

State Environmental Quality Review Act

FINDINGS STATEMENT

**Belleayre Mountain Ski Center
Unit Management Plan Revision**

December 2, 2015

Pursuant to Article 8 - State Environmental Quality Review Act (SEQR) of the Environmental Conservation Law and 6 NYCRR Part 617, the NYS Department of Environmental Conservation (DEC), as Lead Agency for the Belleayre Mountain Ski Center Unit Management Plan, makes the following conclusions of fact and law:

Name of Action:

Belleayre Mountain Ski Center (also referred to herein as Belleayre or Ski Center or BMSC), Unit Management Plan Revision, Route 28, Town of Shandaken, Ulster County, New York.

Project Sponsor:

NYS Department of Environmental Conservation

Acceptance date of final environmental impact statement:

September 2, 2015

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Summary Description of Action:

The 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 currently operated, managed and maintained by the New York State Olympic Regional Development Authority (hereinafter ORDA) 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 between ORDA and the Department.

In 1999, a private developer, Crossroads Ventures LLC, submitted permit applications to the Department for a proposed resort development to be known as The Belleayre Resort at Catskill Park to be located on a total of 1960 acres in the Towns of Shandaken and Middletown, adjacent to the Ski Center. Those applications and an accompanying draft environmental impact statement were the subject of a Department legislative public hearing and issues conference. On September 7, 2005, the Department's Administrative Law Judge issued rulings regarding party status and issues to be adjudicated. These rulings were the subject of appeals to the Department's Commissioner, and an interim decision was issued on December 29, 2006. That Interim Decision identified which issues were to be adjudicated, and directed that the Crossroads' DEIS record be supplemented with additional information, including consideration of an alternative development scenario. On September 5, 2007, Crossroads and certain parties to the adjudicatory proceeding entered into an Agreement in Principle (AIP) describing the proposal for a modified resort project, considerably smaller than that proposed in 1999. Other major provisions of the AIP included agreements by New York State to modernize the Ski Center, to acquire the former Highmount Ski Center (approximately 99 acres), and to add new ski trails to Belleayre, which would include redevelopment of the Highmount ski trails.

Consistent with the AIP, DEC completed a draft revision of the Belleayre Mountain Ski Center Unit Management Plan (UMP) and DEIS (UMP-DEIS), and it, along with a Modified Belleayre Resort at Catskill Park (Modified Belleayre Resort) Supplemental Draft Environmental Impact Statement (SDEIS) for the proposed Modified Belleayre Resort and a Cumulative Impacts Analysis of both projects was released for Public Review in May, 2013.

The revised UMP proposes a comprehensive plan which would allow ORDA to modernize and expand the Ski Center and increase public safety and enjoyment. The comprehensive plan is known as the Full Build-out Alternative, and is designed to modernize and expand the entire facility to address future needs. The proposed actions for the Full Build-Out Alternative include acquisition of the lands of the former Highmount Ski Center; 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 Building, a salt storage building, an additional snowmaking pond, installation of snowmaking piping, a lower pumphouse, and a compressor facility; and modification of existing pumphouses. A map of Full Build-out Alternative is attached as Appendix C.

This UMP revision implements and is consistent with the 1987 amendment to Article XIV, Section 1 of the New York State Constitution, which authorized the expansion of the Ski Center. 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. This UMP also implements and is consistent with the goals of the Catskill Park State Land Master Plan (CPSLMP), and was developed based upon recommendations by ski-industry experts. It also provides ORDA with the greatest flexibility to manage the Ski Center to provide the public with a comfortable and enjoyable ski experience that keeps pace with modern skiing needs and conditions. Upon adoption of this UMP revision, ORDA may implement the actions set forth in the UMP, subject to available capital, safety and operational priorities, and market demands. The master plan proposed in the UMP-FEIS to expand and renovate BMSC is based on the current use of the facility and need for improvements to BMSC to ensure the continued viability of the Ski Center.

The other alternatives 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 Alternative, Core Alternative, and the Highmount Alternative. The Full Build-out Alternative is the preferred alternative because it is the most comprehensive master plan that presents the full build out potential of BMSC under current constitutional limits. Provided that ORDA is able to acquire the necessary funding, improvements to BMSC will be implemented regardless of the construction of the Modified Belleayre Resort, and would be constructed to function independent of the Modified Belleayre Resort.

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 revision 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 in accordance with a comprehensive master plan. From its inception, the Ski Center has continued to expand its facilities and attendance. BMSC's increase in attendance has been significantly and consistently greater than the industry's national and regional trends. Although attendance was down in the 2011-12 season, it has rebounded since. The trend of annual attendance has increased over the last three decades at a rate of 4.5% 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 a consistent increase in attendance and to continue to maintain the safe and efficient operation of the facility.

This UMP proposes management actions to expand the Ski Center to address the public support expressed in 1987 when the New York State Constitution was amended authorizing the expansion of the Ski Center as proposed in this UMP. Additionally, the 2008 CPSLMP included the recommendation to expand the Ski Center. 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 the entire Catskill Region. The effect of this increase in visitors will be the creation of jobs in the local communities to provide services to these visitors.

Agency Jurisdiction:

Local

NYS Facilities are exempt from local requirements, although through the NYS SEQRA process local land use regulations will be examined. New York State capital infrastructure projects are generally immune from the application of local land use regulation subject to the balancing of the public interest test in the decision of the New York Court of Appeals in *Matter of County of Monroe v City of Rochester*, 72 NY2d 338 (1988).

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.

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) pursuant to the State Pollutant Discharge Elimination System (SPDES) Permit for Stormwater Discharges from Construction Activity.
- * NYS Executive Order 51 governing the activities of State agencies within the New York City Watershed.

Delaware River Basin Commission – Delaware River Basin Compact

State

DEC - The projects shall comply with:

- * NYS Constitution Article 14, Section 1
- * CPLMPP
- * ECL – Environmental Conservation Law
- * ECL Article 8 (SEQR) and 6 NYCRR Part 617
- * Water Quality Certification
- * Dam Safety Permit requirements.
- * Relevant sections of 6 NYCRR Part 190.

DEC has permit jurisdiction over the project pursuant to ECL Article 17 - SPDES Permit for Stormwater Discharges from Construction Activity.

NYSDOT – New York State Department of Transportation

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

NYSDOH – New York State Department of Health

- ✧ 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 Department.

NYSOPRHP – New York State Office of Parks Recreation and Historic Preservation

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

NYSDOS – New York State Department of State

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

NYSERDA – New York State Energy Research Development Agency

- ✧ 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 – New York State Department of Labor

- ✧ 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 NYSDOL.
- ✧ Areas of Public Assembly – All proposed work on areas of public assembly shall be reviewed and approved by the NYSDOL.
- ✧ Public Work Prevailing Wage Rates – All construction work performed on-site shall conform to the requirements for prevailing wage rates.

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.

State Environmental Quality Review (SEQR) Process¹

Under SEQR, the Department, as lead agency, in making its findings under 6 NYCRR 617.11, must certify that the requirements of Part 617 have been met, and then certify that, consistent with social, economic and other essential considerations from among the reasonable alternatives available, the

¹ Principal documents related to this SEQR review have been made available on the DEC website at: <http://www.dec.ny.gov/permits/54704.html>.

action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable.

SEQR requires an approving agency to consider fully the environmental consequences revealed in an EIS and to take these consequences into account when reaching a decision whether or not to approve an action. Moreover, the statute authorizes the approving agency to implement measures designed to mitigate the adverse environmental impacts identified, so long as these measures are reasonable in scope and are reasonably related to the adverse impacts identified in the EIS. An agency may impose conditions on a project outside its traditional area of jurisdiction and may even deny a project if the agency finds it must do so to avoid or mitigate significant adverse environmental impacts.

See Appendix A of Findings for a complete list of reviewed documents

See Appendix B of Findings for a complete timeline of the SEQR process

UMP Revision Process

In accordance with the process outlined in the CPSLMP, the Department proposes to revise the Belleayre Mountain Ski Center Unit Management Plan to allow for the construction of the Full Build-out Alternative (also referred to as the Project), including the acquisition of the lands of the former Highmount Ski Center; 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 Building, a salt storage building, an additional snowmaking pond, installation of snowmaking piping, a lower pumphouse, and a compressor facility; and modification of existing pumphouses.

Facts and Conclusions in the EIS Relied Upon to Support the Decision

Introduction

The UMP proposes a comprehensive plan to modernize and expand the Ski Center and increase public safety and enjoyment. ORDA 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. The cohesive plan, known as the Full Build-Out Alternative, is designed to modernize and expand the entire facility to address future needs.

Summary of Potential Impacts of the Full Build-out Alternative as Defined in the Final Scoping Document

- **Land Use and Community Character:** Impacts on the existing Ski Center and whether the Project is consistent with existing regional and local land uses, local zoning laws or ordinances, and other governing land use plans including the Ulster County Open Space Plan, New York City Watershed Memorandum of Agreement, and the CPSLMP; and consistency with the character of neighboring communities including the Towns of Shandaken and Middletown, Villages of Fleischmanns and Margaretville.

- Geologic and Topographic Resources: Impacts associated with blasting including ground vibrations, air blast, groundwater and wells, dust and gas, and flyrock and impacts associated with stormwater management including drainage patterns and steep slopes.
- Surface Waters including Aquatic Habitat: Impacts to surface and subsurface water resources including watersheds, wetlands and streams and to aquatic habitat, in particular, trout as a result of the snowmaking water supply system and resulting stormwater discharge.
- Groundwater Resources: Impacts to nearby groundwater wells.
- Terrestrial and Aquatic Ecology: Impacts from construction and facility operation on wetlands and streams, vegetation, and wildlife including threatened and endangered species.
- Traffic: Impacts of increased traffic.
- Visual Resources: Impacts to visual resources including nighttime visibility.
- Air Quality: Impacts on air quality as a result of construction and operation of the facility.
- Global Climate Change and Carbon Footprint: Impacts associated with emissions from construction activity and from facility operations and impacts associated with clearing of trees on the carbon storage capacity.
- Noise: Noise impacts from construction, including trail clearing, parking lot clearing and paving and blasting, and from facility operation, including snowmaking and traffic.
- Socioeconomic, Community Services and Resources: Impacts on the regional economy and employment in the region.
- Cultural Resources: Impacts on cultural resources and changes to the viewshed.
- Catskill Forest Preserve: Impacts to the Belleayre Mountain Ski Center's Intensive Use Area and to adjoining Forest Preserve Lands.

Summary of Changes from draft UMP-DEIS to final UMP-FEIS

In addition to minor language changes, the UMP-FEIS removes the East Alternative as an alternative. The AIP proposed improvements to BMSC including, in part, the expansion of new ski trails in the eastern portion of BMSC, and an East Alternative was included in the UMP-DEIS as a conceptual idea. However, in response to comments from the public and SEQR involved and interested agencies, DEC staff reviewed a proposal for development on the east side of BMSC that was submitted during the public comment period and determined that significant environmental impacts would result from that east side proposal. Specifically, extensive tree cutting (124.2 acres, or 23.2 acres more than the Full Build-out) and ground disturbance would be required to construct the proposed 3 miles of ski trails, ski lift, and a road in order to facilitate a lift base for the ski lift. This area of the Forest Preserve lies within the Ashokan Watershed, part of the Catskill/Delaware Watershed, and includes an important trout resource, the Cathedral Glen Stream. Accordingly, the East Alternative has been removed as an alternative from the UMP-FEIS due to the significant environmental impacts that would result from that alternative.

In addition, in response to public comments, the acquisition and redevelopment of the former Highmount Ski Center lands has been added as a separate alternative. Development of the former Highmount Ski Center still remains as part of the Full Build-out Alternative. The Highmount Alternative proposes the acquisition of approximately 99 acres and the expansion of the BMSC through the re-development of certain ski trails located at the site of the former Highmount Ski Center.

Summary of the Department's Findings - Potential Impacts and Discussion and Findings

A. Land Use and Community Character

Potential impacts

Potential land use impacts associated with the construction of the Full Build-out Alternative include impacts from tree clearing; impacts on water resources, and impacts on the adjoining Forest Preserve Lands. In addition, construction projects could have an impact on the character of the existing Ski Center.

The Project's consistency with community character and current/future land use were considered in the UMP-FEIS with regard to the Comprehensive Plan for the Town of Shandaken, the Town of Middletown Draft Comprehensive Plan², the Village of Fleischmanns Comprehensive Plan, the Village of Margaretville Comprehensive Land Use and Action Plan, the Ulster County Open Space Plan and Ulster Tomorrow, a Sustainable Economic Development Plan for Ulster County, the New York City Watershed Memorandum of Agreement, the Route 28 Corridor Study, the Resource Protection and Economic Development Strategy Planning and Tourism Study, and the CPSLMP.

Discussion and Findings

The CPSLMP classifies the Ski Center as an Intensive Use Area. An Intensive Use Area is an area of State land where the Department may offer a variety of outdoor recreational activities and "may develop recreational activities that will accommodate relatively high densities of visitors while conforming in design and intensity of development with the wild character of the Forest Preserve."³ The proposed Ski Center facilities have been designed to be consistent with the character of the existing Ski Center and the Department will incorporate architectural designs that will blend with the character of the recreation area and surrounding forest. In addition, the proposed projects will stay within the constitutional interpretation limits for removal of vegetation.

To construct the proposed Ski Center facilities under the Full Build-out Alternative, there will be removal of forest cover. Specifically, approximately 100.8 acres (96.1 on the Belleayre property and 4.7 in the Highmount property) would occur during construction for the Ski Center, which would represent 5% of forest of the 1,884.6 total acres of forest at the BMSC. Accordingly, the Department anticipates that there will be minimal impacts to the neighboring wild forest setting of the Forest Preserve. Mitigation measures, as discussed in more detail in the sections below, include siting facilities, to the extent practicable, within previously disturbed areas (i.e., many of the new ski trails and chairlifts would be built in previously disturbed areas by reverting ski slopes in the Highmount Ski Area). In accordance with Department policy, the wood from the cleared areas would be milled and used, to the extent practicable, for rustic style on-site improvements such as terracing retaining walls, cribbing, stream bridging, fencing, signs, benches, picnic tables, or in other state Forest Preserve facilities. Wood from cleared areas will not be sold to private buyers.

² The Town of Middletown Comprehensive Plan was adopted on December 13, 2011.

³ CPSLMP Section IV.E.

ORDA will also implement additional mitigation measures such as selecting architectural designs to achieve a harmonious blending with the character of the recreation area and the surrounding forest; siting facilities (i.e., ski trails, chairlifts, parking lots) in previously disturbed areas where practical; implementing best management practices for the control of invasive species; minimizing tree cutting through careful on-site design of ski trails and trimming branches in lieu of tree cutting where possible; restoring unused roads or ski trails; erecting signs and interpretative material to educate the public about the forest preserve and areas of sensitive vegetation; minimizing clearing in order to mitigate impacts to wetlands, streams, vegetation, wildlife, and wildlife habitat; and seeding and mulching of construction sites after tree removal in order to readily re-establish vegetation and mitigate impacts to water resources. A 50 foot vegetative buffer would be established around all streams within the natural resources study area in order to avoid run-off from construction and post-construction activities. Impacted areas adjacent to wetlands would be returned to pre-construction contours and re-vegetated after construction is finished. Impacts on water resources would be mitigated through proper implementation of a well-designed SWPPP.

The Full Build-out Alternative would increase the scale of the existing Ski Center but it would remain consistent with the character of the region which has been centered on tourism and outdoor recreation. In general, the local municipal land use plans focus on providing natural resource protection, recreational opportunities and strengthen tourism and economies in the communities. The Full Build-out Alternative is consistent with the goals of the local land use plans. The expansion and renovation of the Ski Center will provide more recreational opportunities and attract a larger number of tourists each year. The Full Build-out Alternative has also been designed to avoid impacts to water quality and the Forest Preserve in order to meet the goals of the New York City Watershed Memorandum of agreement and comply with the CPSLMP, respectively.

B. Geologic and Topographic Resources

1. Geologic Resources

Potential impacts

Based on the Department's review of data and on-site observations, large stones and boulders can be expected to be encountered at depth in 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. The East Parking Lot Area shows no indication of limitations due to stones or bedrock. The Ski-Over Bridge Area contains large boulders and exposed bedrock that will affect access and construction activities. However, filling is proposed in this area with little or no excavation planned. As a result, implementing the Full Build-out Alternative will require grading and potentially rock blasting during construction. Potential impacts from blasting may include startling nearby residents, property damage, effects on groundwater quality or quantity, and pollution from blasting related noise, dust and gas.

Discussion and Findings

The proposed work under the Full Build-out Alternative includes grading in several areas including the proposed parking lots, Discovery Lodge Area, Ski Lift Terminals, Snowmaking/Stormwater Pond, and the Highmount Connector Trail. A Grading Master Plan has been developed for this activity. In addition, rock blasting may be necessary during the

construction. If, as excavation proceeds and bedrock or large boulders are encountered, it is determined that blasting is necessary, the project manager, blaster, and driller will determine what specific areas are to be blasted. In consultation with the blaster, the driller will lay out the locations, depths, and spacing of the holes to be drilled. The blaster will be responsible for the loading, detonation, and safety of the blast. A properly calibrated seismograph will be used to monitor all blasts to ensure compliance with the United States Bureau of Mines guidelines.

Blasting impacts can be mitigated through proper blast design, best management practices and communication between the project representative and the community. If blasting is necessary, ORDA will require a written blasting plan that contains specific information about the blasting operations. The blaster will also be required to maintain records of each blast, have the necessary qualifications, and follow proper blasting protocol and design blasts to minimize ground vibrations, air blasts, dust and gas emissions and flyrock. The UMP-FEIS also contains a map of the location of nearby water wells. Due to the distance from the project, it is not anticipated that the wells will be impacted by potential blasting.

2. *Topographic Resources*

Potential impacts

Potential impacts may include impacts to soil resources and water resources due to soil disturbance and/or erosion especially in the disturbance of areas of steep slopes during construction.

Discussion and Findings

The majority of the intense development areas under the Full Build-out Alternative are located on nearly flat to moderately sloping land. Given that the site soils are susceptible to erosion, efforts were made to minimize the area of disturbance, especially in areas of steep slopes. In the areas where disturbance will occur on steep slopes, an appropriate erosion control method will be used that would include mulching with woodchips, seeding and sodding, erosion control blankets, silt fencing, and/or construction of berms. In addition, water will be diverted away from disturbed areas. Identified issues associated with Stormwater Management and Erosion and Sediment Control are addressed in the SWPPP, and ORDA must comply with the SWPPP, which is a SPDES Permit condition.

ORDA will also require enhanced erosion control measures in the form of phasing, maintaining vegetated buffers, sediment basins, temporary stabilization, and comprehensive stabilization planning. Specifically, silt fencing and construction fencing will be used to physically define the limit of work and will be installed prior to any major soil disturbance. Silt fences will not be relied upon as a sole method of controlling erosion. Silt fencing will be checked for depth of sediment, tears, and to ensure posts are stable; construction will occur in multiple phases to minimize the amount of actively disturbed and destabilized soil at any given time. The smaller areas of construction will provide for a rapid soil stabilization and placement of sediment controls. Work shall not begin in a new area until the current area is stabilized; bare soil will be protected from wind or water erosion using protective mulch or establishing quick-growing temporary grass cover or permanent vegetation cover; all soil stock piles not actively in use will be seeded, mulched, or covered and protected in some fashion and surrounded with silt fence. Soil piles will not be located within 50 feet of a stream, ditch or steep slope; diversions or berms will be created to intercept runoff that would otherwise run across exposed soil. Care will be taken to divert water to areas where the water can adequately infiltrate; to control wind erosion, bare soil will be covered

with vegetation or securely anchored mulch. Water will be used to temporarily keep bare soil moist for wind erosion control, if necessary; and all erosion control measures will be checked daily and repairs made, if necessary.

The Department has also designed the project to minimize the need for importation of fill from off site as a result of the grading design through iterations so that the volume of embankment cut and fill nearly balance. The only materials planned to be imported from off-site are the surface finishing materials (i.e., gravel, asphalt concrete pavement) that are not available on site. Importing of fill material will also meet any Department requirements for the control of invasive species.

C. Surface Waters including Aquatic Habitat

1. Surface Waters

Potential impacts

Potential impacts include impacts to surface and subsurface water resources such as ponds, Pine Hill Lake, streams and wetlands on the Ski Center property. In addition, the Ski Center is located within 2 watersheds, the Middle Hudson and the East Branch Delaware River, which are both subject to the New York City Watershed Rules and Regulations, governing activities such as sewer collection, stormwater discharges, and impervious surfaces that could degrade the New York City water supply.

