

1.5 Terrestrial Wildlife

1.5.1 Introduction

Separate analyses of potential impacts on terrestrial resources were conducted for the BMSC UMP DEIS (Section 4.5) and the Modified Crossroads Resort at Catskill Park SDEIS (Section 3.4.). Neither of these documents concluded that there is a potential for significant impacts to terrestrial resources from the proposed projects. Additional information about baseline conditions at the Modified Crossroads Resort at Catskill Park is available in Appendix 23, Wildlife Survey Results and Appendix 21, the Invasive Species Control Plan. Cumulative impacts would result if the magnitude or duration of the combined impacts would result in a significant loss in habitat or disruption of movement patterns of populations of wildlife. Another type of impact would result if the combined projects would result in a significant increase in populations of nuisance or invasive species. This section evaluates whether any adverse impacts from both projects could, when considered together, become significant.

1.5.2 Construction Impacts

Section 3.4 of the Modified Crossroads Resort at Catskill Park SDEIS describes potential impacts to 233.4 acres of terrestrial habitats of the 793.3 total acres within the project boundary. Almost all of this (228.1 acres) is the clearing of forests for the resort development. Construction of the Modified Crossroads Resort at Catskill Park would clear 29% of the existing land.

Section 4.5 of the Belleayre Mountain Ski Center UMP describes potential impacts to 100.8 acres (96.1 on the Belleayre property and 4.7 in the Highmount property), most of which is currently successional northern hardwood community. Small sections (< 1 acre) of red maple hardwood swamp and shallow emergent marsh would be cleared to accommodate stream crossings as described in Section 1.3. The tree clearing that would occur during construction for the BMSC UMP would represent 5% of forest of the 1,884.6 total acres of forest at the BMSC.

The cumulative impacts of construction of both projects would result in the clearing of 334.2 acres. This represents 12% of the 2,677.9 acres of the combined projects. The clearing would be conducted to provide new ski trails, utilities, and the buildings and roads associated with new developments.

Large, mobile wildlife such as bear, deer, raccoons, etc. would not face direct mortality during construction because of their natural avoidance of noise from

equipment, tree clearing, increased vehicle traffic, infrastructure construction, etc. Indirect mortality due to the permanent loss of habitat could occur, but these species are locally abundant and populations would not be adversely impacted by the proposed construction. Some limited mortality of less mobile species (e.g., rodents, snakes) may occur during the course of construction.

Tree clearing could disrupt wildlife travel corridors for species such as deer and bear. However, the proposed new ski slopes are nearby and parallel to existing trails, so it is unlikely established wildlife corridors occur in these areas.

Another consideration was the cumulative effects of forest fragmentation.. Forest fragmentation occurs when parcels are removed from forest cover, breaking up a large tract into smaller forested areas. There are species of birds and mammals that require large, unbroken areas, and they will not approach the edge of the forest. Fragmentation and the edge effect would increase habitat for wildlife such as deer and raccoons and decrease habitat for forest nesting birds that prefer forest interiors. 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. This adverse impact would reduce the total amount of forest, but not add to the length of the edge.

The proposed impacts are consistent with activities such as ground disturbance and recreation that already occur throughout the study area. Ground is disturbed by trail maintenance, mowing, and grooming the slopes. It is anticipated that wildlife in the study area are accustomed to disturbance of this nature and would either relocate to other adjacent suitable habitat or, upon cessation of construction, make use of areas temporarily disturbed as re-vegetation takes place.

Breeding bird and bat populations 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, and structures. These potential impacts are similar to other disturbances in the area.

1.5.3 Operational Impacts

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 operations described above during the construction phases. 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 (frogs, toads, and newts), snakes, and birds. These potential adverse impacts would be partially offset 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.

Other impacts to wildlife could occur by increased traffic on the roadways. This could result in more road-associated mortality. Although unpleasant, potentially damaging to property, and risky to people, the bulk of the new traffic from the proposed developments would occur during daylight hours when wildlife encounters are infrequent. It is not feasible to predict the frequency of such encounters.

In addition to adverse impacts on wildlife, the potential to increase the presence of invasive species could increase. In particular, the Wildacres Golf Course associated with the Modified Crossroads Resort bat Catskill Park could create habitats for invasive plant species. The clearings at the BMSC could have similar problems. A plan to avoid, minimize, and if necessary control weed species is described in Appendix 21 of the Modified Crossroads Resort bat Catskill Park SDEIS. Similar management practices would be applied at the BMSC.

There is a potential for significant nuisance wildlife issues to arise. Possible nuisance issues include 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 bacteria levels via fecal coliform. Mice and rats can become associated with food services and buildings. BMPs would 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 will prevent black bears from feeding on garbage, and good hygiene and trapping will be required to control nuisance rodents.

1.5.4 Mitigation

Both projects are proposing design elements that avoid and minimize impacts to wildlife. The Invasive Species Plan (Appendix 21, Modified Crossroads Resort at Catskill Park), is intended to assure that the Wildacres Golf Course and other cleared areas uses best practices to avoid the use of herbicides and prevents the growth of invasive plant species. To the extent that is feasible, the proposed new buildings would 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 BMSC, and extensive utilization of BMPs would mitigate impacts to wildlife. Latching bear-proof trash bins would reduce nuisance bear encounters, and vegetative buffers around streams and ponds would avoid the creation of habitats for nuisance geese populations.

1.6 Transportation and Traffic

All of the Existing, future No-Build and Build condition evaluations for the study areas for each project are included in the Belleayre Mountain Ski Center (BMSC) UMP DEIS (Section 4.6 and Appendix AD) and the Belleayre Resort at Catskill Park SDEIS (Sections 3.5 and 4.7 and Appendix 11). This evaluation only discusses the cumulative impacts of the two projects.

