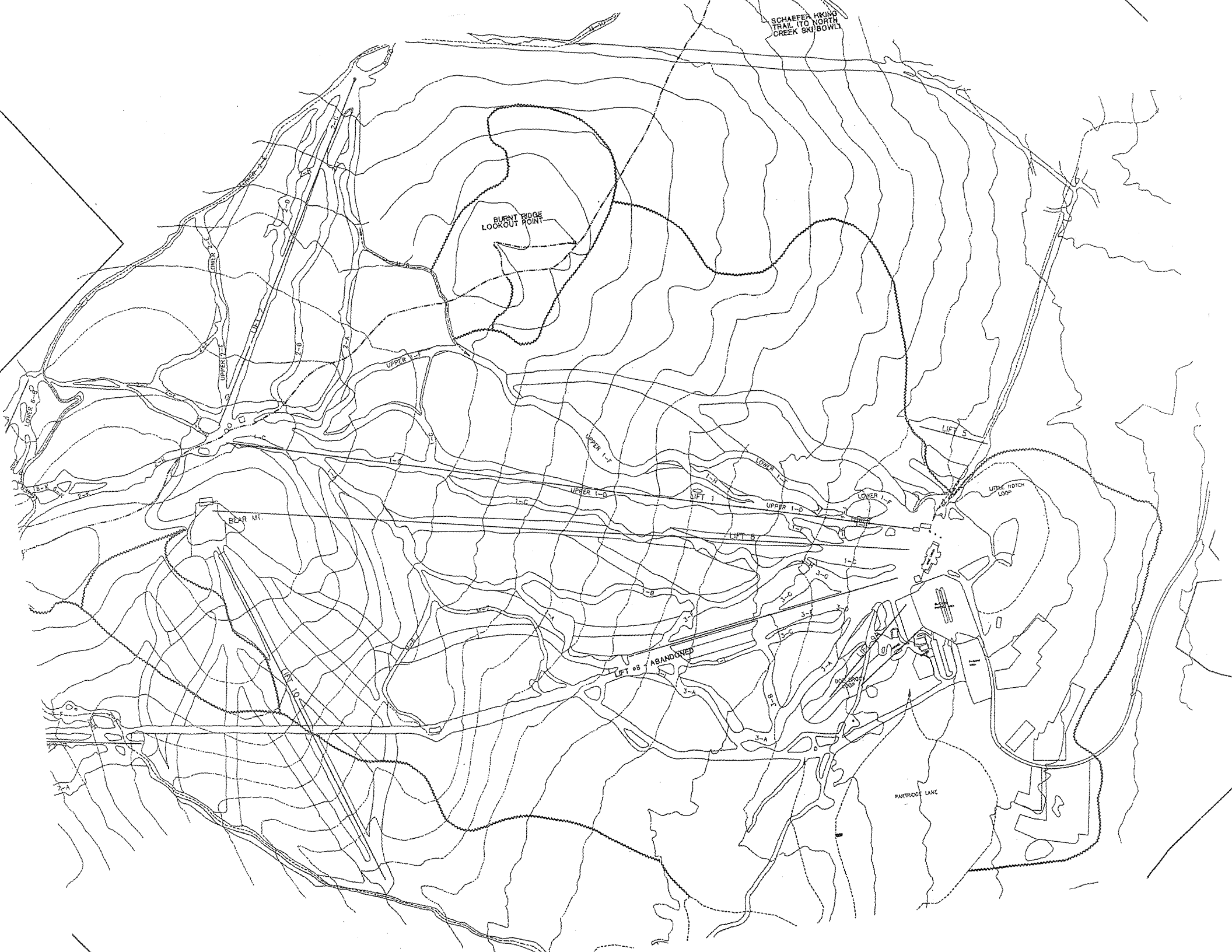
Type: Northern Hardwood Area "R" (North Chair)

| Species | Sugar Maple | Beech | Yellow Birch | Striped Maple | Red Spruce |
|---|---|---|---|---|---|
| DBH | Trees/A | Trees/A | Trees/A | Trees/A | Trees/A |
| 4 | 28.8 | 28.8 | | 28.8 | |
| 5 | 18.3 | | | | |
| 6 | 25.5 | 12.8 | | | |
| 7 | 37.4 | | | | |
| 8 | 21.5 | | | | |
| 9 | 5.7 | | 5.7 | | |
| 10 | 41.2 | 4.6 | 4.6 | | |
| 11 | 15.2 | | | | |
| 12 | 15.9 | | | | |
| 13 | 2.7 | | | | |
| 14 | 2.4 | 2.4 | 2.4 | | |
| 15 | 2.1 | 2.1 | 2.1 | | |
| 16 | | 1.8 | | | 1.8 |
| 17 | | | | | |
| 18 | 1.4 | 1.4 | 1.4 | | |
| 19 | | | | | |
| 20 | 1.2 | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | .8 | | | | |
| 25 | | | | | |
| 26 | | | | | |



Pete Gay Mountain
North Creek Reservoir
Roaring
Central Sch
Holcombville
Landing St
Water Tank
Roaring Bk
Creek
GORE MOUNTAIN
Pine Ridge
Straight Brook
Straight Bk
North
Ward Hill
Black Mtn Brook


TRUCTED 1995 - 2000
- NOT YET CONSTRUCTED
TRUCTION
PIPELINE TO
AKE
CONSTRUCTED 10" SNOWMAKING WATER LINE
Approved Bear Mountain Lodge
LIFT #1 (lift repaired)
BEAR MT.
FOXLAIR - COMPLETED FALL 2000
LIFT #8 (new)
C-6 SAGAMORE TRAIL RELOCATED IN 2000 UMP
LIFT #8 - ABANDONED
LIFT #10 (approved/not installed)
LIFT #5 (to be abandoned)
Approved Gondola Building Improvements
Additions Pending Construction
LIFT #9A (new)
LIFT #9B (approved/not installed)
UPPER 10-F
UPPER 10-B
LOWER 10-B
LOWER 10-F
LOWER 10-H
UPPER 1-D
UPPER 1-F
LOWER 1-F
LIFT 1
LIFT 5
1N-O
1N-P
1N-Q
1N-M
2N-L
C-4
10-A
10-C
10-D
10-F
10-G
C-1
9A
9B


SCHAEFER HIKING TRAIL (TO NORTH CREEK SKI BOWL)
BURNT RIDGE LOOKOUT POINT
LOWER 2-E
LOWER 2-C
UPPER 2-C
UPPER 1-F
LOWER 6-B
LOWER 1-F
UPPER 1-D
LIFT 1
LIFT 5
LIFT 8
LIFT 10
LIFT #8 - ABANDONED
BEAR MT.
LITTLE NOTCH LOOP
PARTRIDGE LANE

## SECTION III MANAGEMENT AND POLICY

### A. Orientation and Evolution of Management Philosophy

No revision to this section is necessary.

### B. Regulatory Issues

No revision to this section is necessary.

1. New York State Constitution Article XIV

No revision to this section is necessary.

a. Ski Trails

No revision to this section is necessary.

b. Vegetative Cutting

No revision to this section is necessary.

c. Non-Alienation

No revision to this section is necessary.

2. Adirondack State Land Master Plan

No revision to this section is necessary.

3. 1995 Unit Management Plan

The 1995 Gore Mountain Ski Center Unit Management Plan is still in force and governs permissible activities at Gore Mountain. Projects approved in the 1995 UMP are discussed in Section I.F. The 1995 Unit Management Plan was approved by the NYS DEC Commissioner on May 17, 1995 and was subsequently filed with the Adirondack Park Agency. Subsequent to its approval, the 1995 UMP was amended in November 1995 to provide for the development of a total of 10 miles of hiking trails to link the hamlet of North Creek with Gore Mountain, including the marking of a hiking trail to the summit, thus improving outdoor recreational opportunities at Gore Mountain. As such, a network of hiking trails was developed from the Ski Bowl Park to Gore Mountain including the Gore Mountain Summit, Rabbit Pond and North Creek Reservoir Trails.

The 1995 UMP was again amended in August 2000 to allow for the construction of an easier ski trail, Foxlair, to descend from the summit of Bear Mountain, the terminus of the new gondola. This trail occupies approximately 5.7 acres and traverses less difficult

terrain to accommodate skiers of lesser ability for the 2000-2001 season prior to the completion of the remaining POD 10 trails in the future. Correspondence pertaining to this amendment is included in Appendix 2, "Correspondence," and includes a memo from ORDA, a draft Amendment from NYSDEC dated August 11, 2000, and an amendment approval dated August 31, 2000, by the APA.

4. Environmental Conservation Law

No revision to this section is necessary.

5. Olympic Regional Development Authority Act

No revision to this section is necessary.

6. DEC - ORDA Memorandum of Understanding

No revision to this section is necessary.

7. Other Regulations

Future development of the improvements envisioned at the Town of Johnsburg Ski Bowl Park will be subject to a town permit, and potentially will require a permit from the Adirondack Park Agency should any regulatory controls be present, such as expansion of an existing use by 25% or more, any structures proposed that are 40 feet tall or more, etc. Additionally, the approval of the legislature is required in order to amend the public authorities law to allow ORDA to operate and manage ski and recreational facilities at Ski Bowl Park in the Town of Johnsburg. The bill, 5.774-Stafford/A.1282-Little, was passed by the legislature and was signed by the Governor in the Fall of 2000.

This bill received wide support from the community, including environmental interest groups. Appendix 2, "Correspondence," includes a letter from the Adirondack Council expressing their support.

## C. Management Goals and Objectives

Gore management has identified two goals for operation of the ski center.

1. Gore Mountain will continue to provide a safe, quality recreational experience to the public and promote both local and regional economic benefits through its responsibility to manage and operate Gore Mountain Ski Center to the highest standard.

2. Gore Mountain will seek to modernize facilities at Gore in order to improve skier safety, provide a higher quality recreational experience and increase local and regional economic benefits, while maintaining environmental quality.

The following specific objectives have been identified to implement the above goals.

1. Environmental Protection

   a. Gore Mountain Ski Center is a participator in Sustainable Slopes, which is the environmental charter for ski areas compiled by the National Ski Areas Association. Ski areas provide a quality outdoor recreation experience in a manner that complements the natural and aesthetic qualities that draws skiers to the mountains. Gore Mountain Ski Center is committed to improving environmental performance in all aspects of its operations and managing the area to allow for continued enjoyment by future generations. The Sustainable Slopes charter is provided in Appendix 6.

2. Public Use

   a. Gore Mountain will seek to develop new summer and fall usage of the Ski Center to provide greater year-round use of the facility by the public, consistent with Article XIV and the SLMP.

   b. Gore Mountain will work closely with the North Creek community and Town of Johnburg to provide information to visitors about the area and to cooperate in the establishment of a shuttle link between the Ski Center and North Creek and a physical ski link to Ski Bowl Park in order that public use may better help promote the economy of the area. Gore Mountain has produced a regional vacation planner to promote destination business.

   c. Gore Mountain will seek to increase the capacity of the ski area in concert with other modernization objectives in order to provide a higher quality skiing experience.

3. Management and Operations

   a. Gore Mountain management will seek to establish annual budgets and schedules in support of the proposed capital improvements plan and other management objectives.

   b. Gore Mountain will seek to improve infrastructure reliability in order to reduce the high frequency of breakdown, excessive staffing requirements and consequent financial drain.

   c. Gore Mountain will seek to reduce its operations and maintenance costs by replacing out-dated and aged equipment.

   d. Gore Mountain will seek to improve its economic return by making the mountain more attractive to skiers, and thus increasing ticket sales.

4. Skier Safety and Experience

   a. Gore Mountain will seek to improve skier safety and enjoyment by widening certain trails and improving certain trail intersections.

   b. Gore Mountain will seek to improve trail selection and create a better balance among trails in order to appeal to a greater cross-section of the skiing market by increasing the number of trails for the beginning and advanced skier.

5. Public Education

   a. Gore Mountain will continue to develop informational and interpretive graphics and displays which will educate the ski center's users to the historical, cultural and environmental conditions in the North Creek area as well as the Adirondack Park in general.

6. Capital Improvements

   a. Gore Mountain will implement a capital improvements program to achieve the above objectives. Specific elements are discussed in Section IV below.

## SECTION IV PROPOSED MANAGEMENT ACTIONS

This section describes the proposed management actions which form the basis of this Supplemental UMP, the use which is expected to result, and the proposed phasing and scheduling of actions. The actions and subsequent discussion of impacts and mitigating measures in Section V, are described at a sufficient level of detail to proceed without subsequent SEQRA or UMP review, provided they are carried out as substantially described in this document.

### A. Proposed Management Actions

Overall actions proposed for the 2002 UMP program at Gore Mountain are described in this section. Some of the actions were proposed and approved in the 1995 UMP/GEIS but never implemented. They remain unchanged and are to be considered still valid as part of this Five-Year Plan. They are included in the Five-Year Plan description but will be given further consideration in Section IV.D as to their SEQRA status.

1. General

The recommended development program under the Five-Year Plan encompasses several phases of detailed improvements covering the full spectrum of ski area facilities. This program is based on the Five-Year Plan for the ski area. See Figures 4-1 and 4-2, "2002 Gore Mountain UMP Master Plan (1 of 2) and (2 of 2)," respectively, which graphically illustrates the trails, lifts, and other improvements recommended for Gore Mountain.

2. Improve Infrastructure Reliability

a. Replacement and Modernization Plan

Much of the infrastructure at the Ski Center has reached the point of needing replacement. Gore management has a goal of creating a long term replacement and modernization plan to restore all such equipment, machinery, infrastructure and structures which are at the end of their useful life.

A defined replacement and modernization plan will specify key elements of the infrastructure needing upgrading and will establish a priority for upgrading as time and economic resources allow, or become available. The replacement and modernization of such infrastructure is balanced by management with new infrastructure that is desirable in order to achieve stated management goals.

The installation of electronic monitoring systems for various aspects of Ski Center operations would improve the efficiency of operation and provide a more reliable way to track operating conditions. Monitoring systems for the following Ski Center operating system components is desirable: snowmaking, electrical, lifts, buildings and weather.

3. Mountain Lodges

a. Rehab/Addition to Saddle Lodge (modified)

It is proposed that as a 2002 Supplemental UMP action, the Saddle Lodge be rehabilitated in its existing location instead of being relocated and rebuilt to 15,600 square feet as proposed (and approved) in the 1995 UMP/DGEIS.

Initially, the Saddle Lodge is proposed to be rehabilitated and expanded from 3,500 to 7,500 ± square feet, as shown in Figures 4-3, 4-4, 4-5 and 4-6, "Proposed Saddle Lodge Floor Plan," and "Saddle Lodge West, North and South Elevations," respectively. The existing concrete "igloo" on the south face of the building will be removed and a new building facade with windows, an entrance and a new concrete patio will be added. The tilted windows on the north face of the building will be removed and replaced with energy efficient windows at a normal angle and a deck will be added. The overall maximum height of the lodge will be unchanged. It is proposed that a physical connection consisting of a hallway corridor be extended to the existing ski patrol building so that ski patrollers can more easily access and utilize the Saddle Lodge facilities. The wastewater from the Saddle Lodge has already been will be piped to the existing wastewater treatment plan located in the base lodge area. If necessary, the lodge will continue to be expanded in phases to the 15,600 square feet, as approved in the 1995 UMP, that industry standards indicate is advisable. It will be architecturally compatible with the new Adirondack "great camp" theme for new construction at Gore.

b. Burnt Ridge Warming Hut

A small warming hut is proposed to be constructed on the summit of Burnt Ridge. It will be approximately 24x40 feet in size and less than 16 feet tall. It will house ski patrol activities and provide a warming hut space for skiers. It will be architecturally compatible with the new Adirondack "great camp" theme for new construction at Gore.

4. New Downhill Trails and Lifts

2. Selective Trail Widening to 200 Feet

It is proposed that additional trails be widened to 200 feet in order to enhance the skiing experience and to accommodate snow boarders. The proposed trail widening locations are indicated on Figure 4-1, "2002 Gore Mountain UMP Master Plan (1 of 2)." The proposed widenings are generally focused on the trail Hawkeye in the Straight Brook area, Lower Loop to Lower Pete Gay in the North Quad area, Wild Air (the Northwoods Gondola lift line), Twin Fawns/Dipper Trails, Teaching Hill, parts of Sunway, and parts of and the bottom of the Showcase Trail on the east side.

There are 0.6 miles of existing trails that are 200 feet wide. There are 1.2 miles of approved and pending trail widenings to 200 feet, and there are 1.77 miles of trail

widening to 200 feet proposed as a 2002 UMP management action. The State Constitution, Article XIV, allows for a total of 8 miles of trail at Gore Mountain to be 200 feet wide. The total of existing, approved pending widening, and proposed 200 foot wide trails is 3.57 miles, well below the allowed amount.

b. Triple Chair (Lift #1) Replacement

With regard to proposed lift work, it is proposed that the 17 year old Adirondack Express triple chair be replaced with a new quad lift, possibly with a bubble. This lift is the oldest high speed lift in North America. The termination point of this lift at the Saddle area will be adjusted in order to alleviate skier traffic congestion in this area.

c. Replace and Re-extend Lift #6

Lift #6, the High Peaks Chair, will be replaced with a new quad lift and will be re-extended in its existing cleared lift line to its former termination point. (The existing lift utilizes a smaller drive which is why the existing termination point falls short.)

d. Relocate and Replace J-Bar (Lift #4)

Lift #4, the J-Bar, will be relocated and replaced, as shown on Figure 4-1, "2002 Gore Mountain UMP Master Plan (1 of 2)," in order to facilitate the rehabilitation of the base lodge and reconstruction of the service drop-off (approved in the 1995 UMP) and to improve traffic circulation adjacent to the base lodge.

e. Magic Carpet Lifts at Learning Center

Two "Magic Carpet" lifts will be installed in previously developed ski slopes at the Learning Center. "Magic Carpet" lifts are essentially on-grade escalators or moving walkways. Photo 4-1 illustrates a "Magic Carpet" lift.

f. New Lifts and Trails to Develop Connection with Town of Johnsburg Ski Bowl Park

Two new quad lifts, one new lift (either chair or surface) and related trails will be constructed in order to create an alpine ski trail connection with the Town of Johnsburg Ski Bowl Park. These are referred to as Pods 11 and 12 as shown on Figure 4-2, "2002 Gore Mountain UMP Master Plan (2 of 2)." Lift #12 is a detachable quad and is proposed to extend from Ski Bowl Park onto lands of the Ski Center. A mid-station unloading station is planned to provide a stand alone pod of skiing at the Ski Bowl Park. The southernmost ski trail is the existing Hudson River snowmaking pipeline trail, which will be widened. The lift continues to a point uphill of the existing pipeline crossing of Roaring Brook (constructed when the snowmaking pipeline was extended) so that skiers can access the base of Lift #11. Lift #11 is a fixed quad and will discharge skiers onto the summit of Burnt Ridge. Skiers can then access either the east side of the mountain onto the Twister Trail, the north side onto the Tahawus Trail or back to the base of Lift

Photo 4 - 1 "Magic Carpet" lift

#11. This will allow skiers who access the mountain from Ski Bowl Park to access all terrain at Gore Mountain. Lift #13 will either be a double chair or a surface lift and will extend from connector trails at Tahawus and Upper Twister to the summit of Burnt Ridge. This lift will function strictly as a transport lift to assist skiers wanting to return to the North Creek Ski Bowl without traversing flat terrain in the vicinity of the reservoir.

The trails in Pods #11 and #12 will average 80 to 120 feet in width, and will be maintained (included snowmaking) by Gore Mountain staff. The Town of Johnsburg will be making the appropriate permit applications for the proposed improvements to Ski Bowl Park. Gore Mountain staff will manage and operate Ski Bowl Park facilities, which will include a tubing park, snowboarding park, alpine ski trails, sledding hill, skating rink, and related snowmaking, ski patrolling, ticket and food concession sales, equipment rental, lodge and parking. Legal and contractual agreements with the Town are needed in order to develop this action.

5. Tubing Hill

A tubing hill with a surface lift is proposed to be developed to the west of the Bear Mountain summit. The tubing hill will be about 120 feet wide and will be accessed by the new Northwoods Gondola. The tubing park will supplement the winter recreation activities at the Ski Center. The Ski Center plans to have tube rentals available and to specify tubing ticket prices.

6. Snowmaking

It is the goal of Gore management to improve the efficiency and production of operations of the Ski Center by eliminating outdated and inefficient equipment and machinery. The replacement of outdated infrastructure will reduce operations and maintenance costs. The purchase of tower guns for use on steeper trails will eliminate or reduce the current manpower intensive snowmaking operations on the mountain. Currently, the snow grooming staff must manually locate snowmaking guns at intervals on steep terrain, usually at night. The use of tower guns would be a safer, quicker, less manpower intensive improvement which would have a significant improvement in the efficiency and production of snowmaking operations. It would reduce the amount of fuel necessary to power snowmobiles, it would allow personnel to do other things, it would provide the desired snow coverage faster and more efficiently, and it would be a more effective way to provide snow coverage on steeper terrain such as the Rumor trail.

In 1995, the goal for the snowmaking system capacity was to have coverage of 1.5 feet of snow on each trail by Christmas. However, el Niño and la Niña have periodically created inconsistent temperatures for efficient snowmaking operations. In order to facilitate snowmaking, it is desirable to increase the amount of water that can be pumped from the snowmaking water reservoir to 6,800 gallons, so that when the temperature is right, snowmaking on trails can be concentrated, allowing quicker snow coverage on more terrain at one time.

The water withdrawal from the Hudson River will continue to be within the limits assessed in the 1995 UMP. Specifically, an upper limit of 5,000 gallons per minute (gpm) was specified and approved. The pump station at the river was designed to accommodate four pumps, each with a capacity of 1,200 gpm. Currently, there are two pumps with a capacity of 1,200 gpm each and two pumps with a capacity of 400 gpm each, for a total current pumping capacity of 3,200 gpm. The next pump upgrade will replace one of the 400 gpm pumps with a 1,200 gpm pump. The succeeding pump replacement will replace the other 400 gpm pump with a 1,200 gpm pump.

In conjunction with the need to increase the capacity to pump water from the reservoir, is the need to increase the air compressor capacity and modernize the compressors currently utilized. It is desirable to have 40,000 cubic feet per minute (cfm) of air available. Currently, there is 30,000 cfm available, but 12,000 cfm of this is drawn from rented compressors, and another 13,000 cfm of this is 20 years old. If the air compressor system is modernized using the electrical system with the new higher distribution voltage built since 1995, snowmaking efficiency can be improved because the compressors can be put up on the mountain at the necessary delivery points. Additionally, this is more efficient because the compressors operate better at higher elevations, that is, it is possible to move more air with the same horsepower, or to move the same amount of air with less horsepower. An additional benefit would be the ability to utilize the waste heat from the compressors in on-mountain lodge(s) radiant lodge heat systems. The snowmaking pumphouse is a series of additions constructed over the years. A new shell will be installed over the equipment which will also include a maintenance hoist. Gore also needs to increase its inventory of snow guns and hoses in order to provide the desired coverage.

The higher voltage accepted from Niagara Mohawk Power Corporation since 1995 provides service at 34,500 volts and allows distribution of electrical power at 34,500 volts to some parts of the mountain. Other portions of the mountain are serviced at 4,800 volts. This enables Gore Mountain to run more loads off of one line instead of having many lines. The large loads are served by the 34.5 kV lines at that voltage which increases energy efficiency since voltage is not transformed to lower energy levels which cause energy loss. Gore will continue to place electrical distribution lines throughout the infrastructure components, and to utilize transformers to reduce the voltage to the specific motor size.

7. Bear Mountain Observation Tower

Construction of an observation tower in proximity to the Bear Mountain Lodge would enhance the environmental experience of recreators and sightseers, and would provide an educational experience which would increase the appreciation of the public for the significant and beautiful wilderness of the Adirondack Park within which the Ski Center is located. Such a facility would provide an additional opportunity for the public to understand the nature of the setting of the Ski Center in relation to the Adirondack Park in its entirety, and would provide a perspective on the developed Ski Center facility in relation to the larger Park. The tower is proposed to be 50 feet tall.

The NYSDEC has recommended that the existing Gore Mountain Fire Tower not be opened to the public. Refer to the December 8, 1999 NYSDEC interdepartmental memorandum provided in Appendix 2, "Correspondence," wherein it is noted that the extensive modifications made to the tower over the years have made predicting its behavior more difficult. As noted in the memorandum,

> "The multiple and sundry repairs and retrofits that have been made to [the tower] over the years have, in effect, conspired to preclude it from functioning as... or even appearing as, an original Aermotor fire tower. If such a facility is desired on Gore Mountain then the public would be best served with a bought or borrowed tower installed at another location on the mountain."

NYSDEC Region 5 staff indicated that there are no fire towers available to reuse at the ski center, and NYSDEC does not need the proposed tower to function as a fire observation tower. The proposed tower may be constructed to resemble the traditional fire towers in the Adirondacks.

### B. Projected Use

With reference to Table 2-10, "Public Usage of Gore Mountain Ski Center," it can be seen that ticketed winter visits to the Ski Center increased by approximately 20% from 1994 to 2000, from 100,461 to 120,017 ticketed skier visits.

The number of season pass holder visits has increased over 400% over the same period, from 6,344 to 25,233, based on industry standard multipliers

The peak days of attendance continue to be within the February Presidents' Week, with a peak day of 5,391 on February 20, 2000.

Summer visits for hiking, mountain biking and sightseeing is approximately 10,400 recreators.

It is anticipated that these trends will continue, and as the 1995 UMP management actions are implemented, the goal of 7,000 SAOT will be approached.

## C. Actions Approved in the 1995 UMP/GEIS which are a Part of the Foregoing Five-Year Plan

### 1. General

This section discusses those management actions remaining to be implemented from the approved 1995 UMP/GEIS which are compatible with and are part of the Five-Year Plan which was described in Section IV.A. Had implementation of these actions been completed prior to the preparation of this Supplemental UMP/EIS the maximum capacity of Gore Mountain would have increased to 7,000 SAOT.

These actions and their related potential environmental impacts and suggested mitigative measures were discussed in detail in the 1995 UMP/GEIS and were subject to a thorough SEQR review. They are considered, therefore, to be approved actions which can be implemented at any time by ORDA and are not subject to reconsideration under this SEQR process. However, where such improvements result in impacts which are cumulative with those discussed in this Supplemental UMP/DGEIS, such impacts are considered in Section V.

The following components of the foregoing Five-Year Plan which were described in Section IV.A constitute those actions remaining to be implemented and which are still valid from the 1995 UMP/EIS. Table 1-1, "Status of 1995 UMP (with Carryover 1987 Actions)," indicates which management actions approved in the amended 1995 UMP are completed, pending construction, modified in the 2002 Supplemental UMP or are abandoned altogether.

Also refer to Figure 1-2, "Status 1995 Gore Mountain UMP Alpine Trails and Infrastructure," and Figure 1-3, "Status 1995 Gore Mountain UMP Backcountry Trails."

### 2. Construct Topridge Quad (POD 10) Lift and Trails

The Topridge Quad (POD #10) lift and trails will be constructed as detailed in the 1995 UMP/DGEIS. The Foxlair Trail was constructed in Fall 2000 as per approval of an amendment to the 1995 UMP. The second beginners lift, Lift 9B, will not be built in the location as indicated in the 1995 UMP nor will the second half of the beginners trail. The lift will be installed as a triple chair (Lift 9B) and will be located in front of the Learning Center. Figure 4-1, "2002 Gore Mountain UMP Master Plan (1 of 2)," illustrates its location as does Figure 4-8, "Learning Center Site Plan."

### 3. Trail Improvements

Additional trail improvements identified in the 1995 UMP will also be constructed. Refer to Table 2-4, "1995 UMP Trail Work Status."

4. Bear Mountain Summit Lodge Construction

The new summit lodge on Bear Mountain that was approved in the 1995 UMP will be constructed. However, the wastewater will be piped to the existing wastewater treatment plant located proximate to the base lodge instead of constructing a separate plant for on-mountain lodges, as was proposed in the 1995 UMP.

5. Base Lodge and Saddle Lodge Rehabilitation

The rehabilitation of the base lodge, including the loading dock, will be completed, as identified in the 1995 UMP. This will include rehabilitation of and addition to the old gondola loading station into a Learning Center.

The Saddle Lodge, however, will not be demolished and rebuilt in a new location as identified in the 1995 UMP. Instead, the existing Saddle Lodge will be rehabilitated in its existing location. Refer to Section IV.A.3.a., above.

6. Development of Learning Center

The former gondola loading building will be rehabilitated and expanded to develop the Learning Center, as approved in the 1995 UMP. It will consist of approximately 15,000 square feet of floor area. Since 1995 considerable attention and planning has been given to the Center by Gore staff. It is planned that the Center will house all nursery and children's ski school program functions as well as all teaching functions. Figure 4-7, "Schematic Learning Center Building Plan," illustrates the floor plan concept. Figure 4-8, "Learning Center Site Plan," illustrates the core of the trail/slope side Learning Center, including lifts.

It is prudent to consolidate all teaching and nursery functions at this location. It will present a more efficient facility with larger space than currently is allocated to this function. It will also allow for an improved student/instructor ratio.

The location is convenient for skiers in that it is near the new drop-off and proximate to the main parking lot. It will also allow for one stop service to obtain lift tickets, rentals, lesson registration and check-in and day care.

The trail terrain is ideal for learning with slopes ranging from beginners to novice in the complex. Installation of the two "Magic Carpets" will make trail access much easier for both children and beginners.

One of the "Magic Carpets" will be fenced and the slope will only be accessible through the Learning Center building. This will provide for increased security and management of young children.

7. Parking and Access Road/Drop Off Improvements

The parking areas proposed to be built as part of the 1995 UMP will be constructed. The access road/drop off improvements were partially constructed in the Summer of 2000 and will be completed. Refer to Figure 1-2, "Status 1995 Gore Mountain UMP Alpine Trails and Infrastructure."

8. Maintenance Complex

The reconfiguration of the maintenance complex as described in the 1995 UMP may be abandoned. The reconfigured Learning Center and beginners area may not require the reconfiguration of the maintenance area. The maintenance facility will, however, need to be modernized and improved.

## D. Prioritization of Management Actions

As previously mentioned, the Five-Year Plan is proposed to be accomplished in several phases of development.

Through the course of the phases, progress evaluations will be conducted annually, work compared with the goals and objectives, and the project refocused as deemed necessary by Gore and ORDA. The results of this annual review will be a budget for the next phase of work that can be taken to the appropriate agencies for approval prior to the beginning of the work period.

The proposed phases are as follows:

Phase 1. 2002 Construction Season

- Begin Mountain Infrastructure Modernization – 2002 UMP Management Action.
- Complete Sagamore Trail – 1995 UMP Management Action.
- Complete Water/Sewer Upgrades for On-Mountain Lodges – Modified 1995 UMP Management Action.
- Begin Tower Gun Installation for Snowmaking – 2002 UMP Management Action.
- Install 2 "Magic Carpet" lifts at the Learning Center.
- Complete Pod #10 (Bear Mountain Summit to Straight Brook Base) – Topridge Quad Lift, Trails, Snowmaking – 1995 UMP Management Action.
- Develop Learning Center in Vacant Gondola Loading Building – Complete Pod #9 Lift and Trail, Building Remodeling and Addition, as revised, 2002 UMP Management Action – 1995 UMP Management Action.
- Remodel Saddle Lodge – Modified 1995 UMP Management Action.
- Replace Lift #1 with Quad – 2002 UMP Management Action.
- Continue Tower Gun Installation for Snowmaking – 2002 UMP Management Action.
- Re-extend and replace Lift #6 to its original termination point – 2002 UMP Management Action.

Phase 2. 2003 Construction Season

- Continue Mountain Infrastructure Modernization – 2002 UMP Management Action.
- Continue Tower Gun Installation for Snowmaking – 2002 UMP Management Action.
- Remodel Base Lodge (Including Loading Dock) – 1995 UMP Management Action.
- Relocate/Replace Lift #4 (J-Bar) in Old Beginners Area – 2002 UMP Management Action.
- Develop Bear Mountain Summit (Tubing Hill, Observation Tower) – 2002 UMP Management Action.
- Develop 200' Wide Trails – 2002 UMP Management Action.
- Perform Safety Widenings – 1995 UMP Management Action.
- Complete Parking/Circulation Improvements – 1995 UMP Management Action.

Phase 3. After 2004

- Construct Summit Lodge on Bear Mountain – 1995 UMP Management Action.
- Continue Mountain Infrastructure Modernization – 2002 UMP Management Action.
- Continue Tower Gun Installation for Snowmaking – 2002 UMP Management Action.
- Install Lifts #11 and 12 to Ski Bowl Park – 2002 UMP Management Action.
- Develop Trails and Snowmaking on Pods #11 and 12 – 2002 UMP Management Action.
- Complete all 1995/2002 UMP remaining management actions.

