

Part A
Belleayre Mountain Ski Center
Unit Management Plan -
Draft Environmental Impact Statement
2013

Route 28, Town of Shandaken, Ulster County



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Belleayre Mountain Ski Center Unit Management Plan & Draft Environmental Impact Statement 2013

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EXECUTIVE SUMMARY

Introduction

The Belleayre Mountain Ski Center (also referred to herein as “Belleayre” or “Ski Center”), is a state-owned and operated recreation facility located on New York State Forest Preserve land under the jurisdiction of the New York State Department of Environmental Conservation (hereinafter “DEC” or “Department”) in the Town of Shandaken, Ulster County, State of New York. This facility is operated as a seasonal ski center with other incidental public recreational opportunities and uses available during the year in compliance with Article XIV, Section 1 of the New York State Constitution. The Ski Center is operated, managed and maintained by the New York State Olympic Regional Development Authority (hereinafter “ORDA” or “Facility Operator”) pursuant to Section 2614, subdivision 4, of Title 28 of Article 8 of the New York State Public Authorities Law (*See Section 1* herein “Introduction” for more details related to the Background, History and Regulatory Framework of the Ski Center) and an implementing Cooperative Agreement.

The draft Unit Management Plan (hereinafter the “UMP”) proposes a comprehensive plan developed by DEC with the assistance of ORDA which sets forth certain proposed actions to improve the efficiency of the Ski Center facility and increase public safety and enjoyment. This comprehensive plan was developed based upon recommendations by ski-industry experts. It also provides the Facility Operator with the greatest flexibility to manage the Ski Center to provide the public with a comfortable and enjoyable ski experience based upon the actual public need at any given time. The plan proposed herein is subject to the State Environmental Quality Review Act (SEQR) shall be subject to a public process, including the consideration of public comments. The Facility Operator may implement the actions set forth in the UMP as and when approved and subject to available capital, safety and operational priorities, and market demands. (*See Section 3* herein for greater details on Proposed Management Actions and Projected Use).

The cohesive plan, known as the “Full Build Out” Alternative, is designed to modernize the entire facility to address future needs. For instance, the proposed actions include the replacement of old and outdated equipment with more modern and energy efficient equipment. The infrastructure, lodging and amenities are proposed to be renovated to improve the public’s enjoyment and safety while visiting Belleayre. The proposed parking areas are designed in a manner to minimize the impacts to the surrounding natural resources. Additionally, the UMP incorporates recommendations from experts in the ski industry to improve the skiable terrain to maximize the public’s skiing experience while remaining within the Constitutional limitations. This includes an analysis of the ski-industry standard known as the “*Comfortable Carrying Capacity*” which generally

measures the ability of Ski Center to provide each individual skier with a pleasant recreational experience without overburdening the Ski Center's infrastructure. Also, since the Full Build-Out alternative set forth in Section 3 herein proposes the most expansive development and use of the site authorized by the Constitution, this UMP also provides a complete analysis of the possible maximum impacts to the environment based upon the Full Build-Out alternative, and identifies actions to avoid or mitigate potentially significant impacts (*See Section 4* herein "Environmental Setting, Potential Impacts and Mitigation Measures").

The management actions included in the Full Build-Out alternative are proposed to be completed in phases over the course of several years. Additionally, since many of the proposed actions address management issues related to the operational efficiencies, infrastructure reliability, safety concerns and public demands, the need to address each of these considerations at any given time will influence the actual sequencing of the management actions. Also, the plans have been developed by the Department and its expert consultants to allow the Facility Operator the greatest flexibility to manage the Ski Center as efficiently as possible and to implement the actions set forth in the UMP as needed to accommodate actual future public desire, based upon the availability of future appropriations and resources to implement this plan. (*See Section 3.7* for "Phasing and Scheduling" and specifically Table 3.7-1).

Finally, in addition to the Full Build-Out alternative, this draft UMP provides several other alternative plans which propose a reduced level of development, and accordingly, a reduced level of potential impacts to the environment, than the Full Build-Out alternative. These options are set forth in Section 6 herein as "Alternatives". They each provide for the development of only a portion of the Full Build-Out alternative, such as the development of only the core or western portions of the Ski Center. The UMP also includes an alternative to develop new areas of the Ski Center, such as the eastern portion of the Ski Center. Finally, there is a "No Action" alternative. After completion of the public process, the adoption of the final UMP may include any one or a combination of these alternatives as the approved plan for the future development of the Ski Center (*See Section 6* "Alternatives" for further details).

As set out below in this summary and in Section 4, the draft UMP/DEIS evaluates potential adverse environmental impacts including impacts to: land use and community character; socio-economics, community services and resources; surface waters; groundwater; terrestrial and aquatic ecology; visual resources; traffic; air quality; greenhouse gas and carbon footprint; noise; socio-economic; cultural resources; and the Catskill Forest Preserve. Whenever impacts may be significant, mitigation or avoidance strategies are proposed.

Project Description

The proposed management actions and projected uses set forth in Section 3 of the UMP/DEIS include the following: installation of three (3) new ski lifts; replacement of two (2) existing ski lifts; addition of sixteen (16) new ski trails; construction of up to three (3) additional parking areas; expansion of the existing Discovery Lodge and Sunset Lodge; construction of the following new structures: the Tomahawk Lodge, an Information Booth, a salt storage building, an additional snowmaking pond, installation of snowmaking piping, a lower pumphouse, and a compressor facility; and modification of existing pumphouses. These actions are set forth in greater detail in Section 3 herein.

The environmental impacts and mitigation measures related to the actions proposed in the Project Description set forth in Section 3 are addressed in the following section of the UMP, Section 4. Section 4 includes the SEQRA analysis of the ability of the area's natural resources to accommodate the most expansive development and use of the site as set forth in this UMP/DEIS.

Section 3 also describes the most comprehensive plan for the expansion, modernization and improvement of the Belleayre Mountain Ski Center, the Full-Build-Out alternative (Also see Section 6: Alternatives). This alternative proposes the completion of all of the actions proposed in this UMP/DEIS. The other alternatives presented in Section 6 provide for only a portion of the projects included in the Full-Build-Out alternative, categorized by the locations proposed for these projects, namely the West Area, Core Area or East Area. These alternatives provide for a subset of the actions described in this UMP, for instance, installing only select portions of the actions which are included in the Full-Build alternative which are proposed to be located in the western side of the facility. The Full-Build-Out alternative will provide the Facility Operator with sufficient flexibility to implement these projects as needed or based upon the availability of funding.

Background

The Catskill Forest Preserve was created in 1885 by an act of the New York State Legislature. The Forest Preserve was given protection by the State Constitution, on January 1, 1895, which provided in Article XII, Section 7 (now Article XIV, Section 1) :

The lands of the State, now owned or hereafter acquired, constituting the Forest Preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed, or destroyed.

The earliest acquisition of Forest Preserve land at Belleayre Mountain was in 1918. In 1947, an amendment to Article XIV of the New York State Constitution was approved, providing the Conservation Department, as the predecessor agency to DEC, with the authority to construct two ski centers on Forest Preserve land; the first on Belleayre Mountain within the Catskill Mountains, and the second on Gore and Pete Gay Mountains in the Adirondacks. Construction of Belleayre Mountain Ski Center began in 1949, and the Ski Center embarked on its premier winter season showcasing five trails, an electrically powered rope tow, New York's first chairlift, a summit lodge, a temporary base lodge with a cafeteria with dirt floors and parking for 300 automobiles. From the beginning, Belleayre was popular with skiers. Local residents still remember how skiers pitched tents outside the lodge to be the first in line. Belleayre soon became the center for winter sports in the region and was credited as an economic catalyst for the surrounding communities.

Over the years, the installation of additional infrastructure and the modernization of old infrastructure has been accomplished for several reasons, including the need to provide for the safety of the public and staff, to provide for greater efficiencies and to insure the future viability of the facility. Belleayre's inaugural season for snowmaking was in 1970. Snowmaking capacity at the Ski Center continued to increase over the following decades.

In 1986, the public approved a second constitutional amendment authorizing the expansion of Belleayre's facility. This amendment authorized the construction and maintenance of up to 25 miles of ski trails of specified widths, and appurtenances thereto, on the slopes of Belleayre Mountain. Subsequently, the capacity of the snowmaking system was increased to 87% coverage. To accomplish this, new water lines, air lines, pumps, and snowmaking water storage facilities were constructed in 1989. In 1998, Belleayre expanded the lift and trail system, the lodge and the parking facilities. Public demand and attendance increased following the completion of these improvements to the Ski Center.

Belleayre has also experienced a growth in incidental public use during the summer months when, historically, the facility had been largely dormant. These incidental uses were inspired by the regional communities and local businesses who believed the popularity of the facility was strong enough to draw visitors to the Region year round. Initially focusing on the ski slopes for hiking and mountain biking terrain, the summer events and activities offered at Belleayre has steadily grown over the years to include attractions such as weekend and holiday sky rides and a Nature Center in the Longhouse Lodge. The centerpiece of Belleayre's summer recreation program is the popular Pine Hill Lake Day Use Area, which offers swimming, boat rentals, large picnic pavilions as well as a playground and volleyball court. Public use of Pine Hill Lake Day Use Area is the subject of a separate Unit Management Plan. To the extent that Pine Hill Lake is utilized for purposes of snowmaking, it is addressed in Section 3 of this UMP.

Use of the facility has also been available to the public pursuant to the issuance of a specific permit or agreement issued by the DEC. For example, the Belleayre Conservatory, pursuant to a separate agreement with the Department, provides cultural programs on the grounds of the Ski Center during the summer months. Private events, such as weddings, are also held at the Ski Center.

Comfortable Carrying Capacity*

The “Comfortable Carrying Capacity” (also referred to herein as “Carrying Capacity” or “CCC”) of a ski area is defined by ski industry experts as “an optimal level of utilization for the ski area (the number of visitors that can be accommodated at any given time) that guarantees a pleasant recreational experience, without overburdening the resort infrastructure.” The industry standard is based on the lift and trail system capacity and the ability of a skier to move around a mountain easily.

For a properly balanced skiing facility, the mountain’s Comfortable Carrying Capacity provides the basis for determining the capacity of the other core ski center facilities, such as Parking Areas and Skier Service Buildings. The industry standard provides the developer with the projected capacity to reference when designing the ski center facilities so that they will then be designed to accommodate the capacity of the mountain lift and trail system. In order to increase the skier’s recreational experience at Belleayre, this UMP proposes to increase Belleayre’s Comfortable Carrying Capacity to approximately 9,000 skiers per day. While many factors may influence the maximum daily attendance, such as a change in the economy or weather conditions), the recorded peak attendance at Belleayre Mountain Ski Center is nearly 6,000 skiers at a time when the Comfortable Carrying Capacity of the Ski Center was only 4,500 skiers per day. The Comfortable Carrying Capacity of the existing facilities at the Belleayre Mountain Ski Center is limited due to the size and availability of the Skier Services Buildings and Parking capacities. This UMP proposes to increase the safety and skiing opportunities for the public in the future, and especially on days when the conditions allow for such large attendance in excess of 6,000 people.

(Please note that the term “Comfortable Carrying Capacity” is a ski industry term, and should not be confused with a similar term often used to describe the ability of the area’s natural resource to accommodate the proposed actions, specifically “the carrying capacity of the natural resource”. (*See Section 4* for a complete analysis of the area’s natural resources. Section 4 also includes an analysis of the avoidance and mitigation measures to be implemented for the proposed management actions to balance the increase in the Comfortable Carrying Capacity of the Ski Center with the potential impacts to the area’s natural resources within this Forest Preserve unit).

Proposed Land Acquisitions

Section 2 herein provides details related to the acquisition of a parcel of land adjoining the Ski Center. This acquisition is necessary to fully implement the proposed management actions set forth in Section 3 which include the expansion of the Ski Center through the re-development of certain ski trails located at the site of the former Highmount Ski Center. This acquisition will also provide for additional expert level skiable terrain to be incorporated into the Belleayre Mountain Ski Center. To accomplish this acquisition, the Department will need to undertake the real property acquisition of all or a portion of the site of the former Highmount Ski Center. Additionally, upon acquisition by DEC the land will need to be classified as an addition to the Belleayre Mountain Ski Center Intensive Use Area within the Catskill Park.

Assessment of Public Need

The purpose for the project is to improve the opportunities for, and quality of, the recreational downhill skiing and related public recreational opportunities on the slopes of Belleayre Mountain as authorized by the State Constitution. This UMP proposes to achieve this goal by modernizing, expanding and renovating the Belleayre Mountain Ski Center, its trails and related appurtenances, in an efficient manner according to industry standards.

From its inception, Belleayre Mountain Ski Center has continued to expand its facilities and attendance. Belleayre's increase in attendance has been significantly and consistently greater than the industry's national and regional trends. The average rate of attendance has generally increased over the last three decades at a rate of 5.8% per year. The increased use by the public of the Ski Center has increased the burden on the facility infrastructure over time and highlighted the need to expand the Ski Center to provide terrain which more closely reflects the industry standards for the distribution of skiers at the facility based upon each skier's ability level, such as the addition of more "expert" level trails. Also, the proposed improvements in this UMP are required to meet the industry standards for a ski facility which is experiencing this consistent increase in attendance and to continue to maintain the safe and efficient operation of the facility based upon this demand.

This UMP proposes management actions to expand the Belleayre Mountain Ski Center to the address the public support expressed in 1986 when the New York State Constitution was amended authorizing the expansion of the Ski Center as proposed in this UMP. Additionally, the 2008 Catskill Park State Land Master Plan included the recommendation to expand the Ski Center facility. The public provided support for the expansion of the Ski Center in the respective public processes associated with the amendment to the NYS Constitution and the adoption of the CPSLMP.

Finally, the modernization, expansion and rehabilitation of the Ski Center will likely result in increased visitors to this region of the State. The effect of this increase in visitors will be the creation of jobs in the local communities to provide services to these visitors.

Trail & Lift Improvements

The ski trail and lift system is the premiere attraction of any ski area. A regional - destination facility like the Belleayre Mountain Ski Center needs to provide terrain which meets the demands of its market by providing a variety of trails for all ability levels of skiers, such as beginner-level skiers, intermediate-level skiers or expert-level skiers.

Issues that need to be addressed in the design of the trail and lift improvements include the following:

- ✧ The trail system needs to comply with constitutional constraints regarding maximum mileage and allowable widths.
- ✧ The trail and lift system needs to accommodate the proposed Comfortable Carrying Capacity for the facility to meet industry standards.
- ✧ The trail and lift system needs to provide for efficient circulation of the skiers from the base facilities, out onto the ski trails, and then eventually back to the base facilities.
- ✧ The trail system should minimize trail crossings, while including connections that link the lifts and trails together to allow circulation throughout the ski area.
- ✧ The trail system should minimize or avoid unnecessary convergences, which could lead to skier congestion.
- ✧ Natural terrain should be utilized to the maximum extent practicable to minimize earthwork and its associated impacts, while adding pleasurable variety to the skiing experience.
- ✧ All of the proposed actions to modernize the Ski Center have undergone a complete environmental analysis to avoid or mitigate environmental significant impacts (as set out below).

