



**2018 Amendment to the
1986 Olympic Sports Complex at
Mt. Van Hoevenberg Unit Management Plan
and
~~Draft~~Final Generic Environmental Impact
Statement
(Proposed Final~~Public Draft~~)**



**Olympic Regional
Development Authority**

July~~May~~ 2018

**2018 Amendment to the 1986 Olympic Sports Complex at Mt. Van Hoevenberg
Unit Management Plan and ~~Final Draft~~ Generic Environmental Impact Statement
Town of North Elba, Essex County, NY**

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EXECUTIVE SUMMARY

I. INTRODUCTION

This ~~final draft~~ 2018 Unit Management Plan (UMP) Amendment for Mt. Van Hoevenberg Intensive Use Area has been prepared in accordance with the Adirondack Park State Land Master Plan (APSLMP or SLMP), addresses changes to the 1986 UMP and the 1999 UMP Amendment thereto, and adds several new management actions. This ~~final draft~~ 2018 UMP Amendment reviews the status of the 1986 and 1999 management actions and identifies those management actions that have been completed, those that are pending, and those that are to be modified or abandoned through this 2018 UMP Amendment. Previous UMP documents are incorporated by reference into this document.

Section 816 of the Adirondack Park Agency Act directs the New York State Department of Environmental Conservation (DEC) to develop, in consultation with the New York State Adirondack Park Agency (APA), UMPs for each unit of land under its jurisdiction classified in the APSLMP. Concurrent with the development of UMPs is the preparation of an Environmental Impact Statement (EIS), which analyzes the significant impacts and alternatives related to each UMP. The New York State Olympic Regional Development Authority (ORDA), pursuant to its enabling law and agreement with the DEC for the management of the Olympic Sports Complex at Mt. Van Hoevenberg Center, has prepared this UMP Amendment in cooperation with DEC and in consultation with APA.

II. 2018 UMP AMENDMENT MANAGEMENT ACTIONS

New management actions are identified and analyzed in this 2018 UMP Amendment. The potential environmental impacts and the attendant proposed mitigation measures for any new or modified management actions are also identified and discussed. The potential impacts and the identified mitigation measures for the previously approved UMP management actions remain in effect and will not be repeated here, but are incorporated by reference.

The following lists the New Management Actions that are the subject of this UMP Amendment and that can be undertaken after the UMP Amendment is adopted. See **Figure ES-1, Master Plan**.

1. Actions Proposed on Town Lands¹ (non-Forest Preserve lands)

- Construct New Ski Trails with Lighting and Snowmaking
- Construct New Sliding Sports Start Facility
- Construct New Welcome Center/Base Lodge and Awards Plaza
- Develop Trailhead, Parking and Hiking Trail Connection for Cascade and Porter

¹ The Town of North Elba sold a permanent easement to the State on NY in November 1965 for the purpose of developing, operating and maintaining a recreational area and facilities thereon.

Mountains, Mount Marcy and Mt. Van Hoevenberg (part of this action to occur on State Land)

- Construct New Snowmaking Reservoir
- Expand Start 1 Building and Deck
- Provide Structured Parking Adjacent to 1980 Start Building to Service Start 1 Building and Restructure Access Drive to Parking
- Replace Start 4 Building
- Expand Track Timing Building
- Expand USA Team Garage Building
- Construct New Snow Storage Structure Building
- Construct New Maintenance Building/Groomer Garage
- Convert Existing Press Building into Medical Building
- Construct New Road from Maintenance Area to Track Access Road, to Replace Existing Access Displaced by New Buildings
- Upgrade and Improve Existing Track Access Road Lighting Add New Fixtures Along Track Access Road from Lam~~yee~~ Lodge to Start 1 Building. Add New Lighting on New Road Connection Near Maintenance
- Construct New Alpine Coaster Including Lighting
- Construct New Transport Coaster or Funicular

2. Actions Proposed on State Lands (Forest Preserve Lands)

- Install Hiking Trail Connections
- Construct New Biathlon Stadium² Including Range, Bleachers and Timing/Competition Building
- Construct New On-site Wastewater Disposal System for Welcome Lodge
- Renovate Boxing Building at Existing Biathlon Stadium
- Redevelop Former Access Road Corridor from Bobsled Lane to Cross-country Parking Lot

² A nordic competition “stadium” is not the same type of facility as what many may envision when they hear the term “stadium” used for other sporting competition venues such as Yankee Stadium or Wembley Stadium. These other sporting competition venues consist of very large, constructed structures encircling a playing field and containing extensive seating and other spectator and competitor facilities.

Nordic “stadiums” are small, open-air, snow-covered grass areas that contain the competition start and finish lines, along with such things as timing/scoreboard facilities, also much smaller accommodations for spectators that are typically bleacher-like are positioned immediately adjacent to the stadium to provide the best possible visibility for spectators. Biathlon stadiums also include the shooting range and the ski penalty loop.

A new biathlon stadium is proposed to be constructed that will allow the facility to attract and host world class biathlon and cross country events. Events of this caliber are typically sanctioned by the International Biathlon Union (IBU) and/or by the International Ski Federation (FIS), and venues striving to host these events must have a trail network and stadium that meet specific criteria.

See Section IV.A.2.b of this UMP Amendment that fully describes the proposed biathlon stadium and provides photographs of other biathlon stadium facilities as examples.

- to Replace Current Access to Cross-country Parking and Lodge
- Construct Two Ski Trail Bridges Over New Gravel Road to Cross-country Lot
- Install Lighting for Parking Lots 2, 3, and 4
- Develop Maintenance/Dredging Plan at North Meadow Brook Intake
- Construct two 8-foot wide ski trails around the private Steckler property that is within the Intensive Use Area.

These management actions are discussed in the context of existing resources, facilities and use (Section 2) and ORDA's Management and Policy when it comes to the Mt. Van Hoevenberg Intensive Use Area (Section 3). The management actions themselves are described in detail in Section 4.

An introductory section (Section 1) first gives an overview of project purpose, a general facility description, the history of the Olympic Sports Complex, a description of the UMP/GEIS process and a summary update of the status of actions contained in previous UMPs.

III. SEQRA PROCESS

ORDA, as the Agency responsible for undertaking the actions in this 2018 UMP Amendment/DGEIS, completed a New York State Environmental Quality Review Act (SEQRA) Full Environmental Assessment Form (FEAF) Parts 1, 2, and 3. Based on the analysis in Part 3 of the FEAF, ORDA determined that the Project may result in one or more significant adverse impacts on the environment, and this Environmental Impact Statement (EIS) must be prepared to further assess the impacts and possible mitigation and to explore alternatives to avoid or reduce these impacts.

The SEQRA aspects of this document are presented as a Generic Environmental Impact Statement (GEIS). A GEIS may be used to assess the environmental effects of a sequence of actions contemplated by a single agency or an entire program or plan having wide application (6NYCRR 617.10(a)(2) and (4)). They differ from a site specific EIS in that it applies to a group of common and related activities which have similar or related impacts. It is the intent of this GEIS to provide sufficient, site-specific information for all aspects of the UMP Amendment. In conformance with SEQRA, these related actions are being considered in this FGEIS. No additional SEQRA analyses are anticipated to be required for any new management action in this UMP Amendment, provided that such actions are carried out in accordance with the recommendations of this document. Conceptual actions contained in this UMP Amendment will be subject to future SEQRA analyses should they be pursued in the future.

A preliminary version of the ~~his~~ UMP Draft Amendment/DGEIS was provided to NYSDEC and to the APA for their review on March 15, 2018. Comments from these agencies were received by ORDA, and ORDA revised the preliminary document accordingly. ORDA then declared this ~~draft UMP amendment/DGEIS document~~ to be complete for public review on May 9, 2018. Notice of DGEIS acceptance and directions for accessing that document were published in the May 9, 2018 issue of the Environmental Notice Bulletin (ENB). A public comment period was

~~open until June 9, 2018 and a public hearing was held at the Lake Placid Conference Center on May 24, 2018. This 2018 UMP Amendment/DGEIS is open for public comment until June 8, 2018 including a SEQRA public hearing scheduled for May 24, 2018 at 7:00 PM at the Lake Placid Conference Center. Responses were prepared to comments received at the public hearing and to written comments submitted during the public comment period. A transcript of the public hearing, copies of written comments and responses to comments are included in this FGEIS. Also included in this FGEIS is an errata section that summarizes the changes that were made to the DGEIS when preparing this FGEIS. Notice of acceptance of this FGEIS by ORDA, as lead agency, was published in the July 3, 2018 ENB.~~

~~Notice of ORDA's acceptance of the DGEIS, establishment of the public comment period, and directions for accessing this document were published in the May 9, 2018 issue of the Environmental Notice Bulletin.~~

This ~~Public Draft-Proposed Final~~ UMP ~~Draft~~ Amendment/~~DF~~GEIS is available online on ORDA's website at http://www.orda.org/corporate/corporate_environment.php. Hard copies of the document are available for review at ORDA offices in Lake Placid and the Town of North Elba Town Hall.

Part 3 of the FEA identified those topics for which additional information was required within the GEIS. Primary concerns include steep slope soil erosion and water quality, water quality impacts and potential impacts historic resources. Potential impacts and mitigation measures for these topics and a range of other topics are discussed in detail in Section 5 of this UMP/DGEIS.

Section 6 considers alternatives to the new management actions including alternative biathlon stadium configurations, alternative snowmaking reservoirs, and alternative methods for maintaining the water intake on North Meadow Brook.

IV. CONFORMANCE WITH THE APSLMP

It is stated in Section I of the APSLMP that "In accordance with statutory mandate, all [unit management] plans will conform to the guidelines and criteria set forth in the master plan"

The following is from the Intensive Use Area portion of Section II of the APSLMP and includes descriptions of how this UMP amendment conforms to the stated guidelines.

Guidelines for Management and Use

Basic Guidelines

1. *The primary management guideline for Intensive Use Areas will be to provide the public opportunities for family group camping, developed swimming and boating, downhill skiing, cross country skiing under competitive or developed conditions on improved cross*

country ski trails, visitor information and similar outdoor recreational pursuits in a setting and on a scale that are in harmony with the relatively wild and undeveloped character of the Adirondack Park.

The Mt. Van Hoevenberg Intensive Use Area will continue to provide opportunities for cross country skiing and similar outdoor recreational pursuits.

There are no new management actions in this UMP Amendment that significantly change the current setting or scale of the facilities at Mt. Van Hoevenberg. All new management actions are proposed for the interior of the existing Olympic Sports Complex with the exception of the hiking trails connecting to adjacent Forest Preserve lands in the High Peaks Wilderness Area. The proposed new ski trails are proposed on the part of the area located between existing ski trails and the combined track. New buildings are proposed in a cluster in the base area. Many management actions involve expansions or repurposing of existing buildings.

2. *All intensive use facilities should be located, designed and managed so as to blend with the Adirondack environment and to have the minimum adverse impact possible on surrounding State lands and nearby private holdings. They will not be situated where they will aggravate problems on lands already subject to or threatened by overuse, such as the eastern portion of the High Peaks Wilderness, the Pharaoh Lake Wilderness or the St. Regis Canoe Area or where they will have a negative impact on competing private facilities. Such facilities will be adjacent to or serviceable from existing public road systems or water bodies open to motorboat use within the Park.*

All of the new management actions proposed in this UMP Amendment are proposed at elevations at or below existing development at the Olympic Sports Complex. As discussed in (1.) above, the proposed management actions consist of mostly infill development and expansions and adaptive reuse of existing facilities.

All actions are located in the interior of the Intensive Use Area, removed from adjoining State and private lands. This UMP amendment is not proposing any significant enlargement of the Complex, so there is no potential for adversely affecting lands subject to or threatened by overuse or competing private facilities.

The existing Mt. Van Hoevenberg Intensive Use area is located adjacent to the eastern portion of the High Peaks Wilderness Area. Nothing proposed in this UMP Amendment is expected to aggravate any problems on adjacent lands. To the contrary, this UMP Amendment proposes to alleviate some existing problems on adjacent lands by providing parking, trailhead and trail facilities on Intensive Use Area lands. By doing so, current issues associated with the NYS Route 73 parking, trailhead and access are being addressed in this UMP Amendment.

3. *Construction and development activities in Intensive Use Areas will:*

-- *avoid material alteration of wetlands;*

Impacts to wetlands have been avoided.

-- *minimize extensive topographic alterations;*

The only significant topographic alteration will be for construction of a snowmaking reservoir which will essentially be a "dug pond".

-- *limit vegetative clearing;*

Vegetative clearing will be limited to Town easement lands and will be limited to only those areas needed to new construction. No tree cutting is proposed on Forest Preserve lands.

and,

-- *preserve the scenic, natural and open space resources of the Intensive Use Area.*

See items 1 and 2 above.

4. *Day use areas will not provide for overnight camping or other overnight accommodations for the public.*

No overnight accommodations, camping or otherwise, are proposed.

5. *Priority should be given to the rehabilitation and modernization of existing Intensive Use Areas and the complete development of partially developed existing Intensive Use Areas before the construction of new facilities is considered.*

The actions contained in this UMP amendment are for the improvement and modernization of the existing Mt. Van Hoevenberg Intensive Use Area.

6. *Additions to the intensive use category should come either from new acquisitions or from the reclassification of appropriate wild forest areas, and only in exceptional circumstances from wilderness, primitive or canoe areas.*

No such additions are contemplated in this UMP Amendment.

7. *Any request for classification of a new acquisition or reclassification of existing lands from another land use category to an Intensive Use Area will be accompanied by a draft unit management plan for the proposed Intensive Use Area that will demonstrate how the applicable guidelines will be respected.*

No such requests are contemplated in this UMP Amendment.

8. *No new structures or improvements at any Intensive Use Area will be constructed except in conformity with a final adopted unit management plan for such area. This guideline will not prevent the ordinary maintenance, rehabilitation or minor relocation of conforming structures or improvements.*

None of the new management actions proposed in this UMP Amendment will be constructed unless and until they are included in the Final UMP Amendment adopted by NYSDEC.

9. *Since the concentrations of visitors at certain intensive use facilities often pose a threat of water pollution, the State should set an example for the private sector by installing modern sewage treatment systems with the objective of maintaining high water quality. Standards for the State should in no case be less than those for the private sector and in all cases any pit privy, leach field or seepage pit will be at least 150 feet from the mean high water mark of any lake, pond, river or stream.*

The new in-ground wastewater treatment proposed for the new Base Lodge/Welcome Center is located at least 500 feet away from the stream that runs between parking lot 6 and the cross-country stadium.

10. *Any new, reconstructed or relocated buildings or structures located on shorelines of lakes, ponds, rivers or major streams, other than docks, primitive tent sites not a part of a campground (which will be governed by the general guidelines for such sites set forth elsewhere in this master plan) boat launching sites, fishing and waterway access sites, boathouses, and similar water related facilities, will be set back a minimum of 150 feet from the mean high water mark and will be located so as to be reasonably screened from the water body to avoid intruding on the natural character of the shoreline and the public enjoyment and use thereof.*

No new buildings or structures are proposed near any shorelines.

V. IMPACT ANALYSIS

A. Vegetation

All of the new management actions proposed in this UMP Amendment will occur in the Northern Hardwood community.

In summary, the following acreages of wooded areas will be affected:

- New Ski Trails: 9 acres
- Alpine Coaster: <2 acres
- New Buildings: 1/2 acre

Total: <11.5 acres

Tree cutting is proposed on less than 1% of the Intensive Use Area, and falls within the capacity of the resource to absorb the impact.

All tree cutting will occur on Town Easement lands. No tree cutting is proposed on Forest Preserve lands.

No rare, threatened or endangered plant species will be impacted.

Only areas absolutely necessary for construction of the proposed management actions will be cleared of vegetation. All other areas will be maintained in a natural state.

Erosion control measures will be used on cleared areas with disturbed soils to avoid affecting adjacent vegetation by erosion or siltation.

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

Plants used to revegetate disturbed areas and planted as part of landscaping will be species indigenous to the region.

Efforts to identify and eradicate invasive species in the Unit will continue.

B. Water and Wetland Resources

A formalized plan for maintenance dredging for the water intake on North Meadow Brook that supplies the water for the combined track is included in this UMP Amendment. The plan includes hydraulic dredging with return flow. A pump around would be used to reduce the water level in the dredge area to below the weir elevation. Water would be pumped to just downstream of the weir to maintain downstream flow. The following measures are proposed to mitigate potential impacts associated with dredging activities.

1. Regardless of the method of dredging to be employed, dredging should take place during periods of low stream flow, typically in the fall.
2. A pump shall be used to reduce streamflow so that water does not flow over the weir during sediment removal. The pump intake shall be located far enough upstream of the sediment removal so as to not pump any turbid water.
3. Water shall be pumped to a point immediately downstream of the weir in order to maintain downstream flows.
4. The pump discharge shall be to an area of stable streambed not susceptible to scouring from the pump discharge.
5. Pumping shall continue after dredging is complete and shall be stopped only when there is no visible difference in turbidity in the dredge area and downstream of the weir.
6. For mechanical dredging, dredge material shall be placed in trucks with sealable gates, and

moved to a dewatering area removed from any surface waters or wetlands.

7. For hydraulic dredging, materials shall be pumped to closed geotextile bags, tubes or other containers. Return flow to the brook shall only be allowed if the return flow does not result in a visible change in turbidity within the brook.
8. Full geotextile containers shall be removed from the vicinity of the brook before material is removed from the containers. Removed materials should be suitably stabilized by vegetative or other means.
9. Machinery should be regularly maintained and checked frequently for fluid leaks. Any machine found to have even a minor fluid leak shall be removed to a remote area for repairs.
10. Machinery operating in the vicinity of streams shall be equipped with spill control materials including absorbent pads.
11. Mobile equipment shall be refueled a minimum of 100 feet from the brook.
12. Stationary equipment, such as pumps, shall be placed a minimum of 20 feet from the brook and shall be placed on fuel-resistant, impervious material (i.e. tarps).
13. Pump refueling shall make use of tight fuel containers and funnels.
14. Absorbent pads shall be available in immediate proximity of pumps and be used in the event of any spill, regardless of quantity.

No management actions are proposed within or adjacent to wetlands.

C. Soils and Geology

The soils in the areas of proposed management actions vary in their erosion potentials and in their depths to bedrock.

Activities in upper elevation areas such as the upper portions of the proposed ski trails and the alpine coaster will occur in soils with severe erosion potential. To the north and at the middle elevations soils have mostly moderate erosion potentials. The soils at the lowest elevations, such as Monadnock, have slight erosion potentials.

Disturbance of areas of steep slopes during construction can lead to an increased vulnerability of the soils to erosion. Suitable measures must be implemented to first prevent soil erosion and then, second, to make sure that any soils that are eroded are contained and prevented from causing sedimentation in receiving waters.

ORDA is familiar with implementing proper erosion and sediment control practices when

undertaking construction practices at their venues that oftentimes involve construction on steep slopes. These proper practices are set forth in the New York State Standards and Specifications for Erosion and Sediment Control (last updated November 2016). These standards and specifications will be used to develop Stormwater Pollution Prevention Plans (SWPPPs) for construction activities in accordance with NYSDEC's SPDES General Permit for Stormwater Discharge from Construction Activity GP-0-15-002.

SWPPPs will detail those measures that will be implemented during construction to mitigate potential soil erosion and surface water sedimentation. SWPPP content will include such things as construction sequencing and phasing, temporary and permanent stabilization, structural erosion control practices and vegetative control practices. SWPPPs will include requirements for monitoring, inspections, data collection, and compliance documentation.

Section V.A.3 provides a lengthy and detailed description of mitigation measures that ORDA commonly and successfully employs during construction activities that will be incorporated into pre-construction SWPPP plans and specifications, and installed, monitored and maintained during construction until soils become stabilized.

Shallow depth to bedrock may be encountered when excavating the proposed snowmaking reservoir. Should blasting be required, ORDA will employ the services of a professional, licensed and insured blasting company to perform any needed blasting. Blasters in New York State are required to possess a valid NY State Department of Labor issued Explosive License and Blaster Certificate of Competence. The Explosives License permits the licensee to purchase, own, possess or transport explosives. The Blaster Certificate of Competence permits the use of explosives.

If it is determined that blasting will be required, a written blasting plan will be developed and approved prior to the commencement of blasting. In general, the blast plan will contain information about the blasting methods to be employed, measures to be taken to protect the safety of the public, and how the applicable rules and regulations will be complied with. If, during the evolution of the project, there are significant changes in the blast design, a new blast plan will be required.

See Section V.A.2 for a full description of all of the measures ORDA will implement to mitigate potential impacts from any blasting that may be required.

D. Visual Resources

Locations with potential views into the Intensive Use Area identified in the 1999 UMP Amendment were revisited and photographed for this UMP Amendment. Views into the existing combined track are possible from the NYS Route 86 scenic vista overlooking the Lake Placid golf course and the parking Lot of the Crowne Plaza Hotel. Both of these vantage points are slightly more than 5 miles away. Closer in, from Adirondack Loj Road, there are some breaks in the tree line visible when there is snow cover, but none of the facilities are evident.

For the 1999 UMP amendment, there was a view into the facility from the observation deck at the 90m ski jump at the Olympic Jumping Complex. Since that time, the foreground vegetation has grown sufficiently tall that it now blocks the view from that location. None of the proposed management actions will increase the visibility of the facility. Lights at the facility are visible at night from the same locations. New lighting is proposed in wooded areas for the new ski trails and along the alpine coaster. New lighting is also proposed in some of the parking lots at the base of the facility. It is not expected that this additional lighting will increase the night visibility of the facility. Replacement of access road lighting with new cutoff fixtures can potentially reduce the amount of light visible from off-site.

E. Fish and Wildlife

No rare, threatened or endangered species are known to occur on the site. No significant habitats are known to occur on the site.

Construction of the management actions proposed in this UMP Amendment will affect less than 1% of the site's vegetation. Proposed management actions are generally located within the perimeter of current development on the site and do not extend the perimeter of disturbance.

The proposed maintenance dredging in the area of the existing water intake on North Meadow Brook has the potential for impacting water quality and aquatic communities. This UMP Amendment/DGEIS includes a list of measures that will be implemented during the maintenance dredging in order to mitigate potential impacts to water quality and aquatic communities.

F. Air Quality

None of the proposed management actions will be a significant source of air emissions.

G. Noise

Sources of noise associated with the new management actions in this UMP Amendment are shooting at the new biathlon stadium and from the proposed snowmaking operations on the new ski trails.

Section V.A.7 provides the levels of noise that are expected to be produced and the sound levels that can be expected at adjacent lands including the NYS Route 73 corridor, the private lands between the Intensive Use Area and NYS Route 73 and in the High Peaks Wilderness at the nearby summit of Mt. Van Hoevenberg. Assessment of 10 simultaneous .22 caliber rifle shots at the biathlon range showed that noise levels will be at imperceptible levels at surrounding locations. Assessment of multiple snowmaking guns in operation found that noise levels at surrounding locations would be at "quiet" levels according to DEC guidelines for assessing and mitigating noise impacts.

H. Transportation

No significant impacts to transportation are anticipated. The proposed management actions will not increase the facility's spectator capacity for large events that are the generators of peak levels of traffic. Overall visitation is likely to increase, but these visits will be spread over time and will not be concentrated at a peak time.

I. Community Services and Utilities

There will be some increase in demand for community services such as fire, EMS, police, rescue,

solid waste and health care. However, Mt. Van Hoevenberg presently makes little demand on such services and the increase in such demand is anticipated to be minimal.

There will be an increase in demand for electrical power associated with the proposed actions. Existing electrical infrastructure is adequate to meet the increased demand. Mt. Van Hoevenberg has its own water supply and wastewater disposal systems. There will be no increase in demand for these utilities.

J. Local Land Use Plans

The actions in this UMP Amendment are consistent with local, regional and ORDA efforts to enhance an attractive year-round day use recreation area.

K. Economics

There are several economic impacts that are directly related to the UMP. These include pre-construction spending for professional services, construction spending related to labor and supplies for constructing the proposed actions, and operation spending by skiers for tickets, lodging, equipment rental and meal purchases on and off the site and payroll spending for new operations and vendor employees.

A multiplier effect will occur for revenues that are produced on the site and later off the site. This traditionally includes short-term (5 years) construction spending and long-term operational spending as well. Multipliers have been developed for all industries by the US Department of Commerce. They are used to predict the direct and indirect economic impacts generated by each spending sector. Direct economic impacts refer to additional revenues received from the Complex from construction and from Sports Complex users themselves. Indirect impacts include the additional purchases made by the recreational facility from other businesses to satisfy the additional demand, and induced impacts are produced from new spending of persons employed in the ski and off-season recreational industry. Each new dollar that is spent actually “turns over” causing additional dollars to be spent to satisfy a new demand. Generally, every dollar spent in the construction and operational phase generates approximately an additional two dollars of spending, thereby tripling the total economic impact.

L. Historical and Archaeological Resources

Potential impacts to the Historic Register-listed 1932/1980 bobsled track were reviewed with NYS Office of Parks Recreation and Historic Preservation (OPRHP). OPRHP determined that the project would not adversely impact the historic track as long as two mitigative measures were put into place.

1. The proposed interpretive signage program outlined in **Appendix 4** will be implemented within one year of the opening of the alpine coaster.

2. ORDA will establish a plan for ongoing routine maintenance and stabilization of the 1932/1980 track as needed as part of their overall maintenance at this facility. This plan will be developed in consultation with DEC and OPRHP.

ORDA is committed to implementing these measures.