NEW MANAGEMENT ACTIONS

1. IMPROVE INFRASTRUCTURE RELIABILITY
-Create a long term replacement and modernization plan to restore all equipment, machinery, infrastructure, and structures which are at the end of their useful life

2. BASE AND MOUNTAIN LODGES AND AMENITIES
-Rehab / addition to Saddle Lodge

3. NEW DOWNHILL TRAIL AND LIFTS
-Selected trail widening
-Triple chair (lift 1) relacement with new quad with bubble
-New lifts and trails to create connection with North Creek Ski Bowl (lifts 11, 12 and 13)
-Relocate / replace Lift #4
-Relocate / replace Lift #3 with new quad
-Re-extend / replace Lift# 6 with new quad
-Extend glade skiing

4. TUBING HILL
-Bear Mountain runs and one surface lift

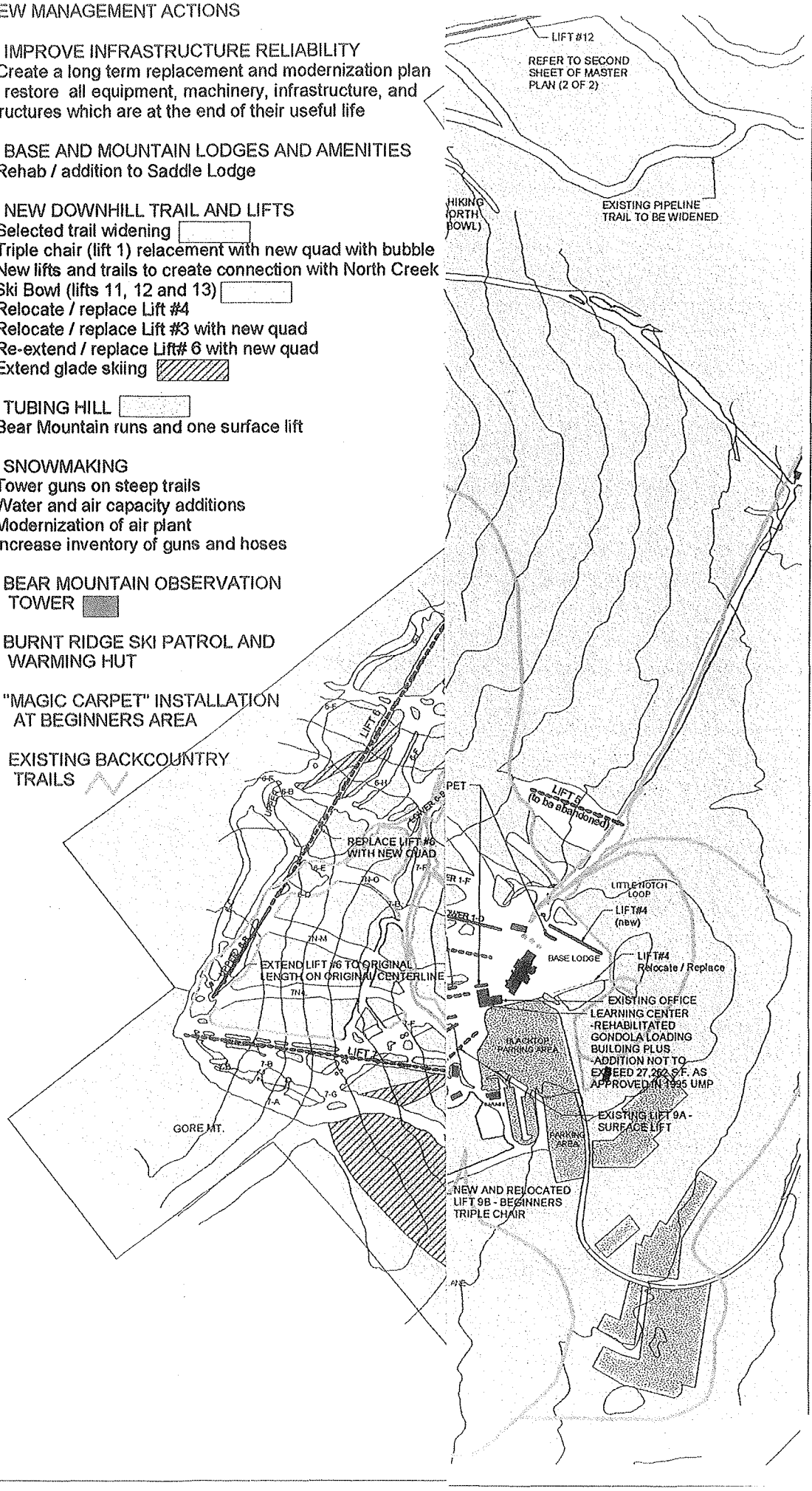
5. SNOWMAKING
-Tower guns on steep trails
-Water and air capacity additions
-Modernization of air plant
-Increase inventory of guns and hoses

6. BEAR MOUNTAIN OBSERVATION TOWER

7. BURNT RIDGE SKI PATROL AND WARMING HUT

8. "MAGIC CARPET" INSTALLATION AT BEGINNERS AREA

9. EXISTING BACKCOUNTRY TRAILS





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Olympic Regional Development Authority

GORE MOUNTAIN

Unit Management Plan and Environmental Impact Statement
2002 GORE MOUNTAIN UMP MASTER PLAN (1 of 2)

North

0 1000 Feet

Scale: 1"= 1,000'

Figure 4-1

Project: 00030
Date: 11/01
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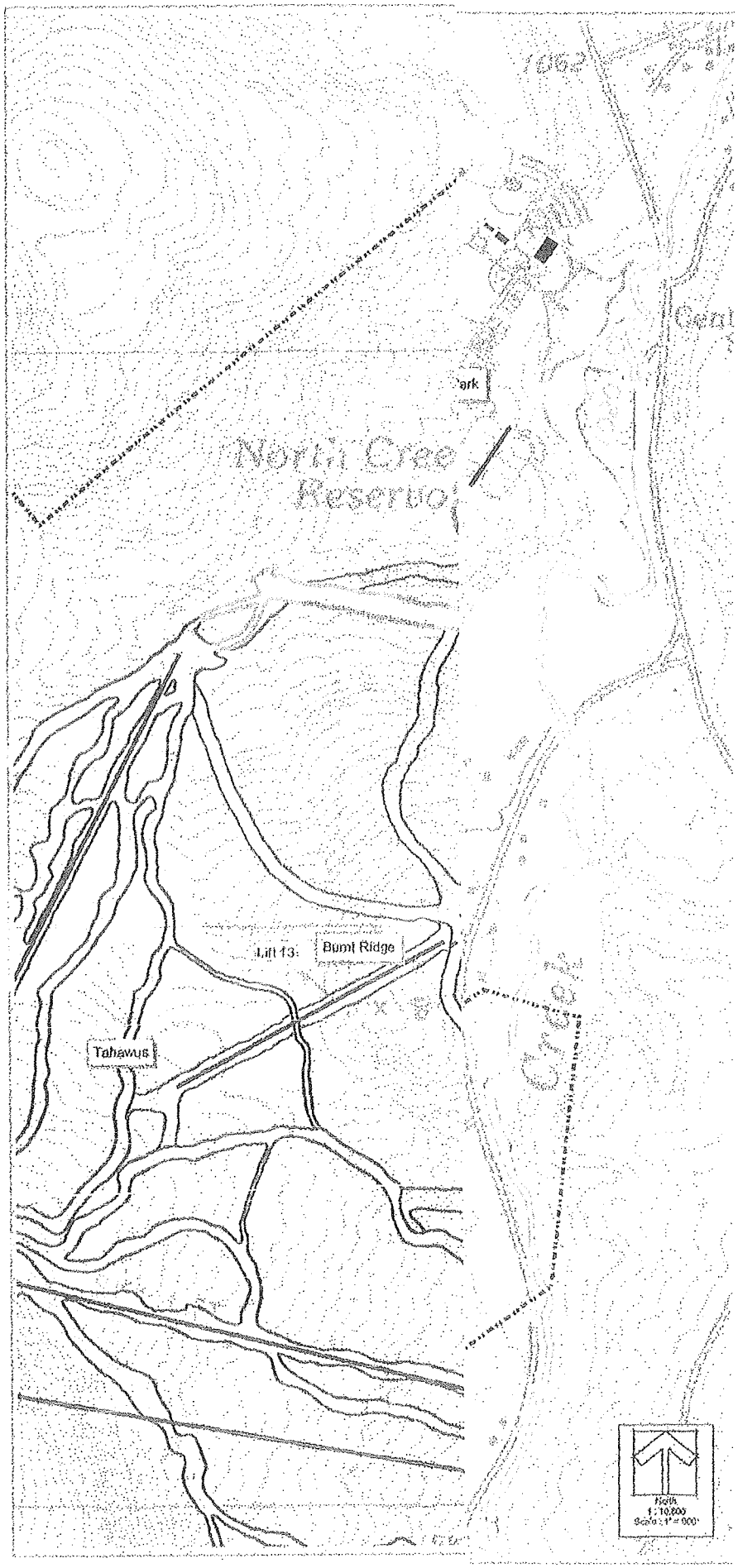


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Design
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GORE MOUNTAIN

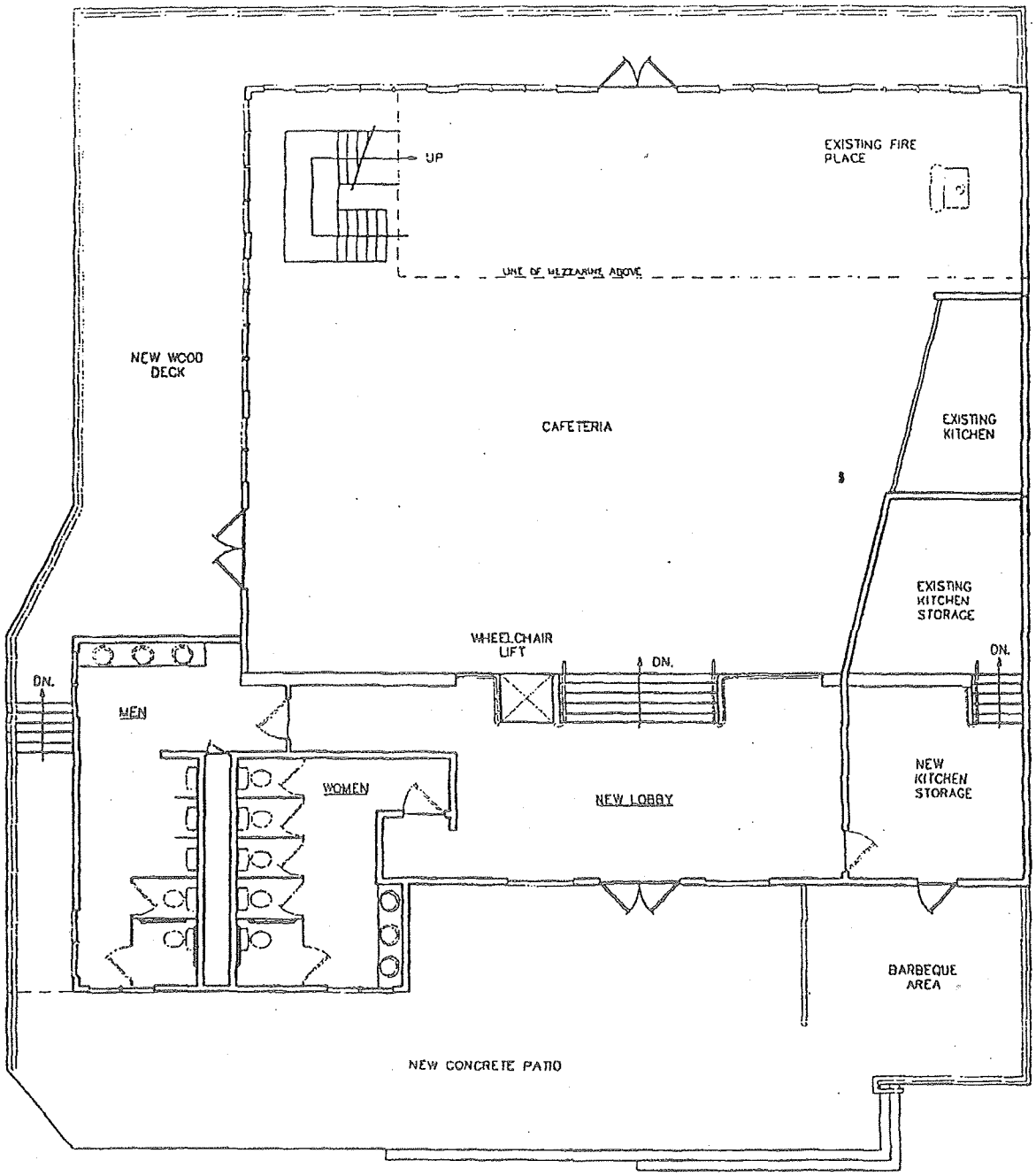
Unit Management Plan And
Environmental Impact Statement

Title: 2002 GORE MOUNTAIN UMP MASTER PLAN (2 OF 2)

Revisions

Project 00030
Date 3-1-01
CAD #

Figure 4-2




# FLOOR PLAN

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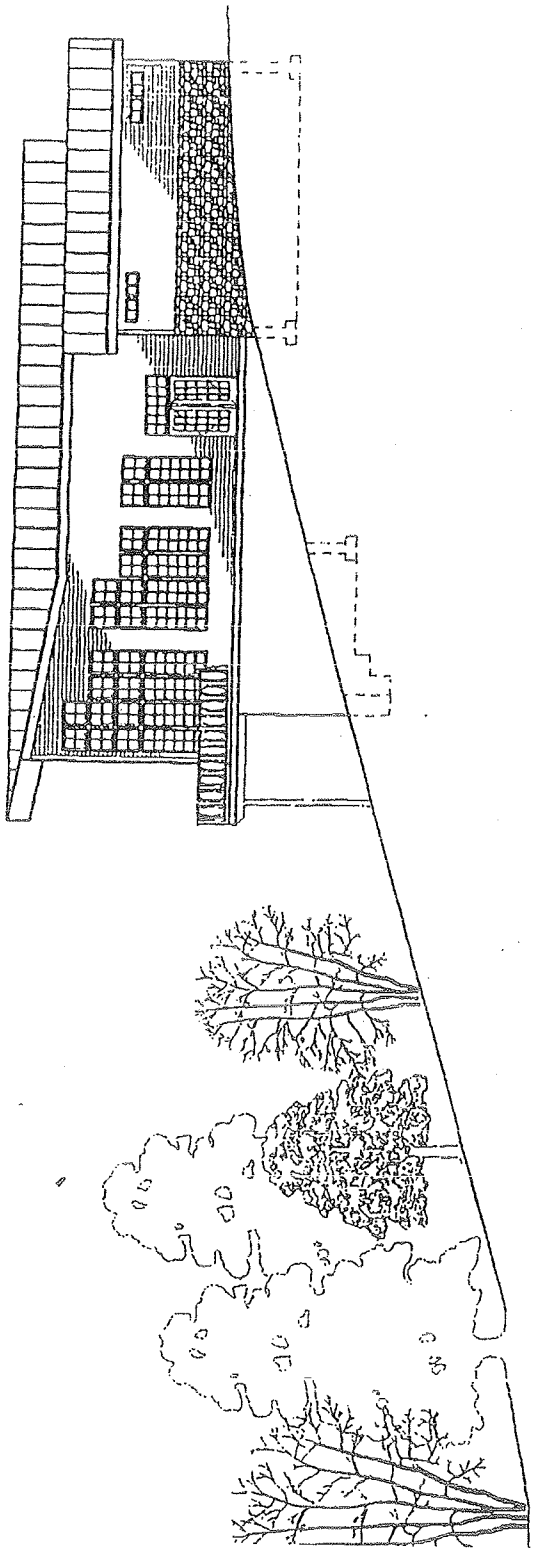
Unit Management Plan And Environmental Impact Statement

Title: PROPOSED SADDLE LODGE FLOOR PLAN

Drawing 4-3

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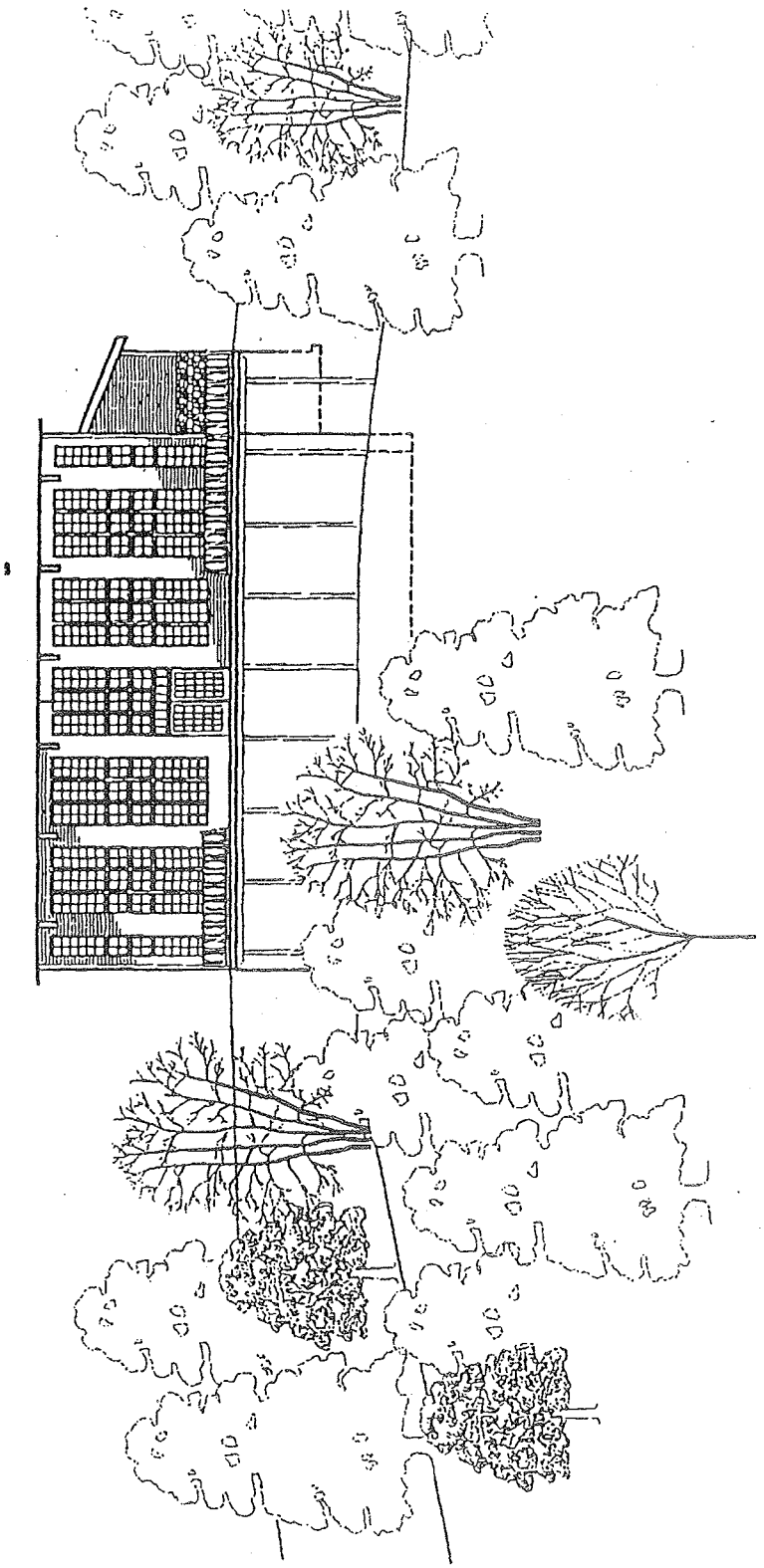
OLYMPIC REGIONAL DEVELOPMENT AUTHORITY

Unit Management Plan And
Environmental Impact Statement

Title: SADDLE LODGE WEST ELEVATION

Drawing 4-4

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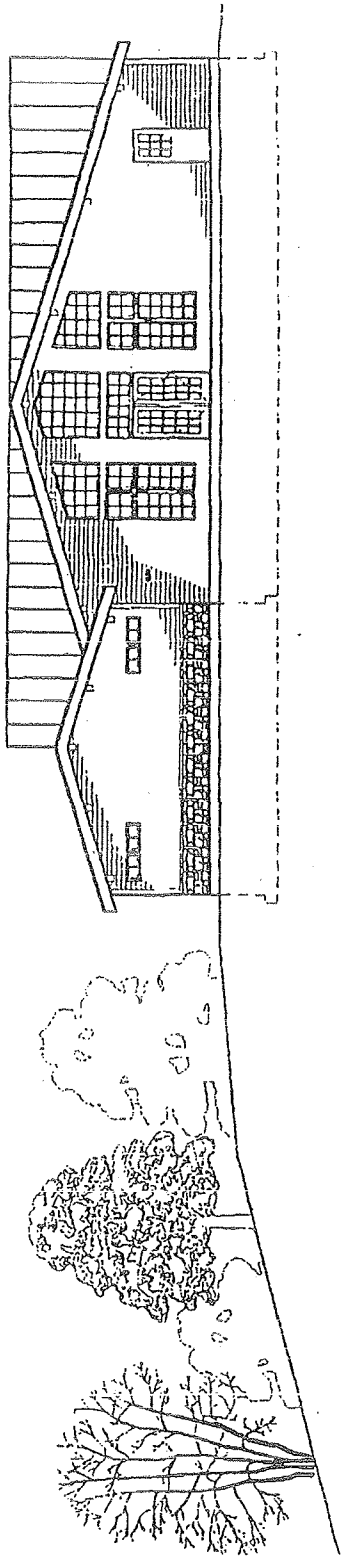
Unit Management Plan And
Environmental Impact Statement

Title: SADDLE LODGE NORTH ELEVATION

Drawing 4-5



SOUTH ELEVATION

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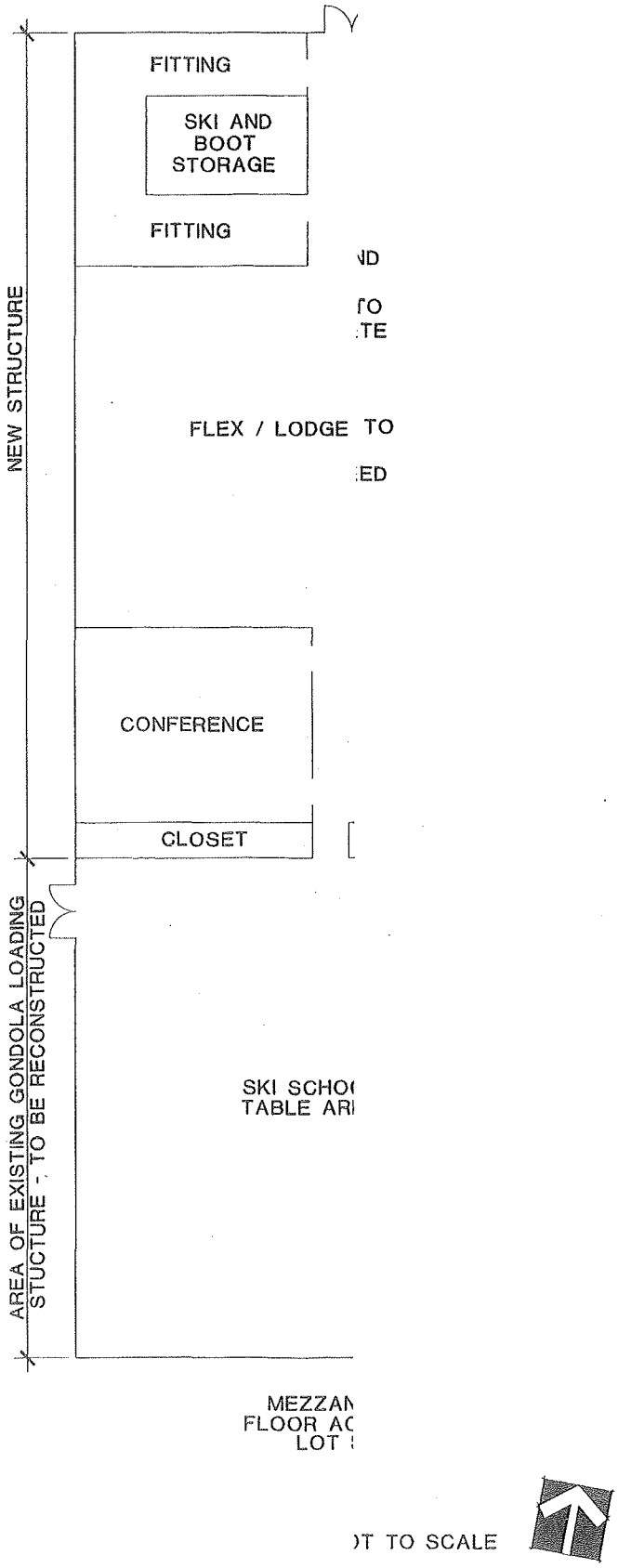
OLYMPIC REGIONAL DEVELOPMENT AUTHORITY

Unit Management Plan And
Environmental Impact Statement

Title: SADDLE LODGE SOUTH ELEVATION

Drawing
4-6

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CORE MOUNTAIN

Unit Management Plan And
Environmental Impact Statement

Title: SCHEMATIC LEARNING CENTER BUILDING PLAN

Revisions

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Date 3-1-01
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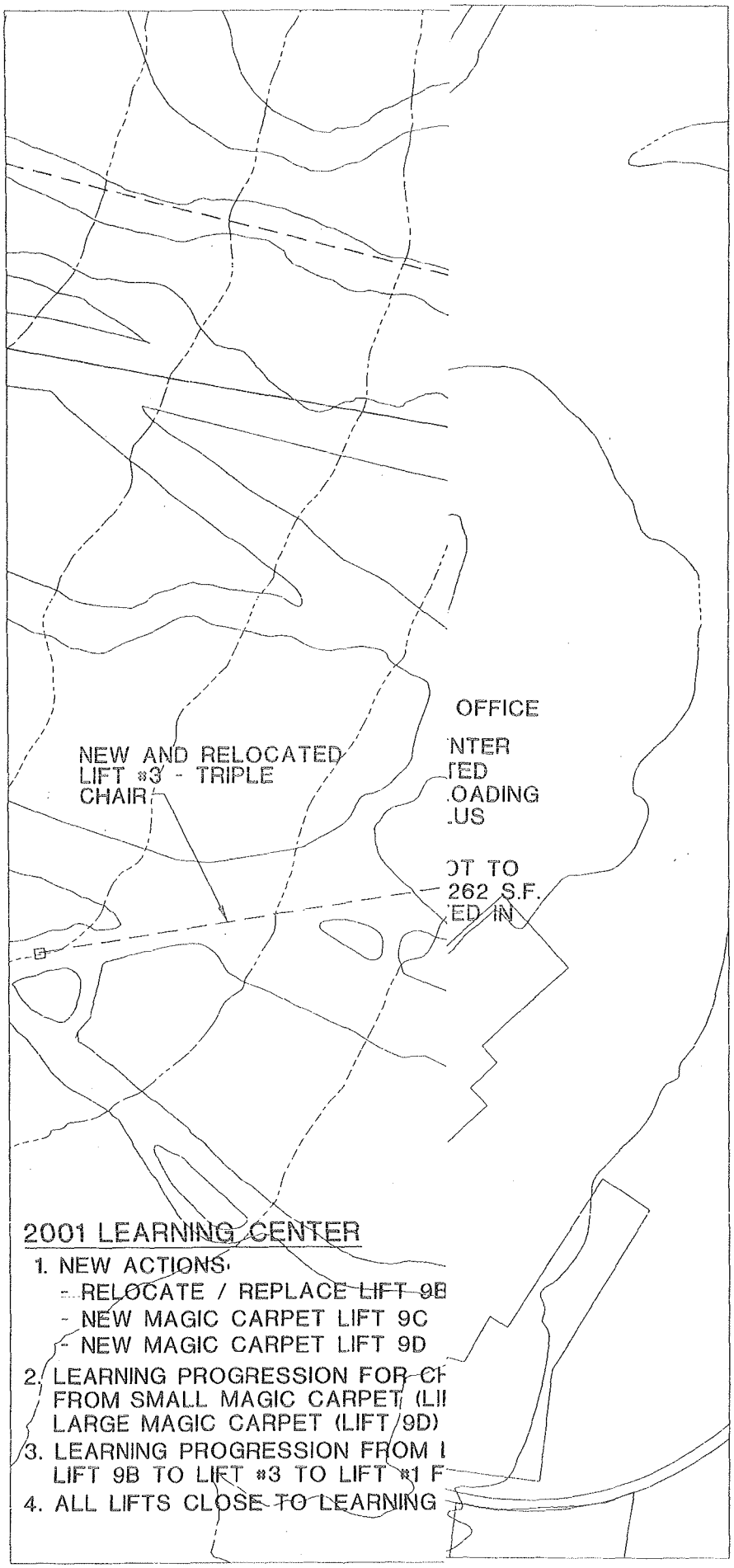
Figure 4-7

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CORE MOUNTAIN

Unit Management Plan And
Environmental Impact Statement
LEARNING CENTER SITE PLAN

Title:

Revisions

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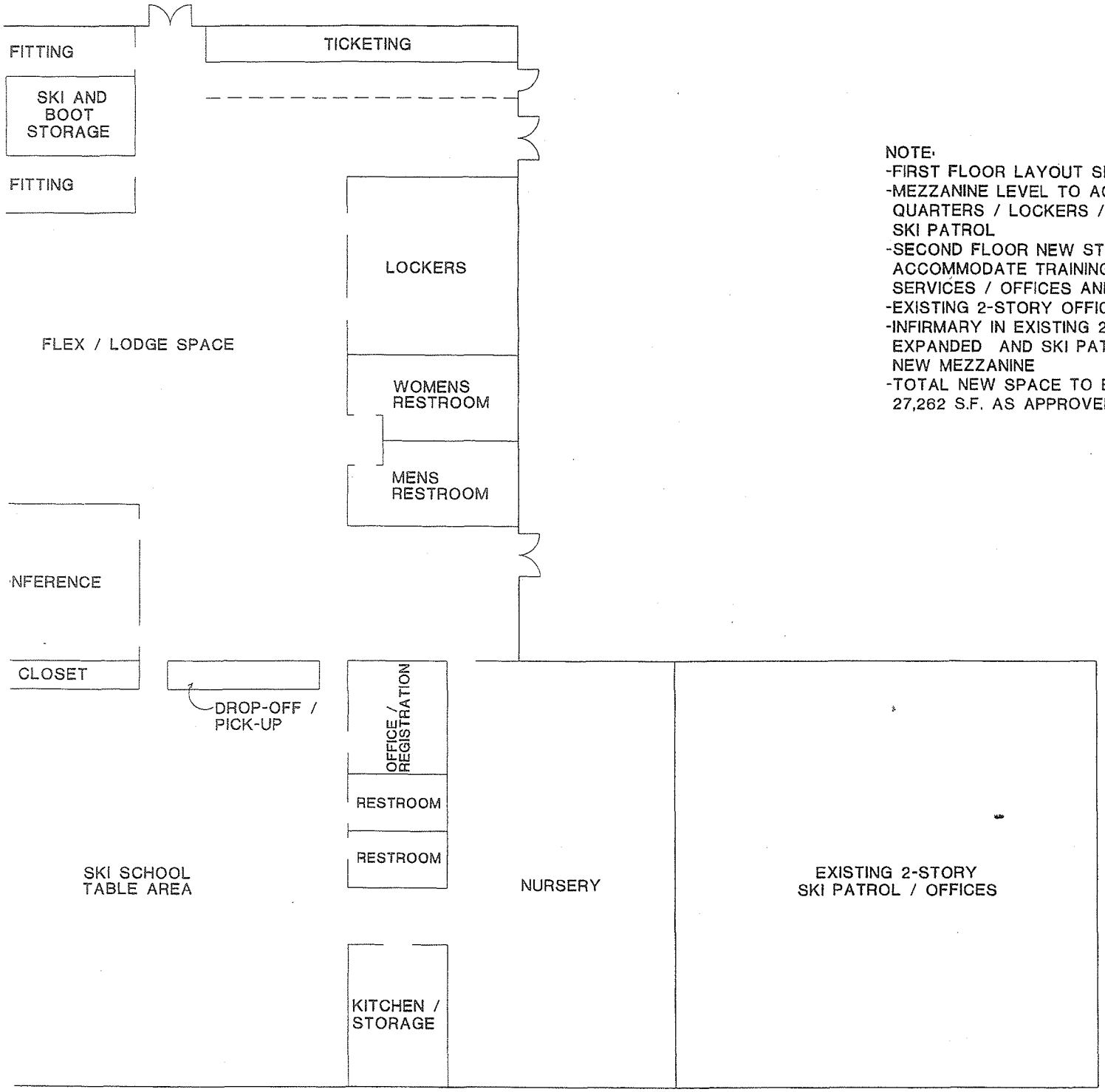
Date 3-1-01
CAD #

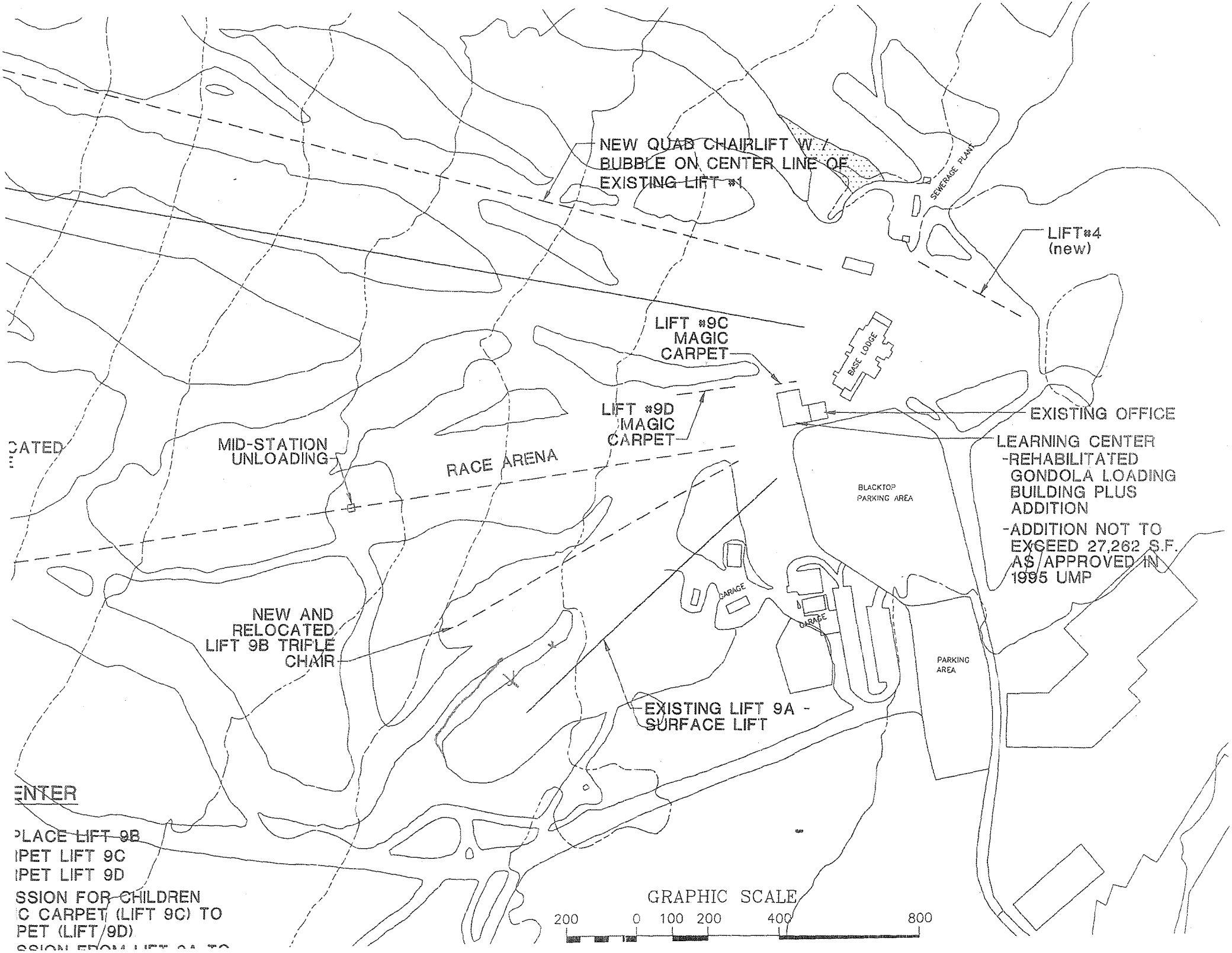
Figure 4-8




NOTE:
-FIRST FLOOR LAYOUT SHOWN
-MEZZANINE LEVEL TO ACCOMMODATE LIFT OPERATOR QUARTERS / LOCKERS / LUNCH ROOM / RESTROOMS AND SKI PATROL
-SECOND FLOOR NEW STRUCTURE AND GONDOLA BARN TO ACCOMMODATE TRAINING CENTER / COMPETITIVE ATHLETE SERVICES / OFFICES AND INSTRUCTIONAL SPACE
-EXISTING 2-STORY OFFICE TO BE RENOVATED
-INFIRMARY IN EXISTING 2-STORY BUILDING TO BE EXPANDED AND SKI PATROL SPACE TO BE RELOCATED TO NEW MEZZANINE
-TOTAL NEW SPACE TO BE CONSTRUCTED NOT TO EXCEED 27,262 S.F. AS APPROVED IN 1995 UMP

MEZZANINE LEVEL UNDER FIRST FLOOR ACCESSIBLE FROM PARKING LOT SIDE OF STRUCTURE

FIRST FLOOR LAYOUT


NEW QUAD CHAIRLIFT W / BUBBLE ON CENTER LINE OF EXISTING LIFT #1
SEWERAGE PLANT
LIFT#4 (new)
LIFT #9C MAGIC CARPET
BASE LODGE
LIFT #9D MAGIC CARPET
EXISTING OFFICE
LEARNING CENTER
-REHABILITATED GONDOLA LOADING BUILDING PLUS ADDITION
-ADDITION NOT TO EXCEED 27,262 S.F. AS APPROVED IN 1995 UMP
MID-STATION UNLOADING
RACE ARENA
BLACKTOP PARKING AREA
GARAGE
GARAGE
PARKING AREA
NEW AND RELOCATED LIFT 9B TRIPLE CHAIR
EXISTING LIFT 9A - SURFACE LIFT
CATED
ENTER
PLACE LIFT 9B
IPET LIFT 9C
IPET LIFT 9D
SSION FOR CHILDREN
C CARPET (LIFT 9C) TO
PET (LIFT 9D)
GRAPHIC SCALE
200 0 100 200 400 800

## SECTION V POTENTIAL IMPACTS AND MITIGATION MEASURES

The analysis in this Supplemental DGEIS provides site specific information for all aspects of the Supplemental UMP except the proposed non-winter facility improvements to the Town of Johnsburg Ski Bowl Park, which differs from the other actions in this UMP in that it is an off-site project to be completed in conjunction with another governmental entity. The Supplemental DGEIS identifies threshold issues and alternatives at a level of detail sufficient to demonstrate the environmental feasibility of the Ski Bowl Park winter facility improvements.

This section discusses potential impacts from the proposed 2002 management plan actions. Where significant impacts are identified, mitigation measures are proposed. Where applicable, the discussion is divided into on-mountain and off-mountain components.

Site specific impacts generally relate to natural resource features such as vegetation, soils or visual characteristics. The specific number of trees, soil or viewshed affected is presented for such impacts.

Lastly, traffic impacts have been based on peak use characteristics, since such occasions have the greatest impact to traffic.

There are no other projects of significance in the study area which affect the calculations in this section, hence a separate discussion of cumulative impacts has not been provided.

### A. Natural Resources

1. Vegetation

a. Impacts

On Mountain

Impacts to vegetation from the project will occur primarily in the area of the new Pods 11 and 12 lifts and trails on the north side of Burnt Ridge. There will also be some clearing to widen various parts of existing ski trails. The impacts will consist of cutting of all woody plant stems and removal of tree stumps.

Tree clearing will take place over approximately 110.9 acres.

