NEW YORK STATE

Department of Environmental Conservation

DIVISION OF LANDS & FORESTS

Fire Tower Study

for the

Adirondack Park

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"From the summit of any of the higher mountains of the Great Wilderness, the scene presented to the eye of the beholder is one of the most striking and sublime in the whole domain of nature. It is at once awfully grand and wildly beautiful beyond the power of language to describe. On every side peak after peak towers up into the clear, cold atmosphere above the clouds, their outlines growing softer and more shadowy in the distance, until the earth and sky commingle in the vast encircling horizon. In all the nearer valleys, full in view, sleep numberless mountain meadows and quiet lakes and lakelets, 'pools of liquid crystal turned emerald in the reflected green of the impending woods.' Wonderful also are the hues and tints and shades of color which these mountains assume with the varying seasons of the year and with the daily changes of the weather, as the sky becomes bright and clear or dark and overcast. Now we see them clothed in the crimson and golden tints of the evening – now in the cold, leaden grey of the morning; now silvery mists creep up their shaggy sides and linger languidly in their valleys – then purple shadows flit across them and play upon their summits. Sometimes the air is so pure and clear after a storm that all the mountains stand out with outlines so sharply defined, and their great forms seemingly appear so near, that we fancy human voices might be heard from the furthest of them. Then again they are all mantled with the matchless soft blue haze, often called mountain smoke, which is that dim, impalpable but lovely illusion and semblance of a color, that indescribable appearance of the fleeting, the vanishing and the spiritual, seen nowhere else in nature's realm but among the mountains, that make the bristling crags and towering peaks, and solid mountain masses seem for all the world like softly sleeping clouds, hanging low-down in a far-off shadowy sky, or floating over the sleeping bosom of some distant mountain lake. Thus the scene forever changes, every day in the year, and every hour in the day presenting some new feature in the mountain landscape."

Nathaniel Sylvester, 1877

"Those areas classified as wild forest are generally less fragile, ecologically, than the wilderness and primitive areas. Because the resources of these areas can withstand more human impact, these areas should accommodate much of the future use of the Adirondack forest preserve. The scenic attributes and the variety of uses to which these areas lend themselves provide a challenge to the recreation planner. Within constitutional constraints, those types of outdoor recreation that afford enjoyment without destroying the wild forest character or natural resource quality should be encouraged."

Adirondack Park State Land Master Plan, November 1987, Updated 2001

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Disclaimer: The listing of a named contributor does not imply that the individual or group supports the management recommendations contained in the study.

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

BACKGROUND

At one time, there were fire towers at 124 locations in New York State, with 57 within today's Adirondack Park. With the advent of the light airplane for fire sighting and the rising costs of manning the fire towers, these once important stations were slowly deactivated. Of the remaining 34 towers in the Adirondack Park*, 20 are on Forest Preserve land, with the other 14 on municipal or private land. Some of the towers and/or communication equipment on private land are owned by the State. In other cases access to towers on private land may involve crossing State lands.

STUDY PURPOSE

The Study provides a summary of past use, existing use and condition, and recommendations for the future use of 20 fire towers on Forest Preserve lands and four other fire towers under DEC jurisdiction on private land. As part of the study process, the associated observer cabins and radio facilities were also assessed.

The Study was completed in response to an agreement made with the Adirondack Park Agency during the approval of the St. Regis Canoe Area and Blue Ridge Wilderness/Wakely Mountain Primitive Area UMPs. More broadly the Study signals the publicly supported transition from the original purpose of fire detection to recreation, historic preservation and education, along with some communications.

The study provides an Adirondack Park-wide view and overall management strategy for these unique man-made structures along with detailed information on fire tower repairs, educational programs, legal issues and use by the public. It will serve to inform management proposals outlined in UMPs on a unit by unit a basis in conformance with the Adirondack Park State Land Master Plan.

A partial list of management issues to be addressed discussed in this study include:

- Clarifying the relationship between communication facilities and fire towers;
- Discussing use of other structures such as helicopter landing areas or platforms, pit privies, picnic tables, signs, storage buildings that are associated with fire towers and cabins;
- Identifying appropriate maintenance activities with guidelines to prevent adverse impacts on historic resources;
- Identifying educational activities that may be carried out and guidelines for fundaising; nature, extent and location of displays; use of observers cabin by staff, etc.; and
- Discussing public use guidelines related to activities at the summit, such as camping, prohibition of fires, group use, and need for regulations.

**The portions of Lewis and Oneida counties within the Adirondack Park no longer contain existing fire towers. The Bald and Number 4 fire towers towers in Lewis County were removed in 1975 and 1985 respectively. See map insert in the Appendix for the location of existing and removed fire towers.*

STUDY RECOMMENDATIONS

The Study will provide a summary of past use, existing use and condition, and anticipated future Department use for each tower under DEC jurisdiction. As part of the study process, the existing fire towers and associated observer's cabins were assessed. Various alternatives for the non-conforming fire towers were analyzed.