VI. ALTERNATIVES ANALYSIS

Section 6 of this UMP Amendment discusses alternatives that were considered for the route of alpine coaster, the configuration of the biathlon stadium, the location of the snowmaking reservoir, the methods for maintenance dredging at the North Meadow Brook intake, and the configuration of a trailhead/shuttle. Section 6 provides the rationale for the selection of the preferred alternatives proposed in this UMP Amendment/DGEIS.

Olympic Sports Complex at Mt. Van Hoevenberg (~~Proposed Final~~Public Draft)
2018 Amendment to the 1986 Unit Management Plan and
~~Final Draft~~ Generic Environmental Impact Statement

Executive Summary

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LIST OF ABBREVIATIONS

AADT	average annual daily traffic
ALS	advanced life support
APA	NYS Adirondack Park Agency
APSLMP	Adirondack Park State Land Master Plan
ATV	all-terrain vehicle
Cfs	cubic feet per second
DEC	NYS Department of Environmental Conservation
EIS	environmental impact statement
ENB	Environmental Notice Bulletin
F	degrees Fahrenheit
FEAF	full environmental assessment form
FIS	Federation Internationale de Ski (International Ski Federation)
GEIS	generic environmental impact statement
IBU	International Biathlon Union
In.	inches
Leq	equivalent continuous sound level
MOU	memorandum of understanding
NPS	net promoter score
OPRHP	NYS Office of Parks Recreation and Historic Preservation

ORDA	NYS Olympic Regional Development Authority
SEQRA	NY State Environmental Quality Review Act
SLMP	State Land Master Plan
SWPPP	stormwater pollution prevention plan
UMP	unit management plan
USDA NRCS	United States Department of Agriculture Natural Resource Conservation Service

SECTION I INTRODUCTION

A. Project Purpose

The New York State Olympic Regional Development Authority (ORDA), in conjunction with the New York State Department of Environmental Conservation (DEC), is amending the 1986 Unit Management Plan (UMP) and Generic Environmental Impact Statement (EIS) for the Olympic Sports Complex at Mt. Van Hoevenberg, Town of North Elba, Essex County, New York. This document serves as an amendment to that 1986 UMP. As an amendment to the 1986 UMP, this document will discuss new proposed actions and changes to actions which have been previously approved, will include any new information relating to new and changed actions such that it satisfies NY State Environmental Quality Review Act (SEQRA) requirements, and will refer to the previously accepted and approved UMP/EIS for sections which have not changed as a result of this UMP Amendment. The document is organized so that it generally follows the sequence of the 1986 UMP.

ORDA's goals for the Olympic Sports Complex at Mt. Van Hoevenberg will be advanced through the actions contained in this UMP Amendment. Included in these goals are the following:

- The Olympic Sports Complex will offer quality year-round recreational/competition programs on publicly owned lands for the benefit and enjoyment of the people of New York State, the United States and the international sports community.
- The Olympic Sports Complex will be an economic catalyst to strengthen the private sector and local government economies.
- The Olympic Sports Complex will seek to improve the quality of facilities at the Complex in order to continue to attract competitive and recreational athletes from New York State, the United States and the international sports community, in order that public use may better help promote the economy of the area.
- The Olympic Sports Complex will seek to improve its economic return by making the mountain more attractive to professional athletes and recreators, and thus increasing ticket sales.
- The Olympic Sports Complex will seek to develop new summer and other off-season events to provide greater year-round use of the facility by the public, consistent with Article XIV and the APSLMP.
- The Olympic Sports Complex will seek to improve skier experience by providing snowmaking and night lighting on certain ski trails.

- ORDA will seek to establish the Olympic Sports Complex as an international caliber facility for competitive events in bobsled, luge, biathlon and cross-country skiing meeting international standards for competition.
- The Olympic Sports Complex will protect the natural resource base in accordance with environmental conservation laws and all other applicable laws and regulations of the State of New York. Management will accomplish this by maintaining an on-going dialogue with the DEC and APA on matters of environmental concern.
- The Olympic Sports Complex management will seek to establish annual budgets and schedules in support of the proposed capital improvements plan and other management objectives.
- The Olympic Sports Complex will seek to improve equipment reliability in order to reduce the frequency of breakdown, associated staffing requirements and consequent financial drain.
- The Olympic Sports Complex will seek to reduce its operations and maintenance costs by replacing outdated and aged equipment.

B. Brief Overview

The Olympic Sports Complex at Mt. Van Hoevenberg currently benefits winter visitors and competitive athletes involved in bobsledding, luge, skeleton, cross-country skiing and biathlon sporting activities. It is maintained as a sports facility meeting international standards under developed and competitive conditions. Summer visitors at Mt. Van Hoevenberg can mountain-bike and hike on the cross-country and biathlon trails, use the biathlon target range, ride bobsleds and luges, visit the International Sliding Sports Museum, participate in an interactive natural history series, and tour the Complex.

ORDA's overall purpose for the Olympic Sports Complex at Mt. Van Hoevenberg is to institute comprehensive activities utilizing the Complex to ensure optimum year-round use and enjoyment of the facilities to the economic and social benefit of the Olympic region. It is also intended to extend opportunity to improve the physical fitness, athletic education and recreational education of the people of New York State and the United States. Management goals and objectives are specified in Section 3 of this UMP Amendment.

Management actions proposed through this UMP Amendment include the following:

Proposed Actions on Town Easement Property:

- Construct New Ski Trails with Lighting and Snowmaking
- Construct New Sliding Sports Start Facility

- Construct New Welcome Center/Base Lodge and Awards Plaza
- Develop Trailhead, Parking and Hiking Trail Connection for Cascade and Porter Mountains, Mount Marcy and Mt. Van Hoevenberg (part of this action to occur on State Land)
- Construct New Snowmaking Reservoir
- Expand Start 1 Building and Deck
- Provide Structured Parking Adjacent to 1980 Start Building to Service Start 1 Building and Restructure Access Drive to Parking
- Replace Start 4 Building
- Expand Track Timing Building
- Expand USA Team Garage Building
- Construct New Snow Storage Structure Building
- Construct New Maintenance Building/Groomer Garage
- Convert Existing Press Building into Medical Building
- Construct New Road from Maintenance Area to Track Access Road, to Replace Existing Access Displaced by New Buildings
- Upgrade and Improve Existing Track Access Road Lighting Add New Fixtures Along Track Access Road from Lam~~yee~~ Lodge to Start 1 Building. Add New Lighting on New Road Connection Near Maintenance
- Construct New Alpine Coaster Including Lighting
- Construct New Transport Coaster or Funicular

Proposed Actions on State Forest Preserve Lands:

- Install Hiking Trail Connections
- Construct New Biathlon Stadium³ Including Range, Bleachers and Timing/Competition Building
- Construct New On-site Wastewater Disposal System for Welcome Lodge
- Renovate Boxing Building at Existing Biathlon Stadium
- Redevelop Former Access Road Corridor from Bobsled Lane to Cross-country Parking Lot to Replace Current Access to Cross-country Parking and Lodge

³ A nordic competition “stadium” is not the same type of facility as what many may envision when they hear the term “stadium” used for other sporting competition venues such as Yankee Stadium or Wembley Stadium. These other sporting competition venues consist of very large, constructed structures encircling a playing field and containing extensive seating and other spectator and competitor facilities.

Nordic “stadiums” are small, open-air, snow-covered grass areas that contain the competition start and finish lines, along with such things as timing/scoreboard facilities, also much smaller accommodations for spectators that are typically bleacher-like are positioned immediately adjacent to the stadium to provide the best possible visibility for spectators. Biathlon stadiums also include the shooting range and the ski penalty loop.

A new biathlon stadium is proposed to be constructed that will allow the facility to attract and host world class biathlon and cross country events. Events of this caliber are typically sanctioned by the International Biathlon Union (IBU) and/or by the International Ski Federation (FIS), and venues striving to host these events must have a trail network and stadium that meet specific criteria.

See Section IV.A.2.b of this UMP Amendment that fully describes the proposed biathlon stadium and provides photographs of other biathlon stadium facilities as examples.

- Construct Two Ski Trail Bridges Over New Gravel Road to Cross-country Lot
- Install Lighting for Parking Lots 2, 3, and 4
- Develop Maintenance/Dredging Plan at North Meadow Brook Intake

See Section 4 for a description of all management actions proposed in this UMP Amendment.

C. General Facility Description

The Mt. Van Hoevenberg lands, classified as an Intensive Use Area under the Adirondack Park State Land Master Plan, total 1593.8 acres as shown on **Figure 1, Intensive Use Area Boundary**.

1. Location of Property

The Olympic Sports Complex at Mt. Van Hoevenberg is located in the Adirondack Park approximately seven miles southeast of the Village of Lake Placid off NY Route 73 in the Town of North Elba, Essex County, as shown on **Figure 2, Regional Location Map**. A paved access road (NY Route 913Q) about one mile long leads southwest from NY Route 73 to the heart of the area, as shown on **Figure 3, Site Location Map**. The Complex is also accessible from two hiking trails, the Mr. Van Trail and the Mt. Van Hoevenberg Trail, which lead into the High Peaks Wilderness Area located to the south of the Olympic Sports Complex.

2. Property Description

The Olympic Sports Complex at Mt. Van Hoevenberg is classified as an Intensive Use Area under the Adirondack Park State Land Master Plan and is comprised of 1593.8 acres. New York State title to this acreage is divided into three types as shown on **Figure 4, Land Ownership**.

a. Forest Preserve

Lands acquired as Forest Preserve and managed according to Article XIV of the State Constitution amount to 1270.35 acres. This includes lands purchased by the State under the 1960 and 1962 Park and Recreation Land Acquisition Bond Acts which were acquired to allow special recreational uses and comprises some 352.58 acres.

b. Permanent Easement

By deed dated November 18, 1965, the State purchased from the Town of North Elba a permanent easement covering 323.45 acres. This easement was acquired for the purpose of developing, operating and maintaining a recreational area and facilities thereon. These lands are not Forest Preserve lands⁴.

⁴ Because these lands within the Intensive Use Area are not Forest Preserve lands, the land use restrictions imposed by Article XIV of the NYS Constitution are not applicable.

c. Other Easement

~~A~~Temporary easements previously existed to allow segments of cross-country ski trails to cross the privately owned lands currently of Steckler and of lands of Corwin in Sub 3 of Lot 8.

D. History of Land Unit

1. Bobsled

The Olympic Sports Complex at Mt. Van Hoevenberg traces its origins back to 1929 when the State Legislature passed an act authorizing the construction of a bobsled run on Forest Preserve lands situated on the western slopes of the Sentinel Range. This legislation was met with much opposition and litigation culminating in the so-called Crane decision in case of The Association for the Protection of the Adirondacks vs. McDonald which declared the 1929 act unconstitutional. Anticipating such a ruling, the Legislature, in 1930, passed a new statute setting up funds and procedures for the construction of a bobsled run on lands for which an easement might be required; this ultimately resulted in the construction of the bobsled run on a permanent easement acquired by the State from the Town of North Elba on the slopes of Mt. Van Hoevenberg.

The bobsled run was used five times for world championship races in addition to the III and XIII Olympic Winter Games. It was approved in 1968 by the Federation Internationale de Bobsleigh et Tobogganing for future international competition. The bobsled run was operated continuously by the State from 1932 until the winter of 1971-72, with the exception of the war years of 1942-45. In 1971, as a result of fiscal restraints, the Mt. Van Hoevenberg bobsled run was shut down and did not operate for the 1971-72 winter season.

During 1972, an agreement was reached with the Essex County Committee for Economic Development, an entity funded by the Federal Office of Economic Opportunity, to enable the Committee to manage and operate the bobsled run on a year- to-year basis for the purpose of creating and maintaining employment. The run was operated since the winter of 1972-73 until the winter of 1978-79 under the sponsorship of the Committee. In 1978, the Department of Environmental Conservation resumed management of the Complex, operating the facility through an annual appropriation from the Natural Heritage Trust. The Mt. Van Hoevenberg Olympic Bobsled Run was listed on the State Register of Historic Places in 2009 and on the National Register in 2010.

The bobsled run originally opened as a 1.5-mile course and was shortened in 1936 to one mile. Early on, the average number of operating days per season was 28. To guarantee the 1980 Olympic bobsled event, the full mile (1,557 meters) bobsled run was completely refrigerated, extending function to about 100 days annually. The bobsled run was subsequently shortened to 1,400 meters in 1990. The lowest half-mile section has been utilized as a bobsled adventure

experience for the public since the 1930s.

Construction of the existing combined bobsled/skeleton/luge track was approved as part of the 1999 UMP Amendment, and construction was completed in January 2000. The bobsled and men's single luge run is 1,455 meters long with 20 turns, a vertical drop of 128 meters and an average slope of 9% (maximum slope 20%). Different starts are used for skeleton, women's luge and doubles luge. In 2009 the run became the first to host world championships for bobsled, luge and skeleton in the same year (non-Olympics). World Championships have taken place on this track in 2003, 2009 and 2012. In January 2018 the track was the site of the IBSF North America's Cup for bobsled and skeleton.

The 20 curves are the most for a competitive sliding track. Curves 4-9 are known as the "Devil's Highway", which makes or breaks a majority of athletes runs by being one of the most technically challenging sections in the world. Requiring precise technical driving motions at speeds exceeding 120km/h, athletes have to maneuver 5 curves that drop several stories in quick succession. "Benham's Bend" (Curve 14) is one of the fastest points on the track before athletes enter a heart-shaped omega, known as "The Heart", which makes up the final quarter of the course before the finish at Curves 19 and 20.

2. Cross Country Skiing

In order to stage the Kennedy International Winter Games in 1969, a new and modern cross-country trail system was designed and constructed at Mt. Van Hoevenberg. This trail system was the first in the country planned for the competitor, the spectator, and the recreational skier. The cross-country race course constructed in that period provide the excellent trails used by the recreational skier today and at that time met the International Ski Federation (FIS) requirements for Olympic and World Class competitions.

Cross country ski events held for the 1980 Winter Olympics included the men's 15 km, 30 km, 50 km and 4 x 10 km relay and the women's 5 km, 10 km and 4 x 5 km relay.

3. Biathlon

Due to the success of holding the 1973 National Biathlon Championships and the World Biathlon Championships on temporary ranges and the enthusiasm which was generated, the Department of Environmental Conservation made plans in the spring of 1973 to construct a permanent biathlon range and trail system. The bridge crossing and other facilities at the biathlon area were upgraded for the 1987 World Biathlon Championships. 1980 Winter Olympics biathlon events included the 20 km, the 10 km sprint (event debut) and the 4 x 7.5 km relay. Women's biathlon was not introduced until the 1992 Winter Olympics.

4. Luge

In 1978, ground was broken for the construction of the original luge run. This project was constructed using Federal Economic Development Administration funds as a part of the development required for the 1980 Winter Olympic Games. The luge run was modified in both 1989 and 1991 in an effort to maintain its international certification. See subsection 1 above for a description of the current combined track that is currently used for luge.

E. Description of UMP/GEIS Process

Section 816 of the Adirondack Park Agency Act directs the DEC to develop, in consultation with the APA, UMPs for each unit of land under its jurisdiction classified in the APSLMP. Pursuant to its enabling law and agreement with the DEC for the management of the Olympic Sports Complex at Mt. Van Hoevenberg, ORDA works with the DEC, in the consultation of the APA, to update and amend the Mt. Van Hoevenberg UMP. The original UMP for Mt. Van Hoevenberg was prepared in 1986. A UMP Amendment for Mt. Van Hoevenberg was prepared 1999.

Specific requirements pertaining to the development of UMPs for ORDA venues was specified in the March 9, 1991 DEC/ORDA MOU and were then expounded upon in the November 2013 DEC/ORDA Consolidation Agreement. Section 2 of the Consolidation Agreement (copy in **Appendix 1**) provides specifics regarding the preparation of UMPs for ORDA venues, including the following topics:

- UMP Content,
- APSLMP Compliance,
- Consultation with NYSDEC Prior to and During UMP Preparation,
- Procedural Steps for preparation of Preliminary Draft UMPs, Public Review Draft UMPs, and Final UMP's,
- Consultation with APA,
- APA SLMP Consistency Review,
- APA Resolution on APSLMP Conformance, and
- Commissioner Approval of UMPs

The Generic Environmental Impact Statement (GEIS) included in this document is prepared in accordance with the New York State Environmental Quality Review Act (SEQRA, 6 NYCRR Part 617 and Implementing Regulations). The March 9, 1991 DEC/ORDA MOU, which is now incorporated as part of the November 2013 DEC/ORDA Consolidation Agreement states, "ORDA will normally serve as lead agency for State Environmental Quality Review (SEQR) and the Department and the Agency will participate in the SEQRA process as involved agencies."

ORDA, as lead agency, completed a SEQRA Full Environmental Assessment Form (FEAF) Parts 1, 2, and 3 (See **Appendix 2**). Based on the analysis in Part 3 of the FEAF, ORDA determined that the Project may result in one or more significant adverse impacts on the environment and that

an Environmental Impact Statement (EIS) must be prepared to further assess the impacts and possible mitigation and to explore alternatives to avoid or reduce these impacts.

The SEQRA aspects of this document are presented as a Generic Environmental Impact Statement (GEIS). A Generic EIS may be used to assess the environmental effects of a sequence of actions contemplated by a single agency or an entire program or plan having wide application (6NYCRR 617.10(a)(2) and (4)). They differ from a site specific EIS in that it applies to a group of common and related activities which have similar or related impacts. It is the intent of this GEIS to provide sufficient, site-specific information for all aspects of the UMP. In conformance with SEQRA, these related actions are being considered in this ~~D~~E~~G~~EIS. No additional SEQRA analyses are anticipated to be required for any new management action in this UMP, provided that such actions are carried out in accordance with the recommendations of this document. Any conceptual actions will require additional review under SEQRA should they be pursued in the future.

A preliminary version of the ~~is~~ UMP Draft Amendment/DGEIS was provided to NYSDEC and to the APA for their review on March 15, 2018. Comments from these agencies were received by ORDA, and ORDA revised the preliminary document accordingly. ORDA then declared the ~~is~~ Public Review UMP Draft Amendment/DGEIS to be complete for public review on May 9, 2018. Notice of ORDA's acceptance of the DGEIS, establishment of the public comment period with a public hearing, and directions for accessing the draft UMP/DGEIS document were published in the May 9, 2018 issue of the Environmental Notice Bulletin (ENB). The ~~is~~ 2018 UMP Draft Amendment/DGEIS ~~was~~ open for public comment until June ~~89~~, 2018 ~~and~~ included ~~ed~~ing a SEQRA public hearing ~~scheduled for~~held at 7:00 PM on May 24, 2018 at the Lake Placid Conference Center. Responses were prepared to comments received at the public hearing and to written comments submitted during the public comment period. A transcript of the public hearing, copies of written comments submitted during the public comment period and responses to comments are included in this FGEIS. Also included in this FGEIS is an errata section that summarizes the changes that were made to the DGEIS when preparing this FGEIS. Notice of acceptance of this FGEIS by ORDA, as lead agency, was published in the July 3, 2018 issue of the ENB.

This ~~Proposed Final~~~~Public Draft~~ UMP ~~Draft~~ Amendment/~~D~~E~~G~~EIS is available online on ORDA's website at http://www.orda.org/corporate/corporate_environment.php. Hard copies of the document are available at ORDA offices in Lake Placid and the Town of North Elba Town Hall.

~~Following the completion of the public comment period, ORDA, in consultation with NYSDEC and in cooperation with the APA, will proceed with the preparation of the FGEIS in accordance with the requirements of SEQRA.~~

F. Status of the 1986 Unit Management Plan and 1999 Unit Management Plan Amendment

The 1986 UMP and the 1999 UMP Amendment for Mt. Van Hoevenberg remain in effect today. Many of the improvements proposed under the 1986 UMP and the 1999 UMP Amendment have been implemented, with the remaining improvements on-going or pending implementation. Many of these approved improvements are incorporated into this five-year update and are still valid upgrades, repairs or additions to the recreation area. They are identified as part of the five year update, and are noted as already approved in the 1986 UMP and the 1999 UMP Amendment.

Refer to **Table 1, Mt. Van Hoevenberg Status of UMP Management Actions**, for a list of management actions approved from the 1999 UMP and the status of those improvements. Table 1 also lists those management actions from the 1986 UMP that are still ongoing.

Table 1
Mt. Van Hoevenberg Status of UMP Management Actions

Item #	Management Action / Improvements	Current Status	Notes
1	Trails / Biathlon Stadium		
	Build 4km of new XC ski trails and improve 1.3km of existing XC ski trails to create 5.3km trail network on Town Easement lands. 4km of 5.3km XC ski trail network will be paved for off-season use. All 5.3 km will have lights for evening skiing.	New Management Action, 2018 UMP Amendment	
	Build new Biathlon Stadium including a shooting range, penalty loop, bleachers, timing/competition building, pedestrian bridge and trails in and out of the stadium area.	New Management Action, 2018 UMP Amendment	Portion on Forest Preserve to be built within existing cleared area.
	Build two (2) new XC ski bridges over original access road.	New Management Action, 2018 UMP Amendment	To be built within existing cleared area.
	<i>Previously Approved Actions</i>		
	Maintain existing Cross-Country (XC) ski trails to applicable International Ski Federation (FIS) and International Biathlon Union (IBU) standards	Approved in 1999, ongoing.	Where feasible without tree cutting
	XC ski trail homologation (international standardization)	Approved in 1999, deferred pending Article XIV resolution	
	In kind replacement of bridges on XC trails	Approved in 1999, ongoing as needed	
	Construct mini-stadium bridge to increase safety at high speed trail intersection	Approved in 1999, pending implementation	
	Create a longer straightaway at the start/finish at the current cross-country stadium and relocate timing building	Approved in 1999, deferred pending Article XIV resolution.	
	Upgrade trail signage and trail maps	Approved in 1999, completed	
	Purchase portable scoreboard	Approved in 1999, abandoned	
	Purchase additional grooming equipment	Approved in 1999, ongoing as needed	
	Replace wooden snow fencing on trails	Approved in 1999, ongoing as needed	
	Create three connector XC ski trails	Presented in 1999, deferred pending Article XIV resolution.	
	Widen XC ski trails north of the access road	Presented in 1999, deferred pending Article XIV resolution.	