All vegetative cutting at Gore Mountain Ski Center will be in compliance with the DEC tree cutting policy. Forest inventory data collected by NYSDEC (see Appendix 7, "NYSDEC Tree Cruise Data for Gore Mountain") have been used to estimate the magnitude of these impacts in terms of the number of trees to be removed. Table 5-1, "Summary of Vegetation Impacts," lists the estimated numbers of various species of forest trees that would be removed in creating new ski lifts and trails. The data for each

**Table 5-1. Summary of Vegetation Impacts**

Estimated number of trees to be cut for new and widened trails, and ski lifts.

| | Sagamore Trail | | Tubing Park | | Lift 11 Trails | | Lift 12 Trails | | Lift 13 | | Trail 1-A | | Trail 1-C and Lift 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh |
| Sugar Maple | 32 | 218 | - | - | 840 | 3,411 | 1,619 | 1,760 | - | 49 | 55 | 377 | 41 | 283 |
| Beech | 32 | 82 | - | - | 937 | 602 | 3,939 | 4,027 | - | 2 | 55 | 142 | 41 | 106 |
| Yellow birch | - | 22 | - | - | - | 433 | 209 | 290 | 5 | 19 | - | 38 | 44 | 123 |
| White Birch | 144 | 198 | 393 | 379 | 443 | 2,229 | - | 694 | 155 | 688 | - | 2 | 87 | 329 |
| White ash | - | 8 | - | - | - | 205 | - | 38 | - | - | - | 14 | - | 11 |
| Black Cherry | - | - | - | - | - | 36 | - | 2 | - | - | - | - | - | - |
| Ironwood | 16 | 14 | - | - | 161 | 99 | 30 | 18 | - | - | 28 | 24 | 21 | 18 |
| Red Spruce | 15 | 23 | 43 | 59 | - | 81 | - | 2 | - | 21 | - | - | - | 99 |
| Red Maple | - | 1 | - | - | 60 | 215 | - | 585 | - | 8 | - | 1 | - | 74 |
| basswood | - | 12 | - | - | - | 14 | - | 3 | - | - | - | 21 | - | 16 |
| Red Oak | - | 2 | - | - | 127 | 277 | 209 | 335 | - | - | - | 3 | - | 2 |
| Hemlock | - | - | - | - | - | 11 | - | 0 | - | 3 | - | - | - | - |
| Balsam Fir | 311 | 217 | 896 | 878 | 602 | 364 | - | - | 212 | 123 | - | - | 130 | 118 |
| Striped Maple | - | 5 | - | - | 1,047 | 171 | - | 132 | 352 | 62 | - | 9 | 87 | 59 |
| Aspen | - | - | - | - | - | - | - | 68 | - | - | - | - | - | - |
| Mountain Ash | 15 | 39 | 43 | 67 | - | - | - | - | - | 3 | - | - | - | 28 |
| **total trees cut** | **564** | **842** | **1,376** | **1,384** | **4,218** | **8,150** | **6,007** | **7,953** | **724** | **980** | **137** | **632** | **451** | **1,267** |
| **Clearing acreage** | 3.4 | | 3.6 | | 42.4 | | 24.2 | | 5.3 | | 3.6 | | 5.7 | |

**Table 5-1 (continued). Summary of Vegetation Impacts**

Estimated number of trees to be cut for new and widened trails, and ski lifts.

| | Upper and Lower Trail 1-D | | Trail 1N-Q | | Trail 1N-R | | Trail 1N-S | | Trails 2-F & lower 2-E | | Trail 2N-L | | Trail 3-A & Lift 9B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh |
| Sugar Maple | 62 | 425 | 10 | 69 | 13 | 93 | 15 | 81 | 80 | 138 | - | - | 60 | 414 |
| Beech | 62 | 160 | 10 | 26 | 13 | 35 | 27 | 15 | 21 | 18 | - | - | 60 | 156 |
| Yellow birch | 4 | 51 | 24 | 59 | - | 9 | - | 11 | 13 | 73 | 9 | 19 | - | 42 |
| White Birch | 8 | 32 | 48 | 181 | - | 1 | - | 4 | 27 | 293 | 17 | 66 | - | 2 |
| White ash | - | 16 | - | 3 | - | 4 | - | 6 | - | - | - | - | - | 16 |
| Black Cherry | - | - | - | - | - | - | - | 0 | - | - | - | - | - | - |
| Ironwood | 31 | 27 | 5 | 4 | 7 | 6 | 5 | 3 | - | - | - | - | 30 | 27 |
| Red Spruce | - | 9 | - | 55 | - | - | - | 0 | - | 87 | - | 20 | - | - |
| Red Maple | - | 8 | - | 40 | - | 0 | - | 3 | - | 25 | - | 15 | - | 2 |
| basswood | - | 24 | - | 4 | - | 5 | - | 0 | - | - | - | - | - | 23 |
| Red Oak | - | 4 | - | 1 | - | 1 | - | 7 | - | - | - | - | - | 4 |
| Hemlock | - | - | - | - | - | - | - | 0 | - | - | - | - | - | - |
| Balsam Fir | 12 | 11 | 72 | 65 | - | - | - | - | 377 | 192 | 26 | 24 | - | - |
| Striped Maple | 8 | 15 | 48 | 31 | - | 2 | - | - | 47 | 16 | 17 | 11 | - | 10 |
| Aspen | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mountain Ash | - | 3 | - | 15 | - | - | - | - | - | 8 | - | 6 | - | - |
| **total trees cut** | **186** | **784** | **217** | **552** | **34** | **156** | **46** | **131** | **565** | **851** | **70** | **159** | **150** | **694** |
| **Clearing acreage** | 4.3 | | 2.3 | | 0.9 | | 0.7 | | 3.4 | | 0.6 | | 3.9 | |

**Table 5-1 (continued). Summary of Vegetation Impacts**

Estimated number of trees to be cut for new and widened trails, and ski lifts.

| | Trail 3-C | | Trail 3-F | | Trails 3-E and 3-G | | Trail 6-H | | Trail 6-I | | Trail 6-L | | Trail 7-B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trees 3-4" dbh | Trees > 4" cbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh |
| Sugar Maple | 18 | 124 | 6 | 38 | 15 | 100 | - | - | - | - | - | - | - | - |
| Beech | 18 | 47 | 6 | 14 | 15 | 38 | - | - | - | - | - | - | - | - |
| Yellow birch | - | 12 | - | 4 | - | 10 | - | - | - | - | - | - | - | - |
| White Birch | - | 1 | - | 0 | - | 1 | 27 | 37 | 119 | 163 | 134 | 183 | 224 | 306 |
| White ash | - | 5 | - | 1 | - | 4 | - | - | - | - | - | - | - | - |
| Black Cherry | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Ironwood | 9 | 8 | 3 | 2 | 7 | 6 | - | - | - | - | - | - | - | - |
| Red Spruce | - | - | - | - | - | - | 3 | 4 | 12 | 19 | 14 | 22 | 23 | 36 |
| Red Maple | - | 0 | - | 0 | - | 0 | - | - | - | - | - | - | - | - |
| basswood | - | 7 | - | 2 | - | 6 | - | - | - | - | - | - | - | - |
| Red Oak | - | 1 | - | 0 | - | 1 | - | - | - | - | - | - | - | - |
| Hemlock | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Balsam Fir | - | - | - | - | - | - | 58 | 41 | 257 | 180 | 289 | 202 | 483 | 338 |
| Striped Maple | - | 3 | - | 1 | - | 2 | - | - | - | - | - | - | - | - |
| Aspen | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mountain Ash | - | - | - | - | - | - | 3 | 7 | 12 | 32 | 14 | 36 | 23 | 61 |
| **total trees cut** | **45** | **208** | **14** | **65** | **36** | **168** | **91** | **89** | **401** | **394** | **451** | **443** | **754** | **740** |
| **Clearing acreage** | 1.2 | | 0.4 | | 0.9 | | 0.2 | | 1.1 | | 1.2 | | 2.0 | |

**Table 5-1 (continued). Summary of Vegetation Impacts**

Estimated number of trees to be cut for new and widened trails, and ski lifts.

| | Trails 7-E and 7N-O | | Trail 7-F | | Trail 10-C | | Upper Trail 10-F | | Lower Trail 10-F | | Trail 10-G | | Upper Tannery | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trees 3-4" dbh | > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh |
| Sugar Maple | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Beech | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Yellow birch | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| White Birch | 21 | 29 | 359 | 491 | 277 | 188 | 106 | 52 | 276 | 358 | 273 | 325 | 93 | 127 |
| White ash | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Black Cherry | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Ironwood | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Red Spruce | 2 | 3 | 38 | 58 | 32 | 39 | 12 | 15 | 29 | 44 | 29 | 43 | 10 | 15 |
| Red Maple | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| basswood | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Red Oak | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hemlock | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Balsam Fir | 46 | 32 | 777 | 542 | 653 | 759 | 257 | 328 | 603 | 452 | 605 | 501 | 200 | 140 |
| Striped Maple | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Aspen | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mountain Ash | 2 | 6 | 38 | 98 | 32 | 28 | 12 | 6 | 29 | 70 | 29 | 62 | 10 | 25 |
| **total trees cut** | **72** | **70** | **1,211** | **1,189** | **994** | **1,014** | **388** | **400** | **937** | **925** | **937** | **930** | **312** | **307** |
| **Clearing acreage** | 0.2 | | 3.3 | | 2.5 | | 1.0 | | 2.5 | | 2.5 | | 0.8 | |

**Table 5-1 (continued). Summary of Vegetation Impacts**

Estimated number of trees to be cut for new and widened trails, and ski lifts.

| | Credit for less clearing on Foxlair trail than was approved | | Credit for Lift 9B, Previously approved, not to be built | | Credit for Trail 1N-M, previously approved, not to be built | | Credit for Trail 1N-N, previously approved, not to be built | | Credit for Trail 1N-Q, previously approved, not to be built | | Credit for Trail 2N-L, previously approved, not to be built | | Credit for Trail 6N-O, previously approved, not to be built | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh |
| Sugar Maple | - | - | (56) | (387) | - | - | (21) | (148) | (43) | (296) | (18) | (127) | - | - |
| Beech | - | - | (56) | (145) | - | - | (21) | (56) | (43) | (111) | (18) | (48) | - | - |
| Yellow birch | - | - | - | (39) | (32) | (69) | - | (15) | - | (30) | - | (13) | - | - |
| White Birch | (175) | (239) | - | (2) | (63) | (238) | - | (1) | - | (2) | - | (1) | (53) | (72) |
| White ash | - | - | - | (15) | - | - | - | (6) | - | (11) | - | (5) | - | - |
| Black Cherry | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Ironwood | - | - | (28) | (25) | - | - | (11) | (10) | (22) | (19) | (9) | (8) | - | - |
| Red Spruce | (18) | (28) | - | - | - | (72) | - | - | - | - | - | - | (6) | (8) |
| Red Maple | - | - | - | (1) | - | (53) | - | (1) | - | (1) | - | (0) | - | - |
| basswood | - | - | - | (22) | - | - | - | (8) | - | (17) | - | (7) | - | - |
| Red Oak | - | - | - | (3) | - | - | - | (1) | - | (3) | - | (1) | - | - |
| Hemlock | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Balsam Fir | (378) | (264) | - | - | (95) | (86) | - | - | - | - | - | - | (114) | (80) |
| Striped Maple | - | - | - | (9) | (63) | (38) | - | (4) | - | (7) | - | (3) | - | - |
| Aspen | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mountain Ash | (18) | (48) | - | - | - | (20) | - | - | - | - | - | - | (6) | (14) |
| **total trees cut** | **(589)** | **(578)** | **(140)** | **(648)** | **(253)** | **(577)** | **(54)** | **(248)** | **(107)** | **(496)** | **(46)** | **(212)** | **(178)** | **(175)** |
| **Clearing acreage** | (1.59) | | (3.66) | | (2.20) | | (1.40) | | (2.80) | | (1.20) | | (0.48) | |

**Table 5-1 (continued). Summary of Vegetation Impacts**

Estimated number of trees to be cut for new and widened trails, and ski lifts.

| | Credit for less clearing on Foxlair trail than was approved | | Credit for Lift 9B, Previously approved, not to be built | | Credit for Trail 1N-M, previously approved, not to be built | | Credit for Trail 1N-N, previously approved, not to be built | | Credit for Trail 1N-Q, previously approved, not to be built | | Credit for Trail 2N-L, previously approved, not to be built | | Credit for Trail 6N-O, previously approved, not to be built | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh |
| Sugar Maple | - | - | (56) | (387) | - | - | (21) | (148) | (43) | (296) | (18) | (127) | - | - |
| Beech | - | - | (56) | (145) | - | - | (21) | (56) | (43) | (111) | (18) | (48) | - | - |
| Yellow birch | - | - | - | (39) | (32) | (69) | - | (15) | - | (30) | - | (13) | - | - |
| White Birch | (175) | (239) | - | (2) | (63) | (238) | - | (1) | - | (2) | - | (1) | (53) | (72) |
| White ash | - | - | - | (15) | - | - | - | (6) | - | (11) | - | (5) | - | - |
| Black Cherry | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Ironwood | - | - | (28) | (25) | - | - | (11) | (10) | (22) | (19) | (9) | (8) | - | - |
| Red Spruce | (18) | (28) | - | - | - | (72) | - | - | - | - | - | - | (6) | (8) |
| Red Maple | - | - | - | (1) | - | (53) | - | (1) | - | (1) | - | (0) | - | - |
| basswood | - | - | - | (22) | - | - | - | (8) | - | (17) | - | (7) | - | - |
| Red Oak | - | - | - | (3) | - | - | - | (1) | - | (3) | - | (1) | - | - |
| Hemlock | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Balsam Fir | (378) | (264) | - | - | (95) | (86) | - | - | - | - | - | - | (114) | (80) |
| Striped Maple | - | - | - | (9) | (63) | (38) | - | (4) | - | (7) | - | (3) | - | - |
| Aspen | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mountain Ash | (18) | (48) | - | - | - | (20) | - | - | - | - | - | - | (6) | (14) |
| **total trees cut** | **(589)** | **(578)** | **(140)** | **(648)** | **(253)** | **(577)** | **(54)** | **(248)** | **(107)** | **(496)** | **(46)** | **(212)** | **(178)** | **(175)** |
| **Clearing acreage** | (1.59) | | (3.66) | | (2.20) | | (1.40) | | (2.80) | | (1.20) | | (0.48) | |

Table 5-1 (continued). Summary of Vegetation Impacts

Estimated number of trees to be cut for new and widened trails, and ski lifts.

| | Project Clearing Totals, including credits | | |
|---|---|---|---|
| | Trees 3-4" dbh | Trees > 4" dbh | All Trees |
| Sugar Maple | 2,726 | 6,625 | 9,350 |
| Beech | 5,096 | 5,111 | 10,206 |
| Yellow birch | 276 | 1,052 | 1,328 |
| White Birch | 2,941 | 6,803 | 9,743 |
| White ash | - | 294 | 294 |
| Black Cherry | - | 38 | 38 |
| Ironwood | 282 | 196 | 479 |
| Red Spruce | 240 | 645 | 884 |
| Red Maple | 60 | 922 | 982 |
| basswood | - | 83 | 83 |
| Red Oak | 336 | 629 | 965 |
| Hemlock | - | 15 | 15 |
| Balsam Fir | 6,280 | 5,078 | 11,358 |
| Striped Maple | 1,544 | 468 | 2,011 |
| Aspen | - | 68 | 68 |
| Mountain Ash | 240 | 519 | 759 |
| **total trees cut** | 20,020 | 28,544 | 48,564 |
| **Clearing acreage** | 110.9 | | |

tree species have been divided into two groups: stems of 3-4 inches dbh (diameter at breast height) and stems larger than 4 inches dbh. These estimates indicate that a total of up to 48,564 trees will be cleared, and a large proportion of them, about 41%, will be relatively small, with stems less than 4 inches dbh. Total clearing for the project, would involve clearing of about 20,020 trees with stems of 3-4 inches dbh and about 28,544 trees larger than 4 inches dbh. Table 5-1, "Summary of Vegetation Impacts," summarizes this data. Figure 5-1, "Tree Cutting Locations – Five-Year Plan," shows the locations of proposed tree clearing.

Trees lawfully cut cannot be removed from the premises in any manner but can be chipped or used on site by ORDA so long as such method is consistent with the guidelines of the State Land Master Plan, this UMP and Article 8 of the ECL. Virtually all trees which are cut for ski trail construction and widening and construction of lifts and other amenities are chipped and used on-site as fill for construction and erosion control projects. Access for the wood chipper on steeper terrain is limited so some trees are buried for use as fill and erosion control.

In order to determine the need for a detailed biological survey of the areas to be impacted by vegetation clearing and new construction (the "project site"), an analysis of the likelihood of rare plant species occurring in those areas was undertaken. Data on plant rarity and areas of occurrence were taken from the Rare Plant Status List (Active Inventory List) of the New York Natural Heritage Program of NYSDEC (Young, 1992). Since the project site is in Warren County, near the boundaries with Essex and Hamilton counties, all rare species listed as occurring in at least one of those counties were used in the analysis.

There are twenty species which were judged to be possible inhabitants of the project site. These are mainly plants which are found in places such as rich beech-maple woods, woods with rocky or sandy soils, and seepy areas along rocky streams. In spite of the existence of suitable habitat, the probability of any one of these species occurring on the project site is very low.

A July 17, 2000 letter from the NYSDEC Natural Heritage Program, provided in Appendix 2, "Correspondence," states that the NHP has no records or occurrences of any rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the vicinity of the site.

Off Mountain

Construction of the proposed improvements to the Town of Johnsburg Ski Bowl Park will involve approximately 25.6 acres. About 8 acres of this area will not require clearing of mature vegetation because the base of proposed lifts 11, 12 and 13 in Ski Bowl Park lie within existing cleared areas in the Park.

b. Mitigation Measures

The following measures will be employed to mitigate the potential impacts on vegetation during construction.

1. Only areas absolutely necessary for construction of ski trails, ski lifts, and other proposed improvements will be cleared of vegetation. All other areas will be maintained in a natural state.

2. Erosion control measures (see Section V.A.3) will be used on cleared areas with disturbed soils to avoid affecting adjacent vegetation by erosion or siltation. Erosion-control devices to be used will include filter fabric fences and staked haybale filters.

3. Upon the completion of clearing of new ski trails and ski lift corridors, they will be seeded with grass mixtures to promote rapid revegetation. Areas disturbed for any other improvements will also be landscaped and revegetated as soon as practicable.

4. To as great an extent as possible, plants used to revegetate disturbed areas and planted as part of landscaping will be species which are indigenous to the region.

5. No clear-cutting of trees to develop panoramic views is proposed. Views will be framed or filtered by existing vegetation.

6. The Construction Pollution Prevention Plan for the work on the Ski Center is appended to the SPDES permit issued for stormwater related to construction activity, and is still in effect.

2. Water and Wetland Resources

a. Impacts

On Mountain

Wetlands on the mountain have been avoided in the planning and design of renovated and new facilities. Under extremely unusual circumstances some clearing adjacent to or within the fringe area of forested wetlands has taken place for trail development. This activity was completed without the need to place any machinery in the wetland. The work was completed by hand. Vegetation was flush cut and pulled out. Silt fence was installed as appropriate. This activity has changed the wetland but has not degraded the area to such an extent that the function and value of the wetland has been lost. The limited areas of disturbance will recover to a location of herbaceous wetland plants rather than forested. The same water retention and flood flow mitigation will occur. Some minor habitat loss will take place, however, the value of the small pocket forested

wetland within upland forest community is limited. Intermittent and permanent drainages will be crossed by proposed ski trails, and existing trees and shrubs will be removed and replaced with grasses. Impacts to water resources as a result of this tree clearing will be temporary and minimized by sediment and erosion control measures. If necessary, culverts will be placed in drainageways crossed by ski trails or ski bridges installed in order to keep the trails from flooding during times of runoff.

None of the activities proposed on the mountain have been located on areas that overlay potential aquifer areas. No changes to or impacts on groundwater flow or quality are anticipated.

Analysis of the stream water quality monitoring data collected since the adoption of the 1995 UMP indicates that the improvements made at the Ski Center since that time have not had an impact on surface water resources downgradient of the site. Refer to Appendix 3, "Gore Mountain Water Quality Monitoring."

The comprehensive stormwater management report prepared for the 1995 UMP was re-examined with regard to the proposed management actions.

The affected subcatchments have been analyzed with respect to the impacts of a 25 year and a 100 year storm and any increase in runoff volumes has been identified. With reference to Table 5-2, "Comparison in Runoff Between 1995 UMP Buildout Condition and 2002 Supplemental UMP," it can be seen that only subcatchment 2, Lower Roaring Brook, shows an increase of 3.6 acre feet of runoff volume. This increase in runoff can be accommodated in the snowmaking reservoir. The reservoir has a surface area of approximately 10 acres, and the additional runoff would consume approximately 0.33 feet of the total depth of the reservoir. The normal operating conditions of the ski center snowmaking operations leaves more than enough freeboard within the reservoir with which to accommodate the 3.6 acre feet runoff volume increase in subcatchment 2.

Assuming the need to control the peak flow of the 100 year storm event, it is generally accepted that an on-site detention pond capable of storing one third to half of the total difference in stormwater volume between the pre-and post-development conditions will be adequate to control the post-development peak discharge rate to the pre-development level.

The ultimate sizing and control of the structure configuration will require a detailed engineering design. However, the estimates of total storage requirements and location are sufficiently understood from this analysis to be considered feasible and effective in mitigating any potential downstream impacts. As a result of the development of the storm basin, no adverse impacts related to increased flooding or erosion (increased channel velocities) will be realized offsite.

## Table 5-2

## Comparison of Runoff Between 1995 UMP Buildout Condition and 2002 Supplemental UMP

| | CN | 25 Yr. Storm Event (4.3") 1995 UMP | 2002 UMP | 100 Yr. Storm Event (5.0") 1995 UMP | 2002 UMP |
|---|---|---|---|---|---|
| **SC 1 Upper Roaring Brook** | | | | | |
| Total Catchment Area (acres) | | 800.3 | 800.3 | | |
| Forested (acres) | 74 | 711.2 | 681.1 | | |
| Open Meadow (acres) | 82 | 81.1 | 111.2 | | |
| Impervious (acres) | 98 | 8.0 | 8.0 | | |
| Weighted Curve Number (CN) | | 75 | 75 | | |
| Estimated Cubic Feet/Second (CFS) | | 915.1 | 915.1 | 1198.0 | 1198.0 |
| Volume in Acre Feet (AF) | | 113.8 | 113.8 | 147.7 | 147.7 |
| **SC 2 Lower Roaring Brook** | | | | | |
| Total Catchment Area (acres) | | 601.6 | 601.6 | | |
| Forested (acres) | 74 | 578.5 | 546.2 | | |
| Open Meadow (acres) | 82 | 20.0 | 52.3 | | |
| Impervious (acres) | 98 | 3.1 | 2.1 | | |
| Weighted Curve Number (CN) | | 74 | 75 | | |
| Estimated Cubic Feet/Second (CFS) | | 654.3 | 701.0 | 865.7 | 917.6 |
| Volume in Acre Feet (AF) | | 82.0 | 85.6 | 107.8 | 111.1 |
| **SC 5 Rabbit Pond Catchment Area** | | | | | |
| Total Catchment Area (acres) | | 604.2 | 604.2 | | |
| Forested (acres) | 74 | 604.2 | 585.3 | | |
| Open Meadow (acres) | 82 | | 18.9 | | |
| Impervious (acres) | | | | | |
| Weighted Curve Number (CN) | | 74 | 74 | | |
| Estimated Cubic Feet/Second (CFS) | | 663.1 | 663.1 | 874.3 | 874.3 |
| Volume in Acre Feet (AF) | | 82.4 | 82.4 | 107.6 | 107.6 |
| **SC 6 Ski Bowl Catchment Area** | | | | | |
| Total Catchment Area (acres) | | 160.7 | 160.7 | | |
| Forested (acres) | 74 | 108.7 | 96.9 | | |
| Open Meadow (acres) | 82 | 52.0 | 63.9 | | |
| Impervious (acres) | | | | | |
| Weighted Curve Number (CN) | | 77 | 77 | | |
| Estimated Cubic Feet/Second (CFS) | | 342.6 | 342.6 | 440.5 | 440.5 |
| Volume in Acre Feet (AF) | | 25.0 | 25.0 | 32.0 | 32.0 |

Off Mountain

Wetlands on the Ski Bowl Park portion of the improvements have been avoided in the planning and design of the Project. Intermittent and permanent drainages will be crossed by proposed ski trails, and existing trees and shrubs will be removed and replaced with grasses. Impacts to water resources as a result of this tree clearing will be temporary and minimized by sediment and erosion control measures. If necessary, culverts will be placed in drainageways crossed by ski trails or ski bridges installed in order to keep the trails from flooding during times of runoff.

A detailed plan for the improvements to Ski Bowl Park is currently being developed by the Town of Johnsburg. Conceptually, the work at Ski Bowl Park does not appear to have the potential to create a significant adverse impact on water resources from the stormwater. Much of the base of Ski Bowl Park is already cleared, Ski Bowl Road is paved, and gravel parking lots are available. The site's sandy soils are conducive to the development of a stormwater management basin, should one be necessary. A detailed stormwater management report will be prepared when the Ski Bowl Park design is completed and application for permits for its construction are made. The development of the Park is environmentally feasible, and will not have a significant adverse environmental impact.

b. Mitigation Measures

The following measures will be employed to mitigate the potential impacts on streams and wetlands during construction of the improvements and operation of the ski center.

(1) Filter fabric fences and haybale dikes will be installed in places where widening of the snowmaking water pipeline route into a ski trail borders wetlands and streams.

(2) Soils disturbed by construction will be mulched and seeded with grasses as soon as practicable in order to minimize potential for erosion.

(3) The measures outlined in the current Construction Pollution Prevention Plan for work on ski center lands will be followed. The Construction Pollution Prevention Plan is appended to the existing SPDES general permit for work associated with construction activity. A SPDES general permit for work associated with construction activity at the Ski Bowl Park will be obtained prior to beginning work.

(4) A Spill Prevention, Control and Countermeasure Plan is in place for all fossil fuel storage tanks on the facility to ensure proper procedure and preventative measures.

(5) A surface water quality monitoring program has been implemented at Gore Mountain to monitor existing and future water quality of the tributaries to North

Creek. This monitoring program has continued throughout the phased development of the improvements proposed in the 1995 UMP. The monitoring indicates that construction of the management actions to date have not had any impact on the quality of surface water resources. Refer to Appendix 3, "Gore Mountain Water Quality Monitoring."

(6) Two-thirds of the compressed air generated is by modern, oil-free air compressors, including eight new rental units.

3. Soils

a. Impacts

On Mountain

Impacts to soils associated with the proposed improvements are most likely to occur in areas of construction of new ski trails and widening of existing trails. Trees and other woody vegetation will be removed over a total area of about 110.9 acres. In some places, it may be necessary to remove boulders and to grade, which will involve cutting and/or filling. These activities may result in exposure of soils, which will then be susceptible to erosion.

There were no significant areas of organic soils, particularly on steep slopes. Most of the soils mapped on the mountain and observed during numerous visits to the site are shallow to very deep, coarse textured glacial till soils. Organic soils (Folists) on steep uplands are generally in a complex pattern with the local deep or shallow glacial till soil. It is unlikely that there will be any extensive areas of folist soils that will be impacted by this project.

Off Mountain

The development of the improvements in Ski Bowl Park will disturb soils and increase the potential for wind and water borne erosion. The soils underlying the proposed improvements consist of Becket bouldery fine sandy loam and Hermon bouldery fine sandy loam, which are suitable for the proposed recreational use. Due to the previous use of the Park for skiing trails and a ski lift, and the incorporation into the design of the previous ski trail layouts and the existing snowmaking pipeline trail, the need to clear vegetation and grade the ground surface is minimized.

b. Mitigation Measures

The following measures will be employed to mitigate the potential impacts on soils during construction:

1. Erosion control measures such as filter fabric fences, erosion-control blankets, and staked haybale filters will be used downslope from all areas where soils will be disturbed by excavation, grading, or deposition of fill and are specified in the Construction Pollution Prevention Plans submitted with the current SPDES general permit for work on the mountain. A separate such SPDES permit will be obtained for the work at the Ski Bowl Park.

2. As soon as practicable, disturbed soils which are to be restored to a vegetated state will be mulched and seeded with grasses, or planted with groundcover plants or other landscape plants.

3. In order to avoid mass movement of the soils on steep slopes, areas under construction will be dewatered and as much natural vegetative cover as possible will remain intact.

4. Visual Resources

a. Impacts

On Mountain

Development of the improvements in the Five-Year Plan will have minimal visual impact since the ski center already consists of cleared terrain along ski trails, and all new trails are proposed to be located in the vicinity of existing trails. The Ski Center is only minimally visible from area roadways. The new trails which are proposed are not anticipated to be significantly visible from such roadways, because they are located below those trails which are currently visible.

The potential impact of the Bear Mountain observation tower on visual resources has been assessed. The observation tower will be an open lattice structure constructed of wood and steel and will be located in proximity to the Bear Mountain Summit Lodge, the Northwoods Gondola lift terminal and the gondola storage building. This represents a consolidation of visual elements. The structure is proposed to be 50 feet in height. The tower will not be lit. No significant adverse visual impact is anticipated as a result of installation of an observation tower.

Construction of an observation tower would enhance the environmental and recreational experience of recreators and sightseers, and would provide an educational experience which would increase the appreciation of the public for the significant and beautiful wilderness of the Adirondack Park within which the Ski Center is located. The tower

would provide an opportunity for the public to understand the nature of the setting of the Ski Center in relation to the Park in its entirety, and would provide perspective on the developed Ski Center facility in relation to the larger Park.

Off Mountain

A simulation of the proposed ski trail connection to Ski Bowl Park has been completed from the perspective of a vehicle traveling on NY Route 28, and is presented in Figures 5-2A and B, "Simulation of Pods 11 and 12." The ski trails in proposed Pod 12 will be visible from NY Routes 28 and 28N. The ski trails associated with Pod 11 are below the ridge line and will not be visible. The Pod 12 lift towers and chairs of the chair lift will be visible. It is not anticipated that the Pod 12 midstation or the lift terminal will be visible. It is possible that the base of Lift 11, portions of the Lift 11 chairs and perhaps a Lift 11 tower will be visible, due to the existing clearing of the power line. The top of Lift 12 will be back dropped by trees but may be visible. The potential visibility of Lift 12 will increase as a traveler proceeds north on NY Route 28. Lift 13 will not be visible from NY Route 28.

b. Mitigation Measures

1. The rehabilitated Saddle Lodge will be constructed of materials designed to minimize the contrast with the surrounding forested environment. The lodge will be rustic in character utilizing stone and timber building materials. Windows will be tinted, non-reflective glass and all surface materials will be finished with either their natural color or earth tone coloration.

2. The improvements in Ski Bowl Park represent a consolidation of visual impacts, as they occur in an area historically, and currently, used for alpine skiing and other winter sports.

3. The potential visual impact of the proposed observation tower is mitigated by utilizing timber and stone in the tower construction, which will tend to blend with the surroundings. The roof will be a natural color to match the other structures and wooded environment. Further mitigation is provided by locating the proposed tower adjacent to the new Summit Lodge and the other structures, and the tower will complement use of the new lodge. The structures are consolidated in a single developed area, in the designated Gore Mountain Ski Center Intensive Use Area. The public education benefits of the observation tower are a positive impact.

5. Fish and Wildlife

a. Impacts

On Mountain

Activities proposed to occur on Gore Mountain which are anticipated to have the greatest impact on resident and migratory wildlife which utilize the site include the construction of new trails through currently wooded areas and expansion of new trails. Construction and expansion of the new and existing trails will involve removing forest communities and subsequent establishment of grass/forb vegetation communities. Where new trails are created localized habitat fragmentation and creation of habitat edge will occur. In areas where existing trails are proposed to be expanded there will be a slight shift in the relative abundance of the forested and grass/forb habitats.

Of the two actions, creation of the new trails has more potential for impacting local wildlife populations. As a result of the creation of the new trails it is anticipated that there will be an increase in forest edge wildlife populations at the expense of forest interior species. It is likely that forest interior species will emigrate to nearby suitable habitats. Depending on the population level and carrying capacity of nearby suitable habitats it is possible that selective compensatory mortality will occur as a result of the overall decrease in available forest interior habitat. Concurrent with a decline in forest interior population levels there will be an increase in the populations of forest edge species. The semi-circular nature of the proposed additional trail layout maximizes the amount of edge per unit area. Also, the nearly parallel nature of the interior trails provides a high rate of interspersion of the open and forested habitats. Existing on-mountain populations of forest edge species are expected to colonize the newly available habitats once construction disturbances have ceased.

No rare, threatened or endangered species will be impacted by the proposed action, nor will any unique habitats be affected. Refer to Section II.2.a. and II.2.b, and to the July 17, 2000 letter from NYSDEC Natural Habitat Program provided in Appendix 2, "Correspondence." The transformation of previously forested area to open areas as part of trail construction will not impact the migratory bald and golden eagles previously seen in flight in the vicinity of Gore Mountain. Opening previously forested areas will increase foraging opportunities for such specie. No impacts to the wood turtle, a species of Special Concern, will occur since there will be no significant impacts to aquatic or semi-aquatic habitats.

Off Mountain

The potential impact to wildlife in the off-mountain portion of the 2002 management actions is similar to that described above.

b. Mitigation Measures

No mitigation measures are proposed since no significant adverse impacts are anticipated.

6. Air Resources

a. Impacts

Since the electric upgrade has been made, the Ski Center has not had to be 100% dedicated to the use of diesel fuel air compressors. With reference to Table 2-5, "Increase in Snowmaking Capacities," it can be seen that the Ski Center utilizes both electric and diesel fuel air compressors. Approximately 18,000 cfm is generated by the diesel units.

Gore Mountain Ski Center has a current NYSDEC Air Quality Permit and permit conditions are met every year.

b. Mitigation Measures

No significant adverse impact to air resources is anticipated as a result of development of the proposed improvements, therefore, no mitigation measures are proposed.

**B. Human Resources**

1. Transportation

a. Impacts

The 1995 UMP contains an analysis of potential traffic impacts from the proposed ski area improvements. The analysis process involved four steps - 1) subtract existing Gore Mountain skier traffic from the raw turning movement volumes to produce normal background traffic volumes, 2) increase the normal background traffic volumes to represent year 1999 volumes, 3) add the Gore Mountain traffic associated with the approved SAOT of 7,000 to produce "No-build" volumes for the two horizon years, and 4) calculate the resulting levels of service.

Trip distribution is the process which determines where site traffic originated from or is destined to. Turning patterns were used to determine probable trip distribution of site traffic. Approximately 62% of skiers are expected to arrive from NY Route 28 eastbound, 18% from NY Route 28 westbound, and 20% from Peaceful Valley Road southbound.

The TIS provided in the 1995 UMP shows that the Gore Mountain Ski Center improvements will cause levels-of-service (LOS) to drop at both intersections.

Departures from Peaceful Valley Road onto NY Route 28 will suffer longer delays during both peak periods. The combined LOS for this traffic drops from LOS B to LOS C during the morning peak, and from LOS D to LOS F during the evening peak. Similarly, the LOS for traffic turning from Gore Mountain Road onto Peaceful Valley Road will drop from LOS D to LOS F during the evening peak hour.

This poor level of traffic operation would be unacceptable if it existed on a recurring basis. In this case, it is projected to occur only on peak Saturdays during the ski season as motorists are leaving the ski area. The peak arrival level-of-service is projected to be LOS A.

The Gore Mountain Road/Peaceful Valley Road intersection is characterized by large radii and a flare at the intersection such that right turning traffic can exit without being delayed behind delayed left turning traffic. Adequate capacity will exist since left and right turning flows are separated. Therefore, no off site mitigation is considered necessary at this location.

The Peaceful Valley Road approach to NY Route 28 currently provides a single lane that serves both left and right turning traffic. Peaceful Valley Road will be widened to provide two approach lanes at the NY Route 28 intersection. This will allow right turning traffic to enter the NY Route 28 traffic stream without being unnecessarily delayed behind delayed left turning vehicles. Sufficient capacity will exist under this lane configuration. As an alternative, a traffic control officer could control the intersection during peak occasions.

b. Mitigation Measures

Based on the traffic analysis completed as part of the 1995 UMP, it is recommended that when the SAOT of 7,000 is realized at the Ski Center, that Peaceful Valley Road be widened to provide two approach lanes at the NY Route 28 intersection. With this improvement, the roadway network will provide adequate access to/from the site as well as through the study area, for the size of the development and the levels of traffic anticipated. The peak day attendance is approximately 5,400 people (not expressed as SAOT as the mountain operational components of the ski center are not yet balanced).

2. Community Services and Utilities

a. Impacts

The potential impact to community services was analyzed in the 1995 UMP assuming that the goal for attendance of 7,000 SAOT was obtained. Under the UMP's projected

capacity of 7,000 SAOT (at completion of all improvements) and assuming 40% average utilization, approximately 49 calls per season to the State Police would result.

The implementation of the UMP will have little or no impact on the provision of fire protection services. All new facilities will be in compliance with the State Uniform Fire Prevention and Building Code Requirements.

The implementation of the UMP will impact the demand for emergency medical services but not the provision of care. Emergency services are provided by the Johnsburg Volunteer Emergency Squad and Empire Ambulance Service, Inc.

The UMP's implementation will also impact the volume of solid waste generated at the Ski Center and transported to the Town's transfer station. The ski center currently generates about 448 cubic yards of solid waste per season. Utilizing the proposed increase in SAOT and assumed increase in utilization, waste generation will increase to 580 cubic yards. Gore management is considering on-site composting as an option to managing some of its solid wastes.

While the potential increase in skiers may lead to increased demand for hospital services, this demand will have no impact on the provision of care. Few, if any, Ski Center patrons requiring care go to the North Creek Health Center. The potential increase in part-time and year-round employees may increase the demand for medical care slightly. The North Creek Health Center is prepared to handle this minor increase in patients. All serious injuries are transported to the Glens Falls Hospital.

The impacts of UMP implementation on the school system are insignificant. The school has excess capacity to absorb approximately one hundred students dispersed over grades K-12. The number of children entering the school system as a result of UMP implementation is not likely to approach one hundred.

Gore Mountain has its own water supply and distribution system, thus, there are no impacts to the North Creek Water District anticipated.

Gore Mountain has its own treatment system for sewage and, therefore, will not impact any area services. The existing wastewater treatment plant has an approved capacity of 65,000 gallons per day (gpd). The peak rate of current usage is 32,000 gpd. The base lodge expansion approved in the 1995 UMP will generate an estimated 11,000 gpd and the two mountain top lodges have a calculated maximum wastewater generation rate of 17,000 gpd, leaving 5,000 gpd as excess capacity available at the plant.

The 1995 UMP identified the development of a wastewater treatment plant in the Saddle Lodge area to accommodate the 17,000 gpd of wastewater to be generated by the Bear Mountain Lodge and the Saddle Lodge as the preferred method of handling wastewater from the two mountain-top lodges. The 1995 UMP considered the use of the existing wastewater plant as a viable alternative. The site specific review of the Bear Mountain Lodge site with the NYSDEC caused the alternative of using the existing plant to become

the preferred method of handling mountain-top lodge wastewater, as it was preferable to NYSDEC to assure treatment in one location. As noted in the 1995 UMP Section VI, "Alternative Lodge Sewer and Water Services," since the base area treatment plant is already operated, little additional operational and maintenance costs will be incurred. Also, the main plant would operate better if it had more waste to process.

A shallow buried 4 inch diameter pipeline has been extended on Showcase down to the base area sewage treatment plant. A dousing system will be used so that the pipeline is flushed and not trickled, thereby preventing the pipe from freezing. Other components of the system include a grease trap installed at the Saddle lodge, and energy dissipaters to control the velocity of the effluent.

No impacts to telephone or cable services are anticipated. As noted in Section II.B.2, telephone and cable companies have the capacity to absorb significant increases in demand. Improvements to electrical distribution systems are discussed in Section IV.B.2. Niagara Mohawk Power Corporation has indicated its ability to continue to provide electric service to the Ski Center. The existing power transmission line (visible from NY Route 28) will be buried at the point where it crosses proposed Lift 11 and will not impact the provision of service.

b. Mitigation Measures

The proposed project will have few impacts on community services and utilities. Those impacts which are identified are easily mitigated. The increase in the volume of solid waste brought to the transfer station, as a result of UMP implementation, may result in the need for an additional roll-off container. No other impacts requiring mitigation measures have been identified.

3. Local Land Use Plans

a. Impacts

The Supplemental UMP is consistent with the Johnsburg Master Plan and other documents such as the North Creek Action Plan that serve to direct community planning. Both documents seek to forge stronger links between the ski center and community, which are also goals of Gore and ORDA and this Supplemental UMP.