Specific recommendations are as follows:

- Decisions regarding individual fire towers and/or observer's cabins on Wild Forest or Intensive Use classified lands will be made on a unit by unit basis through the UMP planning process.

- The Hurricane Mountain fire tower in the Hurricane Mountain Primitive Area should be removed in conformance with Master Plan guidelines.

- The St. Regis Mountain fire tower in the St. Regis Canoe Area should be removed in conformance with Master Plan guidelines.

IMPLEMENTATION

The recommendations in the Study will be implemented by the New York State Department of Environmental Conservation in consultation with the Adirondack Park Agency. Implementation of some study recommendations may require amendment of certain DEC policies and the SHPA Letter of Resolution. Consideration of recommendations will take place through the Unit Management Planning process, which, as noted above, will include APSLMP conformance determinations and SEQRA review. Implementation of recommendations on easement lands will take place through Interim or Recreation Management plans and SEQRA review.

WHAT THE STUDY DOES NOT DO

This study is primarily confined to fire tower related structures or communication facilities on Forest Preserve lands or Conservation Easements where there is legal public access. Activities on adjacent State lands or private property are beyond the scope of this document and will only be discussed as they relate to fire tower access or Department communications. In addition, this study cannot suggest changes to Article XIV, Section 1 of the New York State Constitution or conflict with statutory mandates or DEC policies.

CHAPTER 1: PLANNING

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PLANNING

I. UNIT MANAGEMENT PLANNING EFFORTS TO DATE

With the exception of newly acquired State lands such as Lyon Mountain, the Forest Preserve lands that still contain fire towers*, either have completed UMPs or plans under various states of development. Completed UMPs include one primitive area plan (Blue Ridge Wilderness/Wakely Mt. Primitive), one canoe area plan (St. Regis Canoe Area), eight wild forest plans (Fulton Chain Wild Forest, Blue Mountain Wild Forest, Shaker Mountain Wild Forest, Jessup River Wild Forest, Vanderwhacker Mountain Wild Forest, Black River Wild Forest, Hammond Pond Wild Forest, and Horseshoe Lake Wild Forest within the Bog River plan), one partial wild forest plan (Black Mountain section of Lake George Wild Forest) and one intensive use area plan for Gore Mountain. These final UMPs have undergone extensive public input and currently guide the management of 13 out of the 20 fire towers on Forest Preserve lands in the Adirondacks.

The Wilcox Lake Wild Forest and Lake George Wild Forest UMPs, released as Draft plans in 2006 discuss the Hadley Mountain, Black Mountain, and Spruce Mountain (County land) fire towers. Four remaining UMPs or parts of future Conservation Easement Recreation plans will address the Mt. Adams, Azure, Hurricane, Poke-O-Moonshine, Loon Lake, Owl's Head and Stillwater mountain fire towers. The classification of the newly acquired lands around Lyon Mountain will be addressed in a separate process by the Adirondack Park Agency.

In some cases the future status of individual towers has been quite controversial. For example, DEC has received numerous petitions signed by concerned citizens and letters from legislators on behalf of their constituents to save the St. Regis and Hurricane fire towers. Information gathered from the public at UMP meetings along with written comments were reviewed during the development of this study. Due to the extensive public involvement and large number of fire tower related issues identified during the development of past UMPs, it was determined that additional meetings for this study were not necessary.

** Fire towers have been commonly referred to as a fire lookout tower, fire tower or lookout tower. These steel structures replaced the mountain observation stations that began as small primitive wooden structures or bare rock summits that were exposed to the weather. For consistency, the terms fire tower and observer's cabin will be used throughout this study for the existing steel towers and associated cabins.*

II. STATE ENVIRONMENTAL QUALITY REVIEW ACT

The Fire Tower Study constitutes a Type II action under the State Environmental Quality Review Act (SEQRA). These actions or classes of actions identified in 6 NYCRR Section 617.5, subdivision (c) are not subject to review. These actions are determined not to have a significant impact on the environment. The Fire Tower Study constitutes a Type II action under SEQRA, which provides that studies that do not bind the decision maker are not subject to SEQRA. This study would be covered by 6 NYCRR 617.5 (c)(18), which states information collection including basic data collection and research, water quality and pollution studies, traffic counts, engineering studies, surveys, subsurface investigations and soils studies that do not commit the agency to undertake, fund, or approve any Type I or Unlisted Action.

CHAPTER 2: SCOPE OF THE STUDY AND MANAGEMENT GUIDELINES

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SCOPE OF THE STUDY AND MANAGEMENT GUIDELINES

Fire towers represent many things to different people. While a significant number of fire towers have been restored, the future status of other towers and a long range plan for all State-owned structures on fire tower summits has not been developed. The publicly supported transition from original purposes of fire detection and communications to recreation, historic preservation, and education, needs to be reconciled with existing laws, possible legal issues, and the APSLMP.