	Replace two existing ski tunnels under the access road with two new 10' high, 20' wide, 28' long box or arch culverts	Presented in 1999, deferred pending Article XIV resolution.	
	Relocate wax test area to be adjacent to new racer's facility if necessary	Presented in 1999, deferred pending Article XIV resolution.	New 2018 Management Action will replace this 1999 Management Action
	Pave Biathlon Trails	Presented in 1986, deferred pending Article XIV resolution.	
	Maintain XC ski trails	Approved in 1986, ongoing.	
	Build ski trail bridge in Mini Stadium at high speed trail intersection	Approved in 1986, superseded by 1999 design	
2	Buildings		
	Build new Sliding Sports Start Building	New Management Action, 2018 UMP Amendment	
	Build new Welcome Center Lodge	New Management Action, 2018 UMP Amendment	
	Build addition to USA Team Garage including restroom facilities	New Management Action, 2018 UMP Amendment	
	Build new Groomer Garage including restroom facilities	New Management Action, 2018 UMP Amendment	
	Build new Snow Storage Building	New Management Action, 2018 UMP Amendment	
	Convert existing Press Building into Medical Building, add potable water and restrooms.	New Management Action, 2018 UMP Amendment	
	Renovate interior and exterior of Biathlon Lodge/Boxing Building. No change in footprint.	New Management Action, 2018 UMP Amendment	
	<i>Previously Approved Actions</i>		
	Rehabilitate the biathlon lodge as a recreational lodge (includes outside deck, berms, and landscaping). Amenities include lockers, fireplace and lounge, ski rental/ski school shop, and ticket sales	Approved in 1999, not implemented.	Action modified and presented as New 2018 Management Action.
	Construct a destination hut (unheated and unmanned) on the Porter Mountain loop	Presented in 1999, deferred pending Article XIV resolution, now abandoned.	
	Build new 6,000 sq. ft. racer's facility/training center to replace the cross-country lodge. Amenities to include fitness and weight training rooms, lockers, showers, mini kitchen, telephones, meeting areas, storage, ventilated waxing rooms, and media facilities.	Presented in 1999, deferred pending Article XIV resolution.	New 2018 Action Item will replace this 1999 Action Item

	Construct a 50' x 80' pole barn for equipment storage in the westernmost parking area	Presented in 1999, deferred pending Article XIV resolution.	
3	Combined Track		
	Expand Start 1 Building and Deck	New Management Action, 2018 UMP Amendment	
	Replace Start 4 Building	New Management Action, 2018 UMP Amendment	
	Build addition to Combined Track Timing Building	New Management Action, 2018 UMP Amendment	
	<i>Previously Approved Actions</i>		
	Construct new combined bobsled/luge track. The lower half of the existing bobsled track will remain in place and operational to provide tourist rides. The upper half of the existing track remain in place and be abandoned, not demolished. The upper portion of the existing bobsled run will be abandoned in place and will be allowed to reforest naturally.	Approved in 1999, Completed	
4	Snowmaking		
	Build new 7.5 million gallon snowmaking reservoir and pump house on Town Easement lands	New Management Action, 2018 UMP Amendment	
	<i>Previously Approved Actions</i>		
	Construct a snowmaking system on 7.3 +/- km of XC ski trails on Forest Preserve Lands including an 8 million gallon reservoir, a 30' x 60' building to house pumps and air compressors and controls, two transformers, a pump at the existing pump station where bobsled run icing water is currently withdrawn, and water and air piping with snowmaking gun hydrants and power to run the guns along the trails where snowmaking is planned.	Presented in 1999, deferred pending Article XIV resolution.	
5	Parking / Circulation		

	Build new access road from Maintenance to Upper Bob Run Road, include lighting	New Management Action, 2018 UMP Amendment	
	Renovate existing parking adjacent to 1980 Start Building to service Start 1 Building. Abandon existing road to parking and build new access road. Include expanded paved area for athlete warm up.	New Management Action, 2018 UMP Amendment	
	Replace and improve existing road lighting on Upper Bob Run Road.	New Management Action, 2018 UMP Amendment	
	Install new lighting in parking lots 2, 3 and 4	New Management Action, 2018 UMP Amendment	
	Resurface original access road corridor with gravel from Bobsled Lane to current X/C parking lot/future Biathlon Stadium.	New Management Action, 2018 UMP Amendment	
	<i>Previously Approved Actions</i>		
	Restructure the existing cross-country ski center parking lot to accommodate better traffic flow, drop-off area and parking pods.	Approved in 1999, Abandoned	
	Restructure the existing biathlon lodge parking area to improve traffic flow, accommodate parking spaces, and provide overflow parking.	Approved in 1999, Abandoned	
	Restructure the existing access to the bobsled/luge area by creating a loop road with a vehicle drop-off zone.	Approved in 1999, partially completed.	New 2018 Management Action will replace this 1999 Management Action
	Pave parking fields with high rate of use (Lots 1-5)	Presented in 1999, deferred pending Article XIV resolution.	
	Pave loop road to bobsled/luge area	Presented in 1999, deferred pending Article XIV resolution.	
	Construct trailhead parking area in conjunction with DEC and DOT to serve those people accessing the trails to Pitchoff, Porter and Cascade Mountains.	Presented in 1999, deferred pending Article XIV resolution.	
6	Utilities		
	Provide potable water supply to converted Press Center (Medical Building) and all new buildings.	New Management Action, 2018 UMP Amendment	

	Install wastewater disposal system to serve the new welcome center/lodge, connect converted press center (Medical Building), Groomer Garage and USA Team Garage addition to existing, adequate disposal systems.	New Management Action, 2018 UMP Amendment	
	Develop maintenance/dredging plan at North Meadow Brook water intake	New Management Action, 2018 UMP Amendment.	
	<i>Previously Approved Actions</i>		
	Replace bridge at existing pump station and replace weir as required by DEC and described in UMP	Approved in 1999, completed	
7	Miscellaneous		
	Install an Alpine Coaster, including supporting deck systems, ticketing staging buildings and lighting. Remove lighting on 1980 track.	New Management Action, 2018 UMP Amendment	
	Install transport coaster or funicular	New Management Action, 2018 UMP Amendment	
	Build hiking trail providing connection for Cascade and Porter Mountains, Mount Marcy and Mt. Van Hoevenberg with parking at existing Intensive Use Area parking lots.	New Management Action, 2018 UMP Amendment	
	<i>Previously Approved Actions</i>		
	Maintain and replace security fencing	Approved in 1999, ongoing as needed	
	Maintain grounds and physical plant	Approved in 1999, ongoing as needed	
	Annual review of facility compliance with safety standards and facility modifications as required	Approved in 1986, ongoing.	
	Development and scheduling of summer/off-season events	Approved in 1986, ongoing.	
	Acquisition of lands where temporary ski trail easement was located and of interior parcels of private lands	Approved in 1986, ongoing.	
	Annual review and maintenance of current level of operation.	Approved in 1986, ongoing.	
	Maintenance of grounds and physical plant	Approved in 1986, ongoing.	
	Develop and schedule off-season events	Approved in 1999, ongoing	

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

A. Inventory of Natural Resources

1. Physical Resources

a. Geology

Bedrock formations at Mt. Van Hoevenberg consist primarily of anorthosite on the upper slopes and gneiss east and north of the combined track. Both rock types are very hard crystalline rocks.

The lower slopes of the Complex lie on the sand and gravel lake plain of glacial South Meadows Lake, the highest meltwater lake recognized in the Adirondack Mountains. The beach levels range from 2,146 to 2,209 feet above sea level. Mt. Van Hoevenberg itself is a small bedrock hill which protrudes from the glacial lake plain and was formed where erosion-resistant bedrock knobs called monadnocks are partially buried in glacial drift.

b. Soils

Above an elevation of 2,100 feet, soils form a very thin veneer over the bedrock. Below this elevation, soils have been mapped as glacial till, comprised of well-drained, moderately coarse-textured soils, most of which have a sandy fragipan which restricts drainage at a depth of 0.5 to 1.0 meters below the ground surface. This material provides a satisfactory foundation for most types of construction. However, in the design of septic systems or other subsurface drainage structures such as foundation drains, it is necessary to consider the tendency of the fragipans to retard drainage.

Between the existing parking area and North Meadow Brook, a large area of till without fragipan has been mapped. The biathlon and cross-country stadiums are located on this terrain.

Online USDA NRCS Soils Information (web soil survey) was used as the basis for the soils map for this UMP Amendment, provided in **Figure 5, Soils Map**.

Two of the important soil characteristics that need to be given consideration are the susceptibility of soils to erosion and the depth to bedrock in the soils at Mt. Van Hoevenberg.

Table 8 in the Soils Survey of Essex County provides data on potential hazard of forest off-road or off-trail soil erosion. This is a good measure of erosion potential of soils that become exposed during construction at Mt. Van Hoevenberg. **Table 2, Soil Erosion Potential**, rates the erosion potential of soils at Mt. Van Hoevenberg from slight to severe.

Table2
Soil Erosion Potential

Map Symbol	Soil Series Name	Erosion Potential		Map Symbol	Soil Series Name	Erosion Potential
13A	Burnt Vly-Rumney-Pleasant Lake complex, 0 to 2 percent slopes	Slight		BvA	Burnt Vly peat, 0 to 1 percent slopes	Slight
655B	Sunapee-Monadnock complex, 3 to 15 percent slopes, very bouldery	Slight		CsB	Colton very gravelly loamy sand, 3 to 8 percent slopes	Slight
650D	Monadnock-Adams-Colton Complex, 15-35 percent slopes, bouldery	Moderate		MhB	Monadnock fine sandy loam, 3 to 8 percent slopes	Slight
657C	Monadnock-Tahawus complex, 3 to 15% slopes, very bouldery	Slight		MkB	Monadnock fine sandy loam, 3 to 8 percent slopes, very bouldery	Slight
727B	Skerry-Adirondack complex, 0 to 8 percent slopes, very bouldery	Slight		MkC	Monadnock fine sandy loam, 8 to 15 percent slopes, very bouldery	Slight
931D	Mundalite-Rawsonville complex, 15 to 35 percent slopes, rocky, very bouldery	Moderate		MkD	Monadnock fine sandy loam, 15 to 35 percent slopes, very bouldery	Moderate
941D	Rawsonville-Hogback complex, 15 to 35 percent slopes, very rocky, very bouldery	Moderate		MuC	Mundalite fine sandy loam, 8 to 15 percent slopes, very bouldery	Slight
941F	Rawsonville-Hogback complex, 35 to 60 percent slopes, very rocky, very bouldery	Severe		MwD	Mundalite-Rawsonville complex, 15 to 35 percent slopes, rocky, very bouldery	Moderate
944F	Hogback-Knob Lock complex, 35 to 60 percent slopes, very rocky, very bouldery	Severe		Pd	Pits, sand and gravel	Not Rated
AdC	Adams loamy sand, 8 to 15 percent slopes	Slight		PkA	Pleasant Lake peat, 0 to 1 percent slopes	Slight
AdE	Adams loamy sand, 25 to 45 percent slopes	Moderate		RaF	Rawsonville-Hogback complex, 35 to 60 percent slopes, very rocky, very bouldery	Severe
AkB	Adirondack fine sandy loam, 3 to 8 percent slopes, very bouldery	Slight		SnB	Sunapee fine sandy loam, 3 to 8 percent slopes, very bouldery	Slight

BeC	Becket fine sandy loam, 8 to 15 percent slopes, very bouldery	Slight		SrC	Skerry fine sandy loam, 8 to 15 percent slopes, very bouldery	Slight
BkD	Becket-Turnbridge Complex, 15 to 35 percent slopes, rocky, very bouldery	Moderate		UIC	Udorthents, nearly level through strongly sloping	Not Rated

Construction activities that require excavation in areas of soils with shallow depth to bedrock can require blasting of the underlying bedrock. The following are the depths at which bedrock is typically present in the soils at Mt. Van Hoevenberg.

Table 3
Depth to Bedrock

Map Symbol	Soil Series Name	Bedrock Depth (in.)		Map Symbol	Soil Series Name	Bedrock Depth (in.)
13A	Burnt Vly-Rumney-Pleasant Lake complex, 0 to 2 percent slopes	>72		BvA	Burnt Vly peat, 0 to 1 percent slopes	>72
655B	Sunapee-Monadnock complex, 3 to 15 percent slopes, very bouldery	>72		CsB	Colton very gravelly loamy sand, 3 to 8 percent slopes	>72
650D	Monadnock-Adams-Colton Complex, 15-35 percent slopes, bouldery	>72		MhB	Monadnock fine sandy loam, 3 to 8 percent slopes	>72
657C	Monadnock-Tahawus complex, 3 to 15% slopes, very bouldery	>72		MkB	Monadnock fine sandy loam, 3 to 8 percent slopes, very bouldery	>72
727B	Skerry-Adirondack complex, 0 to 8 percent slopes, very bouldery	>72		MkC	Monadnock fine sandy loam, 8 to 15 percent slopes, very bouldery	>72
931D	Mundalite-Rawsonville complex, 15 to 35 percent slopes, rocky, very bouldery	18-27		MkD	Monadnock fine sandy loam, 15 to 35 percent slopes, very bouldery	>72
941D	Rawsonville-Hogback complex, 15 to 35 percent slopes, very rocky, very bouldery	14-25		MuC	Mundalite fine sandy loam, 8 to 15 percent slopes, very bouldery	>72
941F	Rawsonville-Hogback complex, 35 to 60 percent slopes, very rocky, very bouldery	14-25		MwD	Mundalite-Rawsonville complex, 15 to 35 percent slopes, rocky, very bouldery	25->72
944F	Hogback-Knob Lock complex, 35 to 60 percent slopes, very rocky, very bouldery	14-25		Pd	Pits, sand and gravel	>72

AdC	Adams loamy sand, 8 to 15 percent slopes	>72		PkA	Pleasant Lake peat, 0 to 1 percent slopes	>66
AdE	Adams loamy sand, 25 to 45 percent slopes	>72		RaF	Rawsonville-Hogback complex, 35 to 60 percent slopes, very rocky, very bouldery	14-25
AkB	Adirondack fine sandy loam, 3 to 8 percent slopes, very bouldery	>72		SnB	Sunapee fine sandy loam, 3 to 8 percent slopes, very bouldery	>72
BeC	Becket fine sandy loam, 8 to 15 percent slopes, very bouldery	>72		SrC	Skerry fine sandy loam, 8 to 15 percent slopes, very bouldery	>72
BkD	Becket-Turnbridge Complex, 15 to 35 percent slopes, rocky, very bouldery	27->72		UIC	Udorthents, nearly level through strongly sloping	>72

c. Topography and Slope

Topography at Mt. Van Hoevenberg ranges from gently rolling in the area of the biathlon and cross-country ski stadium area to steep on the upper slopes of the mountain itself. Elevation ranges from 1,900 to 2,830 feet above mean sea level, as shown on **Figure 6, Topography**. Slope steepness is shown on **Figure 7, Slope Map**. Much of the lower elevation area is in the 0-10% slope category, and upper slopes in the range of 40-60% are not uncommon.

d. Water Resources

The only major water course in the Olympic Sports Complex is North Meadow Brook which flows approximately 1.2 miles from east to west across the northern part of the area. **Figure 8, Surface Water and Wetland Resources**, depicts the location of this resource on the site. A small tributary of the brook crosses the southeastern part of the Complex. The brook is classified by the New York State Department of Environmental Conservation Waters Index as C(T). Class "C" waters are managed for fishing and fish propagation. The water quality shall be suitable for swimming and boating recreation even though other factors may limit the use for that purpose. The (T) designation indicates that the water is capable of providing trout habitat.

Stream bed components are dominated by gravel and sand along with limited boulders and rubble. Estimated autumn stream flow is 4 cubic feet per second (cfs) which is considered the minimum flow present in this stream 75% of the time, as reported in the NYSDEC 1986 UMP for the Complex. Peak flows of 25 cfs are possible during rainy periods and may reach 50 cfs for a few days during the spring runoff period.

The calculated minimum average daily flow at the pumphouse on North Meadow Brook projected to occur over a seven day period with a two year return interval (MAD 7/2) is 1.8 cfs.

North Meadow Brook was used in the past as source of snowmaking water source at the OSC.

Snowmaking water was withdrawn from North Meadow Brook at a point located approximately 200 feet north of the access road. Water was withdrawn at a rate of 100 gallons per minute for an average of 400 hours each season. Snowmaking was initiated for the 1980 Olympic Games and has continued until recently. Snow was made in the field east of the existing biathlon lodge, about 150 feet from the brook. Snow was then spread out on the trails with grooming equipment. Starting in the fall of 2016 a TechnoAlpin SnowFactory has been used to make snow in the cross country stadium which is then spread onto ski trails. A bedrock well is the source of water for the snow factory.

Water is also withdrawn from North Meadow Brook at the existing pumphouse in order to ice the bobsled and luge runs. Water for this use is pumped to a 27,000 gallon underground cistern located at the base of the combined track.

e. Wetlands

Wetlands within the Olympic Sports Complex are confined to lowlands along North Meadow Brook and its tributaries, and to a few isolated, poorly drained pockets at higher elevations. Those areas associated with North Meadow Brook generally are spruce-fir swamps and alder-dominated shrub swamps. The mountainside pockets have balsam fir, red spruce, jewelweed, cinnamon fern, sensitive fern, sedges, slender mannagrass, mosses, and leafy liverworts.

Figure 8, Surface Water and Wetland Resources, shows the on-site wetlands identified by the Adirondack Park Agency, and mapped with the aid of aerial photographs and field inspections. These are the wetlands which meet the 1-acre minimum size as State-regulated wetlands within the Adirondack Park. There are other small wetlands in places such as wide spots along intermittently flowing swales, isolated depressions, and seepy places on slopes, which are too small to come under State wetland regulations, but which may be under federal regulation. These are shown as “NWI Wetlands” on **Figure 8**.

f. Climate and Air Quality

The Lake Placid area has a humid continental climate with severe winters, no dry season, warm summers and strong seasonality. According to the Holdridge life zones system of bioclimatic classification, the Lake Placid area is situated in or near the boreal wet forest biome.

The following climate information was taken from the Soil Survey for Essex County (USDA NRCS, 2010) that provides climate data, including data from NRCS Lake Placid 2S climate station.

Temperature (F)

Average Daily Maximum = 52.3

Average Daily Minimum = 29.6

Winter Average = 18.1

Summer Average = 62.2

Average Annual = 40.9

Precipitation (in.)

Mean Annual = 39.65

Average Seasonal Snowfall = 115.2

NYSDEC last reported on air quality attainment in the area in 2016. One of the monitoring station locations is at the base of Whiteface Mountain. Parameters monitored include sulfur dioxide and inhalable particulates (PM2.5). Monitored levels for these 2 parameters were well within federal air quality standards.

2. Biological Resources

a. Vegetation

Due to the variety of drainage and elevation conditions, five typical Adirondack forest coetypes are found on the Mt. Van Hoevenberg site. **Figure 9, "Vegetation Coetype Map,"** traces the approximate boundaries of these forest types which are described as follows:

Spruce-Fir: Composed of red and black spruce and balsam fir with areas of tamarack or wetland hardwoods such as yellow birch or elm. Found mainly in low, wet areas or high on mountains where soil is shallow.

Spruce-Fir-Pioneer Hardwood: Composed of red spruce, balsam fir, white or gray birch and aspen with occasional pin cherry and yellow birch.

Spruce-Fir-Northern Hardwood: Composed of red spruce, balsam fir, hard and soft maple, beech and yellow birch with occasional associated species such as hemlock, black cherry and white ash. Usually found on lower slopes and is quite often a transition forest type between the spruce-fir type and the northern hardwood type.

Northern Hardwood: Composed of soft and hard maple, beech, yellow birch and associated species such as black cherry, white ash and white pine. Found on well- drained side slopes.

Open: Open field or those areas which have filled with brush species such as spirea but lack significant woody growth.

On a finer scale than mapped in **Figure 9**, it is possible to identify several ecological communities as defined in the classification used by NYSDEC (Reschke, 1990). Under this system, the first three forest types, where found on well-drained sites, would be classified as variants of the spruce-northern hardwood forest community. The northern hardwood forest type is the equivalent of the beech-maple mesic forest community.

Along streams and in wet pockets, forest dominated by spruce and fir would be classified as spruce-fir swamp. Where the soil next to a stream is better drained, the balsam flats community may occur. For much of its length along the Olympic Sports Complex, North Meadow Brook is bordered by a narrow zone of the shrub swamp community, in which speckled alder is dominant.

Broader stretches of shrub swamp are associated with the eastern end of Mud Pond and North Meadow Brook in the westernmost part of the Olympic Sports Complex.

b. Wildlife

The Olympic Sports Complex at Mt. Van Hoevenberg is a year round recreation and training facility. Athletes and recreational users run, hike, bike and horseback ride on the Complex's cross-country trails during spring, summer and fall. Winter is the most active time for the area as cross-country skiers and biathletes participate in intensive training and competition. Also, the public comes to the area to enjoy cross-country skiing and to be spectators at the various events throughout the winter season.

In addition to the recreational uses for which Mt. Van Hoevenberg was designed, hunting and trapping are popular activities within the immediate vicinity. Neither the current degree of development nor the influx of winter recreational users has hindered the presence of game species and the enthusiasm exhibited by area sportsmen.

There is no measure available for the number of consumptive and passive users of the wildlife resource on the Olympic Sports Complex at Mt. Van Hoevenberg. Harvest levels and license sales (hunting and trapping) are often used as indicators of the potential number of consumptive users. Since harvest data is collected by township and license sales are tabulated by county, neither offers an appropriate indicator of use on as small a land unit as the Olympic Sports Complex.

The number of passive users could include every visitor that uses the facility. However, specifically, only the visitors using the cross-country ski trails for leisure, as opposed to competition, may readily enjoy observing wildlife. Some of the summer tourists may also take the time to observe birds while walking along the trails or touring the bobsled and luge runs.

A number of species have been documented to historically occur in the area of the project site and of this number many are likely to commonly occur on the site based upon their habitat preferences. Mammalian species likely to be common on the site include short-tailed shrew, black bear, raccoon, weasel, coyote, red fox, gray fox, woodchuck, eastern chipmunk, red squirrel, beaver, meadow vole, muskrat, porcupine, snowshoe hare and white-tailed deer.

A number of avian species are also likely to occur commonly on the site, some throughout the year and some as migrants. Based upon the habitat types found on the site, the avian species most likely to commonly occur on the site at any one time include ruffed grouse, broad-winged hawk, yellow-bellied sapsucker, American robin, red-eyed vireo, brown-headed cowbird, rose-breasted grosbeak, purple finch, dark-eyed junco, white-throated sparrow, blue jay, American crow, black-capped chickadee, owls, raven and brown creeper.

The white-tailed deer is a common big game species throughout the Adirondacks. The deer obtain annual nutrition and shelter needs on and off the Olympic Sports Complex parcel. The best summer range may be described as an inter-mix of pioneer forest and brushland. The forest

offers protection and shelter while the brushland provides an abundance of food in the form of browse. On the Mt. Van Hoevenberg site, the northern hardwood forest is poor habitat for deer because sufficient sunlight does not penetrate to the forest floor to encourage the growth of browse.

However, there is a noticeable increase in the deciduous understory in the spruce-fir-hardwood habitat. There is also an increase in browse along the openings created by the facilities at the Olympic Sports Complex, including the roads, parking lots, and ski trails.

During the latter part of the fall and throughout the winter, deer seek the sheltered portions of their range throughout the Adirondacks, where protection is available from adverse wind, temperature and most importantly, snow depth. The better winter shelter is the conifer and mixed deciduous-conifer covertypes where the crowns of red spruce, white pine, balsam fir, white cedar and hemlock retain the snow and thus diminish snow depths on the ground. One such deer wintering area is located south of the Olympic Sports Complex, along South Meadow Brook.

The maintenance of trails and the periodic large number of people that congregate at a spring event does affect the behavior of wildlife. Trimming shrubs to groom cross-country ski trails helps maintain early successional vegetation thereby contributing to more food for herbivores such as snowshoe hare and white-tailed deer. The large crowds at sporting events probably cause a variety of wildlife to seek shelter on the edge of the highly active portions of the site.

c. Fisheries

North Meadow Brook flows westerly into the West Branch of the Ausable River, and a 1.2 mile section flanks the Olympic Sports Complex at Mt. Van Hoevenberg to the north.

Water quality in the stream near the Olympic Sports Complex at Mt. Van Hoevenberg is sufficient to support aquatic organisms. No evidence of floating or settleable solids, toxic wastes, or other substances dangerous to the aquatic community is known to be present in the stream. Sufficient shade provided by the forest cover keeps the area of the stream below 70°F during warm summer months.

Prior to 1980, North Meadow Brook was being stocked annually with 1,260 brook trout fingerlings. Stocking was discontinued when the stream was found to be supporting a self-sustaining brook trout population.

Electroshocking fish collection and inventory in the 1990's upstream of the bridge over the ORDA Pumphouse Road. This survey counted 30 brook trout (minimum length of 45 mm and maximum length of 189 mm) and 2 brown trout (minimum length of 104 mm and maximum length of 187 mm).

d. Unique Areas, Critical Habitats, and Rare Species

A September 2017 check of NYSDEC's online Environmental Resource Mapper revealed no records of rare, threatened, or endangered species or significant natural communities occurring within the lands of the Olympic Sports Complex at Mt. Van Hoevenberg.

3. Visual Resources

Visual resources were examined and reported on in Appendix C of the 1999 UMP.

The landform that is Mount Van Hoevenberg and its associated forest cover limits the directions from which views into the OSC are possible. Generally speaking, there are no direct views into the developed portions of the OSC from the south. Views into the OSC were found to be limited to 310 degrees NW to 45 degrees NW.

Locations within this viewshed that were identified as having views into the Complex included the following:

- Intersection of NYS Route 73 and the entry to the complex (Bobsled Run Lane)
- Adirondack Loj Road
- 90 meter ski jump deck at the Olympic Sports Complex
- John Brown's Farm/Grave Historic Register Site
- Parking lot of the Crown Plaza Hotel downtown Lake Placid
- Sections of NYS Route 86 (Olympic Scenic Byway) near the Lake Placid Golf Club

4. Noise

When the 1999 UMP was written, the only consistent source of noise at the Olympic Sports Complex, which was limited to the winter season, was the snowmaking gun located in the open field about 460 feet south of NY Route 73 and 165 feet north of the complex access road. Snowmaking had occurred at the Olympic Sports Complex since the 1980 Olympic Games in this area. At the time of the 1999 UMP Amendment, a snow gun which required a portable diesel air compressor was previously used which was relatively much louder than the snow gun which was in use from 1995 to 1999.

As stated above, snowmaking in the open field near NYS Route 73 is presently discontinued. Snowmaking currently takes place interior in in the Complex behind the cross country lodge where the TechnoAlpin SnowFactory currently produces snow for spreading on the ski trails. This location is more interior on the property and further removed from other land uses along NYS Route 73.



B. Human Resources

1. Transportation

The subject property is bounded to the north and east by NY Route 73 and to the west by Adirondack Loj Road as shown on **Figure 3, Site Location Map**. NY Route 73 at its most easterly point connects with NY Route 9, which connects two miles south with I-87 at Exit 30. Access from the south is provided by I-87 at Exit 30 with a portion of NY Route 9 and NY Route 73 being

utilized to reach the site. NY Route 73 traverses west to connect with NY Route 86 at Lake Placid. NY Route 73 is an asphalt-surfaced roadway with a turning lane in both directions at the entrance road to the Olympic Sports Complex. The roadway has paved shoulders approximately 4 feet in width.

Adirondack Loj Road originates at the Adirondack Loj and runs in a north/south direction, intersecting at its northern end with NY Route 73. The roadway is approximately 20 feet wide and paved with a 1 foot wide sand shoulder on both sides.

The Olympic Sports Complex at Mt. Van Hoevenberg is serviced by a 1 mile paved State access road, NY Route 913Q, from NY Route 73. NY Route 73 and approximately 3,000 feet of the access road to the facility are maintained by New York State.

At the end of the access road, there is one main parking lot and four smaller parking lots screened by vegetation. Total parking capacity in all of these lots is estimated to be about 1,800 cars. Parking facilities at Mt. Van Hoevenberg are sufficient for existing activities and the proposed expansions and improvements.

The New York State Department of Transportation indicated that traffic counts had been conducted in the area of the project site. In 1988, 1989, 1992, 1994, and 2014 traffic counts were taken, or were estimated from previous actual counts, on NY Route 73 in the area of the Olympic Sports Complex entrance road. Annual Average Daily Traffic Counts (AADT) were reported as follows:

	<u>Year</u>	<u>AADT</u>
July	1988	2450
May	1989	2550
May	1992	2000
August	1995	3500
September	2014	3467

The DOT reports that late summer counts usually indicate higher traffic volumes in the Lake Placid area due to the presence of summer visitors.