This UMP proposes management actions to provide for greater efficiencies, safety and enjoyment for the public while at Belleayre. In analyzing the existing trail and lift system at Belleayre, and the reasons to modernize or re-develop them, it is helpful to look at their evolution. When the ski area was first opened, the

Overlook (Main) lodge was the sole base lodge facility located in the upper section of the mountain. The first trails were located on the upper part of the mountain only. The parking and entrance driveway was constructed to get people to this base lodge. Within a few years, the novice trails and Discovery (Lower) lodge were constructed. The upper driveway and parking physically separated the upper mountain from the lower mountain.

One of the goals of the proposed lift and trail system detailed in the Full Build-Out alternative is to improve the connections between the upper and lower sections of the mountain. Additionally, this plan proposes to centralize many of the skier services in the proposed expanded Discovery Lodge. These actions will improve efficiency of operations and public safety and comfort. Another goal of the proposed trail and lift system is to better balance the terrain available to meet the market demand for various ability levels. Finally, it will provide more diversified terrain to increase the enjoyment of the skier.

Based on an analysis of the existing ski trails to the industry standards, the ski area has a deficiency in the advanced and expert ability level terrain and a surplus in beginner and novice terrain. The site of the former Highmount Ski area, which lies to the west of the existing Ski Center, and the area identified as the West Area Alternative in Section 6 which lies between the core area of the Ski Center and the site of the former Highmount Ski Center are the perfect additions to the ski trail system to fill this deficiency. Many of the former ski trails at Highmount could be re-developed with minimal tree cutting needed.

Additionally, other winter recreational opportunities for the public will be improved, constructed or expanded to address the need for recreational opportunities for the non-skiing public. These recreational opportunities will include expansion of the existing Nordic, or cross country, ski trails and the addition of a snow tubing hill in a manner consistent with the limitations set forth in the Constitution.

Parking

In general, parking facilities need to be sufficient to accommodate the overall “Comfortable Carrying Capacity” of the facility. The existing parking area capacity at Belleayre Mountain Ski Center has been estimated to accommodate approximately 51 buses and 1,131 passenger vehicles. Currently, the parking area capacity is insufficient to handle the existing Comfortable Carrying Capacity of the facility which is 4,500 skiers per day. On high attendance days, when the Comfortable Carrying Capacity is exceeded, cars frequently park in overflow areas located along County Route 49A and create a safety hazard. This UMP proposes to expand the parking areas to a level needed to accommodate the increased Comfortable Carrying Capacity of 9,000 skiers per day as proposed with this expansion. The plan proposes the addition of up to three (3) new parking areas which may be constructed in phases over time and only if actual attendance

levels experienced in the future, as determined by the Facility Operator, require the additional parking areas. Additionally, several operational policies are also proposed, such as improving parking management to maximize the parking density in the parking areas, and to provide incentives to the public to encourage carpooling and the use of alternative methods of transportation such as bus service.

Skier Services Buildings

In general, ski centers offer several services to the public. These services need to accommodate the number of skiers per day which is determined by the Comfortable Carrying Capacity of the facility. These services for skiers generally include the following: Sitting Space, Food Preparation, Bar/Lounge, Retail, Rental/Repair, Day Care/Nursery, Restrooms, Ticket Sales, Lockers, First Aid/Patrol, Administration, and a Ski School. This proposed plan for the future development of the Ski Center includes the expansion and renovation of the Skier Service Buildings to provide for the most expansive development and use of the site. The current Comfortable Carrying Capacity at Belleayre is approximately 4,500 skiers per day, and at times, the attendance at the Ski Center has reached approximately 6,000 skiers in a day. This plan proposes to expand the Ski Center in order to accommodate an increased Carrying Capacity of 9,000 skiers per day. Currently, the Belleayre Mountain Ski Center's skier services are provided at the Discovery Lodge, Overlook Lodge, Longhouse Lodge, Sunset Lodge, and the Nursery building. The intent of this project is to reconfigure and refurbish the existing space, construct additional space to accommodate the Ski Center's current and future needs, to comply with the Americans with Disabilities Act (ADA) and address other deficiencies. The proposed plan consolidates some functions, such as ski rental services, at a central location to improve administrative efficiency and ease of use by the public.

This plan also includes a requirement for the architectural style of the various buildings on the mountain to be rustic in nature and blend with the character of adjacent "forever wild" Forest Preserve lands. The designs should generally reflect the Adirondack Great Camp architectural style in an effort to integrate the existing and new buildings into one fully functional unit. Further, the designs will be sustainable, make use of readily available materials and standard construction techniques, and have low maintenance features that, when combined, will result in energy efficient and sustainable buildings and grounds. The skier services buildings identified for improvements in this plan include the Discovery Lodge, Overlook Lodge, Information Building, and Sunset Lodge. Additionally, this plan proposes the construction of the Tomahawk Lodge.

Snowmaking

The essential product offered by a ski area is beautiful ski trails covered in snow. In the Northeastern United States, successful operation of a ski area necessitates snowmaking. Snowmaking at a ski area provides the facility manager with the flexibility, based upon market demand, to open the facility before natural snowfall traditionally occurs or to end the ski season later in the season. This artificial lengthening of the ski season provides the facility manager with the flexibility to supplement natural snowfall to enhance or improve conditions and to consistently meet the public expectations of a predictable experience throughout the duration of the ski season. It also allows the ski area to guarantee more consistent trail coverage when the natural snowfall does not provide enough snow cover. Another important advantage of manmade snow is to improve the safety of skiers by providing optimum ski conditions and minimizing conditions which may be caused by winter thaws or rain storms. Snowmaking provides consistency in conditions providing the customer with more confidence to schedule ski vacations or to purchase season passes. The majority of the snowmaking occurs from the end of November in order to allow the ski center to prepare for an opening around the Thanksgiving holiday, and continues through mid-March as weather conditions permit.

At Belleayre, the existing snowmaking system makes snow on approximately 150 of 155 acres or 97% of the skiable area. The system is proposed to be expanded to cover approximately 200 acres to accommodate the new trails that will be constructed.

The snowmaking system at the Ski Center uses the most significant portion of the energy consumed at the facility. The proposed plan will implement many of the National Ski Areas Association (NSAA) Sustainable Slopes design considerations along with state of the art equipment which will result in the annual operating cost of the expanded system being approximately the same as the existing system, while dramatically reducing on-site emissions.

Finally, this UMP proposes a certain level of snowmaking in order to provide the facility operator with the greatest flexibility in providing the public with conditions suitable for downhill skiing. The Full Build-Out alternative, as set forth in Section 6, provides the Facility Operator with the largest potential for snowmaking. The actual levels of snowmaking shall be determined by the Facility Operator.

Primary Electric

The State currently owns and operates its own primary electric system at Belleayre Mountain Ski Center. Primary electric service to the facility is provided by New York State Electric and Gas (NYSEG).

The existing state-owned primary electric system on site is aging, and is of insufficient capacity to handle the proposed electrical loads. A substantial upgrade is included in this plan which includes underground primary electric feeders on-site at Belleayre in order to modernize the existing infrastructure and to provide suitable, reliable, and safe power for the proposed expansion.

In order to supply power to meet the demands of the more efficient electrically driven snowmaking equipment, the primary electric service to the facility will be upgraded and modernized.

The draft plan includes the alternative for portions of the service lines as above ground lines which include actions to mitigate or avoid any environmental impacts.

Energy and Materials Management

An Energy Audit was performed at Belleayre Mountain Ski Center. The audit identified that the majority of the energy consumed at the Ski Center is used in the production of snow. The proposed project includes significant upgrades to the snowmaking system to make it as energy efficient as possible. A Facility Energy Management System is proposed to be installed as part of the snowmaking system improvements.

The Discovery Lodge expansion project detailed in this plan exceeds current building energy code requirements by a minimum of 25%. The Discovery Lodge project complies with Executive Order 111 “Green and Clean” State Buildings and Vehicles Guidelines, and is designed to incorporate Green Building design concepts meeting LEED Gold Certification requirements. Other building work must comply with the latest NYS Energy Building Code requirements.

NSAA Sustainable Slopes

The National Ski Areas Association (NSAA) Sustainable Slopes ENVIRONMENTAL CHARTER FOR SKI AREAS 2005 is a framework for sustainable operations at ski areas. The principles outlined in the charter provide guidance in the planning and operation of ski area facilities aimed at improving sustainability and environmental performance. Many of the principles were considered and utilized to the extent practical in the development of the plan proposed in this UMP.

Land Use & Community Character

This section describes the existing regional and local land uses, zoning laws and ordinances, public policy issues, and the character of the communities in the project study area. Any identified or anticipated future changes in land use,

zoning, public policy, or community character are identified in Section 4 of this document. The project study area comprises the communities along the Route 28 corridor between Boiceville and Margaretville. This plan would not have a significant impact on the current land use, zoning, or community character in the project study area as the Ski Center meshes with the historic character of the region which has been centered on tourism and outdoor recreation.

Geologic and Topographic Resources

An investigation of the existing geologic and topographic resources at Belleayre was conducted on the project site. Existing information was collected from the Natural Resources Conservation Service (NRCS) Soils Maps as to the types and properties of the existing soils located at the site. The majority of the areas of proposed development consisted of NRCS Soils Classification ORD - Oquaga-Arnot-Rock outcrop complex, or WLB - Wellsboro and Wurtsboro soils with many boulders. The majority of site soils are in Hydrologic Group "C", which indicates the soil has a slow infiltration rate.

A field investigation of the soils was performed, consisting of test pits and soil borings in areas of proposed intensive development such as the parking lot areas, snowmaking pond area, and proposed lodge expansion areas.

Conclusions regarding potential limitations to on-site planning, which were based on data reviewed and the on-site observations, are that large stones and boulders can be expected underneath the surface in the proposed locations of the North Parking Lot and Snowmaking Pond Area, Discovery Lodge Expansion Area, and Upper Discovery Parking Lot Area. The large stones and boulders will not impact construction, but will affect the amount of excavated material that can be reused in certain areas. Most, if not all, of the larger excavated material that cannot be used as adjacent fill is planned to be used in the deeper fill section of the Tomahawk Base Area Ski-Over Bridge. The Ski-Over Bridge Area contains large boulders and exposed bedrock that may affect access and construction activities, however, filling is proposed in this area with little or no excavation planned. The East Parking Lot Area shows no indication of limitations due to stones or bedrock.

Surface Water

The project area is located within two United States Geologic Survey (USGS) 8-digit Hydrologic Unit Codes (HUC): the Middle Hudson watershed (HUC 02020006) and the East Branch Delaware River watershed (HUC 2040102).

Wetlands on the project area total approximately 3.43 acres, of which approximately 3.375 acres are under the jurisdiction of the United States Army

Corp of Engineers (USACE), 0.054 acres are isolated, and none are under the jurisdiction of NYSDEC.

There are no perennial streams in the project area that drain into the East Branch Delaware watershed. One ephemeral stream, which is a Class B stream, is mapped along the western side of the project area that drains into Emory Brook, which then drains in turn to Vly Creek, then to Bush Kill, and finally into the East Branch of the Delaware River. There are four (4) perennial streams in the project area which all are tributaries to Birch Creek which drains into the Middle Hudson watershed.

The majority of the watercourses within the project area are identified as Class B, C, B(T), and B(TS) streams with no mapped classification and are considered to have the same classification and standards as the downstream reach to which they are connected. Stream 7 (S7), Crystal Spring Brook, a perennial stream, is the only classified B(T) stream delineated within the Belleayre Mountain Ski Center project area.

Pine Hill Lake, which is located in the southeastern part of the project area and has an estimated storage capacity of 29.4 million gallons, is an impounded National Wetland Inventory (NWI) freshwater wetland. The lake surface covers approximately 5.62 acres. The lake is used for recreational purposes during the summer months and for snowmaking during the winter months. The water level varies throughout the year depending on evaporation, precipitation, and the volume of water used for snowmaking.

This plan also includes the construction of a new off-line storage reservoir at the base of the ski center. This new reservoir will allow pumping from Pine Hill Lake during off-peak hours which will result in a savings of utility costs. The proposed reservoir will also allow diversion of excess runoff to storage at a higher elevation resulting in additional energy savings.

Mitigation of potential impacts to surface water includes increasing the minimum pass-by flows in Birch Creek at Pine Hill Lake from 5 cfs to 8 cfs improving stream habitat, and the implementing a Stormwater Pollution Prevention Plan (SWPPP) to minimize the potential of erosion during construction and to treat stormwater runoff from proposed impervious areas in order to minimize potential impacts to receiving streams.

Groundwater

Existing groundwater wells supply potable water for the Ski Center. The capacity of the existing wells is sufficient to meet the increased demand of the proposed expanded facility.

Terrestrial and Aquatic Ecology

The proposed project area is dominated by secondary northern hardwood forest and includes red maple hardwood swamp, hemlock northern forest, and brushy cleared land.

Wildlife includes common neotropical migrant and resident birds and a diverse array of common mammal, bat, reptile, and amphibian species.

Thirteen wetlands were delineated within the project area: 11 jurisdictional and 2 non-jurisdictional. There are no NYSDEC regulated wetlands on the project site. There are 6 National Wetlands Inventory (NWI) federally regulated wetlands in the project area. The project was designed to avoid any disturbance to wetlands identified in the study area.

During field investigations, no federally or state listed endangered or threatened plant or animal species, species of concern, or critical habitat were identified.

During field investigations, no endangered species of birds were identified. A bald eagle (state and federally threatened) was observed 12 miles south of the project area. Three bird species of special concern were observed in the project area during field investigations: the Red-headed woodpecker, the Vesper sparrow, and the Sharp-shinned hawk.

Of the nine bat species known to inhabit New York State, four of the most common are assumed to use the project area. The Indiana bat (state and federally protected) was not identified in the project area.

Electrofishing surveys conducted by DEC Bureau of Fisheries in streams within the project area have identified 6 species of fish, including 3 trout species.

During field surveys, five species of amphibians were found in the project area.

Although not state or federally protected, there are two species of wildlife that are common in the project area that are of local significance. The black bear and the white - tailed deer are locally important hunting resources.

The project will result in some temporary and permanent impacts on the terrestrial and aquatic ecology of the project area. These impacts will primarily result from clearing vegetation and grading necessary to build ski lifts, ski trails, buildings, and parking lots.

The potential impacts have been minimized and mitigated by careful placement of planned facilities to avoid and buffer sensitive areas. Existing ski trails at the former Highmount Ski Area are going to be used to the extent practical to minimize the clearing of existing forested areas when constructing new trails.