The estimated time of completion (ETC), or year of opening, of the BMSC UMP and Belleayre Resort for the purposes of this analysis is 2015. The BMSC UMP DEIS discusses that the ETC year of the UMP was revised to 2018 subsequent to the completion of the traffic projections and analysis for the future conditions. However, because the background growth was conservatively estimated and the Route 28 corridor has seen little to no growth in the last ten years, the evaluations of the 2015 (ETC) year and subsequent design horizons (ETC+10 and ETC+20) are still applicable for the revised ETC year of 2018. See Section 3.1 of the BMSC UMP DEIS Appendix AD for a more detailed discussion of the study area volume trends.

The site generated trips for both projects were reviewed:

- BMSC UMP - Trips were estimated based on traffic data collected at the existing site on a peak operating day, and applied to the planned peak attendance level for the UMP (9,000 patrons).
- Belleayre Resort at Catskill Park - Trips were estimated for the project based on the Institute of Transportation Engineers (ITE) *Trip Generation, 8th Edition* data for the component land uses, with applicable adjustments to account for the interaction between the Resort and BMSC that are consistent with ITE recommended practice, including considerations of planned shuttle service and ski-in/ski-out amenities.

It is noted that the conditions analyzed are for a “worst-case” condition that represents the Saturday PM peak hour when patrons are exiting BMSC 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.

The new site generated trips for both sites are summarized in Table 1.6-1

Table 1.6-1 Combined Site Generated Traffic; Saturday Peak Hour

Project	Enter	Exit	Total
BMSC UMP	110	626	736
Belleayre Resort	98	70	168
Total	208	696	894

1.6.1 Potential Impacts

1.6.1.1 Study Area Intersections

The traffic for the combined Build condition (refer to Appendix B of this document for traffic volume figures) was evaluated to determine the traffic impacts related to the BMSC UMP DEIS and Belleayre Resort SDEIS. The combined Build condition was evaluated for the ETC year of 2015. Based on this analysis, a level of service (LOS) was assigned to each intersection and roadway segment for the conditions analyzed using criteria set forth in the Highway Capacity Manual 2000 published by the Transportation Research Board. Descriptions of the LOS criteria can be found in Appendix B of this document. The results of the 2015 No-Build (from the BMSC UMP DEIS Section 4.6) and Combined Build analyses are summarized in Tables 1.6-2 and 1.6-3.

Table 1.6-2 - Level of Service Summary: Intersections

Intersection	2015 No-Build	2015 Combined Build
NY Route 28 & NY Route 212	C	F
NY Route 28 & NY Route 214	C/D	F/F*
NY Route 28 & NY Route 42	C	F
NY Route 28 & CR 47	C/B	F/C
NY Route 28 & Main Street	C	E
NY Route 28 & CR 49A	F/E	F/F
NY Route 28 & CR 38	C	C
CR 49A & Van Loan Road	-	F/F
CR 49A & North Parking	-	F
CR 49A & Gunnison Road / Lower Driveway	D/E	F/F
CR 49A & Discovery Lodge	C	F
CR 49A & Upper Discovery Parking	-	F
CR 49A & Overlook Road	B	F/F

*LOS is provided for both minor street approaches

Table 1.6-3 - Level of Service Summary: Roadway Segments

Segment	2015 No-Build	2015 Combined Build
NY Route 28: NY Route 209 to NY Route 375*	A/B	B/B
NY Route 28: NY Route 375 to NY Route 212	D	E
NY Route 28: NY Route 212 to NY Route 214	C	D
NY Route 28: CR 38 to NY Route 30	C	C
CR 49A: South of Belleayre Access	C	C

* This is a multilane segment, therefore LOS is provided for each direction (EB/WB). All other segments are analyzed as two-lane segments.

The analysis of the cumulative development indicates that the 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 BMSC. 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). Refer to Section 2.2 of Appendix B of this document for a detailed discussion on this condition.

Additionally, these operations reflect the peak season conditions during the peak hour of the day, which is not a reasonable design condition. Delay during off-season and off-peak times of the day would be much less. A sensitivity analysis of the site generated traffic at BMSC was completed to test the operations if the ten highest attendance days of the year were disregarded. The mitigation measures are identified in 1.6.2.

1.6.1.2 Growth Inducing Impacts

The construction and operation of the proposed BMSC UMP and Belleayre Resort projects is anticipated to attract local and regional tourists to the area. To support the increase in travelers through the corridor, it can be expected that both projects will induce growth of other supporting uses, such as hotels, restaurants, shops and gas stations, along the NY Route 28 corridor. These developments would be subject to local site plan and zoning approvals, DOT highway access permits, and NYCDEP Watershed Regulations

The potential impact of the growth of development along the corridor would be the increase of access driveways and traffic volume, which have the potential to introduce operational and safety issues. Higher driveway/roadway densities along a corridor can reduce the overall capacity.

Limiting or consolidating access to future development will help maintain the operational capacity of NY Route 28. It would be beneficial for a corridor access management plan to be completed by NYSDOT or other local agency in anticipation of the induced growth developments that can be expected in the area. This would help manage the development requests and provide a basis for site access approvals.

1.6.2 Mitigation Measures

1.6.2.1 Study Area Intersections

A sensitivity analysis was conducted for a reduced attendance condition at BMSC that would represent the 11th highest attendance day of the year (i.e. disregarding the top ten highest attendance days). This analysis was utilized and the site generated traffic for the Belleayre Resort at the intersections of NY Route 28 & NY Route 214 and NY Route 28 & CR 49A was also added to determine the combined operations for this condition. Given that only ten ski season days are estimated to experience higher attendance than this condition, it is recommended that the mitigation improvements are considered for this reduced condition rather than the peak attendance day.

For the year of opening (2015), it is recommended that at the intersection of NY Route 28 & CR 49A, a westbound left-turn lane, northbound right-turn lane and a traffic signal are provided. Installing the turn lanes and signalized control at the intersection of NY Route 28 & CR 49A will provide safe and efficient operations for most operating days at BMSC and Belleayre Resort, and will limit delays and improve safety at the intersection on the peak operating days.