In 2017 the Olympic Sports Complex at Mt. Van Hoevenberg was serviced by public bus service provided by Essex County as part of its Olympic Summer Mid Day Loop that operated between May and September. The site also routinely hosts tour buses, group tours and teams who are transported to the Complex on buses.

Airports

The Lake Placid Airport is owned and operated by the Town of North Elba and is located one mile south of the Village on NY Route 73. Airport services include air charter, air taxi, air ambulance, scenic flights, tie down, aviation gas, plane repairs, and flight instruction. The longest runway is 4,196 feet.

The Adirondack Regional Airport near Saranac Lake is a municipality owned and operated airport and is the nearest facility providing scheduled certified air carrier service into the Lake Placid-Saranac region. It is located 16 miles from Lake Placid on NY Route 86 in Lake Clear, just west of Saranac Lake, and can accommodate larger long range jet aircraft. Its longest runway is 6,573 feet.

Rail

Direct railroad service into the Lake Placid area is not available at this time. AMTRAK provides daily passenger train service between New York City and Montreal, with the nearest stop in Westport, approximately 40 miles from the Olympic Sports Complex.

Bus

Adirondack Trailways provides daily bus service between Lake Placid and New York City and Malone, with many stopping points in between. The Champy Express provides service between Lake Placid and Plattsburgh twice daily. It connects with the afternoon AMTRAK train in Westport.

Ferry

The Lake Champlain Ferry at Essex (north of Westport) offers transportation of cars across Lake Champlain into Vermont at Charlotte from April 1 through January 1. Alternate ferry service on a year-round basis can be found at the ferry terminals in Plattsburgh, New York.

Taxi

Multiple taxi and/or limousine service firms operate in the Village of Lake Placid.

2. Community Services

The New York State Police, Troop B station is located in Ray Brook. The Mt. Van Hoevenberg area is located in Zone 3 and is staffed by 17 uniformed officers. This regulatory division maintains 6 marked patrol vehicles (including a 4 wheel-drive Cherokee), 2 snow machines and 2 All-Terrain Vehicles (ATV). Officers perform regular patrols in the area and are also available for special events for security, traffic and emergencies as requested by Mt. Van Hoevenberg.

The Lake Placid Volunteer Fire Department serves the Mt. Van Hoevenberg site. The Department is located on River Street Extension in the Village of Lake Placid and has a staff of 60 volunteers and 5 full-time drivers and dispatchers. The Department maintains 2 (1,000 gal.) pumpers, an 85' ladder truck, a rescue vehicle, a 300 gallon tanker, a 3,000 gallon tanker, 2 fire boats and ice rescue equipment. All trucks are equipped with fire suppression foam (Class A and AFFF).

The Lake Placid Volunteer Rescue Squad serves the project area and is staffed by 40 volunteer members. The Squad maintains 2 rescue vehicles (1994 McCoy-Miller and 1995 McCoy-Miller).

Both vehicles are rigged with Advance Life Support (ALS) equipment including monitors and a Thomas Pack (similar to "Jaws of Life"). Ten members of the Squad are ALS certified and serve as crew chiefs. The Adirondack Medical Center at Lake Placid is the primary emergency facility utilized by the Squad. The Adirondack Medical Center of Saranac Lake is the next closest facility.

Both medical facilities are operated by the Adirondack Medical Center. The Placid Memorial Health Center has 24 hour emergency care, out-patient facilities, labs, radiology, physical therapy, sports medicine and dental and health care offices. The Adirondack Medical Center in Saranac Lake is a 98 bed facility that offers full in- patient services including OBGYN and surgical. The two facilities are staffed by a combined 38 active physicians.

The project site is located in the Lake Placid Central School District. The District is composed of an elementary school (K-5), located on Old Military Road and a combined junior high/senior high school located on Main Street. 2016-2017 enrollments for K-12 are 649 students. Enrollment declined by 29% over the last 17 years (269 students). The proposed project will not increase the number of students enrolled within the District and will not in any way affect the operation of the District or the enrollment figures.

Solid waste from Mt. Van Hoevenberg is transported to the North Elba Transfer Station located on Cascade Road. A town-owned construction and demolition debris landfill is also located on Cascade Road. Recyclables are sorted here and are transported to various recycling facilities. The solid waste is transported to the Adirondack Resource Recovery Facility in Washington County.

Electrical energy is presently supplied by Lake Placid Municipal Electric Company via a three-phase 13,200/7,620 volt line.

3. Local Land Use Plans

The Town of North Elba has a total land area of 157 square miles, representing approximately 8 percent of Essex County lands. The Town is entirely located in the Adirondack Park and contains multiple APA land use classifications. The State lands at Mt. Van Hoevenberg and in the surrounding area are classified according to the APSLMP administered by the APA. Private lands in the area are classified according to the Adirondack Park Land Use and Development Plan which is also administered by the APA.

Within the Town of North Elba, private land has been classified by the APA as "Hamlet", "Moderate Intensity Use", "Low Intensity Use", "Rural Use" and "Resource Management". State land has also been given APA land use designations; "Wilderness", "Wild Forest", "State Administrative", "Intensive Use", and "Historic" areas have all been classified within the Town of North Elba. The distribution of acres within these land use classifications is shown in **Table 4**.

Table 4
Town of North Elba Private and State Land Use Distribution 2016

Land Use Classification	Acres	Percentage
PRIVATE LANDS		
Hamlet	2,236	11.4%
Resource Management	7,569	38.4%
Moderate Intensity	1,072	5.4%
Low Intensity	3,633	18.4%
Rural Use	5,197	26.4%
TOTAL	19,707	100%
STATE LANDS		
Wilderness	58,902	75%
Wild Forest	14,772	18.7%
Intensive Use	1,682	2.1%
Historic	114	<1%
State Admin.	231	<1%
TOTAL	78,845	100%

As shown on **Figure 10, Land Use Map**, the Olympic Sports Complex at Mt. Van Hoevenberg is bordered to the north by private land designated as "Resource Management" and State lands designated as "Wilderness and "Wild Forest". East of the project, the land area is designated "Rural Use" and "Wild Forest". West of the Complex, the land is "Resource Management" and south of the Complex is State owned land classified as "Wilderness". The High Peaks Wilderness Area has been designated in this area. The hiking trails which originate in the High Peaks Wilderness Area continue on the Olympic Sports Complex intensive use area. The High Peaks Wilderness Area encloses approximately 275,460 acres and is comprised of three distinct, but interrelated units: (1) the Ampersand Primitive Area, (2) the High Peaks Wilderness, and (3) the Johns Brook Primitive Corridor. The High Peaks Wilderness is the best known wilderness of the Adirondacks; it is the State's largest wilderness and receives the most visitation.

The Town of North Elba also regulates land use by the Local Land Use Code most recently revised in 1991. The Local Land Use Code designates residential, business and public and semi-public districts within the Town of North Elba. The remainder of land is classified as rural agricultural following the APA Land Use Classification boundaries and density requirements. The ordinance regulates land uses and area requirements and includes site plan review provisions.

A Comprehensive Land Use Plan was adopted by the Town of North Elba and the Village of Lake Placid in 1964 and was most recently updated in 2014. The Plan does not specifically refer to ORDA initiatives but rather concentrates on developing "ways of meeting the changing demographics and expectations of today's traveler through enhanced customer services and the use of new marketing technologies that are provided in an eco-friendly and sustainable way."

4. Historical and Archaeological Resources

The Mt. Van Hoevenberg Olympic Bobsled Run was listed on the State Register of Historic Places in 2009 and on the National Register in 2010. There are no known archaeological resources on the site or substantially contiguous to the site.

The one and one-half mile long bobsled run was constructed in 1930 and built specifically for the 1932 Winter Olympic Games. It was the only facility for the 1932 Olympics constructed at this location. Immediately adjacent to the bobsled run, is a contemporary combined luge and bobsled run built in 1999. A small portion of the 1999 combined run was built atop the path of the original bobsled run thereby destroying all evidence of the 1930 track in that location. The missing section included six hundred feet of track (of the original 7,820 feet) and one significant curve (Whiteface curve). The original length, steep topography, and twisting route of the 1930 track are still apparent however, enabling an understanding of the significant events of the 1932 Olympics. The historic site boundary includes the two intact sections of the bobsled run and the original access road. The site excludes the missing section of track, all adjacent buildings and features, which are outside the period of significance, as well as the entrance road and parking lot, which have been expanded and modernized to accommodate larger crowds.

Although there have been many changes to the site since 1932, the central and most important feature, the original bobsled run, survives with substantial integrity. It retains its original location amid a steep, heavily forested setting. It also retains most of its original design, structure, workmanship and materials and clearly recalls the grandeur and thrill of the important events of 1932. With the exception of the six-hundred foot section at Whiteface curve, the topographic, sculptural and structural qualities of the run are entirely intact.

The bobsled run is internationally recognized for its association with the 1932 Olympics and the rise of bobsledding as a sport in the United States, and the site is recognized by tourists and athletes from all over the world. The Mt. Van Hoevenberg Bobsled Run is an early and singular example of its type, and it is associated with a nationally significant event. This is the only resource that represents the early history of bobsledding in the United States and its role in the 1932 Olympics.

C. Man-Made Facilities

1. Inventory of Constructed Facilities

Figure 11, Existing Conditions, shows existing facilities. Also see **Figure 12, Trail Inventory**.

a. Combined Track

Construction of the Mt. Van Hoevenberg Combination Bobsled, Skeleton and Luge Track (aka the combined track or the track) was completed in 2000, and the track is considered one of the most technically demanding tracks for sliders of all disciplines, featuring 20 challenging curves, the

most number of curves for a competitive sliding track. One of the most notable features of the course is a heart-shaped omega known as “The Heart” which makes up the final quarter of the course at curves 19 and 20.

Track refrigeration is accomplished by using an ammonia system. Liquid ammonia is pumped under pressure through below-ground mains and its pressure is reduced allowing it to “boil” into gas. Its heat of vaporization- 317 calories per gram- makes ammonia an ideal refrigerant. The ammonia is then returned through mains to receivers and the cycle is repeated. The entire system is hermetically sealed allowing no ammonia vapor to escape into the atmosphere. However, should a leak develop, the ammonia would be greatly diluted. Its density is approximately half that of air at atmospheric pressure causing the vapors to rise. Compounds would then be formed which would fall with precipitation and would behave much like some commercial fertilizers. The 1999 UMP Amendment contains an Ammonia Spill Plan (Appendix H) and a Spill Prevention, Control and Countermeasure Plan (Appendix F) that remain in effect.

Sleds are carried to the start of the run by trucks using a paved road that runs around the outer side of the track (Upper Bob Run Road). This road is also used by maintenance personnel and for vehicular tours that are offered at the facility. There are multiple start buildings along the track that are used for different levels of training (i.e. National, Junior and Development) and for different competitive events (bob, luge, skeleton, men’s and women’s events).

Water for icing the track is obtained from North Meadow Brook and it is stored in two cisterns near the track. Water service is provided at various locations along the length of the track. Maintenance of the ice surface oftentimes occurs at night when the track is in use during the day. The track itself contains over 980 lights that remain on at all times during the time that the track is in operation. Generally, the track is operated from October through April or May. Likewise, lighting along the Upper Bob Run Road is turned on most nights for track maintenance operations during the period of track operations.

In addition to hosting sliding sport training and competitive events, rides are available to the public for a fee. Riders are accompanied by trained drivers and brakemen and start a half mile ride at Start 4.

Accommodations for spectators are mostly informal, and viewing locations are available along most of the length of the track. Up to 10,000 spectators, mostly standing, may be accommodated. Pedestrian bridges at strategic locations allow for a separation of vehicular and pedestrian traffic.

b. Cross Country Skiing

ORDA performed an inventory of existing ski trails for this UMP Amendment. See **Figure 12, Trail Inventory**. There are 50 km of ski trails.

There are 8 km of homologated race trails that average 6 m wide with 1.5 m wide on each side that are “side cut” for maintenance purposes. These trails are located to the south and

southeast of the cross-country stadium.

There are 6 km of what are considered beginner trails that average 6.5 m wide with 1m on each side that are side cut. These trails are located to the north and northeast of the cross-country stadium on generally flatter terrain.

Cross-country trails identified as being on the “cross-country side” are the remainder of the trails located south of the access road. There are 17 km of these trails that average 5 m wide with 1 m side cut on each side.

The remaining 19 km of existing trails are referred to cross-country and biathlon trails located on the north side of the entrance road. These trails average 4.5 m wide with 1 m of side cut on each side.

Overall, the trail terrain is varied, and slopes are between approximately 0 and 35%. While these trails have been designed to meet the public demand and offer varying degrees of difficulty, they also are required to meet Federation Internationale de Ski (FIS) specifications for international competition.

The loop or cloverleaf design directs the skiers through the start-finish stadium several times during a race. For spectator viewing, interval times, and food stations, this system is invaluable. For recreational skiers, the system allows great variety of length and degree of difficulty. During competitions, choice of loops can provide a Chief-of- Course with any combination to suit the particular race or class of competition.

Standing area for spectator viewing will accommodate 5,000 persons at the start-finish line near the Cross Country Lodge and along the trails.

c. Biathlon

Biathlon competition consists of a combination of cross-country skiing and periodic rifle target shooting during the distance skied.

The biathlon facilities at Mt. Van Hoevenberg, located just north of the access road, include over 20 kilometers of trail which has been approved for international competition. The courses were World Cup certified in October 1995 by the International Biathlon Union (IBU). Seven different combinations of loops make it possible to create internationally certified courses for the 7.5 kilometer, 10 kilometer, and 20 kilometer events. The complex of ski trails and firing range have been designed and constructed to complement the Olympic Sports Complex at Mt. Van Hoevenberg for use by both the competitor and the recreational skier.

The firing range itself is 50 meters long. Competitors currently shoot small bore .22 caliber rimfire rifles. The firing range faces north for the best shooting light and provides thirty-six targets.

In direct connection with the range there is a 250 meter (820 feet) start-finish area. The penalty

loop connects with the range in this same area. From this start-finish stadium, there are three major loop-type cross-country ski trails, thereby providing recreational skiing for the public during a competition on either system.

Each of these trails is bisected with several cut-off loops which may be used to provide varying length courses as demanded by the competitions. The 20 kilometer course has a vertical difference of 190 meters, a maximum climb of 55 meters, and a total climb of 560 meters.

There is a timing system for use during competitions and a public address system which covers the range and the start-finish area.

The spectator standing area for viewing at the start-finish line of the biathlon accommodates 3,000 persons.

d. Snowshoe Trails

The current trails map for Mt. Van Hoevenberg (see **Figure 12A**) lists and shows three snowshoe trails.

The 1932 & 1980 Bobsled Track Snowshoe Trail is a 7km trail that starts near Lamy Lodge and follows the route of the 1980 track up to the 1980 start. Here the trail forks and to the right the trail follows the upper part of the 1932 track and extends up to the summit of Mt. Van Hoevenberg. Going left at the fork is the lower portion of the trail that ends near the cross country stadium.

The second snowshoe trail is a 4km loop that begins and ends at the cross country stadium and occurs on lands south of Bobsled Road Run. The trail extends out towards the area of Josie's Cabin.

The third snowshoe trail is a 5km loop that begins and ends at the cross country stadium with most of this trail occurring on lands north of Bobsled Run Road.

e. Mountain Biking

ORDA performed an inventory of existing mountain biking trails for this UMP Amendment.

There are approximately 1.37 miles (2.2 km) of mountain biking trails on the cross country (south) side of Bobsled Run Road and 2.13 miles (3.4 km) on the north, or biathlon side, of Bobsled Run Road. Trail sections are tabulated in the table below and **Figure 12B, Mountain Bike Trails**, shows all of the trails.

Mountain Biking Trails			
Cross Country Side		Biathlon Side	
Trail Name	Trail Length	Trail Name	Trail Length
Kinta	0.51km	Tender Foot	0.14km
Hilary's Step	51m	Mossy Glade	0.13km
Rockn Roll	0.16km	Sand Snake	0.42km
Minute Made	63m	Free Fall	78m
Out	0.28km	Short Stuff	87m
Back	0.27km	Wilderness	0.37km
Josie's trail	0.20km	M&M	0.17km
Josie's Jaunt	0.11km	Side by Side	0.19km
Old 1989 Timing	0.57km	The Gap	46m
		Pedalers Pearl	0.30km
		Twist and Shout	0.14km
		Spruce Rock	0.10km
		Beginners Luck	0.18km
		Big Bird	0.30km
		Death Valley	0.18km
		K9 Cut	0.28km
		Chisolm	0.31km

ef. Buildings

There are a total of 53 buildings in the intensive use area. These buildings are listed in the table below and the locations of many of the buildings are shown on **Figure 11, Existing Conditions**.

Table 5
Olympic Sports Complex Buildings at Mt. Van Hoevenberg

Facility	Area	Item	Type	Type	Size	Est. Year
Bobrun	1980 Track	1980 Start House	Building	Frame	19 X 28	1960
Bobrun	Combined Track	Start 1	Building	Frame	2 x 30 x 50	2002
Bobrun	Combined Track	Bob Start Hut	Hut	Log	4 x 8	2002
Bobrun	Combined Track	Luge Start Hut	Hut	Steel	8 x 12	N/A
Bobrun	Combined Track	Start 2 Hut	Hut	Frame	10 x 10	

Bobrun	Combined Track	Start 3 Building	Building	Frame	30 x 30	2002
Bobrun	Combined Track	Start 4 Building	Building	Log	14 x 17	2001
Bobrun	Combined Track	Curve 10 Mechanical Bldg	Building	Log	10 x 12	2001
Bobrun	Combined Track	Upper Finish	Building	Log	17 x 20	2001
Bobrun	Combined Track	Scale House	Building	Frame	12 x 20	1979?
Bobrun	Combined Track	Start 5 Hut	Hut	Frame	8 x 8	
Bobrun	Combined Track	Hose warming Hut	Hut	Frame		
Bobrun	Combined Track	Middle Finish	Hut	Steel	10 x 11	N/A
Bobrun	Combined Track	Lower Finish	Building	Log	17 x 20	2001
Bobrun	Combined Track	Race Office & Timing Technology Center	Building	Frame	24 x 32	2008
Bobrun	Combined Track	TV Compound Electrical Building	Hut	Frame	10 x 12	2010
Bobrun	Combined Track	Press Center	Building	Frame	20 X 40	1978/79
Bobrun	1980 Track	7/8 Mile Start Hut	Hut			
Bobrun	1980 Track	Curve 7 Hut	Hut			
Bobrun	1980 Track	Curve 8 Hut	Hut			
Bobrun	1980 Track	1/2 Mile Start House	Building	Frame	20 x 40	
Bobrun	1980 Track	1/2 Mile Start Hut	Hut	Frame	8 x 12	
Bobrun	1980 Track	Zig-Zag Booth	Hut	Frame	8 x 8	
Bobrun	1980 Track	1/2 Mile Announcer's Booth	Hut	Steel	4 x 4	
Bobrun	Combined Track	Heart Lookout Tower	Area	Steel	4 x 4	1978/1979
Bobrun		USA Garage	Building	Steel	40 x 60	
Bobrun		Sled Shed	Building	Frame	40 x 98	
Bobrun		Lamy Lodge	Building	Frame	52 x 52	1967
Bobrun		Mt Pumphouse	Building	Frame	10 x 16	1931?
Bobrun		Log Office	Building	Log	20 x 38	
Bobrun		Telephone/ Communication Demark Hut	Hut	Wood		
Bobrun		Refrigeration Plant	Building	Steel	52 x 90	

Bobrun		Bobrun Garage	Building	Steel	50 x 100	
Bobrun		Bobrun Maintenance Shops	Building	Frame	28 x 72	
Bobrun		Plumbing and Storage Hut	Building	Log	12 x 20	
Bobrun		Parking Lot 5 Polebarn	Polebarn	Frame	24 x 60	
Bobrun		Parking Lot 5 Salt Shed	Shed	Steel	40 x 30	
X/C		Cross-Country Lodge	Building	Frame		1978/79
X/C		Waxing Hut	Building	Frame		
X/C		Snow Factory	Trailer			2016
X/C		Cross-Country Stadium Timing Building	Building	Frame		1978/79
		VanHoevenberg House	Building		26 x 56	
		VanHoevenberg House Garage	Building	Frame		
X/C		Cross-Country Garage	Building	Steel		
X/C		Warehouse/ Bus Garage	Building	Steel		
X/C		Cross-Country Polebarn	Polebarn			
X/C		Restrooms/ "Josie's Cabin"	Building			1978
X/C	Biathlon	Biathlon Lodge and Boxing Building	Building	Frame		
X/C	Biathlon	Biathlon Timing	Building	Frame		
X/C	Biathlon	Target Control	Hut	Frame		
X/C	Biathlon	Biathlon Range Officers Building	Building	Frame		
X/C		Snowfields Pumphouse	Building			
Bobrun		River Pump House	Building	Frame	14 x 20	1931?

eg. Water Supply

See **Appendix 3, Engineering Report**, for details regarding water supply and sanitary wastewater disposal.

Potable water is furnished by a drilled well located near the Lamy Lodge. The yield of this well is 25 gpm. Peak consumption is 10,000 gallons/day or 28% of potential yield. There is also a drilled well which yields 6 gpm at the maintenance shop. Peak consumption of this water supply is 250 gallons/day (3% of potential yield). There is also a 25 gpm well near the cross-country lodge that has peak consumption of 2,000 gallons per day (5.6% of capacity). The 30 gpm well at the biathlon lodge has peak consumption of 5% of its 2,000 gallons per day capacity.

Water is also taken from North Meadow Brook and pumped to a 27,000 gallon cistern where it is used to ice the combined track.

h. Sanitary-Wastewater

See **Appendix 3, Engineering Report**, for details regarding water supply and sanitary wastewater disposal.

Sanitary wastewater handling includes conventional on-site, in-ground systems along with holding tanks that are regularly pumped out.

i. Parking

Figure 11, Existing Conditions, shows parking facilities near the combined track which are capable of handling 1,275 vehicles (assuming 90% cars, 10% buses). This central parking location provides for the combined parking requirements for the entire complex including sliding sports, cross-country, and biathlon. Parking is divided into five (5) lots which are numbered for administrative purposes. Additional limited parking is available adjacent to the biathlon and cross-country lodges and the combined track ticket booth. All parking areas consist of compacted sand and gravel.

j. Access Road

The New York State Department of Transportation has responsibility for maintaining the one mile access road, NY Route 913 Q, from its intersection with NY Route 73 at the entrance to the parking areas (Bobsled Run Lane). Facility staff maintains the roadway from this point (Lower Bob Run Road) as well as the parking areas and service roads.

k. Electric Distribution

Electrical energy is presently supplied by the Lake Placid Municipal Electric Company via a three-phase 13,200/7,620 volt line. Individual major buildings are metered separately. There are six tap lines on the site and they are as follows: 1) three phase primary tap to biathlon; 2) three phase primary tap to cross-country stadium; 3) single phase primary tap to pumphouse; 4) single phase primary tap to clubhouse and sled shed; 5) three phase primary tap to refrigeration plant and maintenance shops; and 6) single phase primary tap to top of the combined track. Existing electrical demand is approximately 1,500 kW in winter and 40 kW in the summer.

l. Gravel Pit

A gravel pit is located on the roadway to the water pumphouse northerly of the biathlon range, as shown on **Figure 11, "Existing Conditions."** Gravel is removed for on premise use continuously at all seasons as demand dictates. Approximately 250 tons of gravel is used annually.

m. Equipment Inventory

The intensive use area owns and maintains equipment ranging from office and computer equipment to furniture, carpentry equipment, trail grooming equipment, vehicles and

maintenance equipment. A complete listing of "Inventory Equipment" is available for review at ORDA headquarters in Lake Placid, New York.

2. Inventory of Systems

a. Management

Mt. Van Hoevenberg was built in the early 1930's and was first opened to the public in 1932 for the III Olympic Winter Games. Early management was under the direction of the Bureau of Winter Recreation, Conservation Department (now known as the Department of Environmental Conservation). On October 4, 1982, management was delegated to the Olympic Regional Development Authority (ORDA) through an agreement with DEC, authorized by Chapter 99 of the Laws of 1984 (Article 8, Title 28, Section 2614, Public Authorities Law).

This agreement transferred to ORDA the use, operation, maintenance and management of the sports complex. DEC remains the statutory custodian of the State-owned recreation area. Under the agreement, ORDA is to maintain the facility subject to DEC inspections; make capital improvements with DEC's prior written approval; establish a fund for capital improvements; continue the level of prior public recreation; comply with specified prior agreements; and cooperate with DEC in completion of a Unit Management Plan for the Intensive Use Area.

In 1991 DEC and ORDA entered into a Memorandum of Understanding superseding a 1984 memorandum between the parties, establishing methods and procedures by which managerial requirements contained in the underlying DEC/ORDA management agreements are to be complied with, and setting forth requirements for the operation of ORDA facilities and detailing procedures on how Unit Management Plans for each of the ORDA facilities are to be implemented. This 1991 MOU was incorporated into the current (2013) DEC/ORDA Consolidation Agreement that covers Whiteface, Gore, the Memorial Highway and Mt. Van Hoevenberg. A copy of the Consolidation Agreement is provided in **Appendix 1**.

b. Organization

The New York State Olympic Regional Development Authority (ORDA) was created in 1981 by the State Legislature as a public authority to oversee and manage the Olympic facilities in an effort to insure continued use and enjoyment of the facilities by the public. The ORDA Board of Directors is composed of ten members, three of these the Commissioners of the NYS Department of Environmental Conservation, Economic Development, and Parks & Recreation Departments, and the remaining seven appointed by the Governor of the State of New York, by and with the consent of the Senate. The staff is led by the Authority's President and Chief Executive Officer.

c. Operations

The Olympic Sports Complex is open from 10 am to 4 pm during the summer and from 9 am to 4 pm during the winter. A watchman is present until 9 pm during the summer. In wintertime there is staff on the site 24 hours a day.