Potential impacts will also be mitigated by proper design and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which will minimize potential erosion during construction and will treat stormwater runoff from proposed impervious areas in order to minimize potential impacts on receiving streams.

Traffic

To assess potential impacts related to the Belleayre Mountain Ski Center UMP, nine intersections and five roadway segments within the vicinity of the project were evaluated. Existing traffic volumes for a Saturday afternoon peak travel time were compiled from various traffic counts conducted during 2008 and 2009. Future traffic volumes were estimated based on a background traffic growth rate and an estimation of new site generated trips related to the planned expansion. All of the analyzed roadway segments are estimated to operate at LOS D or better except for NY Route 28, from NY Route 375 to NY Route 212. It is estimated to operate at LOS E on the peak hour of the peak day for the proposed Full Build-Out alternative. However, it still operates with reserve capacity and no improvements are recommended. For the year of opening, it is recommended that a right-turn lane be installed on the northbound approach of CR 49A to NY Route 28. This will bring operations to the same level as a result of the No-Build alternative. Event management strategies will be implemented to help control and direct traffic during the peak traffic hour. An expanded shuttle service or increased transit services, or both, between major population areas to the ski center could also reduce the impacts to the project area intersections.

Visual Resources

A Visual Impact Assessment was conducted for this UMP. The assessment: i) characterizes the existing visual and aesthetic resources surrounding the site; ii) assesses the visibility and visual character of the proposed project; iii) identifies individuals and groups that may be affected by the project; iv) evaluates the impact of the proposed management actions in this UMP on the visual and aesthetic resources; and v) when necessary, recommends mitigations.

The new ski slopes, like the existing ones, will be more visible from some locations in the winter months than in summer months because the white groomed snow provides a high contrast with the forested areas of the mountain. Since Belleayre currently includes existing ski slopes, and the proposed slopes are of similar length and width, the visual aspects of the new expansion are compatible with the existing site. Access to and public enjoyment of surrounding historical, recreational, and commercial land uses will not be impacted by the visual character or visibility of the project.

The project has been designed to avoid or mitigate visual impacts and improve the aesthetic quality of Belleayre Mountain. New ski lifts are streamlined to be low in

profile, and will be painted rustic colors that blend into the wooded landscape. Parking lots will be terraced, tree cover will be preserved as much as possible, and screenings planted, to block views of the lots to the extent practical. External finishes of the new buildings will also be chosen to blend into the landscape, using earth tone colors and non-reflective glass.

To prevent light pollution, outdoor lighting will be designed to meet the standards of the International Dark Sky Association. Cut off light fixtures will be used in new applications, and the facility will not be equipped with lighting to allow night skiing.

Air Quality

The proposed project was evaluated for its potential impacts on air quality. The air quality in the vicinity of the development could be impacted by the increase in air emissions caused by additional vehicular traffic, the potential increase in energy use associated with snowmaking, increased air emissions from space heating equipment, and the temporary impacts caused by construction. Impacts from construction equipment and particulates from earth-moving are of short duration, localized, and not likely to impact areas outside the site. Most of the current impacts attributed to existing operations are from diesel powered air compression equipment which is proposed to be removed pursuant to this UMP and replaced with electric motor-driven air compression equipment, thus lowering emissions. Emissions from the space heating additions are very minor and do not require a detailed analysis.

The carbon monoxide (“CO”) screening-level microscale mobile source air quality analysis indicates that the proposed project will not cause traffic changes requiring a detailed microscale modeling analysis. Based upon the result of passing the screening-level test, the traffic associated with the project will not cause an exceedance of air quality standards.

Construction emissions can be mitigated using best management practices. Exhaust emissions from construction vehicles can be reduced by using fuel-efficient vehicles with emission controls and ensuring that all equipment is properly maintained. Dust emissions from ground disturbance and road traffic should be controlled by spraying water on soil piles and graded areas and keeping roadways clean. Other possible mitigation measures are included in the Air Quality Section.

Global Climate Change and Carbon Footprint

Climate change refers to any significant change in temperature, precipitation, or wind that lasts for an extended period of time (decades or longer). Climate

change may be affected by a number of factors including natural cycles, natural processes, and human activities that change the atmosphere or land surface. According to the 2007 report “Confronting Climate Change in the U.S. Northeast” by the Northeast Climate Impacts Assessment Synthesis Team (NECIA Report), major winter recreation areas in the Northeast United States, such as the Belleayre Mountain Ski Center, will face operational challenges during the 21st century if average global temperatures continue to rise. According to the NECIA Report projections, the climate in the project area may be similar to current conditions in Virginia or North Carolina under the lower emissions scenario, or similar to Georgia and South Carolina under the higher emissions scenario, by the end of the century. It should be noted that there are currently several viable ski areas located in the Southeastern U.S., most notably in North Carolina and Virginia.

Carbon Footprint refers to the quantity of Greenhouse Gas (GHG) that result from an organization or activity. In order to assess the carbon footprint, emissions of GHGs are assessed. During the construction phase, the project will result in emission of approximately 50,897 metric tons of Carbon Dioxide Equivalent GHG’s.

Assessment of GHG emissions indicate that, as a result of the project, Direct emissions (on-site fuel combustion) of GHGs will be reduced from 3,651 to 661 metric tons/year of Carbon Dioxide Equivalent. Indirect emissions (electric consumption, visitor and employee travel, and landfill waste) of GHGs as a result of the project are estimated to increase from 4,075 to 6,918 metric tons/year of Carbon Dioxide Equivalent. Overall Total emissions of GHGs (Direct + Indirect) as a result of the project will be reduced from 7,671 to 7,482 metric tons/year.

Mitigation measures include the incorporation of green building principles in the new construction at the Discovery Lodge and the reduction of energy consumption from snowmaking operations.

Noise

The potential impact of noise resulting from the proposed project was evaluated. Existing data was supplemented with additional field measurement of ambient noise levels. Potential sound levels from the operation of major noise-producing equipment that would be used during construction of the Ski Center were predicted using acoustical modeling. Acoustical modeling also was conducted to evaluate potential noise impacts from operation of the expanded facility and the predicted increase in traffic.

During the construction phase, maximum noise impacts from construction vehicle traffic are expected to occur along CR 49A because of the proximity of residences and relatively low volumes of existing traffic. The residences near the Green Hill

Road and Old Schoolhouse Road monitoring locations will experience some nuisance-level noise in daytime during the construction phase of the new parking lots. Construction vehicles would be using the road during the construction season and during daytime periods only.

During operations, the expanded snowmaking system will result in a maximum increase in sound levels of less than 2 dBA, which is not considered to be perceptible by the human ear. This increase is much less than the NYSDEC guideline of 6 dBA maximum increase. In addition, the noise level from operation would range from 39.5 to 48.1 dBA and would not exceed the Town of Shandaken noise limit of 53 dBA for a receiving residential property during the evening.

Potential impacts of noise due to increased traffic were modeled. The results indicated an increase in traffic noise of slightly more than 3dBA and would likely be unnoticeable. NYSDEC guidelines state that an increase of less than 5 dBA is considered unnoticeable to tolerable.

Noise mitigation is recommended for the construction phase only and includes several typical best management practices to minimize the impacts. Typical measures proposed to be employed include: i) phasing construction so not all equipment is running at one time; ii) maximum sized intake and exhaust muffles to be used on internal combustion engines; iii) idling equipment to be turned off when not in use; and iv) planning construction sites to reduce the need for backing up construction equipment.

Socio-Economic, Community Services and Resources

This section provides an analysis of the population demographic, housing, transportation, and economic profile of the project's socioeconomic study area. A fiscal and municipal services analysis of the towns of Middletown and Shandaken, and a regional assessment of the socioeconomic impacts of the alternative proposed in this UMP as the Full Build-Out alternative are also included.

The proposed modernization and expansion of the Belleayre Mountain Ski Center would have a positive, long-term impact on the Tri-County region. As a result of the proposed facility improvements, the number of total daily lift tickets purchased throughout an average season is expected to more than double over the current figures and reach a total annual attendance of approximately 320,000 skiers. As a result of the expansion, annual revenues at the center are expected to increase from \$6.1 million to \$11.3 million. Total operating expenditures at the Ski Center are predicted to increase from \$6.7 million to \$10.1 million.

It is anticipated that the expansion of the facility will create an average of 12 to 16 temporary jobs during the construction phase, and 32 new full time positions and 245 seasonal positions during the operational phase of the expanded facility. These new jobs will have a not have a significant impact on the local labor force.

The money injected into the local and regional economy directly through payroll and purchase of goods and services at Belleayre Mountain Ski Center and its concessionaires is anticipated to increase from \$6.9 million to \$11.3 million.

As the employees at the Ski Center and local vendors spend a portion of their income from Belleayre in the regional economy, they in turn support other merchants and suppliers in the area. As a result, the original economic value of this injection of funds is increased or “multiplied.” Approximately 20 additional indirect jobs are expected to be created in the region as a result of the increase in employment and attendance at the expanded Belleayre Mountain Ski Center.

It is estimated that due to the increased expenditures at Belleayre Mountain Ski Center, state and local sales taxes revenues would increase by \$220,000.

Other positive indirect economic impacts will occur in the regional economy as attendance at Belleayre increases. The influx of additional skiers to the region will increase the demand at retail establishments and at lodging and dining facilities located near the Ski Center. As more visitors come to the area, local businesses will receive more incidental visits. If the spending patterns of the skiers visiting Belleayre are consistent with those visiting the Gore Mountain Ski Center and the Whiteface Mountain Ski Center, skiers visiting Belleayre will spend approximately \$32 million for lodging, meals, and entertainment each year in the regional economy once the expansion is completed. Establishments located near the ski center and along the Route 28 corridor are expected to experience the greatest impacts. Most of these impacts will be concentrated in 12 to 15 weekends per year.

Cultural Resources

A Phase 1 cultural resources investigation was performed to determine the potential impacts of the proposed project.

Research conducted at OPRHP did not produce any evidence of prehistoric archaeological resources within a 1-mile radius of the project site. OPRHP files showed evidence of 14 historic archeological sites within a 1-mile radius of the project site.

Subsequent field investigations determined that the only site in an area of proposed disturbance that may be eligible for listing in the NRHP (National Register of Historic Places) is the Whispell House located near the proposed

Upper Discovery Parking Lots. The project was redesigned to avoid disturbance of this site.

Two other sites which are adjacent to, but not within, areas of proposed disturbances include a cemetery (on Co. Rte 49A), and the Springhouse Ruin #2 (near the proposed Highmount Lift). While not within areas of proposed disturbance, due to their proximity to proposed disturbed areas, it is recommended that these areas be flagged and fenced off during construction to protect the cultural resource.

The analysis of impacts on visual resources determined that some of the historic structures identified would be within the zone of visual impact of the proposed ski slopes. Since ski slopes are an existing part of the facility, new slopes adjacent to the existing slopes would not introduce a discordant element into the landscape.

Catskill Forest Preserve

An analysis was made to determine the impact on adjacent Forest Preserve lands as a result of the proposed actions in the UMP. Trail registers for the adjacent Big Indian Wilderness Area and Slide Mountain Wilderness Area were examined for a 5 year period before and after the 1999 expansion at the Belleayre Mountain Ski Center. No significant visitor use was observed in the Forest Preserve, while there was a substantial increase in attendance at Belleayre Mountain Ski Center. Therefore, it is expected that the proposed action alternatives, including the Full Build-Out alternative, will not significantly impact the surrounding Forest Preserve lands.

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Introduction

The Belleayre Mountain Ski Center (also referred to herein as “Belleayre” or “Ski Center”), is a state-owned and operated recreation facility located on New York State Forest Preserve land under the jurisdiction of the New York State Department of Environmental Conservation (hereinafter “DEC” or “Department”) in the Town of Shandaken, Ulster County, State of New York. This facility is operated as a seasonal ski center with other incidental public recreational opportunities and uses available during the year in compliance with Article XIV of the New York State Constitution which authorizes the development of up to 25 miles of ski trails of specified widths and appurtenances thereto on the slopes of Belleayre Mountain. The Ski Center is currently operated, managed and maintained by the New York State Olympic Regional Development Authority (hereinafter “ORDA” or “Facility Operator”) pursuant to Section 2614, subdivision 4, of Title 28 of Article 8 of the New York State Public Authorities Law and an implementing Cooperative Agreement.

The Catskill Park State Land Master Plan (also referred to herein as “CPSLMP”) sets forth standards and criteria for the development and management of state-owned lands within the Catskill Park. The 2008 revision of the Catskill Park State Land Master Plan classified the lands constituting the Belleayre Mountain Ski Center as an “Intensive Use Area”. This classification requires that the Ski Center comply with the CPSLMP’s applicable guidelines for Intensive Use Areas and also sets forth the boundaries of the Intensive Use Area. The CPSLMP requires the Department and Facility Operator to prepare a Unit Management Plan ((hereinafter the “UMP”) prior to initiating any new development, construction, or expansion of the facility.

This Unit Management Plan is a revision of the 1998 UMP and covers the ensuing ten year management period. The proposed actions in this UMP are subject to adequate fiscal appropriations and subsequent changes to guidance, policy, rule or law that may affect management, design and/or construction. This UMP proposes a comprehensive plan developed by DEC with the assistance of ORDA which sets forth certain proposed actions to improve the public’s experience at the Ski Center, to modernize the Ski Center in order to improve the efficiency of the facility and increase public safety and enjoyment. Consistent with constitutional constraints, this comprehensive plan was developed based upon recommendations by ski-industry experts. It also provides the Facility Operator with the greatest flexibility to manage the Ski Center to provide the public with a comfortable and enjoyable ski experience based upon the actual public need at any given time. The plan proposed herein shall be subject to a public process, including the consideration of public comments. After the completion of the public process, the UMP will be finalized and adopted by the Department. Once finalized, ORDA may, in their discretion as the Facility Operator, begin to implement the actions set forth in the UMP subject to future appropriations by the New York State Legislature

and available funding and resources. (*See Section 3* herein for greater details on Proposed Management Actions and Projected Use).

For purposes of environmental review under SEQRA, the “Final Scoping Document Belleayre Mountain Ski Center Unit Management Plan – DEIS and Modified Belleayre Resort At Catskill Park Supplemental DEIS dated: February 28, 2008 was prepared. This document represents what is referenced as Part A of the Final Scoping Document, the Belleayre Mountain Ski Center UMP-DEIS.