There are no perennial streams in the study 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 drains in turn to Vly Creek, then to Bush Kill, and finally into the East Branch of the Delaware River. Other perennial streams that were identified during surveys within the Project Area range from well-defined stream channels to poorly defined headwater channels. These unnamed streams drain to the north into Crystal Spring Brook, which flows eastward and discharges to Birch Creek in Pine Hill. Crystal Spring Brook, a perennial stream, is the only classified B(T) stream delineated within the Ski Center Project Site. This stream runs northeast and then southeast into Birch Creek, which is a B(TS) classified stream. Crystal Spring Brook has many unnamed tributaries that flow from the slopes of Belleayre Mountain. Two of the tributaries, Cathedral Glen Brook and Woodchuck Hollow Brook, are categorized as Class C by NYSDEC and cross only a small portion of the survey corridor, which is over the railroad tracks that lead to Pine Hill Lake. Those waters designated as Class C are waters supporting fisheries and are suitable for non-contact activities. These two streams contain trout species; however, they have not been classified as (T) or (TS).

Wetlands on the Project Site total approximately 3.606 acres, of which approximately 3.558 acres are under the jurisdiction of the USACE, 0.008 acres are isolated, and none are under the jurisdiction of NYSDEC. Approximately 0.41 acres of identified wetlands located in the Highmount Ski Area were delineated.

Pine Hill Lake is used for snowmaking during the winter months and incidental recreational purposes during the summer months. There are also 2 other waterbodies at the Ski Center that serve as reservoirs for snowmaking. All of these waterbodies are classified as National Wetland Inventory (NWI) freshwater wetlands.

Potential impacts from construction and operation on waterbodies and aquatic ecological communities (streams, wetlands and reservoirs) found in the study area may include siltation, increased turbidity, decreased levels of dissolved oxygen, increased warming, drainage from ski slopes and pollution from runoff material from roads, parking lots, and tree clearing. During the winter months, runoff from roads and parking lots and ski trail maintenance could increase the salinity and pH of the waterbodies within the project site. Construction activities could cause pollutants to enter the waterbodies in the project area from increased sediment-loading of storm water runoff. All of the streams within the project area may be used to some extent by wildlife as a source of drinking water. These watercourses also provide habitat for macroinvertebrates and amphibians, reptiles and fish that may use surface water when streams are flowing.

Discussion and Findings

The Full Build-out Alternative may result in temporary impacts to wetlands, particularly in the area of the proposed Highmount Ski trails. The replacement of an existing, dilapidated lift base is proposed as part of the Highmount Ski trail construction and the majority of the wetland disturbance that is anticipated would be the result of slope grading and vegetation clearing. It is estimated that a maximum of 0.148 acres of wetlands would be disturbed during construction. Of the 0.148 acres, 0.009 acres would entail a temporary impact for brush-clearing and mowing for ski trails that would not entail dredging or filling in jurisdictional wetlands. Disturbed wetlands will be restored to pre-construction conditions through appropriate selection of vegetation without permanent impacts. In addition, approximately 0.139 acres of wetland would be permanently impacted during construction because of necessary re-grading for the proposed Highmount Ski Lift. The 0.139 acres of permanent impacts associated with the proposed construction at the Highmount Ski Area would fall under the Nationwide Permit 42, as regulated by USACE. Mitigation is required if permanent impacts to federal wetlands exceed 0.1 acres. In order to mitigate these permanent impacts to wetlands, a 0.219 acre wetland mitigation area is proposed as part of the project.

Since the bulk of the runoff from the Belleayre Mountain ski slopes drains into Crystal Spring Brook and subsequently to Birch Creek, biological (macroinvertebrate sampling) and physical (flow and temperature) monitoring is proposed to determine if the construction and operations of the new proposed facilities will have any significant impacts on the water flow and water quality in these small streams. The proposed stream monitoring is intended to observe changes in flow, temperature, and water quality. It is anticipated that the proposed construction will not have any statistically significant impacts on flow, temperature, or macro invertebrate distributions. If any impacts are detected, a meeting will be convened with NYSDEC natural resources specialists to discuss mitigating any impacts and restoring any damages.

2. *Snowmaking Water Supply*

Potential impacts

The Full Build-out Alternative proposes improvements to the snowmaking water supply system that may have an impact on surface waters and aquatic habitats. The volume of water to be used for snowmaking during a typical year will increase by 34%. The plans call for an increase in the volume of withdrawal of surface water from the existing Pine Hill Lake and include the construction of a new storage reservoir at the base of Belleayre Mountain Ski Center. In addition, the proposed expansion of the trail system at the Ski Center will result in an increased demand for

water over the course of a typical ski season, specifically 52 million gallons (MG) additional water withdrawal per ski season or a total of 207 MG. The primary concern in the Ashokan watershed is potential impacts from diverting stream flows of Birch Creek and Crystal Spring Brook during snowmaking operations that occur in late November through February. The primary concern in the Pepacton watershed will be the potential impact to watercourses tributary to the Highmount Ski Area due to runoff from snowmelt.

Discussion and Findings

Maintaining a minimum base flow in streams where water can be diverted into an off-line storage reservoir is critical to avoid having a negative impact on the stream habitat. The management objective of the snowmaking system is to first maintain the pass-by flows necessary for Birch Creek at the Pine Hill Lake withdrawal, and for Crystal Spring Brook at the proposed Lower Reservoir withdrawal. Withdrawals from the streams into the reservoirs are allowed for flows in excess of these minimum stream flow needs. A 35 MG snowmaking reservoir is proposed near the new Maintenance Center to provide additional storage volume, pumping capacity, and energy efficiency. The seasonal timing and the rates of water release from snowmaking reservoirs can potentially impact the receiving water course.

Efforts to mitigate thermal impacts to Birch Creek from Pine Hill Lake, Crystal Spring Brook from the proposed Lower Reservoir and the existing Cathedral Glen Reservoir are as follows: dam safety regulations require that the reservoir have the ability to be drained within 14 days in an emergency situation. The 25 MG Pine Hill Lake would require a discharge rate of 2.8 CFS. The 35 MG proposed snowmaking reservoir would require a discharge rate of 3.9 CFS. The peak flows observed in Crystal Spring Brook have been observed to be up to 12 CFS. The Crystal Spring Brook average flow is 0.8 CFS based on the available data from the Crystal Spring Brook data station. A discharge flow of 3 to 4 CFS is significantly less than observed peak flows. Under normal circumstances however, if a maintenance drawdown of the reservoirs is required, the maximum drawdown rate should be limited to 2-3 CFS to minimize any potential thermal impacts to the downstream environment; continue to minimize the amount of water diverted to the snow making reservoirs during the summer months. Water will be diverted only as needed to maintain the reservoir water quality, while ensuring that the water quality standards within Birch Creek are not compromised; water quality of Birch Creek and Crystal Spring Brook will be monitored; cold water outlets that drain colder water from the bottom of the reservoirs when no surface ice is present will be installed in both Pine Hill Lake and the proposed Lower Snowmaking Reservoir; aeration systems will be installed in both the Pine Hill and new Lower Reservoir; the existing Cathedral Glen Reservoir should be investigated for thermal stratification during the summer months to determine if the installation of a cold water outlet from this impoundment would improve downstream habitat.

Diversion of Water from the Ashokan Watershed to the Pepacton Watershed

Fifty two +/- acres of ski trails are proposed at the west side of the Ski Center (lands of the former Highmount Ski Area) within the Pepacton watershed. Using a conservative value of 1MG of water usage per acre per year for snowmaking, 52 MG of water will be diverted from the Ashokan to the Pepacton watershed annually.

Ashokan Watershed Snowmaking Impacts

The primary concern in the Ashokan watershed is potential impacts from diverting stream flows of Birch Creek and Crystal Spring Brook during snowmaking operations that occur in late

November through February. To protect the aquatic resources within these streams, a pass-by flow, as defined by the NYSDEC Division of Fish Wildlife and Marine Resources, will be maintained at the withdrawal points during this timeframe. Other seasonal pass-by flows may be required to protect the aquatic resources, should water be withdrawn for purposes other than snowmaking, as is presently the case at Pine Hill Lake.

Pepacton Watershed Snowmaking Impacts

The impact of transferring 52 MG of water to the Pepacton watershed would typically not be realized until the spring season when the snowpack melts. The primary concern in the Pepacton watershed will be the potential impact to watercourses tributary to the Highmount Ski Area due to runoff from snowmelt. However, based on historical observations, manmade snowmelt at the Ski Center typically occurs uniformly over a period of approximately two months. A sixty day snow melt period is assumed based on historic observations. There are approximately 21 acres of trails that could have manmade snow within the subcatchment. The average rate of runoff from 21 million gallons (21 acres x 1mg/acre) of water over a sixty day period yields 0.5 CFS. The sixty day average manmade snow melt rate of 0.5 CFS is less than 1% of the 52 CFS for the one year rain event. Accordingly, the two existing downstream culverts (1.5A, & 1.5B) which pass under County Route 49A, or the downstream drainage channels would not be negatively impacted due to the 0.5 CFS increase in base flow over the 60 day period of snowmelt.

3. *Stream Crossings*

Potential Impacts

Three proposed stream crossings for skiers are included in the Full Build-out Alternative plans, utility lines would cross streams, and an improved stream crossing for an existing culvert pipe located on the maintenance garage access is also proposed.

Discussion and Findings

The proposed stream crossings will use bridges to completely span the stream bed and channel avoiding any narrowing of the streambed itself. Construction will require work in and adjacent to the streambed creating the potential for releasing sediment into the stream. Crossings for utilities involve hand clearing of brush, installation of pipes or buried cable, and restoration of existing conditions with no permanent impacts. In order to minimize impacts to the streams, work will be conducted using best management practices, including scheduling work during the dry season to minimize potential impacts. In addition, the SWPPP also includes erosion and sediment control measures for use during construction to further mitigate potential impacts.

4. *Stormwater Discharge from Developed Areas*

Potential Impacts

The potential impacts from stormwater discharge include water quantity, quality and thermal impacts.

Discussion and Findings

Stormwater management systems were designed for Intensive Development Areas (“IDAs”) so that there is no increase in the peak flow at the design discharge points when comparing pre to post development conditions for design storm events. Storage based peak attenuation methods are generally proposed and the Upper Discovery Parking Area and Discovery Lodge will use infiltration to also reduce the overall volume of flows. The runoff from proposed parking lot and other

impervious areas created will be treated using stormwater quality treatment systems before entering the streams.

The stormwater designs for the project will also be updated to meet current standards as follows: the Upper Discovery Parking Area and Discovery Lodge Reconstruction stormwater system designs were updated to incorporate the 2010 stormwater standards. In addition, the stormwater management system for the Upper Discover Parking Area uses Porous Asphalt Pavement, Dry Swales and a Surface Sand Filter for stormwater quality treatment. Other IDAs will have their stormwater management system designs remain compliant with the 2008 standards for purposes of the UMP-FEIS, and will be updated to meet the current standards at the time of construction. Finally, as set forth in Appendix D, the November 17, 2014 letter from the Watershed Inspector General to the Department's Assistant Commissioner for the Office of Hearings and Mediation Services, the Department has agreed, in cooperation with ORDA, to incorporate comments from the Watershed Inspector General into revised Construction Stormwater Pollution Prevention Plans for each project to be implemented within the Ski Center. In addition, subsequent to approval of the Unit Management Plan but prior to commencement of construction of each project, the Department or ORDA shall make the revised Construction Stormwater Pollution Prevention Plans available to the Watershed Inspector General Office for its review and comment for a 60 day period for that project for purposes of agency consultation only.

Finally, specific design features will help to mitigate potential thermal impacts: narrow linear (elongated) parking terraces will allow shading from forested areas retained and planted between the terraces; no stormwater ponds or stormwater wetlands, both of which can have permanent pools, are proposed for stormwater quality treatment; stormwater management systems were chosen that promote underground treatment and infiltration of stormwater runoff. DSWs (Dry Swales), SSFs (Surface Sand Filters), BRFs (Bioretention Filters), allow water to move underground from the surface; Twelve-hour extended detention times, associated with trout waters, were also used for extended detention of the channel protection volume (CPv), in order to reduce any potential thermal impacts to the stream at the discharge points; Upper Discovery Area Porous Asphalt pavement will promote rapid infiltration of runoff from the parking surfaces to deep underground storage areas, reducing any thermal impacts; and the North and East parking area terraces use light colored stone surfaces, which have less thermal impact than conventional asphalt pavement.

These measures collectively will mitigate any potential stormwater impacts from the project.

D. Groundwater Resources

1. Diversion of Surface Water

Potential impacts

Potential impacts on groundwater resources include additional water needed for snowmaking and potential effects on the public water supply.

Discussion and Findings

Only surface water is used for snowmaking, no water is drawn from the aquifer for snowmaking. Accordingly, there will be no impact to groundwater resources as a result of snowmaking.

There is a public water supply system for Pine Hill that is below the Cathedral Glen reservoir but well above the Birch Creek Diversion Structure. The Water Control Structure in Birch Creek is 255 feet lower in elevation than the Pine Hill Water Supply, so any water removed from Birch Creek for snowmaking should have no effect on the Pine Hill Public Water System. The Cathedral Glen Reservoir has been in operation for approximately 30 years, with no documented effect on the quantity of water for Pine Hill. The Belleayre Mountain Ski Center potable water supply and distribution systems were upgraded in 2004, and consist of three drilled wells located on the lower mountain at approximate elevation of 1900. The wells are located up-gradient in the watershed from the Pine Hill Diversion Structure in Birch Creek approximately 475 feet in elevation higher, and several thousand feet away horizontally. Therefore, withdrawal of snowmaking water from Birch Creek should have no effect on Belleayre's potable water supply.

2. *Blasting*

Potential impacts from blasting and mitigation and findings were discussed in Section B.1., above.

3. *Potable Water Supply*

Potential Impacts

The Department proposes to discontinue the use of one of the BMSC wells (Well 3); to operate the system entirely on Wells 1, 2, and 4; to abandon the existing Summit Well (Sunset Lodge); and to install a booster pump at the upper 50,000 gallon reservoir to pump potable water to the Summit (Sunset Lodge). The UMP-FEIS analyzed whether these wells could support water supply for the expanded facility.

Discussion and Findings

The proposed expansion of the BMSC facilities under the Full Build-out Alternative will require an increased maximum daily water demand of approximately 60,000 gpd. Currently Well 1 yields 18 gpm, Well 2 yields 60 gpm, and Well 4 yields 24 gpm. At the desired pumping rate of 67% of well yield capacity, the maximum daily capacity of the existing well sources is $0.67 \times (18 + 60 + 24) \times 1440 = 146,880$ gpd. This indicates that the existing supply capacity is well in excess of the projected maximum daily demand of 60,000 gpd. Therefore, there will be no significant impact on the groundwater resources from the increased potable water demand from the expanded facility.

E. Terrestrial and Aquatic Ecology

1. *Wetlands and Streams*

Potential impacts

Wetlands: Potential impacts to freshwater wetlands include both temporary and permanent impacts to wetlands regulated by USACE. There are no freshwater wetlands on the site under the jurisdiction of DEC.

Streams: Potential impacts to streams and aquatic species include construction of the three stream crossings required for ski trails; impacts resulting from a flow diversion structure in Crystal Stream Brook; discharge of pollutants into streams as a result of construction activity and hydrologic impacts as a result of increased snowmaking. As a New York State public authority, ORDA is not subject to

Article 15 permitting for protection of waters and dam safety. However, the project has been designed and reviewed to meet Article 15 permit issuance standards.

Discussion and Findings

Wetlands: The Department estimates that a maximum of 0.148 acres of wetlands would be disturbed during construction. Of the 0.148 acres, 0.009 acres would entail a temporary impact for brush-clearing and mowing for ski trails that would not entail dredging or filling in jurisdictional wetlands. It is anticipated that the disturbed wetlands identified above would be restored to pre-construction conditions through appropriate selection of vegetation. In addition, approximately 0.139 acres of wetland would be permanently impacted during construction because of necessary re-grading for the proposed Highmount Ski Lift. The 0.139 acres of permanent impacts associated with the proposed construction at the Highmount Ski Area would fall under the Nationwide Permit 42, as regulated by USACE. In order to mitigate project impacts to wetlands, a 0.219 acre wetland mitigation area is proposed as part of the project.

During operation of the facility, maintaining the ski trails would result in minimal impacts on wetlands. Emergent wetlands currently are located on and adjacent to ski slopes but these slopes remain as emergent wetlands because they are mowed and cleared of vegetation during peak recreational months.

Streams: Three stream crossings are required for ski trails, and add to a potential impact of up to 75 feet of stream reach and will result in a *de minimis* impact. Accordingly, no mitigation is proposed. Stream monitoring at five locations for aquatic species would occur pre-construction and during construction in order to monitor changes in flow, temperature, and water quality.

A diversion structure, to be located downstream from the proposed pond behind the maintenance building, would be constructed to measure the available water for snowmaking in Crystal Spring Brook. Impacts from the monitoring station would be minimal because the construction would be timed to coincide with normally dry periods when there is no flow. Best management practices would be utilized to avoid runoff of sediments and solids, and the streambank area would be restored and planted with native vegetation thereby minimizing potential adverse environmental impacts. Continuous flow monitoring to determine water quality would be conducted during construction.

Construction activities could cause pollutants to enter the streams from increased sediment-loading of storm water runoff. Except for the flow diversion structure on Crystal Spring Brook, all disturbances would avoid a 50-foot vegetative buffer zone around water courses. The implementation of a SWPPP would mitigate the potential impacts. *See* discussion on “Snowmaking Water Supply”.

Operation of the facility will require more snowmaking for the proposed new ski trails. However, increased snowmaking would not significantly alter the hydrology and surficial geology because the Stormwater Management Systems were designed for the IDAs so that there is no increase in peak flow at the design discharge points.

2. *Vegetation*

Potential Impacts

Construction Activities: Primary impacts would include clearing forest and herbaceous vegetation during construction activities. Approximately 100.8 acres (96.1 on the Belleayre property and 4.7 in

the Highmount property) of the natural resources study area or 5% of forest out of 1,884.6 total acres of forest would be cleared to construct project facilities and approximately 19.9 acres of reclaimed land on the Highmount property would be cleared to build new ski slopes. Field surveys indicate that the largest percentage of forested vegetation impacted by the project would be within the successional northern hardwood community. Other forest communities that may be affected include red maple hardwood swamp and shallow emergent marsh. The reclaimed areas, which were ski slopes about 15 years ago, are located in the Highmount Ski area, and are now early successional forests.

Secondary impacts may include increased soil erosion and a decrease in the available habitat for wildlife resulting from vegetation clearing and grading. Soil erosion could be problematic on the ski and mountain slopes. There are no state-listed threatened or endangered vegetation or plant communities in the natural resources study area for this project, which was determined through consultation with the New York Natural Heritage Program and a field investigation. Therefore, no impacts on threatened and endangered plant species are expected as a result of construction of the project.

Facility Operation: Maintenance of the BMSC project facilities would result in primary impacts on upland vegetation at some locations. Vegetation, primarily within the successional northern hardwood cover type, would be permanently removed in areas where the Discovery Lodge would be expanded; the proposed new ski lifts, ski trails, and parking lots would be built; existing trail maintenance would increase and at the base of the BMSC, behind the new maintenance building where the new pond would be built. The remainder of the areas temporarily cleared during construction would be allowed to undergo natural succession, although it will be subject to periodic removal of woody vegetation so that an herbaceous and scrub-shrub state is maintained, especially in the recreational areas.

Discussion and Findings

Construction Activities: Clearing activities would occur in conjunction with the construction of ski lifts, ski trails, parking lots, the new Tomahawk lodge, and the expansion of the Discovery Lodge. All of these project facilities are located along the slopes of Belleayre Mountain, which are primarily located in previously disturbed areas. For example, many of the new ski trails and chairlifts would be built in disturbed areas such as the ski slopes in the former Highmount Ski Area. Undisturbed forest in the BMSC and Highmount Ski areas would be cleared for some new ski trails and chair lifts and the expansion of the Discovery Lodge. Parking lots would be built in both undisturbed and disturbed areas of the BMSC. Thus the overall impact of the project on vegetation is anticipated to be minimal because of careful site planning and the amount of disturbance already present. Any impacts will be mitigated with the proper implementation of a well-designed SWPPP, including seeding and mulching of construction sites after tree removal in order to readily re-establish vegetation. Other measures to mitigate the potential impact on vegetation include BMPs for the control of invasive species, minimal tree-cutting through careful on-site design of ski trails, trimming of branches in lieu of tree-cutting where possible, restoration of unused roads or ski trails, and signs and interpretive material educating the public about the forest preserve and areas of sensitive vegetation. These measures would minimize or avoid impacts to vegetation.