Addressing individual fire towers unit by unit without a comprehensive study, prevents a "big picture" planning view for these man-made facilities. In some cases there are sharply contrasting ideas between people, organizations, and State government on what should be done with specific State-owned fire towers. To help address this situation and enable a management strategy looking at a wider perspective than individual units, a comprehensive study of all existing fire towers was determined to be necessary. Since UMPs for Forest Preserve lands with fire towers in the Catskill Park have been completed and many issues have been previously addressed, this Study will focus exclusively on fire towers currently standing in the Adirondack Park. The recommendations in this study are primarily confined to State-owned fire towers under DEC jurisdiction. These facilities can be located on private land, Forest Preserve, or Conservation Easements where there is legal public access. Activities on adjacent State lands or private property are beyond the scope of this document and will only be discussed as they relate to old fire tower locations, fire tower access, or Department communications. Further, the study was written to provide criteria for managing associated fire tower appurtances such as observer's cabins and radio repeaters, as they concern public use and Department administrative needs.

This Chapter explains how fire towers relate to Article XIV, Section 1 of the New York State Constitution, laws and regulations, the APSLMP, State policies and guidelines, UMPs, Historic Preservation, other planning efforts, and lands other than the Forest Preserve

I. ARTICLE XIV, SECTION 1 OF THE NEW YORK STATE CONSTITUTION

Forest Preserve lands are State-owned lands within certain Adirondack and Catskill counties specified in ECL Section 9-0101(3). The boundaries of the Adirondack and Catskill Park, are delineated in ECL Section 9-0101(1) and ECL Section 9-0101(2), respectively, and include all land, both public and private, within these boundaries.

Within the Adirondack Park, virtually all State land is part of the Forest Preserve, governed by Article XIV, Section 1 of the New York State Constitution providing in part:

> "The lands of the state, now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or

> exchanged, or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed...."

The State is obligated to comply with this provision in its administration of the Forest Preserve. The use of fire towers and associated structures or communications equipment on State land must be consistent with the purposes for which the Forest Preserve was created, and, insure that the "wild forest" character of the land is preserved.

II. LAWS AND REGULATIONS

The Environmental Conservation Law §§3-0301(1)(d) and 9-0105(1) authorizes the Department to exercise care, custody and control of the Forest Preserve (also see implementing regulations found at 6 NYCRR Part 190).

Fire management

Under ECL § 9-1103(3), DEC can "establish, maintain, equip and operate forest fire observation stations, telephone lines or other structures therefore as the public interest requires." A "fire observation station" either is or incorporates the fire tower and associated appurtances. In addition, §9–1109 allows the DEC, in certain areas of the State, including the Adirondacks, to maintain "fire prevention systems" including fire observation stations. This did not limit the creation of fire towers solely upon State owned land. In order to have overlapping coverage some observation stations were established and operated on private lands. This was made possible by the cooperation of land owners and in some cases through the benefits of land easements and right of ways. While serving an important fire control function in the past, none of the existing Adirondack fire towers are manned today for the express purpose of fire detection, although communication facilities are located on several towers or fire tower summits.

Historic structures and improvements

Article 14 of the Parks, Recreation and Historic Preservation Law sets forth the responsibilities of State agencies with regard to historic preservation.

§14.01 provides, in part:

> "The legislature determines that the historical, archeological, architectural and cultural heritage of the state is among the most important environmental assets of the state and that it should be preserved."

§14.05 provides, in part:

> "1. The commissioner [of OPRHP] shall continue and advance a statewide historic preservation program which shall include:
>
> (a) Surveying and inventorying historic places and properties for nomination to the national register and state register of historic places; and
>
> (b) Continuing planning activities to foster the preservation and management of historic properties as living parts of our communities and the effective representation of historic preservation in state environmental planning activities; and . . ."

§14.07 sets forth the law pertaining to the State register of historic places, inventory of historic property, and a statewide comprehensive historic preservation plan.

§14.09 sets forth the requirements of State agencies with regard to activities affecting historic or cultural property including the requirement to give notice of proposed plans to the Commissioner of Parks, Recreation and Historic Preservation. The Commissioner then has 30 days to make comments on the proposed plan and to then work with the acting agency to develop alternatives that minimize damage to any historic features.

9NYCRR §427.1 provides that,

> "All historic places within the State listed on or nominated by the commissioner for inclusion on the National Register shall be listed on the State Register."