The cohesive plan, known as the “Full Build-Out” Alternative, is designed to modernize the entire facility to address future needs. For instance, the proposed actions include the replacement of old and outdated equipment with more modern and energy efficient equipment. The infrastructure, lodging and amenities are proposed to be renovated to improve the public’s enjoyment and safety while visiting Belleayre. The proposed parking areas are designed in a manner to minimize the impacts to the surrounding natural resources. Additionally, the UMP incorporates recommendations from experts in the ski industry to improve the skiable terrain to maximize the public’s skiing experience while remaining within Constitutional limitations. This includes an analysis of the ski-industry standard known as the “*Comfortable Carrying Capacity*” which generally measures the ability of the Ski Center to provide each individual skier with a pleasant recreational experience without overburdening the Ski Center’s infrastructure. Also, since the Full Build-Out Alternative set forth in Section 3 herein proposes the most expansive development and use of the site, this UMP also provides a complete analysis of the possible maximum impacts to the environment based upon the Full Build-Out Alternative, and identifies actions to mitigate or avoid any possible impacts (*See Section 4* herein “Environmental Setting, Potential Impacts and Mitigation Measures”).

The management actions included in the Full Build-Out Alternative are proposed to be completed in phases over the course of several years. Additionally, since many of the proposed actions address management issues related to the operational efficiencies, infrastructure reliability, safety concerns and public demands, the need to address each of these considerations at any given time will influence the actual sequencing of the management actions. Also, the plans have been developed by the Department and its expert consultants to allow the Facility Operator the greatest flexibility to manage the Ski Center as efficiently as possible and to implement the actions set forth in the UMP as needed to accommodate actual future public desire in the future and based upon the availability of future appropriations and resources to implement this plan. (*See Section 3.7* for “Phasing and Scheduling” and specifically Table 3.7-1).

Finally, in addition to the Full Build-Out Alternative, this draft UMP also provides several other optional plans which propose a reduced level of development, and accordingly, a reduced level of possible impacts to the environment, than the Full Build-Out Alternative. These options are set forth in Section 6 herein as “Alternatives”. They each provide for the development of only a portion of the Full Build-Out Alternative, such as the development of only the core or western por-

tions of the Ski Center, or also included as an alternative is the option of developing new areas of the Ski Center, such as the eastern portion of the Ski Center, and finally, there is a “No Action” alternative. After completion of the public process, the adoption of the final UMP may include any one of these different alternatives as the approved plan for the future development of the Ski Center (*See Section 6 “Alternatives”* for further details).

1.0 Project Purpose

The Belleayre Mountain Ski Center Unit Management Plan and Draft Environmental Impact Statement (hereinafter also referred to as “UMP/DEIS”) herein is a plan specific to the Belleayre Mountain Ski Center which fulfills the following purposes.

1. This UMP/DEIS is a 10 year plan which satisfies the requirement to develop a Unit Management Plan for each unit of land classified in the CPSLMP and to revise each UMP every 10 years. The Belleayre Mountain Ski Center Unit Management Plan was last revised in 1998.
2. This UMP/DEIS describes a full build out plan that would expand and modernize the Belleayre Mountain Ski Center in an effort to fulfill the goals for the Ski Center as outlined in the CPSLMP which states “Belleayre Ski Center should be modernized to the extent physical resources allow and within the constraints of the amendment to Article XIV, Section 1 of the State Constitution authorizing its establishment.”
3. This UMP/DEIS provides the environmental impact assessment of the proposed full build out plan as required to meet the requirements of the State Environmental Quality Review Act (SEQRA). This analysis also identifies and describes the ability of the natural resources located within the Ski Center’s Intensive Use Area to withstand all the proposed new infrastructure and attendant site disturbance that may result from the expansions, modernizations and improvements set forth in the Full Build-Out Alternative. Additionally, in light of the classification of this Forest Preserve unit as an intensive use area, the development of the area is proposed in a manner which will allow for a greater degree of use than other Forest Preserve units, such as a Wild Forest area.

1.1 Area Description

1.1.1 Location

Belleayre Mountain Ski Center is located off Route 28 at Highmount, Town of Shandaken, Ulster County, New York, about 37 miles west of the New York State Thruway Exit 19 (I-87) at Kingston, or 60 miles southeast of I-88 at Oneonta (Appendix A - UMP Drawings G2 “Project Location”).

1.1.2 Property Description

Belleayre Mountain Ski Center, located in the Town of Shandaken, Ulster County, NY, is a State-owned recreation facility located on 2,178 acres of Forest Preserve land which has been classified as an Intensive Use Area in the Catskill Park State Land Master Plan (CSLMP). Operated by the New York State Department of Environmental Conservation (DEC), it provides a year-round recreation opportunity for the public.

Belleayre Mountain Ski Center is considered by many skiers as one of the finest ski areas in the Catskill region and boasts 52 slopes and trails over its 1,404 foot vertical terrain. Belleayre Mountain has a summit elevation of 3,429 feet, a base (Overlook Lodge) elevation of 2,541 feet, and a lower base (Discovery Lodge) elevation of 2,025 feet. Belleayre Mountain Ski Center has 16.3 miles of ski trails, 5 aerial ski lifts, and 3 surface lifts. Lifts operate daily from 9:00 a.m. to 4:00 p.m. Snowmaking presently covers 93% of the total trail acreage. Other appurtenances to the ski trails include: a snow sports school, adaptive sports center, food service, retail sales of ski and snowboard equipment and products, equipment rentals, children's daycare, cocktail lounge, and lockers. The Ski Center also has approximately 6.4 kilometers of maintained cross-country ski trails. Annually, the ski center provides recreation for about 176,000 persons and employment for over 450 persons. The Catskill Park State Land Master Plan (Ed. 2008) provides for, "[I]n addition to the structures and improvements permitted in all intensive use areas, all those facilities necessary for the operation of a ski center will be allowed, including ski chair lifts, ski lift towers, snowmaking systems, and lodges."

1.2 Background and History

Belleayre Mountain Ski Center - The Forest Preserve was created in 1885 by an act of the New York State Legislature. Threats to the lands constituting the Forest Preserve led the State to give it even stronger protection on January 1, 1895, when these words were added to the New York State Constitution: *"The lands of the state, now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed."* Since its creation in 1885, the Catskill portion of the Forest Preserve has grown from 34,000 to almost 300,000 acres.

The earliest acquisition of Forest Preserve land at Belleayre Mountain was in 1918. Not long after bringing these lands into public ownership, the skiing public recognized the world-class opportunities that Belleayre Mountain offered. In 1946, an amendment was proposed to Article XIV of the New York State Constitution to provide the Conservation Department (the forerunner of the New York State Department of Environmental Conservation) with the authority to construct facilities in the Forest Preserve for the purpose of healthful recreation. Specifically, the amendment was to authorize the construction of two (2) ski centers on Forest Preserve land; the first on Belleayre Mountain in Ulster and Delaware Coun-

ties (Catskill Mountains) and the second ski center on Gore and Pete Gay Mountains in Warren County (Adirondack Mountains). The proposed amendment passed the State Legislature in 1946 and received second passage in 1947. The proposed amendment was then submitted to the People of the State of New York on November 4, 1947, when it was approved by a vote of 1.4 million for and .83 million against. Since 1895, nearly 200 amendments to Article XIV have been introduced in the Legislature. Only 29 of these actually have been presented to the state's voters and only 20 amendments have been approved. Belleayre has the distinction of having been associated with two of these rarely passed amendments, as the People of the State supported and passed an amendment to expand Belleayre's facilities in 1986. This second amendment addressed the skiers' desire to expand Belleayre's trail system, while continuing to protect the natural resources of the Forest Preserve that make Belleayre unique. The amendment states that the normal constitutional restrictions on the use of Forest Preserve land do not prevent the State "*from constructing and maintaining not more than twenty-five miles of ski trails thirty to two hundred feet wide, together with appurtenances thereto, provided that no more than two miles of such trails shall be in excess of one hundred twenty feet wide, on the slopes of Belleayre Mountain in Ulster and Delaware Counties*". The passage of both of these amendments illustrates the strong public interest and support that Belleayre has had and continues to enjoy.

Although the voters approved constitutional amendments to allow the construction of ski trails and appurtenances thereto on the slopes of Belleayre Mountain, the land remains within the Forest Preserve. Thus, the constitutional restrictions against the lease, sale, exchange or public or private corporation taking of Forest Preserve land remain applicable to Ski Center lands. Also, Forest Preserve lands on the mountain that are not utilized for ski trails or appurtenances thereto must be kept as "forever wild forest land."

Construction of Belleayre Mountain Ski Center began in 1949, and the Mountain embarked on its premier winter season showcasing five trails, an electrically powered rope tow, New York's first chairlift, a summit lodge, a temporary base lodge with a cafeteria and dirt floors, and parking for 300 automobiles. From the beginning, Belleayre was an immediate hit with skiers. Local residents still remember how skiers pitched tents outside the lodge to be the first in line. Belleayre soon became the center for winter sports in the region and an economic catalyst for surrounding communities.

Over the years, the installation of new and modernization of older infrastructure has been accomplished to assure safety and more efficient use of the facility. Belleayre's inaugural season for snowmaking was in 1970. Throughout the 70's and 80's, snowmaking capacity grew to provide 30% coverage of the trails. In 1989 the capacity of the snowmaking system was increased to 87% coverage. To accomplish this enhancement, more than 6 million dollars were invested into new water lines, air lines, pumps, and snowmaking water storage. In 1997, the Mountain installed a computerized ticketing system to issue tickets, process, and summarize data. In 1998, Belleayre Mountain received a \$5 million Empire State

Development Corporation (ESDC) grant for capital investment projects. With that, the following projects were completed: the Super Chief lift was upgraded and lengthened; the Tomahawk lift was installed; the Teaching Circle and Little Creek beginner trail were created; 5 new groomers; the Longhouse Lodge was built; 4 new parking lots; two 400 horsepower snowmaking pumps; and several new trails were cut. In 2001, one of the most notable of these trails was officially dedicated the Dot Nebel Trail, a double-black-diamond expert trail named for Dorothy "Dot" Nebel, the Olympian skier who helped design the original trails at Belleayre and who served for 17 years as the director of the Belleayre Mountain Ski School. Other improvements of note include the upgrading of the potable water system, Kidscamp and the Discovery Lodge rental shop expansion, the Deer Run trail relocation, the Super Chief chairlift retrofit to a detachable lift, and the creation of other new trails, such as Onondaga and Horseshoe Pass. The evolution of Belleayre continues. In 2009, a state-of-the-art maintenance building was completed, as was a new Adaptive Snowsports Building, further reducing barriers to offer universal access to Belleayre's world-class slopes.

Belleayre has also experienced a growth in public use during the summer months when historically, the facility had lay largely dormant. Initially focusing on the ski slopes for hiking and mountain biking terrain, the summer events and activities offered at Belleayre has steadily grown over the years to include attractions such as weekend and holiday sky rides, a Nature Center in the Longhouse Lodge, and recreation at the adjacent Pine Hill Lake Day Use Area. Public use of Pine Hill Lake Day Use Area is the subject of a separate Unit Management Plan. To the extent that Pine Hill Lake is utilized for purposes of snowmaking, it is addressed in Section 3 of this UMP.

Hunting is allowed on the Belleayre Mountain Ski Center property subject to NYCRR Part 190.23(d) which states;

d. Firearms and bows and arrows may be possessed and discharged on the ski center during the fall hunting season only, except that no firearms or bows and arrows shall be possessed within 1,000 feet of any road, parking area, lift, tow, building or other facility; nor shall any person possess fireworks of any nature within said area at any time.

A corridor from the upper parking lot to adjacent forest preserve lands is provided for the public's use during the fall hunting season.

Fishing is allowed throughout the Intensive Use Area. Birch Creek, near Pine Hill Lake, is an extremely popular site attracting approximately 200-400 fishermen each year.

1.3 Project Needs & Benefits

1.3.1 Management Goals

As stated in the Project Purpose (1.0), this UMP/DEIS describes a Full Build-Out plan that would expand and modernize the Belleayre Mountain Ski Center in an effort to fulfill its goals. The primary management goal for the Ski Center is to develop and manage the Ski Center consistent with the Constitution's limitations on trail mileage and width and consistent with the Constitution's requirement that Ski Center development be limited to the ski trails themselves and appurtenances thereto. In a broader sense, this goal includes managing the ski area in a manner which insures protection of the natural resource base and the forever wild nature of Forest Preserve lands in the Catskill Park and offering recreational opportunities for leisure time enjoyment for the People of the State. The Department also recognizes, however, that there are additional management goals for the ski area, including:

- ✧ Ensuring that revenues equal operating costs for that portion of the program covered by user fees.
- ✧ Ensuring the health and safety of the public who visit the facility, and employees who work at the facility by complying with applicable codes, rules, and regulations, and having in place required operating procedures.
- ✧ Allowing Belleayre Mountain Ski Center to accommodate increased public demand in a well-balanced manner.
- ✧ Serving as a model for future growth of other ski areas by incorporating the principles of the NSAA Sustainable Slopes Environmental Charter 2005 to the extent practical.
- ✧ Providing incidental economic benefits to the adjoining communities.

1.3.2 Benefits of the Proposed Management Actions

The proposed management actions proposed in this Unit Management Plan/ Draft Environmental Impact Statement (hereinafter "UMP/DEIS") include: installation of three (3) new ski lifts, replacement of two (2) existing ski lifts, addition of sixteen (16) new ski trails, construction of up to three (3) additional parking areas, expansion of the existing Discovery Lodge and Sunset Lodge, new Tomahawk Lodge and information booth, new salt storage building, new snowmaking pond and snowmaking piping, new lower pumphouse, new compressor facility, and modification of existing pumphouses. These actions are set forth in greater detail in Section 3 herein.

It is important to note that the environmental impacts related to the actions proposed in the Project Description and a complete analysis of the ability of the natural resource to withstand the proposed development and uses of the intensive use area as set forth in Section 3 can be found in Section 4 herein. Section 4 includes the SEQRA analysis of the ability of the area's natural resources to accommodate the most expansive development and use of the site as set forth in this UMP/DEIS.

The Project Description, as set forth in Section 3, is also identified in the “Full Build-Out Alternative” set forth in the Section 6. This alternative proposes the completion of all of the actions proposed in the UMP/DEIS. The other alternatives presented in Section 6 provide for either a reduced number of actions which are included in the Full Build-Out Alternative, but only provide for a subset of actions, for instance, installing only select portions of the Full Build-Out alternative or only building one parking lot at a time to address the actual public need at that time, or to provide for increased flexibility of the operator to provide for a reduced level of snowmaking capacity based upon the operator’s judgment and discretion.