Facility Operation: BMSC does not expect to use herbicides or pesticides to control vegetation or pests. If there is a need for herbicides or pesticides, then ORDA will comply with applicable laws and best practices standards. The project facilities would be improved and updated in order to accommodate present peak-use periods and the carrying capacity of the facility. Impacts on biological

resources would be further minimized through implementation of BMPs to stabilize the ground surface and allow for successful revegetation following construction of the project.

3. *Wildlife*

Potential Impacts

Construction activities could result in minor and accidental wildlife mortality as a result of increased traffic following the proposed expansion. Potential impacts from construction may affect brook trout. Some limited mortality of less mobile species (e.g., rodents) may occur during the course of construction. Indirect impacts on wildlife would also occur as a result of habitat alteration and some permanent habitat loss associated with the construction of the project (e.g., tree clearing).

Operation of the project facilities is not expected to result in significant impacts on most wildlife species, including migratory and breeding bird populations and bat populations. The new project facilities are similar to existing project facilities and would therefore not significantly change the operation of the BMSC. Facility operation is likely to result in minimal loss of wildlife habitat because many of the project facilities would be constructed in areas that are already disturbed.

Consultation with the New York Natural Heritage Program and the United States Fish and Wildlife Service and field investigations indicate no threatened or endangered animal species or communities have been identified in the natural resources study area. Thus, no impacts on threatened and endangered wildlife are expected as a result of construction of the project.

Discussion and Findings

The overall impact of the project on wildlife species is anticipated to be minimal because of careful site design, and construction of many project facilities in areas that are already disturbed. Adverse impacts on wildlife species at a population level are not expected as a result of construction. Wildlife species present in the natural resources study area are widely distributed. Therefore, direct mortality to some individuals during the construction process would not result in an adverse impact to wildlife populations throughout the natural resources study area. However, additional minor and accidental wildlife mortality may occur as a result of increased traffic following the proposed expansion. However, it is not likely that expansion of the BMSC would have any adverse effect on the local bear or deer populations.

Mitigation measures may include creation of mitigation wetlands, conservation of wildlife corridors, and protection of habitats during the operational phase. To mitigate impacts to brook trout, a 50 foot vegetative buffer along both sides of all streams within the natural resources study area would minimize the transport of contaminants to the streams during construction. Best management practices would be required of the contractors to control any potential discharges. These measures would further minimize the threat of pollutants to the streams, and consequently impacts to wildlife. To mitigate impacts to other wildlife, vegetative buffer zones around streams and wetlands would be implemented before construction, and plans to re-vegetate impacted areas would be carried out after construction to minimize any potentially adverse impacts.

Tree clearing could disrupt wildlife travel corridors for species such as deer and bear. However, the new ski slopes are nearby and parallel to existing trails, so no currently established wildlife corridors are in these areas. Tree clearing would also increase fragmentation and the edge effect of the landscape in the natural resources study area, increasing habitat for wildlife such as deer and raccoons

and decreasing habitat for bears and forest nesting birds. Fragmentation allows for more parasites and predators to invade nesting bird habitat. Breeding bird populations, however, are not expected to be affected significantly by construction of the project. If construction begins before the breeding season, it is anticipated that breeding birds would likely avoid areas during the active construction phase. If construction begins during breeding season, breeding birds would either be accustomed to disruption of this nature or they would relocate to other adjacent suitable habitat. Indirect impacts on breeding birds would be minimal and involve some habitat alteration in association with the construction of parking lots, the Tomahawk Lodge, ski lifts, and ski slopes, and the expansion of Discovery Lodge; however, these impacts are not expected to be significant because of similar disturbances in the natural resources study area.

Adverse impacts on listed bat populations should not occur during the construction phase. Some potential indirect impacts on bats may occur as a result of habitat alteration or loss due to construction activities; however, these potential impacts are not expected to have adverse impacts on bat populations. Additionally, the listing of the Northern Long Eared bat does not change the UMP-FEIS conclusions.

Operation of the expanded facility could create a potential for nuisance wildlife issues to arise, including black bears feeding on garbage and Canada geese occasionally found nesting in shrubbery near buildings or parking lots, demonstrating aggressive behavior toward people while defending their nesting territory. In addition, high geese concentrations around shallow water areas may elevate bacterial levels. BMPs will be included for managing or avoiding conflicts between humans and wildlife that may arise from increased human/wildlife interaction. For example, mitigation measures such as locking dumpsters would prevent black bears from feeding on garbage. Vegetative buffers, which are called for in the Full Build-out Alternative, discourage visits by Canada geese.

F. Traffic

Potential Impacts

To assess potential impacts related to the Belleayre Mountain Ski Center UMP, nine intersections and five roadway segments within the vicinity of the project and along the NY Route 28 corridor were evaluated. Conditions analyzed were for a “worst-case” condition that represents the Saturday PM peak hour when patrons are exiting Belleayre Mountain Ski Center on the Martin Luther King, Jr. holiday weekend. This is viewed as the peak weekend at the Ski Center and was analyzed to perform a conservative evaluation of the operations. For the Existing condition, all of the intersection approaches operate at a Level of Service (“LOS”) D or better except for County Route 49A approach to NY Route 28 and the Ski Center Lower Driveway and all of the roadway segments operate at LOS D or better. Analysis of traffic associated with the Ski Center UMP-FEIS for the estimated time of completion year shows that operations degrade to LOS F at many intersections. The LOS F designation is based on the delay experienced per vehicle on the stop-controlled approach. However, some of these intersections still operate with acceptable volume to capacity ratios, indicating that there is reserve capacity, and as noted above, these operations reflect the peak season conditions during the peak hour of the day, which is a worst case design scenario. Delay during off-season and off-peak times of the day would be much less.

Discussion and findings

A sensitivity analysis of the site generated traffic was completed to test the operations if the ten highest attendance days of the year were disregarded. Based on this analysis and a sensitivity analysis of a

reduced attendance condition that will serve most of the operating days, it was determined that traffic would be within the available capacity of the studied intersections. The analysis concluded that the only mitigation measure necessary for the Full Build-out Alternative is the installation of a right-turn lane to be installed on the northbound approach of County Route 49A to NY Route 28. This will bring operations at this intersection to the same level as the No-Build alternative or what is currently experienced. The other intersections along the NY Route 28 corridor are estimated to operate with reserve capacity.

In addition, other mitigation measures include implementing event management strategies to help control and direct traffic during the peak traffic hour. For example, 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; staggering the closing times of different ski lifts rather than closing them all at the same time would spread the departures over a longer period of time; keeping other facilities open in the Discovery and Overlook Lodges so that patrons are encouraged to stay at the facility longer after the lifts are closed in order to spread the load of departures to other times of the day; providing variable message signs at key locations in the corridor could also communicate to drivers on heavy ski days that traffic delays may be experienced.

A site distance evaluation was also conducted for the existing and proposed driveway access point to the Ski Center. It was determined that the stopping sight distance along County Route 49A and Van Loan Road is sufficient based at each driveway location for vehicles approaching the driveways from the major roadway. Some of the sight distance measurements for movements turning into or out of the site driveways were less than the recommended criteria. For these locations, clearing of vegetation and driveway warning signs on County Route 49A are recommended. It is noted that there is currently no posted speed limit on County Route 49A. Based on collected operating speeds on the roadway, it is recommended that it be posted for a 40 mph speed limit. The following measures are recommended to mitigate the sight distance limitations: Lower Driveway: clear trees and vegetation on south side of County Route 49A east of intersection; Discovery Lodge: install intersection warning sign for eastbound traffic on County Route 49A in advance of driveway; Overlook Road: clear trees and vegetation on south side of County Route 49A east of intersection and install intersection warning signs in both directions on County Route 49A in advance of driveway; Upper Discovery: install intersection warning sign for eastbound traffic on County Route 49A in advance of driveway; North Lot: install intersection warning sign for westbound traffic on County Route 49A in advance of driveway.

G. Visual Resources

Potential impacts

The Full Build-out Alternative proposes the creation of new ski slopes to the west of the existing slopes, with three new chair lifts and two replacement chair lifts, expansion of Discovery and Sunset Lodges, a new snowmaking supply pond, new parking lots, and improvement of snowmaking systems. These additions and improvements will require clearing 100.8 acres of forest, of which 56.6 acres will be cleared for new ski slopes and lifts. In addition, potential impacts examined include visibility at night and the issues of nighttime “sky glow” and direct glare.

An evaluation of the potential impacts to visual resources of the proposed expansion of the Ski Center was prepared. This analysis characterizes the visual and aesthetic resources of the area surrounding the Ski Center and the visibility and visual character of the proposed Project, identifies the individuals

and groups that may be affected by the Project, evaluates the impact of the Project on those resources and recommends mitigations if necessary. NYSDEC Guidance notes that a five-mile radius provides a “safe” visual assessment study area, but also notes that greater distances should also be considered. This assessment provides an evaluation of visibility as far as 25 miles from the Project for specific resources, particularly those identified in the Final Scoping Document, while also providing an assessment of specific resources and general visual impacts within 5 miles of the Project. An inventory of aesthetic resources was developed using a multi-step study process. Locations of visual resources as described in the NYS Visual Assessment Policy within a 25-mile radius of the Project were documented. In addition, locally significant visual resources and areas of intensive land use were also considered, and a historic structure survey was conducted to identify and document relevant historical buildings within the five-mile area. In addition to the 23 visual resources specified in the Scoping Document, over 150 resources in the counties of Delaware, Greene, and Ulster were included in the inventory and considered based on state and local significance, user groups, and visibility.

Discussion and Findings

Throughout the region, there are many locations that do not have a view of Belleayre Mountain because of topography and vegetation. Based only on topography and vegetation cover on Belleayre, 98% of the region within 25 miles of the site will not have a view, and 79% of the region within 5 miles will not have a view. Based on topography and vegetation on Belleayre only, 16 of the noted visual resources identified within 5 miles of the project area had potential views of the project. Using the maps of all aesthetic resources and the ZVI, three teams traveled throughout the area to observe visual quality of the region and visibility of Belleayre Mountain.

The analysis concludes that the changes to the Ski Center will be blocked from view by topography and vegetation from most locations in the region. As demonstrated in the simulations and line-of-sight profiles, distance, angle, and seasonal changes in vegetation will often prevent the viewers from recognizing built structures from the locations where visibility is possible. The new ski slopes, like the existing ones, will be highly visible from some locations in the winter 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 new slopes are of similar length and width, the new expansion is compatible with the existing site.

The project has been designed to mitigate visual impact and improve the aesthetic quality of Belleayre Mountain. New ski lifts were streamlined to be lower in profile than the existing ski lifts, and will be painted colors that blend into the wooded landscape. Parking lots will be terraced and tree cover will be preserved to block views of the lots. External finishes of the new buildings will also be chosen to blend into the landscape, using earth tone colors and non-reflective glass. The new ski slopes, like the existing ones, will be highly visible from some locations in the winter 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 new slopes are of similar length and width, the new expansion is compatible with the existing site. While the new slopes will be visible feature of the landscape from certain locations, the 56.6 acres of new slopes represent an increase in 35% of groomed trails at Belleayre; thus, the expansion is not excessive in scale compared with the size of the existing ski center. The new lifts and other built structures will not be visible from mountaintop viewpoints because of the distances involved. Based on the similarity of the Project’s contrast and scale to existing visual elements on the landscape, the visual presence of the Project will not have a detrimental effect on the perceived beauty of the surrounding location. 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. Access for recreational skiing and hiking will be improved as a result of the project, as the Ski Center will improve existing facilities, provide new trails, and provide for more skiers. Consequently, there will be no significant adverse impact to Visual Resources.

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

H. Air Quality

I. Construction Emission Sources

Potential Impacts

The construction activity includes some grading and clearing that will utilize diesel-powered equipment, and this non-road equipment is the largest source of proposed construction emissions. Such equipment will include bulldozers, excavators, compactors, compressors, and off-road dump trucks. Emissions were also estimated for mobile sources including on-road heavy trucks and on-road light duty vehicles, including material-delivery trucks and employee personal vehicles used for commuting to the site.

Discussion and Findings

Impacts from construction equipment and particulates from earth-moving are of short duration, localized, and not likely to impact areas outside the site. 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 include: minimizing idling of construction vehicles; using existing power sources (e.g., power poles) or clean fuel generators rather than diesel-powered generators; ensuring that all construction equipment is properly tuned and maintained prior to and during on-site operation; developing a project-specific dust control plan to control dust in accordance with best construction practices. Other specific practices include: using traffic control to restrict traffic to predetermined routes; maintaining as much natural vegetation as is practicable; phasing construction to reduce the area of land disturbed at any one time; using temporary mulching, permanent mulching, temporary vegetative cover, permanent vegetative cover, or sodding to reduce the need for dust control; using mechanical sweepers on paved surfaces where necessary to prevent dirt buildup, which can create dust; periodically moistening exposed soil surfaces with adequate water to control dust; and repeatedly applying treatments, as needed, to control dust when temporary dust control measures are used.

Deliveries of material for the Discovery Lodge and ski lift components of the project would temporarily increase truck traffic by fewer than ten deliveries per day. No potentially significant air quality impacts associated with construction traffic are anticipated.

2. Operational Emission Sources

Potential Impacts

Potential impacts may occur during both construction and operation. Projected emission sources will include vehicles (i.e., mobile sources), non-road equipment, and stationary sources associated with the project. There will be an additional source of emissions from increased snow-grooming, facility maintenance, and new space heating in the Discovery Lodge.

Discussion and Findings

Current emission sources at the Ski Center include diesel engine driven air compressors for snowmaking, diesel engine driven grooming equipment for ski trail grooming, miscellaneous gasoline engine powered equipment including on-road light vehicles, snowmobiles, and landscaping equipment, and miscellaneous diesel equipment, including tractors, light and heavy on-road vehicles, and other non-road equipment. Emissions also result from the operation of heating boilers and furnaces in buildings. The dominant source of emissions at the Ski Center is portable diesel-powered air compressors used to compress large volumes of air for snowmaking. In addition, a generator at Pine Lake is used to provide electricity to the Pine Lake Pump House for water-pumping during daytime hours.

During construction, diesel construction equipment would be on-site for short durations and would not represent a source of long-term emissions. Short-term emissions would not result in more than 50 tons per year (tpy) of all criteria pollutants. Since total annual emissions are below major source thresholds, these emissions would not have a significant adverse impact on air quality. The construction activity includes some grading and clearing that will utilize diesel-powered equipment. Emissions from construction would result from building the Discovery Lodge and several equipment buildings, clearing new trail and parking areas, adding water storage, and adding and replacing ski lifts. Construction is scheduled to take place over several years; however, equipment operation will not be continuous during the construction period. Project construction would take place over four summers, but the greatest amount of equipment use and, therefore, emissions is planned for the second year. As major source thresholds are annual, emissions were only estimated for this highest activity year. Non-road equipment is the largest source of proposed construction emissions. Equipment will include bulldozers, excavators, compactors, compressors, and off-road dump trucks. Emissions were also estimated for on-road heavy trucks and on-road light duty vehicles, including material-delivery trucks and employee personal vehicles used for commuting to the site. The worst-year construction phase emissions are estimated to be significantly lower than major source thresholds. Therefore no significant adverse impacts to air quality are expected as a result of the proposed construction activities.

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 mitigation includes minimizing idling of construction vehicles; using existing power sources (e.g., power poles) or clean fuel generators rather than diesel-powered generators; ensuring that all construction equipment is properly tuned and maintained prior to and during on-site operation; developing a project-specific dust control plan to control dust in accordance with best construction practices. Specific practices include: using traffic control to restrict traffic to predetermined routes; maintaining as much natural vegetation as is practicable; phasing construction to reduce the area of land disturbed at any one time; using temporary mulching, permanent mulching, temporary vegetative cover,

permanent vegetative cover, or sodding to reduce the need for dust control; using mechanical sweepers on paved surfaces where necessary to prevent dirt buildup, which can create dust; periodically moistening exposed soil surfaces with adequate water to control dust; repeatedly applying treatments, as needed, to control dust when temporary dust control measures are used.

During operations, projected emission sources will include vehicles, non-road equipment, and stationary sources associated with the project. Overall, the emissions will be reduced due to the proposed change from diesel compressors to electric equipment for snowmaking. There would be an additional source of emissions from increased snow-grooming, facility maintenance, and new space heating in the Discovery Lodge. The new space heating would use fuel oil and is not likely to require an air quality permit because of the proposed size. Overall consumption of diesel fuel from both mobile and stationary sources would be reduced by more than 80% at the Ski Center, resulting in a substantial reduction in emissions. Once construction is complete, emissions of all criteria pollutants will be reduced due to the removal of the large diesel air compressors. Existing air quality impacts from operations are primarily due to diesel engine powered air compression equipment. This equipment will be removed and replaced with electric motor-driven air compression equipment which will eliminate emissions from the air compression equipment. Emissions from the space heating additions are very minor. Diesel snow-grooming equipment is currently used on the trails; any new equipment used for the additional trails will produce lower emissions than the older equipment that was available, and as new equipment replaces older equipment emissions will continue to decrease. Other emission sources include the oil burning space heating to be added at the Discovery Lodge. This boiler will be sized at approximately 1,250,000 British thermal units (BTU) per hour and will generate significantly less than 50 tons per year of all criteria pollutants.

The 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. As a result of passing the screening-level test, it follows that traffic associated with the project will not cause exceedance of air quality standards. The additional traffic due to the project is expected to lower the LOS at key intersections to a LOS of D or lower during the peak hour; however, due to low emission factors for the current vehicle population and the low peak hour volume at these intersections, the project passes the volume threshold screening test. In addition, the change in the emissions of ozone precursor compounds is anticipated to be insignificant compared with regional emission levels of these compounds. Thus, regional ozone levels will not be affected by the project.

Proposed project operation phase mitigation is to remove the diesel-powered air compression system, which will greatly reduce air quality impacts relative to 2008 emissions. Additionally, the new Discovery Lodge shall be built to LEED (Leadership in Energy and Environmental Design) Silver energy efficiency requirements, which will minimize fuel combustion and resulting emissions. Mitigation measures will also be encouraged to reduce the air quality impact from staff and visitor traffic. Mitigation measures are described in Section 3.3 for Parking and Vehicle Circulation; many of the mitigation measures described would increase the number of passengers in vehicles and thereby reduce the number of vehicles travelling to Belleayre Mountain Ski Center. A reduction in the number of vehicles will result in a reduction in vehicle mobile source emissions. Key mitigation measures include preferential parking areas for high occupancy vehicles; other incentives for carpooling include increasing bus and shuttle service to the mountain and encouraging their use by providing additional and preferential spaces for buses and shuttles.

I. Global Climate Change and Carbon Footprint

Potential impacts

Climate Change: Major winter recreation areas such as the Ski Center may face operational challenges during the 21st Century if average global temperatures continue to rise.

Carbon Footprint: The Ski Center carbon footprint is the sum of all greenhouse gas (GHG) emissions and is calculated as metric tons per year CO₂e. GHG emissions from the Ski Center primarily result from fossil fuel combustion. Emissions from construction are related to equipment use, onsite vehicle use, off-site vehicle emissions (including delivery trips and employee commuting) and biomass combustion. GHG emissions from the Ski Center operations primarily result from fossil fuel combustion. Sources of direct GHG emissions at Ski Center include emissions from fossil fuel combustion conducted on-site, including space heating systems, snow making, trail grooming and maintenance equipment, and kitchen equipment. The primary fuels at the site are fuel oil, diesel, gasoline and propane.

Indirect GHG emissions are emissions that are not from Ski Center owned or leased equipment, but that are associated with ski center activity. For this analysis, emissions associated with electricity consumption, visitor travel to and from the Ski Center, employee commuting emissions, and methane emissions associated with ski center waste landfilled off-site were included in the quantitative analysis.

Finally, clearing of the ski trails and areas for other project facilities will eventually result in the conversion of trees and other woody materials to CO₂ and ash from combustion or to CO₂ or methane and soil organic matter if left to decompose naturally and therefore release of sequestered carbon and some loss of carbon storage capacity. Clearing forests in the project area would also result in less capacity to accumulate carbon annually. Total quantities of carbon in the various components of the forest were calculated by multiplying the per-acre values by the 100.8 acres of forest that will be cleared for the project. It is estimated that the net reduction in carbon storage capacity at the Ski Center due to land clearing is approximately 44,000 tons CO₂e during the construction phase, and sequestration will be reduced by approximately 29.8 tons per year during the operation phase.