Acquisition of lands within the Adirondack or Catskill parks. The portion of Environmental Conservation Law (ECL) related to acquisition of historic structures and improvements is provided in §9-0109. This part of the ECL provides that:

> "1. Unless deemed necessary for the conservation of critical and unique natural land areas or of significant wild forest land areas, the state shall not acquire or accept fee simple ownership of structures or improvements in the Adirondack or Catskill parks listed or eligible to be listed on the state register of historic places including that amount of land on which such structures or improvements are located that is necessary for their maintenance and use.

2. Prior to any land acquisition by a state agency within the Adirondack or Catskill parks, the commissioner or responsible chief executive officer proposing such acquisition shall undertake a review of such action pursuant to the state environmental quality review act as provided in article eight of this chapter and, when applicable, the New York state historic preservation act of 1980.

3. If such structures or improvements in the Adirondack or Catskill parks are offered to the state for purchase or as a gift, it shall be the responsibility of the state agency to which such offer is made, in accordance with guidelines prepared for notifying potential private purchasers, to search for a private purchaser or donee who would preserve such structures or improvements, if the present owner thereof consents.

4. Historic structures and improvements which are located within the Adirondack and Catskill parks and owned by the state prior to the effective date of this section and which existed prior to acquisition by the state may be maintained provided that:

a. the commissioner of parks, recreation and historic preservation finds that such structures and improvements are listed or are eligible to be listed on the state register of historic places pursuant to subdivision one of section 14.07 of the parks, recreation and historic preservation law; and

b. the commissioner finds that such structures and improvements can be maintained for public enjoyment and understanding of the forest preserve or for departmental activities necessary in protecting forest preserve lands in the parks in a manner that will not disturb the existing degree of wild forest character of land on which the pre-existing structures or improvements are located or the wild forest character of land adjacent thereto; and

c. such maintenance is in accordance with reasonable regulation of the forest preserve in the Adirondack and Catskill parks consistent with article fourteen of the state constitution."

III. POLICIES AND GUIDELINES

DEC policy has been developed for the public use and administration of Forest Preserve lands. Select policies relevant to fire towers and summit facilities include but are not limited to:

- Administrative Use of Motor Vehicles and Aircraft in the Forest Preserve (CP-17)
- Tree Cutting on Forest Preserve Land (O&D #84-06)
- Cutting and Removal of Trees in the Forest Preserve (LF-91-2)
- Division Regulatory Policy (LF-90-2)
- Policies and Procedures Manual title 8400 - Public Land Management
- Adopt-A-Natural Resource (ONR-1)
- Mountaintop Policy (See Appendix)
- Forest Preserve Roads (CP-38)
- Temporary Revocable Permit Policy, Use and Occupancy

Adopt-A-Natural Resource

The New York State Legislature, through the creation of Environmental Conservation Law §9–0113 authorized the Department to enter into agreements with any person or persons "for the purposes of preserving, maintaining or enhancing state-owned natural resources." ECL §9–0113(2) states that the agreement will provide the resources be preserved in "its natural state" or managed to "enhance or restore the natural resource values they provide." Section V of the ONR-1 defines natural resources as "all natural areas and related assets under the jurisdiction of the Department."

Other Policies

The Department also maintains policy to provide guidelines for the design, location, siting, size, classification, construction, maintenance, reconstruction and/or rehabilitation of facilities associated with fire towers and access trails such as fireplaces, fire rings, foot bridges, foot trails, primitive camping sites, road barriers, sanitary facilities and trailheads. Other guidelines used in the administration of Forest Preserve lands are provided through Attorney General Opinions, Department policy memos, and Regional operating procedures.

IV. RELATIONSHIP TO ADIRONDACK PARK AGENCY AND APSLMP

The Adirondack Park Agency, established in 1971 by Executive Law Article 27 (§§800-820), manages both private and public land within the boundaries of the Adirondack Park. Private land located within the Adirondack Park is managed by the Agency under the Adirondack Park Land Use and Development Plan, developed pursuant to Executive Law §805. State Forest Preserve lands located within the Adirondack Park are managed by DEC in compliance with the Adirondack Park State Land Master

Plan (APSLMP), developed by the Adirondack Park Agency. Unit Management Plans (UMPs) are developed by the Department pursuant to Executive Law §816 in compliance with the guidelines set forth in the APSLMP.

The APSLMP* is authorized by the Adirondack Park Agency Act, §816 (originally §807) of Article 27 of the Executive Law, and was prepared by the APA in consultation with the DEC, and approved by the Governor. It establishes a classification system for State lands within the Adirondack Park, and Guidelines for management and use of lands in each classification. The APSLMP has the force of legislative enactment, as determined by the case of Helms v. Reid 394 N.Y.S. and 987 (Hamilton County Supreme Court, 1977).