Personnel employed at Mt. Van Hoevenberg vary with the season. During the winter season there are approximately 30 permanent and 60 seasonal staff.

d. Contractual Arrangements

The cross-country lodge has a food service contract for the winter with Green Goddess LLC, a local Lake Placid Vendor. This is an annual contract with automatic renewal each year over a period of 5 years set to expire in 2019.

Ski Shop and Ski Rental Operations are now managed with in-house resources.

Mountain Bike Center - ORDA has an agreement with High Peaks Cyclery, to operate a mountain bike facility which includes trail usage, equipment rental, repair and sales, food and beverages sales, and special events including races, demo days, instruction and other appropriate activities. The agreement continues on an annual contract basis.

D. Public Use of the Olympic Sports Complex

The goal of this UMP Amendment is to offer quality year-round recreation/competition programs on publicly owned lands for the benefit and enjoyment of the people of New York State, the United States and the international sports community. The following discussion outlines the primary events and uses at the facility throughout the year.

1. Major Events

Lake Placid facilities enjoy an extensive national and regional calendar in many winter sports. Major events at Mt. Van Hoevenberg are the World Cups in Bobsled, Skeleton, Luge and Paralympic Bobsled and the USCSA National Championships in Cross Country. Listed below are the major 2017-2018 sports events by venue hosted by ORDA at the Olympic Sports Complex. The following lists the major events under each sports category:

Cross-Country Events

- Harry Eldridge Memorial X-C Ski Race
- Mt. Van Hoevenberg X-C Demo Days
- High Peaks Cyclery X-C Marathon
- Cross-Country Jr. Olympic Qualifying Race
- Lake Placid Loppet and Kort Loppet (25 & 50 K races)
- Intercontinental Cup (Nordic Combined)
- Subaru US Cross-Country Skiing Championship
- Empire State Winter Games

Biathlon Events

- US Biathlon World Team Trials
- Empire State Winter Games

Bobsled Events

- Man Bobsled Race-Ed Grant Memorial
- US 2-Man Bobsled National Championship and World Team Trials
- US 4-Man Bobsled National Championship and World Team Trials
- FIBT 2-Man Bobsled Race
- FIBT 4-Man Bobsled Race
- 4-Man Bobsled Race-Le der le Trophy
- Man Bobsled Race-Bunny Sheffield Memorial
- 4-Man Bobsled Race-USBSF Cup
- Geoff Bodine International Invitational Bobsled Competition
- 2-Man Bobsled Race-US Masters National Championship
- US Masters Women's National Championship

Luge and Skeleton Events

- US Luge-Club Championship
- US Luge-Masters National Championship
- US Luge-Senior Seeding Race
- US Luge-Junior Seeding Race #1
- US Luge-Junior Seeding Race #2
- World Junior Luge Championships
- US Luge-Junior National Championship
- Skeleton World Cup
- USBSF Skeleton Nat'l Championship
- Empire State Winter Games

2. Visitor Use

a. Visitor Base

Existing visitor use is confined to two activities: spectators and active users of the facilities. Numbers are highly dependent on snow cover and therefore vary widely. Over the past five years, total Olympic Sports Center visitation ranged from a low of 15,963 (2014-2015) to 18,687 in 2013-2014. Summer admissions for this period reached a high 2012-13 and have been decreasing over the last four years. At the same time, winter admissions have risen to the point in which summer and winter admission numbers are about even (Table 6). It appears that total annual visitation, without considering bobsled ridership numbers at the OSC is stable, but not in growth mode.

Summer visitation at MVH mostly takes the form of mountain biking and bobsled rides. Contracts with mountain bicycle concessionaires and the increasing popularity of mountain biking as a sport in particular have contributed to increasing usage of the Olympic Sports Complex during the summer months. Wheeled bobsled rides to the public during the summer started in 1995 and are proposed to continue indefinitely resulting in a significant contribution to the year-round economy.

Table 6
Olympic Sports Center Total Visitor Numbers 2012-2017

Year	Summer Admissions	Winter Admissions	Total Annual Admissions
2012-13	11,833	6,851	18,684
2013-14	10,947	7,740	18,687
2014-15	8,794	7,169	15,963
2015-16	8,809	9,349	18,158
2016-17	9,017	8,671	17,688

An additional source of visitors is to the Sliding Center where bobsled rides are offered. The following table reports the total visitation.

Table 7
Olympic Sports Center Ride and Visitation Numbers

Year	Total Admissions	Total Ridership	Total Visitors
2012-13	18,684	18,413	37,097
2013-14	18,687	21,701	40,388
2014-15	15,963	20,001	35,964
2015-16	18,158	15,559	33,717
2016-17	17,688	16,138	33,826

b. Sliding Center

The combined track set the mark again for the longest season in the world. During an almost six-month stretch, more than 25,000 competition, training and recreation trips went down the one-mile long, 22-curve course. Sliding Center visitors are characterized into two groups. They include passenger bobsled participants and general admission guests. More than 16,000 people participated in the center's various passenger ride programs and 17,500 guests toured the historic facility.

The Sliding Center's busiest period is during the winter months. Competition and athlete training account for the bulk of the number of runs down the track. Taking them into account, as well as the public, the mile long facility handled more than 25,000 trips down. Luge again accounted for the most number of trips down the course, with almost 11,000, while two-man, four-man and women's bobsled athletes made a combined 3,000 trips down. Skeleton athletes traveled down the course almost 5,000 times and 6,500 public rides were counted. Ridership occurs in about the same numbers during the summer and winter seasons.

Table 8
Olympic Sports Center Ride Numbers

Year	Summer Rides	Winter Rides	Total Riders
2004-05	11,452	12,675	24,127
2005-06	11,856	15,106	26,962
2006-07	10,591	12,632	23,223
2007-08	8,418	11,919	20,337
2008-09	8,342	8,859	17,201
2009-10	7,766	13,909	21,670
2010-11	6,762	13,839	20,601
2011-12	7,200	11,008	18,208
2012-13	7,496	10,917	18,413
2013-14	7,665	14,036	21,701
2014-15	7,591	12,410	20,001
2015-16	7,181	8,378	15,559
2016-17	7,356	8,782	16,138

c. Nordic Center

This venue is highly reliant on good snow cover. It operated for 135 days and had almost 35-thousand skier visits during the 2016-17 season. This was a gain of 98 more days of operation and 23-thousand more skier visits on the center's Olympic trails. Total visitation accounts for all season pass and athlete training days as well as usage by racing competitors. Daily ticket sales reflect all single and multi-day trail passes sold and accounted for 14,000 skier visits last year. Visitation and use at the Nordic Center has risen substantially over the last 10 years. Total attendance rose 44% since its reported low of 19,400 in the 2005-06 season.

Table 9
Nordic Center Ticket Sales and Attendance

Year	Day Ticket Sales	Total Attendance
2005-06	8,631	19,400
2006-07	7,890	16,400
2007-08	10,738	20,200
2008-09	8,735	19,425
2009-10	10,161	28,486
2010-11	11,230	30,736
2011-12	4,748	16,620
2012-13	8,812	23,102
2013-14	14,648	29,188
2014-15	15,832	35,392
2015-16	5,846	12,444
2016-17	14,082	34,729

SECTION III MANAGEMENT AND POLICY

A. Orientation and Evolution of Management Philosophy

ORDA's central management goal stated in the original 1986 UMP:

The Olympic Region Development Authority shall continue to institute comprehensive activities utilizing the Olympic Sports Complex at Mt. Van Hoevenberg to insure optimum year-round use and enjoyment of the facilities to the economic and social benefit of the Olympic region and to extend opportunity to improve the physical fitness, athletic education and recreational education of the people of New York State and the United States pursuant to the Public Authorities Law, the Adirondack Park Agency Act, and the Environmental Conservation Law, in harmony with the Adirondack Park.

Subsequent to adoption of the 1986 UMP it has become evident to Mt. Van Hoevenberg management that certain improvements are required to maintain the facility at a level suitable for use by athletes and recreators alike. The cross-country and biathlon trails and the bobsled and luge runs are outdated designs and create significant hazards for users. Mt. Van Hoevenberg management has placed an emphasis on facility modernization and improvement in order to achieve the goal stated in the 1986 UMP. Mt. Van Hoevenberg management believes that modernizing the facility will improve skier safety, -provide a higher quality recreational and competitive experience and increase local and regional economic benefits.

ORDA's central management goal and management philosophy is as follows:

"The Olympic Regional Development Authority will continue to provide a safe, quality, recreational experience to the public and promote both local and regional economic benefits through its responsibility to manage and operate the Olympic Sports Complex at Mt. Van Hoevenberg to the highest standard."

ORDA's goals and management philosophy have evolved since its inception following the 1980 Olympic Games. Originally created as a management organization with a priority of providing a safe, quality, recreational experience, ORDA has expanded its operational philosophy to encompass business strategies that are similar to leaders in the ski resort and sports industry. It is recognized that ORDA's unique portfolio of assets, have an ability to positively impact the economies in which it operates. In addition, ORDA's sporting events, attractions, and training facilities enhance people's lives.

Today, ORDA continues to build on the foundation of its mission and is deploying a philosophy that will allow the organization to be sustainable long into the future. This will be accomplished through strategic planning and open communication both internally and externally with all constituents. The business priorities are organized into three categories:

- 1.) Revenue Growth and Opportunities
- 2.) Capital Projects and Development
- 3.) Organizational Excellence

Within each of these categories, ORDA's centralized team works with management teams to develop strategic business plans for each venue that are in line with ORDA's goals and objectives. Short descriptions of these priorities are as follows:

Revenue Growth and Opportunities

Each year, management teams evaluate short term and long term concepts to increase revenue. Additionally, they explore opportunities in hosting major events, creating new partnerships that amplify ORDA's offerings, and overall, provide guests with the best experience. ORDA measures success through end of the year evaluations in specific revenue segments, visitation numbers, event profit and loss statements, and NPS (Net Promoter Score). (NPS is system utilized by leading resort operators in the industry and has been directly correlated with the ability to increase visitation and revenue.)

Capital Projects and Environment

Capital projects will be initiated thru management and in line with ORDA's strategic plans. General priorities include refurbishment of outdated structures for safety, development or improvement of attractions or infrastructure that enhance the guest experience or allows ORDA to increase visitation and revenue.

Many ORDA venues exist within the boundaries of State protected lands and the impact of climate change on our environment is recognized. ORDA will be a leader in environmental stewardship with consistent commitment to sustainability, responsible development practices, and continuous communication with DEC, APA, and other regulatory agencies to ensure we are taking the appropriate measures.

Organizational Excellence

ORDA will strive for organizational excellence in every facet of its operation. From financial management, team building, communication, education, strategic planning, to overall safety, organizational excellence is a vision where every employee focuses on ways to improve or positively influence our operations.

B. Regulatory Issues

Management and operation of the Olympic Sports Complex at Mt. Van Hoevenberg is affected by a variety of regulatory issues. Such issues influence the nature and scope of permissible activities at the Complex. Significant regulatory issues are as follows:

1. New York State Constitution Article XIV

Article XIV states that Forest Preserve land, as currently fixed by law, either presently owned or acquired in the future by the State, will be kept forever as wild forest lands. As such, Forest Preserve lands cannot be leased, sold or exchanged, or be taken by any public or private corporation. Timber on Forest Preserve land subject to certain expressed exceptions, cannot be removed, sold or destroyed.

It is essential, therefore, that development and tree removal on forest preserve lands at the Mt. Van Hoevenberg Sports Complex be consistent with the mandates of Article XIV as it has been interpreted over the years by the courts and in a series of Attorney General opinions. The leading cases interpreting Article XIV are the Association for the Protection of the Adirondacks v. McDonald, 228 A.D. 73 (3d Dept. 1930), affirmed 253 N.Y. 234; Balsam Lake Anglers Club v. DEC. 199 A.D. 2d 852 (3rd Dept. 1993); and Protect the Adirondack Inc. v DEC (2017).

In McDonald, the Appellate Division, in declaring a proposed bobsled run at Mt. Van Hoevenberg unconstitutional, construed the meaning of "forever wild" as used in Article XIV: "Its uses for health and pleasure must not be inconsistent with its preservation of forest lands in a wild state. It must always retain the characteristics of a wilderness. Hunting, fishing, camping, mountain climbing, snowshoeing, skiing or skating find an ideal setting in nature's wilderness." Also, "No artificial setting is required for any of these purposes. Sports which require a setting which is man-made are unmistakably inconsistent with the preservation of these forests lands in the wild and natural state in which Providence has delivered them."

In large part, McDonald focused on the amount of trees to be cut and removed for the proposed bobsled facility. Dicta within that decision indicates that reasonable cutting of trees is permissible when necessary to enable the public to safely use forest preserve lands, so long as such cutting is "immaterial", i.e., does not detract from the wild forest character of the forest preserve. In other words, the amount of trees that can constitutionally be cut and removed is determined on a case-by-case basis.

McDonald emphasized that the forest preserve is for use by the public:

"The Forest Preserve is preserved for the public; its benefits are for the people of the State as a whole. Whatever the advantages may be of having wild forest lands preserved in their natural state, the advantages are for every one (sic) within the State and for the use of the people of the State. Unless prohibited by the constitutional provision, this use and preservation are subject to the reasonable regulations of the Legislature."

"What regulations may reasonably be made by the Commission for the use of the park by campers and those who seek recreation and health in the quiet and solitude of the north woods is not before us in this case. The Forest Preserve and the Adirondack Park within it are for the

reasonable use and benefit of the public, as heretofore stated. A very considerable use may be made by campers and others without in any way interfering with this purpose of preserving them as wild forest lands."

McDonald, then, certainly does not interpret Article XIV as an absolute prohibition but, rather, contemplates considerable use of forest preserve lands by the public, subject to reasonable regulations.

In the Balsam Lake case, the Appellate Division dealt, in part, with the issue of whether to annul a negative declaration (under SEQRA) issued by the Department of Environmental Conservation that the implementation of the Balsam Lake Mountain Wild Forest Unit Management Plan would not have a negative impact upon the environment on lands classified as "wild forest" by the Catskill Park State Land Master Plan. The Unit Management Plan called for, among other actions, the construction of five new parking lots, the designation of two existing campsites as lawful campsites, the relocation of existing trails and the construction of a new hiking trail, and the construction of a cross-country ski trail loop.

The Appellate Division, in upholding the Department of Environmental Conservation's action, found, in interpreting the Article XIV provision that timber on forest preserve lands cannot be sold, removed, or destroyed, that "(a)although this provision would appear... to prohibit any cutting or removal of timber from the forest preserve, the Court of Appeals, noting that the words of the NY Constitution must receive a reasonable interpretation, has construed (in McDonald) this provision as prohibiting the cutting or the removal of ... trees and timber to a substantial extent", and indicated "that only those activities involving the removal of timber 'to any material degree' will run afoul of the constitutional provision."

The Appellate Division, in the Balsam Lake case, specifically found that the addition of the five parking areas and the relocation of certain trails are not improper uses of the forest preserve, nor do they involve unconstitutional amounts of cutting. The Court found that "these proposed uses appear compatible with forest preserve lands, and the amount of cutting necessary is not unconstitutionally prohibited."

Aside from an easement issue not pertinent here, the Appellate Division further found a rational basis existed for DEC's negative declaration.

In addition to the leading case law discussed above, there have been a series of Attorney General opinions that provide further guidance. In the interest of public safety and in consideration of the development of protective and recreational facilities, it has been necessary for the Department of Environmental Conservation, as the managing authority for Forest Preserve Lands, to periodically ascertain the limitations of legislative intent from the State Attorney General pertaining to the cutting, removal and destruction of trees.

In instances where cutting has not been sanctioned by constitutional amendments, the opinion

and interpretation of the State's Attorney General has been sought on allowable cutting activities. One such opinion, dated January 18, 1934, pertaining to ski trail construction state: "ski-trails (cross-country) may be constructed by the Conservation Department in the Forest Preserve when cutting trees to any material degree, will not be necessary and the wild forest character of the Preserve will not be impaired."

In addition, trees may be removed for several other purposes. An Attorney General's opinion dated February 5, 1935 authorizes the removal of trees in the Forest Preserve that endanger public safety.

An Attorney General's opinion dated September 20, 1934 allows the use or removal of vegetation for surveying triangulation stations, where these stations serve as an aid to the conservation work of the State, and where the number of small trees used or removed for the work appear immaterial.

The cutting of trees to establish scenic vistas is addressed in an Attorney General's opinion of January 17, 1935. In this opinion, vistas may be established as long as the work is "carried on with care in order that the tree removal may not be sufficient to pass the point of immateriality." Before the creation of a vista, alternate locations in the area and alternate methods of achieving the view must be considered. For example, a more sparsely wooded site might be found, or an observation platform erected.

The salvage of windfall timber is authorized when it is determined that it represents a fire hazard in an opinion dated July 26, 1945. Salvaged timber cannot be sold or given away to anyone who may sell it, but it can be used for any project under Department of Environmental Conservation jurisdiction.

A June 24, 1986 Attorney General Opinion (No. 86-F3) addresses the issue of whether the DEC may cut live-standing trees for use in the maintenance of existing trails in the forest preserve. The opinion concludes that: "The carefully planned and supervised selective cutting in the forest preserve of only those few scattered trees necessary for the maintenance of popular and steep trails to lessen soil compaction, erosion and the destruction of vegetation may be conducted consistent with the "forever wild" provisions of the State Constitution, as long as it does not occur to any material degree."

In a February 22, 1996 opinion, the Attorney General concluded that DEC may not issue four temporary revocable permits to authorize installation of electrical cable and other equipment on the beds and shorelines of Raquette Lake and Big Moose Lake. Applying the reasoning of McDonald, the Attorney General found that the cable would not serve a public use permitted in the forest preserve, and that it would not benefit the public at large by facilitating the enjoyment of the preserve.

Considering the guidelines established by applicable case law and opinions of the Attorney

General it would appear that the management actions proposed in this unit management plan, composed largely of improvement to long-standing existing cross country ski trail facilities, are consistent with the mandates of Article XIV. The proposed tree cutting and vegetative removal, while significant in number, appears reasonable in relation to the overall size of the terrain encompassing the proposed actions, and the substantial public benefit to be derived from the improved outdoor recreational amenities to be provided. As expressed in McDonald, a very considerable use may be made by the public and others without in any way interfering with the purpose of preserving the forest preserve as wild forest lands.

The Olympic Sports Complex Unit Management Plan and supporting DGEIS provide the necessary framework and procedures to ensure compliance with the standards and guidelines discussed above. Adherence to the DEC Commissioner's Tree Cutting Policy (Organization and Delegation Memorandum 84-06 and Division Direction LF-91-2) is mandated in the 1991 DEC/ORDA Memorandum of Understanding (incorporated into the 2013 Consolidation Agreement) for the implementation of Unit Management Plans. The Memorandum of Understanding requires approval of the DEC Director of the Division of Lands and Forest for the cutting of any vegetation at the State Facilities under ORDA's control. The request for approval to cut trees for the purposes of new construction, expansion or modification of projects must be submitted in writing and include specifically required detailed information. Furthermore, the DEC policy and procedures were amended in 1986 to include the requirement for adequate notice in the Environmental Notice Bulletin to the public as to the number of trees proposed to be cut and the size of the land involved on specific projects. These requirements combine to assure that the test for "carefully planned and supervised selective cutting" will be met.

The reasonableness of these actions is also manifested in Mt. Van Hoevenberg's classification as an "intensive use area" in the Adirondack Park State Land Master Plan. It is significant, in this regard, that the Court, in the Balsam Lake case, found proposed campsite facilities on forest preserve lands classified as "wild forest" to be compatible with forest preserve lands, and the amount of cutting necessary not unconstitutionally prohibited. Wild forest areas are considerably more restricted in their contemplated use than are intensive use areas such as Mt. Van Hoevenberg. The primary wild forest management guideline is to protect the wild forest setting and to provide those types of outdoor recreation that will afford public enjoyment without impairing the wild forest atmosphere. An intensive use area, on the other hand, is an area where the State provides facilities for intensive forms of outdoor recreation by the public, and where a primary management guideline is "to provide the public opportunities for ... cross country skiing under competitive or developed conditions...in a setting and on a scale that are in harmony with the relatively wild and undeveloped character of the Adirondack Park."

While the State Land Master Plan does not purport to resolve Article XIV issues, this legislatively mandated plan governing the use and development of forest preserve lands within the Adirondack Park by State agencies does provide a sound basis for rational use of these lands through a deliberately conceived plan and regulated implementation process.

Accordingly, it is submitted, the proposed management actions constitute a reasonable use of the forest preserve, serve a public purpose and benefit, are "in harmony with the relatively wild and undeveloped character of the Adirondack Park," and, therefore, are consistent with the mandates of Article XIV of the State Constitution.

Timber cut for construction of proposed improvements on the Olympic Sports Complex will be used on-site or at other locations within the Forest Preserve for firewood, or will be used for such purposes as picnic tables, erosion control, foot bridges, and similar construction projects.

2. Adirondack Park State Land Master Plan

The APSLMP classifies State Lands in the Forest Preserve according to their character and capacity to withstand use and sets forth general guidelines and criteria for the management and use of State lands. The SLMP classifies the Olympic Sports Complex at Mt. Van Hoevenberg as an Intensive Use Area. Intensive Use Areas are defined as follows:

"An intensive use area is an area where the State provides facilities for intensive forms of outdoor recreation by the public. Two types of intensive use areas are defined by this plan: campground and day use areas."

"These areas provide overnight accommodations or day use facilities for a significant number of visitors to the Park and often function as a base for use of wild forest, wilderness, primitive and canoe areas."

Specific guidelines for management and use which apply to Intensive Use Areas include:

"The primary management guideline for intensive use areas will be to provide the public opportunities for family group camping, developed swimming and boating, downhill skiing, cross country skiing under competitive or developed conditions on improved cross country ski trails, visitor information and similar outdoor recreational pursuits in a setting and on a scale that are in harmony with the relatively wild and undeveloped character of the Adirondack Park.

"All intensive use facilities should be located, designed and managed so as to blend with the Adirondack environment and to have the minimum adverse impact possible on surrounding State lands and nearby private holdings. They will not be situated where they will aggravate problems on lands already subject to or threatened by overuse, such as the eastern portion of the High Peaks Wilderness, the Pharaoh Lake Wilderness or the St. Regis Canoe Area or where they will have a negative impact on competing private facilities. Such facilities will be adjacent to or serviceable from existing public road systems or water bodies open to motorboat use within the Park."

"Construction and development activities in intensive use areas will: avoid material alteration of wetlands; minimize extensive topographic alterations; limit vegetative clearing; and,

preserve the scenic, natural and open space resources of the intensive use area."

"Priority should be given to the rehabilitation and modernization of existing intensive use areas and the complete development of partially developed existing intensive use areas before the construction of new facilities is considered."

"No new structures or improvements at any intensive use area will be constructed except in conformity with a final adopted unit management plan for such area. This guideline will not prevent the ordinary maintenance rehabilitation or minor relocation of conforming structures or improvements."

Specific to the Mt. Van Hoevenberg Intensive Use Area, the APSLMP states the following:

"The Mt. Van Hoevenberg Recreation Area should be maintained as a year-round sports facility meeting international standards for such sports as bobsled, luge, biathlon, and cross country skiing on improved cross country ski trails under developed, competitive conditions."

3. 1986 Unit Management Plan and 1999 Amendment

The 1986 Mt. Van Hoevenberg Recreation Area Unit Management Plan and the 1999 Amendment thereto are still in force and governs permissible activities at Mt. Van Hoevenberg. Projects approved in the 1986 UMP and the 1999 UMP Amendment are discussed in Section I. F.

4. Environmental Conservation Law

Section 9-09031 of the Environmental Conservation Law places the "care, custody and control" of the Olympic Sports Complex with the Department of Environmental Conservation.

5. Olympic Regional Development Authority Act

The Olympic Regional Development Act (Article 8, Title 28, NYS Public Authorities Law) establishes the Olympic Regional Development Authority (ORDA) and sets forth its responsibilities, functions and duties. The authority operates and manages the Olympic Sports Complex at Mt. Van Hoevenberg under an agreement with the Environmental Conservation Department, entered into on October 4, 1982, amended November 10, 1982 and April 1, 1984, pursuant to the Public Authorities Law, Section 2614.

6. DEC-ORDA Memorandum of Understanding and Consolidation Agreement

The DEC and ORDA implement their mutual responsibilities for management of the Olympic Sports Complex through a Memorandum of Understanding (MOU) dated March 8, 1991. The MOU sets forth mutually agreeable methods and procedures by which managerial

requirements are implemented. The MOU also establishes the means by which the existing UMP is implemented. Such means generally involve notification, inspection and review of actions to ensure compliance with the UMP and applicable regulations.

In 2013 DEC and ORDA entered into a Consolidation Agreement that, in part, incorporates the 1991 MOU. A copy of this *Agreement Consolidating the Management Agreements for the Gore Mountain Ski center, the Whiteface Mountain Ski Center and Memorial Highway, and the Mt. Van Hoevenberg Recreation Area* is in **Appendix 1**. The 2013 Consolidation Agreement reestablishes the procedures for preparation of UMP's including such things as UMP content, UMP conformance with the SLMP, and the roles of ORDA, DEC and the APA in preparation, review and approval of UMPs.