Refer to Section 3.0 of Appendix B of this document for a detailed description of mitigation measures.

1.6.2.2 Site Driveways

The documentation for both the BMSC UMP and the Belleayre Resort included a sight distance evaluation along CR 49A and at the proposed driveway intersections. Both identified improvements to be implemented to improve sight distance for drivers along the CR 49A corridor and drivers exiting driveways from both sites. The improvements identified are summarized below:

- Vegetation clearing and/or embankment grading for the intersections with:
 - Wildacres Front 9 Village driveway
 - Lower Discovery Lodge Parking
 - Highmount Spa Resort driveway
 - Wildacres Upper Access driveway

- Intersection Warning Signs:
 - Wildacres Front 9 Village driveway
 - North Parking
 - Upper Discovery Parking
 - Discovery Lodge

- Wildacres Resort Main Access driveway/BMSC Overlook Road: Realignment of CR 49A to improve vertical and horizontal curves to accommodate pedestrian crossing between the Resort and BMSC.

- Wilderness Activity Center driveway: relocate existing driveway 300 feet to south or restrict movements to right-in/right-out.

A comprehensive corridor signing plan should be developed to ensure that the recommended warning signs do not overlap or conflict with each other.

1.6.2.3 Traffic Demand Management

Traffic demand management (TDM) strategies are being incorporated into the project proposals that will reduce the vehicular trips between the two sites as follows:

- Local shuttles: The TIS for the Belleayre Resort discusses the use of a shuttle system to transport skiers between the Resort and BMSC. This assumption was used in the trip generation estimates for the Resort and will greatly reduce the number of vehicular trips made between the two sites.
- Ski-in/Ski-out: The documentation for both projects describe ski-in/ski-out accommodations, which allow Resort users to get right onto a ski lift without driving to BMSC. This also was an assumption used in the Resort trip generation estimates.

Other traffic demand and event management strategies should be implemented to distribute the traffic load on the system.

- Public Transportation: Expand 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).
- Private Bus Companies: Expand packages available to include other regional skier origins besides NYC and to be available more frequently.
- Operations
 - BMSC: Staggering the closing times of different ski lifts and/or keeping other lodge facilities open longer after the lifts are closed.
 - Belleayre Resort: Offering different check-in/check-out days for the fractional units (spread out over Friday, Saturday and Sunday rather than all on Saturday) and offering a variety of weekend packages for the hotel that would include arrivals and departures on off-peak days (Friday and Monday).
- Driver Information: Providing variable message signs at key locations in the corridor.

1.6.2.4 Aviation

Neither the DEC UMP nor the Belleayre Resort has proposed construction of any airport facilities. Any visitors arriving by airplane would rely on the existing airports in the region including Albany International, Stewart International, Sullivan County Airport and the Kingston–Ulster Airport.

1.7 Visual

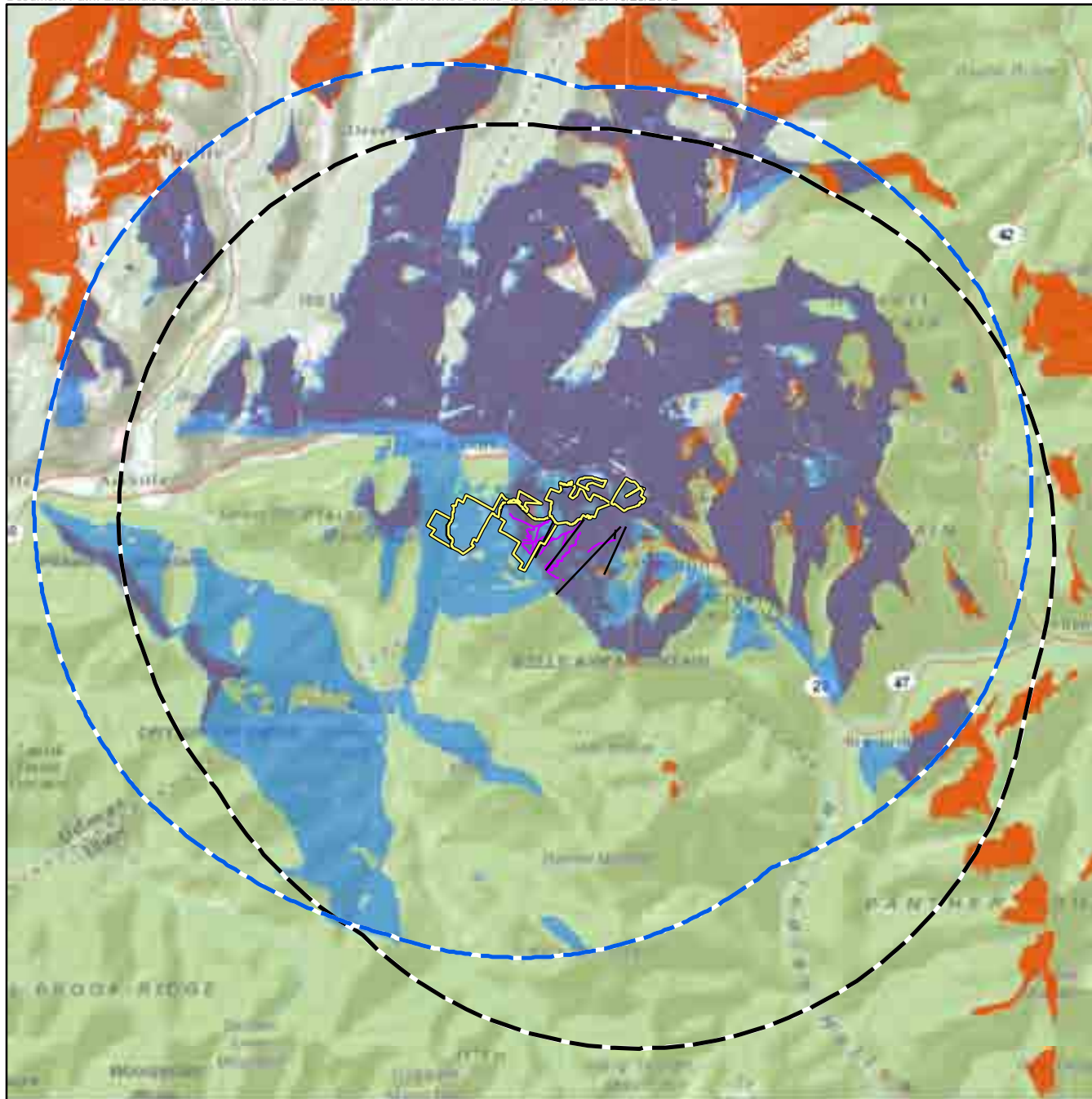
A visual impact assessment (VIA) of the proposed expansion of the Belleayre Mountain Ski Center (BMSC) was prepared for the BMSC UMP DEIS. As part of the Modified Belleayre Resort at Catskill Park SDEIS for the Modified Crossroads Resort at Catskill Park (Resort), a VIA was completed to assess the visual impacts of that project. Both VIAs were conducted in accordance with NYSDEC Program Policy “Assessing and Mitigating Visual Impacts” (NYSDEC 2000). An analysis of the combined effects of these two projects has been conducted to assess the cumulative visual impacts of the projects.