With respect to Article XIV, the APSLMP provides:

> "...the provisions of the master plan are intended to be constitutionally neutral. While obviously no structure, improvement or use held to be unconstitutional is permitted by this Master Plan, no inference as to the constitutional appropriateness or inappropriateness of any given structure, improvement or use should be drawn from whether it is allowed or prohibited in a particular land classification. This master plan is not intended to make constitutional determinations regarding unrelated issues under Article XIV, which are properly a matter for the Attorney General and ultimately the courts." (APSLMP, Page 1.)

On page 18, a non-conforming use is defined as:

> "A structure, improvement or human use or activity existing, constructed or conducted on or in relation to land within a given classification that does not comply with the guidelines for such classification specified in the master plan."

Forest Preserve management must conform with the guidelines of the APSLMP. Since fire towers are included in the definition of "structures", individual fire towers may be conforming or non-conforming depending on the specific classification. Since the Master Plan was first adopted in 1972, it has undergone two major revisions. The language regarding fire towers has changed in both revisions.

Relevant definitions, page number references, and APSLMP quotations used within this document are from the approved November 1987, updated 2001 edition.

The APSLMP places State land within the Adirondack Park into the following classifications: Wilderness; Primitive; Canoe; Wild Forest; Intensive Use; Historic; State Administrative; Wild, Scenic and Recreational Rivers; and Travel Corridors.

Wilderness Classification - In the case of wilderness areas, the APSLMP identifies structures and improvements such as fire towers and observer cabins, storage sheds and other buildings, telephone and electrical lines, and helicopter platforms as non-conforming. In the Adirondack Park, a total of 10 fire towers were removed from wilderness classified lands. The Fort Noble Mountain fire tower was removed from the Fort Noble Mountain primitive area, which subsequently became part of the West Canada Lake Wilderness. The definition for wilderness areas is provided on page 20:

> "A wilderness area, in contrast with those areas where man and his own works dominate the landscape, is an area where the earth and its community of life are untrammeled by man–where man himself is a visitor who does not remain. A wilderness area is further defined to mean an area of state land or water having a primeval character, without significant improvement or permanent human habitation, which is protected and managed so as to preserve, enhance and restore, where necessary, its natural conditions, and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least ten thousand acres of contiguous land and water or is of sufficient size and character as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic or historical value."

Primitive Classification - The definition of a primitive area is provided on page 26:

> "A primitive area is an area of land or water that is ether:
>
> 1. Essentially wilderness in character but, (a) contains structures, improvements, or uses that are inconsistent with wilderness, as defined, and whose removal, though a long term objective, cannot be

provided for by a fixed deadline, and/or, (b) contains, or is contiguous to, private lands that are of a size and influence to prevent wilderness designation; or,

2. Of a size and character not meeting wilderness standards, but where the fragility of the resource or other factors require wilderness management."

Following the definition, the APSLMP provides:

"The definition recognizes two basic types of primitive areas: (i) where the ultimate goal is clearly to upgrade the area to wilderness at some future time, however distant, when the non-conforming uses can be removed and/or acquisition of private tracts is accomplished, and, (ii) where eventual wilderness classification is impossible or extremely unlikely.

An example of the first type would be the existence of a fire tower and associated structures and improvements (observer cabins, telephone lines, etc.) whose precise date of removal cannot be ascertained until the new aerial surveillance program of the Department of Environmental Conservation is fully implemented and communication systems modernized."

On page 27 in the section "Guidelines for Management and Use" under the subheading "Basic Guidelines," the APSLMP provides:

"The primary primitive management guideline will be to achieve and maintain in each designated primitive area a condition as close to wilderness as possible, so as to perpetuate a natural plant and animal community where man's influence is relatively unapparent."

In the same section under the subheading "Structures and Improvements," the APSLMP provides:

"1. All structures and improvements that conform to wilderness guidelines will be acceptable in primitive areas.

2. In addition, existing structures and improvements,

(a) whose removal, though anticipated, cannot be provided for by a fixed deadline . . ."

In the descriptions of specific Primitive Areas in the APSLMP, the Hurricane Mountain tower is listed as an important DEC communications link, with the note that the area should become Wilderness if no longer needed for this use. The APSLMP, on page 82, also notes that the Wakely Mountain Primitive Area should be made part of the Blue Ridge Wilderness once the tower is no longer needed.

Canoe Classification - In the original Master Plan fire towers were listed as non-conforming structures in Wilderness areas and were to be removed without exception, this applied to Canoe areas as well. In the last revision, the current language about the St. Regis fire tower was added, giving some conditions for the tower to remain.

The following is the definition of a Canoe Area found in the Master Plan:

"A canoe area is an area where the watercourses or the number and proximity of lakes and ponds make possible a remote and unconfined type of water-oriented recreation in an essentially wilderness setting."

The following Master Plan guidelines for management and use for Canoe Areas relate to fire towers and related structures:

The primary canoe area management guideline will be to protect the quality of the water and fishery resources while preserving a wilderness character on the adjacent lands.