7. Other Regulations

The Department of Environmental Conservation regulates sanitary waste disposal systems at the Complex and the Department of Health regulates water supply and food service facilities.

Petroleum storage tanks are managed and regulated in compliance with NYSDEC Petroleum Bulk Storage Regulations.

Construction activities will comply with NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002).

SPDES registrations are in place for the existing inground wastewater treatment systems and these registrations will be maintained.

Operation of the ammonia gas treatment units are regulated under a NYSDEC air permit.

B. Management Goals and Objectives

Olympic Sports Complex Management has established goals and objectives in line with ORDA's key priorities:

- 1.) Revenue Growth and Opportunities
- 2.) Capital Projects and Environment
- 3.) Organizational Excellence

1.) Revenue Growth and Opportunities

- a. The Olympic Sports Complex will offer quality year-round recreational/competition programs on publicly owned lands for the benefit and enjoyment of the people of New York State, the United States and the international sports community.

- b. The Olympic Sports Complex will be an economic catalyst to strengthen the private sector and local government economies.
- c. The Olympic Sports Complex will seek to improve the quality of facilities at the Complex in order to continue to attract competitive and recreational athletes from New York State, the United States and the international sports community, in order that public use may better help promote the economy of the area.
- d. The Olympic Sports Complex will seek to improve its economic return by making the mountain more attractive to professional athletes and recreators, and thus increasing ticket sales.
- e. The Olympic Sports Complex will seek to develop new summer and other off-season events to provide greater year-round use of the facility by the public, consistent with Article XIV and the SLMP.
- f. The Olympic Sports Complex will seek to improve skier experience by providing snowmaking and night lighting on certain biathlon and cross-country ski trails.
- g. The Olympic Sports Complex will seek to establish the Olympic Sports Complex as an international caliber facility for competitive events in bobsled, luge, biathlon and cross-country skiing meeting international standards for competition.

2.) Capital Projects and Environment

- a. The Olympic Sports Complex will protect the natural resource base in accordance with environmental conservation laws and all other applicable laws and regulations of the State of New York. Management will accomplish this by maintaining an on-going dialogue with the DEC and APA on matters of environmental concern.
- b. The Olympic Sports Complex will seek to improve skier experience by developing the biathlon lodge as a recreational lodge and by expanding and renovating the cross- country lodge as a training facility.
- c. ORDA will seek to improve the safety and experience of bobsled and luge athletes by providing a state-of-the-art facility to replace the outdated runs.

3.) Organizational Excellence

- a. The Olympic Sports Complex management will seek to establish annual budgets and schedules in support of the proposed capital improvements plan and other management objectives.

- b. The Olympic Sports Complex will seek to improve equipment reliability in order to reduce the frequency of breakdown, associated staffing requirements and consequent financial drain.
- c. The Olympic Sports Complex will seek to reduce its operations and maintenance costs by replacing outdated and aged equipment.
- d. The Olympic Sports Complex will seek to improve skier safety and experience by widening certain cross-country and biathlon trails, improving certain trail intersections, providing a skier bridge at a certain high use trail intersection, and widening the cross-country stadium.

SECTION IV PROPOSED MANAGEMENT ACTIONS AND PROJECTED USE

A. Proposed Management Actions

See **Figure 13, Master Plan, Figure 14, Master Plan Base Area Enlargement** and **Figure 15, Master Plan Upper Enlargement**.

1. Actions Proposed on Town Lands

a. Construct New Alpine Coaster Including Lighting

A new alpine coaster will be constructed along a route that follows the path of the 1932/1980 bobsled track. The proposed alpine coaster will provide the visiting public with the opportunity to experience firsthand the route traveled by 1932 and 1980 Olympians. This experience will embrace the heritage of sliding sports associated with the Olympic Sports Complex.

This is a gravity-driven ride that gives the rider control over the car's speed with its rider-controlled brake system. The alpine coaster behaves like a roller coaster in that bobsled-like sleds on wheels ride along rails on a raised track made of stainless steel tubing. The track is 26 inches wide and the height of the track varies depending on the terrain. Typical height is 3 feet to 6 feet off the ground.

See **Figure 16 Alpine Coaster Typical Components**.

Installation of the track system has low environmental impact. The track only needs a 12 foot path through the woods and the path and stumpage and undergrowth can remain in most locations. The track is attached to the existing ground by two 1-foot square galvanized pads which are then pinned to the ground with ground spikes.

The route for the proposed alpine coaster is illustrated on **Figure 13, Master Plan**.

Riders will enter the coaster from a new loading/unloading deck that will be constructed between Lamy Lodge and the 1980 bobsled outrun. Riders will be transported uphill to the start of the ride that will be located between the 1980 Start Building and the current Combined Start 1 Building. The coaster will parallel the route of the 1932/1980 bobsled track until just above the Finish Curve where the coaster will cross over the 1932/1980 track before terminating at the loading/unloading deck.

The route of the alpine coaster will be lit by LED lighting either mounted to the track structure or on short posts located immediately adjacent to the track. Lights will be shielded to focus lighting on the track and its immediate surroundings.

Ancillary components of the alpine coaster include a drive terminal and a tension terminal, two

re-direct wheels, passenger decks and attendant buildings.

b. New Transport Coaster or Funicular

An additional coaster or a funicular will be constructed to provide visitors and spectators access to the upper portions of the existing combined track. Visitors currently access the upper portions of the track by a van shuttle system. Spectators currently access the upper portion of the track on foot.

The transport coaster or funicular will make use of the same loading/unloading deck as the alpine coaster. There will be a deck at the Start 4 Building for passengers to load and unload if they choose to. The upper end of the transport coaster will be located between the 1980 Start Building and the Start 1 Building. Two sets of tracks will be constructed to provide for uphill and downhill transport. There will no lighting associated with this transport. See **Figure 15, Master Plan Upper Enlargement**.

c. New Ski Trails with Lighting and Snowmaking

Approximately 4 km of new ski trails will be constructed. See **Figure 17, Ski Trails**. These 4 km of new trails will be in the vicinity of 1.3 km of existing trails and, together will provide a 5.3 km trail network.

The new trails are configured in a series of loops that will allow for the establishment of different course lengths.

Four (4) km of the network will be paved to allow for year round use/training. Paved portions will be 10 to 12 feet wide. See **Figure 18, Ski Trail Typical Cross Section**.

All 5.3 km of trails will have lights to allow for evening skiing. Ski Trails with lighting (and other proposed lighting for this UMP Amendment) are shown on **Figure 19, Lighting Diagram**. It is expected that evening skiing will be available from Tuesday through Saturday likely until 8:00 or 9:00 PM, possibly to 10:00 PM on some nights. Lighting will be mounted on existing trees to the extent possible, at a height ranging between 15 and 30 feet. -Pole mounted lights at the same height will be an option. Fixtures will generally face downward and be fitted with shields.

All 5.3 km of trails will have snowmaking with a combination of fixed 20 feet high tower guns and portable guns.

d. New Sliding Sports Start Facility

Figure 20, Sliding Sports Facility Study, illustrates plans, elevations and sections of the proposed Start Facility that will be constructed just to the north of former and current tracks. See **Figure 14, Master Plan Base Area Enlargement**. The building is 502 feet long and 43 feet

wide.

The facility will include refrigerated luge and bobsled start runs, a sprint track and observation platforms.

There will be a connection between this new building and the existing sled shed building to the east.

e. New Welcome Center/Base Lodge and Awards Plaza

A new, ~~up to 40,000-15,000~~ sf, 2 story welcome center/base lodge is proposed to be constructed adjacent to the sliding sports start facility. It is envisioned that this building will contain a welcome center/information area, ticketing for existing venue attractions, retail, food service, restrooms, rental equipment, administrative and meeting room space and a hiking "trailhead". ~~The new lodge was originally proposed as 15,000 sf, but ongoing building programming studies have resulted in development of alternatives that include housing other proposed uses within the new lodge building. For example, consideration is being given to including the competition building (see section 2.b below) within the lodge instead of being its own freestanding building at the proposed stadium. See Figure 14, Master Plan Base Area Enlargement.~~ ~~It is envisioned that this building will contain a welcome center/information area, ticketing for existing venue attractions, retail, food service, restrooms, rental equipment, administrative and meeting room space and a hiking "trailhead".~~

A new on-site wastewater disposal system will be constructed to serve the Lodge. Lodge water supply needs can be accommodated by the existing supply sources. See the Engineering Report in **Appendix 3** for details.

An outdoor plaza will be constructed adjacent to the welcome center/base lodge and will be used for awards ceremonies and other outdoor functions.

f. New Road from Maintenance Area to Track Access Road, to Replace Existing Access Displaced by New Building

Vehicles currently gain access to the paved road that accesses the combined track via an entrance located near the existing ticket booth and the existing sled shed. This current access will be displaced by the construction of the start facility, lodge and plaza.

New access to the track access road will be constructed between Lamy Lodge and Maintenance and will include a bridge over a small stream and a bridge over the 1932/1980 track and the alpine coaster. See **Figure 14, Master Plan Base Area Enlargement.**

g. Snowmaking Reservoir

A snowmaking reservoir will be constructed near the upper portion of the new proposed ski trails. **Figure 13, Master Plan**, shows the location of the reservoir and **Figure 21, Snowmaking Reservoir**, provides additional detail.

The pond will be excavated into the hillside and will have a total storage capacity of +/- 7.5 Mgal. Usable storage after surface ice cover and dead space below the pump intake are taken into consideration is estimated to be +/- 6.2 Mgal.

Figure 21 shows the location of the proposed pump house that will house the pumps that supply water to the snow guns on the new ski trails. Electric service will be extended to the pump house.

Water supply to fill the reservoir will be from the intake on North Meadow Brook that is currently used to supply water for surfacing and repairing the combined track as well as for other non-potable uses throughout the year. The pumping rate from North Meadow Brook ranges from 80 to 90 gpm. In the 1986 UMP the withdrawal rate was established as 89 gpm.

In the 1986 UMP North Meadow Brook's estimated autumn stream flow was 4 cfs which was considered to be the minimum flow present in this stream 75% of the time (1986 UMP p. 19). Stream flow downstream of the pumping facility was to be maintained at a flow rate exceeding 3 cfs, the minimum flow rate designated by the Division of Fish and Wildlife to protect stream aquatic life (1986 UMP p. 49).

The 1999 UMP Amendment documented that snowmaking water was also taken from North Meadow Brook at a point located about 200 feet north of the access road. Snowmaking occurred in an open field near the biathlon stadium and 100 gpm was pumped for an average of 400 hours per season since the 1980 games (1999 UMP p.12). In the 1999 UMP Amendment a new snowmaking reservoir was contemplated in the field near the biathlon stadium. This action was categorized as needing Article XIV resolution and was not constructed. More detailed streamflow assessment occurred as part of the planning for this reservoir. The streamflow assessment resulted in a calculated MA7CD2⁵ for North Meadow Brook flow of 1.8 cfs (1999 UMP Amendment p. 31). It was determined that North Meadow Brook withdrawals could occur at a maximum rate of 500 gpm or 1.1 cfs. (1999 UMP Amendment p. 61). At that time, NYSDEC Region 5 Fisheries (Bill Schoch 7/24/96 letter in Appendix A of the 1999 UMP Amendment) reviewed the proposal to increase the rate of use of the flow in the brook for snowmaking and agreed with the MA7CD2 value and supported the reservoir. However, NYSDEC also recommended the construction of a new weir to maintain downstream flows.

At this time, ORDA is not proposing to increase the water withdrawal rate from North Meadow Brook above the current 80-90 gpm rate. ORDA will continue to use the existing pumps on

⁵ MA7CD2 is a low flow stream discharge statistic that represents the minimum average 7-consecutive-day flow at a recurrence interval of 2 years.

North Meadow Brook as it has in the past, and will also use the existing pumps to gradually fill the snowmaking reservoir prior to the start of snowmaking. Future UMP documents may further explore the option of increasing the withdrawal rates from North Meadow Brook.

Repairs or upgrades to the pipe that delivers water from the pumphouse to the venue components will be considered routine maintenance and will require a DEC Work Authorization prior to performing any such work on State lands.

- h. Trailhead, Parking and Hiking Trail Connection for Cascade and Porter Mountains, Mount Marcy and Mt. Van Hoevenberg (part of this action to occur on State Land)

One weekend in the fall of 2017 DEC closed the trailhead parking on NYS Route 73 and directed hikers into the OSC. This trial action was viewed as a success by many, and current plans call for the establishment of parking, trailhead(s) and trail connection to the existing trail network that provides access to Cascade, Porter, Mt. Van Hoevenberg and Mount Marcy.

Ample parking is available at the existing parking lots.

The welcome center can be used as a starting off point where users can get various information on trail routes, equipment, safety, Forest Preserve rules and regulations, etc. The retail component will include things such as trail guides, food and drink, insect repellent, some limited hiking equipment, etc.

Connections to the existing trail network were developed by personnel from DEC Region 5 in Ray Brook and are illustrated on **Figure 22, Proposed NYSDEC Hiking Trail**.

The proposed hiking trail would originate at the proposed Base Lodge/Welcome Center. From there, the trail would proceed upslope through a wooded area for approximately 0.5 miles until it reaches the parking area near the 1980 Start Building. This section is on Town Easement property. Hikers could then proceed to the west on the existing Mt. Van Hoevenberg Trail to the summit of Mt. Van Hoevenberg and the High Peaks Wilderness beyond, including Mount Marcy.

Hikers which go to the left at the 1980's Start Building would proceed on the new trail for approximately 0.7 miles before coming to an intersection with the Mt. Vans Trail that continues to the south. Staying left on the new trail at the intersection with the Mt. Vans Trail, hikers would proceed another +/- 2 miles before coming to the existing trail that leads to Cascade and Porter Mountains. The section of trail after the 1980's Start Building is all on Forest Preserve Land, approximately half in Intensive Use Area and half in Wilderness.

- i. Stormwater Management System

It was originally thought that additional stormwater management practices would need to be proposed as part of this UMP Amendment. However, during the development of the plans that are part of this UMP Amendment, it was determined that additional stormwater practices were not warranted. In accordance with Section 9.2.1 of the New York State Stormwater Management Design Manual, the project site reduces greater than 25% of the total disturbed impervious area, and, therefore no post construction stormwater practices are required. The total disturbed impervious area is 5.2 acres and there is a reduction of total disturbed impervious of 2.13 acres or a 41% reduction.

j. Start 1 Building and Deck Expansion

The existing Start 1 Building is a 30 feet by 50 feet (1500 sq. ft.), 2-story building, with a 15 feet by 50 feet (750 sq. ft.) deck off the second story and two small, attached storage shed structures. The building is connected to a roof structure that is approximately 110 feet by 16 feet (1,760 sq. ft.) that covers the track start area. The Start 1 Building and roof structure are surrounded by a wood deck.

The proposed action is to build a 2 story building addition within the footprint of the 2nd story deck, (eliminating the deck), and expand the roof structure that covers the track by adding approximately 1,650 sq. ft. of roof area. The new portion of the roof structure would also connect to the Start 1 Building roof. Additionally, the existing deck surrounding the start building and roof structure would be expanded by approximately 500 sq. ft., to provide more track staging area.

k. Replace Start 4 Building

Replace the existing Start 4 Building with a new 24 feet by 36 feet building. Construct a nearby 12 feet by 36 feet sled storage building.

l. Expand Track Timing Building

The race office and track timing building is located at the finish line of the combined track. An eight feet long addition will be added to the end of this building.

m. Convert Existing Press Building into Medical Building

The existing press building located just to the south of the combined track heart will be repurposed for use as a medical building. Potable water service for sinks and bathroom fixtures will be brought to the building where service currently does not exist. Wastewater generated at this building can be accommodated by the system serving the Lamy Lodge.

n. Provide Structured Parking Adjacent to 1980 Start Building to Service Start 1 Building and Restructure Access Drive to Parking

The currently informal and deteriorated parking area will be paved and expanded slightly to provide 40 parking spaces. The existing access drive will be rerouted to the north to provide less steep access to the parking from near the Start 1 Building.

o. Expand USA Team Garage Building

Construct a 2,600 square feet addition to existing 40 feet by 55 feet USA Team Garage Building to achieve a 60 feet by 80 feet building. A bathroom will be added to this building and wastewater can be accommodated in the system serving the sled shed or the system serving Lamy Lodge.

p. New Snow Storage Structure

A 65 feet by 150 feet building will be constructed in proximity to the new ski trails. This building will be used to store snow produced at the SnowFactory. Having surplus snow in storage will allow for more rapid recovery of ski trail surfaces after melt events as well as for establishing a snow base early in the season before suitable prolonged snowmaking weather.

q. New Maintenance Building/Groomer Garage

A new building will be constructed to the east of the USA Team Garage Building along the existing access road. At 50 feet by 80 feet, this building will be used primarily for storage and maintenance of trail grooming equipment. The building will include a restroom. Water service will be extended to serve this new building and wastewater can be accommodated in the existing system serving the Lamy Lodge.

r. Upgrade and Improve Existing Road Lighting. Add New Fixtures Along Track Access Road from Lamy Lodge to Start 1 Building. Add New Lighting on New Road Connection Near Maintenance

The existing roadway lighting on Upper Bob Run Road from the Lamy Lodge up to the Start 1 building is proposed to be removed and replaced with new, full cutoff light fixtures. Additional fixtures would be placed in select areas where the existing lights do not provide adequate coverage. This includes the renovated parking area adjacent to the 1980 start building, which currently has no lighting. New roadway lighting would also be placed along the new track access road that is proposed behind the maintenance area. All new roadway lighting would be full cutoff fixtures mounted on 20-30' tall poles.

ORDA recognizes that lighting at the Olympic Sports Complex is a sensitive issue. Appendix 2A, Mt Van Hoevenberg Olympic Sports Complex: Efforts to Mitigate Light Pollution, provides details of past, present and future efforts undertaken to mitigate potential impacts caused by facility lighting. Efforts include removing outdated light fixtures; replacing non-cutoff, throw light fixtures with cutoff fixtures; progressively covering the combined track with opaque covering; and the use of photocells, timers and motion sensors to control lighting.

2. Actions Proposed on State Lands

a. New On-site Wastewater Disposal System for Welcome Lodge

See **Appendix 3** for details. The location of the system is shown on **Figure 14, Master Plan Base Area Enlargement**.

The system will consist of 3,600 feet of conventional absorption trench system in a leach field that will be approximately 100 feet by 212 feet. No tree cutting will be required.

The system will also include a 1,000 gallon grease interceptor and a 12,000 gallon septic tank. These components will be located on Town Easement lands.

b. New Biathlon Stadium

A new biathlon stadium is proposed to be constructed that will allow the facility to attract and host world class biathlon and cross country events. Events of this caliber are typically sanctioned by the International Biathlon Union (IBU) and/or by the International Ski Federation (FIS), and venues striving to host these events must have a trail network and stadium that meet specific criteria.

The stadium is proposed to be located within and adjacent to the existing cross country parking lot. See **Figure 14, Master Plan Base Area Enlargement**. The proposed stadium includes a shooting range with target structure, a coaches' area, penalty loop, a start/finish area, spectator area, a competition building for technical and administrative operations, an electronic information board, a pedestrian bridge and ski trails in and out of the stadium area. These components must be located on generally flat ground and close together to maximize spectator viewing. See photos below for an example of biathlon stadiums.





Shooting range Correncon En Vercors, France



The shooting range is generally flat, roughly 60 meters by 90 meters in size, and oriented northeastward in accordance with IBU rules. It includes a 16' tall earthen safety berm with a 4' timber wall on top (20' total height) behind the targets, and 12' tall timber walls on each side of the range. The target structure is a pre-fabricated unit on the northern end of the range, roughly 8' tall and spanning the width of the range. It includes a metal roof, a timber wall behind the targets and the target units. **(See photo above)** The center of the range is a flat, grassed area. The area at the rear (south) of the range where competitors lie or stand to fire is

called the shooting ramp. The shooting ramp includes a 2 meter wide paved strip with mats placed on it for the athletes to shoot from, a ski trail for access and a demarcated area for coaches, media and competition officials. The range must be wide enough to accommodate 30 shooting lanes.

Adjacent to the shooting range is the penalty loop. The penalty loop must be located immediately adjacent to the range and is required to be a specific length. It is generally just an open flat area. Adjacent to the penalty loop is the start/finish area. The start/finish area includes the competition trails, timing equipment, a competition building and bleachers for spectators. This area is also generally flat, and must be close enough to the range to provide good visibility for spectators. The start/finish area must also meet specific size requirements, and generally must be large enough to accommodate several competitors and different starting configurations for different types of cross country and biathlon events. During competitions, a pedestrian bridge over the competition trails will provide access to the start/finish area for spectators and officials as necessary. Temporary fencing will be used throughout the stadium during competitions to control access and define specific areas.

There are other ancillary competition requirements such as a warm up course, a wax testing area, team waxing cabins and team parking areas. It is envisioned that the existing cross country trail network and existing stadium area will be used for the warm up course, wax testing area, and general staging. The existing parking lots would be used for the temporary waxing cabins and team parking areas.

The stadium is designed to make use of the existing cleared area that is currently the cross country parking lot. It is envisioned that the stadium will be mostly a grassed area, replacing large areas of compacted gravel. Some of the trails outside of the stadium on Town easement lands that enter and exit the stadium area are proposed to be paved so they may be used for training in the off season. **(See Figure 17, Ski Trails)**. However, the portions of these trails that are on State land will not be paved. ORDA plans on installing a temporary wood surface on these sections of trails on State land so that they can be used for off-season training. The stadium components are arranged so they meet competition requirements and will not require the clearing of trees on Forest Preserve lands. Earthwork that will be required to ensure the area is 'generally' flat and to construct the safety berm can be performed without impacting the existing tree canopy. Portions of the stadium that will require clearing (start/finish area) are located on Town Easement lands.

c. Stormwater Management Improvements

It was originally thought that additional stormwater management practices would need to be proposed as part of this UMP Amendment. However, during the development of the plans that are part of this UMP Amendment, it was determined that additional stormwater practices were not warranted. In accordance with Section 9.2.1 of the New York State Stormwater Management Design Manual, the project site reduces greater than 25% of the total disturbed

impervious area, and, therefore no post construction stormwater practices are required. The total disturbed impervious area is 5.2 acres and there is a reduction of total disturbed impervious of 2.13 acres or a 41% reduction.

d. Renovate Boxing Building at Existing Biathlon Stadium

Interior renovations will be made to this building. Exterior renovations will also be made including the addition of exterior doors for loading and unloading. The building footprint will remain the same. No tree cutting will be required.

e. Lighting for Parking Lots 2, 3, and 4

Currently there is no lighting in these parking lots. Lighting will be installed for all 3 lots. Full cutoff fixtures will be mounted on 20 to 30 feet tall poles. The parking lights will be on Tuesday through Saturday likely until 8:00 or 9:00 PM, possibly to 10:00 PM on some nights, which is the same time that the new ski trails will have lighting on them. No tree cutting will be required.

f. Redevelop Former Access Road Corridor from Bobsled Lane to Cross-country Parking Lot to Replace Current Access to Cross-country Parking and Lodge.

Prior to the 1980 Olympics, the main access road into the facility was off of Bobsled Run Lane and connected to the gravel parking lot nearest the current cross-country stadium (parking lot 6). After the current road access was constructed, the former access road was used as a ski trail. This road will be reestablished in its original (and current) location and will provide direct vehicular access to the cross-country stadium as a gravel driveway. See **Figure 13, Master Plan**. No tree cutting will be required.

g. Construction Two Ski Trail Bridges Over New Gravel Access Road to Cross-country Lot

Two ski trail bridges will be constructed over the driveway where ski trails currently cross. See **Figure 13, Master Plan** and **Figure 23, Bridge Detail**. No tree cutting will be required.

h. Develop Maintenance/Dredging Plan at North Meadow Brook Intake

The North Meadow Brook intake structure is used to fill the existing underground cisterns to meet the facility's combined track maintenance demands. Due to sedimentation from the brook, the area upstream of the intake structure (intake pool) must be dredged on an annual basis to maintain storage capacity within the pool without disrupting the downstream flow of the brook. The preferred method for dredging the intake area is hydraulic dredging and dewatering using geo-fabric tubes. Hydraulic dredging allows for the removal of both deposited and suspended sediment within the pool via the suction hose. Hydraulic dredging shall be

completed during periods of low flow within North Meadow Brook to prevent the release of turbid water downstream. See **Figure 24, North Meadow Brook Intake Dredging**. Dredging of the intake pond shall be completed in accordance with the following:

- Install erosion and sediment control devices on the downhill side of any land areas that are to be disturbed during the dredging process;
- Mobilize hydraulic dredging, geo-fabric dewatering equipment and bypass pump adjacent to the intake pool;
- A dewatering outlet apron on the downstream side of the intake structure must be constructed to prevent erosion of nearby soil;
- Install bypass pump upstream of the dredging area to reduce flow to intake pond. The pond level must be at least 6" below the weir at all times during dredging to prevent the release of turbid water downstream;
- Once dredging is completed, allow geo-fabric tubes to completely dewater then cut open the tubes and remove sediment. If sediment is to be kept on site, the sediment should be leveled and seeded to reestablish vegetation.

See section 5 for additional measures that will be implemented during dredging.

i. Hiking Trail Connections

The proposed hiking trail would originate at the proposed Base Lodge/Welcome Center. From there the trail would proceed upslope through a wooded area for approximately 0.5 miles until it reaches the parking area near the 1980 Start Building. This section is on Town Easement property. Hikers could then proceed to the west on the existing Mt. Van Hoevenberg Trail to the summit of Mt. Van Hoevenberg and the High Peaks Wilderness beyond, including Mount Marcy. See **Figure 22, Proposed NYSDEC Hiking Trail**.