Using computer modeling and balloon studies, the project’s VIAs provide viewshed mapping and described the results of visibility analysis within a 5-mile radius study area. Prominent viewpoints outside that area from the numerous mountain peaks in the region were also considered. The VIAs also provided an inventory of local and statewide significant aesthetic resources, described the existing visual/aesthetic character of the landscape and characterized viewer groups. Daytime and nighttime simulations of both projects were created to demonstrate the views from the surrounding landscape. This research and the visual tools were used to aid in the determination of significance of the visual and aesthetic impact by evaluating project consistency/contrast with existing landscape components, effect on user groups and mitigation measures as suggested in the DEC’s Program Policy.

1.7.1 Zone of Visibility









Assessing the cumulative visibility of the projects involved the evaluation of the VIA Reports of both the BMSC and the Crossroads 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. Digital terrain modeling was used for each project to identify the potential viewshed areas, and the combined results of the modeling demonstrate the viewshed of the combined development. Figure 1.7-1 shows the overlapping ZVI of the ski center and the resort based on an evaluation of topography only, no vegetation, and represents the most conservative potential for visibility of both or either projects.

As the ZVI map of topography only provides an unrealistically conservative view of the potential for visibility, each of the VIAs also provided a ZVI that considered how views are blocked by vegetation. The Crossroads Resort analysis considered the tree canopy throughout the 5-mile radius, while the BMSC analysis conservatively considered only the tree canopy on BMSC property. Figure 1.7-2 shows the combined ZVIs to indicate where visibility of either or both of the projects is likely.



Source: E & E, 2008; USGS, 2004; LA Group 2009

Proposed Belleayre Project Area Cumulative Visibility Assessment Topography Only Ulster County, New York

-  Zone of Potential Visibility (Belleayre UMP Ski Center)
-  5-mile Project Area (Belleayre UMP Ski Center)
-  Zone of Potential Visibility (Crossroads Belleayre Resort)
-  5-mile Project Area (Crossroads Belleayre Resort)
-  Cumulative Zone of Potential Visibility (Crossroads Belleayre Resort and Belleayre UMP Ski Center)
-  Proposed Belleayre UMP Ski Center Ski Lifts
-  Proposed Belleayre Ski Center Trails
-  Boundary of Crossroads Belleayre Resort

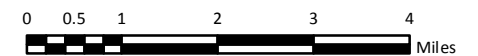
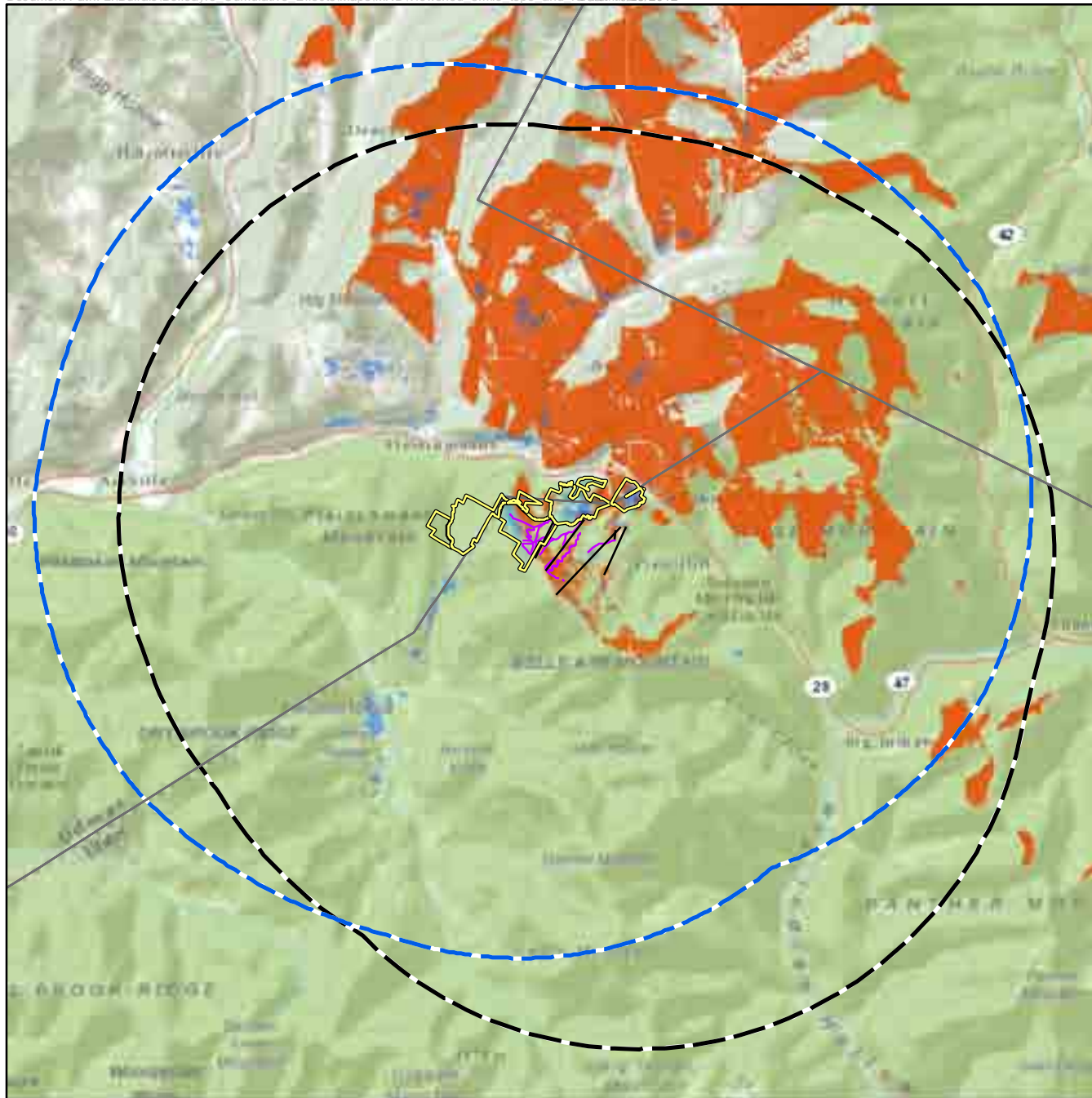