The St. Regis Mountain fire tower and observer cabins may be retained so long as retention is considered essential by the Department of Environmental Conservation pending ultimate removal upon final implementation of the aerial surveillance program and modernization of the Department of Environmental Conservation's communication system. The overhead telephone lines serving the fire tower and observer's cabin will be promptly replaced with an on-ground line which may be retained until alternative method(s) of maintaining communication become feasible.

Wild Forest Classification - In the original Master Plan fire towers could remain in Wild Forest areas for educational purposes "regardless" of need from a fire control standpoint. The language was changed in the 1979 Master Plan, and remains in the current version, to say that fire towers in Wild Forest areas may be retained where "consistent with their need from a fire control and communications standpoint".

These lands, as noted in the official land use definition at page 32 of the APSLMP, are to be maintained in an "essentially wild character" but with a "somewhat higher degree of human use" permitted. These are lands both less fragile and less remote than those having a Wilderness character. In the case of wild forest areas, all structures and improvements permitted under the guidelines covering wilderness, primitive, and canoe areas will be allowed. In addition, structures and improvements such as nature and interpretive trails and picnic tables will be allowed and their maintenance, rehabilitation and construction permitted.

On page 34, in the section pertaining to wild forest areas, the APSLMP provides:

> "The maintenance and rehabilitation of the following structures and improvements will be allowed to the extent essential to the administration and/or protection of state lands or to reasonable public use thereof but new construction will not be encouraged:
> -- storage sheds and similar rustic buildings for use of administrative personnel;
> -- small-scale electronic communication and relay facilities for official communications;
> -- telephone and electrical lines to service permitted administrative structures;
> -- roads, and state truck trails as set forth below;
> -- fire towers and observer cabins as set forth below; . . ."

On page 36, still within the wild forest section, the APSLMP provides:

Fire towers

> "The educational and informational aspects of certain fire towers should be encouraged and wherever feasible these fire towers should be retained where consistent with their need from a fire control and communications standpoint."

Intensive Use Classification - This land category includes DEC campgrounds and other developed sites. One Intensive Use Area (Gore Mountain Ski Center) contains a fire tower and observer's cabin, while two Intensive Use Areas (Lake Eaton and Poke-O-Moonshine campgrounds) provide alternative access to the fire towers on Owl's Head and Poke-O-Moonshine mountains respectively.

NYSDOT Travel Corridor Classification - This land category is defined as: "...that strip of land constituting the roadbed and right-of-way for state and interstate highways in the Adirondack Park, and those NYS lands immediately adjacent to and visible from these facilities." (APSLMP, page 46) A scenic byway is defined as: "a road corridor which is of regionally outstanding scenic, natural recreational, cultural, historic or archaeological significance. These corridors offer an alternative travel route to our major highways and daily travel patterns, while telling a story about New York State's heritage, recreational activities or beauty. In addition, a scenic byway corridor is managed to protect this outstanding character and to encourage economic development through tourism and recreation." Information on the relationship of these travel corridors to fire towers is further discussed in the scenic byway plan portion of Chapter 2.VII.

Unclassified State Lands - This land category includes newly acquired State lands. In the case of Lyon Mountain, the tract that includes the fire tower and surrounding lands was acquired from the Nature Conservancy in 2008. The property is currently managed as unclassified Forest Preserve, to be included in the appropriate Unit Management Plan after the formal APA classification process.

Special Management Areas - The Adirondack Park State Land Master Plan recognizes Special Management Areas within the Adirondack Park as special interest areas, under the categories of Scenic, Geographical, Historic, and Natural. Identified scenic locations include the fire tower summits such as Mt. Arab, Azure, Blue, Hadley, Hurricane, Kane, Poke-O-Moonshine, Rondaxe (Bald), St. Regis, Vanderwhacker, and Wakely mountains.

On page 10 of the APSLMP, in the section, "Unit Management Plan Development," the APSLMP provides that unit management plans will set forth objectives to address such issues as:

> ". . . the preservation and management of special interest areas such as . . . historic areas or structures."

On page 50, the APSLMP section, "Special Management Guidelines" includes examples of parcels of land that may require special management to reflect unusual resource or public use factors, including:

> "...historic buildings, structures or sites not part of a designated historic area..."

On the same page within the same section, the APSLMP provides:

> "Guidelines for Management and Use

1. In no instance will the management of any of these lands be less restrictive than that of the major land classification in which they lie, but more restrictive measures may be employed where desirable."

Conservation Easements - This study includes management guidelines for fire towers on easement lands, when applicable.

Non-Forest Preserve Lands - This land category includes a small amount of acreage administered by the Department of Environmental Conservation consisting of:

-- lands in the Towns of Altona and Dannemora which are expressly excluded from Article XIV, §l by the terms of the Constitution;

This land category would include the portion of newly acquired State lands in the town of Dannemora that contains the parking area and most of the trail to Lyon Mountain.