Discussion and Findings

Major winter recreation areas, such as the Ski Center, may face operational challenges during the 21st Century if average global temperatures continue to rise. The primary effect of increasing global temperatures will likely be a shortening of the ski season, reduction in annual snowfall and hours with air temperatures suitable for snowmaking, and a general lessening of the snow quality as more mixed precipitation or rain falls during the winter months. However, the increase in reliance on snowmaking to maintain a reliable snowpack would help to mitigate or adapt to these potential changing conditions, as long as snowmaking capacity is sufficient to take advantage of available snowmaking hours. In addition, the existing layout of the Ski Center, i.e., the northward facing slopes, will help retain snow during warmer temperatures since sunlight on sunny days will not be as direct as it would be on south facing slopes.

The most direct GHG intensive activity is diesel engine driven air compression for snowmaking, accounting for 77% of total direct GHG. The replacement of the diesel engine air compressor station with a substantially larger electric compressor station will substantially mitigate direct GHG emissions from the expansion project. While the overall number of visitors to the Ski Center is expected to increase by 76%, the overall direct and indirect GHG emissions from the Ski Center are expected to decrease by

2%. Additional proposed mitigation measures to reduce energy consumption from snowmaking operations include the following: testing and repairing leaks in compressed air system; replacement of existing compression system with new high efficiency electric snow guns; strategic placement of the new water reservoir to take advantage of gravity and use of new higher efficiency pumps; groundwater reclamation to reroute surface water run-off directly to the upper and new reservoirs instead of allowing it to flow to Pine Hill Lake; and establishment of procedures and automation for energy use.

Indirect GHG emissions include emissions associated with electricity consumption, visitor travel to and from the Ski Center, employee commuting emissions, and methane emissions associated with ski center waste landfilled off-site were included in the quantitative analysis. The major uses for electricity at the Ski Center include water pumping and air compression for snow making. Building equipment, lighting, ski lifts and other equipment represent a relatively small amount of electricity consumption. Electricity consumption increases significantly under the expansion project because of the introduction of a new electric powered snowmaking air compressor station that replaces the existing diesel powered air compression station, and from the elimination of a diesel fueled electric generator. Electricity consumption also increases because of increased water pumping for expanded snow making, and for additional ski lifts. Motor vehicle emissions result from visitors traveling to and from the Ski Center by personal vehicles and bus. Offsite methane emissions would occur from kitchen and miscellaneous waste collected at the Ski Center that is transported and disposed of in an offsite landfill. Accordingly, indirect emissions increase due to increased electricity consumption for the new compression station, and for additional electricity used for water pumping related to snow making activities. Indirect emissions also result from additional travel related to the increased number of visitors to the Ski Center. However, the net effect of the combined changes in direct and indirect GHG emissions is estimated to be a slight reduction in total GHG emissions after completion of the proposed expansion project compared to existing conditions.

Furthermore, the incorporation of green building principles into the new construction at the Discovery Lodge will result in a number of important mitigation measures to lower energy consumption and reduce greenhouse gas emissions, including the use of energy efficient HVAC system equipment including air handling units with heat recovery and a ground source heat pump; use of 'FreeAire' Refrigeration Systems for kitchen freezers and coolers that make use of free cold outside air to maintain refrigerated spaces; design of a tight building envelope incorporating use of structural insulated panels (SIPs) and insulating concrete forms (ICFs) with addition of spray foam insulation at joints and envelope transitions to minimize heat loss; use of high-albedo roofing material; abundant use of interior daylighting from skylights and window glazing; use of windows with a high R value and good thermal breaks to optimize daylighting while minimizing heat loss and solar heat gain; use of occupancy/motion sensors on lighting and climate controls; use of water conserving fixtures including low flow lavatory fixtures with automatic sensors, low flow toilets, and waterless urinals to reduce potable water consumption; provide for storage and collection of recyclables (including, at a minimum, paper, corrugated cardboard, glass, plastic, and metals); conduct fundamental building commissioning to ensure energy performance; recycle at least 50% of construction and demolition debris; incorporate green power through the purchase of Renewable Energy Certificates (RECs); and use of refrigerants with low global warming potential (GWP) and ozone depletion potential (ODP) and minimize refrigerant leakage from HVAC and refrigeration equipment.

While the impact of the proposed project on the ability of the site to sequester carbon is minimal, and impacts will be further mitigated in a number of ways. First, clearing of forested areas will be kept to the minimum required for a successful project. Second, wood from the cleared areas will be milled and

used in buildings in the project area if feasible. It is not anticipated that the cleared areas will provide a significant amount of milled wood when considered as a proportion of the total wood standing in the areas to be cleared. Third, wood that cannot be used for solid wood products should be used as much as practicable as firewood at the ski center. Fireplaces are not efficient in converting wood to net energy, however, and thus would offset negligible amounts of fossil fuel energy. Another means of mitigating the impact on the ability of the site to sequester carbon could be to establish forest by planting trees in areas that are currently not in forest cover. Assuming those areas would otherwise remain un-forested, such action would sequester carbon over the long term in amounts greater than other types of vegetation. Afforested areas meant to mitigate release of carbon caused by the project should be protected for many decades from harvest. Transportation GHG emissions mitigation measures will be the same as for air quality emissions mitigation, which are discussed in the Air Quality Section.

J. Noise

1. Construction Noise Evaluation

Potential Impacts

Noise will result from project construction activities, during daytime hours only, approximately 10 hours per day, six days per week. Construction noise can vary during the different phases of a building construction project such as the Discovery Lodge. The phases would include site clearing, excavation, foundation work, and building erection. The Ski Center project also would generate noise during trail clearing, reservoir clearing and excavation, and parking lot clearing and paving. During the construction phase, there will be a temporary increase in construction vehicle traffic along NY 28 and County Route 49A. As a result, maximum noise impacts from construction vehicle traffic are expected to occur along County Route 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. Most of the construction traffic would occur during the first two years of construction.

In addition, construction of the project may include blasting on a limited basis for construction of utility trenches on the top ridge of the mountain. The instantaneous sound level from typical construction blasting has been documented as approximately 94 dBA at a distance of 50 feet, which is only a few decibels higher than the expected reference sound level of the project construction activities and will be reduced considerably over the distance from the trench construction to the nearest residential receptors. In comparison to other construction sound, the sound from blasting will be brief and relatively infrequent, and as discussed above, prior to any blasting, a Site-Specific Blasting Plan shall be completed by the blasting contractor.

Discussion and Findings

Although these noise impacts are temporary in nature, mitigation measures will be necessary to address the construction noise impacts at the locations identified above. The following measures shall be employed as necessary to reduce the noise levels during construction: stationary equipment such as compressors and generators will be located away from noise-sensitive receptors; construction activities will be phased such that not all of the equipment is operating simultaneously; maximum-sized intake and exhaust mufflers will be used on internal combustion engines; idling equipment will be turned off when not in use; to the extent possible, construction sites should be laid out in a manner that reduces the need for backing up construction equipment in order to reduce the noise from backup alarms; noise

reduction blankets will be installed on perimeter site fencing at some locations, as necessary this could afford a five to ten decibel reduction in noise level.

2. Operational Noise Evaluation

Potential Impacts

Potential operational noise impacts include the impact of the expanded snowmaking system and impacts from increased traffic.

Discussion and Findings

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. 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 also modeled. The results indicated an increase in traffic noise of slightly more than 3dBA, which would likely be unnoticeable. Given the absence of the potential for adverse effect as a result of operational noise, no mitigation measures are warranted.

K. Socioeconomic, Community Services and Resources

Potential impacts

A socioeconomic analysis was undertaken to ascertain the potential impacts associated with the potential increased service demand generated by the project. The analysis included a fiscal and budgetary analysis and an analysis of municipal services in the towns of Middletown and Shandaken; a demographic and economic profile of a larger socioeconomic study area that includes three towns in the Route 28 corridor between Boiceville and Margaretville-Middletown, Shandaken, and Olive; and an analysis of the regional socioeconomic impacts of the project in the tri-county area of Delaware, Ulster, and Greene counties. Data used in the analysis were the most current available at the time of the UMP-DEIS preparation. Updated labor force statistics and unemployment rate data were included in the UMP-FEIS to address specific comments provided by the public on the UMP-DEIS.

Potential impacts as a result of the expansion of the Ski Center include impacts on the economy, employment and income; population and housing; taxes and revenues; and local government expenditures.

Discussion and Findings

The proposed modernization and expansion of the Ski Center would have a positive, long-term impact on the Tri-County region. For purposes of evaluating socio-economic impacts, the Full Build-out Alternative was used to make a conservative estimate of impacts. As a result of the proposed facility improvements, the number of total daily lift tickets purchased throughout an average season is projected to more than double over the current figures and reach a total annual attendance of approximately 320,000 skiers upon completion of the Full Build-out Alternative.

Economy, Employment, and Income: Construction of the proposed project at the Ski Center is expected to stimulate the state and regional economy as a result of both construction and operation of the expanded facility, and will have a small but positive impact. Construction expenditures and employment will have both a positive direct and indirect impact on the local economy. As the new construction workers spend a portion of their payroll in the local area and construction

companies purchase materials from local suppliers, the overall demand for local goods and services will expand. While the construction and operation of the expanded Ski Center will result in additional jobs, it is not expected to have a significant impact on the local labor force. Construction of the proposed project is expected to employ an average of 12 to 16 workers, and during the operational phase of the proposed project, an estimated 32 new full-time, year-round positions and an additional 245 to 250 seasonal positions would be created at the Ski Center and its concessionaires.

Population and Housing: The proposed expansion of the Ski Center is not anticipated to have a significant impact on the population or demographic characteristics of Delaware, Ulster, and Greene counties. During construction some specialized workers may temporarily relocate to the area but given the transient nature of these jobs it is unlikely that these workers will permanently relocate to the area. The majority of the jobs that will be created by the operation of the expanded Ski Center are expected to be filled either by commuters or residents of the Delaware, Ulster, and Greene counties. Therefore, there will be no significant in-migration into the region as a result of construction or operation of this project, and no significant housing market impacts are expected as a direct result of this project. The proposed project may have some minor indirect influence on the second home market in the area as the improvements at the Ski Center will create more recreational amenities and may improve the desirability of second homes in the area and potentially a very minor effect on the price of vacation homes in the area.

Taxes and Revenues: Completion of the proposed project will have minor positive fiscal impacts on the communities surrounding the Ski Center. During the construction, local sales tax receipts will expand as the amount of economic activity in the region expands. In addition, local sales tax receipts will be positively affected during the operation of the expanded Ski Center as attendance increases, revenues from food concessions and retail activity will expand and increase sales taxes.

Local Government Expenditures: Local government expenditures are not anticipated to be impacted as result of the proposed project. There is a potential for a slight increase the number of calls for police and ambulance support due to increased attendance; however, the additional numbers of calls are not expected to be significant and require additional financial outlays from the local communities.

L. Cultural Resources

1. Cultural Resources

Potential impacts

The UMP-FEIS analyzed potential impacts to cultural resources including prehistoric archaeological resources and historic archaeological resources under the Full Build-out Alternative. An examination of historic maps in the area of the Ski Center identified that the area has a high potential for containing historic archaeological resources. Accordingly, a Phase 1A archaeological survey was conducted in order determine whether archaeological resources eligible for listing in the National Register of Historic Places (NRHP) exist in the area of potential effect. One site appeared to be eligible for listing in the NRHP, the Whispell House. There are also other areas either not eligible for listing or outside the area of potential effect but warrant mitigation measures, as further described below.

Discussion and Findings

A Phase I archaeological survey determined that most of the areas of the proposed construction have either sustained a severe prior disturbance or were unsuitable for human habitation because of the extreme slope and almost of the discovered modern/historical remains are not eligible for listing in the NRHP. Consequently, the majority of the proposed construction activities will have no effect on cultural resources. However, the survey revealed archaeological data from the early 20th century Whispell house which appeared to be NRHP eligible. In order to mitigate any impacts to this area, the Department redesigned the proposed parking lot in order to avoid this area of historic significance.

Additional mitigation includes documenting the location of two cattle barn foundations on a detailed scale drawing; maintaining a 30 foot buffer between the historic cemetery and the construction and marking that area with orange snow fencing; and surround the Springhouse Ruin #2 site with orange snow fencing during construction to prevent disturbances to these sites.

2. Visual Impacts on Cultural Resources

Potential impacts

The majority of the proposed new facilities at the Ski Center will not be visible from the National Register of Historic Places (NRHP)-listed, NRHP-eligible, or unevaluated historic structures documented above. These include the visitor's booth and parking; parking lots, water reservoir, salt storage, pumphouses; water lines, Tomahawk Lodge; and the Overlook Lodge amphitheater. Historic structures would be screened from these facilities either by terrain or by the very extensive existing vegetation at the Ski Center. Some of the historic structures would be within the visual zone of some of the proposed new ski slopes. However, ski slopes are an already existing part of the Ski Center, and the new slopes, adjacent to existing slopes, would not introduce a discordant element into the landscape.

Discussion and Findings

Given the absence of the potential for adverse effect to visual resources, no mitigation measures are warranted.

M. Catskill Forest Preserve

Potential impacts

The Ski Center is located on New York State Forest Preserve lands which have been classified as an Intensive Use Area. Adjacent Forest Preserve lands are classified as Wild Forest and Wilderness. Accordingly, the proposed project could have an impact on the Intensive Use Area and on adjacent Forest Preserve lands.

Discussion and Findings

The projects proposed in the Full Build-out Alternative are consistent with constitutional limitations, as amended, specifically for forest preserve lands on Belleayre Mountain and the uses allowed within an Intensive Use Area in accordance with the CPSLMP. In 1947 the voters approved a constitutional amendment to Article XIV, Section 1 of the State Constitution authorizing the development of a ski center on Belleayre Mountain in Ulster and Delaware Counties and in 1987 the public approved a second constitutional amendment authorizing the expansion of the Ski Center. 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. The purpose of the amendment was to

provide for more recreational skiing, and so that the ski area could “keep pace with modern skiing needs and conditions”.

The Full Build-out Alternative presents the full build out potential of BMSC under current constitutional limits. Many of the projects proposed in the Full Build-out Alternative make improvements to modernize existing facilities at the Ski Center, in accordance with the intent of the 1987 Constitutional Amendment, “to keep pace with modern skiing needs and conditions.” DEC has also proposed an expansion of BMSC, to include the Belleayre West lift and trails and the acquisition of the former Highmount Ski Center property to provide the public with improved recreational opportunities on Forest Preserve land by constructing and maintaining additional mileage of ski trails at Belleayre, consistent with constitutional limits. The development of new trails will provide skiers with additional terrain on which to ski, making the skiing experience more diverse and enjoyable, and new appurtenances will heighten skier comfort and enjoyment.

The impact of the Full Build-out Alternative on the public use of the surrounding Forest Preserve lands is not expected to be significant as the proposals in the Full Build-out Alternative are unique to the Ski Center. The proposed projects are not designed or intended to increase access to adjacent Forest Preserve Lands.

Alternatives

Five alternatives were considered in the UMP-FEIS, including the Full Build-out Alternative, the West Alternative, the Core Alternative, the Highmount Alternative, and the No Action Alternative.

The Full Build-out Alternative presents the full build out potential of BMSC under current constitutional limits. The projects proposed in the Full Build-out Alternative make improvements to modernize existing facilities at BMSC, and DEC has also proposed an expansion of BMSC, to include the Belleayre West lift and trails, and the acquisition of the former Highmount Ski Center property to allow for the redevelopment of that location.

The purpose of the Full Build-out Alternative is to provide the public with improved recreational opportunities on Forest Preserve land by constructing and maintaining additional mileage of ski trails at Belleayre, consistent with constitutional limits. In 1987, the New York State Constitution was amended (Article XIV, Section 1) to provide for the expansion of the maximum trail mileage at Belleayre to 25 miles in length. Accordingly, this UMP revision proposes to expand BMSC in accordance with the NYS voters desire to expand the Belleayre ski trail system. Further, the CPSLMP supports the modernization of BMSC, stating that “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”. The Full Build-out Alternative proposes to renovate BMSC by centralizing operations, upgrading to more energy efficient equipment, and modernizing the lodges. Such renovations are consistent with the CPSLMP. Renovations to Belleayre Mountain Ski Center have occurred throughout the history of Belleayre, and are a part of what has made Belleayre what it is today. As discussed in the UMP-FEIS Section 1.2 “Background and History”, “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.”

The overall safety, attractiveness and viability of BMSC will be enhanced once this project is completed. The development of new trails will provide skiers with additional terrain on which to ski,

making the skiing experience more diverse and enjoyable, and new appurtenances will heighten skier comfort and enjoyment.” In addition, the BMSC expansion will continue to serve the needs of non-skiing recreational users. Other recreational opportunities within the scope and purpose of the CPSLMP and the UMP may be entertained by ORDA as management decisions. As with other UMP’s, it is not the intent for all of the work to occur immediately, but rather to provide a framework so that work is done in a manner that leads towards a well-conceived master plan.

The other alternatives 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 Alternative, Core Alternative, and the Highmount Alternative. The environmental impacts of the West Alternative, Core Alternative, and the Highmount Alternative are less than the Full Build-out Alternative (*See* Table 6.8-1 of the UMP-FEIS) but would not implement the goals of the constitutional amendment, nor would they provide the public with the enhanced recreational opportunities or the additional economic benefits. The overall safety, attractiveness and viability of the Ski Center will be enhanced once the Full Build-out Alternative is completed. Additionally, the development of new trails will provide skiers with additional terrain on which to ski, making the skiing experience more diverse and enjoyable, and new appurtenances will heighten skier comfort and enjoyment.

Full Build-out Alternative: The Full Build-out Alternative proposes to renovate BMSC by centralizing operations, upgrading to more energy efficient equipment, and modernizing the lodges. Specifically, the Full Build-out Alternative includes acquisition of the lands of the former Highmount Ski Center; 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 Building, a salt storage building, an additional snowmaking pond, installation of snowmaking piping, a lower pumphouse, and a compressor facility; and modification of existing pumphouses.

The impacts of this alternative were analyzed in the UMP-FEIS. This alternative is designed to modernize and expand the entire facility to address future needs and would provide for the most expansive development and use of the site authorized by the Constitution. This goal includes managing the BMSC in a manner which insures protection of the natural resource base and the forever wild nature of the Catskill park while, at the same time, offering public recreational opportunities for leisure time enjoyment and supporting the economy in the region. The Full Build-out Alternative would also result in skiable terrain that best balances the mix of available trails by degree of difficulty to meet current industry standards.

West Alternative: In comparison to the Full Build-out Alternative, the West Alternative eliminates the acquisition of the site of the former Highmount Ski Center and the proposed development of the associated lift and trails, the construction of the Tomahawk Lodge and the east parking lots. This Alternative would not implement the goals of the constitutional amendment and would not provide the opportunity to result in more skiable terrain that best balances the mix of available trails by degree of difficulty to meet current industry standards.

Core Alternative: In comparison to the Full Build-out Alternative, the Core Alternative eliminates the Highmount lift and trails, the West lift and trails, the Tomahawk Lodge, the Sunset Lodge expansion, the East Parking lots, and the North Parking lots. This Alternative would not implement the goals of the constitutional amendment and would not provide the opportunity to result in more

skiable terrain that best balances the mix of available trails by degree of difficulty to meet current industry standards.

Highmount Alternative: The Highmount Alternative includes the acquisition of the lands of the former Highmount ski area and the construction of a lift and trails. Completion of this alternative is contingent on DEC's acquisition of the property. In comparison to the Full Build-out Alternative, it eliminates the West lift and trails, the Tomahawk Lodge, the Sunset Lodge, and the East and North Parking lots. This Alternative would fail to provide ORDA with a comprehensive, master plan that presents the full build out potential of BMSC under current NYS Constitutional limits, and would not provide ORDA with the flexibility to implement projects as needed or based upon the availability of funding.

No action Alternative: The No action alternative involves operating the BMSC "as is" without providing any new improvements, modernizations or expansions. While the No action Alternative would result in little up-front capital construction costs, no action will result in a negative impact on the enjoyment and safety of the skiing public and the reliability of equipment at BMSC. Without upgrading the infrastructure with more efficient equipment, the infrastructure, such as the lifts, snowmaking equipment, water supply pumps or lighting may become unreliable. If equipment is not reliable, and breaks down, the waiting time to get on a lift or find a seat in the lodge may increase, thereby further reducing the enjoyment and positive experience of the public while skiing at Belleayre, and will ultimately deter the skiing population. As the number of skier visits declines, revenue will be lost which could result in personnel layoffs and a continuing downward spiral of the Ski Center until it becomes uneconomical for the facility to remain in operation. Thus, the No action alternative would not accomplish the goals of the Constitutional amendment or the CPSLMP and would ultimately result in the closure of the Ski Center.