The proposed Full Build-Out Alternative plan described in this UMP/DEIS is proposed to enable the Belleayre Mountain Ski Center to fulfill its goals for the following reasons:

- ✧ The proposed lift and trail layout provides the maximum terrain opportunities for skiers of various abilities. The proposed trail network will better match industry standards for skier ability distribution which would facilitate increased attendance.
- ✧ The proposed lifts and trails, building, and parking expansions would result in a balanced design, resulting in more efficient use of the facility.
- ✧ The proposed plan centralizes many of the skier services and administrative functions in the expanded Discovery Lodge location, resulting in less duplication of functions between lodge facilities and a more efficient operation. The proposed Discovery Lodge Expansion would result in a safer, accessible, energy efficient and sustainable building.
- ✧ Replacement of antiquated lifts, infrastructure and equipment would improve safety.
- ✧ The proposed redevelopment of existing ski trails on the property of the former Highmount Ski Area would minimize the earthwork and tree cutting needed to expand terrain.
- ✧ Improvements to the snowmaking system would result in a more energy efficient system, reduce the environmental impact of the existing system, and improve that ability to assure that snow conditions are good during the operating season.
- ✧ Reduced cost of energy and increased attendance would help the facility to balance revenues with operating expenses.
- ✧ The plan, by increasing attendance, will have incidental benefits to the local, regional, and state economy.

1.3.3 General Project Description

The Full Build-Out Alternative plan proposed and outlined in Section 3 of this UMP/DEIS contains major items of work including: installation of three (3) new ski lifts, replacement of two (2) existing ski lifts, addition of sixteen (16) new ski trails, construction of three (3) additional parking areas, expansion of the existing Discovery Lodge and Sunset Lodge, new Tomahawk Lodge and information booth, new salt storage building, new snowmaking pond, new snowmaking piping, new lower pumphouse, modification of existing pumphouses, new compressor facility, modification of existing pumphouses.

1.3.4 1998 UMP Status

1998 UMP

The majority of the management actions included in the 1998 UMP have been completed. Some of the management actions were abandoned due to lack of funding or because they were deemed unnecessary after other objectives were completed. Other management actions that weren't completed continue to be priorities and are therefore included in this UMP/DEIS. Table 1.3-1 illustrates the status of proposed management actions from the 1998 UMP.

Table 1.3-1 1998 UMP Management Action Status

Action Title	Complete	Abandoned	Updated in Current UMP
Replace Lift # 8	X		
Increase Snowmaking	X		
Parking and Roads	X		
Septic Line	X		
Replace and Extend Lift #6	X		
Expand Overlook Lodge		X	
New Ski Trail (West)		X	
Observation Deck		X	
Maintenance Garage	X		
Equipment Storage		X	
Lift Safety	X		
Sunset Lodge Utilization			X
Equipment Replacement	X		
Ski Patrol – First Aid		X	
Telephone Lines	X		
Interpretive Trail	X		
Reception Lodge Base Lift #8			X
Discovery Lodge Rehabilitation			X
Marketing and Advertising	X		
Tubing Park			X
Hiking Trail Head		X	
West Side Novice/ Int Trail	X		
Carrying Capacity	X		

The Sunset Lodge Expansion (Sunset Lodge Utilization), Discovery Lodge Expansion (Discovery Lodge Rehabilitation), and the Tomahawk Lodge (Reception Lodge Base Lift #8) are the three projects that were originally included in the 1998 UMP, have been updated, and are contained in this UMP/DEIS in Section 3 Proposed Management Actions and Projected Use.

1998 UMP Amendments

While facility planners do their best to envision the requirements of a 10-year unit management plan, it is sometimes not possible to foresee all the developments that will be created by increased skier visits, equipment development, and evolution of the skiing industry. Therefore, it is often necessary to amend a Unit Management Plan to include actions that increase skier satisfaction, provide a safe skiing experience, accommodate increased skier visits and further minimize environmental impacts. Approved UMP amendments are officially incorporated in the 1998 plan and are included as an attachment to the original document. In addition, all statements in the original plan apply to the amendment.

The following actions were approved as amendments to the 1998 UMP and have been completed:

- ✧ New Trail Construction (Onondaga and Horseshoe Pass) to accommodate the removal of the mid-station on the Super Chief (Lift #6) chairlift
- ✧ Storm Water Retention Pond at the Discovery Lodge Bus Lot
- ✧ Rehabilitation of Public Drinking Water Supply System
- ✧ Trail Widening (Dot Nebel) for racing
- ✧ Teaching Area Widening (Papoose Landing - Kidscamp)
- ✧ Extension of Appurtenance Connector (Expressway) to connect Dot Nebel
- ✧ Trail Widening (Terrain Park on Utsayantha)
- ✧ Trail Widening (Half Pipe on lower Belleayre Run)
- ✧ New Ticket Booth at Overlook Lodge
- ✧ New Adaptive Sports Building

1.4 Regulatory Framework

1.4.1 Local

NYS Facilities are exempt from local requirements, although through the NYS SEQRA process local land use regulations will be examined.

1.4.2 County

Ulster County

- ✧ Highway - The proposed work will require permits from the Ulster County Highway Department for the proposed driveway access points located along Ulster County Route 49A.
- ✧ Potable Water – The proposed work will require approvals for modifications to the potable water system. Ulster County Department of Health will have to review and approve of proposed modifications to the potable water system at the facility.

1.4.3 Regional

NYCDEP - New York City Department of Environmental Protection

- ✧ Wastewater – The proposed work will require approval from NYCDEP to accept projected increased flows from Belleayre Mountain Ski Center to the Pine Hill WWTP.
- ✧ Stormwater – The proposed work will require approval from DEP for the Stormwater Pollution Prevention Plan (SWPPP).
- ✧ NYC Executive Order 51

Delaware River Basin Commission – Delaware River Basin Compact

1.4.4 State

NYSDEC. The projects shall comply with:

- ✧ NYS Constitution Article 14, Section 1
- ✧ CPSLMP – Catskill Park State Land Master Plan
- ✧ ECL – Environmental Conservation Law
- ✧ ECL Article 8 State Environmental Quality Review Act (SEQR) and 6 NYCRR Part 617
- ✧ Water Quality Certification
- ✧ Stormwater Discharge Permit (SWPPP approval) requirements
- ✧ Dam Safety Permit requirements.
- ✧ Relevant sections of 6 NYCRR Part 190.

NYSDOT

- ✳ Review and approval of Traffic report/recommendations for potential impacts to NYS Route 28.

NYSDOH

- ✳ Potable Water Supply - The proposed potable water system work shall be designed in accordance with NYSDOH regulations for potable water supply, however the review and approval will be done by the Ulster County Health Dept.

NYSOPRHP

- ✳ Cultural Resources – OPRHP shall review and approve of the Cultural Resources Investigation done for this project.

NYSDOS

- ✳ Building Codes – The proposed building construction work shall be designed in accordance with the Building Code of New York State current editions.

NYSERDA

- ✳ The proposed building construction work shall be designed in accordance with the Executive Order No. 111 “Green And Clean” State Buildings And Vehicles Guidelines.

NYSDOL

- ✳ Ski Lifts – The proposed ski lift work shall be designed in accordance with 12 NYCRR Part 32 “Ski Tows and Other Passenger Tramways”, and shall be reviewed and approved by the DOL.
- ✳ Areas of Public Assembly – All proposed work on areas of public assembly shall be reviewed and approved by the DOL.
- ✳ Public Work Prevailing Wage Rates – All construction work performed on-site shall conform to the requirements for prevailing wage rates.

1.4.5 Federal

USACOE - United States Army Corps of Engineers

- ✧ Wetlands – The proposed work shall meet the requirements of the USACOE, and any required Nationwide or Individual permits shall be obtained.

- ✧ Clean Water Act provisions regarding inter-basin transfers of surface waters shall be complied with.

ADA - Americans with Disabilities Act

- ✧ The proposed work shall meet the applicable requirements of the ADA.

1.5 Inventory of Existing Facilities

Comfortable Carrying Capacity

An important term used by ski industry experts in planning future development of a ski area facility is referred to as the facility's "Comfortable Carrying Capacity". Industry experts define the "Comfortable Carrying Capacity" of a ski area as "an optimal level of utilization for the ski area (the number of visitors that can be accommodated at any given time) that guarantees a pleasant recreational experience, without overburdening the resort infrastructure."

The estimate of a ski area's Comfortable Carrying Capacity is primarily a combination of the lift and trail systems capacity, skier services building (i.e. lodges) capacity, and parking capacity. Skier services, parking, and lift and trail system capacities should be designed to be in balance.

The analysis set forth in this UMP describes the existing Comfortable Carrying Capacity of the Belleayre Mountain Ski Center as approximately 4,500 skiers per day and is currently limited by the skier services buildings and available parking.

1.5.1 Existing Buildings

In 1952, the Main Lodge (Overlook Lodge) was built for the newly constructed ski center. The walls are of stacked logs and the roof was built with log trusses, timber planks, and shingle roofing. Large stone fireplaces were built in the seating areas. The lodge has been expanded twice for more capacity which includes a table seating area, bar and lounge area, an expanded food service area and ski rental and retail areas.

In 1953, the Summit Lodge was built at the peak of the mountain. It is wood framed with wood panel interior, wood floors, and a large stone fireplace. The exterior is wood sided with a shingled roof. There is a food service area with seating and an exterior deck.

Also in 1953, a Maintenance Garage was built to maintain the mountain work vehicles. It is wood framed with a shingle roof and wood siding exterior. There was an office area expansion to house the maintenance workers as more equipment was needed as the ski mountain expanded.

In 1962, a Residence Building was built to accommodate the mountain superintendant but is now used for office and other incidental purposes. It is wood-framed, wood-panel sided, and has a shingle roof.

In 1964, the Lower Lodge (Discovery Lodge) was built on the lower mountain. The building underwent two expansions within its first four years to increase capacity and services, including a bar/lounge area. It is wood framed and also contains heavy timbers. It has wood siding and a heavy wood plank roof with shin-

gles. There are two fireplaces in the seating areas. It has a food service area and also is where the Kidscamp is located. There is a rental area and first aid station. In the late 1980's a steel framed expansion was constructed to accommodate a small office staff on a third floor.

A steel framed Butler Building was built in 1968 behind the maintenance garage to handle the carpentry needed to keep the mountains facilities functioning.

All the other buildings are small utility buildings needed for the mountain, which are typically wood framed, wood sided, and have shingle roofs. These include ticket buildings, lift shelters, water pump buildings, storage sheds, and ski patrol buildings. There was another steel Butler building built to accommodate the compressors needed for snowmaking.

The Pine Hill Lake was built in 1980 and corresponding buildings to pump water up the mountain for up-to-date snow making have subsequently been constructed.

The following table lists all of the existing buildings at the Belleayre Mountain Ski Center, including Building Name, Area (sf), Building Type, Heating, and Construction Date.

Table 1.5 -1 Existing Buildings

Building Name	Area (sf)	Building Type	Heated	Constructed Date
DISCOVERY LODGE (NOVICE AREA)-NP	25,500	Ski Lodge	YES	1/1/1964
OVERLOOK LODGE (UPPER AREA)-NP	22,600	Ski Lodge	YES	1/1/1952
MAINTENANCE GARAGE(NOVICE)-NP	15132	Garage	YES	12/15/2008
ABANDONED GARAGE (UPPER AREA)	15000	Vehicle Maintenance	NO	1/1/1953
LONGHOUSE LODGE(UPPER) - NP	6400	Ski Lodge	YES	11/30/1999
BUTLER BUILDING-NP	4800	Utility Shed	YES	1/1/1968
BATH HOUSE PINE HILL (DUA)-NP	2000	Bathroom	YES	1/1/1993
RESIDENCE/NURSERY(UPPER)-NP	1992	House	YES	1/1/1962
SUNSET LODGE(TOP)-NP	1930	Ski Lodge	YES	1/1/1953
SNOWMAKING COMPRESSOR BLDG - NP	1600	Utility Shed	NO	7/1/1995
SC PINE HILL PUMPHOUSE-NP	1564	Pump House	YES	2/1/1989
PUMP HOUSE (UPPER AREA)-NP	1500	Pump House	YES	1/1/1975
RECYCLE BLDG. (UPPER AREA) - NP	1200	Storage Building	NO	6/28/1998
ADAPTIVE BUILDING (UPPER)	1056	Recreation Building	YES	7/1/2009
STORAGE BARN (MAINT BLDG)-NP	964	Utility Shed	NO	1/1/1980
GARAGE-STORAGE AREA-NP	880	Utility Shed	YES	1/1/1953
LIFT 8 OPERATOR SHELTER-NP	750	Utility Shed	YES	1/1/1953
SALT SHED-UPPER AREA-NP	700	Utility Shed	NO	1/1/1979
STORAGE (GARAGE AREA)-NP-023	650	Utility Shed	NO	1/1/1984
STORAGE (GARAGE AREA)-NP	650	Utility Shed	NO	1/1/1984
RACE TIMING SHELTER-UPPER-NP	600	Utility Shed	NO	1/1/1984
LIFT 7 OPERATOR SHELTER-NP	600	Utility Shed	YES	1/1/1986
GLEN PUMP HOUSE (NOVICE)-NP	600	Utility Shed	YES	1/1/1975
GARAGE AT PINE HILL LAKE (DUA) - NP	380	Garage	YES	6/28/1998
GROUP SALES TICKET BOOTH - NP	360	Ticket Booth	YES	7/10/1999
TICKET OFFICE (UPPER)	300	Ticket Booth	YES	9/1/2004
AIR COMPRESSOR BLDG. #1-NP	300	Utility Shed	YES	12/1/1988
AIR QUALITY MONITORING BLDG (NOVICE).	300	Utility Shed	NO	6/1/1988
LIFT 2 OPERATOR SHELTER-NP	250	Utility Shed	YES	1/1/1984
LIFT 1 OPERATOR SHELTER-NP	250	Utility Shed	YES	1/1/1984