The UMP cites specific commitments to the community so as to foster a stronger link between the Gore Mountain Ski Center and the Town of Johnsburg, especially the Hamlet of North Creek. The UMP suggests the establishment of a shuttle bus to be operated between the train station and the ski area stopping at various business locations. The UMP has identified on-site space for the local Chamber of Commerce to use for disbursement of information on area lodging, attractions and services. Gore Mountain has also developed a vacation planning brochure that includes a listing of area tourism and support services.

ORDA has cooperated with North Creek in developing hiking, cross-country ski and mountain bike trails with the goal of connecting with trails between Ski Bowl Park and Gore Mountain lands. Part of this plan includes trail markers and the design of an interpretive trail system. This 2002 UMP also includes a management action to physically link Gore Mountain Ski trails to Ski Bowl Park and to update the Ski Bowl facility by Gore.

The UMP identifies increased local employment opportunities related to the construction and operation phases of the facility's expansion, as discussed in Section 4 below. The future success of the ski area is irrevocably linked to employment and business growth opportunities in and around North Creek. These goals are consistent with both the Johnsburg Master Plan and the North Creek Action Plan. The UMP is also consistent with Johnburg's Zoning Ordinance. The districts and densities outside of the hamlet are exactly matched to the official APA Land Use Map. Gore Mountain Ski Center is entirely within the Intensive Use Area which was created intentionally for such a special use.

While the improvements and expansion of skier facilities on the mountain will not directly effect planning and zoning in the community, it will create the potential for new skiers who will require services in and around the hamlet of North Creek and some may choose to buy or build a second home in the area. Linkage of Gore Mountain to Ski Bowl Park will also stimulate additional skier visits to the area. These are potential positive impacts for the local economic base and will serve to stabilize certain businesses, expand some businesses and create new businesses. Such impacts are discussed in more detail in Section IX below.

b. Mitigation Measures

No mitigation measures are necessary since no negative impacts have been identified.

4. Economics

a. Impacts

There are several economic impacts that are directly related to the UMP. These include pre-construction spending for professional services such as planning, architectural, permitting, environmental and legal fees; construction spending related to labor and supplies for trail development, snowmaking installation and the building of lodges; spending by new skiers for lift tickets, ski lessons, equipment rental and meal purchases both on and off the mountain, lodging and entertainment; and payroll spending for new operations employees.

Construction materials will be sent out for bid and, whenever possible will be purchased locally.

Most of the trail work and snowmaking elements will be handled by ORDA workers whereas lift installations, road construction and the construction of the lodges will be contracted to outside contractors.

The annual operating payroll is expected to increase proportionately due to the anticipated hiring of additional ski patrollers, ski school instructors, trail groomers, building maintenance personnel and service workers at the Saddle and Bear Mountain lodges and renovated Base Lodge and Learning Center. The new payroll will in turn generate new spending for rent, mortgages, groceries, gasoline, personal services, retail and recreation by new workers and their families throughout the primary and secondary area of impact.

Additional direct and long-term spending will come from the skiers themselves for ticket purchases, equipment rentals, ski lessons and on-site food purchases. The National Ski Areas Association reports that the average ski dollar buys the following goods and services: 54% on ski lift tickets; 7% on ski lessons; 13% on food and beverage; 5% on equipment and clothing; 4% on equipment rentals; 6% on summer services; 2% on real estate; and 9% on miscellaneous items (NSAA, 1993). Based upon an average of 1,525 new skiers per day, a season length of 135 days and an on-site spending per person average of $59, this new spending is projected at $13.16 million per year which represents an increase of about $4 million over existing skier spending. These revenues will primarily be used to improve overall economic conditions at Gore and ORDA plus support the new payroll requirements for the ski area. Some money may be contributed to fund continued completion of the UMP actions.

A multiplier effect will occur for revenues that are produced on the mountain and later spent off the mountain. This traditionally includes short-term (5 years) construction spending and long-term operational spending as well. Multipliers have been developed for all industries by the US Department of Commerce. They are used to predict the direct and indirect economic impacts generated by each spending sector. Direct economic impacts refer to additional revenues received from the ski area for construction and from the skiers themselves. Indirect impacts include the additional purchases made by the ski industry from other businesses to satisfy the additional demand, and induced impacts are produced from the new spending of persons employed in the ski industry. Each new dollar that is spent actually "turns over" causing additional dollars to be spent to satisfy a new demand. Each category of industry (construction, recreation, lodging) has separate and unique impacts associated with its own business operation and production.

Generally, each dollar spent in the construction and operational phase generates an additional dollar of spending thereby effectively doubling the total economic impact.

Substantial direct off-site economic benefits will also occur as a result of the project. These include the spending that skiers do off the mountain for goods and services such as food and lodging along the way. It has been estimated through the user survey that $1.5 million is currently spent by skiers annually on lodging accommodations plus approximately $0.7 million on food purchases. A multiplier of approximately 6 can be

applied to these figures resulting in a total of $13.2 million in total economic impact from off-site skier spending.

Off season revenue sources are not considered significant and were not included in this analysis.

b. Mitigation Measures

No mitigation measures are required since the impacts on the economy are entirely positive.

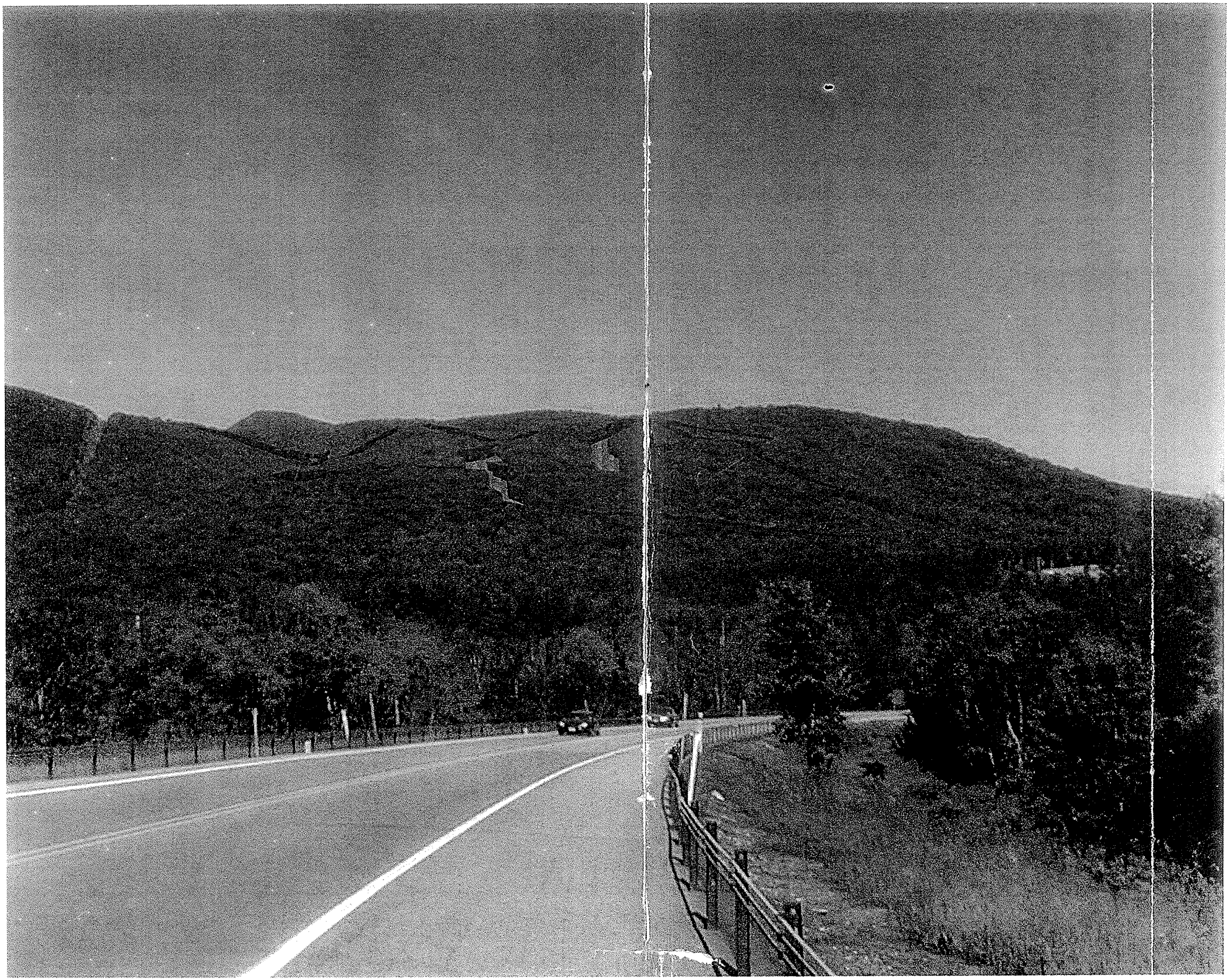
5. Historical and Archeological Resources

a. Impacts

There are no known historical or archeological resources present in the area proposed for the improvements.

b. Mitigation Measures

No adverse impact to archeological or historical resources is anticipated as a result of development of the management actions described in the UMP, therefore, no mitigation measures are proposed.



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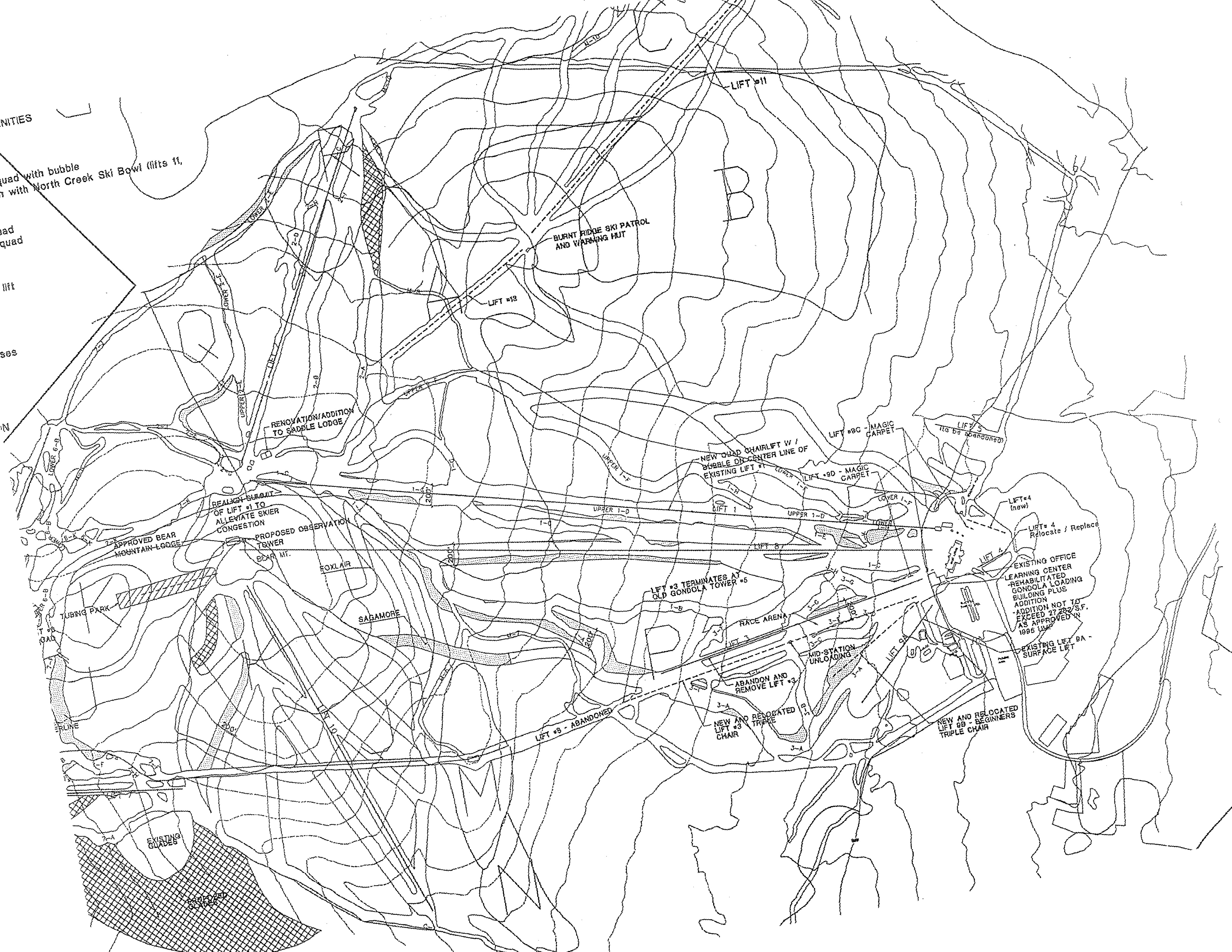

## SECTION VI ALTERNATIVES

### A. Alternative Lift Configurations

Alternative lift configurations considered include extending a lift to Pete Gay Mountain, which is impractical because Pete Gay was excluded from future ski trail use by the 1987 UMP amendments. Pete Gay is classified as Resource Management, not Intensive Use Area, per the APA land use area designation. Refer to Figure 1-1, "Intensive Use Area Boundary."

The extension of Lift 10 is impractical because the gradient creates inconsistent terrain with undesirable runouts and would be more expensive to operate. Similarly, an installation of another lift south of Lift 10 and the Straight Brook Quad (Lift 7) would require additional labor and maintenance and would not provide any significant gain in terrain to make such a concept worthwhile.

Various designs to create the connection to Ski Bowl Park were considered, and the proposed information was selected due to the most desirable, operable, ski lift combination that would work with the available terrain.

### B. Alternative Trail Improvements

The current proposal was selected due to the fact that the resultant skiable terrain best balances the mix of available trails by degree of difficulty to meet current industry standards. While these other ski pods are considered to be environmentally sound and offer good skiing opportunities, they are not needed to fulfill the current goals and objectives which were established for the upgrade and renovation of Gore Mountain.

Potential trail layouts associated with the above rejected alternative lift configurations were discarded for similar reasons.

Trail designs are influenced by existing surface water drainage patterns and the purpose of each such trail and the desire to create fun and functional ski trails. Trail designs have been altered during the planning process as the environmental analysis for this Supplemental UMP progressed.

Alternative trail widening areas were considered based primarily on safety considerations and were altered somewhat during the planning process to the proposed widenings shown on Figure 4-1, "2002 Gore Mountain UMP Master Plan (1 of 2)."

Trail widths of 100 to 120 feet were originally considered for Pods 11 and 12 (which connect to Ski Bowl Park), but were felt to be too wide, and so were modified to the 80 to 90 foot trail width proposed as part of this 2002 Supplemental UMP.

## C. Alternative Lodge Improvements

The 1995 UMP proposed demolishing, relocating and rebuilding the Saddle Lodge, but this was modified to the revised proposal to rehabilitate this lodge in its present location. Refer to Figures 4-3, 4-4, 4-5 and 4-6, "Proposed Saddle Lodge Floor Plan," and "Saddle Lodge West, North and South Elevations," respectively.

## D. Alternative On-Mountain Sewer and Water Services

Water

As an alternative to obtaining potable water from drilled wells at the new lodges, the existing infiltration gallery near the Saddle Lodge could continue to be used. A water filtration/chlorination system and storage tank could be established to provide water to both new lodges.

Another alternative water source would be filtration, storage and distribution to both lodges of water obtained from the existing snowmaking water transmission line which delivers water for snowmaking to the Saddle area and will deliver water for snowmaking to Bear Mountain. This alternative is not as desirable because potable water will be needed at the mountain-top lodges year-round, while snowmaking water only needs to be delivered during four to five months of the winter. Also, North Creek Reservoir provides storage for snowmaking water and is drained for maintenance and inspection during the summer, when water would still be needed at the mountain-top lodges. Hauling water up to the lodges is not recommended because it is impractical as a long term solution.

Another option would be to pump potable water from the base lodge up to the mountain lodges, or by using an Archimedes screw, perhaps transporting water heated with waste heat or by solar heat in order to avoid having to bury this pipeline.

None of these alternatives need to be considered further since an adequate new drilled well has been developed at the Saddle to provide for potable water needs.

Sewer

It is feasible to reduce the volume of wastewater generated at the lodges by using waterless composting toilets, such as Clivus Multrum, in the restrooms. This would reduce the volume of wastewater that would then be disposed of.

The infrastructure necessary to transport wastewater from the mountain-top lodges to the main wastewater treatment plant at the base of the mountain has been constructed.

The treatment capacity of the main wastewater treatment plant is 65,000 GPD as indicated in the plant SPDES permit. The present peak rate of wastewater generation at the base lodge is 29,000 GPD (and averages 8,000 GPD). The base lodge expansion will

generate an estimated 11,000 GPD and the two on-mountain lodges will generate a total of approximately 17,000 GPD, leaving 8,000 GPD as excess capacity available at the plant. Since the base area treatment plant is already operated, little additional operational and maintenance costs will be incurred. Also, the main plant would operate better if it had more waste to process.

## E. Alternative Development

A comment letter from the Gore Mountain Region Chamber of Commerce requested consideration of developing a golf course at the site.

A golf course is not proposed as a management action at Gore Mountain. A golf course would violate Article XIV, Section 1, of the NYS Constitution. Development of such a facility would, therefore, require a constitutional amendment.

## F. The No-Action Alternative

If no action is taken and no improvements are made to the ski center, many skiers will continue to choose to ski at better maintained facilities which provide desired amenities. Equipment will continue to break down and further deter the skiing population. As the number of skier visits declines, revenue will be lost which could result in personnel layoffs and a continuing down spiral of the ski center until it becomes uneconomical for the facility to remain in operation.

The "No Action" alternative also implies that no "new" actions are taken (or approved) in the 2002 UMP. The 1995 UMP is approved and remains in effect and can continue to be implemented.

## SECTION VII SUMMARY OF UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Some environmental impacts of the proposed action can neither be prevented nor reasonably avoided. This section will describe the unavoidable impacts which may occur due to construction and implementation of the Gore Mountain Five-Year Plan.

Construction activities will result in dust, odors, fumes, noise and vibration. A small amount of traffic will be generated. Removal of vegetation, excavation and grading will be required to improve ski trail area, and chair lift support structures and new chair lifts. Immediate seeding and mulching of disturbed areas will greatly reduce the possibility of any serious erosion problems. Final vegetative growth and grades will blend with the existing environmental setting.

Increased noise levels during construction of improved facilities cannot be avoided. The possibility exists for interference with wildlife breeding and nesting seasons. Related noise will have a significant short-term impact, but little long-term permanent impact is expected.

Operational activities will cause a minor increase in peak hour traffic and solid waste disposal needs.

There will be demands on local government offices such as the assessor, tax collector, and building inspector. Fire, police and rescue services will have an increased population to protect. There will be an increase in medical emergencies requiring service. Minor amounts of air pollution and noise will be generated. Fuel will be used. There will be an increase in surface water runoff due to increased impervious areas.

All of these impacts are relatively minor and local in nature. Most do not require mitigation measures. Section V of this DEIS describes those mitigation measures which are required.

## SECTION VIII IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Expansion of recreational use of the land at Gore Mountain does not represent a significant or irretrievable commitment of resources. Should intensive use recreational facilities and programs be abandoned, the area would revert to natural vegetation and habitat characteristics which are representative of those in the Adirondack Park.

Construction of the Gore Mountain Five-Year Plan will result in the permanent commitment of raw materials including concrete, steel, gravel, and wood for construction of the permanent structures, in addition to energy resources required to construct, operate and maintain the recreation area.

Site preparation for the proposed project will remove approximately 110.9 acres of existing vegetation and disturb soils on the site. Since no rare, threatened or endangered species are known to inhabit the site, the removal of this habitat is not viewed as significant.

Operation of the proposed project will result in the permanent, irretrievable commitment of resources such as energy for heating, lighting and equipment operations, however, such commitment will be extremely minimal. Adverse impacts on air, water and socioeconomic resources will not be irreversible or significant.

## SECTION IX GROWTH INDUCING, SECONDARY AND CUMULATIVE IMPACTS

This section identifies the potential off-site impacts that may occur following improvements to the Gore Mountain facility. Growth inducing and secondary impacts relate to changes in population, land use patterns, and the creation of new businesses. Cumulative impacts relate to changes from the project plus changes from other projects in the region.

A review of the last five year period gives an excellent idea of what kind of economic impacts have occurred in the local region as a result of the recent improvements at Gore Mountain. The number of skiers at Gore Mountain increased 36 percent from a low of 106,805 total visits in the1994/95 season to 145,250 total visits during the 1999/2000 season. The increase has had an entirely positive impact on the local business community and outlying communities. According to the Gore Mountain Regional Chamber of Commerce, the following changes have occurred in the primary area of impact:

- The Mountain and Bordertown –new downtown entertainment complex /sports goods store.
- Caseys North- new downtown restaurant.
- Charities Outback- new downtown restaurant
- Country Creations- new downtown gift shop
- Curious Merchant- new gifts and furniture shop in downtown
- The Rustic Homestead- new rustic furniture shop in downtown
- The Hudson River Trading Company- new antique shop in downtown
- Reflections- new gift shop in downtown
- Sheer Style Salon- downtown beauty shop and associated products and services
- Upper Hudson River Railroad- scenic 2-hour train rides
- Stewarts- new convenience store- Route 28
- Grist Mill- newly reopened restaurant in Warrensburg
- Super 8- new motel in Warrensburg
- Perfect Grinds- new coffee shop in Warrensburg
- Whitewater Challenger's Eco-Tours
- Marsha's Restaurant
- Trappers Tavern

This partial list is impressive in terms of business growth and is a huge step towards helping make North Creek the kind of community it wishes to be. It is not, however, entirely representative of all the changes that have occurred in the last 5 years. Mid-week ski business is not strong enough to support keeping most local restaurants open, therefore, many operate only part of the week during the winter season.

The community is also at a crossroads in terms of other kinds of business growth such as overnight accommodations. During the weekend the demand for beds exceeds the capacity, however, during the week there is very little demand for beds. Weekend business is strong enough to fill beds as far away as the Sagamore Hotel in Bolton

Landing and several of the chain motels in Lake George. Offsite primary and secondary positive economic impacts extend as far down as Exit 21 at Lake George to Exit 25 at Chestertown. The local corridors leading from Warrensburg at Exit 23 receive the most benefits since Northway users utilize numerous stops for food, gas and lodging before arriving in North Creek.

The additional business realized from over 38,445 more skiers is estimated at $2.4 million annually. This figure assumes that 64 percent, or 24,604 spent the day in the area and spent $30 per day (in addition to the ski ticket), and the remaining skiers, 13,841, spent the night in the area and spent $122.50 per night. This revenue translates into jobs for residents and compounds its value as it moves through the local economy. Gore Mountain itself has increased the total number of part-time employees by 30 percent since 1995 to a total of 120 part-time employees in 2000. The salaries from this employment help stabilize the local economy by offsetting the summer seasonal employment then layoff syndrome that dominates the service industry in the North Country area.

Cumulative impacts are also considered a positive factor for the economy. Several new housing developments are under construction to meet the demand for second homes including The Preserve at Gore, a 55-lot subdivision. Much of the demand for new housing can be attributed to new people being exposed to the area through skiing at Gore Mountain. The impacts from residential growth versus tourism growth tend to be more subjective in that they can be perceived as positive changes for some and negative changes from other points of view. For example, an overall increase in downtown business revenue most likely also means more traffic on local roads. Most roads in the North Country, however, are designed to handle the level generated by the high volume summer seasonal traffic. Winter business is always welcome and the increased traffic is generally accepted as a necessary side effect.

Growth inducing, secondary and cumulative impacts essentially remain as written for the 1995 UMP. Gore Mountain has not reached the goals set in the document but is on its way there. The planned improvements set forth in this document will help the ski area attain the stated goal but will not necessarily cause there to be substantially more skiers, nor a significantly higher amount of impacts.

## SECTION X EFFECTS ON THE USE AND CONSERVATION OF ENERGY

The proposed actions will not cause a major use of energy, although the consumption of fossil fuels and power will be required by the project both during its construction and operational phases.

During construction, the primary expenditure of energy will be the consumption of fossil fuels to operate construction equipment and to transport construction workers and materials to the site. This activity will cause a temporary and unavoidable increase in energy use. Some of the activities involving fuel consumption during the various construction phases include clearing and grubbing, excavation, grading, and lift and building construction.

The operation of the facility will also require the consumption of fossil fuels and power. The use of electric and fossil fuels for improved chair lifts and snowmaking equipment cannot be avoided. Additionally, new and expanded lodge facilities and services will necessitate the use of more fuel for heating.

Gore Mountain currently has access to 34,500 volts of electricity supplying a maximum demand load of 7.5 megavolt amperes (MVA). As presently designed, the Ski Center has a peak demand of 7 MVA. Of this peak demand, approximately 3 MVA is used by air compressors. The improvements for the site have resulted in the alteration of the power demands to include the use of electric and diesel fuel power thereby eliminating approximately 1.2 MVA of the current electric demand. Various chair lifts will be replaced, upgraded or in some cases eliminated and other lifts will be added resulting in only nominal new chair lift energy requirements. To improve service and conserve energy, transformers have been upgraded and installed and electric transmission lines have been upgraded and expanded.

The improvements proposed for the Gore Mountain Ski Center are expected to result in an increase in the number of skiers traveling to the area. The resultant automobile traffic could contribute to the consumption of fossil fuels. Shuttle buses from local communities, overnight accommodations and schools are proposed to be included. Shuttles will serve to diminish parking and traffic congestion and will reduce the consumption of fossil fuels.

Normal day-to-day operation will contribute to increased power consumption on a long-term basis. This consumption, however, will predominantly be seasonal in nature.

Outside of the structures some outdoor lighting is expected, but will not result in a substantial use of electricity.

One potentially significant energy conservation effect would occur should the ultimate plan for the area be realized. Should the recreational train route be expanded from North Creek to service Saratoga Springs, then a connection to Amtrak could be realized.

Therefore, skiers could travel from New York City or Montreal and points in between to Saratoga Springs by Amtrak. They could then transfer to the recreation/tourism train and arrive by rail in North Creek. They could then be shuttled to area motels and inns and then shuttled to Ski Bowl Park for access to the mountain. No automobiles, other than local shuttles, would be involved.

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# Appendix 1

## Scoping Outline

GORE MOUNTAIN 2000 UMP/EIS

SCOPING OUTLINE

EXECUTIVE SUMMARY

SECTION I INTRODUCTION

A. Project Purpose
B. Location of Property
C. General Facility Description
D. History of Ski Center
E. Description of UMP/GEIS Process
F. Status of 1995 UMP

SECTION II UPDATED INVENTORY OF EXISTING RESOURCES, FACILITIES, SYSTEMS AND USE

A. Changes in Natural Resources
B. Changes in Human Resources
C. Changes in Man-Made Facilities
D. Changes in Public Use of the Ski Center

SECTION III MANAGEMENT AND POLICY

A. Orientation and Evolution of Management Philosophy
B. Regulatory Issues
C. Management Goals and Objectives

1. Improve Equipment Reliability
2. Reduce operations and maintenance costs
3. Environmental compatibility
4. Stabilize the local economy
5. Improve trail safety
6. Improve trail selection
7. Improve economic return
8. Increase public access

SECTION IV PROPOSED MANAGEMENT ACTIONS AND PROJECTED USE

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1. Improve Equipment Reliability
   Create a long term replacement and modernization plan to restore all equipment, machinery, infrastructure and structures which are at the end of their useful life
2. Base and Mountain Lodges and Amenities
   Rehab/addition to Saddle Lodge

3. New Downhill Trails and Lifts
   Beginner trail from Bear Mountain
   Selective trails to 200' wide
   Triple chair (lift 1) replacement
   New Lifts and Trails to Create Connection with North Creek Ski Bowl
4. Tubing Hill
   Bear Mountain two runs and one surface lift
5. Snowmaking
   Tower guns on steep trails
   Water and air capacity additions
6. Sand Pits
   Two new sand pits
7. Bear Mountain fire tower/observation tower

B. Project Use
C. Phasing and Scheduling
D. Actions Approved in the 1987 and 1995 UMP/GEIS which are a Part of the Foregoing Five-Year Plan.

1. Construct POD 10 Lift and Trails
2. Creation of Children's Center
3. Bear Mountain Summit Lodge Construction
4. Base Lodge Rehabilitation
5. Extend Parking
6. Trail Improvements

SECTION V POTENTIAL IMPACTS AND MITIGATION MEASURES

A. Number, location and species of trees cut on mountain
B. Changes in views from roadways and state land
C. Impacts to local roadways, including traffic volumes and levels of service
D. Impacts to community services, including adequacy to service additional skiers
E. Compatibility with local land use plans
F. Direct economic impacts including job creation, construction spending and taxes

SECTION VI ALTERNATIVES

A. Alternative lift configurations
B. Alternative trail improvements
C. Alternative lodge improvements
D. Alternative parking/circulation improvements
E. The No-Action Alternative

SECTION VII SUMMARY OF UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

SECTION VIII IRREVERSIBLE AND IRRETREIVABLE COMMITMENTS OF RESOURCES

SECTION IX GROWTH INDUCING, SECONDARY AND CUMULATIVE IMPACTS

SECTION X EFFECTS ON THE USE AND CONSERVATION OF ENERGY

# Appendix 2

# Correspondence

OLYMPIC REGIONAL
NEW YORK
DEVELOPMENT AUTHORITY

March 1, 2001

To: Attached List of Involved Agencies

Re: Gore Mountain Ski Center
Unit Management Plan Update/ Draft Generic Environmental Impact Statement
Notice of Completeness, Notice of Hearing

The Olympic Regional Development Authority as lead agent has accepted as complete for the purposes of commencing public review, a Supplemental DGEIS for the 2001-2006 Gore Mountain Ski Center Unit Management Plan. A SEQRA Public Hearing has been scheduled for 7 PM on April 9, 2001 at the Gore Mountain Base Lodge. Comments will be accepted in writing by the contact person until midnight of May 1, 2001.

The action involves the continuation of management actions approved in the 1995 UMP, in addition to proposed management actions including upgrading the snowmaking system capacity, widening of some trails, ski lift work, development of a tubing hill, designation of two sand pits, and a trail/lift connection to the Town of Johnsburg Ski Bowl Park. The project is located on Peaceful Valley Road, in the Town of Johnsburg, Warren County. Copies of the Supplemental UMP/DGEIS are available for review at Gore Mountain Ski Center, the Johnsburg Town Hall, the Warren County Planning Department at the Warren County Municipal Center, and at ORDA offices at 216 Main Street, Lake Placid, Adirondack Park Agency, Raybrook Headquarters and at the Department of Environmental Conservation Offices in Warrensburg and Raybrook.

CONTACT PERSON: Michael Pratt, Gore Mountain Ski Center, Peaceful Valley Rd., North Creek, NY 12853

Signature; Ted Blazer
President, Olympic Regional Dev. Authority

0030ordanoc

# Keene Valley Land Exchange With State Nearing Completion After Five Years

A bill that brings 144 new acres of Forest Preserve into public hands was finally approved by the NYS Legislature during the last days of the 2000 legislative session, after a five-year delay.

The bill allows the state to move forward with a land swap approved in a Constitutional Amendment and statewide ballot in 1995. The deal granted 12 acres of isolated Forest Preserve to the Town of Keene for expansion of its cemetery in Keene Valley. In exchange, the town turned over 144 acres of riverbank and forest east of State Route 73 and south of U.S. Route 9, along the Ausable River, also in Keene Valley.

The town will demolish the highway garage currently standing south of the current river access lot. The existing parking area, picnic site and fishing access will be maintained by the state.

*Along the east bank of the East Branch of the Ausable River, Keene Valley, in April 2000. This stretch is slated to become Forest Preserve. Photo by John F. Sheehan.*

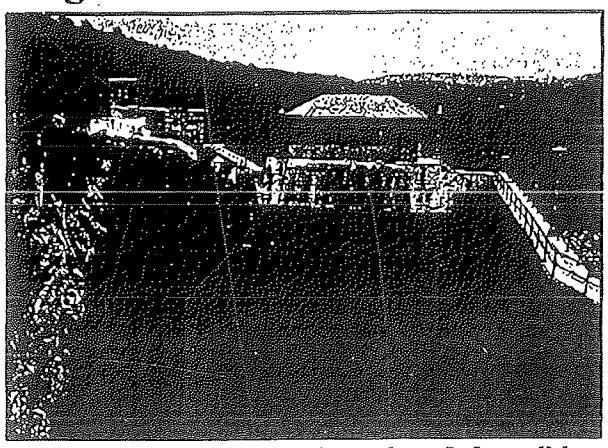
## North Creek Ski Bowl United With State's Gore Ski Area

The final days of the legislative session brought welcome news to North Creek, when a bill was approved giving the Olympic Regional Development Authority permission to manage the Town of Johnsburg's Ski Bowl, also known as Little Gore, adjacent to Gore Mountain Ski Area.

ORDA already manages the Gore operation. It has promised town residents that it will provide night skiing, tubing and free skiing to town children, and will incorporate the Ski Bowl into the Gore operation. Lift ticket buyers can use both facilities.

## *Federal Settlement: Great Sacandaga Shore is Forest Preserve*

In the first such arrangement in the nation, the state's Hudson River/Black River Regulating District board will jointly manage water levels and water quality on the Great Sacandaga Lake (as well as the operation of two more dams downstream) with dam owner and hydro-power license co-holder, Orion Power. The licenses remain in effect for 40 years. Orion, of Maryland, bought the Sacandaga system's power dams from Niagara Mohawk Power Corp. last year. Under most federal licenses, the power company alone holds the federal license and has sole discretion over water levels, hours of operation, downstream releases, and most importantly, discretion over all use of the land around the lake. In this case, those functions will be shared by the power company and regulating board, in recognition of the land's Constitutional protection under New York law. The federal license negotiated by the Adirondack Council and a host of other parties over the past nine years (115 meetings) requires: Higher and more consistent water levels, new racks at the dams to protect fish from the turbines, coordinated releases for whitewater recreation, increased funds and water for fisheries management and other environmental enhancements. The lake was created in 1932 to prevent flooding in the Hudson Valley. Photo by Gary Randorf.



*Conklingville Dam, Great Sacandaga Lake, will be managed jointly by Orion Power and state officials.*

To: Holly Elmer, LA Group FAX: 587-0180
From: Jack Freeman, ADK Tel: 668-4447, x26

Ken Rimany

*Dave Gibson, of the Association for the Protection of the Adirondacks, Newcomb Town Supervisor George Canon, Steven Beatty of the National Park Service, and ADK's Jack Freeman gather by the Santanoni Preserve dedicatory plaque. The plaque was unveiled at a celebration held in September, and cites several of Santanoni's unique characteristics. The plaque reads, in part, "Retaining a high level of integrity of setting, plan design, style, materials and method of construction. Santanoni remains an intact and imaginative example of an Adirondack camp."*

available. The Web site features a history of the ALSC and its long-term monitoring project; a site map; a listing of research projects; research data on ponds and lakes of the Adirondacks; and monthly chemical updates for "two key monitoring lakes," Big Moose and Willys Lakes.

Adirondack Park
VISITOR CENTERS
Paul Smiths • Newcomb

**Visitor Interpretive Center Anniversary Celebrated:** The Adirondack Park Agency noted the tenth anniversary of the Newcomb Interpretive Center in the fall of 2000. The center is on Rt. 28N, 14 miles east of Long Lake. It offers trails, indoor exhibits, multi-image presentations on the Park, lectures and programs. It is open daily from 9 to 5, year-round. Admission is free.

**Gov. Pataki Earmarks Dollars for the Adirondacks:** More than one million dollars were set aside in the fall of 2000 for improvements and repairs in state lands in the Adirondacks and Catskills. ADK's own Neil Woodworth is quoted by WNBZ as saying "the funds will help create more hiking trails, canoe launches, and campsites for all New Yorkers." The money comes from the state Environmental Protection Fund.

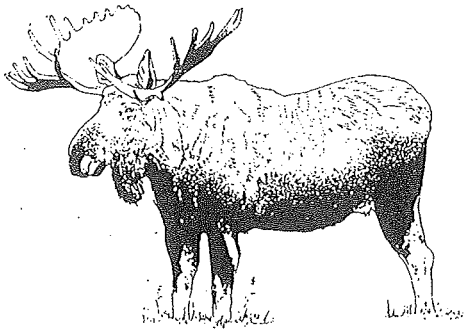
**Finger Lakes Updates:** The Finger Lakes Trail System added two new lean-tos in the summer of 2000. One is located on the Conservation Trail in Cattaraugus County (FLT map CT-4), and the second is on Rogers Hill in Schuyler County (map M-15). The Genesee Valley Chapter of ADK also reports improvements to the old roadway heading east up the hill from NY Rt. 70A. Culverts were replaced, erosion control was implemented, and a bridge was installed.

**Long Path Relocation Opened:** Over five miles of Long Path relocation in the central Catskills is now open to the public. The new segment begins on the Willow Trail 1.6 miles north of the Mt. Tremper Fire Tower and is part of an 11.8-mile relocation that replaces over six miles of road walking. For information: Peter Senterman, 845-221-4392.

**Changes at North Creek Ski Bowl:** North Creek Ski Bowl (also known as "Little Gore") has been put under the management of the Olympic Regional Development Authority (ORDA), which also manages the adjacent Gore Mt. Ski Area. ORDA intends to incorporate the Ski Bowl facility into the Gore Mt. operation, and one lift ticket will cover both facilities.

**New Edition:** The third edition of the *West Hudson Trails* two-map set is now available from the New York-New Jersey Trail Conference. The set features Orange County's Storm King and Schunemunk Mountains and Black Rock Forest hiking areas. The maps are five-colored, and are printed on waterproof, tearproof Tyvek.