Growth Inducing and Secondary Impacts

The effects of the proposed Ski Center modernization, improvement and expansion were analyzed as it relates to the potential of such an expansion to stimulate secondary impacts including an increase in local population, demand for support facilities and commercial and residential development.

While the economic benefits from this project are expected to be significant and positive, growth inducing and secondary impacts are expected to be minimal from the Ski Center alone. However, the expansion and modernization of the Ski Center would have an incidental beneficial impact on the Modified Belleayre Resort at Catskill Park. Those impacts are addressed in the Cumulative section, below. Spending in the local community by an increased number of patrons at the Ski Center will provide a positive economic stimulus, but since most of the skiers will be day-visitors, the level of spending would not be sufficient to support many new businesses and other signs of growth inducement.

Since construction employment is expected to peak at 35 workers and operations are expected to generate no more than 32 full-time jobs and only 250 seasonal jobs, it is expected that the majority of these jobs will be filled by individuals currently living in the tri-county area or by those who are willing to commute into region. The local communities have relatively high unemployment, which would permit the projected increases in jobs to be absorbed by the community which would result in a decrease in chronic unemployment.

The increase in jobs will not necessarily be a significant growth inducement since the size of the local population is not likely to change very much. Housing market impacts are expected to be minimal as well. Since the majority of the employment opportunities created by the expansion of the Ski Center are expected to be filled either by commuters or residents of the Delaware, Ulster, and Greene county region, there will be no significant in-migration into the region as a result of this project.

All of the schools located within the study corridor have capacity to absorb additional students. However, since it is expected that the new full-time workers would be largely drawn from the existing residents, the children of such residents would not be expected to add to the population of the schools within the region.

New electric service is proposed to support this growth, but the new service would be developed from an existing sub-station along Route 28. This would not provide electric service to any residential areas that might be stimulated by the availability of an electric supply in areas that are currently off the grid.

The proposed project may have some minor influence on the second home market in the nearby towns. The improvements at the Ski Center will create more recreational amenities in the area and may improve the desirability of second homes in the area. This increase in desirability may translate to a slight increase in demand for, and price of, vacation homes in the area. However, this increase in demand is expected to be very minor because the Ski Center has already been in operation for many years and the incremental change in recreational facilities as a result of this project will be relatively small.

Social, Economic and Other Essential Considerations

Social, economic and other essential considerations were discussed in the Public Need section and Section K (Socioeconomic, Community Services and Resources), above.

Cumulative Impacts of the Modified Belleayre Resort at Catskill Park and the BMSC UMP-FEIS

Cumulative impacts occur when multiple actions affect the same resource(s). These impacts can occur when the incremental or increased impacts of an action, or actions, are added to other past, present and reasonably foreseeable future actions. Cumulative impacts can result from a single action or from a number of individually minor but collectively significant actions taking place over a period of time (*See The SEQR Handbook, p. 205, published on the Department's website at <http://www.dec.ny.gov/permits/6188.html>*). In this matter, the Department analyzed potential impacts of the two projects that may affect the same resources. Part C of the UMP-FEIS analyzes the potential cumulative environmental impacts of two proposed projects, the BMSC UMP-FEIS and the Modified Belleayre Resort.

The two proposed projects include the following components:

The Modified Belleayre Resort at Catskill Park

The Modified Belleayre Resort at Catskill Park (the "Modified Belleayre Resort") project consists of two resort complexes, both located west of the Ski Center along Ulster County Route 49A and south of NYS Route 28. The first resort, Wildacres, will include a hotel building with 250 units and ancillary hotel uses plus 163 lodging units in multi-unit buildings detached from the hotel and an 18-hole golf course. The second resort, the Highmount Spa, consists of a 120 unit hotel with spa

facilities and 53 fractional ownership units; a multi-level lodge building with 27 fractional ownership units and 16 detached lodging units in 8 buildings.

Belleayre Mountain Ski Center UMP-FEIS

The expansion of the Ski Center is proposed as part of the revision to the Unit Management Plan, as required by The CPSLMP. The Department is proposing to expand the Ski Center, consistent with state constitutional limitations on the total miles of ski trail that can be developed at the Ski Center. In the core area, trail, lift and lodge improvements are being proposed.

On the west of the BMSC, the State of New York proposes to acquire most of the property known as the former Highmount Ski Center (the "Highmount Parcel") (99 acres+/-) from Crossroads, and upon acquisition, classify this parcel as an addition to the Ski Center's Intensive Use Area. The Department proposes to develop new ski lifts and ski trails, with snowmaking capacity on the acquired parcel. The current property owner, Crossroads Ventures LLC (Crossroads), would retain title to a 150 foot wide strip of land running through the parcel, consisting of approximately 5.38 acres in order to construct a ski lift and warming hut (the "Spa Village Property"). Under this proposal, Crossroads would also retain easements across the Highmount Parcel for sewer and utilities and an access road. If the Highmount Parcel is acquired by the State of New York, and if the Spa Village ski lift is built by Crossroads, the proposal envisions that the Olympic Regional Development Authority (ORDA) and Crossroads will enter into an operating agreement such that ORDA will maintain and operate the ski lift and ski trails on the adjoining private Spa Village Property for Crossroads, and ORDA would receive compensation for these services from Crossroads. In order to do so, ORDA would need an amendment to its authorizing statute, Public Authorities Law Article 8, Title 28. Ski trails constructed on the Spa Village property by Crossroads would provide a connection between the Highmount parcel and the Spa Village Property. In addition, ski trails on the Highmount parcel would connect to the rest of BMSC. These trail connections would allow for public use of the Spa Village ski lift and trails leading to the Highmount Spa, as well as ski-in ski-out access to BMSC for Highmount Spa guests. In addition, as part of the Modified Belleayre Resort, Crossroads proposes to connect the Wildacres resort to the Belleayre West lift by installing a pedestrian crosswalk across County Route 49A.

A cumulative map of the Modified Belleayre Resort and the Full Build-out Alternative is attached as Appendix E.

Potential Impacts of the Two Projects:

A. Stormwater Management

Potential Impacts

Potential impacts from the two projects include impacts from construction resulting in changes to the estimated exiting runoff discharge volumes, peak flow rates and sediment and phosphorus loading to receiving waters due to site disturbance and land use/cover modifications (i.e., an increase in impervious surfaces); potential increases in runoff during spring snowmelt due to the additional snowmaking required for the Highmount ski-trail development; and the disturbance of steep slopes. In addition, there are potential impacts to the Middle Hudson River Watershed and the East Branch of the Delaware River Watershed. Finally, additional potential impacts include impacts of runoff on water quality and quantity, including potential thermal impacts.

Discussion and Findings

The stormwater management system proposed for the BMSC uses storage-based attenuation methods such as dry swales, diversion swales, biofilters, dry detention basins, and porous pavement to mitigate the potential impacts that may result from the increases in impervious areas. These measures are intended to meet the volume and peak rate control requirements set by the New York State Stormwater Management Design Manual (NYSSMDM). In addition, the hydrologic analysis of the portion of the Modified Belleayre Resort contributing to the Middle Hudson River watershed indicates that runoff volume and peak flow are not expected to increase when compared with existing conditions in this drainage area.

The majority of the drainage to the East Branch of the Delaware River watershed for the project would consist of the sub-catchments associated with the Modified Belleayre Resort. The results from the post-construction volume estimates for the Modified Belleayre Resort that contribute to the East Branch of the Delaware River watershed conclude that peak flow rates are not expected to increase at the stormwater discharge locations. Additionally, modeling results conclude that no cumulative impacts were observed for stormwater draining to the East Branch of the Delaware River.

Accordingly, the potential adverse impacts on surface water resources that may result from stormwater have been addressed by the SWPPP prepared for both of the projects. Post-construction storm water management systems have been designed to mitigate and minimize any potential long-term impacts of runoff water quality and quantity, including potential thermal impacts. In addition, SWPPPs from both projects include provisions for project phasing, heightened inspections requirements, heightened stabilization requirements and other measures or best management practices to manage run-off and control erosion during construction. The DEC will also issue individual SPDES permits for the construction because both projects have triggered the steep slope provisions in the SPDES General Permit for Stormwater Discharges from Construction Activity. The individual SPDES permits for both projects will include provisions that require the implementation of the project SWPPPs as reviewed and accepted by the Department. In addition, all SWPPPs will require NYCDEP approval and review by the NYS Watershed Inspector General. Implementation of the SWPPPs will minimize or avoid impacts from potential stormwater runoff.

B. Water Supply

Potential Impacts

Potential Impacts include quantitative changes in ground and surface water resources that may result from various features of the proposed projects. In addition there could be adverse impacts on stream habitats.

Discussion and Findings

A water-budget analysis was completed for the Ski Center UMP-FEIS and the Modified Belleayre Resort FEIS to provide an analysis of the potential impacts identified above. The potable water supply system for the Ski Center consists of a series of four main groundwater supply wells, and a fifth well that is dedicated to supplying the Sunset Lodge. The well field will continue to be utilized for the post-development water supply. Although there is an anticipated increase in groundwater withdrawals, the current potable water supply system is capable of delivering the anticipated required demand without requiring additional wells to provide for the increased withdrawals from the aquifer. Surface water from Pine Hill Lake, the Upper Impoundment and Cathedral Glen Impoundment will be used for snowmaking at BMSC. To avoid having adverse impacts on stream habitats, withdrawals from the streams

contributing to the reservoirs will only be allowed during flows in excess of the minimum stream flow. For the Modified Belleayre Resort, new wells will be located outside of the Birch Creek drainage system, near the Village of Fleischmanns. Pumping and water quality tests demonstrated that these wells will provide sufficient potable water without adversely affecting the Village of Fleischmanns' water supply. Water that is planned to be used for irrigation at the Modified Belleayre Resort will come from stormwater routed to a lined irrigation pond and water from three wells located on the Wildacres portion of the site. Tests performed on the three wells proposed for irrigation are capable of sustaining typical irrigation season water demands and not adversely affect existing groundwater supplies or surface waters. No surface waters will be impounded in order to provide irrigation water at the Modified Belleayre Resort. The ongoing operation of the wells supplying the Ski Center as well as the tests conducted on the wells planned to supply the Modified Belleayre Resort development indicate that no cumulative, adverse impact are expected from the developments to the groundwater resource.

C. Wastewater

Potential Impacts

Potential impacts could result from the increased wastewater from an expanded Ski Center and the Modified Belleayre Resort.

Discussion and Findings

All wastewater from the Ski Center currently is conveyed to, and treated at, the Pine Hill WWTP, except for the Sunset Lodge. The Sunset Lodge is presently served by an on-site septic tank and absorption bed system. However, the Department (now ORDA) proposed that the Sunset Lodge septic tank effluent would be connected to the wastewater collection system in the future and would become influent to the Pine Hill WWTP. All wastewater generated within the various Modified Belleayre Resort buildings will be collected and transported to the Pine Hill WWTP, via a new connection to the existing Hamlet of Pine Hill sewer system. The Pine Hill WWTP has adequate excess design flow capacity to treat the future wastewater flows from both proposed projects on an average daily flow basis, which is lower than the design flow capacity. Finally, to address high flows during wet weather events due to inflow and infiltration issues with the existing Pine Hill sewer system, the design for the Modified Belleayre Resort includes a flow equalization tank on the project site that will be built by Crossroads and operated and maintained by NYCDEP that would minimize or avoid impacts from wastewater.

D. Surface Water and Groundwater Resources

Potential Impacts

Potential impacts include those to streams and wetlands, the Middle Hudson River watershed and the East Branch of the Delaware River, Pine Hill Lake and other ponds in the vicinity.

Discussion and Findings

Cumulative impacts will only be experienced within the East Branch of the Delaware River watershed. The Modified Belleayre Resort project is primarily located in this watershed. There are five mapped streams and nineteen wetlands/wetland segments. Thirteen wetlands are considered jurisdictional by the Army Corps of Engineers (ACOE), an additional six wetlands did not have any apparent surface water connections to waters of the United States and were determined not to be jurisdictional. The far northern portion of the Ski Center is also located within the East Branch of the Delaware River. The Ski Center UMP-FEIS identified six wetland areas and one stream within this area. Four of the ACOE wetlands are considered jurisdictional and two were determined to be non-jurisdictional. (There are no

DEC jurisdictional wetlands.) After review of existing mapping and reports provided by each project, the Department determined that cumulative impacts would occur though they would be temporary and mitigated.

There is one intermittent unnamed stream that is a tributary to Emory Brook (Class B) mapped within both the Ski Center and the Modified Belleayre Resort areas. This stream is indicated as being within the “Highmount Brook Watershed” in the Modified Belleayre Resort FEIS and originating in the slopes of the Highmount Ski Area in the Ski Center UMP-FEIS. According to the Ski Center UMP-FEIS this stream occurs within an area where trail clearing and two ski lifts are proposed. Potential impacts to this stream as well as to downstream resources may include siltation, increased turbidity, decreased levels of dissolved oxygen, increased warming, and increased drainage from ski slopes.

Construction activities that may have an impact to wetlands and downstream waters within the East Branch of the Delaware River Watershed include trail clearing/non-mechanized tree and woody vegetation removal, installation of elevated bridges crossings for golf carts, subsurface directional drilling for water and sewer lines, and construction of the Highmount Ski Base. Regarding wetlands, cumulative impacts resulting from construction of the project were estimated at approximately 2.271 acres for the delineated BMSC onsite wetlands, the majority of which are associated with disturbance of forest or vegetation cover caused by construction. However, 2.089 acres of these disturbances include activities such as tree clearing of wetlands for ski trails and golf course play over areas, as well as the minor impacts that would result from the installation of golf cart and pedestrian bridge installation, which would include hand clearing of vegetation. These temporary impacts are not regulated and do not require permitting as they do not involve dredging or filling in jurisdictional wetlands. The remaining 0.139 acres of regulated impacts would result from the removal and replacement of the ski lift base at the proposed Highmount Ski Area. As part of a mitigation plan, this wetland would be replanted with appropriate vegetation to restore the disturbed area and return it to its ecological function.

Moreover, during construction most stream and wetland disturbances would be minor and temporary. Erosion and sediment control measures would be implemented during construction to mitigate potential impacts on surface waters. Measures include detailed phasing and sequencing of construction, perimeter controls, structural controls, temporary and permanent stabilization of channel banks and slopes and installation of sediment basins. In addition, best management practices would be used to control runoff and avoid any potential impacts; and dry season scheduling of the work would help to minimize the potential impacts to these waterbodies.

E. Aquatic Resources

Potential Impacts

Potential impacts to aquatic resources include: stream crossings; wetlands; and an increase in temperature of the streams resulting from a reduction in upland forest cover and stream cover in the wetland and stream locations.

Discussion and Findings

A total of nine stream crossings are proposed along various intermittent streams located within the combined project. Pedestrian, skier and golf cart passages will be required to span these waterbodies. Very little physical disturbance is proposed within the channel beds and banks of surface waters located on the site; all road crossings and ski trail crossings of streams would utilize elevated bridges, except for one stream crossing at an access road on the Wildacres development that would require the

replacement of an existing culvert with a large bottomless arch culvert. Any impacts that result from stream crossings are considered temporary. Both the Modified Belleayre Resort FEIS and the Ski Center UMP-FEIS present best management practices in soil and erosion control plans that provide mitigation methods to help reduce the impacts of sedimentation that may otherwise result from construction adjacent to surface waters and habitats. Additionally, any disturbed stream bank, impoundment and wetland areas will be restored and planted with native vegetation.

An additional long-term impact that may result from the construction and operation of the two projects is the possible increase in temperature of the streams resulting from a reduction in upland forest cover and stream cover in the wetland and stream locations identified as golf course play-over areas. To mitigate potential impacts from thermal loading to the aquatic habitats, any vegetation that is proposed to be disturbed in proximity to the intermittent streams shall be replaced with plantings to provide shading of the stream/wetland. This will be accomplished by placing appropriately sized coir logs along the existing stream banks and planting the coir logs with willow cuttings. Additionally, regular hand cutting maintenance of the vertical growth of the willow sprigs will allow for the development of a more horizontal willow canopy over the stream or wetland. Another mitigation measure for thermal loading is designed into the stormwater management systems for both projects. The proximity of the proposed Ski Center development to trout streams and the potential for thermal impacts on these habitats were considerations in the design of stormwater runoff control. The proposed construction would not have any significant impacts on flow, temperature, or macroinvertebrate distribution with the mitigation measures described above; however if any impacts are detected based on monitoring during or after construction, additional mitigation and restoration will be required.

F. Terrestrial Wildlife

Potential Impacts

Potential impacts from land clearing include loss of habitat, forest fragmentation, or disruption of movement patterns of wildlife, including large, mobile wildlife such as bear and deer, or less mobile populations such as snakes, breeding bird and bat populations. In addition, there are potential impacts to terrestrial forest ecology as a result of the operation of both projects.

Discussion and Findings

The cumulative impacts of construction of both projects would result in the clearing of 334.2 acres. This represents approximately 12% of the 2,677.9 acres of the combined projects. Cumulative impacts would result if the magnitude or duration of the combined impacts would result in a significant loss in habitat, forest fragmentation, or disruption of movement patterns of populations of wildlife, including large, mobile wildlife such as bear and deer, and less mobile populations such as snakes, breeding bird and bat populations. Each project evaluated the potential for forest fragmentation and concluded that because the project is at the edge of the forest now, it would not add new forest edges, but instead move the edge deeper into the forest. Breeding bird and bat populations are not expected to be affected significantly by construction of the project. The potential impacts to terrestrial forest ecology during operations were evaluated for both projects. The largest adverse impacts of the projects would occur from the land clearing. Long term impacts to wildlife would be reduced, as local populations would quickly adapt to the new habitat boundaries. Both projects concluded that there would be some adverse impacts from the lost habitats to terrestrial mammals, amphibians, snakes, and birds. These potential adverse impacts would be partially mitigated by the replacement of the forests with open ski slopes, which provide forage and habitat for birds that prefer the ecological gradient (ecotone) between forests and fields, and the feeding habitat provided by open grasslands for predatory birds. No rare, threatened,

or endangered species would be impacted by either project or by the cumulative impacts of both projects.

Another type of potential impact resulting from the combined projects would be a significant increase in populations of nuisance or invasive species. However, the Invasive Species Plan for the Modified Belleayre Resort is intended to assure that the Wildacres Golf Course, and other cleared areas, use best practices to avoid the use of herbicides, as outlined in the Appendix 1 of these findings, and prevent the growth of invasive plant species.

Both projects are proposing design elements that avoid and minimize impacts to wildlife. The proposed new buildings of the Modified Belleayre Resort will be clustered in small areas. Clustering minimizes forest fragmentation and reduces disturbances from roads and utilities. The proposed LEED certification of buildings at both projects would support unobtrusive designs and landscaping only with native vegetation. Maintenance of buffers around streams at the Ski Center, and extensive utilization of BMPs would mitigate impacts to wildlife. As part of the Ski Center UMP-FEIS, redevelopment of existing trails at Highmount minimizes the impacts to wildlife.

G. Transportation and Traffic

Potential Impacts

The projects' EISs undertook an analysis of the potential impacts as a result of both the construction and operation of the projects on traffic.

Discussion and Findings

The Department evaluated cumulative operational impacts on traffic and transportation. The analysis of the cumulative development concludes that the Level of Service (LOS) for traffic entering or crossing NY Route 28 from the intersecting side streets will generally be LOS E or LOS F during the worst-case condition of a peak attendance day at the Ski Center. The LOS F designation is based on the delay experienced per vehicle on the stop-controlled approach. However, some of these intersections still operate with acceptable volume to capacity ratios, indicating that there is reserve capacity (i.e., the hourly volume is less than the hourly service rate). Additionally, these operations reflect the peak season conditions during the peak hour of the day in order to evaluate the worst case scenario. Delay during more average conditions, including offseason and off-peak times of the day would be much less.

Crossroads has committed to various mitigation measures, which, among others, includes the construction of a right-turn lane on the northbound County Route 49A approach, a left-turn lane on the westbound NY Route 28 approach and the installation of a traffic signal. Other mitigation measures are proposed in the design of the projects (i.e., shuttle service between the Modified Belleayre Resort and the Ski Center, ski-in/ski-out). See Appendix 1 of these findings.