Figure 1.7-1



Source: E & E, 2008; USGS, 2004; LA Group 2009

Proposed Belleayre Project Area Cumulative Visibility Assessment Topography and Forest Ulster County, New York

-  Zone of Potential Visibility,
(Belleayre UMP Ski Center,
Forest Cover at Project Site Only)
-  5-mile Project Area
(Belleayre UMP Ski Center)
-  Zone of Potential Visibility,
(Crossroads Belleayre Resort,
All Forest Cover in 5-mile Project Area)
-  5-mile Project Area
(Crossroads Belleayre Resort)
-  Cumulative Zone of Potential Visibility
(Crossroads Belleayre Resort and
Belleayre UMP Ski Center)
-  Proposed Belleayre UMP Ski Center Ski Lifts
-  Proposed Belleayre Ski Center Trails
-  Boundary of Crossroads Belleayre Resort

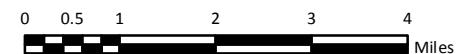


Figure 1.7-2

The 5-mile radius areas surrounding either project are almost the same areas, although the 5-mile radius around the Resort extends farther to the west, while the 5-mile radius surrounding the BMSC is farther to the east. 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 visible facilities of the BMSC are located along the north ridge of Belleayre Mountain, facing northeast. Most of the 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.

In addition to the viewshed analysis of the 5-mile radius from the project, the BMSC VIA analyzed the potential visibility from specific locations as distant as 25 miles away. The Catskill Park has 98 peaks more than 3,000 feet high and spans four counties: Delaware, Greene, Sullivan, and Ulster counties. Views of the combined projects from 18 mountain summits were identified during the scoping process as valuable aesthetic resources that require evaluation in the DEIS, and existing views were evaluated for visibility and quality to assess the potential impact of the project. This evaluation was completed using digital terrain modeling, on-line research, interviews with local guides, and field observations. Beyond 5 miles, only the ski slopes were visible to the naked eye, and from many locations the distance, topography, and angle prevented a clear view of the ski area. A full description of these observations and assessment is provided in the BMSC's VIA, including figures that summarize the evaluations, with viewsheds, line-of-sight profiles, details on each visual resource, and photographs taken from these peaks. Because of the distance and topography, the Crossroads Resort will not be visible from any mountain peaks except Balsam Lake Mountain, where the view is minimal (see Simulation VP-9 of the Crossroads Resort VIA) and there is no view of the BMSC because as determined in the original BMSC visual analysis, all existing and new facilities are blocked by vegetation and topography or not visible due to distance.