**Trail Updates:** The Red Hill Trail, which leads to a newly restored fire tower, is open to the public. Located in the southern Catskills, the trail can be found on New York-New Jersey Trail Conference's *Catskill Trails* map #43. On the AT, a pedestrian bridge across Dunnfield Creek in Worthington State Forest has been repaired. The Ramapo-Dunderberg Trail, which can be found on the Trail Conference's *Harriman-Bear Mountain Trails* map #4, has been relocated. The new trailhead is just south of the parking area on the west side of Rt. 9W, opposite Old Ayers Rd. to Jones Point. The trail is marked with red-on-white blazes.



**Moose Fatality:** On a single night in October, two moose were struck by cars in the Tupper Lake area. The first moose, a 700-pound 1½-year-old bull, was killed; the second lived to stagger off the road. Neither resulted in any injury to the drivers or passengers.

Jan-Feb, 2001

STATE OF NEW YORK
EXECUTIVE DEPARTMENT
ADIRONDACK PARK AGENCY
P.O. Box 99, Route 86
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# MEMORANDUM

TO: Dan Fitts

FROM: Chuck Scrafford

DATE: August 31, 2000

SUBJECT: Amendment to the Gore Mountain Unit Management Plan

Attached is a request from Michael Pratt, General Manager of the Gore Mountain Ski Center to amend the unit management plan for the Ski Area to allow the construction of a trail off Bear Mountain, the terminus of the new gondola. Currently the two trails off Bear Mountain are rated "more difficult" and "most difficult" presenting a challenge out of proportion to the skills of beginner and lower intermediate skiers. The proposed trail would traverse more gentle slopes and be an easier trail to ski. This would allow all accessing Bear Mountain to ski terrain consistent with their ability and allow dispersal of skiers to all parts of Gore Mountain. Skier safety and experience and skier distribution are key management objectives for the operation of the Ski Area.

The proposal involves cutting 1050 feet of trail to a width of 200 feet. This will require cutting 1838 trees 3-4 inches dbh and 1902 trees over 4 inches dbh. The cleared area will be approximately 5.7 acres. The proposed trail is well within the Constitutional limits set for both the total miles of trails allowed at Gore Mountain and the miles of trails that may be 200 feet wide. Article XIV allows up to 40 miles of trails on Gore and Pete Gay Mountains and limits the width of those trails to 80 to 200 feet in width provided not more than 8 miles of such trails are in excess of 120 feet wide. There are 28.5 miles of existing and approved (but not yet constructed) alpine ski trails at the Gore Mountain Ski Area of which 4.4 miles either are or are proposed to be cleared to 200 feet.

ORDA has prepared and filed a Negative Declaration in the Environmental Notice Bulletin. As of this date there has not been any public comment. Mike Pratt will forward copies of any comments they receive, which will be provide to you and the Agency members.

As you know, Gore Mountain is in the process of a comprehensive update of its unit management plan. In order to provide adequate time for review and public comment, that process will not be completed until late fall or early winter. The proposal for the above trail is being presented as an amendment to the current plan to allow it to be

constructed and in service this winter. The need described above is immediate for this season and Gore's management feels it cannot wait until next year to solve this problem.

Staff concurs that this trail proposal merits consideration as an amendment to the current unit management plan. Staff further recommends that the Agency find that the proposed amendment complies with the guidelines for management and use of ski areas set forth at pages 30 and 32 of the Master Plan.

CWS:hs

cc: State Land Team

GORE

SKI THE NEW FACE OF GORE MOUNTAIN

Peaceful Valley Road, P.O. Box 470, North Creek, NY 12853 GOREMOUNTAIN.COM
Phone 518-251-2411 Marketing Fax 518-251-2073 Administration Fax 518-251-5171

August 11, 2000

**Memorandum**

To: Ted Blazer – Olympic Regional Development Authority
Chris Conway – Olympic Regional Development Authority
Tom Wahl – Department of Environmental Conservation
Tom Martin – Department of Environmental Conservation
Karen Richards – Department of Environmental Conservation
Gary West – Department of Environmental Conservation
John Banta – Adirondack Park Agency
Chuck Scrafford – Adirondack Park Agency
Henry Savarie – Adirondack Park Agency

From: Michael J. Pratt

Re: 2000 Gore Mountain Supplemental Unit Management Plan & 1995 Unit Management Plan Amendment

The schedule to complete the Supplemental Unit Management Plan in time for the September approval of the Adirondack Park Agency proved to tight. In order to provide more review time, easier public comments and ensure the collaborative product we all wish to endorse, the Supplemental Unit Management Draft has not been declared complete by the Olympic Regional Development Authority.

Gore Mountain needs to construct the easier trail off Bear Mountain for this snow season. The trail name is Foxlair. This project is being requested as an amendment to the 1995 plan.

The 2000 Gore Mountain's Supplemental Unit Management Plan will be completed in as timely a fashion as the SEQRA process allows.

Thank you for your understanding and cooperation.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF LANDS AND FORESTS

Forest PReserve Project Work Plan
for
Construction of New Facilities and the Expansion or
Modification of Existing Facilities

FY ~~XXX~~ 2000- AUGUST

| Region/Facility | Project Title & Location | Land Classification | Project No. |
|---|---|---|---|
| 5 | PARKING LOTS | INTENSIVE USE | 00-03 |
| GORE MOUNTAIN SKI AREA | | | |

Description & Justification (Attach Sketch Map Showing Location and other Required Supporting Documents):

CUT EASIER TRAIL - FOXLAIR

Description of Use of Motorized Equipment or Motor Vehicles, if any:

EXCAVATORS, BULLDOZERS, WOOD CHIPPERS

Michael J. Pratt
Prepared By:

8/11/00
Date:

APPROVALS OR DISAPPROVALS

Date: 8/14/00
Thomas D. Martin
Regional Forester

Date: 8/14/00
Thomas H Wahl
Regional Supervisor for
Natural Resources

Date: 8/14/00
Regional Director or
Division Director

Date: 8/16/00
Frank Dunham
Director of Lands & Forests

Comments:

# DRAFT AMENDMENT
# GORE MOUNTAIN SKI CENTER UMP

## BACKGROUND:

A Unit Management Plan for the Gore Mountain Ski Center was first completed in 1987. In May of 1995, DEC Commissioner Michael Zagata approved an amended UMP completed by the Olympic Regional Development Authority. As with the original plan, the revision focused on operation of the ski area.

Development of the approved 1995 UMP management actions included construction of the Northwoods Gondola, which provides access to the summit of Bear Mountain. Three trails developed off the Bear Mountain summit, Kill Kare, Pine Knot and Fairview are rated as "more difficult" and "most difficult" due to the relatively steep slopes these trails occupy. It is necessary to provide an easier way to descend Bear Mountain. An easier trail, referred to as Foxlair, which occupies relatively more gentle slopes, is proposed to be located on the east side of Bear Mountain, descending to the existing beginner trail, Sunway.

This amendment is necessary in order to allow for negotiable terrain for virtually all skiers accessing the summit of Bear Mountain. This trail will enhance the skiers experience and increase the accessibility of the facilities at Gore Mountain.

## OBJECTIVE OF AMENDMENT:

To amend the current Unit Management Plan to include a specific project to implement the objective of improving public access to Gore Mountain, and enhancing the skiers experience.

## PROPOSED MANAGEMENT ACTION:

The following project would be added to the existing UMP, Section IV, A:

A new easier trail, to be referred to as Foxlair, will extend from the summit of Bear Mountain down the approved Sagamore trail, and descend eastward to the existing beginner Sunway trail. Foxlair is proposed to be approximately 200 feet wide and 1,050 feet long, and will require the removal of approximately 1,838 trees that are 3-4" dbh and 1,902 trees that are greater than 4" dbh. The proposed work plan is attached.

## SCHEDULE OF IMPLEMENTATION

It is estimated that this proposed management action could be accomplished in time for the 2000 winter ski season.

ID#_____

Date_____

State Environmental Quality Review

**NEGATIVE DECLARATION**

Notice of Determination of non-Significance

August 11, 2000

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (New York State Environmental Quality Review Act) of the Environmental Conservation Law.

The Olympic Regional Development Authority, as lead agency, has determined that the proposed action described below will not have a significant effect on the environment and a draft environmental impact statement will not be prepared.

**NAME OF ACTION**: Amendment of the 1995 Unit Management Plan for the Gore Mountain Ski Center.

**SEQR STATUS**: Type I

**CONDITIONED NEGATIVE DECLARATION**: No

**DESCRIPTION OF ACTION**: The Olympic Regional Development Authority proposes to adopt an amendment to the Unit Management Plan for the Gore Mountain Ski Center. The amendment will provide for the development of an easier trail by which to descend the summit of Bear Mountain, which is accessed by the recently constructed Northwoods Gondola, thus improving outdoor recreational opportunities at Gore Mountain.

**LOCATION**: Warren County, Town of Johnsburg, New York State Forest Preserve lands classified as the Gore Mountain Ski center.

**REASONS SUPPORTING THIS DETERMINATION**: The action proposed (ski trail development) implements the objective of improving public access to Gore Mountain, as stated in the 1995 Update and Amendment to the Gore Mountain Ski Center UMP.

Development of 1,050 feet of ski trail will result in the cutting and clearing of understory vegetation in the 200 foot wide trail corridor, altering a maximum of 5.7 acres. This will increase the amount of downhill ski trails on the mountain from 28.5 miles of approved (some not yet constructed) alpine ski trails to 28.7 miles, well below the 40 miles as authorized by the New York State Constitution.

Trail development will involve cutting approximately 1,838 trees that are 3 to 4" dbh, and 1,902 trees that are greater than 4" dbh.

Established trail construction and maintenance techniques as described in the Appalachian Mountain Club's Field Guide to Trail Building and Maintenance (2nd edition) will be utilized to minimize soil erosion. These techniques include employing drainage dips, ditches and water bars.

No known significant habitats or archeological resources have been identified in or adjacent to the project area.

**FOR FURTHER INFORMATION CONTACT:**

Michael Pratt
Gore Mountain Ski Center
PO Box 470 Peaceful Valley Road
North Creek, NY 12853

**A COPY OF THIS NOTICE SENT TO:**

John Cahill, Commissioner
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-0001

Stuart Buchanan, Regional Director – Region 5
New York State Department of Environmental Conservation
PO Box 296, Rte. 86
Ray Brook, NY 12977-0296

Daniel Fitts, Executive Director
Adirondack Park Agency
PO Box 99
Ray Brook, NY 12977

00030ncgdec2.doc

Table 5-1. Summary of Vegetation Impacts

Estimated number of trees to be cut for new and widened trails, ski lifts, and sand pits.

| | Sagamore Trail | | Foxlair Trail | | Tubing Park | | Lift 11 Trails | | Lift 12 Trails | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh | Trees 3-4" dbh | Trees > 4" dbh |
| Sugar Maple | 43 | 298 | 10 | 72 | - | - | 840 | 3,411 | 1,619 | 1,760 |
| Beech | 43 | 112 | 10 | 27 | - | - | 937 | 602 | 3,939 | 4,027 |
| Yellow birch | - | 30 | - | 7 | - | - | - | 433 | 209 | 290 |
| White Birch | 260 | 358 | 537 | 735 | 393 | 381 | 443 | 2,229 | - | 694 |
| White ash | - | 11 | - | 3 | - | - | - | 205 | - | 38 |
| Black Cherry | - | - | - | - | - | - | - | 36 | - | 2 |
| Ironwood | 22 | 19 | 6 | 5 | - | - | 161 | 99 | 30 | 18 |
| Red Spruce | 27 | 42 | 56 | 87 | 43 | 59 | - | 81 | - | 2 |
| Red Maple | - | 1 | - | 0 | - | - | 60 | 215 | - | 585 |
| basswood | - | 17 | - | 5 | - | - | - | 14 | - | 3 |
| Red Oak | - | 3 | - | 1 | - | - | 127 | 277 | 209 | 335 |
| Hemlock | - | - | - | - | - | - | - | 11 | - | 0 |
| Balsam Fir | 563 | 393 | 1,161 | 811 | 895 | 875 | 602 | 364 | - | - |
| Striped Maple | - | 7 | - | 2 | - | - | 1,047 | 171 | - | 132 |
| Aspen | - | - | - | - | - | - | - | - | - | 68 |
| Mountain Ash | 27 | 71 | 56 | 146 | 43 | 68 | - | - | - | - |
| **total trees cut** | **985** | **1,361** | **1,838** | **1,902** | **1,376** | **1,383** | **4,218** | **8,150** | **6,007** | **7,953** |
| **Clearing acreage** | 5.2 | | 5.7 | | 3.6 | | 42.4 | | 24.2 | |

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
Wildlife Resources Center - New York Natural Heritage Program
700 Troy-Schenectady Road, Latham, New York 12110-2400
Phone: (518) 783-3932 FAX: (518) 783-3910

John P. Cahill
Commissioner

July 17, 2000

RECEIVED
JUL 18 2000
the LA group

Richard P Futyma
The LA Group
40 Long Alley
Saratoga Springs, NY 12866

Dear Mr. Futyma:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to the proposed State Land Unit Management Plan - new ski trails proposed, areas as indicated on the map you provided, located in the Town of Johnsburg, Warren County.

We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not mean, however, that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site, but rather that our files currently do not contain any information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals, and plants, significant natural communities, and other significant habitats. For information regarding regulated areas or permits that may be required under state law (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

Sincerely,

Teresa Mackey

Teresa Mackey, Information Services
NY Natural Heritage Program

Enc.
cc: Reg. 5, Wildlife Mgr.
Reg. 5, Fisheries Mgr.

STATE OF NEW YORK
EXECUTIVE DEPARTMENT
ADIRONDACK PARK AGENCY
P.O. Box 99, Route 86
RAY BROOK, NEW YORK 12977
(518) 891-4050
FAX: (518) 891-3938

February 1, 2000

Mr. Michael J. Pratt
General Manager
Gore Mountain Ski Area
P.O. Box 470
North Creek, NY 12853

Dear Mike:

We are pleased to support your application for an award from the National Ski Area Association for excellence in environmental group relations. Working with you, your staff at Gore Mountain and Ted Blazer, President and CEO of the Olympic Regional Development Authority, is always a positive experience.

Gore Mountain Ski Area being, located in the Adirondack Park on State Forest Preserve Lands, is required to prepare a management plan for operation of the ski center including all proposed capital improvements. The Adirondack Park Agency is responsible for approving the ski area's management plan. Among the specific findings of the Agency is a formal determination that the management of the area is compatible with the character of the Adirondack Park and that it minimizes impacts to the Park resources.

The current management plan for the ski area includes a number of significant capital improvements, including expansion of lift capacity, withdrawing water from the Hudson River for snowmaking, adding a new mountain to the area, building a new lodge on the summit of Bear Mountain, and increasing parking capacity which could adversely affect the Park's resources. Your sensitivity to environmental issues and thoughtful, solution oriented approach to them made our review more of a collaborative pro-active effort at environmental protection instead of an adversarial encounter between recreation and the environment.

Involving all the stakeholders, skiers, other recreationalists, environmental organizations, the community of North Creek, local government and involved state agencies, early and throughout the process built trust and confidence in Gore Mountain's ability to meet its management objects and remain committed to the Adirondack Park, its residents, and its resources. Your efforts resulted in a process that is a model for bringing diverse interests groups and governmental agencies together on sensitive environmental issues.

We look forward to working with you to update the Gore Mountain Ski Area management plan.

Sincerely,

Daniel F. Fitts
Executive Director

DTF:nmh:chz
cc: Richard H. Lefebvre
Charles W. Scrafford

For Immediate Release:

# SIX SKI AREAS RECOGNIZED FOR ENVIRONMENTAL EXCELLENCE AT THE SKIING COMPANY'S GOLDEN EAGLE AWARDS PRESENTATION

*Stowe Mountain Resort of Vermont Captures Highest Honor*

Orlando, FL, May 6, 2000 – The Skiing Company, publishers of *SKI*, *SKIING* and *FREEZE Magazines*, announced today Stowe Mountain Resort as the recipient of the Golden Eagle Award for overall environmental excellence at the Golden Eagle Awards Breakfast during the National Ski Area Association's convention in Orlando, FL. Six Silver Eagles were presented in the following categories: Area Visual Impact- Vail, Colorado; Environmental Education- Mad River Glen, Vermont; Environmental Group Relations- Gore Mountain, New York; Energy Conservation- Aspen Skiing Company, Colorado; Wildlife Habitat- Stratton, Vermont and Water Conservation- Aspen Skiing Company.

**Golden Eagle:**

**Overall Ski Area Operation- Stowe Mountain Resort, Vermont**

Facing major competition from ski conglomerates, consequent loss of market share, the challenges of an aging facility and the potential loss of critical snowmaking capacity, Stowe had to make some major changes. Stowe hosted meetings with 27 organizations to create the Stowe 2000 Collaborative Master Planning Initiative. It includes several key elements: enhanced snowmaking capabilities; water quality improvements; and on-mountain improvements including expanded base lodge, new trails, lifts and a hamlet-scale settlement at the foot of Spruce Peak for a residential base. The process also brought about several adjustments including the elimination of a proposed ski trail, relocation of a new lift, wetland preservation, stream restoration and enhancement and commitments to incorporate the principles of sustainability. The Community Plan provided a much-needed template for future project planning throughout Vermont. (Finalists: Whistler/Blackcomb, BC and Aspen Skiing Company)

**Silver Eagles:**

**Area Visual Impact- Vail, Colorado**

In creating the 885-acre Blue Sky Basin, years of innovative planning, hard work and collaboration with federal, state and local agencies helped create a new era in ski trail design. Other than roads and lift corridors, the area was constructed without conventional ski trails. Only braided winding trails and thinned glades exist aside from natural openings which minimizes visual impact as well as potential impact to wildlife and existing native vegetation. Strict adherence to a well-conceived plan and to mitigation efforts puts the resort on the cutting edge of trail design by creating "backcountry skiing in-bounds" while still preserving much of the pristine forest that creates that experience. Blue Sky Basin is a showcase of how a collaborative process between the ski industry and environmental agencies can work toward a common goal -- producing a unique skier experience while remaining sensitive to the environment, both visually and biologically. (Finalists: Steamboat, CO and Stevens Pass, WA)

**Energy Conservation- Aspen Skiing Company, Colorado**

ASC, winner of the 1998 and 1999 Golden Eagle Award for Overall Ski Area Operations, returns with another outstanding program. Initiatives in this area include: extensive lighting retrofits in the Gondola building and locker rooms; a renewable-energy program using wind power to supply 30% of the energy needs of the Sundeck Restaurant and 100% of the energy required to power the Cirque lift; energy-efficient washers in employee housing; an EPA Energy Star Buildings program to improve efficiency in 60% of the company's buildings; a 75% subsidy of employee bus passes; a $1.8 million annual subsidy of skier shuttles and a formal employee van-pool program. One of ASC's most important achievements in this area has been the fitting out of the Sundeck Restaurant with a host of environmental and energy-saving features: a deck made from recycled materials, elimination of CFCs in refrigeration, and energy-efficient lighting, windows and shades. It is one of only ten buildings in the US to achieve certification by the US Green Building Council's Leadership in Energy and Environmental Design (LEED) program, the first national rating system for green buildings. (Finalists: Killington, VT; Mount Bachelor, OR)

MORE

SIX SKI AREAS RECOGNIZED... ADD ONE

**Water Conservation- Aspen Skiing Company, Colorado**
In an effort to reduce water use and improve the quality of the local watershed by reducing pollution and funding water-related environmental projects, ASC instituted a hotel water-saver and contributed more than $18,000 to fund water conservation through ASC's employee Environment Foundation. Some of the initiatives include: a switch from solvent-based to water-based parts washers in vehicle shops to reduce hazardous waste generation and solvent leakage; installation of a high-efficiency horizontal-axis washing machines in employee housing; a fluorescent bulb recycling program to prevent mercury from leeching into local groundwater and development of a landscaping plan for the new Sundeck restaurant that uses native grasses which eliminates irrigation beyond the initial establishment period. (Finalists: Angel Fire, NM; Smuggler's Notch, VT)

**Wildlife Habitat Protection- Stratton Mountain Resort**
Vermont requires that two acres of land be offered as mitigation for every acre affected by a ski area's development. Stratton's 1999 Master Plan was nearly 18-to-1. The plan weighs the overall impact of facilities and human activity on wildlife and takes extraordinary steps to enhance habitat. The area sponsored studies that provide data instrumental to understanding of how activity impacts regional wildlife. The area funded a $100,000 grant to launch a six-year radio telemetry study designed to identify key components of critical black bear habitat and determine how the black bear responds to changing land use. (Finalists: Aspen Skiing Company; Mont Tremblant, Quebec)

**Environmental Group Relations- Gore Mountain, New York**
In 1994, Gore Mountain formulated a five-year plan, a long-term upgrade of the ski area to modernize the 30-year-old facility. Since it is surrounded by forever-wild Adirondack Park, environmental compatibility was identified as a primary goal of the plan. The area has since exceeded this goal by not simply following environmental regulations, but by becoming a proactive pioneer that combines skiing and environmental concerns to develop in an environmentally sensitive manner now and in the future. The process supported by such groups as the Sierra Club, Adirondack Nature Conservancy, Audubon Society, and Trout Unlimited involved the presentation of the area's goals and vision, inviting group concerns, and then addressing them. (Finalists: Copper Mountain, CO; Aspen Skiing Company)

**Environmental Education- Mad River Glen, Vermont**
Prior to its purchase by the Mad River Glen Cooperative in 1995, the area was at risk of being acquired by a corporate resort operator. The Cooperative was organized for skiers and locals to preserve the area's heritage and landscape. It developed a sustainable recreational development plan that protects the integrity of the area's natural resources. It instituted naturalist programs to educate and raise awareness of the public about the conservation of the area's mountain environment. The programs have grown from weekend snowshoeing programs to slide shows to weekend ecology and wildlife workshops to the Northern Forest Stewardship Conference, founded to create an open dialogue on how recreational facilities can foster the conservation of natural resources while remaining economically viable. (Finalists: Mammoth, CA; Crystal Mountain, MI)

The Golden Eagle Awards were established in 1993 by Times Mirror Magazine's Skiing Company to recognize the environmental achievements of ski areas. In spite of the many examples of ski areas benefiting the environment, the positive environmental impact is not often mentioned. The judges were: Michael Berry, president of the National Ski Areas Association, Andy Bigford, Editor-in-Chief, *SKI Magazine*, Jerry Blann, Chairman, National Ski Area Assoc.'s Environmental Committee, Christin Cooper, former U.S. Ski Team Olympian, Rick Kahl, Editor-in-Chief, *SKIING Magazine*, Joyce Kelly, former Director, Wildlife Habitat Council, Francis Pandolfi, former Deputy Chief, David Rowan, Editor and Publisher of *Ski Area Management*, U.S. Forest Service and Jack Zehren, President of the architectural firm Zehren & Associates.

###

The Skiing Company, based in Boulder, Colo., is the division of Times Mirror Magazines that publishes *SKI, SKIING, FREEZE, Skiing Trade News* and *SkiNet.com*. TMM titles include: *Field & Stream, GOLF MAGAZINE, Motor Boating & Sailing, Outdoor Explorer, Outdoor Life, Popular Science, Ride BMX, Salt Water Sportsman, Senior Golfer, Snap BMX, Snowboard Life, Today's Homeowner, TransWorld SKATEboarding, TransWorld SNOWboarding, TransWorld STANCE, TransWorld SURF* and *Yachting*.

Contact: Sara Delekta
The Skiing Company
Work: (212) 779-5172
Cell: (917) 868-4502
sara.delekta@tmm.com

New York State Department of Environmental Conservation
MEMORANDUM

**To:** Dick Grebe, Region 5, Ray Brook
**From:** Jim Lyons
**Subject:** Gore Mountain Fire Tower Inspection & Analysis

**Date:** 12/8/99

Per request I have evaluated the Gore Mountain Fire Tower for structural integrity and with consideration to the possibility of rehabilitating it and opening it for public use. I've attached a report outlining the current state of the tower and my recommended course of action.

Basically I am recommending that the Department does not pursue opening this tower to the public. This structure is not in any imminent danger of *falling down* or otherwise failing in its current capacity as a stalk for microwave antennae. But that said, the fact remains that this tower has already been extensively modified to the point that predicting its behavior is no longer an exact science. The multiple and sundry repairs and retrofits that have been made to it over the years have, in effect, conspired to preclude it from functioning as, and in my opinion even appearing as, an original Aermotor fire tower. If such a facility is desired on Gore Mountain then the public would be best served with a bought or borrowed tower installed at another location on the mountain.

Please let me know if you have any questions or if I can be of any further assistance on this project.

Thank you.

cc: T. Miller
A. Niles
T. Wolf
R. Fenton
C. Vandrei

Mike Pratt - Gore Mountain Ski Center

New York State Department of Environmental Conservation
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Please let me know if you have any questions or if I can be of any further assistance on this project.

Thank you.

cc: T. Miller
A. Niles
T. Wolf
R. Fenton
C. Vandrei

Mike Pratt - Gore Mountain Ski Center

# Appendix 3

# Gore Mountain Water Quality Monitoring

## Gore Mountain Water Quality Monitoring

### 1. Introduction

In accordance with the 1995 Gore Mountain Unit Master Plan (UMP), water quality in streams around Gore Mountain was monitored between 1995 and 1999. Water quality monitoring was performed in response to concerns expressed during the UMP public review process (1995 UMP FGEIS Section 2.02). Concern was expressed that construction of new ski trails and other improvements described in the 1995 UMP could potentially impact water quality in the brooks that drain the areas of proposed improvements. Water quality data collected to date indicates that ski area improvements that have been made between 1995 and 1999 have not resulted in either increased sediment loading or increased nutrient loading to the streams around Gore Mountain.

### 2. Sampling and Testing

Water samples were taken from Straight Brook and Roaring Brook during base flow conditions and during storms with and without snow cover. Samples were collected during all seasons over the five-year period. Roaring Brook was sampled above the North Creek Reservoir and downgradient of the ski trails and lift on the northern portion of the ski area. This allowed for collecting samples prior to dilution and particulate settling that would occur in the reservoir. The Straight Brook sampling location was located at an existing cross country ski bridge downstream of the new trails constructed on the south face of Bear Mountain.

Collected water samples were tested for a number of parameters described in the 1995 UMP. The certified professional sewage treatment plant operator at Gore Mountain conducted analyses for some parameters. Other parameters were tested at an outside laboratory accredited by the New York State Department of Health.

The following is a list of the analyses performed on the samples taken from Straight Brook and Roaring Brook.

| Parameter | Units | Test Method |
|---|---|---|
| Conductivity | umhos/cm at 25°C | EPA 120.1 |
| pH | standard units | EPA 150.1 |
| Total Suspended Solids (TSS) | mg/l | EPA 160.2 |
| Ammonia | mg/l | EPA 350.2 |
| Total Phosphorus (TP) | µg/l | EPA 365.2 |
| Temperature | °F | at sample point |
| Turbidity | ntu | standard neptholometer |
| Dissolved Oxygen (DO) | mg/l | DO meter/titrate calibration (temperature compensated) |

Table 1, "Gore Mountain Stream Monitoring Program, Straight Brook" and Table 2, "Gore Mountain Stream Monitoring Program, Roaring Brook" contain the results of the sample analyses.

3. Data Processing

The data in Tables 1 and 2 were analyzed to determine if there were any trends in the data over time. Theoretically, construction of improvements covered under the 1995 UMP could have resulted in increased nutrient loading and also erosion and sedimentation in the two creeks. This theoretical increasing in loading would have a cumulative affect with indicators of nutrient loading and sediment loading increasing over time.

Generally speaking, the following were the major improvement activities undertaken at Gore Mountain for the time when water quality data was being collected.

1995 - Straight Brook Lift and work road near the North Lift
1996 - Snowmaking Pipeline and Glades on the east side of Straight Brook
1997 – Beginner Area
1998 - Trail near Straight Brook, East Side Lift Line, and work road to Bear Mountain
1999 – Gondola installed and three trails on Bear Mountain

Water Quality Data collected over the 1995-1999 period were first separated by year. The data were then further stratified into base flow conditions and storm/melt conditions. Thus for the parameters listed above there were yearly data for both base flow and storm conditions. Table 3, "Straight Brook Monitoring Results" and Table 4, "Roaring Brook Monitoring Results", presents the sampling data separated by years, by parameter, and base flow versus storm conditions.

Tables 3 and 4 show that in numerous instances sample levels were below laboratory detection limits, as indicated by the "<" symbol. In order to be able to make statistical comparisons of this data it was necessary to assign a value to those samples that were below laboratory detection limits. The assumption was made that all values less than the laboratory detection limits were one-half of the detection limits.

Table 5 "Straight Brook Statistics", and Table 6, "Roaring Brook Statistics", summarize the data for the monitoring period. These data were used for the statistical comparisons between years contained in Table 7, "Straight Brook – Comparison of Years" and Table 8, "Roaring Brook – Comparison of Years", present the statistics for each of the parameters and flow regimes over the five year period. For each parameter/flow condition/year combination a 95% confidence interval ( $\alpha = 0.05$) was calculated. Where the 95% confidence interval of two years overlapped it was determined there was no significant difference between the years for that particular parameter/flow condition.

## 4. Results

In almost all instances there are no differences in measured parameter levels over the five-year period.

### 4.1 Erosion and Sediment Loading

Parameters used to analyze any potential increase in erosion and sediment loading were primarily conductivity, total suspended solids (TSS), and turbidity. Measuring conductivity is a simplified method for determining the amount of total dissolved solids (TDS) which is the filterable residue dissolved in water. TSS, as its name implies, is a measurement of materials that do not dissolve in water. Turbidity is a more composite parameter representing light attenuation due to the combination of dissolved and suspended inorganic matter as well as organic matter, humic compounds and colloidal materials.

Base flow conductivity was the same in Straight Brook for all five years. Levels were generally between 10 and 30 umhos/cm but in 1996 and 1997 levels as high as 144 and 589 were measured. These anomalies resulted in elevated mean values and wide confidence intervals. Conductivity in Straight Brook during storm events did show some statistically significant variation between years with conductivity generally decreasing between 1995 and 1999 indicating slight decreases in dissolved solids in Straight Brook.

Roaring Brook conductivity levels similarly decreased when levels in 1995 and 1999 are compared. Year-to-year decreases were not statistically significant. This trend occurred in the data collected for both storm events and base flow conditions.

Roaring Brook TSS levels under base flow conditions did show some year-to-year variability, but no clear trend over time. Levels in 1995 and 1997 were lower than other years with the samples taken in 1995 (1 sample) and in 1997 (2 samples) all having TSS levels below the 1 mg/l detection limit. A single TSS sample taken in Straight Brook under storm condition did not allow for the calculation of a 95% confidence interval and is likely the reason that 1995 levels were higher than 1999 levels. All other years were similar.

TSS base flow levels in Roaring Brook were the same for all years. There were also no statistical year-to-year differences in Roaring Brook TSS levels for storm events.

There was no year-to-year variability in turbidity levels in either brook for either base flow conditions or storm conditions. This would be expected given the lack of variation in the dissolved fraction measured by conductivity and the solids components measured by TSS.

### 4.2 Nutrient Loading

Ammonia and total phosphorus (TP) were the two parameters measured to quantify nutrient loading in the two brooks.

Ammonia levels in Straight Brook exceeded the 1 mg/l laboratory detection limits in only one sample taken during storm event in 1996. Ammonia levels were 1.1 mg/l in this sample. All other storm sample levels were <1mg/l. Base flow ammonia levels in Straight Brook were the same for all years, all less than the detection limit.

The same patterns of ammonia occurred in Roaring Brook. All base flow samples were <1 mg/l. All storm event samples were less than 1 mg/l with the exception of two events where ammonia levels were 1.1 mg/l in 1997 and 1.6 mg/l in 1996. There were no differences in year-to-year ammonia levels in Roaring Brook.

Straight Brook TP levels during base flow sampling were the same in all years except for 1996. In 1996 all TP base flow samples were less than the 10 mg/l detection limit. For storm event sampling in Straight Brook there were no differences in TP levels between any of the years.

TP levels were the same in Roaring Brook for all years under base flow conditions. There was also no difference in TP levels for any of the years under storm flow conditions in Roaring Brook.

The lack of variation in ammonia and TP levels over the last five-year period demonstrates that improvements at Gore Mountain have not resulted in increased nutrient loading to the nearby streams.

### 4.3 Other Parameters Monitored

In addition to the parameters described above, pH, temperature, and dissolved oxygen (DO) were also monitored.

For both streams the only variation in pH was for Straight Brook in 1995 when the single storm event sample had a pH of 4.2. This was lower than other years. All other years for Straight Brook and all years for Roaring Brook had similar pH for base flow and storm event conditions.

The only variation found in the DO data was a lower value for Roaring Brook in the only base flow sample taken in 1995. All other years for both streams had DO levels that did not vary from one another.

There are no trends in temperature to analyze because sampling dates varied from year to year. This data was collected only to have available in the event that anomalies occurred in other data that could some how be related to unusual temperature conditions.

## 5. Conclusions and Recommendations

The water quality data collected for the period 1995 to 1999 in Straight Brook and Roaring Brook demonstrate that the improvements at Gore Mountain have not impacted local water quality or downstream water quality.

It is recommended that the current sampling program be modified to provide data that lends itself better to future analyses. Because of the small number of samples in some of the data once it is stratified between years and also between base flow and storm conditions, high rates of variability sometimes make for wide confidence intervals that could potentially mask possible trends.

By increasing the sampling frequency, while at the same time decreasing the number of parameters tested for, a better data set can be developed for approximately the same costs.

It is recommended that attempts be made to take monthly samples during base flow conditions and during storm events. It is recognized that this may be difficult during the summer months when flows in the brooks are very low or non-existent and in mid-winter when ice cover may impede sampling. However, a data set of 10 to 12 samples for each year would very likely reduce the variability in the data and allow for a more rigorous analysis.

Recommended parameters to continue to test for should include conductivity, TSS, and TP. Testing for these parameters would still provide the data necessary to continue to evaluate potential impacts from increased nutrient loading and erosion and sedimentation as a result of future improvements at Gore Mountain. To date, no such impacts have occurred based on the data collected between 1995 and 1999.