Additional mitigation includes improving site distance for drivers along the County Route 49A corridor and drivers exiting driveways from both sites; vegetation clearing and/or embankment grading and intersection warning signs for certain intersections. In addition, County Route 49A will be realigned to improve vertical and horizontal curves to accommodate pedestrian crossing between the projects in the area of the Wildacres Resort Main access driveway. The Wilderness Activity center driveway will be relocated to the south or movements will be restricted to right-in/right-out. Finally, other mitigation measures include expanded public transportation opportunities (i.e., existing Ulster County Area Transit free service to BMSC from Kingston to provide additional capacity on high attendance ski days and to

serve other key local skier origins within the UCAT service area (Poughkeepsie, New Paltz, Newburgh, Wallkill, Saugerties)); expanded packages with private bus companies; and other operational strategies including staggering the closing times of different ski lifts and/or keeping other lodge facilities open longer after the lifts are closed at the Ski Center; offering different check-in/check-out days for the fractional units and offering a variety of weekend packages for the hotel that would include arrivals and departures on off-peak days at the Modified Belleayre Resort; and providing variable message signs at key locations in the County Route 49A corridor. These measures collectively will significantly reduce traffic impacts.

H. Visual

Potential Impacts

Assessing the aesthetic impacts of the projects involved the evaluation of the Visual Impact Assessment (VIA) Reports of both the BMSC and the Modified Belleayre Resort and determining the combined effects of the projects. The zone of visibility influence (ZVI), or viewshed maps, created for both projects have been analyzed to determine the extent of the area where either project, or both, may be visible within a 5-mile radius. In addition to the viewshed analysis of the 5-mile radius from the project, the BMSC VIA analyzed the potential visibility from specific locations at distances of 25 miles away. In addition, visibility at night and the issues of nighttime “sky glow” and direct glare were reviewed as potential impacts.

Discussion and Findings

To assess the significance of the cumulative aesthetic impact of the proposed projects, all the research, field studies, maps, figures, and simulations of both VIAs and those combined for the Cumulative Analysis were reviewed. The ZVI modeling and maps indicate that changes resulting from the expanded Ski Center and the Modified Belleayre Resort will be blocked from view by topography and vegetation from most of the identified locations in study area. As demonstrated in the simulations and line-of-sight profiles, distance, angle, and seasonal changes in vegetation will often prevent the viewers from recognizing built structures from the locations where visibility is possible. The Modified Belleayre Resort FEIS VIA determined that the project would not introduce a significant change in the visible landscape, relying on two main factors as follows: the context of the existing views and the mitigation measures integrated into the project design that are intended to reduce the potential for visual impacts. The new ski slopes, like the existing ones, will be highly visible from some locations in the winter months because the white groomed snow provides a high contrast with the forested areas of the mountain. Since the Ski Center currently includes existing ski slopes and the new slopes are of similar length and width, the new expansion is compatible with the existing site. While the potential for visibility of the projects overlap from some locations, from most views the visibility varies because of the different locations of the two projects. Most of the visible facilities of the BMSC are located along the north-ridge of Belleayre Mountain, facing northeast. Most of the Modified Belleayre Resort facilities will be located at a lower elevation on Belleayre Mountain, or in the case of the Highmount area, will be located facing northwest. This lower location and profile means views are usually blocked by vegetation surrounding the project site and between the viewer and the project, as indicated in the viewshed analysis. None of the eleven representative locations within a 5-mile viewshed of the Modified Belleayre Resort project would experience a significant change in visual resources, and the project would not be visible from any Forest Preserve lands classified as Wilderness. Additionally, views were evaluated from 22 locations from mountain peaks, hiking trails and/or overlooks outside of the 5-mile radius. The majority of these did not have views of the project, while 3 of these locations had potential views toward the project but were not considered significant in the overall analysis.

The new ski slopes at the Ski Center may be visible from specific visual resources within the study area, but these views are typical of the existing ski area and would not introduce a discordant visual element into the viewshed.

Both projects have been designed so as to avoid or mitigate visual impacts and improve the aesthetic quality of the built environment on Belleayre Mountain. The design of the Modified Belleayre Resort has been changed significantly to comply with the AIP and address the visual impacts of the project. The Modified Belleayre Resort design includes clustering development and smaller buildings than the original design or the agreed upon conditions of the AIP. The new design reduces the amount of cleared area, thereby preserving nearly 70% of the project site in its current condition. The need for surface parking is substantially reduced by placing most parking underground in buildings; all building heights will be maintained within limits set by local land use regulations; and exterior finishes shall be earth tone colors. At the BMSC, new ski lifts will be low in profile and will be painted colors that blend into the wooded landscape. Parking lots shall be terraced and tree cover will be preserved to block views of the lots. External finishes of the new buildings will also be chosen to blend into the landscape, using earth tone colors and non-reflective glass.

To mitigate light pollution, outdoor lighting shall be designed to meet the standards of the International Dark Sky Association. Cut off light fixtures shall be used in new applications, and the Ski Center shall not be equipped with lighting to allow night skiing. At the Modified Belleayre Resort, lighting design, screening and operational restrictions, such as the installation of timers on tennis court lighting will minimize light pollution to acceptable levels. While glow from outdoor project lighting is expected, these levels are lower than the RPI Lighting Research Center's recommended limit for most rural locations.

Accordingly, the combined visual impacts of the two projects will not have a significant effect on the region's scenic and aesthetic resources, in view of proposed mitigation and project designs.

I. Noise

Potential Impacts

Potential impacts include increased noise as a result of the construction and operation of the projects. To evaluate the potential cumulative noise impact resulting from the Ski Center and the Modified Belleayre Resort, the predicted noise levels, as estimated from modeling conducted for the Ski Center UMP-FEIS and the Modified Belleayre Resort FEIS, were added. Potential impacts were for the construction and operation of each project at the nearest noise receptor locations. The combined noise levels were compared with the measured existing noise levels in the area to determine the potential increase in noise above the existing noise level.

Discussion and Findings

For construction, combining the sound levels for the construction of the Modified Belleayre Resort and the Ski Center projects with mitigation measures employed would result in an increase in the sound level at the receptors ranging from no increase to a 15 decibel increase over the existing sound level. However, mitigation measures planned for the construction projects would reduce the noise contribution at the nearest receptors. These measures include: stationary equipment such as compressors and generators shall be located away from noise-sensitive receptors; construction activities would be phased such that not all of the equipment is operating simultaneously; maximum-sized intake

and exhaust mufflers will be used on internal combustion engines; idling equipment would be turned off when not in use; to the extent possible, construction sites will be laid out in a manner that reduces the need for backing up construction equipment in order to reduce the noise from backup alarms; noise-reduction blankets that would reduce the noise level by 5dBA to 10 dBA would be installed on perimeter site fencing at some locations, as necessary; on-site equipment use would be minimized when within 500 feet of residences in order to reduce the noise of moving equipment on and offsite; and a sound barrier would be put in place when construction activities would be within 500 feet of a residence. Accordingly, with the implementation of these measures, the cumulative noise impact of constructing both projects would not be significant.

To assess the potential cumulative noise impact resulting from the operation of the Ski Center and the Modified Belleayre Resort, the operating noise levels projected by the environmental impact study for each project were combined for the nearest representative receptor locations. Modeling indicates there would be an increase over the ambient noise level at each of the receptor locations as a result of the expanded Ski Center and the Modified Belleayre Resort project operating at the same time. However, by employing mitigation measures such as restricting the snowmaking operations to certain times, and using lower noise HVAC units or shielding HVAC units (or both), it is expected that the cumulative noise levels due to the operation of both projects would result in a noise increase of less than 5 dBA at all of the receptors with the exception of receptor W-11, the closest receptor on County Route 49A to NY Route 28, which is impacted by the increase in project traffic.

Traffic levels would be expected to be less during the summer months since the peak operations at the proposed resort would occur during the winter when the Ski Center is operational. Since music concerts have been ongoing at the Ski Center in the summer, the concert and traffic noise are considered as existing conditions and no additional noise would be expected from the Ski Center operation in the summer. The cumulative noise resulting from both projects would include only additional traffic noise associated with the resort operation, which would be less than the winter traffic noise. Accordingly, the worst case cumulative noise resulting from both projects would only include additional traffic noise associated with the resort operation — approaching a 6 dBA increase during daytime in the wintertime which, according to DEC guidance, will be perceived but will not constitute a significant adverse impact. Consequently, there would be no significant adverse impacts and no mitigation is required.

J. Socioeconomics

Potential Impacts

Potential impacts include the cumulative socioeconomic impacts of the construction and operation of the expanded BMSC and the Modified Belleayre Resort on the local (e.g. the Towns of Middletown, Shandaken, and Olive) and regional economies (e.g. Delaware, Ulster, and Greene Counties).

Discussion and Findings

The cumulative socioeconomic impacts of the construction and operation of the expanded Ski Center and the Modified Belleayre Resort would have a positive socioeconomic impact on the local (e.g. the Towns of Middletown, Shandaken, and Olive) and regional economies (e.g. Delaware, Ulster, and Greene Counties). During construction, the regional output, employee earnings, and total employment would experience substantial increases as a result of construction of these two projects. The increase in construction spending would directly impact the regional and state economy by increasing employment and earnings in the construction industry. Likewise, the operation of the expanded Ski Center and the Modified Belleayre Resort projects would have a long-term positive impact on the local and regional

economies. Local employment opportunities, employee earnings, and local expenditures would increase as a result of both projects. Cumulatively, the expansion of the Ski Center and the Modified Belleayre Resort projects are expected to directly contribute a total of approximately \$29.1 million into the regional economy each year through payroll and wage and salary payments.

The Department also considered competitive impacts on private ski areas within the region in response to public comments on the UMP-FEIS. DEC and ORDA believe that improvements to BMSC would benefit all ski areas in the region by making the region a more desirable ski destination. Expansion of the BMSC is part of a larger initiative within the State to promote the Catskill Region as a tourist destination. ORDA will operate BMSC in such a way to promote the Catskills as a regional destination for skiers. The BMSC, in conjunction with private Catskill ski resorts and other amenities, would build a critical mass for drawing tourists to the Catskill region during the winter months. In addition to expansion of the BMSC, the State is promoting the region by placing informational signage along the New York State Thruway (in both northbound and southbound directions) that will highlight the Catskill Mountain Ski Areas.

The concept of building and maintaining a critical mass to draw tourists or an “industry cluster” has been described in academic economic research. First pioneered by Porter (1998) the “industry cluster” concept was then applied to the tourism industry by Nordin (2003); Weidenfeld, Butler, et al (2010); and others, and shows that developing a tourism resort “cluster” has the potential to expand the tourism market for all operators in a region, not just a single operator and has the potential to lower costs associated with suppliers and support services needed by all members of the cluster. The primary economic benefit of an industry cluster is that by concentrating a variety of establishments that offer similar goods and services, many of the secondary industries that service these industries locate to the area, thus providing required good and services for the optimal functioning of the cluster and lowering support costs via economies of scale. In the case of tourism clusters, the clustering of similar attractions also helps create a tourism destination. As described in Inman et al (2002) in order for a tourist area to “be competitive having a vigorous and innovating support sector is indispensable.” Support services such as quality dining, shopping, and accommodations as well as good providers of hotel and restaurant food and supplies and trained culinary and hospitality personnel are all crucial for creating a thriving tourism industry. By expanding BMSC, New York State plans to expand further an environment that would encourage this secondary support industry. Common costs such as regional promotion and marketing activities are greatly enhanced when there is a cluster of similar destinations in a region. In her analysis of the impact of ski resort clusters in northwestern Sweden, Nordin (2003) found that the synergy and cooperation between the various entities within a cluster (i.e. attractions, accommodations, dining etc.) determine how effective that cluster was at promoting economic development. Rather than compete with private ski areas, the state’s goal is to work with private ski areas to develop the region as an attractive destination for visitors. To this end, ORDA is willing to provide leadership to promote a regional marketing effort of the Catskill region.

Thus, the proposed expansion of the Ski Center and the Modified Belleayre Resort projects are not expected to have a significant impact on the population or demographic characteristics of Delaware, Ulster, or Greene counties. The projects are expected to have a positive impact on local sales tax, property tax, and hotel occupancy tax receipts. The cumulative impacts on socioeconomic conditions of the proposed expansion of the Ski Center and the Modified Belleayre Resort project would be positive due to the projected increases in tax revenues, job creation, and economic activity. This, however, would be a finding that the towns of Shandaken and Middletown would be called upon to make in evaluating the Modified Belleayre Resort as part of their SEQR findings and approvals.

K. Community Character

Potential Impacts

Community character is defined by municipalities, through their comprehensive plans, which document their existing community character, set out their vision for the future, and configure a road map for achieving that by guiding land use patterns and development. Ideally, comprehensive plan goals are implemented through land use regulations and other municipal actions. Potential impacts include impacts on land use, cultural amenities, noise, traffic and air quality; future development of the Catskills; and impacts on the Catskill State Park and Forest Preserve.

Discussion and Findings

The community character and land use study area for each project comprises the two project sites and the communities along the Route 28 corridor between Boiceville and Margaretville. While there would be some short-term adverse impacts from construction and operation of the Ski Center and the Modified Belleayre Resort, they are not expected to result in significant adverse cumulative impacts on community character. The Ski Center expands an existing use that dates back to the 1940s, in an area whose economy is centered on tourism and recreation. The same is true for the Modified Belleayre Resort, which would create a destination resort in a region that was historically home to such resorts. While discussed above, the following potential impacts are also discussed below as elements of community character.

Land Use

Both projects are generally consistent with the applicable local planning and development goals, and the Modified Belleayre Resort is permissible under the Town of Middletown's and the Town of Shandaken's zoning regulations as special permit uses. The projects integrate with each other and are familiar uses in the Catskills, and are consistent with the goal of promoting tourism that is embraced by communities in the study area. The projects allow for the conservation of a substantial amount of acreage for public ownership and use, including the acquisition of 1,200 acres known as the "Big Indian" parcel; adaptively reuse and provide for the protection of historic structures; and provide recreational and open space within their project areas. All of the project facilities proposed for the Ski Center were planned to support the existing Ski Center, and there will be no changes in existing land use. Permanent land use impacts of the Modified Belleayre Resort would be restricted to the project site, and approximately 29% of this site would be developed.

Visual

The majority of the proposed new facilities at the BMSC would not be visible from historic/cultural resources. These resources would be screened from Ski Center facilities either by terrain or by the extensive existing vegetation at the Ski Center. The proposed new ski slopes could be viewed from some historic structures; however, ski slopes are an existing part of the Ski Center and would not introduce a discordant element into the landscape.

Regarding visual impacts for the Modified Belleayre Resort, none of eleven representative locations within a 5-mile viewshed of the project would experience a significant change in visual resources, and the project would not be visible from any Forest Preserve lands classified as Wilderness. Additionally, views were evaluated from 22 locations from mountain peaks, hiking trails and/or overlooks outside of the 5-mile radius. Nineteen of these locations did not have views of the project, while 3 of these locations had potential views toward the project. The new ski slopes at the Ski Center may be visible from specific visual resources within the study area, but these views are

typical of the existing ski area and would not introduce a discordant visual element into the viewshed. While glow from outdoor project lighting is expected, these levels are lower than the recommended limit for most rural locations and mitigation measures will be implemented.

Noise

The cumulative impacts of both projects on noise are anticipated to be temporary, and restricted to on-site activities (i.e., during construction). Construction would occur over a period of time and not together all at once, which serves to avoid or reduce construction related noise impacts on the community.

Air

Air quality impacts resulting from construction of both projects would be temporary, and sources (i.e., small equipment and trucks) would be distributed throughout the BMSC and the Modified Belleayre Resort because they are primarily mobile equipment. There would be a short-term cumulative adverse impact on air quality during the mix of construction and operation activities, and the minor cumulative impacts on air quality would cease upon completion of construction. During operations, minor cumulative impacts are anticipated as a result of traffic related emissions or pollutants emitted from sources associated with the Modified Belleayre Resort. For emissions of NO_x, the reduction at the BMSC from the elimination of existing diesel equipment would likely offset any increase in NO_x associated with operation of the Modified Belleayre Resort.

Future Development

The projects are so unique that they are unlikely to have an impact on future similar developments in the Catskills. While limited commercial development exists along Route 28, the concentration of commercial development is limited to the areas immediately adjacent to Boiceville and Margaretville. This pattern of development is likely to continue because of existing local and New York City watershed land use restrictions, regulations on new development, and existing environmental constraints. The cumulative impacts of the combined projects are not expected to have adverse effects on local water supply or wastewater treatment. Wastewater from both projects would be collected and conveyed to the Pine Hill WWTP for treatment. Because the loadings from the project are similar to conventional residential wastewater, the project would neither adversely affect the treatment capacity of the WWTP, nor the ability of the WWTP to meet its SPDES discharge permit limits.

Catskill Forest Preserve

The BMSC expansion project is neither designed nor intended to increase access to adjacent Forest Preserve lands except for any proposed passive recreational uses of portions of the Big Indian lands. Although the project would result in a significant increase in skier attendance at the BMSC and could foster a greater interest in the surrounding area, the project is expected to have negligible impacts on Forest Preserve lands. The Modified Belleayre Resort does not abut any designated Wilderness area or Wild Forest area, nor are there any proposed direct connections between the Modified Belleayre Resort and the Wilderness or Wild Forest areas. At average occupancy for the Modified Belleayre Resort and in the years following BMSC expansion, it is reasonable to expect that the additional number of Forest Preserve visitors would not exceed 105 people per day. In order to mitigate adverse impacts that could result from an increase in Forest Preserve use, the Modified Belleayre Resort would implement a program to educate and guide resort guests in the use of Forest Preserve trails. Trails that may be at risk of overuse would be identified in order to redirect guests

to less intensively used trails. Information on guest usage would be submitted to NYSDEC monthly, and a report on trail conditions and guest usage will be submitted to the NYSDEC annually.

No mitigation measures for potential impacts to community character are specifically proposed, beyond mitigation for individual resource areas such as impacts on the Catskill Forest Preserve (Modified Belleayre Resort), visual resources (signs and building materials), traffic, and air quality (dust control measures during construction, reduction of air pollutant emissions through the use of green technology, green design, and the use of shuttle buses or ski-in/ski-out options).

Accordingly, the proposed expansion of the Ski Center is consistent with existing on-site uses; and the Modified Belleayre Resort project would re-introduce resort development uses into an area that historically supported this type of development. The development appears consistent with the comprehensive plans and zoning of the two towns that would be home to the resort. This, however, would be a finding that the affected towns would be called upon to make in evaluating the Modified Belleayre Resort project with respect to their zoning authority and comprehensive plans.

L. Air Quality

Potential Impacts

Potential impacts include air quality impacts during construction of the projects as it is possible that construction activities could overlap in one or more years and it is feasible that operation of the Ski Center would overlap with a combination of construction and operational activities at the Modified Belleayre Resort. The improvements proposed in the Ski Center UMP-FEIS and the Modified Belleayre Resort FEIS were evaluated for their potential cumulative impacts on air quality and greenhouse gas (GHG) emissions. In addition, a cumulative assessment for construction air pollutant emissions was conducted, based on a worst-case scenario—peak construction year emissions for each project with the assumption they occur during the same year.

Discussion and Findings

Construction

Construction emissions would be temporary and emission sources would be distributed throughout the project areas because they are primarily mobile. Construction emissions would cease when construction is completed, and the minor cumulative impacts on air quality would cease upon completion of construction. The dispersed nature and short-term impacts would not represent a significant cumulative adverse impact.

Operation

Operation of the two facilities is expected to ultimately produce only small cumulative air quality impacts. Several features of both projects are designed to reduce air pollutant emissions, including new snowmaking equipment that uses electric motors to turn fans instead of diesel compressors and pumps; green building design at the Ski Center and Modified Belleayre Resort; minimizing vehicle traffic between the Modified Belleayre Resort and the Ski Center through use of shuttle buses or ski-in/ski-out options. Traffic and associated emissions from the Modified Belleayre Resort would not be expected to coincide with peak traffic air pollutant emissions associated with the Ski Center. Therefore, the potential cumulative impact of traffic-related emissions is expected to be small.