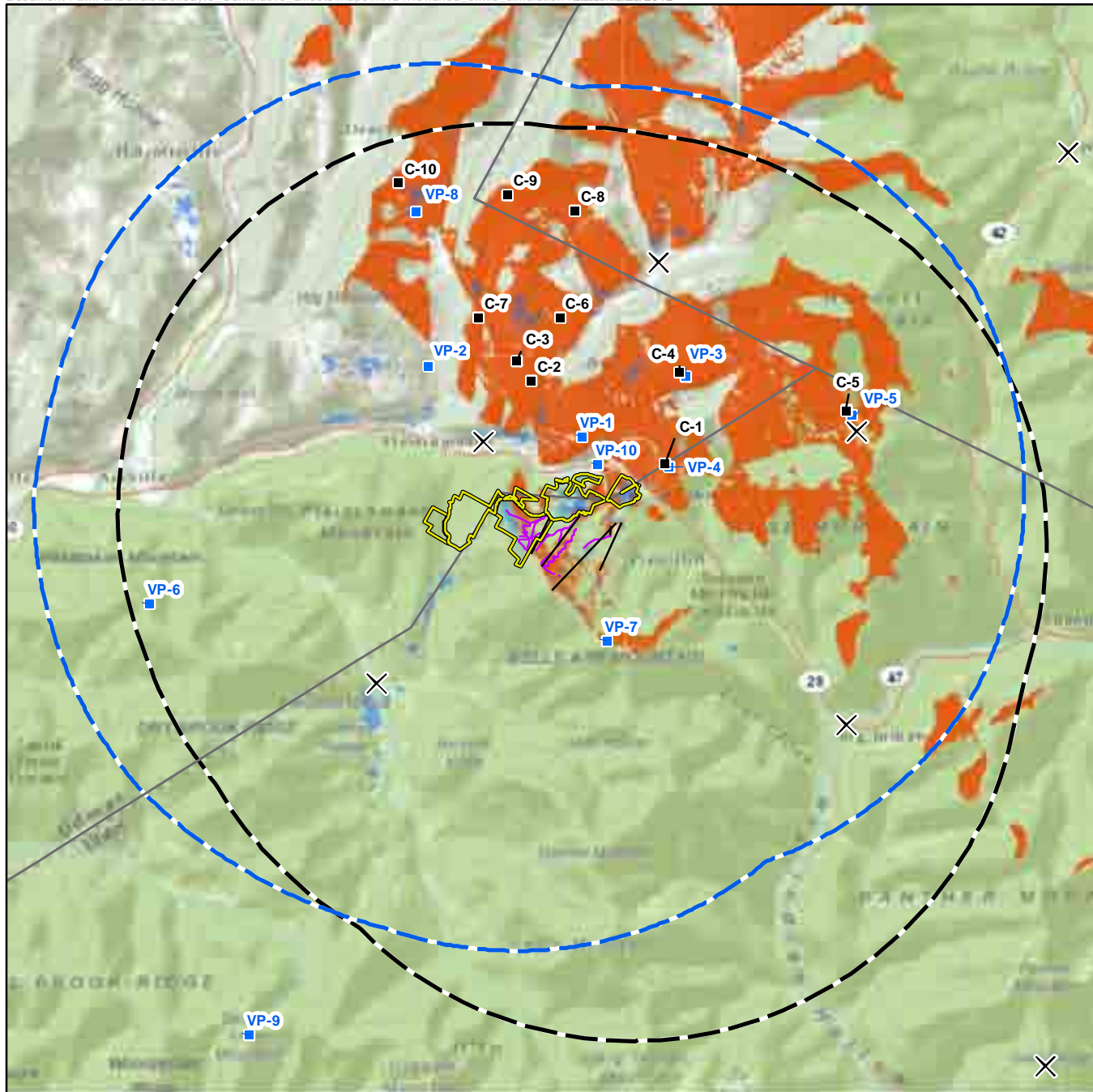
1.7.2 Inventory of Aesthetic Resources

An inventory of aesthetic resources was developed for each of the projects, in accordance with NYSDEC's policy "Assessing and Mitigating Visual Impacts." The locations include all locally significant aesthetic resources that have been officially identified in local or regional land use plans as well as public roads (including but not limited to NYS Route 28), hiking trails, public recreation areas, and areas of historical significance that have potential views into the project development areas. As noted above, significant resources outside the 5-mile radius, such as the nearby Catskill peaks, were also included in the inventory of the projects.

Using a 25-mile radius, more than 170 locations, in addition to the mountain peaks, were noted in the BMSC VIA, and 16 were identified as potentially having views of the project. In the Resort VIA, 40 locations within the 5-mile radius were evaluated, and 29 had the potential for visibility of the project site.

1.7.3 Potential Impacts on Visual Resources: Visual Simulations

Each of the two project's VIAs provided 10 to 11 photo simulations, selected from the many photos taken from receptor locations during field studies of project visibility, to demonstrate how the projects are visible and what they will look like from sensitive, worst-case, and representative locations (see Figure 1.7-3). These locations were chosen for a variety in distance from the projects, representing foreground(0-1/2 mile distance) middle-ground(1/2 mile to 3 miles away) and background (beyond 3 miles distance) visible locations. A review and comparison of these simulations has been completed, evaluating the potential for the visibility of both projects within each view. A summary of that evaluation is provided in Tables 1.7-1 and 1.7-2. Because of line-of-sight issues, there are few locations where both projects are visible. Of the locations chosen for the individual project VIAs, in most cases the other project is not noticeably visible in the view. For example, from the Owl's Nest restaurant, the BMSC is very visible, and the changes to the BMSC will be visible, as shown in the photo simulation(C-1). However, as demonstrated by the Crossroads Resort simulation from the same location (VP-4), it is likely that the Resort facilities will be blocked by the angle of view and vegetation.



Source: E & E, 2008; USGS, 2004; LA Group 2009

Proposed Belleayre Project Area Cumulative Visibility Assessment Topography and Forest Simulation Locations Ulster County, New York

- Zone of Potential Visibility (Belleayre UMP Ski Center)
- 5-mile Project Area (Belleayre UMP Ski Center)
- Zone of Potential Visibility (Crossroads Belleayre Resort)
- 5-mile Project Area (Crossroads Belleayre Resort)
- Cumulative Zone of Potential Visibility (Crossroads Belleayre Resort and Belleayre UMP Ski Center)
- Night Sky Location
- Proposed Belleayre UMP Ski Center Ski Lifts
- Proposed Belleayre Ski Center Trails
- Belleayre UMP Ski Center Simulation Location
- Crossroads Belleayre Ski Center Simulation Location
- Boundary of Crossroads Belleayre Resort