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## [illegible]ole [illegible]ore [illegible]inta[illegible] Str[illegible] Mo[illegible]orin[illegible]ogr[illegible]

Straight Brook

| Sampling Dates | Parameters Conductivity (umhos/cm@25°C) | pH (su) | TSS (mg/l) | Ammonia (mg/l) | Total Phosphate-P (ug/l) | Temperature (°F) | Turbidity (ntu) | Dissolved Oxygen (mg/l) | Discharge (cfs) |
|---|---|---|---|---|---|---|---|---|---|
| 11/3/1999 | 21 | 6.80 | 2.0 | <1.0 | 8.0 | 47.7 | .54 | 10.1 | Storm/Melt Event |
| 10/27/1999 | 21 | 7.40 | <1.0 | <1.0 | 21 | 40.5 | .51 | 10.7 | Baseflow |
| 9/17/1999 | 18 | 5.55 | <1.0 | <1.0 | 8.0 | 50.5 | 1.31 | 9.2 | Storm Event |
| 7/27/1999 | 31 | 6.9 | <1.0 | <1.0 | 43 | 62.1 | .39 | 8.0 | Baseflow |
| 5/27/1999 | 13.6 | 6.25 | <1.0 | <1.0 | <2.0 | 45.5 | .22 | 8.4 | Storm Event |
| 5/4/1999 | 14.1 | 5.1 | 1.0 | <1.0 | 16 | 41.2 | .31 | 8.5 | Baseflow |
| | | | | | | | | | |
| 12/1/1998 | 18 | 5.42 | 3.5 | <1.0 | 26 | 40.1 | .59 | 11.64 | Storm/Melt Event |
| 11/6/1998 | 24 | 6.92 | 2.5 | <1.0 | 14 | 33.9 | .22 | 11.75 | Baseflow |
| 8/24/1998 | 20 | 6.31 | 27 | <1.0 | 22 | 59.2 | 3.17 | 9.47 | Storm Event |
| 6/15/1998 | 19 | 5 | 1.0 | <1.0 | 160 | 53 | .65 | 10.10 | Storm Event |
| 6/12/1998 | 28 | 6.77 | 6.5 | <1.0 | 10 | 51.6 | .83 | 9.86 | Baseflow |
| 1/4/1998 | 31 | 5.98 | <1.0 | <1.0 | 30 | 27.7 | .19 | 12.30 | Storm/Melt Event |
| | | | | | | | | | |
| 10/27/1997 | 29 | 5.7 | 1.0 | <1.0 | 500 | 32 | 1.14 | 12.04 | Storm Event |
| 9/7/1997 | 27 | 6.9 | 4.0 | <1.0 | 20 | 48.2 | .52 | 7.92 | Storm Event |
| 8/11/1997 | 31 | 6.56 | <1.0 | <1.0 | 29 | 55 | .23 | 9.93 | 0.0023-0.00669 cfs Baseflow |
| 6/17/1997 | 23 | 7.6 | 8.0 | <1.0 | 18 | 48 | .97 | 10.25 | Storm Event |
| 4/17/1997 | 144 | 6.1 | <1.0 | <1.0 | 10 | 33.3 | .39 | 13.62 | Baseflow |
| 2/28/1997 | 15 | 6.2 | <1.0 | <1.0 | 19 | 29 | .32 | 14.2 | Storm Event (2/27 rain .5") |
| | | | | | | | | | |
| 12/2/1996 | 23 | 10 | 5.5 | <1.0 | <10 | 28 | .78 | 8.7 | Storm/Melt Event (Nov. rain 4.24") |
| 11/7/1996 | 14 | 6.3 | 3.0 | <1.0 | <10 | 38 | .19 | 9.3 | Baseflow (Oct. rain 3.86") |
| 9/9/1996 | 28 | 6.4 | 6.0 | <1.0 | 20 | 54 | .91 | 8.9 | Storm Event |
| 8/14/1996 | 589 | 6.6 | <1.0 | <1.0 | <10 | 56 | .31 | 8.0 | Baseflow |
| 6/7/1996 | 22 | 6.1 | 42 | <1.0 | 30 | 46 | 2.83 | 10.32 | Storm Event |
| 3/26/1996 | 25 | 5.5 | <1.0 | <1.0 | <10 | 28 | .27 | 12.36 | Baseflow |
| 2/23/1996 | 24 | 5.2 | 3.0 | 1.1 | 10 | 29 | .56 | 10.6 | Storm/Melt Event |
| 2/5/1996 | 25 | 6.3 | <1.0 | <1.0 | <10 | 27 | .33 | 14.61 | Baseflow |
| | | | | | | | | | |
| 10/17/1995 | 37 | 4.2 | 2.0 | <1.0 | <10 | 42 | 16.4 | 9.1 | Storm Event 3.48 cfs |
| 6/21/1995 | 28 | 6.7 | <1.0 | <1.0 | 30 | 52 | .34 | 8.9 | Baseflow .1109 cfs |
| 6/1/1995 | | | | | | 56 | | | Baseflow .59 cfs |
| 5/31/1995 | | | | | | 57 | | | Baseflow 1.65 cfs |
| 3/7/1995 | 26 | 6.1 | Alkalinity 2.8 | <1.0 | 10 | | | | |

## [illegible]ble [illegible]ore [illegible]nta[illegible] Str[illegible] Mo[illegible]ring [illegible]ogra[illegible]

Roaring Brook

| Sampling Dates | Parameters Conductivity (umhos/cm@25°C) | pH (su@16.2°C) | TSS (mg/l) | Ammonia (mg/l) | Total Phosphate-P (ug/l) | Temperature (°F) | Turbidity (ntu) | Dissolved Oxygen (mg/l) | Discharge (cfs) |
|---|---|---|---|---|---|---|---|---|---|
| 11/3/1999 | 17 | 6.12 | <1.0 | <1.0 | 12 | 46.8 | .49 | 10.6 | Storm/Melt Event |
| 10/27/1999 | 17 | 7.08 | <1.0 | <1.0 | 8.0 | 40.6 | .34 | 10.7 | Baseflow |
| 9/17/1999 | 18 | 6.70 | <1.0 | <1.0 | 10 | 50.7 | 1.26 | 9.1 | Storm/Melt Event (H. Floyd) |
| 7/27/1999 | 35 | 6.9 | <1.0 | <1.0 | 13 | 61.5 | .43 | 8.1 | Baseflow |
| 5/27/1999 | 14.7 | 6.05 | <1.0 | <1.0 | <2.0 | 45.1 | .20 | 11.3 | Storm Event |
| 5/4/1999 | 15 | 5.4 | 2.0 | <1.0 | 42 | 40.3 | .29 | 8.6 | Baseflow |
| | | | | | | | | | |
| 12/1/1998 | 19 | 6.04 | 3.5 | <1.0 | 19 | 39.2 | .45 | 10.3 | Storm/Melt Event |
| 11/6/1998 | 37 | 6.82 | 2.0 | <1.0 | 26 | 33.6 | .20 | 11.64 | Baseflow |
| 8/24/1998 | 26 | 6.27 | 63 | <1.0 | 161 | 58.6 | 24.1 | 9.51 | Storm Event |
| 6/15/1998 | 18 | 5.36 | 3.5 | <1.0 | 140 | 51 | 1.03 | 9.98 | Storm Event |
| 6/12/1998 | 32 | 6.68 | 5.5 | <1.0 | 79 | 51.3 | .51 | 9.98 | Baseflow |
| 1/4/1998 | 32 | 6.41 | 4.0 | <1.0 | 20 | 27.5 | .45 | 10.78 | Storm/Melt Event |
| | | | | | | | | | |
| 10/27/1997 | 28 | 6.1 | 1.0 | <1.0 | 30 | 33 | 2.53 | 11.56 | Storm/Melt Event |
| 9/7/1997 | 35 | 6.8 | <1.0 | <1.0 | 30 | 8.5 | .97 | 8.03 | Storm Event |
| 8/11/1997 | 38 | 6.5 | <1.0 | <1.0 | 1,300 | 53.4 | .29 | 8.15 | est.0.00669-0.01115 cfs Baseflow |
| 6/17/1997 | 29 | 7.3 | 5.5 | <1.0 | <10 | 48.7 | .83 | 9.85 | Storm Event |
| 4/17/1997 | 130 | 5.9 | <1.0 | <1.0 | 10 | 33.1 | .34 | 13.55 | Baseflow |
| 2/28/1997 | 17 | 6.1 | <1.0 | 1.1 | 22 | 30 | .37 | 8.82 | Storm/Melt Event |
| 1/17/1997 | Heavy Icing, can't sample | | | | | | | | Baseflow |
| | | | | | | | | | |
| 12/2/1996 | 23 | 5.7 | 14 | 1.6 | <10 | 29 | .89 | 8.9 | Storm/Melt Event |
| 11/7/1996 | 18 | 6.3 | 2.0 | <1.0 | <10 | 37 | .24 | 11.1 | Baseflow (10/96 3.86" rain) |
| 9/9/1996 | 41 | 6.3 | 2.0 | <1.0 | <10 | 54 | .32 | 8.5 | Storm Event |
| 8/14/1996 | 830 | 6.5 | <1.0 | <1.0 | <10 | 53 | .27 | 7.8 | Baseflow |
| 7/31/1996 | Unable to Sample | | | | | | | | Storm Event |
| 6/7/1996 | 29 | 5.9 | 3.5 | <1.0 | 20 | | | | 6/12/96 6.46 cfs Storm Event |
| 3/26/1996 | 30 | 6.2 | 1.0 | <1.0 | <10 | 27 | .23 | 12.1 | Baseflow |
| 2/23/1996 | 26 | 5.8 | <1.0 | <1.0 | 10 | 28 | .48 | 8.1 | Storm/Melt Event |
| 2/5/1996 | 30 | 6.1 | <1.0 | <1.0 | <10 | 27 | .27 | 8.55 | Baseflow |
| | | | | | | | | | |
| 10/17/1995 | 29 | 5.7 | <1.0 | <1.0 | <10 | 42 | .88 | 8.91 | Storm Event 4.03 cfs |
| 6/21/1995 | 38 | 6.4 | <1.0 | <1.0 | 10 | 62 | .31 | 7.7 | Baseflow 0.065 cfs |
| 6/1/1995 | | | | | | | | | Baseflow .44 cfs |
| 5/31/1995 | | | | | | | | | Baseflow .48 cfs |
| 3/7/1995 | 36 | 6.5 | Alkalinity 7.[illegible] | <1.0 | 10 | | | | |

## Table 3
## Straight Brook Monitoring Results

| Straight Brook-1999 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| conduct. | | | | | | MEAN | ST DEV | N |
| | base | 21 | 31 | 14.1 | | 22.0 | 8.497254 | 3 |
| | storm | 21 | 18 | 13.6 | | 17.5 | 3.722007 | 3 |
| | | | | | | | | |
| pH | | | | | | | | |
| | base | 7.4 | 6.9 | 5.1 | | 6.5 | 1.209683 | 3 |
| | storm | 6.8 | 5.55 | 6.25 | | 6.2 | 0.626498 | 3 |
| | | | | | | | | |
| TSS | | | | | | | | |
| | base | <1 | <1 | 1 | | | | 3* |
| | storm | 2 | <1 | <1 | | | | 3* |
| | | | | | | | | |
| Ammonia | | | | | | | | |
| | base | <1 | <1 | <1 | | <1 | | 3* |
| | storm | <1 | <1 | <1 | | <1 | | 3* |
| | | | | | | | | |
| TP | | | | | | | | |
| | base | 21 | 43 | 16 | | 32.0 | 14.36431 | 3 |
| | storm | 8 | 8 | <2 | | | | 3* |
| | | | | | | | | |
| Turbidity | | | | | | | | |
| | base | 0.51 | 0.39 | 0.31 | | 0.5 | 0.100664 | 3 |
| | storm | 0.54 | 1.31 | 0.22 | | 0.9 | 0.560268 | 3 |
| | | | | | | | | |
| DO | | | | | | | | |
| | base | 10.7 | 8 | 8.5 | | 9.4 | 1.436431 | 3 |
| | storm | 10.1 | 9.2 | 8.4 | | 9.7 | 0.85049 | 3 |
| | | | | | | | | |
| | | | | | | | | |

## Table 3
## Straight Brook Monitoring Results

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Straight Brook-1998 | | | | | | | | |
| | | | | | | MEAN | STDEV | |
| conuct. | | | | | | | | |
| | base | 24 | 28 | | | 26 | 2.828427 | 2 |
| | storm | 18 | 20 | 19 | 31 | 22 | 6.055301 | 4 |
| | | | | | | | | |
| pH | | | | | | | | |
| | base | 6.92 | 6.77 | | | 6.845 | 0.106066 | 2 |
| | storm | 5.42 | 6.31 | 5 | 5.98 | 5.6775 | 0.582201 | 4 |
| | | | | | | | | |
| TSS | | | | | | | | |
| | base | 2.5 | 6.5 | | | 4.5 | 2.828427 | 2 |
| | storm | 3.5 | 27 | 1 | <1 | | 14.34399 | 4* |
| | | | | | | | | |
| Ammonia | | | | | | | | |
| | base | <1 | <1 | | | <1 | | 2* |
| | storm | <1 | <1 | <1 | <1 | <1 | | 4* |
| | | | | | | | | |
| TP | | | | | | | | |
| | base | 14 | 10 | | | 12 | 2.828427 | 2 |
| | storm | 26 | 22 | 160 | 30 | 59.5 | 67.07955 | 4 |
| | | | | | | | | |
| Turbidity | | | | | | | | |
| | base | 0.22 | 0.83 | | | 0.53 | 0.431335 | 2 |
| | storm | 0.59 | 3.17 | 0.65 | 0.19 | 1.15 | 1.362057 | 4 |
| | | | | | | | | |
| DO | | | | | | | | |
| | base | 11.75 | 9.86 | | | 10.81 | 1.336432 | 2 |
| | storm | 11.64 | 9.47 | 10.1 | 12.3 | 10.88 | 1.315355 | 4 |
| | | | | | | | | |
| | | | | | | | | |

## Table 3
## Straight Brook Monitoring Results

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Straight Brook-1997 | | | | | | | | |
| | | | | | | MEAN | STDEV | N |
| cond. | | | | | | | | |
| | base | 31 | 144 | | | 87.50 | 79.90307 | 2 |
| | storm | 29 | 27 | 23 | 15 | 23.50 | 6.191392 | 4 |
| | | | | | | | | |
| pH | | | | | | | | |
| | base | 6.56 | 6.1 | | | 6.33 | 0.325269 | 2 |
| | storm | 5.7 | 6.9 | 7.6 | 6.2 | 6.60 | 0.828654 | 4 |
| | | | | | | | | |
| TSS | | | | | | | | |
| | base | <1 | <1 | | | <1 | | 2* |
| | storm | 1 | 4 | 8 | <1 | | | 4* |
| | | | | | | | | |
| Ammonia | | | | | | | | |
| | base | <1 | <1 | | | <1 | | 2* |
| | storm | <1 | <1 | <1 | <1 | <1 | | 4* |
| | | | | | | | | |
| TP | | | | | | | | |
| | base | 29 | 10 | | | 19.50 | 13.43503 | 2 |
| | storm | 500 | 20 | 18 | 19 | 139.25 | 240.5014 | 4 |
| | | | | | | | | |
| Turbidity | | | | | | | | |
| | base | 0.23 | 0.39 | | | 0.31 | 0.113137 | 2 |
| | storm | 1.14 | 0.52 | 0.97 | 0.32 | 0.74 | 0.381958 | 4 |
| | | | | | | | | |
| DO | | | | | | | | |
| | base | 9.93 | 13.62 | | | 11.78 | 2.609224 | 2 |
| | storm | 12.04 | 7.92 | 10.25 | 14.2 | 11.10 | 2.666363 | 4 |

## Table 3
## Straight Brook Monitoring Results

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Straight Brook-1996 | | | | | | | | |
| | | | | | | MEAN | STDEV | |
| cond. | | | | | | | | |
| | base | 14 | 589 | 25 | 25 | 163.25 | 283.8807 | 4 |
| | storm | 23 | 28 | 22 | 24 | 24.25 | 2.629956 | 4 |
| | | | | | | | | |
| pH | | | | | | | | |
| | base | 6.3 | 6.6 | 5.5 | 6.3 | 6.18 | 0.471699 | 4 |
| | storm | 10 | 6.4 | 6.1 | 5.2 | 6.93 | 2.112463 | 4 |
| | | | | | | | | |
| TSS | | | | | | | | |
| | base | 3 | <1 | <1 | <1 | | | 4* |
| | storm | 5.5 | 6 | 42 | 3 | 14.13 | 18.62961 | 4 |
| | | | | | | | | |
| Ammonia | | | | | | | | |
| | base | <1 | <1 | <1 | <1 | <1 | | 4* |
| | storm | <1 | <1 | <1 | 1.1 | | | 4* |
| | | | | | | | | |
| TP | | | | | | | | |
| | base | <10 | <10 | <10 | <10 | <10 | | 4* |
| | storm | <10 | 20 | 30 | 10 | | | 4* |
| | | | | | | | | |
| Turbidity | | | | | | | | |
| | base | 0.19 | 0.31 | 0.27 | 0.33 | 0.28 | 0.061914 | 4 |
| | storm | 0.78 | 0.91 | 2.83 | 0.56 | 1.27 | 1.049984 | 4 |
| | | | | | | | | |
| DO | | | | | | | | |
| | base | 9.3 | 8 | 12.36 | 14.61 | 11.07 | 2.986273 | 4 |
| | storm | 8.7 | 8.9 | 10.32 | 10.6 | 9.63 | 0.968642 | 4 |
| | | | | | | | | |
| | | | | | | | | |

## Table 3
## Straight Brook Monitoring Results

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Straight Brook-1995 | | | | | | | | |
| | | | | | | MEAN | STDEV | |
| Cond. | | | | | | | | |
| | base | 28 | 26 | | | 27 | 1.414214 | 2 |
| | storm | 37 | | | | 37 | | 1 |
| | | | | | | | | |
| pH | | | | | | | | |
| | base | 6.7 | 6.1 | | | 6.4 | 0.424264 | 2 |
| | storm | 4.2 | | | | 4.2 | | 1 |
| | | | | | | | | |
| TSS | | | | | | | | |
| | base | <1 | | | | <1 | | 1* |
| | storm | 2 | | | | 2 | | 1* |
| | | | | | | | | |
| Ammonia | | | | | | | | |
| | base | <1 | <1 | | | <1 | | 2* |
| | storm | <1 | | | | <1 | | 1 |
| | | | | | | | | |
| TP | | | | | | | | |
| | base | 30 | 10 | | | 20 | 14.14214 | 2 |
| | storm | <10 | | | | <10 | | 1* |
| | | | | | | | | |
| Turbidity | | | | | | | | |
| | base | 0.34 | | | | 0.34 | | 1 |
| | storm | 16.4 | | | | 16.4 | | 1 |
| | | | | | | | | |
| DO | | | | | | | | |
| | base | 8.9 | | | | 8.9 | | 1 |
| | storm | 9.1 | | | | 9.1 | | 1 |

## Table 4
## Roaring Brook Monitoring Results

| Roaring Brook-1999 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| conduct. | | | | | | | MEAN | ST DEV | N |
| | base | 17 | 35 | 15 | | | 22.3 | 11.0 | 3 |
| | storm | 17 | 18 | 14.7 | | | 16.6 | 1.7 | 3 |
| | | | | | | | | | |
| pH | | | | | | | | | |
| | base | 7.08 | 6.9 | 5.4 | | | 6.5 | 0.9 | 3 |
| | storm | 6.12 | 6.7 | 6.05 | | | 6.3 | 0.4 | 3 |
| | | | | | | | | | |
| TSS | | | | | | | | | |
| | base | <1 | <1 | 2 | | | | | 3* |
| | storm | <1 | <1 | <1 | | | <1 | N/A | 3 |
| | | | | | | | | | |
| Ammonia | | | | | | | | | |
| | base | <1 | <1 | <1 | | | <1 | N/A | 3 |
| | storm | <1 | <1 | <1 | | | <1 | N/A | 3 |
| | | | | | | | | | |
| TP | | | | | | | | | |
| | base | 8 | 13 | 42 | | | 21.0 | 18.4 | 3 |
| | storm | 12 | 10 | <2 | | | | | 3* |
| | | | | | | | | | |
| Turbidity | | | | | | | | | |
| | base | 0.34 | 0.43 | 0.29 | | | 0.4 | 0.1 | 3 |
| | storm | 0.49 | 1.26 | 0.2 | | | 0.7 | 0.5 | 3 |
| | | | | | | | | | |
| DO | | | | | | | | | |
| | base | 10.7 | 8.1 | 8.6 | | | 9.1 | 1.4 | 3 |
| | storm | 10.6 | 9.1 | 11.3 | | | 10.3 | 1.1 | 3 |
| | | | | | | | | | |
| | | | | | | | | | |

## Table 4
## Roaring Brook Monitoring Results

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Roaring Brook-1998 | | | | | | | | |
| | | | | | | MEAN | STDEV | N |
| conuct. | | | | | | | | |
| | base | 37 | 32 | | | 34.5 | 3.5 | 2 |
| | storm | 19 | 26 | 18 | 32 | 23.75 | 6.55 | 4 |
| | | | | | | | | |
| pH | | | | | | | | |
| | base | 6.82 | 6.68 | | | 6.75 | 0.10 | 2 |
| | storm | 6.04 | 6.27 | 5.36 | 6.41 | 6.02 | 0.47 | 4 |
| | | | | | | | | |
| TSS | | | | | | | | |
| | base | 2 | 5.5 | | | 3.75 | 2.47 | 2 |
| | storm | 3.5 | 63 | 3.5 | 4 | 18.5 | 29.67 | 4 |
| | | | | | | | | |
| Ammonia | | | | | | | | |
| | base | <1 | <1 | | | <1 | N/A | 2 |
| | storm | <1 | <1 | <1 | <1 | <1 | N/A | 4 |
| | | | | | | | | |
| TP | | | | | | | | |
| | base | 26 | 79 | | | 52.5 | 37.5 | 2 |
| | storm | 19 | 161 | 140 | 20 | 85.0 | 76.1 | 4 |
| | | | | | | | | |
| Turbidity | | | | | | | | |
| | base | 0.2 | 0.61 | | | 0.405 | 0.3 | 2 |
| | storm | 0.45 | 24.1 | 1.03 | 0.45 | 6.508 | 11.7 | 4 |
| | | | | | | | | |
| DO | | | | | | | | |
| | base | 11.64 | 9.98 | | | 10.81 | 1.174 | 2 |
| | storm | 10.3 | 9.51 | 9.98 | 10.78 | 10.1 | 0.535 | 4 |

## Table 4
## Roaring Brook Monitoring Results

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Roaring Brook-1997 | | | | | | | | | |
| | | | | | | | MEAN | STDEV | N |
| cond. | | | | | | | | | |
| | base | 38 | 130 | | | | 84 | 65.054 | 2 |
| | storm | 28 | 35 | 29 | 17 | | 27.3 | 7.500 | 4 |
| | | | | | | | | | |
| pH | | | | | | | | | |
| | base | 6.5 | 5.9 | | | | 6.2 | 0.424 | 2 |
| | storm | 6.1 | 6.8 | 7.3 | 6.1 | | 6.6 | 0.585 | 4 |
| | | | | | | | | | |
| TSS | | | | | | | | | |
| | base | <1 | <1 | | | | <1 | | 2* |
| | storm | 1 | <1 | 5.5 | <1 | | | | 4* |
| | | | | | | | | | |
| Ammonia | | | | | | | | | |
| | base | <1 | <1 | | | | <1 | N/A | 2* |
| | storm | <1 | <1 | <1 | 1.1 | | | | 4* |
| | | | | | | | | | |
| TP | | | | | | | | | |
| | base | 1300 | 10 | | | | 655 | 912.168 | 2 |
| | storm | 30 | 30 | <10 | 22 | | | | 4* |
| | | | | | | | | | |
| Turbidity | | | | | | | | | |
| | base | 0.29 | 0.34 | | | | 0.315 | 0.035 | 2 |
| | storm | 2.53 | 0.97 | 0.83 | 0.37 | | 1.2 | 0.939 | 4 |
| | | | | | | | | | |
| DO | | | | | | | | | |
| | base | 8.15 | 13.55 | | | | 10.85 | 3.818 | 2 |
| | storm | 11.56 | 8.03 | 9.85 | 8.82 | | 9.6 | 1.525 | 4 |

## Table 4
## Roaring Brook Monitoring Results

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Roaring Brook-1996 | | | | | | | | | |
| | | | | | | | MEAN | STDEV | N |
| cond. | | | | | | | | | |
| | base | 18 | 830 | 30 | 30 | | 227.00 | 402.04 | 4 |
| | storm | 23 | 41 | 29 | 26 | | 29.75 | 7.89 | 4 |
| | | | | | | | | | |
| pH | | | | | | | | | |
| | base | 6.3 | 6.5 | 6.2 | 6.1 | | 6.28 | 0.17 | 4 |
| | storm | 5.7 | 6.3 | 5.9 | 5.8 | | 5.93 | 0.26 | 4 |
| | | | | | | | | | |
| TSS | | | | | | | | | |
| | base | 2 | <1 | 1 | <1 | | | | 4* |
| | storm | 14 | 2 | 3.5 | <1 | | | | 4* |
| | | | | | | | | | |
| Ammonia | | | | | | | | | |
| | base | <1 | <1 | <1 | <1 | | <1 | N/A | 4 |
| | storm | 1.6 | <1 | <1 | <1 | | | | |
| | | | | | | | | | |
| TP | | | | | | | | | |
| | base | <10 | <10 | <10 | <10 | | <10 | N/A | 4 |
| | storm | <10 | <10 | 20 | 10 | | | | |
| | | | | | | | | | |
| Turbidity | | | | | | | | | |
| | base | 0.24 | 0.27 | 0.23 | 0.27 | | 0.25 | 0.02 | 4 |
| | storm | 0.89 | 0.32 | 2.32 | 0.48 | | 1.00 | 0.91 | 4 |
| | | | | | | | | | |
| DO | | | | | | | | | |
| | base | 11.1 | 7.8 | 12.1 | 8.55 | | 9.89 | 2.04 | 4 |
| | storm | 8.9 | 8.5 | 9.87 | 8.1 | | 8.84 | 0.76 | 4 |

## Table 4
## Roaring Brook Monitoring Results

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Roaring Brook-1995 | | | | | | | | | |
| | | | | | | | MEAN | STDEV | N |
| Cond. | | | | | | | | | |
| | base | 38 | | | | | 38 | <1 | 1 |
| | storm | 29 | 36 | | | | 32.5 | 4.9 | 2 |
| | | | | | | | | | |
| pH | | | | | | | | | |
| | base | 6.4 | | | | | 6.4 | N/A | 1 |
| | storm | 5.7 | 6.5 | | | | 6.1 | 0.6 | 2 |
| | | | | | | | | | |
| TSS | | | | | | | | | |
| | base | <1 | | | | | <1 | N/A | 1 |
| | storm | <1 | | | | | <1 | N/A | 1 |
| | | | | | | | | | |
| Ammonia | | | | | | | | | |
| | base | <1 | | | | | <1 | N/A | 1 |
| | storm | <1 | <1 | | | | <1 | N/A | 2 |
| | | | | | | | | | |
| TP | | | | | | | | | |
| | base | 10 | | | | | 10 | N/A | 1 |
| | storm | <10 | 10 | | | | | | 2* |
| | | | | | | | | | |
| Turbidity | | | | | | | | | |
| | base | 0.31 | | | | | 0.31 | N/A | 1 |
| | storm | 0.88 | | | | | 0.88 | N/A | 1 |
| | | | | | | | | | |
| DO | | | | | | | | | |
| | base | 7.7 | | | | | 7.7 | N/A | 1 |
| | storm | 8.91 | | | | | 8.91 | N/A | 1 |

## Table 5
## Straight Brook Statistics

| STRAIGHT BROOK | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Base Flow Conductivity** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 22 | 26 | 87.5 | 163.3 | 27 | | |
| StDev | 8.5 | 2.83 | 79.9 | 283.88 | 1.4 | | |
| N | 3 | 2 | 2 | 4 | 2 | | |
| 95% Conf. | 9.62 | 3.92 | 110.73 | 278.20 | 1.94 | | |
| **Storm/Melt Conductivity** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 17.5 | 22 | 23.5 | 24.3 | 37 | | |
| StDev | 3.72 | 6.06 | 6.19 | 2.63 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 4.21 | 5.94 | 6.07 | 2.58 | #NUM! | | |
| **Base Flow pH** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 6.5 | 6.85 | 6.33 | 6.2 | 6.4 | | |
| StDev | 1.21 | 0.11 | 0.33 | 0.47 | 0.4 | | |
| N | 3 | 2 | 2 | 4 | 2 | | |
| 95% Conf. | 1.37 | 0.15 | 0.46 | 0.46 | 0.55 | | |
| **Storm/Melt pH** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 6.2 | 5.68 | 6.6 | 6.9 | 4.2 | | |
| StDev | 0.63 | 0.58 | 0.83 | 2.1 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 0.71 | 0.57 | 0.81 | 2.06 | #NUM! | | |
| **Base Flow TSS** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 0.7 | 4.5 | 0.5 | 1.13 | 0.5 | | |
| StDev | 0.29 | 2.83 | 0 | 1.25 | 0 | | |
| N | 3 | 2 | 2 | 4 | 1 | | |
| 95% Conf. | 0.33 | 3.92 | #NUM! | 1.22 | #NUM! | | |
| **Storm/Melt TSS** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 1 | 8 | 3.38 | 14.1 | 2 | | |
| StDev | 0.87 | 12.73 | 3.45 | 16.28 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 0.98 | 12.48 | 3.38 | 15.95 | #NUM! | | |
| **Base Flow Ammonia** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 0.5 | 0.5 | 0.5 | 0.5 | 0.65 | | |
| StDev | 0 | 0 | 0 | 0 | 0.3 | | |
| N | 3 | 2 | 2 | 4 | 2 | | |
| 95% Conf. | #NUM! | #NUM! | #NUM! | #NUM! | 0.42 | | |
| **Storm/Melt Ammonia** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 0.5 | 0.5 | 0.5 | 0.65 | 2 | | |
| StDev | 0 | 0 | 0 | 0.3 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | #NUM! | #NUM! | #NUM! | 0.29 | #NUM! | | |
| **Base Flow TP** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 26.7 | 12 | 19.5 | 5 | 20 | | |
| StDev | 14.4 | 2.8 | 13.44 | 0 | 14.1 | | |
| N | 3 | 2 | 2 | 4 | 2 | | |
| 95% Conf. | 16.29 | 3.88 | 18.63 | #NUM! | 19.54 | | |
| **Storm/Melt TP** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 5.7 | 59.5 | 139.3 | 16.3 | 5 | | |
| StDev | 4.04 | 67.1 | 240.5 | 19.06 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 4.57 | 65.76 | 235.69 | 18.68 | #NUM! | | |

## Table 5
## Straight Brook Statistics

| Straight Brook (cont.) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Base Flow Turbidity** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 0.4 | 0.53 | 0.3 | 0.28 | 0.34 | | |
| StDev | 0.1 | 0.431 | 0.11 | 0.06 | 0 | | |
| N | 3 | 2 | 2 | 4 | 1 | | |
| 95% Conf. | 0.11 | 0.60 | 0.15 | 0.06 | #NUM! | | |
| | | | | | | | |
| **Storm/Melt Turbidity** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 0.7 | 1.15 | 0.74 | 1.27 | 16.4 | | |
| StDev | 0.56 | 1.36 | 0.38 | 1.05 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 0.63 | 1.33 | 0.37 | 1.03 | #NUM! | | |
| **Base Flow DO** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 9.1 | 10.8 | 11.8 | 11.1 | 8.9 | | |
| StDev | 1.44 | 1.34 | 2.61 | 2.99 | 0 | | |
| N | 3 | 2 | 2 | 4 | 1 | | |
| 95% Conf. | 1.63 | 1.86 | 3.62 | 2.93 | #NUM! | | |
| **Storm/Melt DO** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 9.2 | 10.9 | 11.1 | 9.6 | 9.1 | | |
| StDev | 0.85 | 1.32 | 2.67 | 0.99 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 0.96 | 1.29 | 2.62 | 0.97 | #NUM! | | |

# Table 6
## Roaring Brook Statistics

| ROARING BROOK | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| **Base Flow Conductivity** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 22.3 | 34.5 | 84 | 227 | 38 |
| StDev | 11 | 3.5 | 65.1 | 402.04 | 0 |
| N | 3 | 2 | 2 | 4 | 1 |
| 95% Conf. | 12.4 | 4.9 | 90.2 | 393.99 | N/A |
| **Storm/Melt Conductivity** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 16.6 | 23.75 | 27.3 | 24.25 | 32.5 |
| StDev | 1.7 | 6.55 | 7.5 | 2.63 | 4.9 |
| N | 3 | 4 | 4 | 4 | 2 |
| 95% Conf. | 1.9 | 6.42 | 7.3 | 2.58 | 6.8 |
| **Base Flow pH** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 6.5 | 6.75 | 6.2 | 6.28 | 6.4 |
| StDev | 0.9 | 0.1 | 0.4 | 0.17 | 0 |
| N | 3 | 2 | 2 | 4 | 1 |
| 95% Conf. | 1.0 | 0.1 | 0.6 | 1.7 | #NUM! |
| **Storm/Melt pH** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 6.3 | 6.02 | 6.6 | 5.93 | 6.1 |
| StDev | 0.4 | 0.47 | 0.6 | 0.26 | 0.6 |
| N | 3 | 4 | 4 | 4 | 2 |
| 95% Conf. | 0.5 | 0.5 | 0.6 | 0.3 | 0.8 |
| **Base Flow TSS** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 1 | 3.75 | 0.5 | 1 | 0.5 |
| StDev | 0.9 | 2.47 | 0 | 0.71 | 0 |
| N | 3 | 2 | 2 | 4 | 1 |
| 95% Conf. | 1.0 | 3.4 | #NUM! | 0.7 | #NUM! |
| **Storm/Melt TSS** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 0.5 | 18.5 | 1.8 | 5 | 0.5 |
| StDev | 0 | 29.67 | 2.5 | 6.12 | 0 |
| N | 3 | 4 | 4 | 4 | 1 |
| 95% Conf. | #NUM! | 29.1 | 2.4 | 6.0 | #NUM! |
| **Base Flow Ammonia** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| StDev | 0 | 0 | 0 | 0 | 0 |
| N | 3 | 2 | 2 | 4 | 1 |
| 95% Conf. | #NUM! | #NUM! | #NUM! | #NUM! | #NUM! |
| **Storm/Melt Ammonia** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 0.5 | 0.5 | 0.7 | 0.78 | 0.5 |
| StDev | 0 | 0 | 0.3 | 0.55 | 0 |
| N | 3 | 4 | 4 | 4 | 2 |
| 95% Conf. | #NUM! | #NUM! | 0.3 | 0.5 | #NUM! |
| **Base Flow TP** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 21 | 52.5 | 655 | 5 | 10 |
| StDev | 18.4 | 37.5 | 912 | 0 | 0 |
| N | 3 | 2 | 2 | 4 | 1 |
| 95% Conf. | 20.8 | 52.0 | 1263.9 | #NUM! | #NUM! |
| **Storm/Melt TP** | **1999** | **1998** | **1997** | **1996** | **1995** |
| Mean | 7.7 | 85 | 21.8 | 10 | 7.5 |
| StDev | 5.9 | 76.1 | 11.7 | 7.07 | 3.5 |
| N | 3 | 4 | 4 | 4 | 2 |
| 95% Conf. | 6.7 | 74.6 | 11.5 | 6.9 | 4.9 |

# Table 6
## Roaring Brook Statistics

| Roaring Brook (cont.) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Base Flow Turbidity** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 0.4 | 0.41 | 0.32 | 0.25 | 0.31 | | |
| StDev | 0.1 | 0.3 | 0.04 | 0.02 | 0 | | |
| N | 3 | 2 | 2 | 4 | 1 | | |
| 95% Conf. | 0.1 | 0.4 | 0.1 | 0.0 | #NUM! | | |
| | | | | | | | |
| **Storm/Melt Turbidity** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 0.7 | 6.51 | 1.2 | 1 | 0.88 | | |
| StDev | 5 | 11.7 | 0.9 | 0.91 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 5.7 | 11.5 | 0.9 | 0.9 | #NUM! | | |
| **Base Flow DO** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 9.1 | 10.81 | 10.85 | 9.89 | 7.7 | | |
| StDev | 1.4 | 1.17 | 3.82 | 2.04 | 0 | | |
| N | 3 | 2 | 2 | 4 | 1 | | |
| 95% Conf. | 1.6 | 1.6 | 5.3 | 2.0 | #NUM! | | |
| **Storm/Melt DO** | **1999** | **1998** | **1997** | **1996** | **1995** | | |
| Mean | 10.3 | 10.1 | 9.6 | 8.84 | 8.91 | | |
| StDev | 1.1 | 0.54 | 1.5 | 0.76 | 0 | | |
| N | 3 | 4 | 4 | 4 | 1 | | |
| 95% Conf. | 1.2 | 0.5 | 1.5 | 0.7 | #NUM! | | |

Table 7

Straight Brook - Comparison of Years

(95% Confidence Intervals - same letter after year numbers indicates statistically similar values)

| | | | | | | |
|---|---|---|---|---|---|---|
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | lower | 12.38 | 22.08 | -23.23 | -114.9 | 25.06 |
| **Base Flow Conductivity** | mean | 22 | 26 | 87.5 | 163.3 | 27 |
| | upper | 31.62 | 29.92 | 198.23 | 441.5 | 28.94 |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a,b** | **1997 a,b** | **1996 b** | **1995 c** |
| | lower | 13.29 | 16.06 | 17.43 | 21.72 | |
| **Storm/Melt Conductivity** | mean | 17.5 | 22 | 23.5 | 24.3 | 37 |
| | upper | 21.71 | 27.94 | 29.57 | 26.88 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | lower | 5.13 | 6.7 | 5.87 | 5.74 | 5.85 |
| **Base Flow pH** | mean | 6.5 | 6.85 | 6.33 | 6.2 | 6.4 |
| | upper | 7.87 | 7 | 6.79 | 6.66 | 6.94 |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 b** |
| | lower | 5.49 | 5.11 | 5.79 | 4.84 | |
| **Storm/Melt pH** | mean | 6.2 | 5.68 | 6.6 | 6.9 | 4.2 |
| | upper | 6.91 | 6.25 | 7.41 | 8.96 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a,b** | **1998 a** | **1997 b** | **1996 a,b** | **1995 b** |
| | lower | 0.37 | 0.58 | | -0.09 | |
| **Base Flow TSS** | mean | 0.7 | 4.5 | 0.5 | 1.13 | 0.5 |
| | upper | 1.03 | 8.42 | | 2.35 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a,b** | **1997 a,b** | **1996 a,b** | **1995 b** |
| | lower | 0.02 | -4.48 | 0 | -1.85 | |
| **Storm/Melt TSS** | mean | 1 | 8 | 3.38 | 14.1 | 2 |
| | upper | 1.98 | 20.48 | 6.76 | 30.05 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | lower | | | | | |
| **Base Flow Ammonia** | mean | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | upper | | | | | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | lower | | | | 0.35 | |
| **Storm/Melt Ammonia** | mean | 0.5 | 0.5 | 0.5 | 0.65 | 0.5 |
| | upper | | | | 0.95 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a,b** | **1996 b** | **1995 a,b** |
| | lower | 10.41 | 8.12 | 0.87 | | 0.46 |
| **Base Flow TP** | mean | 26.7 | 12 | 19.5 | 5 | 20 |
| | upper | 42.99 | 15.88 | 38.13 | | 39.54 |

Table 7

**Straight Brook - Comparison of Years**

(95% Confidence Intervals - same letter after year numbers indicates statistically similar values)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** | |
| | lower | 1.13 | -6.26 | -96.39 | -2.38 | | |
| **Storm/Melt TP** | mean | 5.7 | 59.5 | 139.3 | 16.3 | 5 | |
| | upper | 10.27 | 125.26 | 374.99 | 34.98 | | |
| | | | | | | | |
| | | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** | |
| | lower | 0.29 | -0.07 | 0.15 | 0.22 | | |
| **Base Flow Turbidity** | mean | 0.4 | 0.53 | 0.3 | 0.28 | 0.34 | |
| | upper | 0.51 | 1.13 | 0.45 | 0.34 | | |
| | | | | | | | |
| | | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 b** | |
| | lower | 0.07 | -0.18 | 0.37 | 0.24 | | |
| **Storm/Melt Turbidity** | mean | 0.7 | 1.15 | 0.74 | 1.27 | 16.4 | |
| | upper | 1.33 | 2.48 | 1.11 | 2.3 | | |
| | | | | | | | |
| | | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** | |
| | lower | 7.47 | 8.94 | 8.18 | 8.17 | | |
| **Base Flow DO** | mean | 9.1 | 10.8 | 11.8 | 11.1 | 8.9 | |
| | upper | 10.73 | 12.66 | 15.42 | 14.03 | | |
| | | | | | | | |
| | | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** | |
| | lower | 8.24 | 9.61 | 8.48 | 8.63 | | |
| **Storm/Melt DO** | mean | 9.2 | 10.9 | 11.1 | 9.6 | 9.1 | |
| | upper | 10.16 | 12.19 | 13.72 | 10.57 | | |