V. RELATIONSHIP TO UNIT MANAGEMENT PLANS

Unit Management Plans (UMPs) are prepared by the DEC in consultation with the APA. Guidelines for UMPs are found in the APSLMP and the Policies of the DEC. Executive Law §816 (1) and the APSLMP provide that the provisions and proposed management actions in a UMP must comply with the existing provisions, guidelines and criteria of the APSLMP and cannot amend the master plan itself. New facilities and/or uses contemplated for State lands pursuant to the Study may require specific authorization in an approved UMP or UMP amendment for the location in question. UMPs will be written to consider the recommendations of the Study, to the extent that they are consistent with legal authority existing at that time.

Full implementation of the Study may require amendments to DEC regulations and policy before certain recommendations may be considered in UMPs. Until such time as policy revisions are adopted by the DEC, UMPs will be written to reflect current policy, and will be amended when policy revisions take effect. Determinations of whether UMP provisions conform to the APSLMP guidelines are made by APA through the unit management planning process.

VI. RELATIONSHIP TO PARKS, RECREATION, AND HISTORIC PRESERVATION

The Adirondack Forest Preserve was listed as a National Historic Landmark by the National Park Service in 1963. This designation also results

in automatic listing in the State and National Registers of Historic Places. The Department is required by the New York State Historic Preservation Act (SHPA), Parks, Recreation and Historic Preservation Law (Article 14) and SEQRA (ECL Article 8) to include cultural resources in the range of environmental values that are managed on public lands. DEC and OPRHP have taken the approach that all fire towers are historic artifacts and should be retained where not in conflict with the APSLMP.

Several Adirondack fire towers and some associated observer cabins are listed on both the State and National Registers of Historic Places. Other towers are considered eligible or not eligible for nomination. (See Chapter 4.II.A.)

VII. RELATIONSHIP TO OTHER PLANNING EFFORTS

A. Conserving Open Space in New York State

The State's Open Space Plan (OSP) is prepared by OPRHP and the DEC, in consultation with nine Regional Advisory Committees appointed by county governments and the State. The OSP provides the blueprint for State activities to conserve open space. Priority projects identified in the OSP are eligible for land acquisition funding from the State's Environmental Protection Fund (EPF) established by ECL Article 54.

B. Statewide Comprehensive Outdoor Recreation Plan

The Statewide Comprehensive Outdoor Recreation Plan (SCORP) is prepared every five years by OPRHP to provide statewide policy direction and to fulfill the agency's recreation and preservation mandate. The document serves as a status report and as an overall guideline for recreation resource preservation, planning and development. The latest Statewide Comprehensive Outdoor Recreation Plan was published in 2009 and is available online at: www.nysparks.com. The SCORP identifies seven statewide policies, supported by a number of action strategies. The policies most relevant to fire towers are:

- Preserve and protect natural and cultural resources.
- Develop comprehensive recreational, greenway and heritage trail systems.

C. Scenic Byway Plans

A system of 13 officially designated scenic byways marked with distinctive icons on brown and yellow signs crisscross the Adirondack North Country. These travel corridors along State highways are managed by the NYS Department of Transportation and provide Adirondack Park visitors with a variety of aesthetic settings, access to recreational trails, cultural and historical resources, along with occasional scenic vistas. For a map and

additional information on Scenic Byways: www.adirondackscenicbyways.org.

The Adirondack North Country Association has worked in partnership with government officials, community leaders, business owners, members of local civic groups and not-for-profit organizations, along with concerned residents to create a Corridor Management Plan for some of the Scenic Byways. Fire towers were named by local participants as significant historical and cultural resources that contribute to an exceptional byway experience for residents and visitors.

Many fire towers were inventoried as part of the byway planning project and appear on byway tourism maps as sites of particular interest to visitors. Byway plans focused on fire towers that were immediately adjacent to, visible from, and accessed by the travel route, although part of the byway's corridor can extend well beyond the road itself. Adirondack Scenic Byways can provide views of summits with fire towers, parking facilities, or enable access to tower trailheads from county and town highways. They include:

Adirondack Trail Scenic Byway (Route 30 and 30A) - From Fonda to Malone.

From its earliest days, what is now NYS Route 30 has been an important north-south route in the Adirondacks. The southern portion of this 188 miles long scenic byway between Fonda and Speculator was once known as the Sacandaga Trail, described in pamphlets from the 1920's as "New York's most beautiful highway." This section includes Fulton County's "Gateway to the Adirondacks" which offers a transition from the more populated urban areas while bringing visitors into the Adirondack Park. The parking areas for the Snowy Mountain and Blue Mountain trails are located next to this highway. Views from the highway of the fire towers on Snowy and Blue mountains are possible on clear days. In addition, the highway provides access to the relocated Whiteface tower on exhibit within the Adirondack Museum in the Hamlet of Blue Mountain Lake.