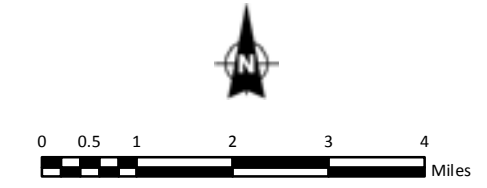


Figure 1.7-3

Table 1.7-1 Summary of Belleayre BMSC VIA Photo-Simulations

Simulation	Location	Distance (Miles)	Similar Resort View	Description of Cumulative Review
C-1	Owl's Nest restaurant	1.8 (Middleground)	VP-4	Resort changes are mostly screened by vegetation
C-2	Breezy Hill Rd.	2.3 (Middleground)	VP-1	See cumulative simulation
C-3	Oak Ridge Rd.	2.6 (Middleground)	N/A	Resort changes are mostly screened by topography and vegetation
C-4	Brush Ridge Rd.	2.6 (Middleground)	VP-3	See cumulative simulation
C-5	Upper Birch Creek Rd.	3 (Middleground)	VP-5	No view of Resort changes
C-6	Top of Bellows Rd.	3.1 (Background)	N/A	Viewpoint is narrow through trees. Resort will be mostly blocked by topography and vegetation.
C-7	Little Red Kill Rd.	3.4 (Background)	VP-8	Resort changes at Highmount will be visible. See cumulative simulation of C-8/VP-8 for similar view.
C-8	Kaftas Rd.	4.4 (Background)	N/A	Resort changes at Highmount will be visible. See cumulative simulation of C-8/VP-8.
C-9	De. Nacola Rd.	4.7 (Background)	VP-8	Resort changes at Highmount will be visible. See cumulative simulation of C-8/VP-8 for similar view.
C-10	Dimmick Mtn Rd.	5.4 (Background)	VP-8	Some visibility of Resort changes at Highmount, but reduced by distance. See cumulative simulation of C-7/VP-8.
C-11	Mt. Temper fire tower	12.6 (Background)	N/A	No view of Resort changes

Table 1.7-2 Summary of Belleayre Resort VIA Photo-Simulations

Simulation	Location	Distance (Miles)	Similar BMSC View	Description of Cumulative Review
VP-1	Wood Road	1/2	C-2	See cumulative simulation
VP-2	Big Red Kill Rd.	2	N/A	No view of BMSC changes
VP-3	Brush Ridge Rd.	2	C-4	See cumulative simulation
VP-4	Owl's Nest Restaurant	1/2	C-1	BMSC changes are visible. Resort changes are screened by vegetation
VP-5	Reisser Farm	2 3/4	C-5	BMSC changes to slopes are visible. Resort changes are screened by vegetation
VP-6	Dry Brook Ridge	4 1/2 (Background)	N/A	No view of BMSC changes, and most Resort changes will be screened by vegetation
VP-7	Cathedral Glen Trail	1 3/4	N/A	View from within BMSC: only parts of projects will be visible; most visibility blocked by vegetation
VP-8	Red Kill Road	3 3/4 (Background)	C-10	See cumulative simulation
VP-9	Balsam Lake Mountain	6 (Background)	N/A	No view of BMSC changes
VP-10	Route 28 East of Fleishmanns		N/A	BMSC and Resort changes to slopes and tree remove will be somewhat visible during leaf-off conditions. All structures will be screened by vegetation

The review of simulations determined that there are three viewpoints from which a cumulative view would be different than the potential view demonstrated in the original simulation, providing a view of both projects and therefore the worst-case scenario of potential cumulative visibility (see Table 1.7-3). New simulations from these viewpoints have been created to document the potential view of the combined projects under “leaf on” and “leaf off” conditions.

Table 1.7-3 Summary of Cumulative Photo-Simulations

Crossroads Resort Simulation	Location	Distance (Miles)	Landscape Position	Similar Belleayre UMP BMSC Simulation
VP-1	Wood Road	1/2	Foreground	C-2
VP-3	Brush Ridge Rd.	2	Middleground	C-4
VP-8	Red Kill Road	3 ¾	Background	C-8

Figure 1.7-3 is a map of the simulation locations from both projects, also indicating the locations of the viewpoints selected for cumulative simulations. Leaf-on and leaf-off conditions were simulated. The simulations are provided in Figures 1.7-4 through 1.7-9.



Future Conditions Simulated

Figure 1.7-4: VP-1/C-2, Leaf Off

Cumulative Photo Simulation, Crossroads Belleayre Resort and Belleayre UMP Ski Center, Leaf Off

Photo Location: Wood Road
Landscape Position: Foreground View to WSW, 1/2 Mile from project site



Future Conditions Simulated

Figure 1.7-5: VP-1/C-2, Leaf On

Cumulative Photo Simulation, Crossroads Belleayre Resort and Belleayre UMP Ski Center, Leaf On

Photo Location: Wood Road
Landscape Position: Foreground View to WSW, 1/2 Mile from project site



Future Conditions Simulated

Cumulative Photo Simulation, Crossroads Belleayre Resort and Belleayre UMP Ski Center, Leaf Off Figure 1.7-6: VP-3/C-4, Leaf Off

Photo Location: Brush Ridge Road
Landscape Position: Middleground View to SW, 2 Miles from project site



Future Conditions Simulated

Figure 1.7-7: VP-3/C-4, Leaf On

Cumulative Photo Simulation, Crossroads Belleayre Resort and Belleayre UMP Ski Center, Leaf On

Photo Location: Brush Ridge Road
Landscape Position: Middleground View to SW, 2 Miles from project site



Future Conditions Simulated

Figure 1.7-8: VP-8/C-10, Leaf Off

Cumulative Photo Simulation, Crossroads Belleayre Resort and Belleayre UMP Ski Center, Leaf Off

Photo Location: Red Kill Road/Dimmick Mountain Road
Landscape Position: Foreground View to NE, 3 3/4 Miles from project site



Future Conditions Simulated

Figure 1.7-9: VP-8/C-10, Leaf On

Cumulative Photo Simulation, Crossroads Belleayre Resort and Belleayre UMP Ski Center, Leaf On

Photo Location: Red Kill Road/Dimmick Mountain Road
Landscape Position: Foreground View to NE, 3 3/4 Miles from project site

1.7.4 Potential Impacts on Visual Resources: Night-time Visibility

During project scoping, it was determined that the visual impact study would include visibility at night and the issues of nighttime “sky glow” and direct glare. The visual impact of night-time lighting on the night sky is a concern in many communities. The Dark Sky Society defines light pollution as “glare, light trespass, and light which is reflected into the night sky, contributing to sky glow, through the use of unshielded, misplaced, excessive, or unnecessary outdoor night lighting”(Dark Sky Society 2009).