Table 8

Roaring Brook - Comparison of Years

(95% Confidence Intervals - same letter after year numbers indicates statistically similar values)

| | | | | | | |
|---|---|---|---|---|---|---|
| | | **1999 a** | **1998 a,b** | **1997 a,b** | **1996 a,b** | **1995 b** |
| | upper | 9.9 | 29.6 | -6.2 | -166.99 | |
| Base Flow Conductivity | mean | 22.3 | 34.5 | 84 | 227 | 38 |
| | lower | 34.7 | 39.4 | 174.2 | 620.99 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a,b** | **1997 b** | **1996 b** | **1995 b** |
| | upper | 14.7 | 17.33 | 20 | 21.67 | 25.7 |
| Storm/Melt Conductivity | mean | 16.6 | 23.75 | 27.3 | 24.25 | 32.5 |
| | lower | 18.5 | 30.17 | 34.6 | 26.83 | 39.3 |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 5.5 | 6.65 | 5.6 | 6.11 | |
| Base Flow pH | mean | 6.5 | 6.75 | 6.2 | 6.28 | 6.4 |
| | lower | 7.5 | 6.85 | 6.8 | 6.45 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 5.8 | 5.52 | 6 | 5.63 | 5.3 |
| Storm/Melt pH | mean | 6.3 | 6.02 | 6.6 | 5.93 | 6.1 |
| | lower | 6.8 | 6.52 | 7.2 | 6.23 | 6.9 |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a,b** | **1997 b** | **1996 b** | **1995 b** |
| | upper | 5.5 | 0.35 | | 0.3 | |
| Base Flow TSS | mean | 6.5 | 3.75 | 0.5 | 1 | 0.5 |
| | lower | 7.5 | 7.15 | | 1.7 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | | -10.6 | -0.6 | -1 | |
| Storm/Melt TSS | mean | 0.5 | 18.5 | 1.8 | 5 | 0.5 |
| | lower | | 47.6 | 4.2 | 11 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | | | | | |
| Base Flow Ammonia | mean | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | lower | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | | | 0.4 | 0.28 | |
| Storm/Melt Ammonia | mean | 0.5 | 0.5 | 0.7 | 0.78 | 0.5 |
| | lower | | | 1 | 1.28 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 0.2 | 0.5 | -608.9 | | |
| Base Flow TP | mean | 21 | 52.5 | 655 | 5 | 10 |
| | lower | 41.8 | 104.5 | 1918.9 | | |
| | | | | | | |

Table 8

**Roaring Brook - Comparison of Years**

(95% Confidence Intervals - same letter after year numbers indicates statistically similar values)

| | | | | | | |
|---|---|---|---|---|---|---|
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 1 | 10.4 | 10.3 | 3.1 | 2.6 |
| Storm/Melt TP | mean | 7.7 | 85 | 21.8 | 10 | 7.5 |
| | lower | 14.4 | 159.6 | 33.3 | 16.9 | 12.4 |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 0.3 | 0.01 | 0.22 | 0.23 | |
| Base Flow Turbidity | mean | 0.4 | 0.41 | 0.32 | 0.25 | 0.31 |
| | lower | 0.5 | 0.81 | 0.42 | 0.27 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | -5 | -4.99 | 0.3 | 0.1 | |
| Storm/Melt Turbidity | mean | 0.7 | 6.51 | 1.2 | 1 | 0.88 |
| | lower | 6.4 | 18.01 | 2.1 | 1.9 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 7.5 | 9.21 | 5.53 | 7.89 | |
| Base Flow DO | mean | 9.1 | 10.81 | 10.85 | 9.89 | 7.7 |
| | lower | 10.7 | 12.41 | 16.13 | 11.89 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a,b** | **1996 a,b** | **1995 b** |
| | upper | 9.1 | 9.6 | 8.1 | 8.14 | |
| Storm/Melt DO | mean | 10.3 | 10.1 | 9.6 | 8.84 | 8.91 |
| | lower | 11.5 | 10.6 | 11.1 | 9.54 | |

Table 8

Roaring Brook - Comparison of Years

(95% Confidence Intervals - same letter after year numbers indicates statistically similar values)

| | | | | | | |
|---|---|---|---|---|---|---|
| | | **1999 a** | **1998 a,b** | **1997 a,b** | **1996 a,b** | **1995 b** |
| | upper | 9.9 | 29.6 | -6.2 | -166.99 | |
| Base Flow Conductivity | mean | 22.3 | 34.5 | 84 | 227 | 38 |
| | lower | 34.7 | 39.4 | 174.2 | 620.99 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a,b** | **1997 b** | **1996 b** | **1995 b** |
| | upper | 14.7 | 17.33 | 20 | 21.67 | 25.7 |
| Storm/Melt Conductivity | mean | 16.6 | 23.75 | 27.3 | 24.25 | 32.5 |
| | lower | 18.5 | 30.17 | 34.6 | 26.83 | 39.3 |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 5.5 | 6.65 | 5.6 | 6.11 | |
| Base Flow pH | mean | 6.5 | 6.75 | 6.2 | 6.28 | 6.4 |
| | lower | 7.5 | 6.85 | 6.8 | 6.45 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 5.8 | 5.52 | 6 | 5.63 | 5.3 |
| Storm/Melt pH | mean | 6.3 | 6.02 | 6.6 | 5.93 | 6.1 |
| | lower | 6.8 | 6.52 | 7.2 | 6.23 | 6.9 |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a,b** | **1997 b** | **1996 b** | **1995 b** |
| | upper | 5.5 | 0.35 | | 0.3 | |
| Base Flow TSS | mean | 6.5 | 3.75 | 0.5 | 1 | 0.5 |
| | lower | 7.5 | 7.15 | | 1.7 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | | -10.6 | -0.6 | -1 | |
| Storm/Melt TSS | mean | 0.5 | 18.5 | 1.8 | 5 | 0.5 |
| | lower | | 47.6 | 4.2 | 11 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | | | | | |
| Base Flow Ammonia | mean | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | lower | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | | | 0.4 | 0.28 | |
| Storm/Melt Ammonia | mean | 0.5 | 0.5 | 0.7 | 0.78 | 0.5 |
| | lower | | | 1 | 1.28 | |
| | | | | | | |
| | | | | | | |
| | | **1999 a** | **1998 a** | **1997 a** | **1996 a** | **1995 a** |
| | upper | 0.2 | 0.5 | -608.9 | | |
| Base Flow TP | mean | 21 | 52.5 | 655 | 5 | 10 |
| | lower | 41.8 | 104.5 | 1918.9 | | |
| | | | | | | |

Table 8

Roaring Brook - Comparison of Years

(95% Confidence Intervals - same letter after year numbers indicates statistically similar values)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1999 a | 1998 a | 1997 a | 1996 a | 1995 a | |
| | upper | 1 | 10.4 | 10.3 | 3.1 | 2.6 | |
| Storm/Melt TP | mean | 7.7 | 85 | 21.8 | 10 | 7.5 | |
| | lower | 14.4 | 159.6 | 33.3 | 16.9 | 12.4 | |
| | | | | | | | |
| | | | | | | | |
| | | 1999 a | 1998 a | 1997 a | 1996 a | 1995 a | |
| | upper | 0.3 | 0.01 | 0.22 | 0.23 | | |
| Base Flow Turbidity | mean | 0.4 | 0.41 | 0.32 | 0.25 | 0.31 | |
| | lower | 0.5 | 0.81 | 0.42 | 0.27 | | |
| | | | | | | | |
| | | | | | | | |
| | | 1999 a | 1998 a | 1997 a | 1996 a | 1995 a | |
| | upper | -5 | -4.99 | 0.3 | 0.1 | | |
| Storm/Melt Turbidity | mean | 0.7 | 6.51 | 1.2 | 1 | 0.88 | |
| | lower | 6.4 | 18.01 | 2.1 | 1.9 | | |
| | | | | | | | |
| | | | | | | | |
| | | 1999 a | 1998 a | 1997 a | 1996 a | 1995 a | |
| | upper | 7.5 | 9.21 | 5.53 | 7.89 | | |
| Base Flow DO | mean | 9.1 | 10.81 | 10.85 | 9.89 | 7.7 | |
| | lower | 10.7 | 12.41 | 16.13 | 11.89 | | |
| | | | | | | | |
| | | | | | | | |
| | | 1999 a | 1998 a | 1997 a,b | 1996 a,b | 1995 b | |
| | upper | 9.1 | 9.6 | 8.1 | 8.14 | | |
| Storm/Melt DO | mean | 10.3 | 10.1 | 9.6 | 8.84 | 8.91 | |
| | lower | 11.5 | 10.6 | 11.1 | 9.54 | | |

# Appendix 4

## Inventory of Man-Made Facilities

## Inventory of Man-Made Facilities

| Building | Dimension | | Use | Public Capacity |
|---|---|---|---|---|
| Main Lodge | 71' x 268' | 2 story | Multi-use | 3,974 |
| Saddle Lodge | 45' x 60' | 2 ¼ | Public | 180 |
| Gondola Base | 65' x 95' | 2 story | Multi-use | --- |
| Gondola Mid-Station | 75' x 125' | 2 story | Not in use now | --- |
| Gondola Summit | 60' x 90' | 1 story | Not in use now | --- |
| Motor Vehicle Garage | 50' x 95' | 1 story | Vehicle Maintenance | --- |
| Lifts Garage | 30' x 85' | 1 story | Snowmaking Hdqtrs. | --- |
| Snow Garage | 30' x 90' | 1 story | Trails Dept. | --- |
| Compressor House #2 | 50' x 100' | 1 story | Housing Compressors | --- |
| Pump House | 26' x 42' | 1 story | Housing Pumps | --- |
| Sewer Plant | 25' x 80' | 1 story | Sewage Treatment | --- |
| Orbal Plant | 50' Diam. | 1 story | Sewage Treatment | --- |
| Round House | 30' Diam. | 1 story | Sewage Holding Tanks | --- |
| Warming Hut-Summit | 20' x 35' | 1 story | Public | 20 |
| Field House | 16' x 24' | 1 story | Abandoned | --- |
| Lift #1 Drive Vault | 25' x 30' | 1 story | Houses Drive Motors | --- |
| Lift #1 Base Attend. | 16' x 16' | 1 story | Attendants/Computer | --- |
| Lift #1 Chair Barn | 50' x 104' | 1 story | Houses Chairs | --- |
| Lift #1 Drive Cover | 22' x 67' | 1 story | Covers Drive Terminal | --- |
| Lift #1 Top Operator | 8' x 10' | 1 story | Attendants/Computer | --- |
| Lift #2 Base Attend. | 8' x 16' | 1 story | Attendants/Controls | --- |
| Lift #2 Top Attendants | 8' x 16' | 1 story | Attendants | --- |
| Lift #3 Base Atten. | 8' x 16' | 1 story | Attendants/Controls | --- |
| Lift #3 Mid-Station | 8' x 4' | 1 story | Attendants | --- |
| Lift #3 Top Attendants | 8' x 4' | 1 story | Attendant/Well Pump Controls | --- |
| Lift #4 Base Attend. | 8' x 6' | 1 story | Attendants | --- |
| Lift #4 Top Attend. | 8' x 6' | 1 story | Attendants | --- |
| Lift #5 Base Attend. | 8' x 12' | 1 story | Attendants | --- |
| Lift #5 Top Attend. | 4' x 8' | 1 story | Attendants | --- |
| Lift #6 Base Attend. | 8' x 16' | 1 story | Attendants/Control | --- |
| Lift #6 Top Attendants | 8' x 8' | 1 story | Top Attendant | --- |
| Lift #7 Base Attendant | 8' x 16' | 1 story | Attendants | --- |
| Lift #7 Top Attendant | 8' x 16' | 1 story | Attendants/Controls | --- |
| Storage Barn | 24' x 50' | 1 story | General Storage | --- |
| Equipment Barn | 50' x 100' | 1 story | Vehicle Storage | --- |
| NYSEF | 28' x 48' | 1 story | NYSEF | --- |
| Twister Finish Bldg. | 12' x 28' | 1 story | Race Timing | --- |
| Twister Start Bldg. | 6' x 8' | 1 story | Race Starting | --- |
| Lift 8 Base | 12' x 16' | 1 story | Race Timing | --- |
| Nastar Start Bldg. | 6' x 8' | 1 story | Race Starting | --- |
| Watchman's Booth | 8' x 12' | 1 story | Group Sales | --- |
| Manager's House | 28' x 44' | 1 story | Residence | --- |

| | | | | |
|---|---|---|---|---|
| Bus Booth | 24' x 24' | 1 story | Group Sales | --- |
| Ski Patrol | 34' x 60' | 2 story | Patrol Offices & Conference Room | --- |
| Creek Pump House | 10'6" x 11'6" | 1 story | Houses Pump | --- |
| Generator Cover | 21' x 23' | 1 story | Cover Emergency Generators | --- |
| Round House Control | 13'6" x 14' | 1 story | Cover Electric Controls | --- |
| Valve House A | 16' x 24' | 1 story | Keep Snowmaking Valves Warm | --- |
| Valve House B | 20' x 16' | 1 story | Keep Snowmaking Valves Warm | --- |
| Valve House D | 16' x 24' | 1 story | Keep Snowmaking Valves Warm | --- |
| Saddle Patrol C | 14' x 16' | 1 story | Satellite Ski Patrol Station | --- |
| Hedco Building | 22' x 24' | 1 story | Snowmakers Satellite Station | --- |
| Windy Hill Valve House | 12' x 16' | 1 story | Keeping Snowmaking Valves Warm | --- |
| Sled Shack | 8' x 16' | 1 story | Toboggan Storage | --- |
| Summit Toboggan Bldg. | 6' x 8' | 1 story | Toboggan Storage | --- |
| Saddle Generator Shed | 9' x 15' | 1 story | Cover Emergency Generator | --- |
| Valve House F | 16' x 20' | 1 story | Keep Snowmaking Valves Warm | --- |
| Reservoir Bldg. | 8' x 8' | 1 story | Cover Potable Water Tank | --- |
| Race Pole Storage | 4' x 8' | 1 story | Store Race Poles | --- |
| Manager's Storage | 8' x 8' | 1 story | Personal Storage | --- |
| Access Rd. Garage | 12' x 21' | 1 story | Fertilizer Storage | --- |
| Summit Patrol | 13'5" x 28'5" | 1 story | Ski Patrol | --- |
| Fire Tower | 16' x 16' | 72' High | Fire Lookout | --- |
| Communications Tower | 12' x 24' | 110' High | State Police & DEC Communication Repeaters | --- |
| 12 Outhouses | 3' x 4' | 1 story | Mens, Ladies, Attendants | --- |
| Manager's Garage | 14' x 28' | 1 story | 1 Car Garage | --- |
| Lift #8 Summit | 12' x 20' | 1 story | Attendants/Storage | --- |
| Lift #8 Cabin Storage Bldg. | 150' x 68' | 1 story | Storage/Maintenance | --- |

# Appendix 5

## Marketing Research Report

# *Marketing Research Report*

## *April 27, 2000*

GORE
MOUNTAIN

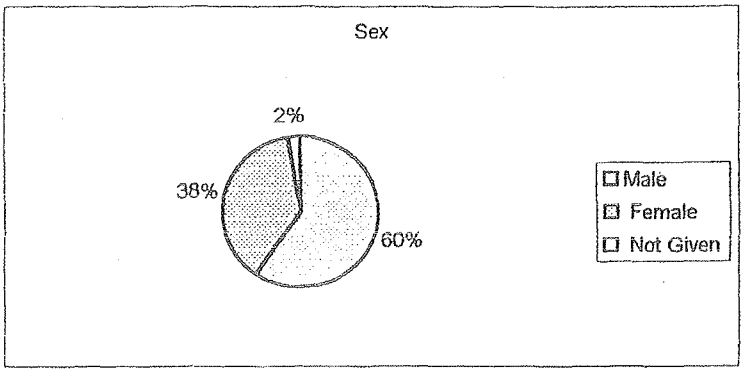
*Prepared by Emily Stanton*
*For internal use only*

## *I. Introduction*

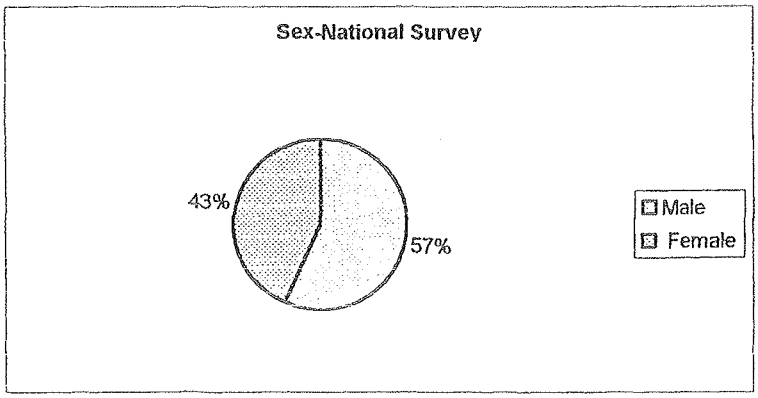
*A random survey was taken of 204 individuals from the first weekend of the Presidents' holiday (February 19-20) until closing day (April 2). This time period takes into the sample skiers from local and distant locations during both optimal winter and variable spring conditions. Objectives in obtaining the data were to assess customer awareness and opinion on the 5-Phase Plan, collect quantitative consumer data, and prioritize future development according to customer wants and needs. The 1998-1999 National Skier/Boarder Opinion Survey National Year-End Summary Report, prepared by the Leisure Trends Group, is being used as a constant to compare our sample to the 33,000 skiers and boarders who completed a survey at 40 ski areas throughout the United States, and three in Canada. Total Gore Mountain skier visits 1999-2000: 120,017.*

## *II. The Sample*

*204 INDIVIDUALS*
*121- Male*
*78- Female*
*5- Not Given*

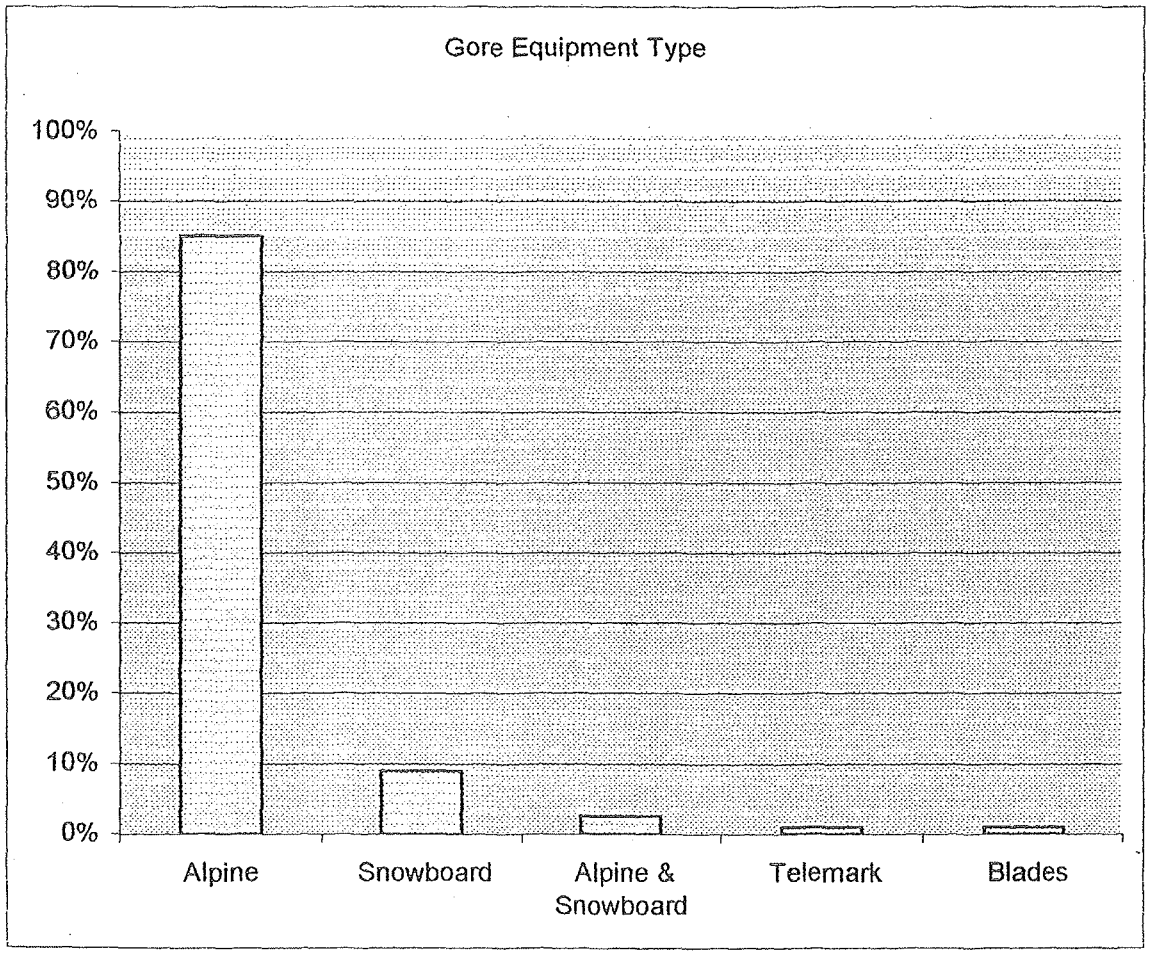



*The national survey indicates that males are 57% of downhillers, females 43% (Leisure Trends, 1999), making the sex distribution of the Gore sample quite comparable to the national average.*



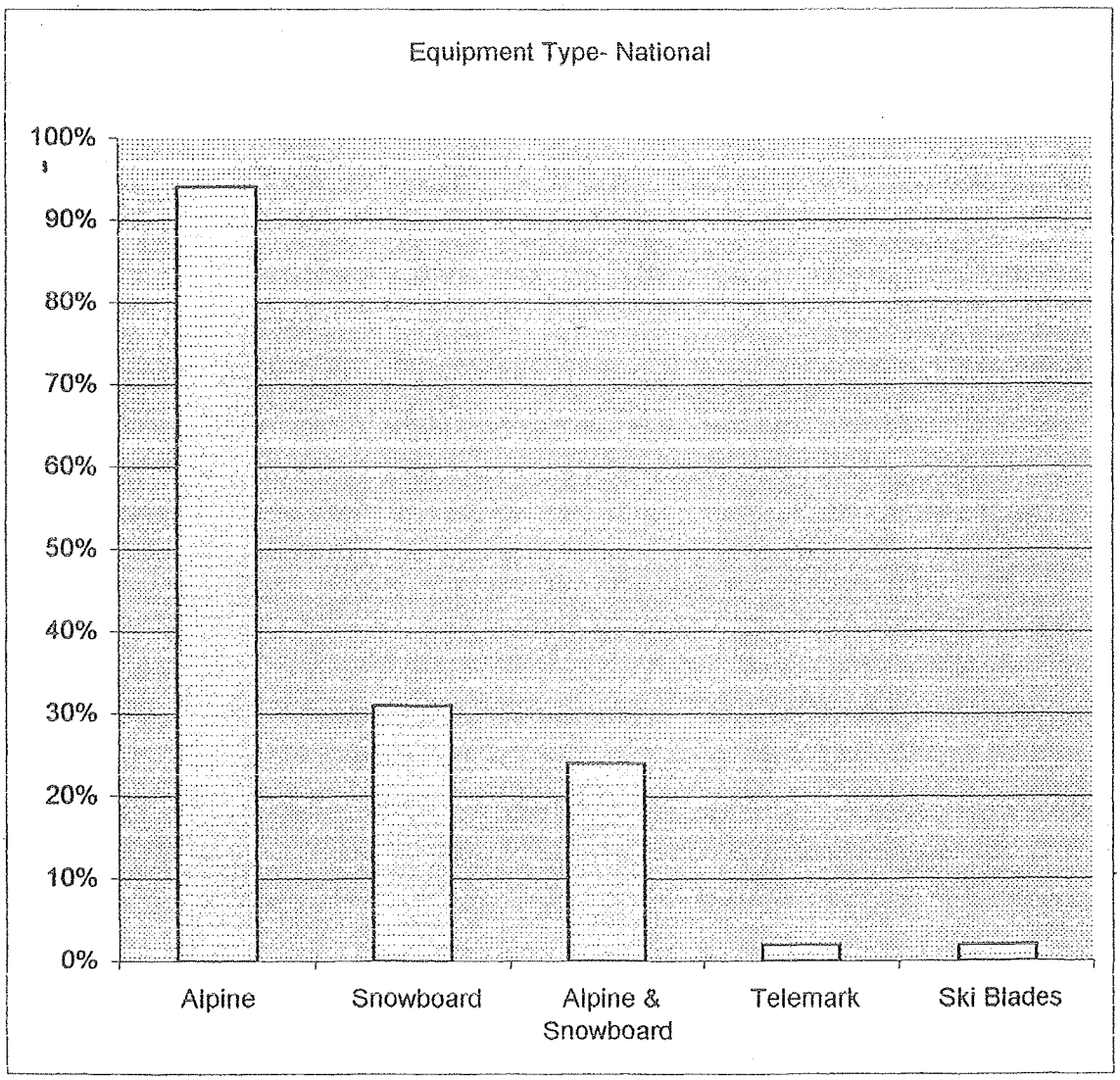
*172 respondents, 85% of the sample, are alpine skiers.*
*18 respondents, 9% of the sample, are snowboarders.*
*5 respondents, 2.5% of the sample, participate in both alpine skiing and snowboarding.*
*2 respondents, 1% of the sample, are telemark skiers.*
*2 respondents, 1% of the sample, use ski blades.*

*5 respondents, or 2.5% of the sample, did not provide their equipment type.*

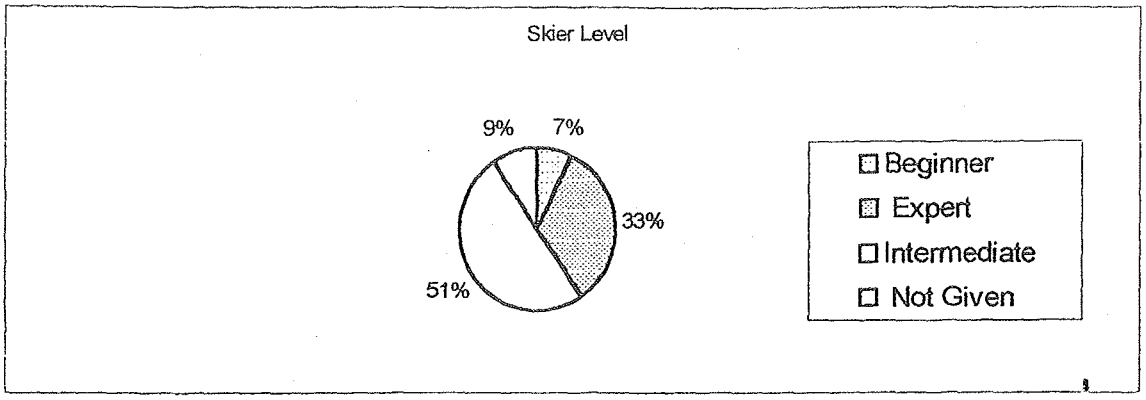


*According to the national data (Leisure Trends, 1999), 94% of people on the slopes are alpine skiers and 31% are snowboarders, with these figures adding to over 100% because 24% participate in both alpine skiing and snowboarding. Only 6% of the downhill market snowboards exclusively.*

*Note that on any given day, approximately 84% are alpine skiing, only 1% less than the Gore Mountain sample, and 17% are snowboarding.*
*The national data also shows 2% of downhillers on telemark skis and 2% on ski blades. Each of these figures is only 1% greater than the Gore Mountain sample.*

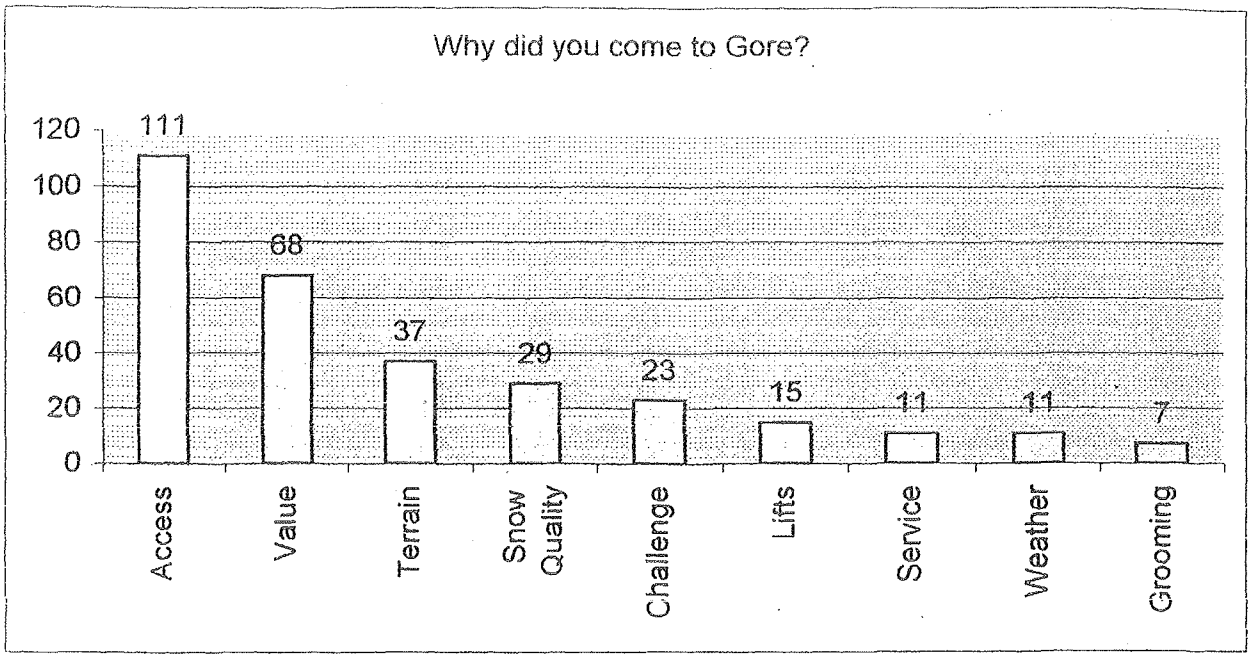


*Over one-half of the Gore sample categorizes themselves as intermediate skiers or riders, one-third as experts, and less than one-tenth as beginners.*




*85 respondents, or 41.7%, visited Gore on an overnight trip. Their average stay was 3.188 nights. Nationally, the average stay is 4.8 nights (Leisure Trends, 1999).*

*The average number of ski days per year in the Gore Mountain sample is 16.925. Nationally, this figure is 14 days. Of the approximate 17 ski days per year, our sample skis 6.744 days, or spends 40% of their ski time at Gore.*




*54.4% of respondents said that access was the primary factor influencing their decision to come to Gore. Value was chosen by 33.33% of respondents, Terrain 18.1%, Snow Quality 14.22%, Challenge 11.27%, Lifts 7.35%, Service 5.4%, Weather 5.4%, and Grooming 3.4%. These figures exceed 100% because respondents were asked to circle two factors. Other various factors included family atmosphere, tradition, being local, word of mouth, kids and learn to ski programs, the race program, and the scenery.*

*According to the national data (Leisure Trends, 1999), access, friends, tradition, and terrain are the primary factors influencing the choice of destination. Secondary factors include price and product characteristics (atmosphere, snow surface, lodging, and scenery). 53% of downhillers use a price promotion.*

*121 (59.31%) respondents noted that their primary information source about Gore Mountain was friends and family. 34 (16.7%) used the Gore Mountain website as their primary information source. Nationally, 48% of all downhillers indicate that they accessed the website of the resort they were visiting, and 87% have access to the Internet.*

*Other information sources included the snow phone, the race program, and the particular school a guest attended.*

## *III. Findings*

*Our sample is significantly similar to the national average concerning sex and equipment type. The sample skis approximately three more days per year than the average skier, and spends 40% of their ski time at Gore Mountain, making it an avid group of downhillers that is familiar with the ski area.*

*Despite the rapid growth of snowboarding, it still remains a small fraction of the downhill segment, with alpine skiers at least five times the number of snowboarders. Although this will likely change in the future, the market is currently strongly dominated by alpine skiers.*

*Telemark skiers and snowbladers do not constitute a significant market.*

*Over half of the sample was here because of the easy access, one-third for the value.*

*Our trail distribution matches nicely to our sample's ability level. Beginner skiers=9%, Beginner trails=10%, Intermediate skiers=51%, Intermediate trails=60%, Expert skiers=33%, Expert trails=30%.*

*Word of mouth remains the strongest marketing tool, with approximately 60% using friends and family as their main Gore Mountain information source. The website was the closest second at 16.7%.*

*Aspects of the Gore Mountain experience most disliked:*

1. *Flat Areas*
2. *Nothing!*
3. *No direct access to summit*
4. *Gondola location/Bear Mountain trails*
5. *Food/Bar prices*
6. *Lack of grooming*
7. *Crowded Lodge/Parking (Tie)*
8. *Lift Unloading Areas*
9. *Rental Process/Conditions (Tie)*
10. *Long ticket lines/lack of comfortable seating/weather (Tie)*

*Aspects of the Gore Mountain experience most liked:*

1. *Terrain*
2. *Gondola*
3. *Lack of crowds*
4. *Family appeal*
5. *Lifts*
6. *Grooming/Employees/Everything (Tie)*
7. *Scenery*
8. *Conditions*
9. *Snowmaking*
10. *Half-pipe/Summit area/Glades (Tie)*

*Areas that deserve the most focus over the next 5 years:*

1. *Trails (48%)*
2. *Snowmaking*
3. *Lifts*
4. *Grooming*
5. *Lodges*
6. *Parking*
7. *Food*
8. *Conditions Reporting/ Additional Activities (Tie)*
9. *Children's Programs/Safety (Tie)*
10. *Ski School*

*The majority of previous Gore Mountain visitors are not aware of the Five-Phase Plan.*
*Not Aware- 66.6%*
*Aware- 33.3%*

*The majority of previous Gore Mountain visitors said the changes since 1995 have been positive.*
*Positive- 93%*
*Negative-7%*

*The majority of previous Gore Mountain visitors do not ski or ride more often because of these changes.*
*Do not Ski/Ride More- 56%*
*Ski/Ride More- 44%*

*Guests feel that new lifts, including the Northwoods Gondola, have made the greatest improvement to the mountain (45%). Snowmaking (20%) and added terrain (16%) were also frequently mentioned.*

## *IV. Marketing Implications*

*Marketing is making business decisions according to customer wants and needs. The following implications only consider customer wants and needs, and put no consideration toward cost/budgeting, environmental regulation, safety, etc.*

**Lift #10 and new Bear Mountain trails should be of main priority for improvements. Almost half of the sample said that trails deserve the most attention over the next five years. Flat areas and gondola location/Bear Mountain trails are at the top of the list for customer dislikes. Customer complaints are the most frequent about these two topics.*

**There are references to our great value and easy access in our marketing messages, but these two advantages that we hold tightly over the majority of other mountains need to become more highlighted in our marketing mix. Value and access is what we have over Vermont. Let's talk them up!*

**More grooming. Good grooming, over all other aspects of the mountain, is the factor most likely to determine whether someone comes to ski or not. Grooming should become part of our snow report.*

**Let skiers back in the half-pipe. In addition to several requests for this in the visitor survey, a separate file has had to be made for comment forms in regard to the same matter.*

**Maintain but do not increase investment in terrain park and half-pipe. The Gore Mountain snowboard segment is small, and our flat areas deter many snowboarders. Snowboarders are less likely to be destination visitors, and they comprise a younger, lower-income segment that is not mountain-loyal. Our snowboard program is presently sufficient. We currently have several events for snowboarders only, and a functional snowboard school. Since snowboarders are not mountain-loyal, they will be swayed by future snowboard improvements, including the addition of Lift #10 that will allow them to avoid the flat areas. Our mountain's terrain is not snowboard friendly, and the current size of the snowboard market does not warrant significant snowboard improvements.*

**Gore Mountain visitors are not staying as many nights as other destination visitors. We lack nightlife and a simplistic way to arrange for accommodations.*

**Begin an adult frequent skier card program. Skiers are given a free card. Ticket sellers are provided with special stickers or stamp. Ski 4 times, get your 5th visit free. This program will show our appreciation towards our frequent skiers, and assuage the adults who are upset at losing the Empire Card and absorb the most skiing costs. These adults are the main source of our revenues, and they should have an incentive program. 53% of downhillers use a price promotion.*

**Communicate the Five-Phase Plan to guests more effectively. People would be more accepting and understanding of changes if they knew the changes were part of a long-term rehabilitation project, and would feel like a more involved part of the Gore community that their tax dollars are invested in. A sign in the lodge or a general informational release to be distributed at the information desk may be useful. Employees should also be more informed of the Plan.*

**Add non-skiing activities. Additional activities were among the top ten items of areas that deserve the most attention over the next five years. Tubing, sleigh rides, and more snowshoe events are all examples of additional activities. Even the purchase of some board games would be a nice way to get started.*

**Arrange for good-bye people for next year to compliment the greeters. Arrange for more product giveaways and free samples. Companies who we hand out free samples for may be more conducive to becoming sponsors, and people love free stuff.*

**Develop a structured, more organized, customer-friendly way to work the kids programs. One-stop shopping is needed.*

**Develop an employee appreciation program, and have more regularly scheduled employee meetings and mixers. A well-informed, happy staff will result in better customer service.*

# Appendix 6

## Sustainable Slopes

## Environmental Vision Statement

To be leaders among outdoor recreation providers through managing our businesses in a way that demonstrates our commitment to environmental protection and stewardship while meeting the expectations of the public.

## Environmental Mission Statement

Ski areas across North America provide a quality outdoor recreation experience in a manner that complements the natural and aesthetic qualities that draw all of us to the mountains. We cherish the outdoors and respect the alpine environment in which we live and work. We are committed to improving environmental performance in all aspects of our operations and managing our areas to allow for their continued enjoyment by future generations.

## PARTNERING ORGANIZATIONS

The Principles were developed through a stakeholder process facilitated by the Keystone Center. Input was sought from wide variety of interests, including federal, state and local governmental agencies, environmental and conservation groups, other outdoor recreation groups, and academia. The "Partnering Organizations" listed below support the ski industry's development of the Principles and are committed to working with the industry on their particular areas of expertise and interest as the industry moves forward to implement the Principles.