TRAIL 18 ELEC. BLDG.-NP	225	Utility Shed	NO	1/1/1975
CHLORINE BUILDING - CROSS COUNTRY	208	Utility Shed	YES	7/25/2004
TICKET OFFICE-UPPER 2-NP	200	Utility Shed	YES	
TICKET OFFICE-UPPER 1-NP	200	Utility Shed	YES	
TICKET BOOTH-NOVICE AREA-NP	200	Utility Shed	YES	1/1/1962
FOOD SERVICE BLDG. (UPPER AREA) -NP	196	Recreation Building	YES	8/15/1999
FOOD SERVICE BUILDING DUA - NP	196	Recreation Building	YES	6/1/2000
SC PINE HILL VALVE PIT-NP	192	Pump House	YES	9/1/1988
UPPER SKI PATROL 6-NP	180	Utility Shed	YES	1/1/1982
DETACH. LIFT OPERATORS BLDG. (BOT)	160	Recreation Building	YES	5/1/2006
PATROL SHELTER (SUM. CH 7-NP	144	Utility Shed	YES	1/1/1975
CHLORINATION SHED-UPPER-NP	138	Utility Shed	YES	1/1/1953
RACE TIMING FINISH SHELTER-NP	120	Utility Shed	YES	1/1/1984
LIFT 7 TOP TERM. SHED-NP	120	Utility Shed	YES	1/1/1986
CHLORINATION BLDG (MAIN L)-NP	120	Utility Shed	YES	1/1/1992
EMPLOYEE BLDG. LIFT 8 (BOTTOM)-NP	100	Utility Shed	YES	8/15/1999
DOT NOBEL RACE TIMING SHELTER - NP	100	Utility Shed	YES	1/1/1991
TICKET BOOTH (DUA)-NP	100	Ticket Booth	YES	1/1/1993
LIFT#6 EMPLOYEE SHELTER (BOTTOM)-NP	88	Utility Shed	YES	1/1/1994
DETACH. LIFT ATTENDANT BLDG. (TOP)	80	Utility Shed	YES	5/1/2006
OPERATORS BUILDING LIFT #8 - NP	80	Utility Shed	YES	8/26/1999
SKI PATROL LIFT #8 (TOP) - NP	80	Utility Shed	YES	1/1/1994
TELEPHONE CONNECTIONS BLDG - NP	64	Utility Shed	YES	8/10/1990
STORAGE SHED 2-NP	64	Utility Shed	YES	1/1/1968
STORAGE SHED (PUMPHOUSE)-NP	64	Utility Shed	NO	1/1/1968
LIFT 2 ATTENDANT SHELTER-NP	60	Utility Shed	YES	1/1/1984
LIFT 1 ATTENDANT SHELTER-NP	60	Utility Shed	YES	1/1/1984
CHLORINE BUILDING - LOWER AREA	50	Utility Shed	NO	7/25/2004
CHLORINE BUILDING - UPPER AREA	50	Utility Shed	YES	7/25/2004
LIFT #4 OPERATOR SHELTER-NP	49	Utility Shed	YES	1/1/1978
CHLOR. SHED - NOVICE AREA-NP	48	Utility Shed	YES	1/1/1983
MID LIFT BUILDING LIFT#8 -NP	36	Utility Shed	YES	8/26/1999
SEWAGE MONITOR BLDG.(BONNIEVIEW)-NP	36	Utility Shed	YES	7/1/2000
ATTENDANT BUILDING LIFT #8 (TOP)-NP	36	Utility Shed	YES	8/26/1999
LIFT #5 OPERATOR SHELTER-NP	30	Utility Shed	YES	1/1/1978
LIFT 7 ATTENDANT SHELTER-NP	24	Utility Shed	YES	1/1/1986
LIFT #3 OPERATOR SHELTER-NP	16	Utility Shed	NO	1/1/1981
TOMAHAWK TICKET BLDG	64	Ticket Booth	YES	1/1/1974
SKI PATROL STORAGE TOP LIFT #7		Utility Shed	NO	8/26/2000

Table 1.5 -1 Existing Buildings (cont.)

1.5.2 Existing Alpine Ski Trails

Currently there are 52 existing ski trails at Belleayre Mountain Ski Center for a total downhill ski trail length of 16.3 miles. The ski trail system includes 12 beginner/novice, 25 intermediate, 8 most difficult, and 7 expert rated trails. Included in the facility are a terrain park and 4 teaching areas. The four teaching areas are serviced by handle tow lifts #3, #4, and #5 and include: Running Bear, Teepee Flats (the Teaching Circle), Little Creek, and Papoose Landing (Kids-camp). Novice slopes on the lower mountain are serviced by lifts #1 and #2, a double-double chair lift, and include: Iroquois, Huron, Eagle Falls, Oneida, Mohican, Dakota, Easy In, The Canyon, Chinook, and Discovery Way. Intermediate,

Most Difficult, and Expert trails on the upper mountain include: Cathedral Brook, Roaring Brook, Onondaga, Horseshoe Pass, Winnisook, Tongora, Chippewa, Belleayre Run, Wanatuska, Mohawk, Onteora, Yahoo, Utsayantha, Algonquin, Esopus, Peekamoose, Pepacton, Seneca, Tuscarora, Tomahawk Crossing, Dot Nebel, and Deer Run. These trails are serviced by lift #6, a detachable quad chair (Super Chief), lift #7 a fixed-grip triple chair, and lift #8 a fixed-grip quad chair (Tomahawk). Trail numerical facts are shown in the Table below. Four gladed ski areas are also located on the upper mountain and include: Winnisook Glades, Chippewa, Belleayre Glades, and Lift Line.

Table 1.5 – 2 Existing Alpine Ski Trails

Trail Name	Vertical (ft)	Length (ft)	Avg. Grade (%)	Area (sf)	Area (ac)	Avg Width	Posted Ability
EASIEST							
Chinook	53	350	15	24648	0.6	70	1
Dakota	232	1714	14	120533	2.8	70	1
Discovery Way	245	2516	10	128736	3.0	51	1
Easy In Section A	48	187	26	19460	0.4	104	1
Easy In Section B	38	180	21	11986	0.3	67	1
Easy Out Section A	25	320	8	15540	0.4	49	1
Easy Out Section B	26	355	7	10874	0.2	31	1
Huron Section A	79	797	10	30575	0.7	38	1
Huron Section B	360	3100	12	182655	4.2	59	1
Iroquois	362	2400	15	215187	4.9	90	1
Little Creek	107	913	12	123156	2.8	135	1
Mohican	438	3982	11	241885	5.6	61	1
Oneida	84	1564	5	27636	0.6	18	1
Running Bear	72	583	12	59872	1.4	103	1
The Canyon Upper	73	362	20	34560	0.8	95	1
INTERMEDIATE							
Algonquin Lower	409	1503	27	106979	2.5	71	2
Area 51	91	1947	5	221623	5.1	114	2
Ashokan Bottom Extension	490	623	79	26730	0.6	43	2
Ashokan Section A	145	1081	13	74689	1.7	69	2
Ashokan Section B	257	1814	14	114596	2.6	63	2
Belleayre Run Lower	664	2721	24	287610	6.6	106	2
Cathedral Brook Lower	224	1965	11	85747	2.0	44	2
Deer Run	894	6768	13	433385	9.9	64	2
Dot Nebel Lower	553	2035	27	302953	7.0	149	2
Eagle Falls	83	288	29	15165	0.3	53	2
Esopus	370	1809	20	94187	2.2	52	2
Expressway	206	1488	14	70496	1.6	47	2
Horseshoe Pass	221	1256	18	92600	2.1	74	2
Mohawk Lower	148	594	25	37335	0.9	63	2
Onondaga	305	1557	20	111550	2.6	72	2

Lifts				
12 - Discovery Lodge to Beginner Area	300	10883	0.2	36
Skiable Connector Total	7873			

Existing Skiable Connector Total (mi) 1.5

Total Existing Ski Trail & Skiable Connector Length = 17.8 Miles

1.5.3 Existing Ski Lifts

Belleayre Mountain Ski Center operates eight electric ski lifts, which include three ropetows, two double chairs, one triple chair, and two quad chairs. The table below provides a summary of the Belleayre Ski lifts.

Table 1.5 – 3 Existing Ski Lifts

Lift Number	Name	Installed	Horizontal Length (ft)	Speed (ft/min)	Vertical Rise (ft)	Capacity (p/h)	vtf/h (000's)	Motor Size (hp)
1	Novice Lift - Double Chair	1982	3792	440	479	1200	575	125
2	Novice Lift - Double Chair	1982	3792	440	479	1200	575	125
3	Little Creek - Rope Tow	2001	725	270	98	540	53	15
4	Ski Wee - Carpet	1996	210	270	115	540	62	15
5	Novice - Handle Tow	1992	400	270	40	540	22	15
6	Super Chief - Detachable Quad Chair	2006	4866	1000	1133	2400	2719	600
7	Fixed Triple Chair	1986	2861	500	806	1800	1451	200
8	Tomahawk - Fixed Quad Chair	1999	3412	450	923	2400	2215	400

All ski lifts are regulated by the NYS Department of Labor (DOL) and must comply with the 12 NYCRR Part 32 “Ski Tows and Other Passenger Tramways”, and the NYS General Obligations Law. All existing lifts are subject to routine inspections by the DOL.

1.5.4 Existing Snowmaking

Natural snow fall averages 140 inches annually. Snowmaking covers 97% of skiable terrain (150 of 155 acres) including novice, intermediate, expert trails, skiable connectors, and teaching areas. Three shifts work around the clock with a system of both airless and air/water snow making equipment. Snow is made as weather patterns indicate favorable conditions and up to 4,480 gallons of water are converted to snow per minute. The snowmaking installation guarantees operation of the facility daily through the entire season. Water is pumped from Pine Hill Lake directly to Cathedral Glen, and Upper Pumphouse storage ponds. Machine made snow is of higher density than natural snow and will hold up and last longer than natural snow under adverse weather conditions (rain, warm weather). Snowmaking will give a higher safety factor through build up of snow so that bare ground will not result on slopes, lift lines, and high use areas. Machine snow packs well and is impervious to high winds which blow natural snow off trails. See Appendix B "Snowmaking Engineers Report" for a more detailed description of the existing snowmaking system. See UMP Drawing EX9 for the existing snowmaking system plan.

Snowmaking System

- 81 SMI snowmaking machines
- 25,000 Feet of air/water supply hose
- 29 Air/water snow gun sleds
- 813 Air hydrants
- 840 Water hydrants
- 153,000 Feet of air/water pipe (6" - 16" diameter), various valves, fittings, and controllers
- 10 Water pumps
- 4 Water supply pumps
- 571 Air/Water Towers (352 high-energy and 219 low-energy compressed air guns)

Pump House - Upper

- 2 Ventilation systems - 36" Loren Cook, automatic thermostatic controlled fans with manual High and Low speeds
- 1 Johnson 23 DLC 4 stage 500 hp variable speed pump - 1,480 gpm and control cabinet
- 1 Johnson 8 stage 350 hp vertical drive water pumps - 750 gpm
- Main Electric Service – 1600 amp, 480 v, 3 phase
- 2 Electrical control panels, 1 each pump
- 3 - 1,500 cfm Ingersoll-Rand electric compressors and electrical control Panels
- 10-1600 cfm portable rental diesel powered compressors.

Pump House - Cathedral Glen

- 2 - 250 hp 6 stage turbine pumps - 750 gpm
- Main Electric Service - 800 amp, 480 volt, 3 phase
- 2 motor controllers for pumps

Pump House - Pine Hill Lake

3,600 gallon/minute pumping capacity

1 Ventilation system

Main Electric Service – 1600 amp, 480 volt, 3 phase

4 - 400 hp Ingersoll-Rand high head pumps and 4 electrical control panels

1 - 200 hp Crane-Deming low head pumps

4 - 40 hp Crane-Deming low head pumps and 4 electrical control panels

1 Lake depth gauge – digital

Reservoirs

Upper Pumphouse Reservoir - Estimated 1.5 million gallons, at 3,000 gallons per minute of pumpable capacity

Cathedral Glen Reservoir - Estimated 2 million gallons at 1,500 gallons per minute of pumpable capacity

Pine Hill Lake/Pumping Facility - Estimated 25 million gallons usable (30 million gallon capacity) at 3,600 gallons per minute of pumpable capacity

Valves in Manholes

12 Drain valves various sizes

Pipe Lines

Various sizes totaling 30 miles of air and water lines, including a 16 inch transfer line

840 Water Hydrants

813 Air Hydrants

Operating Elements

Water valves (11-8") (4-6") (2-4") (7-2")

1.5.5 Cross Country & Mountain Bike Trails

Cross Country Trails

Belleayre Mountain cross-country ski trails are separated from the downhill slopes on the lower part of the mountain. Cross-country trails have no trail use fee. Lessons are available on weekends and holidays. There are 5 maintained cross-country ski trails at Belleayre totaling 6.4 kilometers. Trail difficulty ranges from novice to expert to accommodate all ability levels of cross-country skiers. Letter and color designations identify trails. Trails average 6 feet wide and are not groomed or patrolled. Midweek usage averages 10-15 persons/day. Weekend usage averages 75 people per day.

Table 1.5 – 4 Existing Cross Country Ski Trails

Trail Name	Difficulty	Length (ft)	Length (km)	Length (mi)
Trail A	Novice - Green	3531	1.1	0.7
Trail AA	Novice - Green	3450	1.1	0.7
Trail H	Intermediate - Blue	4325	1.3	0.8
Trail HH	Intermediate - Blue	4948	1.5	0.9
Trail J	Expert - Black	4876	1.5	0.9
	X-Country Trail Total (km)	6.4		
	X-Country Trail Total (mi)	4.0		

Mountain Bike Trails

Belleayre Mountain Ski Center recognizes and accommodates the growing public interest in mountain biking. The Catskill Park State Land Master Plan addresses emerging trends in mountain biking by establishing guidelines for the appropriate use of existing trails as well as the development of new trails for mountain bike use. Consistent with these guidelines, beginning in late April each year, Belleayre Mountain Ski Center offers several miles of mountain biking trails across the facility. Belleayre Mountain provides access for mountain biking on existing cross-country ski trails, connecting and service roads, and foot trails located in the Intensive Use Area.

See UMP Drawing EX2 for a map of Existing Cross Country, Hiking & Biking Trails.

1.5.6 Existing Parking Capacity

The existing parking area capacity at Belleayre Mountain Ski Center has been estimated at approximately 51 buses and 1,131 passenger vehicles. For the purposes of this assessment, potential parking capacity was considered in the six parking areas shown on UMP Sheet EX11. The number of parking spaces in each of the areas is identified in Table 1.5-5 below. Individual existing parking areas are further described in sections following.

Table 1.5 – 5 Existing Parking Capacity in Designated Areas

Area Description (1)	Passenger Vehicles	Bus	Lot Area SF/ Vehicle.	Passenger Vehicles Per Acre	Total Lot Area SF (2)
Overlook Lodge Upper Parking	305		341	128	103,897
Overlook Lodge Lower Parking	161		392	111	63,111
Tomahawk Parking Upper 3 Lots	231		391	111	90,311
Tomahawk Parking Lower Lot.	55		333	131	18,291
Overlook Road Shoulder Parking	163		764	57	124,551
Discovery Lodge Bus Parking		51	1843	24	93,970 (2.2ac)
Disc Lodge Employee Parking	11		325	134	3,576
Disc Lodge Lot 1 and 2	305		388	112	118,233
Passenger Vehicle Total =	1,231			103	521,970 (12ac)

Note:

(1) Although overflow parking sometimes uses other off-site areas, these are the improved parking areas currently under Belleayre Control and furnished for visitors.

(2) Values were obtained by scaling from digitized mapping and are approximate.

[] Included in average passenger vehicles per acre calculation (117=1057 Vehicles / 9 Acres) .

It should be noted that the existing parking spaces discussed are “potential” or “hypothetical” spaces because the parking lots do not currently have painted lines to form parking spaces, referred to as stalls.