Climate Change

In each year of construction, direct GHG emissions would be produced from construction equipment exhaust at the rate of approximately 10,000 metric tons of CO₂e per year. Construction at the Ski Center would also result in the loss of forest when land is cleared for ski lifts and trails. The CO₂e released from the forest and woody material is estimated at 44,000 tons. This release of GHG would likely occur over the period of construction as the woody material decays. It is anticipated the woody material would be chipped and used primarily as ground cover (mulch). Direct GHG emissions during Ski Center operations would be lower compared with existing direct GHG emissions; conversely, indirect GHG emissions would be higher. Indirect emissions from the removal of trees for the ski lifts and trails would result in a loss of carbon sequestration estimated at approximately 30 tons of CO₂e per year. Mitigation measures affecting direct emissions of GHGs during operations at the Ski Center include the incorporation of green building principles in the new construction at the Discovery Lodge and subsequent reduction of energy consumption and use of electricity-driven snowmaking machines. (See, generally, SDEIS, Appendix 28.)

Construction at the Modified Belleayre Resort may initially coincide with construction at the Ski Center. Since construction at the Modified Belleayre Resort would take place over approximately a 9 year period, the overlap of construction GHG emissions at the two sites would potentially cease after a five-year period when construction is completed at the BMSC. In the initial years, the Ski Center would be emitting GHG from construction and also still using the diesel snowmaking equipment. In this worst-case analysis it is assumed that the replacement of the diesel pumps and compressors would not occur until the end of construction. Also, the snowmaking would not occur during the same months as the construction, but GHG emissions are assessed on an annual basis so no credit is accepted for the lack of overlap between construction and snowmaking. Using 25,000 tons per year direct CO₂e⁴, there is a three-year period when cumulative GHG emissions would exceed 25,000 tons per year direct of CO₂e. This period coincides with construction activities and operation of facilities at the two project sites. This short-term effect would end when construction is completed at the Ski Center. In subsequent years, direct cumulative GHG emissions are expected to be less than 25,000 tons per year direct CO₂e. Mitigation designed to reduce the direct and indirect emission of GHGs from the BMSC and Modified Belleayre Resort are focused on efficient use of energy, materials and resources. With these measures implemented, the Ski Center and the Modified Belleayre Resort would minimize GHG emissions to the maximum extent practicable.

Mitigation measures that will aid in minimizing emissions of GHGs from the Ski Center include using green building principles in new construction at the Discovery Lodge to lower energy consumption and thus reduce direct and indirect GHG emissions; replace the diesel engine air compressor station with a substantially larger electric air compressor station to mitigate direct GHG emissions associated with snowmaking; testing and repairing leaks in the compressed air system to maintain efficiency; strategic placement of the new water reservoir to take advantage of gravity and use of new higher efficiency pumps; groundwater reclamation to reroute surface water run-off directly to the upper and new reservoirs instead of allowing it to flow to Pine Hill Lake; establish automated procedures and install automated equipment to control energy use; and mitigating a reduced ability to sequester carbon by keeping forest clearing to a minimum, using wood from the cleared areas in on-site building construction if feasible, and establishing a forest by planting trees in areas that are currently not forested.

⁴ GHG emissions are subject to regulation by the federal government. The ‘Tailoring Rule’ creates a Prevention of Significant Deterioration significance threshold for GHGs of 25,000 annual metric tons CO₂e (EPA 2010). In addition, there is a Mandatory GHG reporting rule at the Federal level.

Transportation and other mobile source/equipment GHG emission mitigation measures at the Ski Center would include construction emissions mitigation using best management practices aimed to maximize fuel efficiency such as using fuel-efficient vehicles, ensuring that all equipment is properly maintained and minimizing idling of construction vehicles; using existing power sources (e.g., grid electric power) or clean fuel electric generators rather than diesel-powered electric generators. Finally, other mitigation measures are proposed to reduce the impact from staff and visitor traffic such as increasing the number of passengers per vehicle and thereby reduce the number of vehicles travelling to the Ski Center; preferential parking areas for high occupancy vehicles and other incentives for carpooling such as rewards of food, beverages, free/reduced price lift tickets or equipment tuning; and increasing use of mass transit and/or shuttle buses by providing additional parking for buses. The new Ski Center, despite being bigger than the existing facility, will have less emissions because of more efficient equipment. Consequently, there would be an improvement in air emissions from this project.

The Modified Belleayre Resort's design goal is to achieve Leadership in Energy and Environmental Design (LEED) Silver status, and the project would also incorporate specific mitigation measures outlined in DEC's "Policy on Assessing Energy Use and Greenhouse Gas Emissions in Environmental Impact Statements." These mitigation measures would result in overall lower energy consumption and associated GHG emissions. Clearing forested areas would be kept to the minimum required for a successful project. In so doing, trees and other woody plants remaining on-site would continue to provide carbon sequestration. In addition, as part of landscaping around the resort areas, replacement trees would be planted wherever feasible.

Accordingly, the potential cumulative impacts on air quality and greenhouse gases are expected to be minor and the projects have incorporated reasonable mitigation measures.

M. Climate Change

Potential Impacts

The improvements proposed in the Ski Center UMP-FEIS and the proposed Modified Belleayre Resort were evaluated for their potential cumulative impacts on GHG emissions and climate change (one of the first large scale projects known to have done so in New York). The effect of climate change on the combined projects was also evaluated.

Discussion and Findings

Major winter recreation areas, such as the Ski Center, may face operational challenges during the 21st Century if average global temperatures continue to rise. The primary effect of increasing global temperatures will likely be a shortening of the ski season, reduction in annual snowfall and hours with air temperatures suitable for snowmaking, and a general lessening of the snow quality as more mixed precipitation or rain falls during the winter months. However, the increase in reliance on snowmaking to maintain a reliable snowpack would help to mitigate or adapt to these potential changing conditions, as long as snowmaking capacity is sufficient to take advantage of available snowmaking hours. The potential for an increase in the amount of snowmaking may result in additional greenhouse gas emissions through increased use of snowmaking equipment. The use of the most energy efficient snowmaking equipment will help to mitigate any additional emissions. In addition, the existing layout of the Ski Center, i.e., the northward facing slopes, will help retain snow during warmer temperatures since sunlight on sunny days will not be as direct as it would be on south facing slopes. For the Modified Belleayre Resort, drought conditions would require an increase in the use of irrigation to maintain

landscape appearance and golf course amenities. Water conservation techniques such as using water-saving fixtures that exceed building code requirements, collecting and re-using rainwater and design water efficient landscaping could be used to mitigate low rainfall periods. The measures described above will help reduce the effects of climate change on the combined projects

N. Cultural Resources

Potential Impacts

Separate cultural resources analyses were conducted for the Ski Center UMP-FEIS and the Modified Belleayre Resort FEIS. These analyses considered prehistoric archaeological resources, historic archaeological resources, historic structures and changes to the viewshed that could impact the setting of historic resources.

Discussion and Findings

Based on information provided in the survey report, the New York State Office of Parks, Recreation and Historic Preservation and DEC have determined that the proposed activity will have no adverse impact on registered or eligible archeological sites or historic structures, consequently construction and operation of the Ski Center and the Modified Belleayre Resort are not expected to result in adverse cumulative impacts on cultural resources. No mitigation measures are proposed beyond agency consultation for the adaptive reuse of historic buildings for the Modified Belleayre Resort and avoidance of the historic Whispell House at BMSC.

Certification to Approve:

Having considered the Draft and Final EIS and having considered the preceding written facts and conclusions relied upon to meet the requirements of 6 NYCRR 617.11, this Statement of Findings certifies that:

1. The requirements of State Environmental Quality Review (6 NYCRR Part 617) have been met;
2. Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action approved (Final EIS development plan) is one which avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures (as set out above) that were identified as practicable; and
3. The Department hereby revises the Belleayre Mountain Ski Center UMP to allow for development of the Full Build-out Alternative.

Dated: December 2, 2015
Albany, NY



Basil Seggos
Acting Commissioner
NYS Department of Environmental Conservation

Appendix A

List of Documents Reviewed

In developing this SEQR Findings Statement, the DEC has reviewed and considered the following documents:

- NYS Constitution Article 14, Section 1.
- Catskill Park State Land Master Plan.
- Draft Unit Management Plan (UMP) Draft Environmental Impact Statement (DEIS) for the Belleayre Mountain Ski Center, accepted April 17, 2013.
- Final UMP Final Environmental Impact Statement (FEIS) for the Belleayre Mountain Ski Center, accepted September 2, 2015.
- FEIS for Modified Belleayre Resort at Catskill Park, accepted September 2, 2015.

**Appendix B:
SEQR Process Timeline**

November 21, 2007	Positive Declaration and Draft Scoping document issued
February 28, 2008	Final Scoping document issued
April 17, 2013	UMP-DEIS Accepted for public comment
May 29, 2013	Legislative Hearing
July 17, 2013	Public comment period on UMP-DEIS closed
September 2, 2015	UMP-FEIS accepted by Lead Agency

Appendix C
Map of Full Build-out Alternative

PROPOSED LIFTS

- DISCOVERY LIFT
- BELLEAYRE WEST LIFT
- HIGHMOUNT LIFT
- NOVICE LIFT (replace)
- BEGINNER LIFT (replace)

PROPOSED TRAILS

- HIGHMOUNT TRAILS
- WEST TRAILS
- DEER RUN EXT. W/ SKIER BRIDGE

PROPOSED BUILDINGS

- DISCOVERY LODGE EXP.
- SUNSET LODGE EXP.
- TOMAHAWK LODGE
- OVERLOOK PUBLIC ASSEMBLY AREA
- INFORMATION BOOTH

PROPOSED PARKING

- UPPER DISCOVERY PARKING
- NORTH PARKING
- EAST PARKING

PROPOSED INFRASTRUCTURE

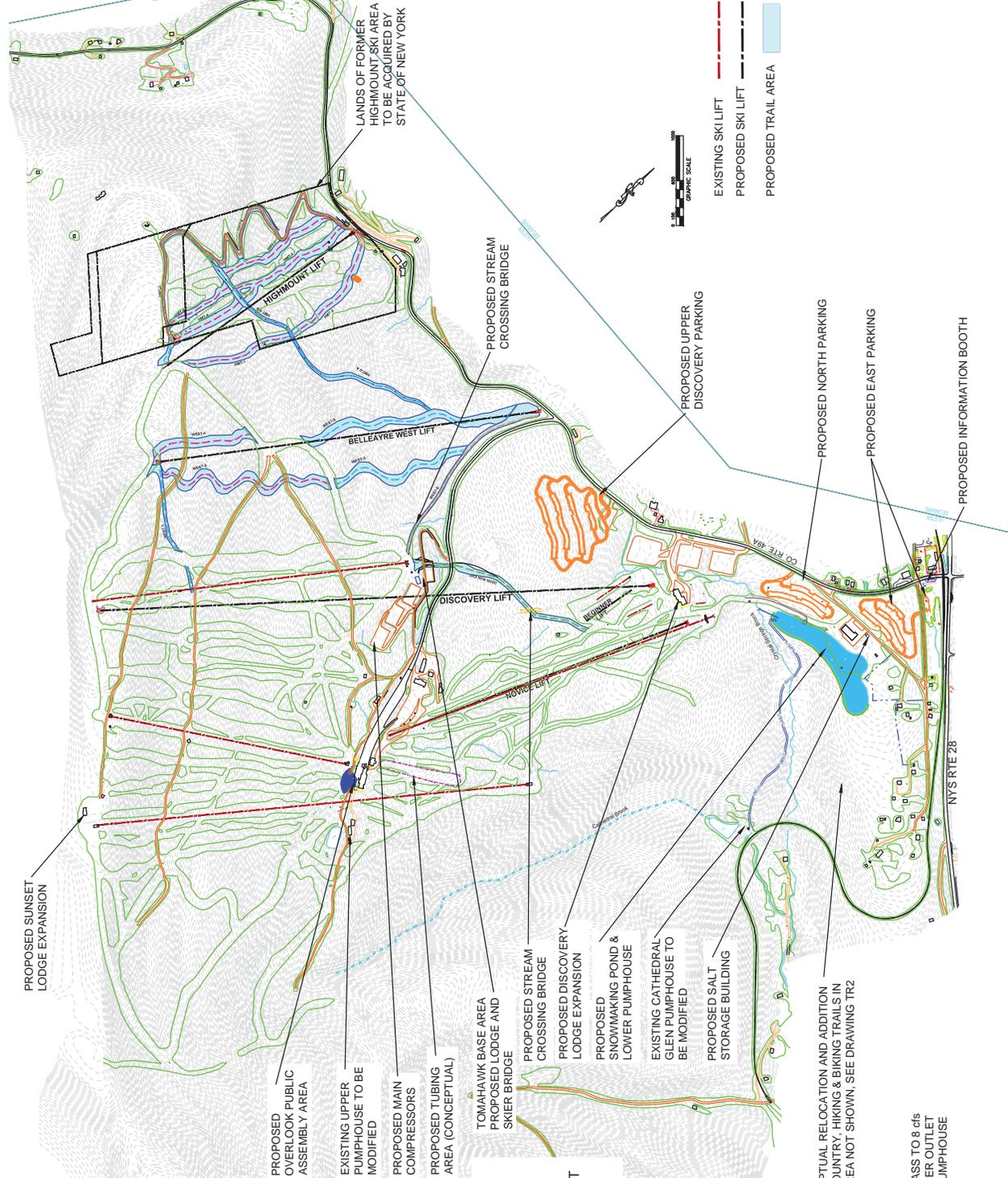
- SNOWMAKING POND
- SNOWMAKING PIPING
- LOWER PUMPHOUSE
- MAIN COMPRESSORS
- PRIMARY ELECTRIC REPLACEMENT
- MODIFY EXISTING PUMPHOUSES
- SALT STORAGE BUILDING

Statistics	
Trail Mileage	23.1
Trail Capacity	8800
Building Capacity	8940
Parking Capacity	8998

CONCEPTUAL RELOCATION AND ADDITION TO X-COUNTRY, HIKING & BIKING TRAILS IN THIS AREA NOT SHOWN. SEE DRAWING TR2

PINE HILL LAKE

- INCREASE MIN. BYPASS TO 8 cfs
- PROVIDE COLD WATER OUTLET
- MODIFY EXISTING PUMPHOUSE



Appendix D
**November 17, 2014 letter from the Watershed Inspector General to the
Department's Assistant Commissioner for the Office of Hearings and Mediation
Services**



STATE OF NEW YORK
OFFICE OF THE ATTORNEY GENERAL

ERIC T. SCHNEIDERMAN
ATTORNEY GENERAL

DIVISION OF SOCIAL JUSTICE
ENVIRONMENTAL PROTECTION BUREAU

November 17, 2014

By E-Mail and Mail

Louis A. Alexander, Assistant Commissioner
Chief Administrative Judge, James T. McClymonds
New York State Department of Environmental Conservation
Office of Hearings and Mediation Services
625 Broadway
Albany, New York 12233-1500

**Re: Matter of Applications for Permits to Construct
and Operate Belleayre Resort at Catskill Park**

Dear Assistant Commissioner Alexander and Chief Judge McClymonds:

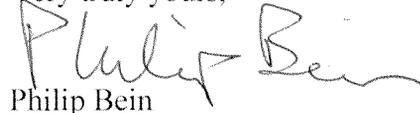
The Office of Watershed Inspector General (the WIG), an amicus party to the adjudicatory hearing in the above-referenced matter, respectfully responds to the motion by Department Staff to cancel the pending adjudicatory hearing as follows:

The WIG has reached agreement with the applicant for the Resort at Catskill Park to address our concerns regarding potential adverse stormwater impacts from that project. The applicant has satisfactorily resolved the WIG's stormwater concerns to date, and has agreed that the WIG will have 60 days for the review of each phase of the applicant's stormwater plans during the same 60 days when the Department's staff are reviewing these plans for each phase. In addition, the WIG has reached agreement with Department Staff to address our concerns regarding potential adverse stormwater impacts from development at the Belleayre Mountain Ski Center under the Unit Management Plan. Department Staff have satisfactorily resolved the WIG's stormwater concerns to date, and the WIG will have 60 days to review the stormwater plans for each project to be constructed under the Unit Management Plan.

Attached and incorporated within this response are the respective agreements, specifically an email (with attachment) dated November 17, 2014, from Dan Ruzow on behalf of the applicant, and a letter agreement signed by the WIG and by Lawrence Weintraub on behalf of Department Staff, dated November 17, 2014.

Accordingly, in light of these agreements, the WIG does not object to cancellation of the pending adjudicatory hearing.

Very truly yours,

A handwritten signature in black ink that reads "Philip Bein". The signature is written in a cursive style with a large initial "P" and a long, sweeping underline.

Philip Bein
Watershed Inspector General

Cc: Service list

Attachments

Philip Bein

From: Ruzow, Daniel <DRuzow@woh.com>
Sent: Monday, November 17, 2014 11:14 AM
To: Philip Bein; Lawrence Weintraub
Cc: Kevin Franke; Bakner, Teresa
Subject: SWPPP Comment and Future SWPPP Review
Attachments: Crossroads Response to WIG Concerns Regarding Modified Project SWPPP 111714(rev).docx

Importance: High

Dear Phil,

As a follow up to our recent telephone calls, this is to confirm that we will address all of the issues raised by the Watershed Inspector General's Office as outlined in the attached Response to your Office's recent comments. The plan changes will be made subsequently during the site development process and your Office will be afforded the same period of time, i.e. 60 days, for the review of each phase of the Stormwater Pollution Prevention Plan during the same 60 days when NYSDEC staff are reviewing the SWPPP for each phase.

We appreciate the comments of the WIG's Office and the assistance of Mr. Lake in bringing these questions to our attention.

Dan Ruzow

Daniel A. Ruzow

Whiteman Osterman & Hanna LLP

One Commerce Plaza

Albany, New York 12260

email: druzow@woh.com

off- (518) 487-7619

Fx- (518) 487-7777

Cell-(518) 281-5318

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WIG Concerns Regarding Modified Project SWPPP:

A. Stormwater Controls:

1. Parking Garage Near Wildacres Hotel and Filling a Wetland:

Project phases characterize when project components are to be constructed. The Draft stormwater pollution prevention plan (SWPPP, Appendix 19 in the SDEIS presents a very detailed plan for the construction of the Wildacres Hotel during Phase 1A of the Modified Project (Drawings L-3.01). However, Phase 1A does not include the detailed plans for constructing the unattached garage for the Wildacres Hotel. Plans to construct the unattached garage are presented in Phase 2 of the Modified Project (L-3.01 and L-3.00 and in the blasting plan shown on Figure 2-35 of the DSEIS). As recommended in my July 24, 2013 Technical Appendix Comment I.B.3., these plans need to be included in Phase 1A.4 (or eliminated entirely). According to the grading plan view drawings, the drawings that show the various phases of construction, and the erosion and sediment control plans, the Wildacres Hotel with its associated infrastructure appears to obstruct access to the area designated for the garage. The FEIS needs to address this potential access issue and explain how construction of this garage will be integrated into the project. In addition, the extent of construction activity at the proposed hotel parking garage does not appear on drawing L-3.01 or on drawing L-3.09 of the Erosion and Sediment Control Plan. These details must be added, if this component of the project is to be constructed. Also, the work area tables on drawing L-3.01 and in Table 11, page 54 of the SWPPP need to be modified accordingly. As discussed in my July 24, 2013 Technical Appendix Comment I.D., The proposed parking garage associated with the Wildacres Hotel is to be built on top of an isolated wetland (L-4.03), and will fill approximately half of it. I recommend, in the absence of documentation in the FEIS, that the isolated wetland not be disturbed and that the 208 parking spaces associated with this garage be constructed below the Wildacres Hotel, adding to the existing capacity of 250 parking spaces to make a total of 458 parking spaces.

Response: The majority of the connector road between the hotel and the parking garage is included in Phase 1 construction, more specifically in subphase 1A.4. This connection will be used, in part, for construction access to build the parking garage (planned during Phase 2 construction) Also, as shown on the attached annotated excerpt from Sheet L-3.01, construction access can be obtained from County Route 49 A and tie into the connector road in order to lessen construction traffic in proximity to the hotel. As we discussed, we will revise the SWPPP for the Phase 1 construction drawings to reflect the work that will be undertaken to ensure construction access to the parking garage and to set forth the soil disturbance and the soil erosion and sedimentation control practices that will be followed. A clarifying note will be added to the Phase 1 SWPPP plans that the construction access from County Route 49A will be constructed

as part of Phase 2. This will ensure that the work related to the construction of the parking garage (Phase 1A) in Phase 2 matches up fully with the work undertaken in Phase 1.

The proposed parking garage will be built on piers so there will be no direct impact to the wetland hydrology as agreed in the AIP. This wetland area is a seep formed and maintained primarily by groundwater discharge. The AIP provides that the non-jurisdictional wetlands will be avoided based on this construction technique and this will be shown in the construction drawings (phase 1 of the SWPPP, but for Phase 2 construction) of the SWPPP. All SWPPPs prepared for all phases of site development will be provided to the WIG's Office which will have 60 days to review each SWPPP for each phase.