Hikers which go to the left at the 1980's Start Building would proceed on the new trail for approximately 0.7 miles before coming to an intersection with the Mt. Vans Trail that continues to the south. Staying left on the new trail at the intersection with the Mt. Vans Trail, hikers would proceed another +/- 2 miles before coming to the existing trail that leads to Cascade and Porter Mountains. The section of trail after the 1980's Start Building is all on Forest Preserve Land, approximately half in Intensive Use Area and half in Wilderness.

- j. Construct two 8-foot wide ski trails around the private Steckler and Corwin ~~properties~~ that are within the intensive use area

In the past, ORDA held ~~an easement~~ s that allowed for two ski trails to cross the private Steckler and Corwin ~~properties~~ that are located within the intensive use area. ~~The easements~~ expired and have not been renewed. ORDA will construct two trails, each 8 feet wide, that will pass by the Steckler property just to its south and pass the Corwin property to the west. A total of 7,075 feet of trail is proposed. In addition, an 8-foot wide trail approximately 3,815 feet long is proposed to connect the relocated trails with the Porter Mountain Loops. Another 8-foot

wide trail, approximately 3,580 feet long, is proposed to connect the Porter Mountain Loops with the Hi Notch trail, then rejoin the existing trails on the Corwin property just to the west. A revised Figure 22A, Proposed Cross-country Trail Relocation, shows this action.

B. Projected Use

Future Major Events

Lake Placid has been chosen to host the 2019 International Children's Winter Olympic Games, the 2021 Bobsled and Skeleton World Championships, and the 2023 Winter World University Games. Lake Placid officials are also actively working on bids to host the 2021 Special Olympics World Winter Games.

Future Visitor Use

It is expected that both spectator and participant use will increase. The expected increase will be associated with use of the expanded amount of ski trails and the expanded hours of operations for those trails. It also expected that there may be an increase in the number of biathlon events held at the OSC due to the availability of the new biathlon stadium. Adding the alpine coaster to the facility is also expected to increase visitation at this ORDA venue. See the following sections for additional detail.

Future Sliding Center Use

Numbers of bobsled participants and touring guests are expected to remain near their current levels which have consistently been in the 33,000 range in the past two seasons. Other factors, including the addition of the alpine coaster, favorable weather, etc., could result in total attendance at or above the recent high of 40,000+ in 2013-2014.

Future Nordic Center Use

Public use of the nordic center is expected to increase due to the availability of additional trails, extended hours of operation, including evening hours and use of the trails with lighting, the availability of snowmaking and the availability of a year-round surface for skiers. Despite variations in attendance that can be attributed to weather, the data in Table 7 show a general increase in sales and attendance between 2005-2006 and 2016-2017. Discounting the low-snow winter of 2015-2016, recent attendance has been around 35,000 per season. It is not unrealistic to expect that attendance numbers could increase to somewhere in the range of 40,000 per season.

It is expected that the amount of training and program use will also increase in response to the availability of new facilities at the OSC. The amount of increase is somewhat difficult to predict since it will be up to user groups and not controlled by ORDA. Training and program use is

expected to increase for all seasons, with the greatest increase expected in the winter months.

Having a new biathlon stadium available is also likely to increase use of the OSC facility. Typically ORDA may host 4 biathlon competitions in a season. With the availability of a new facility that meets current IBU standards, it is foreseeable that there could be an increase in the number of competitions upwards of 3 per year.

Future Alpine Coaster Use

The following is the alpine coaster first year use projection that was provided by a company who has installed similar operations at other locations.

Table 10
First-Year Alpine Coaster Ridership Projection

Month of Use	Projected Number of Riders
January	2,250
February	4,200
March	2,550
April	3,060
May	3,420
June	10,800
July	11,160
August	13,020
September	5,460
October	6,120
November	2,160
December	2,400
Totals	66,600

It is not expected that all alpine coaster riders will be “new” visitors. Many are likely to be visitors who would have visited the venue otherwise, and who choose to participate in this additional opportunity. Conversely, there will some visitors who come to Mt. Van Hoevenberg because of the alpine coaster, and then also choose to participate in other opportunities available at the facility.

C. Actions Approved in the 1999 UMP Amendment/EIS which are Part of the Foregoing Five-Year Plan

Table 1 in Section 1 of this UMP Amendment includes management actions from the 1999 UMP Amendment which continue to be implemented at Mt. Van Hoevenberg. See Table 1.

SECTION V POTENTIAL IMPACTS AND MITIGATION MEASURES

A. Natural Resources

1. Vegetation

a. Impacts

The proposed management actions will result in the removal of trees from some wooded areas on Town Easement lands.

Construction of the biathlon stadium will result in the revegetation of the cross-country parking lot (Lot 6).

Tree removal will be required to create the 4km of new ski trail on Town easement land. At approximately 30 feet wide per **Figure 19, Ski Trail Typical Cross Section**, a total of 9.0 acres will be affected.

Clearing width for the alpine coaster will be narrower, typically +/- 12 feet. At +/- 7,400 long, up to 2.0 acres could be affected. Portions of the alpine coaster will be in areas nearby the 1932/1980 track that are already partially cleared or fully cleared, so the affected area will be less than 2.0 acres.

Creation of the relocated ski trails and the related connections to other existing ski trails will occupy approximately 2.7 acres (total trail length 14,470 feet at 8 feet wide).

The new Sliding Sports Building is proposed along the edge of the current access road. Assuming that half of the building would require vegetative clearing, approximately ¼ acre would be affected. Construction of the snow storage shed in a currently wooded area would affect approximately another ¼ acre.

As shown on **Figure 25, Vegetation and Management Actions**, all of the activities described above will occur in the northern hardwood forest community.

The crosscountry parking lot is approximately 1/3 of an acre overall. The outer edges of the lot are a mix of vegetation and compacted dirt and gravel. The middle portion of the parking area is devoid of vegetation. Essentially all of this parking lot will be converted to herbaceous vegetation that would be maintained within the biathlon stadium.

None of the proposed management actions will require the cutting of any trees on Forest Preserve lands.

b. Mitigation Measures

Only areas absolutely necessary for construction of management actions will be cleared of vegetation. All other areas will be maintained in a natural state.

Erosion control measures will be used on cleared areas with disturbed soils to avoid affecting adjacent vegetation by erosion or siltation. Erosion-control devices to be used will include filter fabric fences and staked straw bale filters.

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

Plants used to revegetate disturbed areas and planted as part of landscaping will be species indigenous to the region.

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

Continue to train staff to identify and document the location of key invasive plant species.

Work toward a complete comprehensive inventory of the presence and extent of invasive plants in the unit.

Eliminate any identified populations of invasive plant species that are discovered in the unit. These actions may be carried out by DEC personnel or by members of APIPP or other volunteers under supervision of DEC through an Adopt-a-Natural Resource Agreement, or by contract with ORDA.

2. Water and Wetland Resources

a. Impacts

See **Figure 26, Surface Water Resources and Wetlands and Management Actions.**

Activities proposed around or in water resources include a foot bridge over the tributary to North Meadow Brook that will be constructed between the far end of the biathlon shooting range and the cross country stadium. A vehicular bridge over a different tributary will be constructed for the new section of access road between maintenance and the track access road. Bridges will be arch culverts or clear spans. Support elements for the bridges will be constructed outside of the bed and immediate banks of the streams.

Maintenance of the area around the water intake on North Meadow Brook will involve work in the brook. During the removal of accumulated sediment around the intake, there will be

potential for causing increased stream turbidity within the brook and downstream of the brook. Measure that will be implemented to mitigate potential impacts associated with sedimentation in surface waters as a result of soil erosion during construction are discussed in the following section, Soils and Geology.

No activities are proposed in or around wetlands.

b. Mitigation Measures

The following measures shall be implemented during any maintenance dredging to remove sediment that has accumulated around the intake to the pump house on North Meadow Brook.

1. Dredging should take place during periods of low stream flow, typically in the fall.
2. A pump shall be used to reduce streamflow so that water does not flow over the weir during sediment removal. The pump intake shall be located far enough upstream of the sediment removal so as to not pump any turbid water.
3. Water shall be pumped to a point immediately downstream of the weir in order to maintain downstream flows.
4. The pump discharge shall be to an area of stable streambed not susceptible to scouring from the pump discharge.
5. Pumping shall continue after dredging is complete and shall be stopped only when there is no visible difference in turbidity in the dredge area and downstream of the weir.
6. For hydraulic dredging, materials shall be pumped to closed geotextile bags, tubes or other containers. Return flow to the brook shall only be allowed if the return flow does not result in a visible change in turbidity within the brook.
7. Full geotextile containers shall be removed from the vicinity of the brook before material is removed from the containers. Removed materials should be suitably stabilized by vegetative or other means.
8. Machinery should be regularly maintained and checked frequently for fluid leaks. Any machine found to have even a minor fluid leak shall be removed to a remote area for repairs.
9. Machinery operating in the vicinity of streams shall be equipped with spill control materials including absorbent pads.
10. Mobile equipment shall be refueled a minimum of 100 feet from the brook.

11. Stationary equipment, such as pumps, shall be place a minimum of 20 feet from the brook and shall be placed on fuel-resistant, impervious material (i.e. tarps).

12. Pump refueling shall make use of tight fuel containers and funnels.

13. Absorbent pads shall be available in immediate proximity of pumps and be used in the event of any spill, regardless of quantity.

3. Soils and Geology

a. Impacts

Proposed management actions that involve soil disturbance are proposed in areas with the following soils progressing from the lowest elevations to the highest elevations; Udorthents, Mundalite fine sandy loam, Mundalite-Rawsonville complex, and Rawsonville-Hogback complex. See **Figure 27, Soils Map and Management Actions**.

Soil erosion potential increases from slight at the lower elevation, to moderate at the middle elevations to severe at the highest elevations.

Depth to bedrock is greater than six feet at lower elevations. At the middle elevations depth to bedrock will vary depending on which component of the Mundalite-Rawsonville component is present where management actions are occurring, including the excavation of the snowmaking reservoir. For the uppermost portions of the proposed ski trails and the upper portion of the alpine coaster, construction will have to contend with bedrock that will be 14-25 inches below the ground surface.

There are potential impacts that could arise from soil erosion.

There are also potential impacts that could arise from blasting bedrock that may be necessary for construction of the snowmaking reservoir.

These potential impacts can be mitigated through the implementation of the following mitigation measures.

b. Mitigation Measures

1. Soil Erosion

Disturbance of areas of steep slopes during construction can lead to an increased vulnerability of the soils to erosion. Suitable measures must be implemented to first prevent soil erosion and then, second, to make sure that any soils that are eroded are contained and prevented from causing sedimentation in receiving waters.

ORDA is familiar with implementing proper erosion and sediment control practices when undertaking construction practices at their venues that oftentimes involve construction on steep slopes. These proper practices are set forth in the *New York State Standards and Specifications for Erosion and Sediment Control* (last updated November 2016).

These standards and specifications will be used to develop Stormwater Pollution Prevention Plans (SWPPPs) for construction activities at Mt. Van Hoevenberg in accordance with NYSDEC's *SPDES General Permit for Stormwater Discharge from Construction Activity, GP-0-15-002*.

SWPPPS will detail those measures that will be implemented during construction to mitigate potential soil erosion and surface water sedimentation. SWPPP content will include such things as construction sequencing and phasing, temporary and permanent stabilization, structural erosion control practices and vegetative control practices. SWPPS will include provisions for monitoring, inspections, data collection, and compliance documentation.

Mitigation measures that ORDA commonly and successfully employs during venue construction activities include the following that will be incorporated into Mt. Van Hoevenberg pre-construction SWPPP plans and specifications.

Construction Road Stabilization – site access will be achieved using existing work roads, ski trails, driveways and parking areas. At this time, no new disturbance is anticipated for site access, material storage areas or other construction uses.

Concrete Washout – Concrete truck washouts will be provided in existing parking areas located in proximity to the base area.

Protecting Vegetation to Remain – clearing limits will be marked with flagging tape, paint or other suitable means prior to the felling of trees on Town easement lands.

Runoff Control

- **Construction Ditches** – construction ditches shall be installed across ski trails at a slope of 2% or less where it is necessary to divert flow from the top of a slope or to interrupt flow running down a slope. Construction ditches shall be installed, maintained and stabilized after construction in accordance with pages 3.3-3.6 of New York State Standards and Specifications for Erosion and Sediment Control, 2016.
- **Trench Plugs** – Sand bags or gravel bags will be employed in open utility trenches longer than 300 feet. Compost filter socks of suitable size are an acceptable alternative to sand bags or gravel bags.

Soil Stabilization

- **Temporary Seeding** - Seed and mulch inactive areas with bare soil within 3 days of disturbance unless construction will resume in that area within 2 days. Seed with annual rye mixture at 30 pounds per acre. For late fall or early winter seeding seed with winter rye at a rate of 100 pounds per acre. Mulch areas with straw at a rate of 2 tons per acre.
- **Permanent Seeding and Mulching** - Maintain existing vegetation outside of marked limits of disturbance. Disturbed soils shall be permanently stabilized by successfully establishing an herbaceous ground cover.

Seeding – A commercially available native seed mixture appropriate to the climate shall be used to stabilize disturbed areas to be re-vegetated. Seed may be applied by a number of suitable means including broadcasting, hydro-seeding, or incorporated as part of a geotextile (i.e. Green & Bio Tech SureTurf 1000 and 4000 Seeded Mat System[®], BIOMAT[®] seeded mats).

Mulching – Broadcast seeded areas shall also be mulched. Broadcast seeded areas shall be mulched with straw at a rate of 2 to 3 bales per thousand square feet (100-120 bales per acre). Mulch shall be secured in place by either driving over the mulched area with a tracked vehicle or by applying a non-asphaltic tackifier.

Hydro-seeded areas shall contain a mix of wood cellulose mulch applied during the hydro-seeding process. Wood cellulose mulch shall be applied at a rate of 35 pounds per thousand square feet (2,000 pounds per acre). A non-asphaltic tackifier will be included with the hydro-mulch application.

Soil Restoration

As directed by the Qualified Inspector, areas of compacted soils that are to be seeded should be restored to improve the quality of the seed bed. The top four (4) to six (6) inches of soil shall be loosened using hand or mechanical means prior to applying seed. Also, as directed by the Qualified Inspector, finished grades consisting of exposed subsoils may require soil amendment or topsoil in order to provide a suitable seed bed.

Sediment Control

- **Silt Fence** – Where appropriate, silt fence (standard or reinforced) shall be installed along topographic contours. Use of silt fence is appropriate where there is no concentration of water flowing to the barrier and where the drainage area for overland flow does not exceed ½ acre per 100 feet of fence. Additionally, maximum allowable slope lengths contributing runoff to a silt fence shall be as follows:

Slope Steepness	Standard Maximum Slope Length (ft.)	Reinforced Maximum Slope Length (ft.)
<50:1	300	N/A
50:1 to 10:1	125	250
10:1 to 5:1	100	150
5:1 to 3:1	60	80
3:1 to 2:1	40	70
>2:1	20	30

(Source: New York State Standards and Specifications for Erosion and Sediment Control, 2016)

- Silt fence structures should be installed anywhere sediment retention is needed in and around a construction site.
- Perpendicular to slopes or parallel to contour.
- At the toe of highly erodible slopes.
- Around culverts and storm water drainage systems.
- Adjacent to lakes, streams or creeks.

Maintenance – Silt fences should be inspected periodically for damages such as tearing by equipment, animals, or wind and for the amount of sediment which has accumulated. Removal of the sediment is generally necessary when it reaches 1/3 the height of the silt fence. In situations where access is available, machinery can be used; otherwise, it must be removed manually. The key elements to remember are:

- The sediment deposits should be removed when heavy rain or high water is anticipated.
- The sediment removed should be placed in an area where there is no danger of erosion.
- The silt fence should not be removed until adequate vegetation ensures no further erosion of the disturbed slopes. Generally, the fabric is cut at ground level, the wire and posts removed, the sediment spread, and seeding and mulch is applied immediately.

Reinforced silt fence should be installed at the base of temporary stockpiles. The reinforced silt fence is designed to hold heavier loads. Falling debris from stockpiles may be caught by the reinforced silt fence where standard silt fence could fail.

- **Straw Bale Dikes** – Straw bale dikes may be used as a substitute for silt fence ONLY where shallow depth to rock precludes the proper installation of silt fence. Straw bale dikes shall NOT be used where there is concentrated flow. Straw bale dikes shall NOT be used where more than 3 months of erosion and sediment control is required unless bales are replaced or an additional parallel row of bales is installed prior to the original

straw bales being in place for 3 months. Length of slope above the straw bale dike shall not exceed the following:

Slope Steepness	Maximum Slope Length (ft.)
2:1	25
3:1	50
4:1	75

(Source: New York State Standards and Specifications for Erosion and Sediment Control, 2016)

Straw bale dikes require more maintenance and degrade much more rapidly. Straw bale dikes offer a more standalone practice that may be less dependent on the required staking. Staking is required for both silt fence and straw bale dikes. Both practices are required to be buried in the ground, although silt fence is required a six inch burial as opposed to a four inch burial trench for straw bale dikes. If neither application is applicable, sediment may be captured by using aproned Triangular Silt Dikes.

Installation specifications:

- Each bale shall be embedded in the soil a minimum of 4 inches.
- Bales shall be placed in a row with ends tightly abutting the adjacent bales.
- Bales shall be securely anchored in place by stakes driven through the bales. The first stake in each bale shall be driven toward the previously laid bale to force bales together.
- Inspection shall be frequent and repair or replacement shall be made promptly as needed.

Ski Trail Construction

Use the following measures to mitigate the potential impacts of trail construction.

- Limit individual disturbance areas to less or equal to 1 acre at any time.
- Grubbed stumps will be removed or buried within the trail as part of trail construction (filling low spots, etc.)
- Branches and tops will be chipped with chips broadcast into adjoining wooded areas. Chip piles shall not be created in wooded areas.
- Install sediment and erosion control practices.
- On constructed trails, which involved cut/fill operations, exposed earth areas will be contained by diverting clean runoff from the uphill side with construction ditches as much as practicable.
- Silt fence and/or chip berms on the downhill side will be utilized to filter the runoff from the raw site.
- Areas where finish grade has been established will be seeded and mulched within 3 days. No areas shall be left with raw earth exposed for more than 7 days.

Alpine Coaster Construction

The scope of the alpine coaster construction operations is similar, but less intense, than most trail construction operations. Construction will involve:

- Cutting trees to provide a 12-15 feet wide area with sufficient clearance.
- Stumps are cut flush to the ground.
- Grading operations are limited to the areas immediately around tension and drive terminals, redirect wheels, passenger decks and attendant buildings. In these locations E&SC practices include silt fence, upgradient water bars, and vegetative stabilization.
- Ground cover vegetation will be undisturbed to the extent possible.
- Areas requiring site disturbance will be stabilized using practices described above.
- Wooded areas which are cut will be allowed to naturally fill in with herbaceous growth.

Linear Utilities

Linear utilities include underground water pipe, air lines, and electric lines. Erosion from pipeline construction will be minimized by limiting the length of the open trench to 1200' for a period not to exceed 10 days. Sand or gravel bags trench plugs will be placed in sloped trenches at a minimum of 300' intervals to slow the velocity of stormwater runoff that may enter the trench.

Areas where finish grade has been established will be seeded and mulched within 3 days. No areas shall be left with raw earth exposed for more than 7 days.

2. Blasting

ORDA will employ the services of a professional, licensed and insured blasting company to perform any needed blasting. Blasters in New York State are required to possess a valid NY State Department of Labor issued Explosive License and Blaster Certificate of Competence. The Explosives License permits the licensee to purchase, own, possess or transport explosives. The Blaster Certificate of Competence permits the use of explosives.

If it is determined that blasting will be required, a written blasting plan will be developed and approved prior to the commencement of blasting. In general, the blast plan will contain information about the blasting methods to be employed, measures to be taken to protect the safety of the public, and how the applicable rules and regulations will be complied with. If during the evolution of the project there are significant changes in the blast design, a new blast plan will be required.

While each blast plan is tailored to meet the specific needs of a particular project, they all

contain certain elements. Typically the general information provided will include the blasting contractor; the project blaster; locations of blasting; the duration of blasting operations; locations of offsite receptors; location of any nearby utilities; the drill hole pattern; the explosives and detonation systems to be employed; the proposed loading of the holes; the maximum weight of explosives to be detonated in any delay period; measures to be taken to minimize the offsite impacts of blasting; traffic control and warning signs; the sequence and type of blasting warning signals; location of seismographs to monitor blast induced vibrations; what, if any local permits are required; will pre-blast surveys be performed, and if so where; and other information as necessary.

In addition, prior to the commencement of blasting, a pre-blast meeting will be held with the blaster, project manager, and other interested parties.

A record of each blast will be made by the blaster, and a copy provided to and retained by the project, which contains at a minimum the following information:

- Name of the operator and/or contractor conducting the blast.
- The location, date and time of the blast.
- Name, signature and identification number of the blaster (certificate of competency number, as issued by the Department of Labor).
- Type of material blasted.
- Diagram of shot including number of holes, depth of holes, diameter of holes, burden, spacing, and face orientation.
- Location and distance of nearest non-company owned structure.
- A record of the shot including amount of subdrilling, decking, stemming height and type, quantity and type of explosive, quantity and type of detonator, weather conditions (including wind speed and direction), type of initiation system and all delay periods progressively, in milliseconds. A drill log reviewed and signed by the licensed blaster and company supervisor including date, time, location, shot number, number of holes, hole depth, average face height, burden, spacing, diameter and any potential problem areas such as seams, cracks, voids and water.

The following techniques and control measures will be considered in blast design to reduce ground vibration:

- Adjusting the blast hole pattern
- Reducing the pounds of explosive per delay:
 - use of smaller diameter blast holes
 - reduce bench height
 - use of decking
- Avoiding overly confined charges (e.g. excessive burden).
- Avoiding excessive subdrilling.
- Strict control over spacing and orientation of blast holes.

- Borehole deviation monitoring.
- If possible, designing the blast sequence to direct vibration away from structures of concern.

A properly designed blast will give lower vibrations per pound of explosive. Close to the blast, the ground vibration character is affected by factors of blast design and geometry, particularly charge weight per delay, delay interval, and to some extent direction of initiation, burden, and spacing.

Additionally, to reduce the public's concern regarding ground vibrations:

- Blasts will be scheduled for the same time of day whenever possible.
- Blasts will be scheduled for periods of high local activity.
- Blasts will not be scheduled for quiet periods.
- Neighbors will be notified of the blast schedule in advance.

4. Visual Resources

a. Impacts

A Visual Resource Impact Analysis was included in the 1999 UMP Amendment (Appendix C). This analysis determined that views into the Olympic Sports Complex are available only from areas between 310 degrees northwest and 45 degrees east. Intervening terrain and vegetation blocks views from other directions.

The following vantage points were identified as having potential views in the 1999 Amendment.

- NYS Route 73 Entrance – views were filtered by intervening vegetation.
- Adirondack Loj Road - a portion of the 1932/1980 bobsled run was visible
- 90M Ski Jump Deck – portions of the bob run, luge run and access road were visible
- John Browns Grave/Farm Site – one of the maintenance garages at the base was visible, but the bob and luge runs were not visible
- Holiday Inn Parking Lot – the clearing for the bob run and the luge run were visible
- Route 86 Overlooking the Lake Placid Golf Course – the upper half of the clearing for the bob run was visible

These same vantage points were evaluated in March 2018 during snow cover conditions which enhances visibility from distant views.

- NYS Route 73 Entrance – views were blocked by intervening vegetation
- Adirondack Loj Road – See **Figure 28, Adirondack Loj Road**, showing photographs from this location. Breaks in the tree lines associated with the combined track are visible as white “traces” on the wooded hillside.

- 90M Ski Jump Deck – views of the Olympic Sports Complex are now blocked by foreground vegetation.
- John Browns Grave/Farm Site – there are no views into the Olympic Sports Complex
- Crowne Plaza (formerly Holiday Inn) Parking Lot – **See Figure 29, Crowne Plaza Parking** showing photographs from this location. From this vantage point, nearly all of the combined track and the 1980 Start Building are within the view. The view is from a little over 5 miles away and also includes a portion of the Village of Lake Placid and the ski jumps at the Olympic Jumping in the foreground of the view.
- Route 86 Overlooking Lake Placid Golf Course (designated scenic vista) – **See Figure 30, Route 86/Golf Course** showing photographs from this location. The upper and middle portions of the combined track are visible. The view also includes the ski jumps.

It is not anticipated that the proposed management actions included in this UMP Amendment will result in significant changes in views from locations where the Olympic Sports Complex is currently visible. The sliding sports building, the welcome/base lodge, the snow storage building and the groomer garage are all proposed at low elevations that are not visible. The proposed ski trails and the alpine coaster are proposed at higher elevation and in proximity to the combined track. However, due to the limited extent of disturbance associated with these management actions – 30 feet wide for the ski trails, and 12-15 feet wide for the alpine coaster, development of these elements will cause very little to no changes in tree canopy cover that may be visible from the distant vantage points within the Village that are a little over 5 miles away.

Night-Lighting

The visibility of the facility at night was also assessed. **Figures 31 and 32** contain photographs taken the night of March 11, 2018 from the Crowne Plaza Hotel Parking Lot, from the NYS Route 86 scenic vista at the golf course and from Adirondack Loj Road. The photographs were taken on a cloudy night with low cloud cover, with facility lit as it typically is for nighttime winter operation.