Existing Designated Parking Areas

UMP Drawings EX12 through EX15 show ski center designated parking areas. Currently Belleayre experiences parking overflow during peak weekends. The overflow areas are not considered to be designated as existing parking for the purposes of this report.

Some of the criteria applied to estimate the existing capacity of each parking area include:

- ✱ Relatively efficient stall and access aisle layouts were superimposed on scale maps of the parking areas.
- ✱ Ten foot wide vehicle stall widths were used based on an observed tendency for drivers to park further apart at ski facilities when no painted lines are visible.
- ✱ The assumption was field-checked as described in Section 3.3.1.

The capacity of the existing lots has been estimated using a hypothetical graphical approach. Vehicle counts were made in representative parking lots during the ski-season as discussed below.

The size of the parking stalls used for passenger vehicle parking were typically 10 feet by 20 feet for 90 degree parking and 10 feet by 18 feet for 45 degree angled parking, with some differences noted below.

Typical traffic aisle widths used in the potential layouts were 15 feet to 18 feet for one-way traffic, and 22 feet to 25 feet for two-way traffic.

Section 3.3.1 includes a discussion and analysis of field data collected during the ski season to determine the hypothetical 10 foot stall width and evaluate the utilization of the existing parking areas.

Overlook Lodge Upper Parking Lot

This paved parking area is shown on UMP Drawing EX15. Two center rows of back-to-back stalls span most of the linear parking area with angled parking along the outside. The two rows combined are less than 40 feet wide. The center rows transition a single row of vehicles near the west extent of the lot, as observed. The tendency for one-way vehicle travel, approaching the Overlook Lodge along the south side of the center rows and exiting along the north side of the rows is reflected in the layout. For this hypothetical layout, and others, 10 feet wide; 45 degree parking stalls are used to represent angled parking. The field check of parked car spacing, discussed in Section 3.3.1, was made in this area.

Overlook Lodge Lower Parking Lot

This paved parking area is shown on UMP Drawing EX15. The parking layout shows, but does not utilize, the location of the currently abandoned former maintenance building to provide for an additional 55 parking stalls.

Tomahawk Parking Lots

This paved parking area is shown on UMP Drawing EX15. The four parking lots are of more recent construction and the orientation of the parking layout shown is based on the original design layout for 9 foot stall widths. Increasing the stall widths to 10 feet reduces the total number of stalls by 34, from 320 at 9 foot wide stalls, down to 286, which is used in the existing capacity calculations. Shuttle bus service is currently provided to these lots.

Overlook Road Shoulder Parking Area

This paved parking area is shown on UMP Drawing EX14. The approximate extent of the area used by vehicles provides 163 stalls, allowing a 30 foot length along the shoulder for each vehicle to parallel park.

Discovery Lodge Bus Parking Lot

This unpaved, gravel surfaced parking area is shown on UMP Drawing EX13. The parking layout shown uses 15 feet by 40 feet stalls, angled at 45 degrees. This was based on bus dimensions shown in Architectural Graphic Standards. The hypothetical layout provides for 51 bus stalls. The lot is used by a mix of passenger vehicles and buses. Staff recently indicated that of approximately 45 buses bringing visitors to the mountain on a given day, 30 remained parked throughout the day and the remainder left the site for a period and then returned to load visitors at departure time. The Bus Parking Lot is located in close proximity to the Discovery Lodge. A nearby ticket booth and walkway allows for buses to park and unload passengers within walking distance of the lodge. The proximity to the lodge may encourage passenger vehicle drivers to use the lot. On days when there is low demand for bus parking, this lot is used for passenger vehicles. EX13 also shows a scenario where the parking area can accommodate approximately 220 passenger vehicles and 4 buses.

Discovery Lodge Lower Parking Lots

This paved parking area, comprised of two rectangular lots, is shown on UMP Drawing EX12. A service road that runs parallel to CR49A provides access to the two lots. Shuttle bus service is currently provided to these lots.

1.5.7 Existing Roads

Belleayre Mountain Ski Center has approximately 7.5 miles of existing roads at the facility including entrance driveways, connecting roads, and service roads. See UMP Drawing EX10 for drawing that shows the existing roads. The roads are surfaced with a variety of materials including: hot mixed bituminous pavement, cold mix bituminous pavement, and gravel. Severe winter weather at this elevation of 2,500 feet with thaw/freeze cycles combined with lack of adequate drainage has led to severe deterioration of paved road sections at the ski center. Sand applications and plowing affect road surface, while cracks and potholes develop that affect driving and walking conditions. Annual routine maintenance is needed. A shale pit is used for some road maintenance and fill requirement. The access road to the Overlook Lodge was re-paved in the summer of 2003 with improved drainage, additional select gravel sub-base, and cold mix bituminous pavement.

1.5.8 Energy Consumption

Belleayre Mountain Ski Center systems consume energy in several forms including Electricity, Heating Fuel Oil, Diesel Equipment Fuel, and a minimal amount of Propane. Systems which use energy include: snowmaking, ski lifts, grooming, buildings, and mobile equipment. See Appendix G “Belleayre Mountain Energy Audit” for a comprehensive Energy Audit that was performed at the ski center. The Energy Audit provides in great detail the actual energy consumption at the facility. Please refer to that attachment for more specific information.

1.5.9 Existing Potable Water

Belleayre Mountain Ski Center currently operates public water supply system with a transient population (skiers/guests) of up to 6000, and a non-transient population (employees) of up to 300. The public water supply system is required to comply with the regulations of the NYS Department of Health, as administered by the Ulster County Health Department. A NYS certified water system operator is responsible for the proper operation of the potable water supply system. See UMP Drawing EX7 “Existing Potable Water System Plan” for a drawing that shows the location of critical components of the existing potable water system.

During the period of April 1, 2007 – March 31, 2008 the total water use at the facility (not including the un-metered Sunset Lodge system) was approximately 1.2 million gallons, with a peak day use on Feb. 17 of 26,516 gallons.

Source: The source of potable water for the ski center is four drilled wells. Wells #1-#3 were installed in the summer of 2003. Well #3 is currently out of service,

and is planned to be properly abandoned. Well #4 was installed in 1992. The Sunset Lodge currently has its own separate well and supply system.

Raw Water Disinfection: The raw water supply from the wells is pretreated with sodium hypochlorite (chlorine) solution injected prior to entering the raw water storage tanks.

Pumping/Storage Facilities: The potable water system includes two aboveground atmospheric storage tanks for storing raw potable water. The first is a 100,000 gallon capacity tank located on the lower mountain, above the Discovery Lodge, off the Iroquois trail. All of the wells pump into this 100,000 gallon tank. The second raw water storage tank has a 50,000 gallon capacity and is located on the upper mountain off the Esopus trail. The 100,000 gallon tank feeds the Discovery Lodge by gravity. The 50,000 gallon tank feeds the Overlook Lodge and other smaller use buildings by gravity. There is a transfer pump station located adjacent to the 100,000 gallon tank to pump up to and fill the 50,000 gallon tank.

Final Disinfection: The gravity feed line from the 100,000 gallon tank to the Discovery Lodge, and the line from the 50,000 gallon tank to the Overlook Lodge are each equipped with a flow modulated automatic feed chlorination system which maintains the chlorine residual at the point of use required by the Health Department. Adequate contact time is provided in the gravity supply piping from the chlorination stations to the building entrances.

Final Filtration: Although not required by Health Department Regulations, the potable water used within the Overlook Lodge, Longhouse Lodge, and Discovery Lodge is filtered through a 5 micron absolute cartridge filter system to provide an additional level of purity of the water supply used there.

System Control: The potable water system is controlled by a state of the art electronic control system that monitors and indicates storage tank levels, turns well pumps on and off, and monitors residual chlorine levels within the lodges.

See Appendix D “Potable Water Engineers Report 2004” for additional information regarding the existing potable water system, including the existing well logs.

1.5.9 Wastewater

Belleayre Mountain Ski Center currently operates a septic tank effluent wastewater collection and transmission system to handle its sanitary sewage. With the exception of the Sunset Lodge, Sanitary Sewage from all sources is first treated locally with a septic tank, and the resulting effluent is collected and transmitted to the NYC DEP collection manhole located in Bonnieview Ave. in the former village of Pine Hill. The sanitary sewage is eventually treated and discharged at the NYCDEP Pine Hill WWTP. The Sunset Lodge system has a septic tank, and a subsurface absorption system. The septic tanks are routinely pumped out and the solids are also disposed of at the WWTP. See UMP Drawings EX4, EX5, and

EX6 for drawings that show the location of critical components of the existing sanitary sewer collection system. Also see Appendix C “Engineer’s Report - Wastewater Collection, Treatment and Disposal” which contains more specific information on the existing wastewater collection and transmission system.

1.5.10 Solid Waste

Approximately 90 tons of solid waste is transported annually to the town of Ulster sanitary landfill at \$60/ton. Sorted recyclables amount to approximately 6.6 tons annually. Ski centers typically generate about .68 pounds/ person/day of solid waste. A spoil area is designated for on-site disposal of tree stumps, non-treated wood, tree trunks, rock, concrete, and similar debris. Trees up to 18" diameter are chipped and used for erosion control.

1.5.11 Hiking Trails

Seven (7) hiking trails totaling approximately 23.7 miles are located on or near the Belleayre Mountain Intensive Use Area. The Pine Hill-Eagle Mountain Trail provides access to the Big Indian Wilderness Area. See UMP Drawing EX2 “Existing X-Country & Hiking Trails” for drawing that shows the location of the existing hiking trails.

1.5.12 Shale Pit

Site Description - The site is located 4,000 feet ± west of the Belleayre main lodge at the intersection of Deer Run and mid-station access roads. It is approximately 2 acres in area and at present is predominantly exposed shale ledge. The site periphery is lightly wooded. It is bound on the north and east by the above facility access roads and on the south and west by a generally marked change in slope. The south-westerly boundary has been staked in the field with colored flagging.

Mining Description - All available surface soil and overburden remaining within and on the site described above shall be conserved in stockpiles along the site perimeter. Excavation of material is being accomplished by ripping the weathered surface layers of rock and bull-doing the loosened rock to the lower level where it is used on the ski centers trails, service roads, and related facilities. Controlled blasting may occasionally be used to facilitate the removal of the more dense and protruding shale faces. Blasting is required to be performed by a blaster certified by the New York State Department of Labor. The general progression of excavation is from north to south so that reclamation of the northerly half can proceed concurrently with excavation.

It is estimated that the quantity of material excavated from the Shale Pit does not exceed 200 cys or 300 tons annually. This quantity is significantly less than the

limits of 750 cys or 1,000 tons annually which would require an Article 23 MLR Permit.

1.6 Inventory of Human Resources

In 2012, ORDA became the Facility Operator of the Ski Center. Below please find a general description of the different departments and functions of the Ski Center.

1.6.1 Belleayre Administration and Functions

The General Manager of Belleayre Mountain Ski Center: Under the supervision of the Olympic Regional Development Authority, the General Manager is responsible for the year-round operation and maintenance of the ski center. Activities include, but are not limited to:

- ✧ Establishment of facility procedures to implement ORDA and DEC policy
- ✧ Preparation and presentation of facility budget requests.
- ✧ Supervision of concession contracts.
- ✧ Transmission of appropriate facility data to ORDA.
- ✧ Consultation with DEC Division of Lands and Forests on long-range planning for construction and rehabilitation.
- ✧ Planning and supervising of all facility departments for daily operation and maintenance.
- ✧ Inspection of facility for adherence to code requirements.
- ✧ Maintaining facility data including: personal service, general ledger, and statistical patterns.

Administration - This department allows for effective and efficient control of the entire operation. Department staff members document all accounts payable, accounts receivable, personal service, inventory and general ledger revenue and expense, transmitting same to ORDA. In addition to all financial accounting and reporting, the department coordinates all other departments, monitors daily operation and maintenance, prepares progress reports, and maintains and transmits all statistical data on weather patterns and facility use. 12NYCRR54 Code 54 defines "ski area operation" responsibility for a ski area. Interpreted in frequent court decisions against ski areas, this law holds the facility responsible for the action or inaction of every employee at the ski center. The inherent risk of the sport and the weight of Codes 54 and 18 mandates a responsibility for extensive training of all

seasonal staff members at all locations of the facility. The seasonal nature of the operation and high turnover rate in staffing require extensive education and re-education every winter and the administration department develops the necessary procedure manual and training programs, updating same annually.

Ticket Sales - This department consists of 24 computerized and networked selling locations distributed throughout the mountain with point-of-sales conveniently and strategically located to maximize the sales of 150+ different combinations of lift, lesson, rental and nursery sales. During winter operation, tickets are sold 7 days a week from 7:00 am through 3:30 pm. A minimum of 4 to a maximum of 24 point-of-sales may be opened depending on skier traffic. Intensive training is provided to all sellers prior to any seller serving the public. With the majority of Belleayre's revenue being produced through ticket sales, it is vital that ticket sellers are trained to handle customers in a fast, efficient, courteous way. Required maintenance for the ticket sales include, but are not limited to: repair and maintenance of all computers and peripheral devices such as monitors, keyboards and printers; repair and replace any networking cable; and maintenance of all 150+ sellable items.

Electrical Maintenance - The electrical system which serves Belleayre Mountain Ski Center must serve all phases of the operation and includes unique requirements for buildings, lifts, and snowmaking among others. This unit is totally responsible for the entire system from the boundary and throughout the entire complex. The electrical maintenance department is responsible for the 12,000 volt primary distribution system which includes buried high voltage wire and transformers. Maintenance of the system during summer months is a high priority since underground wire cannot be easily excavated for repair during winter operation. Winter efforts demand trouble shooting of spot problems as they occur, as downtime must be kept to a minimum. Staff members conduct both destructive and non-destructive testing of all systems to comply with code requirements to isolate potential problems. In so doing, investments in systems are protected and maximum life expectancy of each is achieved. The department staff members are highly trained in the specialized field of electrical distribution and consumption at the ski center facility.

Building Maintenance - The ski center has more than 50 buildings which must be maintained. This includes main lodges, mid- station shelters, maintenance buildings, storage buildings, compressor building, lift attendant buildings, etc. Building maintenance includes janitorial, carpenters, cleaning, plumbing and heating services, water, and sewage.

Lift Maintenance - The maintenance of ski lifts is a year-round operation in order to meet safety codes as required by law - Industrial Rules 32, 12 NYCRR54 and ANSI B-77 and provides a safe and efficient lift operation. Required maintenance items for the 8 lifts involved include the painting of over 150 towers, lubrication of all tower sheaves (over 1,200) and sheave axles; check all drive components - lubrication, thruster brakes and motor, brake linings and holding power; gear boxes, couplings, alignment, emergency brakes, carriage support wheels,

stay cables, haul rope cables, etc. Employees must work on these units which are 30-40 feet off the ground. All must be checked, maintained, repaired, and pass state and contractual inspections.