2. Soil Restoration and Vegetative Control:

Section 6.2.1 of the stormwater pollution prevention plan (SWPPP) describes the soil restoration measures that will be performed on site. Table 3, on page 24 of the SWPPP, shows the restoration requirements for specific amounts of soil disturbance. As recommended in my July 24, 2013 Technical Appendix Comment I.B.4., all disturbed, "compacted" soils in the area of development are required to be decompacted after construction activities have been completed, to restore their water infiltrating characteristics (New York State Stormwater Design Manual, August 2010, pages 5-20 through 5-24). Soil restoration is critical to the post construction condition of the site. Areas requiring soil restoration should be designated on the plan views associated with the erosion and sediment control plan or the site stabilization drawings, L-3.26 and L-3.27, as well as in the text of the revised SWPPP. Failure to provide soil restoration across the site voids ALL the hydrology analysis and calculations for water quality treatment volume (WQv) in the FEIS.

Response: All of the soil restoration provisions currently set forth in the text in the draft SWPPP in the EIS will be set forth on the SWPPP plans for each phase of construction so that the contractors are easily able to understand the soil restoration requirements discussed above.

Section 7 of the SWPPP, Vegetative Control, states that 50 acres of sod will be used at the project. Drawings L-6.00 to L6.06 details the landscaping and the planting plan for the project. However, there are no detailed seeding specifications, seeding mixes or seeding rates shown for the project. It has been noted in the DSEIS that the soils on the site are classified as frigid soils, due to their elevation and short growing season. Therefore, the selection, establishment, and maintenance of a successful grass cover are critical to stabilize the soil. Appropriate detailed seeding specifications, seeding mixes or seeding rates

should be incorporated into the final EIS. In addition, drawings L-6.00 to L-6.06 need to be updated with this information.

Response: Each phase of the final SWPPP drawings will include the specifications for seeding mixtures and rates, as well as all locations where sod is to be placed. The WIG's Office will have 60 days to review each phase of the SWPPP to ensure that the notes added to the drawings regarding such sod placement locations and seeding mixtures and rates are appropriate.

3. Woody Debris:

The Draft SWPPP describes on site timber clearing operations (Appendix 19, section 6.1.4). These operations include the removal of marketable timber, chipping brush, limb wood, and other woody debris, and potentially burying stumps and debris onsite (page 2-37). As recommended in my July 24, 2013 Technical Appendix Comment I.B.5., no mention of burying stumps is made on the drawings and no waste areas are designated to receive this woody material. Due to the forested nature of a large majority of this site, a substantial quantity of woody debris may result. Woody debris storage and disposal areas should be designated and detailed in the revised SWPPP and shown on the detailed drawings L-4.00 thru L-4.09 of the Grading and Drainage Plan. This has not been done. The revised drawings dated February 21, 2014, do not detail what is to be done with the cut trees and stumps. These directions need to be added to the drawing notes on all drawings from L-4.00 to L-4.09.

Response: Each phase of the final SWPPP will contain notes concerning the appropriate handling and disposal of woody debris. These precise instructions to the contractor (which will include directing that burial of woody debris must be undertaken within the designated limits of disturbance), will be provided to the WIG's Office as set forth above.

B. Erosion and Sediment Controls:

1. As discussed in my July 24, 2013 Technical Appendix Comment I.C.7., the Erosion and Sediment Control Plan drawings, L-3.02 through L-3.25a, show many swales, rock outlets, and all sediment basin outlet dispersion pipes located outside of the designated work areas. The work limits should include these areas, since they result in a significant amount of work and, in many cases, soil and vegetative disturbance. Once these limits have been revised, the work area table on sheet L-3.01 and Table 11 of the Draft SWPPP should be corrected accordingly.

Response: The work limits shown on the plans have been re-verified to ensure that all activities involving soil disturbance are accounted for, and any necessary updates to the corresponding work area tables have been included in an updated sheet L-3.01 and SWPPP Table 11, both of which are included in the Errata section of this FEIS. Dispersion pipes are not typically included in the disturbance areas since these pipes will be manually laid on existing ground and staked into place with little to no soil disturbance. The dispersion pipes are not included in the limits of disturbance, but they can be considered within the limits of construction. Each phase of the final SWPPP will be reviewed as set forth above.

2. As discussed in my July 24, 2013 Technical Appendix Comment I.C.11., a few sediment basins have the potential to short circuit due to the inlet flow entering the basin too close to the discharge outlet (e.g. sheet L-4.05). This should be corrected with a barrier to re-route the inlet flow along a longer flow path to the outlet point.

Response: Sediment basins will be dewatered with a pump with a turbidity meter into a dispersion pipe, and not over a traditional outlet. (See detail 1 on sheet L-8.01 in the errata section of this FEIS). Therefore, maximizing flow path within the sedimentation basin is less of a concern. Each phase of the final SWPPP will carefully examine whether the length between the inlet and outlet can be increased via the use of a barrier or the shape of the basin. For permanent basins to be used for operational stormwater management every effort will be made to have an appropriate flow path to the outlet point that maximizes the effectiveness of the basin. The WIG's Office will have an opportunity to review each phase of the final SWPPP as set forth above.

3. As discussed in my July 24, 2013 Technical Appendix Comment I.C.12., a drop inlet catch basin, or a transition inlet structure that collects flow from two swales prior to its appearance under a golf fairway, needs to be placed on sheet L-4.04.

Response: This will be shown on the final SWPPP for that phase.

New Additional Comments

The following comments are based on the updated drawings (2/21/14):

1. The emergency spillways for the stormwater management ponds should be relocated from atop the embankment and above the service spillways to a secure location in natural ground to prevent a potential washout of the dam, if overtopping should occur (drawings L-4.05 and L-8.01).

Response: This improvement will be shown on the ponds on the final SWPPP for each phase where feasible. For the most part, all ponds are excavated and do not have embankments.

2. Drawing L-4.03 shows the top floor elevation of the parking garage to be at 2,200' while the bottom floor elevation is shown at 2,210'. These elevations need to be confirmed.

Response: These elevations were inadvertently swapped and the numbers will be corrected.

3. Drawing L-4.05 should adjust the location of the micro-pool extended detention pond forebay to capture runoff from the south stormwater conveyance at the practice driving range.

Response: This will be adjusted on the final SWPPP plan for that phase of the site development.

4. Drawing L-4.08 should re-configure the inlet/outlet points of the stormwater pond in such a way as to prevent short circuiting of the flow and maintain the required minimum length to width ratio of 1.5 to 1 (New York State Stormwater Management Design Manual, 2010).

Response: This drawing shows the irrigation pond (which also functions as a stormwater cistern). The irrigation pond will be used for irrigating the golf course rather than for simple treatment and discharge of stormwater. Because of the lack of discharge from this pond, short circuiting will not be an issue of concern.

5. Stockpile areas are shown at locations on the Erosion and Sediment Control Plans, such as the one shown on sheet L-3.12 and again on sheet L-3.13, but it is not clear what is to be stockpiled in these areas. These specifics need to be added to the grading and erosion control notes for clarification.

Response: The specific information regarding the soil stockpile areas will be added to the final SWPPP. As stated above, in all cases the WIG's Office will have the same 60 day review period as the NYSDEC for the each phase of the final SWPPP which will be submitted as part of the site development in accordance with the individual SPDES permit issued by NYSDEC for the project.



STATE OF NEW YORK
OFFICE OF THE ATTORNEY GENERAL

ERIC T. SCHNEIDERMAN
ATTORNEY GENERAL

DIVISION OF SOCIAL JUSTICE
ENVIRONMENTAL PROTECTION BUREAU

November 17, 2014

Lawrence Weintraub, Esq.
Assistant Counsel
Office of General Counsel
NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1500

Kelly Turturro, Esq.
Assistant Regional Attorney
NYSDEC Region 3
21 South Putt Corners Road
New Paltz, New York 12561

Re: **Matter of Applications for Permits to Construct
and Operate the Belleayre Resort at Catskill Park**

Dear Counsel:

The purpose of this letter is to memorialize the agreement between the Watershed Inspector General (WIG or WIG Office), an amicus party in the above-referenced administrative proceeding, and Department of Environmental Conservation Staff (Department Staff) concerning future review by WIG and further revisions by the Department's staff of the stormwater pollution prevention plans for the Belleayre Mountain Ski Center Unit Management Plan.

The WIG Office and WIG's stormwater consultant, Donald Lake, have reviewed the Final Environmental Impact Statement for the Belleayre Mountain Ski Center Unit Management Plan, dated July 2014, including Appendix A (containing 151 construction drawings), Appendix A1 (Technical Appendix Supporting Stormwater Calculations), and Appendix E (the Stormwater Pollution Prevention Plan or SWPPP). In this letter, we refer to these documents collectively as the UMP Stormwater Plans.

I. WIG Technical Comments

The WIG Office has shared the following technical comments concerning the UMP Stormwater Plans with Department Staff:

A. Soil Restoration:

Sub-Appendix J, "Best Management Practices" of Appendix I, Shumaker SWPPP for Discovery Lodge Expansion", on page 806 of the file labeled "03 Belleayre UMP-FEIS Appendices B-P" includes the compacted soil restoration requirements for the final stabilization of the site areas at the UMP project. However, these requirements are absent from and need to be placed on the following construction drawings: TR-3, 4, 7, 10; SM-15, 15A, 15B, 16, 17; LT-1 through LT-8; EC-1, 2, 4, 6, and 8 through 12; BS-5, 6, 7, 10, 11, and 13 through 16.

B. Snow Management:

As discussed in the Technical Appendix, to WIG's July 23, 2014 comments concerning the Draft Environmental Impact Statement (DEIS) for the Belleayre Mountain Ski Center UMP (hereinafter DEIS Comments) (Comment II.C), a detailed snow management plan was missing from the DEIS. After reviewing the FEIS, it is still missing. As mentioned before, details concerning snow removal and snow storage practices need to be provided. For example, will the snow be removed during the winter season and stored in a specific location, such as adjacent to a stream, or will it be plowed into a stormwater management practice and potentially impede its performance? A snow management plan must be developed and incorporated into the FEIS and SWPPP, especially at critical parking areas.

C. Woody Debris:

Due to the forested nature of a large majority of this site, a substantial quantity of woody debris may result. Page 858 of Appendix E of the SWPPP, indicates that trees and stumps will be chipped. As discussed in my July 24, 2013 Technical Appendix, Comment II.D.4, there are no waste areas designated to receive this woody material. Additional information must be added to existing notes and construction details on all appropriate construction drawings and the SWPPP to clarify and segregate the routing of construction waste material from the vegetation removal operations. This information should be added to the notes and construction details shown on drawings TR-4, LT-2, BS-2, SM-8, EC-2, 4, and EC-6.

D. Deficiencies in Construction Drawings:

None of the more than 151 drawings contained in the updated FEIS have revision dates recorded on them. This would indicate that they have not been updated. Technical comments concerning these drawings were presented in our letter of July 24, 2013. Unfortunately, none of our technical comments concerning deficiencies in the construction drawings have been addressed in the FEIS. The following deficiencies still exist:

1. The FEIS, incorporates by reference, many details that are contained in documents that are not part of the FEIS submittal, such as the New York State Standards for Erosion & Sediment Control (2005). These details need to be reproduced and added to the details and specifications that appear on the construction drawings that were submitted as part of the FEIS. For example, drawing PK-10 requires additional details.

2. Although specific seed mixes, seeding rates, mulches, and mulch application rates for detailed areas of the project appear in Appendix F of the FEIS, they are not shown on the drawings where they have been referenced. Drawings LA-1 and LA-2 should be revised to include this information.

3. Dimensions and details are missing from a number of specific works of improvement, such as for the building site drawings (e.g. BS-2, 3, 6, 7, 8), the lift terminal drawings (e.g. LT-1 through LT-8), snowmaking (e.g. SM-2, SM-9, SM-10, SM-11A, and SM-12), and parking (e.g. PK-1 and PK-6 through PK-16). This information needs to be added to the construction drawings.

4. Topographic information presented in yellow ink is unreadable on many of the Building Site drawings, specifically BS-10 through BS-13, and also on EC-1 and EC-2. The color of the ink on these sheets needs to be changed so that the contour lines are readable.

5. Rock outlet protection designations are absent from many of the drawings. For example, they are missing from drawings BS-3, BS-7, LT-3, LT-5, EC-1, and EC-6. This omission needs to be corrected.

6. Safe site access is essential to all stormwater management practices that require maintenance. Drawings associated with these stormwater practices must clearly delineate access pathways. For example, access to maintain the stormwater infiltration basin on drawing BS-3 must be shown.

7. Additional grading details such as contour closure, defined diversion outlets and fill elevations and slopes are needed to clarify proposed earthwork modifications on drawings BS-10 through 16, LT-2, LT-4, EC-6, EC-10, and PK-4, PK-7, PK-14, and PK-15.

8. Channel lining details are needed for the water conveyances shown on drawings SM-10, EC-1, PK-7, and PK-9. For example, depending on the practice and its longevity, these details could specify whether the conveyances are constructed from stone, plastic, or vegetation.

9. A range of specific erosion and sediment control practice details need to be added to the construction drawings. The following list provides an example of these details: adding concrete truck washouts on drawing BS-2 and EC-1; adding rock outlet protection structures on all culvert outlets shown on drawing BS-3, EC-1 and EC-6; adding seed and mulch types and rates to the EC series of drawings and to all the ESC plan sheets for the

other series of drawings (LT, SM, BS, PK, and TR), adding drop inlet protection on drawing LT-3, and detailing diversion outlets on drawings LT-1 through LT-8.

10. Additional phasing and sequencing notes and legends are needed to complete construction drawings BS-4, BS-5, BS-16, EC-1, and EC-2.

II. Revisions of the UMP Stormwater Plans and Further Review by WIG

The Department's staff concur with the WIG's comments set forth in Section I above, and shall, in cooperation with the Olympic Regional Development Authority, incorporate them into revised Construction Stormwater Pollution Prevention Plans for each project to be implemented within the Belleayre Mountain Ski Center under the UMP.

Subsequent to approval of the Unit Management Plan but prior to commencement of construction of each project, the Department's staff or the Olympic Regional Development Authority, shall make their revised Construction Stormwater Pollution Prevention Plan available to the WIG Office for its review and comment for a 60-day period for that project. This comment period shall be for agency consultation only; it shall not be deemed a public comment period pursuant to the Uniform Procedures Act or the State Environmental Quality Review Act or otherwise. Consistent with the Executive Order establishing the New York City Watershed Inspector General, the Department's staff, in cooperation with the Olympic Regional Development Authority, shall work with the WIG Office to consider any comments submitted by the WIG and confer with WIG prior to finalizing the Construction Stormwater Pollution Prevention Plan for any such project.

Please indicate your agreement with the foregoing on behalf of the Department's staff by signing where indicated below.

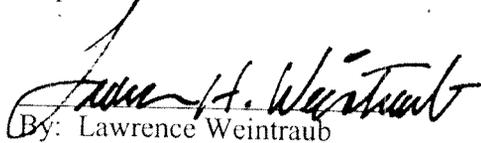
Yours truly,



Philip Bein
Watershed Inspector General

Agreed and Accepted:

Department Staff



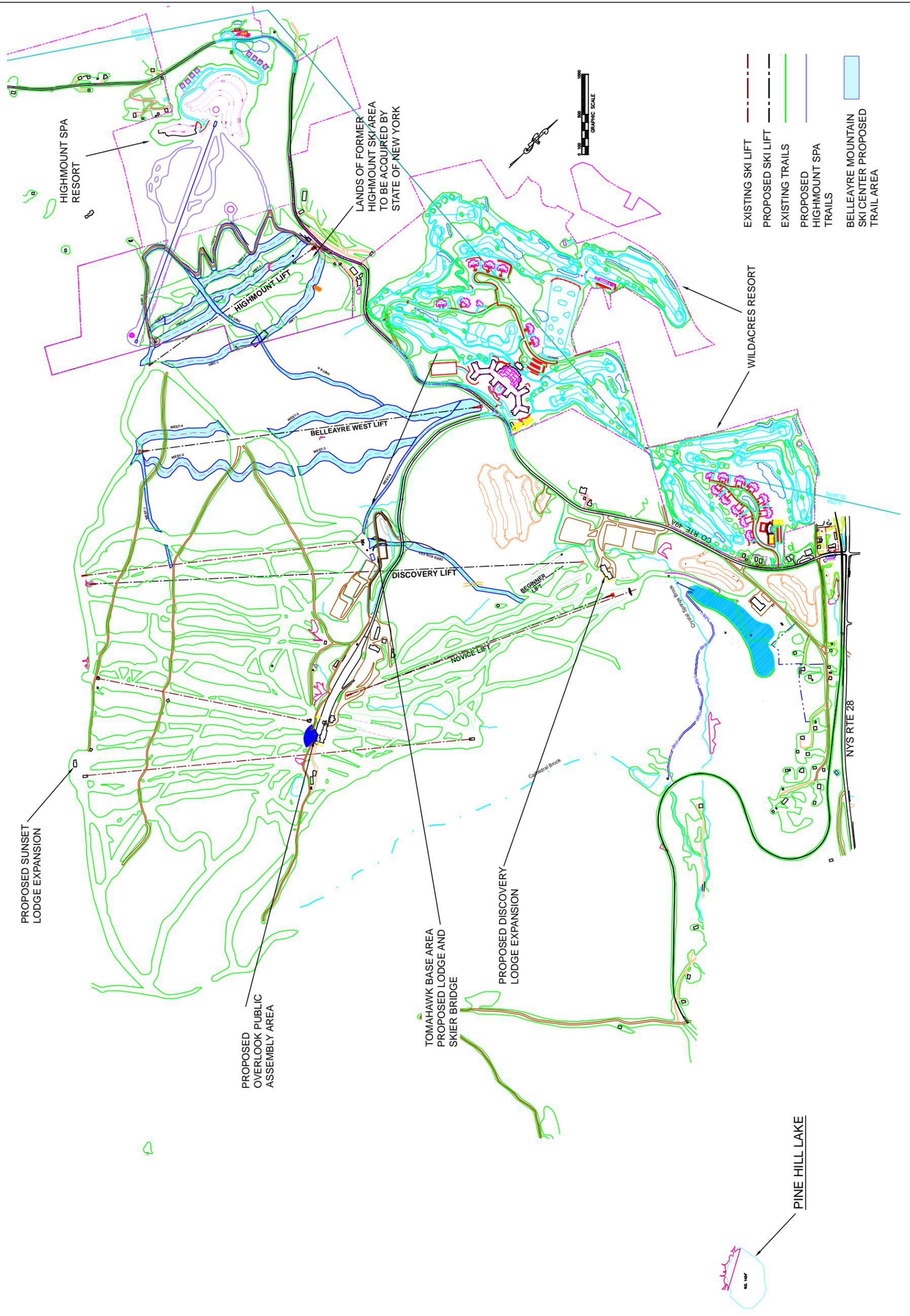
By: Lawrence Weintraub
Assistant Counsel

c: Mr. Ted Blazer, ORDA
Kelly R. Turturro, Assistant Regional Attorney
Andrew J. Niles, P.E., NYSDEC – Bureau of Design and Construction

Appendix E
Cumulative Map:
Belleayre Mountain Ski Center – Full Build-out Alternative
and
Modified Belleayre Resort at Catskill Park

CUMULATIVE MAP: BELLEAYRE MOUNTAIN SKI CENTER - FULL BUILD OUT PLAN AND MODIFIED BELLEAYRE RESORT AT CATSKILL PARK

NYS Department of Environmental Conservation
Bureau of Design & Construction



- EXISTING SKI LIFT
- PROPOSED SKI LIFT
- EXISTING TRAILS
- PROPOSED HIGHMOUNT SPA TRAILS
- BELLEAYRE MOUNTAIN SKI CENTER PROPOSED TRAIL AREA



PROPOSED SUNSET LODGE EXPANSION

PROPOSED OVERLOOK PUBLIC ASSEMBLY AREA

TOMAHAWK BASE AREA PROPOSED LODGE AND SKIER BRIDGE

PROPOSED DISCOVERY LODGE EXPANSION

WILDACRES RESORT

PINE HILL LAKE

HIGHMOUNT SPA RESORT

LANDS OF FORMER HIGHMOUNT SKI AREA TO BE ACQUIRED BY STATE OF NEW YORK

BELLEAYRE WEST LIFT

DISCOVERY LIFT

NOVICE LIFT

BEGINNER TRAIL

NYS RTE 28

Catskill Brook