Light pollution from ski resorts represents a challenge because the resorts are often located in rural areas, where natural darkness is prevalent but where lighting can also bounce off snow on the slopes or be trapped by low clouds or snowmaking operations. Nighttime skiing requires significant lighting to provide safe conditions for skiers. During snowmaking activities, lighting is necessary for the safety of personnel working with the snowmaking equipment.

Both project VIAs evaluated the impacts of new and existing lighting conditions. For the BMSC, it was noted that there are no plans to provide night-time skiing at Belleayre Mountain, and current lighting is not adequate to allow night skiing. Snowmaking activities will continue to occur during after hours, which will require lighting for the safety of workers. However, with new snowmaking equipment that can be controlled and monitored remotely, the need for lighting on the hill is reduced. In addition, some pole-mounted lights that currently exist will be removed. New exterior lighting on buildings and parking areas will be minimal and designed to minimize stray light. The overall night lighting will therefore be reduced by the proposed action at the BMSC, resulting in a reduced nighttime visual impact.

For the Crossroads Resort VIA, Lighting Research Center (LRC) of Rensselaer Polytechnic Institute analyzed the existing and proposed outdoor lighting at the resort. The outdoor site-lighting performance analysis was completed using computer calculations and modeling and photo renderings. The analysis determined that outdoor lighting at the resort will likely produce more outdoor light, leaving the boundaries of the site during winter conditions. However, outdoor lighting can be designed to reduce light pollution by limiting the amount of light leaving the boundaries to the recommended and required levels.

The VIA of the resort included photographs of the potential worst-case lighting scenarios, showing existing lighting conditions when all lights are on at the BMSC. The analysis completed for the Resort represents a conservative cumulative condition for night time visibility of the combined projects. Figure 1.7-10 provides a simulation of worst-case lighting scenario, viewed from location VP-4/C-1 (Owl’s nest).

Because lighting on the slopes is limited to areas needed for worker safety during snowmaking and snowmaking usually occurs when most of the building and parking lot lights are not used, this condition is a very conservative representation

of existing conditions. In addition, the changes at the BMSC will reduce existing number of lights and new lighting will be designed to limit light escaping from the property.



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Outdoor Site Lighting Performance
Belleayre Resort at Catskill Park

Wildacres Resort & The Highmount Spa Resort
Town of Shandaken & Town of Middletown, New York

Title:
Composite Rendering
Nighttime Lighting
Owl's Nest
Site #4
No tennis court lighting

Date:
March 9, 2011

Sheet:

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Figure 1.7-10, Cumulative Photo Simulation VP-4/C-1,
Crossroads Belleayre Resort and Belleayre UMP Ski Center,
Night Lighting

1.7.5 Proposed Visual Resources Mitigation Measures

Both projects have been designed so as to avoid or mitigate visual impact and improve the aesthetic quality of the built environment on Belleayre Mountain. The design of the Crossroads Resort has been changed significantly to comply with the Agreement in Principle and address the visual impacts of the project. The modified Crossroads Resort design has eliminated the Big Indian development and includes tight, clustering development and smaller buildings than the original design or the agreed upon conditions of the Agreement in Principle. 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 will 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 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 original plans for the cumulative expansion included 19 units at Highmount. The plans for this part of the project would have required additional roadways and tree removal and be located at a higher and more visible elevation. These plans were cancelled during the revisions of the Crossroads Resort, reducing the cumulative footprint and visibility of the project.

To mitigate light pollution, outdoor lighting will be designed to meet the standards of the International Dark Sky Association. Cut off light fixtures will be used in new applications, and the facility will not be equipped with lighting to allow night skiing. At the Resort, lighting design, screening and operational restrictions, such as the installation of timers on tennis court lighting will minimize light pollution to acceptable levels.

1.7.6 Cumulative Visual Impact Assessment

While cumulative visibility of the BMSC and the Crossroads Resort projects can be estimated and verified, as completed by the separate VIAs and described above, the evaluation of visual impacts at specific locations and the general region is a difficult task. Visual character and aesthetic quality is a subjective evaluation, with each person likely to have a different opinion on what would be considered impact on character and quality. NYSDEC policy states that “aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource” (New York State Department of Environmental Conservation July 31, 2000). The goal of this assessment has been to provide the reader with a clear and

scientific understanding of the visibility of the project and to assess visual impact based on the project's compatibility, contrast, and scale as well as any changes in the aesthetic character of the landscape and the impact on users groups.

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 Belleayre BMSC and new elements of the Crossroads Resort 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 Crossroads Resort VIA determined that the project would not introduce a significant change in the visible landscape, relying on two main factors: 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. All of the existing views analyzed in the Crossroads Resort VIA have some existing development in them, with some having more than others, and the type varying between viewpoints. Views, for the most part, are from public roads that have existing foreground development between the receptor location and the project site. Mitigation measures associated with the design of the modified project as described above further reduce the visibility of the project.

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 BMSC 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 a visible feature of the landscape from certain locations, the 47 acres of new slopes represent an increase of only 27% of groomed trails at BMSC. 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 two projects' contrast and scale to existing visual elements on the landscape, the visual presence of the projects will not have a detrimental effect on the perceived beauty of the surrounding location.

Development is minimal in the region; however, the density, size and type of buildings and facilities are compatible with other property in the region. The visual character of the project will not be different than that of the local roadways with power lines, the Highmount cell tower, and other existing residential structures and ski facilities.

Access to and public enjoyment of surrounding historical, recreational, and commercial land uses will not be negatively impacted by the visual character or visibility of either Project.

Considering the combined visual impacts of the two projects, as well as mitigation described above, the cumulative visual impacts from the BMSC and the Crossroads Resort projects will not have a significant effect on the region's scenic and aesthetic resources.