Center for Sustainable Tourism, University. of Colorado
Conservation Law Foundation
US Department of Energy
US Environmental Protection Agency
USDA Forest Service
Leave No Trace Inc.
The Mountain Institute
National Environmental Trust
National Fish & Wildlife Foundation
2002 Olympics Salt Lake City Organizing Committee
Teton County, Wyoming
Trust For Public Lands

*This list will be revised periodically. Please check www.nsaa.org for updates.*

# PARTICIPATING ORGANIZATIONS

Individuals from the following organizations and agencies provided input on the Principles through the stakeholder process. Participation does not imply that these individuals or organizations support the Principles.

**Participating Organizations**

| | |
|---|---|
| The Alford Design Group, Inc. | (Peter Alford, Jr.& Sr.) |
| Cirrus Ecological Solutions | (Neal Artz/Scott Evans) |
| Citizens Allied for Responsible Growth | (Dana Williams) |
| Colorado Mountain College – Ski Area Operations | (Curtis Bender/Paul Rauschke) |
| Colorado Ski Country USA | (Melanie Mills) |
| Conservation Law Foundation | (Mark Sinclair) |
| Economics Research Associates | (Greg Cory) |
| Environmental Defense | (Jennifer Pitt) |
| Green Mountain Club | (Ben Rose) |
| Innovation Works | (Mary Lou Krambeer) |
| Jack Johnson Company | (Brooke Hontz/Lauren Loberg) |
| Kimley-Horn & Associates, Inc. | (Jim Fletcher) |
| Leave No Trace Inc. | (Amy Mentuck) |
| Lyndon State College | (Catherine DeLeo, Ph.D.) |
| National Environmental Trust | (Jan Pendlebury, Kevin Curtis, Laura Culberson, Paul Blackburn, Susan Sargent) |
| National Fish and Wildlife Foundation | (Cinda Jones) |
| National Park Service | (Wendy Berhman) |
| The Nature Conservancy | (Liz Schulte/Angela Koloszar) |
| Normandeau Associates | (Al Larson, P.G.) |
| North Fork Preservation Alliance/ Sundance Resort | (Mary Morrison) |
| Northwest Colorado Council of Governments Q/Q Committee | (Lane Wyatt) |
| ORCA – Trade Association of the Outdoor Industry | (Myrna Johnson) |
| Pacific Northwest Ski Areas Association | (Doug Campbell) |
| Park City Municipal Corporation | (Richard Lewis/Myles Rademan) |
| Pioneer Environmental Services, Inc. | (Roy Hugie) |
| Outward Bound USA | (Craig Mackey) |
| Salt Lake Organizing Committee for the Olympic Winter Games of 2002 | (Diane Conrad & David Workman) |
| s.e. group | (Ted Beeler) |

| | |
|---|---|
| Sierra Club – Utah | (Jock Glidden) |
| Sierra Club – West Virginia | (Paul Wilson) |
| Ski Areas of New York | (Rob Megnin) |
| SKI Magazine | (Andy Bigford) |
| Ski Maine Association | (Greg Sweetser) |
| The Citizens Committee to Save Our Canyons | (Gavin Noyes) |
| Surfrider Foundation/Snowrider | (Jen Ader/Darryl Hatheway) |
| Teton County, Wyoming | (Ann Stephenson) |
| The Groswold Ski Company | (Jerry Groswold) |
| The Mountain Institute | (Jane Pratt) |
| Town of Mammoth Lakes | (Bill Taylor & Mike Vance) |
| Trout Unlimited – Colorado Chapter | (Melinda Kassen) |
| Trout Unlimited – Oregon Chapter | (Jeff Curtis) |
| Trout Unlimited – Utah Chapter | (Paul Dremann) |
| Trust for Public Land | (Doug Robotham) |
| University of Colorado – Center for Sustainable Tourism | (Charles Goeldner) |
| U.S. Department of Energy | |
| U.S. Environmental Protection Agency | |
| U.S. Forest Service | |
| Vermont Natural Resources Council | (Stephen Holmes) |
| Vermont Ski Areas Association | |

# PREAMBLE

## *The Context of the Environmental Principles*

**Our Values**

- Like their guests, ski area operators and employees enjoy the outdoors, appreciate the alpine environment and consider it their home. A strong environmental ethic underlies our operations, makes us stewards of the natural surroundings, and is the basis for our commitment to constant improvement in environmental conditions.

- The recreation opportunities that ski areas provide contribute to improving the quality of life for millions of people each year, and the natural surroundings greatly enhance those experiences. In providing quality, outdoor recreation opportunities, we strive to balance human needs with ecosystem protection.

- Ski areas are well suited to accommodate large numbers of visitors because of their infrastructure and expertise in managing the impacts associated with those visits. By providing facilities for concentrated outdoor recreation in limited geographic areas, ski areas help limit dispersed impacts in more remote, wild areas.

- Ski areas operate within and are dependent on natural systems including ecological, climatic and hydrological systems. These dynamic systems can affect our operations, just as we have effects on them. We are committed to working with stakeholders to help understand and sustain the diversity of functions and processes these systems support.

- In addition, ski areas operate within rural and wild landscapes that are valued for their scenic, cultural, and economic characteristics. We are committed to working with stakeholders to understand and help maintain those characteristics which make these landscapes unique.

- Given the ski industry's dependence on weather, climate changes that produce weather patterns of warmer temperatures or decreased snowfall could significantly impact the industry. Accordingly, the industry is committed to better understanding the actual and potential impacts of climate change, reducing its own, albeit limited, emission of greenhouse gases, and educating its customers and other stakeholders about this issue.

- Along with environmental concerns, ski area operators are deeply concerned with the safety of our guests. We take safety into account in the design and operation of ski areas, and in some situations need to place the highest priority on safety.

## Background on the Principles

- The ski industry is composed of a diverse group of companies, varying in size, complexity, accessibility to resources, and geographic location. These Principles are meant to be a useful tool for all ski areas, from local ski hills to four season destination resorts, whether on public or private land. Our vision is to have all ski areas endorse these Principles eventually and make a commitment to implementing them. Some smaller areas that endorse these Principles may be limited in their ability to make progress in all of the areas addressed.

- The Principles are voluntary and are meant to provide overall guidance for ski areas in achieving good environmental stewardship, not a list of requirements that must be applied in every situation. Recognition must be made that each ski area operates in a unique local environment or ecosystem and that development and operations may reflect these regional and operational differences. Each ski area must make its own decisions on achieving sustainable use of natural resources. While ski areas have the same goals, they can choose different options for getting there.

- The Principles are meant to go "beyond compliance" in those areas where improvements make environmental sense and are economically feasible. Ski areas should already be meeting all applicable federal, state, and local environmental requirements. Through these Principles, we are striving to improve overall environmental performance, whether it be in the form of achieving efficiencies, sustaining resources or enhancing the public's awareness of our special environment.

- The Principles encourage ski areas to adopt the "avoid, minimize, mitigate" approach to natural resource management. Avoidance should be the first consideration when outstanding natural resources or settings are at stake.

- The Principles recognize that ski areas have some unavoidable impacts. At the same time, they strive to maintain the integrity of the environments in which they operate, by contributing to the sense of place in mountain communities and being good stewards of the areas in which operate.

- The Principles are aimed at improving environmental performance at existing ski areas, and can serve as helpful guidance for planning new developments. The Principles cannot fully address when and where new ski area development should occur, as that issue should be addressed on the merits of each individual project and in consideration of the specific characteristics of a particular location. What might be beneficial development in one location could be inappropriate in another.

- Ski areas are concerned about the larger issues of growth and sustainable development in mountain communities. Key issues of community planning, such as protecting viewsheds, quality of life, and open space, are inherently linked to our business and the quality of experience of our guests. While the Principles cannot address fully some of the larger issues of growth in mountain communities, the ski

industry is committed to working with stakeholders to make progress on these issues of concern to mountain communities. Many of the concepts in these Principles can provide leadership in confronting those issues.

- The Principles were developed through a collaborative dialogue process where input and awareness, not necessarily consensus on every issue or by every group, was the goal. They represent the major areas of agreement for ski areas and Partnering Organizations.

- These Principles are a first, collective step in demonstrating our commitment to environmental responsibility. We hope that this initiative will help us better engage our stakeholders in programs and projects to improve the environment.

# ENVIRONMENTAL PRINCIPLES

*Voluntary environmental principles for ski area planning, operations and outreach**

## I. Planning, Design and Construction

*In planning and designing trails, base areas and associated facilities, ski areas have the opportunity to explore ways of integrating our operations into natural systems and addressing short and long-term environmental impacts to natural resources. There may also be opportunities to address past disturbances from historical uses that have occurred in the area and mitigate the unavoidable impacts from future ones.*

**Principles:**

- Engage local communities, environmental groups, government agencies and other stakeholders in up front and continuing dialogue on development plans and their implementation
- Assess environmental concerns and potential restoration opportunities at local and regional levels
- Plan, site and design trails, on-mountain facilities and base area developments in a manner that respects the natural setting and avoids, to the extent practical, outstanding natural resources
- Emphasize nature in the built environment of the ski area
- Make water, energy, and materials efficiency and clean energy use priorities in the design of new facilities and the upgrading of existing facilities
- Use high-density development or clustering to reduce sprawl, provide a sense of place, reduce the need for cars and enhance the pedestrian environment
- Meet or exceed requirements to minimize impacts associated with ski area construction

**Options for getting there:**

- ✓ Engaging stakeholders collaboratively on the siting of improvements and the analysis of alternatives
- ✓ Complementing local architectural styles, scale, and existing infrastructure to enhance the visual environment and to create a more authentic experience for guests
- ✓ Respecting outstanding natural resources and physical "carrying capacity" of the local ecology in planning new projects
- ✓ Using simulation or computer modeling in planning to assist with analyzing the effects of proposals on key natural resources and viewsheds such as visual modeling or GIS
- ✓ Designing trails with less tree removal and vegetation disturbance where feasible

**These Principles are voluntary and are not intended to create new legal liabilities, expand existing rights or obligations, waive legal defenses, or otherwise affect the legal position of any endorsing company, and are not intended to be used against an endorser in any legal proceeding for any purpose.*

- ✓ Incorporating green building principles, such as using energy, water and material efficiency techniques and sustainable building practices
- ✓ Using long-life, low maintenance materials in building
- ✓ Including parks, open space and native landscaping in base area developments
- ✓ Seeking opportunities for environmental enhancement and restoration
- ✓ Maximizing alternate transportation modes in and around the base area
- ✓ Minimizing road building where practical
- ✓ Selecting best management practices (BMPs) for construction sites with stakeholder input
- ✓ Applying sound on-mountain construction practices such as over-snow transport techniques, stormwater control or phasing of activities to minimize disturbances to natural habitats

## II. Operations

*In the day-to-day operation of ski areas and associated facilities, there are many opportunities for stewardship, conserving natural resources, and achieving efficiencies. Taking advantage of these opportunities will not only benefit the environment, but can also result in long-term cost savings.*

### Water Resources

*Water is an important resource for ski areas as well as the surrounding natural environments and communities, and should be used as efficiently and effectively as possible.*

#### *Water Use for Snowmaking*

**Principles:**

- ◈ Optimize efficiency and effectiveness of water use in snowmaking operations
- ◈ Conduct snowmaking operations in a manner that protects minimum stream flows and is sensitive to fish and wildlife resources (see Fish & Wildlife Principles below).

**Options for getting there:**

- ✓ Using appropriate technology and equipment to optimize efficiency
- ✓ Inspecting and monitoring systems to reduce water loss
- ✓ Using reservoirs or ponds to store water for use during low flow times of the year and to maximize efficiency in the snowmaking process
- ✓ Working with local water users and suppliers to promote in-basin storage projects to offset low flow times of the year
- ✓ Installing water storage facilities to recapture snowmelt runoff for reuse
- ✓ Inventorying water resources and monitoring seasonal variations in stream flows
- ✓ Supporting and participating in research on the ecological impacts of snowmaking

### *Water Use in Facilities*

**Principle:**

- Conserve water and optimize efficiency of water use in ski area facilities

**Options for getting there:**

- ✓ Conducting water use audits and investigating methods and alternative technologies to reduce water consumption
- ✓ Installing water efficient equipment in facilities such as low-flow faucets and toilets
- ✓ Participating in existing water conservation and linen and towel re-use programs such as EPA's WAVE® and Project Planet® programs for lodging
- ✓ Educating guests and employees about the benefits of efficient water use

### *Water Use For Landscaping and Summer Activities*

**Principle:**

- Maximize efficiency in water use for landscaping and summer activities

**Options for getting there:**

- ✓ Incorporating water efficiency BMPs in planning and design phases
- ✓ Planning summer uses in conjunction with winter uses to maximize the efficiency of necessary infrastructure
- ✓ Using drought-tolerant plants in landscaped areas
- ✓ Using native plant species where appropriate
- ✓ Using water efficient irrigation and recycling/reuse technologies
- ✓ Using compost in soil to increase water retention and reduce watering requirements
- ✓ Inspecting and monitoring systems to reduce water loss
- ✓ Watering at appropriate times to minimize evaporation
- ✓ Educating employees about efficient water use

### *Water Quality Management*

**Principle:**

- Meet or exceed water quality-related requirements governing ski area operations

**Options for getting there:**

- ✓ Participating in watershed planning, monitoring and restoration efforts
- ✓ Using appropriate erosion and sediment control practices such as water bars, revegetation and replanting
- ✓ Maintaining stream vegetative buffers to improve natural filtration and protect habitat
- ✓ Applying state-of-the-art or other appropriate stormwater management techniques
- ✓ Utilizing oil/water separators in maintenance areas and garages
- ✓ Using environmentally sensitive deicing materials
- ✓ Encouraging guests to follow the Leave No Trace™ principles of outdoor ethics

### *Wastewater Management*

**Principle:**

- Manage wastewater in a responsible manner

**Options for getting there:**

- ✓ Planning for present and future wastewater needs with adjacent communities
- ✓ Using appropriate wastewater treatment technology or alternative systems to protect water quality
- ✓ Connecting septic systems to municipal wastewater systems where appropriate
- ✓ Exploring the use of decentralized or on-site treatment technologies where appropriate
- ✓ Re-using treated wastewater/greywater for non-potable uses and appropriate applications
- ✓ Monitoring wastewater quality

## Energy Conservation and Use

*Ski areas can be leaders in implementing energy efficiency techniques and increasing the use of renewable energy sources within their operations to conserve natural resources, reduce pollution and greenhouse gases and reduce the potential impacts of climate change.*

### *Energy Use for Facilities*

**Principles:**

- Reduce overall energy use in ski area facilities
- Use cleaner or renewable energy in ski area facilities where possible
- Meet or exceed energy standards in new or retrofit projects

**Options for getting there:**

- ✓ Auditing current usage levels, and targeting areas for improvement
- ✓ Developing an energy management plan that addresses short and long term energy goals, staffing, and schedules for new and retrofit projects
- ✓ Orienting buildings and their windows to maximize natural light penetration, reduce the need for artificial lighting and facilitate solar heating and photovoltaic electricity generation
- ✓ Using solar heating or geothermal heat pumps for heating air and water
- ✓ Using timing systems, light management systems and occupancy sensors
- ✓ Performing lighting retrofits to provide more energy efficient lamps, retrofitting exit signs to use low watt bulbs, calibrating thermostats, and fine tuning heating systems
- ✓ Using peak demand mitigation, distributed, on-site power generation and storage, and real time monitoring of electricity use

- ✓ Working with utilities to manage demand and take advantage of cost sharing plans to implement energy savings
- ✓ Entering into load sharing agreements with utilities for peak demand times
- ✓ Partnering with the U.S. Department of Energy and state energy and transportation departments to assist with energy savings and transit programs
- ✓ Participating in energy efficiency programs such as EPA/DOE's Energy Star™
- ✓ Educating employees, guests and other stakeholders about energy efficient practices
- ✓ Installing high efficiency windows, ensuring that all windows and doorways are properly sealed and using insulation to prevent heating and cooling loss
- ✓ Minimizing energy used to heat water by using low-flow showerheads, efficient laundry equipment, and linen and towel re-use programs
- ✓ Investing in cleaner or more efficient technologies for power generation, including wind, geothermal, and solar power generation, fuel cells and natural gas turbines and generation from biomass residues and wastes.
- ✓ Purchasing green power, such as wind-generated power, from energy providers

### *Energy Use for Snowmaking*

**Principles:**

- ◈ Reduce energy use in snowmaking operations
- ◈ Use cleaner energy in snowmaking operations where possible

**Options for getting there:**

- ✓ Using high efficiency snow guns and air compressors for snowmaking operations
- ✓ Upgrading diesel motors or converting them to alternative clean energy generation sources
- ✓ Using real time controls, sensors and monitoring systems to optimize the system and reduce electrical demand
- ✓ Using on mountain reservoirs and ponds to gravity feed snowmaking systems where possible
- ✓ Using distributed, on-site power generation to avoid or reduce peak demands from the utility grid
- ✓ Purchasing green power from energy providers

### *Energy Use for Lifts*

**Principles:**

- ◈ Reduce energy use in lift operations
- ◈ Use cleaner energy in lift operations where possible

**Options for getting there:**

- ✓ Using high efficiency motors
- ✓ Upgrading diesel motors or converting them to alternative clean energy sources, such as fuel cells or microturbines
- ✓ Using renewable energy sources
- ✓ Purchasing green power from energy providers

### *Energy Use for Vehicle Fleets*

**Principles:**

- ◆ Reduce fuel use in vehicles used for ski area operations
- ◆ Use cleaner fuel where possible

**Options for getting there:**

- ✓ Providing shuttles or transportation for guests and employees
- ✓ Using energy efficient vehicles
- ✓ Using alternative fuel or hybrid electric engines in ski area fleet vehicles including shuttles, trucks, snowcats and snowmobiles
- ✓ Conducting regular maintenance on fleet vehicles

## Waste Management

*The Principles below incorporate the "REDUCE, REUSE, RECYCLE" philosophy of waste management to help ensure materials are being used efficiently and disposed of only after consideration is given to reusing or recycling them. Reducing waste helps protect natural resources, reduce pollution, greenhouse gases and energy use by decreasing the need to produce new materials, and minimizes disposal costs.*

### *Waste Reduction*

**Principle:**

- ◆ Reduce waste produced at ski area facilities

**Options for getting there:**

- ✓ Conducting an audit of waste production to establish a baseline and track progress toward reduction
- ✓ Purchasing recycled products
- ✓ Purchasing products in bulk to minimize unnecessary packaging
- ✓ Encouraging vendors to offer "take-backs" for used products
- ✓ Educating guests and employees about reducing wastes generated at the area and following the Leave No Trace™ Principles such as pack it in, pack it out

### *Product Reuse*

**Principle:**

- Reuse products and materials where possible

**Options for getting there:**

- ✓ Using washable or compostable tableware/silverware in cafeterias and lodges
- ✓ Encouraging guests to reuse trail maps
- ✓ Composting food wastes, grass clippings, and woody debris for use in landscaping and revegetation areas
- ✓ Exploring opportunities for reuse of products (e.g., building materials, lift parts and equipment, and office supplies)
- ✓ Joining EPA's WasteWise® program

### *Recycling*

**Principle:**

- Increase the amount of materials recycled at ski areas where possible

**Options for getting there:**

- ✓ Making recycling easy for guests by offering containers and displaying signage in facilities and lodges
- ✓ Recycling office paper, cardboard, newspaper, aluminum, glass, plastic and food service waste
- ✓ Recycling building materials as an alternative to landfilling
- ✓ Partnering with local governments on recycling in remote communities where recycling programs are not readily available
- ✓ Encouraging vendors to offer recycled products for purchase
- ✓ Educating guests and training employees on recycling practices
- ✓ Setting purchasing specifications to favor recycled content and specifying a portion of new construction to require recycled content

### *Potentially Hazardous Wastes*

**Principle:**

- Minimize the use of potentially hazardous materials, the generation of potentially hazardous wastes and the risk of them entering the environment

**Options for getting there:**

- ✓ Safely storing and disposing of potentially hazardous materials such as solvents, cleaning materials, pesticides and paints
- ✓ Recycling waste products such as used motor oil, electric batteries, tires and unused solvents
- ✓ Reshelving and reusing partially used containers of paint, solvents, and other materials

- ✓ Purchasing non-hazardous products for use when effective
- ✓ Properly managing fuel storage and handling
- ✓ Maintaining or upgrading equipment to prevent leaks
- ✓ Initiating programs to reduce the occurrence of accidental spills or releases
- ✓ Installing sedimentation traps in parking lots
- ✓ Educating employees on the requirements for properly handling hazardous wastes
- ✓ Reclaiming spent solvents
- ✓ Coordinating with local area emergency planning councils for response in case of a spill or release

## Fish and Wildlife

*Ski areas operate within larger ecosystems and strive to be stewards of fish and wildlife habitats. They need the cooperation of other landowners, managers, local communities and other stakeholders for an effective ecosystem management approach. There are measures ski areas can take to better understand, minimize, and mitigate impacts to fish and wildlife, and in some cases, enhance habitat, particularly for species of concern. The benefits of these measures include promoting biodiversity and the natural systems that attract guests to the mountain landscape.*

**Principle:**

- ◈ Minimize impacts to fish and wildlife and their habitat and maintain or improve habitat where possible

**Options for getting there:**

- ✓ Supporting and participating in research of fish and wildlife populations and their interactions with ski areas
- ✓ Inventorying and monitoring fish and wildlife and their habitat, particularly protected species
- ✓ Using snowmaking storage ponds or reservoirs to store water for use during times of low stream flows to help protect aquatic habitat
- ✓ Conducting activities and construction with sensitivity to seasonal wildlife patterns and behavior
- ✓ Siting and designing trails and facilities to include gladed skiing areas, linkage of ungladed areas to maintain blocks of forested corridors, and inter-trail islands to reduce fragmentation where appropriate
- ✓ Limiting access to, or setting aside, certain wildlife habitat areas
- ✓ Using wildlife-proof dumpsters or trash containers
- ✓ Creating or restoring habitat where appropriate, either on- or off-site
- ✓ Using land conservation techniques such as land exchanges and conservation easements as vehicles for consolidating or protecting important wildlife habitat
- ✓ Participating in ecosystem-wide approaches to wildlife management

- ✓ Providing wildlife education programs for employees, guests, and the local community such as Skecology® and the Leave No Trace™ Principles of respecting wildlife

## Forest and Vegetative Management

*Ski areas recognize the importance of stewardship in managing the forests and vegetation that support ecosystems and allow for public recreation opportunities. Sound forest and vegetative management can benefit fish and wildlife habitat, water quality and viewsheds and reduce erosion, pollution, and greenhouse gases.*

**Principle:**

- ◆ Manage effects on forests and vegetation to allow for healthy forests and other mountain environments

**Options for getting there:**

- ✓ Inventorying and monitoring forest and vegetative resources
- ✓ Adopting vegetative management plans
- ✓ Minimizing the removal of trees through the careful siting and design of trails
- ✓ Using over-snow skidding to remove logs for new runs during times of sufficient snow cover
- ✓ Using aerial logging where economically feasible
- ✓ Removing dead and diseased trees, with consideration to habitat value, to promote healthy forests and public safety
- ✓ Revegetating roads that are no longer used
- ✓ Revegetating disturbed areas with native plant species and grasses, recognizing that faster growing, non-native species may be needed to address erosion
- ✓ Revegetating disturbed areas as quickly as possible following disturbance
- ✓ Limiting disturbance to vegetation during summer activities
- ✓ Assessing the role of forest stands in reducing greenhouse gases
- ✓ Providing signage informing guests of sensitive vegetation areas
- ✓ Using traffic control measures, such as rope fences, on areas with limited snow coverage to protect sensitive vegetation and alpine tundra
- ✓ Reducing or eliminating snowcat and snowmobile access to sensitive areas with limited snow coverage
- ✓ Planting at appropriate times to minimize water use while optimizing growth
- ✓ Employing practices to control invasive or noxious weeds

## Wetlands & Riparian Areas

*Ski areas recognize that wetlands and riparian areas are crucial components of the alpine ecosystems in which they operate.*

**Principle:**

- Avoid or minimize impacts to wetlands and riparian areas, and offset unavoidable impacts with restoration, creation or other mitigation techniques

**Options for getting there:**

- ✓ Inventorying and monitoring wetland and riparian areas
- ✓ Limiting snowmaking and grooming equipment access to wetlands and riparian areas if snow cover is inadequate to protect them
- ✓ Limiting guest access to wetlands and riparian areas and vernal pools if snow cover is inadequate to protect them
- ✓ Engaging in restoration, remediation and protection projects
- ✓ Establishing buffers and setbacks from wetland and riparian areas in summer
- ✓ Managing snow removal and storage to avoid impacting wetlands and riparian areas as feasible
- ✓ Supporting or participating in research on functions of wetland habitats and riparian areas
- ✓ Using trench boxes to minimize impacts to forested wetlands from construction of utility lines

## Air Quality

*Ski area guests and operators value fresh air as an integral part of the skiing experience. Although there are many sources in and around the community that, combined, may compromise air quality, ski areas can do their share to help minimize impacts. Some of the many benefits of cleaner air and reduced air pollution include enhanced visibility and lessening human influences on climate change, which is of particular concern to ski areas given their location.*

**Principles:**

- Minimize ski area impacts to air quality
- Reduce air pollution and greenhouse gas emissions as feasible

**Options for getting there:**

- ✓ Reducing air pollutants and greenhouse gas emissions from buildings, facilities and vehicles through clean energy and transportation-related measures identified in these Principles
- ✓ Using dust abatement methods for dirt roads during summer operations and construction
- ✓ Revegetating as appropriate to control dust

- ✓ Reducing the sanding and cindering of ski area roads by using alternative deicing materials
- ✓ Sweeping paved parking lots periodically
- ✓ Reducing burning of slash through chipping or other beneficial uses
- ✓ Limiting wood burning fireplaces or using cleaner burning woodstoves and fireplaces and installing gas fireplaces
- ✓ Working with local and regional communities to reduce potential air quality impacts

## Visual Quality

*Scenic values are critical to surrounding communities and the experience of guests. Although ski area development is a part of the visual landscape in many mountain areas, it can be designed and maintained in a manner that complements the natural setting and makes the natural setting more accessible to guests. Where opportunities for collaboration exist, ski areas should also consider working with appropriate partners in the protection of open lands that help define the visual landscape in which their guests recreate.*

**Principle:**

- ◈ Create built environments that complement the natural surroundings
- ◈ Explore partnerships with land conservation organizations and other stakeholders that can help protect open lands and their role in the visual landscape

**Options for getting there:**

- ✓ Planning with landscape scenic values in mind
- ✓ Minimizing ridgeline development where feasible
- ✓ Promoting protection of open space elsewhere in the community to enhance regional viewsheds
- ✓ Applying local architectural styles and highlighting natural features to minimize disruption of the visual environment and create a more authentic experience
- ✓ Using visual simulation modeling in siting, planning and design to assist in demonstrating visual effects of projects
- ✓ Designing lifts and buildings to blend into natural backdrop or complement natural surroundings
- ✓ Constructing trails to appear as natural openings
- ✓ Using non-reflective building products and earth tone colors on structures
- ✓ Planting trees or other vegetation to improve visual quality
- ✓ Incorporating low level lighting or directional lighting to reduce impacts of lights on the night sky while recognizing safety, security, and maintenance needs
- ✓ Keeping parking areas free of debris and garbage
- ✓ Placing existing and new utility lines underground to reduce visual impacts

## Transportation

*Travel to and within ski areas has unavoidable impacts. Through transportation initiatives, ski areas can do their part to help ease congestion and impacts to air quality and improve the ski area experience. (See related topic of ski area vehicle fleets under Energy Principles.)*

**Principle:**

- Ease congestion and transportation concerns

**Options for getting there:**

- ✓ Providing employee transportation benefits, including shuttles, bus passes or discounts, van pools, and ride-share incentives
- ✓ Providing and promoting ski area guest transportation through shuttles or buses
- ✓ Offering and promoting carpooling or HOV incentives for guests such as discounts, or preferred parking in proximity to lodges
- ✓ Offering and promoting non-peak travel incentives for guests such as Sunday night stay discounts
- ✓ Increasing density in base area development when appropriate to reduce the need for vehicle use
- ✓ Supporting and participating in transit initiatives in the community and region
- ✓ Working with travel agents to market and promote car free vacation packages

# III. Education and Outreach

*Because of their setting in an outdoor, natural environment and the clear connection between that natural environment and the guest experience, ski areas have an excellent opportunity to take a leadership role in environmental education and enhancing the environmental awareness of their guests, surrounding communities, and employees.*

**Principles:**

- Use the natural surroundings as a forum for promoting environmental education and increasing environmental sensitivity and awareness
- Develop outreach that enhances the relationship between the ski area and stakeholders and ultimately benefits the environment

**Options for getting there:**

- ✓ Training employees and informing guests of all ages about the surrounding environment
- ✓ Promoting the Environmental Code of the Slopes©
- ✓ Educating stakeholders about these Principles and the Environmental Charter for Ski Areas
- ✓ Providing leadership on environmental concerns with particular importance to the alpine or mountain environment, such as climate change

- ✓ Dedicating personnel to environmental concerns and incorporating environmental performance measures and expectations into departmental goals
- ✓ Dedicating a portion of your website to environmental excellence and the Environmental Charter
- ✓ Offering Skecology® or other environmental education and awareness programs that provide on-mountain instruction and offer classroom information for use in schools
- ✓ Partnering with local school systems, businesses and the public on initiatives and opportunities for protecting and enhancing the environment
- ✓ Displaying interpretive signs on forest resources, vegetative management and fish and wildlife
- ✓ Publicly demonstrating a commitment to operating in an environmentally sensitive manner by adopting these Principles or addressing environmental considerations in company policies or mission statements
- ✓ Creating funding mechanisms for environmental outreach projects
- ✓ Promoting the ski area's environmental success stories or specific measures taken to address water, energy, waste, habitat, vegetation, air quality, visual quality or transportation concerns
- ✓ Encouraging employees to participate in community environmental initiatives
- ✓ Supporting initiatives to reduce snowmobile noise and emissions
- ✓ Asking guests their opinions about ski area environmental programs and initiatives and using their feedback to improve programs and the guests' experiences

# Appendix 7

# NYSDEC Tree Cruise Data for Gore Mountain

# *Next Steps for Ski Areas*

Endorsing the Environmental Charter and making a commitment to implement the Principles over time

Adopting environmental mission statements, policies or programs that reflect or expand upon the Environmental Charter and demonstrate your commitment to environmental protection and stewardship

Designating an "Environmental Charter contact" at your resort

Conducting audits and gathering data to measure, document, and report your progress toward implementing the Principles

Using the Principles as a framework, targeting areas for improved environmental performance

Supporting research on, exploring, and applying technologies that conserve natural resources

Developing comprehensive programs for waste reduction, product reuse and recycling

Participating in existing programs that help foster effective environmental management and policies or measure environmental improvements

Developing Environmental Management Systems over time which are tailored to your operations

Sharing data and innovative environmental solutions with other resorts and the industry as possible

Taking active steps to educate your employees, guests, and the general public about the Environmental Charter and your environmental policies and practices

# ENVIRONMENTAL CODE OF THE SLOPES©

## *What skiers, snowboarders and ski area guests can do to help*

- Follow the Leave No Trace™ Principles of outdoor ethics when visiting ski areas:
  - **Plan ahead and prepare:** Know the regulations and special concerns for the area you'll visit, prepare for winter weather, and consider off-peak visits when scheduling your trip.
  - **Dispose of waste properly:** Recycle your glass, plastics, aluminum and paper at resorts. Reuse trail maps on your next visit or recycle them rather than throwing them away. Never throw trash, cigarette butts or other items from the lifts.
  - **Respect wildlife:** Observe trail closures, seasonal closures, and ski area boundaries. These closures are in place not only for your safety, but the well being of plants and animals located in sensitive areas. In summer, stick to designated trails when hiking and biking to avoid disturbances to vegetation and wildlife.
  - **Be considerate of other guests:** Respect other guests, protect the quality of their experience, and let nature's sounds prevail.

- Carpool with friends and family or use transit to avoid traffic when travelling to and within the ski area.

- Turn off the lights when leaving your room and reuse bath towels and bedding to help conserve energy and water.

- Use washable tableware and silverware in cafeterias and lodges instead of paper or plastics to help us reduce waste.

- Take advantage of environmental or alpine education programs offered at ski areas to learn more about the surrounding environment and how to help protect it.

- If you have kids, get them involved in environmental and alpine education programs at a young age.

- Support "clean up days" or other environmental programs at your local ski area.

- Provide feedback and let ski areas know how they can improve their environmental performance.

| Community | A | | B | | C | | D | | E | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Pioneer HW | | Mixed HW | | North HW | | Mixed HW | | Mixed HW | |
| | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh |
| Sugar Maple | 0 | 9.9 | 81 | 125.1 | 22 | 119.1 | 94.7 | 63.4 | 76.5 | 63 |
| Beech | 0 | 0.5 | 8.2 | 20.2 | 39.2 | 22.2 | 18.2 | 25.8 | 189.2 | 197.2 |
| Yellow birch | 0 | 1.7 | | 4.9 | | 16.8 | 12.1 | 27.4 | 10.5 | 11 |
| White birch | 29 | 130.2 | | 24.4 | | 6 | | 24.5 | | 33.5 |
| White ash | 0 | 0 | | | | 8.9 | 12.1 | 7.4 | | |
| Black cherry | 0 | 0 | | 6.5 | | 0.4 | | 2.7 | | |
| Ironwood | 0 | 0 | | | 7 | 4.3 | 6.1 | | | |
| Red Spruce | 0 | 1.9 | | 10.4 | | 0.4 | | | | |
| Red Maple | 0 | 0 | 14.6 | 27.7 | | 4.4 | 6.1 | 20.9 | | 28.4 |
| Basswood | 0 | 0 | | | | 0.6 | | 9.2 | | |
| Red Oak | 0 | 0 | 30.9 | 11.8 | | 9.9 | | | 10.5 | 14.7 |
| Hemlock | 0 | 0.6 | | | | 0.1 | | 5.4 | | |
| Balsam Fir | 39.4 | 22 | | 6.8 | | | 27.6 | 4.9 | | |
| Striped Maple | 68.5 | 11.2 | | | | | | | | 6.6 |
| Aspen | 0 | 0 | | | | | | 19.7 | | 3.4 |
| Mountain Ash | 0 | 0 | | | | | | | | |
| Total | 136.9 | 178 | 134.7 | 237.8 | 68.2 | 193.1 | 176.9 | 211.3 | 286.7 | 357.8 |

| Community | F Spruce-Fir | | G Pioneer HW | | H North HW | | I Not Used | | J SF & PH | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh |
| Sugar Maple | | | 34 | | 86.8 | 129.7 | | | | |
| Beech | | | | | 40.8 | 40.4 | | | | |
| Yellow birch | | 22.6 | | 18.6 | | 38.7 | | | | |
| White birch | | | | 110.9 | | 1.9 | | | 109.8 | 150.2 |
| White ash | | | | | | | | | | |
| Black cherry | | | | | | | | | | |
| Ironwood | | | | | | | | | | |
| Red Spruce | 727 | 237.2 | | 31.7 | | | | | 11.5 | 17.7 |
| Red Maple | | | | 1.4 | | 13.9 | | | | |
| Basswood | | | | | | | | | | |
| Red Oak | | | | | | | | | | |
| Hemlock | | | | | | | | | | |
| Balsam Fir | 204 | | 193.5 | 89.9 | | 10 | | | 237.4 | 165.8 |
| Striped Maple | | | | | | | | | | |
| Aspen | | | | | | | | | | |
| Mountain Ash | | | | | | | | | 11.5 | 29.9 |
| Total | 931 | 259.8 | 227.5 | 252.5 | 127.6 | 234.6 | | | 370.2 | 363.6 |

| Community | K | | L | | M | | N | | O | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Spruce Fir | | Not used | | SF & PH | | North HW | | Not used | |
| | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh |
| Sugar Maple | | | | | | 39.8 | 68 | 280.1 | | |
| Beech | | | | | | | 144.7 | 72.1 | | |
| Yellow birch | | | | | | | | | | |
| White birch | 109.2 | 53 | | | 217 | 78 | | | | |
| White ash | | | | | | | 68 | 3.1 | | |
| Black cherry | | | | | | | | | | |
| Ironwood | | | | | | | | | | |
| Red Spruce | 12.8 | 14.9 | | | | 38.4 | | 9.5 | | |
| Red Maple | | | | | | | | | | |
| Basswood | | | | | | | | | | |
| Red Oak | | | | | | | | | | |
| Hemlock | | | | | | | | | | |
| Balsam Fir | 263.8 | 337.4 | | | 159.5 | 101.8 | | | | |
| Striped Maple | | | | | 57.5 | 44.2 | | | | |
| Aspen | | | | | | 18.3 | | | | |
| Mountain Ash | 12.8 | 5.7 | | | | | | | | |
| Total | 398.6 | 411 | 0 | 0 | 434 | 320.5 | 280.7 | 364.8 | 0 | 0 |

| Community | P | | Q | | R | |
|---|---|---|---|---|---|---|
| | North HW | | Pioneer HW | | North HW | |
| | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh | 3-4" dbh | >4" dbh |
| Sugar Maple | 15.3 | 105.6 | | | 28.8 | 191.3 |
| Beech | 15.3 | 39.7 | | | 28.8 | 25.1 |
| Yellow birch | | 10.6 | 14.4 | 31.3 | | 16.2 |
| White birch | | 0.6 | 28.8 | 108.4 | | |
| White ash | | 4 | | | | |
| Black cherry | | | | | | |
| Ironwood | 7.7 | 6.8 | | | | |
| Red Spruce | | | | 32.9 | | 1.8 |
| Red Maple | | 0.4 | | 24.1 | | |
| Basswood | | 5.9 | | | | |
| Red Oak | | 0.9 | | | | |
| Hemlock | | | | | | |
| Balsam Fir | | | 43.1 | 38.9 | | |
| Striped Maple | | 2.5 | 28.8 | 17.4 | 28.8 | |
| Aspen | | | | | | |
| Mountain Ash | | | | 9.2 | | |
| | | | | | | |
| Total | 38.3 | 177 | 115.1 | 262.2 | 86.4 | 234.4 |