Motorized Equipment Maintenance - This department is required to service, maintain, and operate all motorized and gas operated equipment- trucks, cars, grooming vehicles, bulldozers, snowmobiles, compressors, chain saws, etc., necessary for the safe and efficient operation of the ski center. Additionally, this department manufactures parts and equipment for ski lifts, snowmaking, and other facility systems.

Trail and Area Maintenance - Ground maintenance in the immediate vicinity of the main lodge includes grass mowing, trash pickup, and walkway upkeep. The department also accomplishes ground maintenance chores in the peripheral forest area and ski trails. Winter operation at the ski center requires all ski slopes to be groomed on a daily basis using grooming vehicles and trail grooming attachments. Three crews work around the clock utilizing five "over the snow" vehicles to maintain the best possible snow conditions on ski slopes. Attachments to the snow vehicles, such as blades, compactor bars, and power tillers are used as conditions warrant. The non-winter management period is when slopes and service roads on the mountain must be maintained. Belleayre Mountain staff provides labor for the majority of construction projects, including new buildings, lifts and ski trails. Mowing of all slopes/trails is required (steeper sections of trails are mowed by hand). Service roads must be repaired after heavy rains and spring run-offs. Brush encroachment on all trails requires cutting to avoid hazardous skiing conditions. Any signs of erosion must be corrected by grass seeding, mulching, and/or cleaning of water bars or installation of new ones.

Snowmaking - This department produces the essential component of the ski experience, snow, manufacturing machine-made snow on over 97% of the slopes/trails at the ski center. Working in three shifts from late November to mid-winter, it provides consistently good conditions for the skiing public. Without snowmaking, an area might often be shut down when adequate depths of natural snow are lacking, resulting in large losses of revenue. During the summer months, routine maintenance and repairs are made to air/water pipes, hydrants, valves, pump houses, compressor buildings, snow guns, hoses, etc. Routine maintenance protects the capital investment in equipment by increasing its lifespan and reduces the chance of a costly breakdown during the ski season.

Lift Operations - Lift operations are a seven day a week operation throughout the ski season. Dependent upon the type of lift, each lift requires between four and eight lift attendants to operate. The safety of the riding passenger is very much dependent upon the lift attendant. Adequate training and his/her knowledge of the lift are absolutely essential not only for the prevention of accidents, but also in the event that one does occur. Pre-employment drug and alcohol testing is required for all lift operators and attendants.

Snowsports School - This revenue producing department supplies instruction in the art of skiing and snowboarding from beginner to expert. Most Snowsports School staff are PSIA certified professionals, teaching a modern technique which stresses the enjoyment and safety in skiing. It is through the Snowsports School that beginners are most often converted to ski enthusiasts and become frequent patrons of the ski center. The Snowsports School is responsible for the image we present to the public. Snowsports instructors are the most visible ski area personnel on the mountain. The ski instructors' duties require their presence on the trails most of the day. Therefore, they are important "good will" ambassadors and are responsible for improving public relations at the facility. Snowsports School lessons are offered daily for individuals, families, and groups using the American Teaching System. Kids Camp for children 4-12 years. Group and private lessons are offered daily and cross-country and telemark skiing lessons are offered on weekends and holiday weeks, as are Alpine Development and Race Training programs.

Ski Patrol - Ski Patrol provides immediate and temporary first aid and transportation to injured skiers. All ski patrol persons are qualified to administer first aid and transport injured persons to the base area facilities. All ski patrol members are trained in lift evacuation procedures and are certified by the National Ski Patrol System. The use of radio equipment enhances their on-hill efficiency. The ski patrol are the first persons to ride the lifts each day during the winter operation in order to check the new conditions of each trail and report any potential hazards before the skiing public is allowed on the lifts. At the end of the day they "sweep" all trails to ensure that no skier remains on the mountain or on the lifts. The ski patrol provides area security during intensive use periods.

First Aid - During peak time, two registered nurses are available for emergency situations. Like the ski patrol, they are skilled in the latest on-the-snow techniques and equipment.

Nursery - A fully equipped and staffed nursery is located in its own separate building adjacent to the Overlook Lodge parking lot. Open from late November through March, from 7:30 am until 4:30 pm, the nursery serves children from the age of 8 weeks to 6 years with reservations required and when space is available. Shuttle service between the nursery and both the Discovery and Overlook Lodges is also available.

Security - Equipment located at the Belleayre Mountain Ski Center is valued at several million dollars. To help protect the facilities, electronic security systems have been installed with 24-hour per day monitoring. During year-round operation, Park Rangers are employed during daytime operations to act as deterrent to criminal activity, for crowd control, and for various security details.

Marketing - Marketing duties are performed by an in-house marketing department. Duties of this department include:

- ✳ Advertising: A variety of media outlets including, among others, TV, radio, print, newspaper inserts, billboards, signs, internet etc., are used to increase public awareness of, and interest in, the Belleayre facility.
- ✳ Promotion: Promotional activities include, but are not limited to, ski shows, press kits and press releases, special activities and events, participation with related industry organizations, and a host of other activities. Like advertising efforts, promotion of the area is designed to increase public awareness and interest. It differs from advertising (what we say about ourselves) in that it is designed to create a positive image (what others say about us). Additionally, promotion efforts enhance the experience of the visitors and encourage return visits, as well as good "word of mouth" about the area.
- ✳ Communication: Like advertising and promotion, communication efforts are designed to increase public awareness of the facility. These activities include, among others, a network for ski condition reporting; a ski shop and related business network; regular written and verbal communication with media; and a brochure distribution network. While advertising and promotion are general in nature, communication activities are designed to get very specific information out to specific individuals and businesses that are already aware of and interested in the facility. The ski center receives over 50,000 incoming telephone calls each winter and makes in excess of 8,000 outgoing calls for the sole purpose of giving people the information they have requested about the facility.
- ✳ Group Sales: A special unit whose duty is to initiate, contact, and solicit business from the tour group industry has provided an increase to our group sales. By participating in "Ski Group" shows held in the spring of each year, we make contact with all of the major tour leaders in the northeast. A special sales location, manned during the winter season by the same personnel who attend the spring shows and who continue contact throughout the year, has proven to be advantageous.

Rental Shops - The rental shops located in the Overlook Lodge and Discovery Lodge are owned and operated by the Ski Center. Ski and snowboard equipment, including top of the line skis, boots, bindings, poles, snowboards, boots and helmets are available in rental shops at both the Discovery and Overlook Lodges. The rental shops are open daily from 8:00 a.m. to 5:00 p.m.

1.6.2 Contractual Services - Concessions

The Department of Environmental Conservation is authorized by Environmental Conservation Law Section 9-0903(4) to enter into license agreements to operate concessions at Belleayre Mountain Ski Center. At the present time, license agreements have been issued for a retail ski shop concession and a cafete-

ria/cocktail lounge concession. Terms and conditions of these contracts provide that a manager for each concession be approved by and report to the General Manager. Each concession is exclusive for all articles, commodities or services covered by the contract. The concessionaires assume all risks and are answerable in damages for all accidents and injuries in the operation under the contract.

Food and Beverages

Food, beverage, and bar service are available at the ski center under contract with a concessionaire. The contract award is based on the highest percentage of gross sales to be paid to the state bid by a qualified vendor. In addition to providing space for the concessionaire's operations, the department also owns and maintains much of the equipment. This includes maintenance of walk-in freezers, ice machines, stoves, coolers, grills, etc. Concession contracts provide that concessionaires promote the ski center.

Retail Ski Shop

The retail ski shop at the ski center is operated under contract by a concessionaire who bids on a five year contract. The contract award is based on the highest percentage of gross sales to be paid to the state bid by a qualified vendor. Space is provided the concessionaire by the department. The Department also maintains light fixtures, electrical outlets, plumbing, etc. required for the shop to operate. The Retail Shops, which are located in both the Discovery and Overlook Lodges, sell to the public a line of clothing, skis, bindings, and most other equipment related to the sport of skiing and snowboarding. In addition, a selection of accessories such as hats, goggles, gloves, lip balm, pins, ski wax, and gifts are available in an effort to make the visiting skiers' trip more pleasurable.

1.6.3 Fiscal Information

The budgeting process generally takes place during May and June in preparation for the following April 1 fiscal year. Belleayre Mountain Ski Center initially identifies needs and submits its budget recommendations to ORDA. Then, ORDA may modify the budget plan in keeping with state fiscal policy together with projected goals and objectives of ORDA.. While expenditures are predicted and requests are prepared, Belleayre's final operational budget is determined annually in the Executive budget. Budgeting and allocations are arranged under four categories: Maintenance and Operation, Rehabilitation and Improvement, Capital, and Equipment:

Maintenance and Operation: The maintenance and operation expenditures at Belleayre includes routine costs which do not extend or change the life or usefulness of the capital facility such as personal service, supplies, materials, utilities, and contractual.

Rehabilitation and Improvement: Rehabilitation and Improvement expenditures may be defined as those which extend or change the useful life of an existing capital facility.

Capital: Capital expenditures may be defined as the initial construction, development, and acquisition of new facilities, resources, and furnishings or major reconstruction of facilities.

Equipment: Equipment may be defined as a product that has a cost in excess of \$200, a life expectancy in excess of 2 years, and is not part of a capital development.

Revenue, Expense, and Attendance under DEC Management - The ski center was operated as part of the recreation special revenue account with DEC campgrounds. The recreation revenue account affords a dedicated fund in which to deposit revenue the Department receives from the operation of Belleayre Mountain. The Department does not have access to withdraw funds deposited to the recreation account. As stated earlier, DEC's Recreation Program and Belleayre's budget was subject to annual appropriations in the Executive budget. Revenues shown below do not include gross revenues generated at Belleayre from the operation of various concessions nor does it include sales tax revenues received by the state that result from the operation of Belleayre. Since this is a special revenue account, operating costs are intended to be offset by revenues. During the period from FY '97-98 to FY '08-'09, Belleayre Mountain generated \$47,790,006 at an operating cost of \$54,350,110. The focus on revenue generation and cost reduction are important considerations in all facets of the operation. At Belleayre Mountain, season pass holders are required to procure a daily lift ticket each day they come skiing. While this is unusual, Belleayre has an exact count of skier visits per season, and does not rely on multipliers for an estimated count.

In 2012, the Olympic Regional Development Authority (ORDA) became the Facility Manager of the Belleayre Mountain Ski Center, and therefore, DEC is no longer involved in the operations and financial management of the site.

Table 1.6 - 1 below illustrates the growth in attendance numbers as well as the revenue and expense numbers for Belleayre Mountain Ski Center from FY '97/'98 to FY '08/'09. The operating costs reflect the April 1 to March 31 fiscal year. The attendance and revenue numbers reflect a ski season, from November until mid-April.

FISCAL YEAR	ATTENDANCE	REVENUE	OPERATING COST
1997-98	83,854	\$2,365,700	\$1,757,000
1998-99	84,042	\$2,166,200	\$2,157,200
1999-00	107,211	\$2,930,100	\$2,637,400
2000-01	141,886	\$4,166,400	\$3,547,343
2001-02	136,819	\$4,071,500	\$4,132,719
2002-03	175,661	\$5,208,900	\$4,335,546
2003-04	168,177	\$4,961,159	\$5,660,988
2004-05	171,524	\$5,035,500	\$5,633,531
2005-06	162,120	\$4,857,406	\$6,380,271
2006-07	146,560	\$4,338,639	\$5,624,926
2007-08	181,509	\$6,105,794	\$6,709,987
2008-09	154,726	\$5,654,208	\$5,773,199
2009-10	169,163	5,392,668	Not Available
2010-11	167,036	5,601,288	Not Available
Totals	2,050,288	\$62,855,462.00	\$54,350,110

Table 1.6-1 Attendance, Revenue, Operating Cost FY '97/'98 – '08/'09

	Weekend & Holiday	Midweek	Half Day -Weekend & Holiday/Midweek
Full Day Lift Ticket			
Adult (18-61)	\$54	\$45	\$44/\$36
Senior (62-69)	\$44	\$40	\$39/\$35
College Student	\$44	\$40	\$39/\$35
Junior (13-17)	\$44	\$40	\$39/\$35
Youth (6-12)	\$38	\$35	\$32/\$28
Toddler (5 & under)	\$11	\$11	
70+ Gold Pass	Free	Free	Free
Early & Late Season	\$43	\$38	
Groups of 15 or more	\$40	\$34	
	Weekend & Holiday	Midweek	
2 Day Lift Ticket			
Adult (18-61)	\$108	\$90	
Senior (62-69)	\$80	\$72	
Junior (13-17)	\$80	\$72	
Youth (6-12)	\$70	\$62	
Toddler (5 & under)	\$22	\$22	

Table 1.6 – 2 2008-2009 Rack Rates

Rentals -Skis, Boots & Poles or Snowboard & Boots	Adult	Junior
1 day	\$33	\$25
2 day	\$64	\$48
3 day	\$93	\$71
5 day	\$145	\$105
Half Day	\$27	\$21
Helmets	\$13	\$13
Lift/Lesson/Rental Package	Weekend & Holiday	Midweek
Adult	\$92	\$84
Junior	\$82	\$72
Season Passes	Through 11/30	After 11/30
Adult	\$676	\$726
Youth/Junior	\$215	\$265
College Student	\$254	\$304
Senior	\$585	\$635
Midweek	\$276	\$326
Transferable	\$1,200	\$1,200

Table 1.6 - 2 2008-2009 Rack Rates (Cont)

SEASON	2012-13*
	(as of 3/11/13)
OPENING DAY	12/1/2012
CLOSING DAY	TBD
# OF OPERATING DAYS	101
CUMLATIVE NATURAL SNOW	104
# OF SKIER VISITS	103,216
NOVICE AREA OPEN	100
# OF DAYS CLOSED	0
TEMPERATURE RANGE LOW	
TEMPERATURE RANGE HIGH	
LARGEST DAY IN GROSS	2/16/2013
LARGEST DAY IN GROSS	\$207,788.00
Date of LARGEST SKIER VISITS	1/20/2013
LARGEST DAY SKIER VISITS	4374
WEEKEND OPERATIONAL DAYS	30
MIDWEEK OPERATIONAL DAYS	71
LIFT \$	\$3,744,489.36
PER CAP ON LIFT \$	\$36.28
GROSS \$	\$5,051,523.92
PER CAP ON GROSS \$	\$48.94
NET SALES	\$4,897,894.90
TOTAL REVENUES	\$4,897,894.90
For Every \$ spent at BMSC	
\$7 is spent back to the community	\$34,285,264.30

Table 1.6 - 3 Attendance, Revenue, Operating Cost under ORDA FY '12/'13

* Data listed for Season 2012/2013 is as of Monday, March 11, 2013 and only represents partial year statistics.