In the view from the Crowne Plaza parking lot, the upper portion of the track (lit with white LED and metal halide lights) above Start 5 is visible along with some portions of the access road lighting (lit with the more yellow high pressure sodium lights).

Not as much light is visible from the NYS Route 86/Golf Course location since it is almost 200 feet lower in elevation than the previous photo location.

In the night photo from Adirondack Loj Road, just the upper part of the track down to about Start 3 is visible. There is also some screened view of a short section of the lower track, possibly curve 17 entering the heart.

In additions to these locations, APA requested an evaluation of the night visibility of the facility

from NYS Route 73 between the Olympic Jumping Complex and Cascade Lake as part of this UMP Amendment. This evaluation occurred on April 30, 2018. During this evaluation, facility personnel described conditions as presenting a worst-case scenario with cloud cover enhancing sky glow. The combined track was closed for the season, and during the evaluation all of the curve shades were pulled open along with shades on many other track sections. This would be unusual during normal operations. The curve shades are thick, white and opaque and transmit a very small amount of light. The shade/roof system had also been removed in the straight away between curves 19 and 20 in preparation for a tin system, therefore lighting in that area was not contained.

See Photo 1 on Figure 32A. This photo was taken just east of the entrance to the Olympic Sports Complex across the road from road from North Country School. The area that is lit is screened by vegetation except one area of lighting at the top of the combined track. Obviously, the glow from the lit tack is what is most visible. It is very unlikely that lit Nordic trails in the trees at a lower elevation will be noticeable.

There was no view of the light sources from the area around the entrance to the facility on NYS Route 73, and there was only a short duration (+/- 200 yards) when glow is visible.

Photo 2 on Figure 32A was taken just to the east of the Cascade Touring Center and is representative of the types of glimpses of the facility one gets through the trees as you drive along NYS Route 73. NYS Route 73 traverses along a hillside in this area allowing one to look down and across a low area at the facility. The road is heavily vegetated with a mature, mostly coniferous, forest which obscures the view of the facility but still allows glimpses of the lit facility through the trees. Again, the area most visible is the combined track on the hillside. It is very doubtful lighted nordic trails in the woods on the lower elevations would be visible, and most certainly would not be noticeable if the combined track is lit.

See **Figure 20, Lighting Diagram**. Changes in lighting proposed in this UMP Amendment are not expected to increase the visibility of the OSC at night.

- No changes are proposed to the current combined track lighting.
- Full cutoff roadway lighting is proposed in parking lots 2, 3 and 4 which are not visible in the photos due to their lower elevation. The fixtures would also be mounted at a height of 20-30', which is below the tree canopy height surrounding the parking lots.
- Proposed full cut off pedestrian lighting will replace existing road lighting in the area of the proposed plaza at the Welcome Lodge which is also low on the site and not visible in the photos. The existing road lighting is outdated and not dark sky friendly, and the proposed pedestrian lighting will be mounted at a lower height below the tree canopy height.

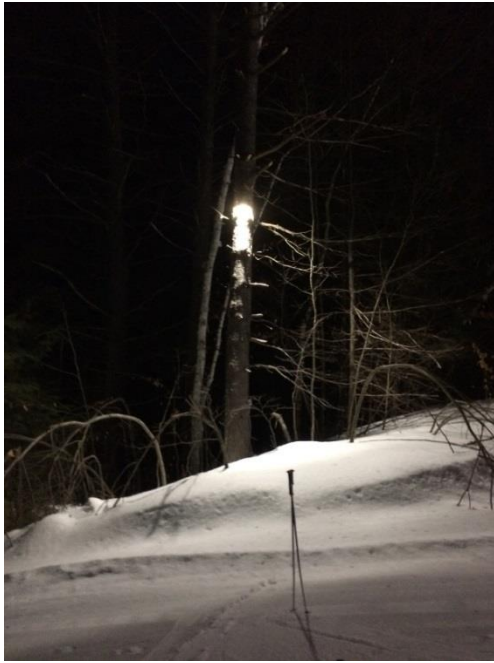
- The lower section of the ski trails and the alpine coaster are not visible in the photos due to their lower elevation, so the proposed lighting will not be visible.
- The alpine coaster will be lit with small full cutoff LED fixtures mounted to the track within the 12-15 wide track corridor at a height of approximately 10 feet. Low height, small fixture size and a narrow track corridor within the existing tree canopy will likely prevent most, if not all, light from the upper portion of the alpine coaster from being visible. Additionally, all of the existing lighting along the 1980 track, adjacent to the proposed alpine coaster, will be removed.



Alpine Coaster Light Example



- New ski trail lighting on the upper trails will be shielded flood lights directed downward within the 30 feet wide trail corridor and will be mounted on trees or on poles at a height of 15 to 30 feet. It is possible that some of the higher elevation ski trail lights may be slightly visible from off-site when trail direction is directly in line with the view, however the low mounting height, narrow trail clearing and existing wooded vegetation will prevent most, if not all of the proposed ski trail light from being visible. Any light that may be visible would be minimal in the context of what is currently visible.



- The roadway lighting on Upper Bob Run Road will be replaced with full cutoff roadway light fixtures. The use of the full cutoff fixtures will eliminate some of the light currently visible, but the reduction would be relatively minimal in the context of the unchanged track lighting. Additional full cutoff roadway light fixtures may be added in select dark spots along Upper Bob Run Road near Start 4 and lower, and at the improved parking area near Start 1. Additional light from these fixtures would be very minimal, and will not alter the existing nighttime view.

b. Mitigation Measures

No significant adverse impacts have been identified, so no mitigation measures are needed.

ORDA will continue to seek ways of decreasing the visibility of site lighting as described in Appendix 2A.

5. Fish and Wildlife

a. Impacts

Potential impacts and mitigation measures for aquatic habitats are discussed in the Surface Water and Wetlands section above and the Soils and Geology section above.

Potential impacts and mitigation measures for terrestrial habitats are discussed in the Vegetation section above and in the wetlands portion of the Surface Water and Wetlands

section above.

b. Mitigation Measures

No measures beyond those provided in the sections above entitled Surface Waters and Wetlands, Soils and Geology, and Vegetation are required.

6. Air Quality

a. Impacts

None of the new management actions contained in this UMP Amendment will be a source of significant air emissions. There will be some temporary construction related air quality affects related to dust and construction vehicle emissions. However, these will all occur within the interior of the intensive use area, removed from adjoining properties, and they will be short term and temporary in nature. During operations there will be some increase in vehicle emissions from visitors, but this is not anticipated to have any appreciable effects on local air quality.

b. Mitigation Measures

No significant adverse impacts have been identified, so no mitigation measures are needed.

7. Noise

a. Impacts

There will be noise associated with the biathlon shooting range when the range is in use during training and competition. However, biathlon shooting will be relocated to this area from the current biathlon range which is located more towards the exterior of the property and closer to adjoining properties and the NYS Route 73 corridor.

Noise from biathlon shooting was tested for a 2007 report prepared for the Olympic Jumping Complex. A single .22 caliber shot was found to have a sound level of 88.2 dBA at 30 feet away. This is equivalent to approximately 138 dBA at the source (0.1 foot away). Assuming 10 simultaneously fired .22 caliber shots (an unlikely scenario), the source noise level would be 148 dBA. When considering how this level of noise might affect adjacent Forest Preserve lands, the peak of Mt. Van Hoevenberg, 4,500 away from the biathlon range, was evaluated. At this distance, the 148 dBA would be +/- 55 dBA. Table E on page 19 of the DEC *Program Policy for Assessing and Mitigating Noise Impacts* (2001) describes a sound level of 55dBA to be in the "Quiet" range.

Snowmaking on the ski trails on the Town easement will be a source of noise, but it is not

expected the noise from snowmaking will cause impacts. It is expected that the snow guns that will be used will be low energy snow guns since they will be supplied with water from the nearby snowmaking reservoir that is higher in elevation than most of the trails. (High energy snow guns are more often used when water has to be pumped from greater distances.) A March 2011 noise study conducted for the most recent Belleayre Mountain Ski Center UMP documented a sound level (Leq) of 65.8 dBA for four simultaneously operating snow guns located 100 to 300 feet away.

Assuming a source noise of 65.8 dBA at a distance of 100 feet from the source, noise calculations can be made for expected sound levels at three nearby locations; the entrance on NYS Route 73 (+/- 4,230 feet away) the peak of Mt. Van Hoevenberg (+/- 3,000 feet away) and the private property to the east between the intensive use area and NYS Route 73 (+/- 4,230 feet away). At these distances the source level of 65.8 dBA would be 33.27, 36.26 and 33.27 dBA respectively. As a point of reference, Table E on page 19 of the DEC *Program Policy for Assessing and Mitigating Noise Impacts* (2001) lists the ambient sound level for a bedroom as 40 dBA.

b. Mitigation Measures

No significant adverse impacts have been identified, so no mitigation measures are needed.

B. Human Resources

1. Transportation

a. Impacts

The proposed improvements are intended to increase visitation to and use of the facilities at Mt. Van Hoevenberg. It is not expected that this increase in visitation will have significant impacts on transportation. Transportation impacts are associated with peak times of use and peak attendance. For Mt. Van Hoevenberg, these peaks are associated with competition events.

None of the proposed management actions are intended to increase the facility's capacities for competitions (parking, spectator space, etc.). Spectator attendance for events associated with the new biathlon stadium is not expected to exceed attendance for currently held events, including world class sliding events. It is possible that the frequency of competitions could conceivably increase, but the peak traffic generated from these events will not change.

The increase in use expected as a result of the proposed actions will be occurring throughout the day and during non-peak times.

Providing parking and trailhead facilities at Mt. Van Hoevenberg will improve transportation

conditions on that section of NY Route 73 where trailhead parking often is overcrowded.

b. Mitigation Measures

No significant adverse impacts have been identified, so no mitigation measures are necessary.

2. Community Services and Utilities

a. Impacts

There will be some increase in demand for community services such as fire, EMS, police, rescue, solid waste and health care. However, Mt. Van Hoevenberg presently makes little demand on such services and the increase in such demand is anticipated to be minimal.

There will be an increase in demand for electrical power associated with the proposed actions. Existing electrical infrastructure is adequate to meet the increased demand. Mt. Van Hoevenberg has its own water supply and wastewater disposal systems. There will be no increase in demand for municipal utilities.

b. Mitigation Measures

No significant adverse impacts have been identified, so no mitigation measures are necessary.

3. Local Land Use Plans

a. Impacts

The actions in this UMP Amendment are consistent with local, regional and ORDA efforts to enhance an attractive year-round day use recreation area.

b. Mitigation Measures

No mitigation measures are needed since no potential impacts have been identified.

4. Economics

a. Impacts

There are several economic impacts that are directly related to the UMP. These include pre-construction spending for professional services, construction spending related to labor and supplies for constructing the proposed actions, and operation spending by skiers for tickets, lodging, equipment rental and meal purchases on and off the site and payroll spending for new operations and vendor employees.

A multiplier effect will occur for revenues that are produced on the site and later off the site. This traditionally includes short-term (5 years) construction spending and long-term operational spending as well. Multipliers have been developed for all industries by the US Department of Commerce. They are used to predict the direct and indirect economic impacts generated by each spending sector. Direct economic impacts refer to additional revenues received from the Complex from construction and from Sports Complex users themselves. Indirect impacts include the additional purchases made by the recreational facility from other businesses to satisfy the additional demand, and induced impacts are produced from new spending of persons employed in the ski and off-season recreational industry. Each new dollar that is spent actually “turns over” causing additional dollars to be spent to satisfy a new demand. Generally, every dollar spent in the construction and operational phase generates approximately an additional two dollars of spending, thereby tripling the total economic impact.

b. Mitigation Measures

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

5. Historical and Archaeological Resources

a. Impacts

The potential for impacting the 1932/1980 bobsled track that is on the National Register of Historic Places was evaluated in conjunction with NYS Office of Parks Recreation and Historic Preservation (OPRHP). This evaluation is provided in **Appendix 4**.

b. Mitigation Measures

OPRHP determined that the proposed alpine coaster will have no adverse impact on the 1932/1980 bobsled track as long as the following measures are implemented.

1. The proposed interpretive signage program outlined in **Appendix 4** will be implemented within one year of the opening of the alpine coaster.
2. ORDA will establish a plan for ongoing routine maintenance and stabilization of the 1932/1980 track as needed as part of their overall maintenance at this facility. This plan will be developed in consultation with NYSDEC and NYSOPRHP.

ORDA is committed to implementing these measures.

SECTION VI ALTERNATIVES

A. Alternative Alpine Coaster Route

A number of circumstances contributed to the selection of the proposed alpine coaster location as the preferred location.

Lands at the OSC include lands owned by New York State that are considered Forest Preserve Lands. The alpine coaster cannot be built on these lands because it is not permissible. Article XIV of the NYS Constitution pertains to Forest Preserve lands and what can and cannot occur on these lands. Article XIV contains specific amendments that pertain to the alpine ski areas on Forest Preserve lands at Whiteface Mountain and Gore Mountain and the development that is allowed to occur at these locations (locations that are also operated by ORDA). There is no similar amendment to Article XIV pertaining to allowable development on Forest Preserve lands at the OSC.

There are other lands at the OSC that are not Forest Preserve lands. These other OSC lands are owned by the Town of North Elba which has granted the State of New York a permanent easement.

The original bobsled run was proposed on the west side of the Sentinel Range, in Wilmington Notch on State forest lands. Construction at this location was blocked by litigation from environmental organizations. This protest of a manmade structure in the Forest Preserve resulted in the construction of the 1932 bobsled track at Mt. Van Hoevenberg. The 1932 track, the 1980 track and the 1999 track were all constructed on Town of North Elba lands. Through a deed dated November 18, 1965, the State purchased from the Town of North Elba a permanent easement covering the 323.45 acres owned by the Town. This easement was acquired for the purpose of developing, operating and maintaining a recreational area and facilities thereon. Sliding sports (bobsled, luge, and skeleton) make use of tracks that have combinations of lengths, slopes and turn geometries that provide challenging, fast, and safe sliding conditions. The appropriate combination of factors that led up to the routing of the 1932 track (excluding the upper ½ mile in 1934) was reinforced by the 1980 track following the path of the 1932 track. The 1980 bobsled track has some higher bank turns than the 1932 track to accommodate the higher speed of the newer sleds, but it followed the same route down the mountain as the 1932 bobsled track. Alpine coasters also strive to provide the same challenging, fast and safe riding conditions.

The 1932/1980 bobsled track was constructed towards the east side of the Town lands. Physical and natural resources constraints to the west of the 1932/1980 bobsled track would make locating the alpine coaster in this area difficult. There is a topographic ridgeline that extends north on the mountain face just to the west of the western end of the 1932/1980 track just beyond zigzag curve. This presence of this topographic ridgeline obviously presented a challenge to the original design on the bobsled track and it was avoided by keeping the track to

the east of the ridgeline. Beyond these ridgelines there are also some streams coming down the mountainside that discharge into a wetland complex where the topography starts to become less steep. This wetland area is at about the same elevation as the lowest point of the 1932/1980 track. Construction of the alpine coaster in this area would also involve forest clearing along the route in order to construct and operate the alpine coaster.

Construction of the alpine coaster further to the west would also require construction of additional support infrastructure that would require additional environmental impacts. As currently designed, alpine coaster riders can make use of the existing access roads and parking in this part of the OSC. Constructing the alpine coaster further to the west would require, extensions of existing access and parking infrastructure at minimum, and possible construction of new infrastructure. New support infrastructure, such as restrooms for alpine coaster customers, would be required at a more remote location on the Town property.

B. Alternative Biathlon Stadium Configuration

Alternatives explored for design and placement of the biathlon stadium included using the existing 1980 Olympic biathlon stadium, utilizing the existing cross country stadium, locating the biathlon stadium entirely on the Town of North Elba lands, and alternative configurations that utilize the existing cross country parking lot as is currently proposed.

While the existing biathlon stadium has an existing range in a generally flat, open area, it does not meet modern day International Biathlon Union (IBU) and International Ski Federation (FIS) standards, nor does the trail network it connects to. Modifications to the trail network in order to achieve compliance with the necessary standards, (loops coming back into and out of the stadium, required climbs of specific gradient within certain distances of the stadium, etc.), would require tree clearing on Forest Preserve Lands and are therefore not viable.

Additionally, the existing biathlon stadium would likely require new supporting infrastructure to be sufficient for IBU and FIS sanctioned events. The venue's goal is to instead consolidate operations near the existing core area, (near Lamy Lodge and the existing parking lots), as this is where the bulk of the existing infrastructure is located.

The existing Cross Country Stadium was considered as a preliminary possibility. However, construction of a new biathlon range in this location would require the clearing of trees on Forest Preserve lands and therefore is not viable. Using the existing stadium as a part of a new biathlon stadium, (such as the start/finish area only), was also considered, but not pursued as the biathlon range would've had to have been located too far away to provide a proper stadium layout with adequate viewing for spectators.

Locating the Biathlon Stadium entirely on Town Easement lands, in the northeast corner of the easement boundary was also explored, but not pursued. The topography in this location is sloping, and locating all of the necessary stadium components entirely within this area

would've resulted in significant and impractical amounts of earthwork to create a generally flat area that is required for the stadium.

Finally, alternate stadium configurations were explored within the existing cleared area that includes the cross country parking lot, access road and parking for visitors to the combined track. Including all of the stadium components within this area is not viable as it would require additional tree clearing on Forest Preserve lands to meet the necessary spatial and layout requirements. Topography and the required orientation of the shooting range were additional factors that were considered and contributed toward making alternative configurations not viable. See **Figure 33, Biathlon Stadium Alternate**.

C. Alternative Maintenance Dredging at North Meadow Brook Intake

Mechanical Dredging (Excavation) with Streamflow Bypass- Excavation of the intake pool was explored and ultimately not selected due to the space limitations around the intake pool and environmental risks associated with the excavation process. Excavation of the pool would require the construction of an in-stream coffer dam and either a pump or rock channel bypass system to divert flow from the excavation area. An addition to the bypass system, a settling pond would also be required to dewater the excavated material prior to discharge to the brook downstream of the intake structure.

ORDA is continuing to explore potential alternatives for the North Meadow Brook intake area that may reduce the need for in-stream work to maintain suitable conditions at the intake.

D. Alternative Snowmaking Reservoir

Two alternative snowmaking reservoir locations were considered for this UMP Amendment. See **Figure 34, Alternative Snowmaking Reservoirs**. The first alternative reservoir is a 5.5 million gallon reservoir that is located adjacent to the proposed biathlon stadium. This location was selected as it was on Town easement land which allows for the cutting of trees, and the topography in the area was favorable for a reservoir. However, this alternative would require the relocation of many biathlon trails in the area. The second alternative reservoir is a 7.3 million gallon reservoir that is located north of Bobsled Run Way near the facilities entrance off of NYS Route 73. This location was explored in the 1999 UMP Amendment and was deferred pending resolution of Article XIV issues.

E. Alternative Trailhead/Shuttle

The 1999 UMP Amendment included the management action: "Construct trailhead parking area in conjunction with DEC and DOT to serve those people accessing the trails to Pitchoff, Porter and Cascade Mountains".

This management action was contained in 1999 UMP Amendment Section IV.A.2 which

contained those management actions that could be carried out pending Article XIV resolution. Thus, the trailhead parking that was being given consideration in the 1999 UMP Amendment must have been envisioned as new development on Forest Preserve lands at Mt. Van Hoevenberg.

The currently proposed system of utilizing the existing parking lots at Mt. Van Hoevenberg and constructing a Welcome Center/Base Lodge to serve as a “trailhead” is a preferred alternative because it can be implemented once this UMP Amendment is adopted. There are no Article XIV issues to contend with the preferred alternative.

F. The No-Action Alternative

If the no-action alternative were pursued, none of the new management actions proposed in this UMP would be given consideration. Any management actions approved in earlier adopted UMPs, but not yet constructed/implemented, could remain in effect and can continue to be implemented.

The last UMP Amendment for Mt. Van Hoevenberg was in 1999, nearly 20 years ago. The no-action alternative would defer new planning for the facility, and could mean that the following goals set by ORDA for Mt. Van Hoevenberg may not be attainable:

- The Olympic Sports Complex will seek to improve the quality of facilities at the Complex in order to continue to attract competitive and recreational athletes from New York State, the United States and the international sports community, in order that public use may better help promote the economy of the area.
- The Olympic Sports Complex will seek to improve its economic return by making the mountain more attractive to professional athletes and recreators, and thus increasing ticket sales.
- The Olympic Sports Complex will seek to develop new summer and other off-season events to provide greater year-round use of the facility by the public, consistent with Article XIV and the APSLMP.
- The Olympic Sports Complex will seek to improve skier experience by providing snowmaking and night lighting on certain biathlon and cross-country ski trails.
- The Olympic Sports Complex will seek to establish the Olympic Sports Complex as an international caliber facility for competitive events in bobsled, luge, biathlon and cross-country skiing meeting international standards for competition.
- The Olympic Sports Complex will seek to improve equipment reliability in order to reduce the frequency of breakdown, associated staffing requirements and consequent

financial drain.

- The Olympic Sports Complex will seek to reduce its operations and maintenance costs by replacing outdated and aged equipment.

SECTION VII SUMMARY OF UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Some of the potential environmental impacts of the new management actions cannot be prevented or reasonably avoided. This section describes the unavoidable impacts that might occur as a result of the implementation of management actions set forth in this UMP which provide for further modernization, improvement and expansion of the Mt. Van Hoevenberg facility.

A. Construction Phase

Construction activities inevitably result in temporary impacts including: visual, noise, vibrations, dust, fumes and odors.

During construction, while vegetation is disturbed there is an increased risk of erosion during stormwater events and a resulting adverse impact in surface water quality. As a result, the water quality in nearby receiving waters may be impacted during the course of construction due to possible erosion of excavated areas. Preparation of project-specific Stormwater Pollution Prevention Plan (SWPPP) for construction activities using the mitigation measures described in Section V.A.2 will minimize these impacts.

Construction will involve clearing of vegetation on Town easement lands for the construction of trails, buildings, the alpine coaster and other proposed facilities. Clearing results in habitat loss that could increase runoff and adversely impact wildlife. (See Section 2 for an explanation of the Environmental Setting, and Section 5 for Potential Impacts and Mitigation Measures)

There may be a localized impact to air quality from dust during construction, however, this potential impact will be temporary and will not extend outside of the Intensive Use Area.

B. Operational Phase

There will be an incremental increased use of surface water resources for snowmaking water supply. ORDA will continue to withdraw water from North Meadow Brook in accordance parameters established in the 1986 UMP and the 1999 UMP Amendment.

Slightly increased attendance and operational activities as a result of the project will cause a corresponding slight increase in traffic levels, but peak hour traffic is not expected to significantly increase.

SECTION VIII IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The extent to which a proposed action may cause permanent loss of one or more environmental resources should be identified as specifically as possible based upon available information. Resources which should be considered include natural and man-made resources that would be consumed, converted or made unavailable for further uses due to construction, operation, or use of the proposed project, whether those losses would occur in the immediate future, or over the long term.

The management actions contained in this UMP Amendment do not involve any significant, irreversible or irretrievable commitment of natural resources under the footprint of the proposed ski trails, the proposed sliding sports building, the proposed welcome lodge, the proposed alpine coaster, the proposed snowmaking reservoir or other management actions. The footprint the proposed management actions represent a small commitment of these natural resources to built conditions.

Many of the management actions would involve the removal of existing vegetation and would disturb on- site soils. It is not believed that such impacts are significant. No rare, threatened or endangered species are known to inhabit the site.

There would be a commitment of raw materials for construction of the proposed buildings and the proposed alpine coaster, including concrete, steel, gravel, and wood. Energy resources would be required for the construction, operation and maintenance of the expanded facility.

SECTION IX GROWTH INDUCING, SECONDARY AND CUMULATIVE IMPACTS

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

A review of the period since the 1986 UMP gives an excellent idea of what kind of economic impacts have occurred in the local region as a result of the recent improvements at Mt. Van Hoevenberg. The total number of visitors per year has increased, as has the number of national and international competitions held at the facility. The increase has had an entirely positive impact on the local business community and outlying communities.

The additional business realized from more visitors and competitors translates into jobs for residents and compounds its value as it moves through the local economy. The salaries from this employment help stabilize the local economy by offsetting the summer seasonal employment then layoff syndrome that dominates the service industry in the North Country area.

Secondary impact results from the operation and spending of sports associations whose athletes utilize the Olympic venues. Due to ORDA's presence and active marketing of its facilities, the region is home to a number of these organizations, including the U.S. Luge Association, the U.S. Bobsled and Skeleton Federation and the National Sports Academy.

ORDA activities draw national television coverage as well as local and regional news coverage. Media exposure has a far reaching impact on drawing tourists to the Adirondack Region.

ORDA has recently completed a UMP Amendment for Whiteface Mountain that includes plans to upgrade the facilities at that venue. Cumulatively, improvements at Whiteface Mountain and at Mt. Van Hoevenberg will provide continued economic benefits for the Lake Placid Area and the Adirondack region of New York State.

SECTION X EFFECTS ON THE USE AND CONSERVATION OF ENERGY

Fuels will be used to power construction equipment and tools. Deliveries of construction materials will also require fuel. Outside contractors will use fuel for traveling to and from the job site at Mt. Van Hoevenberg.

Providing snowmaking on some ski trails will result in an increase in energy needed during operations. Similarly, energy demands will increase for the refrigeration needed for the Sliding Sports Facility and for heating for the Welcome Lodge building.