Olympic Scenic Byway (Routes 3, 86, and 9N) - From Sackets Harbor to Wilmington.

This 170-mile Byway, provides a mix of woodlands, farmlands and waterways as the road winds through mountain villages. The towers on Mt. Arab and Cathedral Rock are not easily visible from the highway, except for brief views during leaf-off seasons. NYS Route 3 provides access to both fire tower trailheads. Hurricane Mountain is visible from Route 9N between Elizabethtown and

Keene although this section of Route 9N is not part of the scenic byway.

Central Adirondack Trail Scenic Byway (Routes 365, 28 and 9)- From Rome to Glen Falls.

Although the parking area for the Rondaxe (Bald) Mountain trail is located near this highway, the fire tower is not visible from the road. Gore Mountain is visible from multiple points on the roads in the area around North River.

Roosevelt Marcy Scenic Byway (Route 28N) - From NYS 30 to NYS 28.

Limited views from the highway of the towers on Goodnow and Vanderwhacker mountains are possible on clear days. The tower on Vanderwhacker Mountain is difficult to see from 28N, although it may be seen from the bridge over the Hudson in Newcomb and from Aiden Lair in Minerva. Route 28N provides access to both fire tower trailheads.

Blue Ridge Road Scenic Byway - From North Hudson to Newcomb.

This 17-mile highway travels winding through forests along the southern fringe of the Adirondack High Peaks region. Provides access to the remains of an old mining community at Tahawus and the trailhead for Mt. Adams. Vanderwhacker Mountain is visible from the Blue Ridge Road west of Pine Hill.

Lakes to Locks Passage All-American Road - From Waterford to Rouses Point.

This 225-mile highway includes portions of State Route 9N and 22. The road parallels the Hudson River, the Champlain Canal and Lake Champlain. The fire tower on Black Mountain can be seen from 9N near Sabbath Day Point.

While not part of the Byway system, an additional State highway provides important access to one fire tower and observer's cabin:

NYS Route 10/29A - Between the Adirondack Park boundary and NYS Route 8. Views from the highway of the tower on Kane Mountain is possible on clear days. Access to the Kane Mountain trailhead is via Green Lake Road.

D. Other Plans

In a few instances, governmental agencies such as the Town of Tupper Lake (Mt. Morris) and Saratoga County (Spruce Mountain) own land with fire towers. These municipalities can have in place

planning and land use management guidance that addresses fire towers and communications facilities on these summits.

VIII. RELATIONSHIP TO LANDS OTHER THAN THE FOREST PRESERVE

Slightly over half of the 6-million acre Adirondack Park is comprised of privately-owned lands. Some fire towers on private lands are open to the public with landowner permission, while seven towers including the summits of Buck Mountain, Cathead Mountain, Meenagha Mountain, Mount Morris, Salmon Lake Mountain, Palmer Hill, and Swede Mountain are closed to the public. Open towers are located on land that is either under a conservation easement, owned by a municipality or other public entity such as the College of Environmental Science and Forestry (ESF), or involves property where the private owner has allowed public access without any formal easement.

A. **Conservation Easement Lands** - ECL §49-0301 allows for the "less than fee" interest in property that can be purchased by "not for profit conservation bodies" or "public bodies" (§49-0303(3)) for the purpose of preserving or maintaining environmental features. Conservation Easements grant the State of New York a legal interest in the Property and sets forth terms, restrictions, and rights of the Landowner and the State with respect to the Property, thus establishing a framework for its future use and management. Conservation Easements on private lands in some cases allows for public access to fire towers.

Parts of tower trails or access roads are located on easement lands, such as the trail to Loon Lake Mountain or the road to the Pillsbury Mountain trailhead. In the case of Loon Lake Mountain, the fire tower while located on Forest Preserve lands, did not have year round trail access through the easement lands until April 22, 2009. On Stillwater Mountain a fire tower exists on lands under a conservation easement, which will be open to the public subject to seasonal restrictions.

Some towers on easement lands are closed to the public. For example, Buck Mountain on Lyme Adirondack Timberlands LLC property in the Town of Long Lake. Other towers or portions of access trails (Spruce Mountain and Blue Mountain) exist on private land where it would be desirable to secure public access either through fee title or conservation easement acquisition.

B. **College of Environmental Science and Forestry Lands** - The fire towers on Cathedral Rock and Goodnow Mountain are administered by the State University of New York, College of Environmental Science and Forestry (ESF). ESF has promoted the

public use of the fire towers at the Wanakena and Huntington Forest property through brochures and interpretive trails.

C. **Public Museums** - Two reconstructed fire towers are located within museum property in the hamlets of Blue Mountain Lake and Elizabethtown. They are open to the public subject to operating hours and season of the year. These exhibits have not served as functional fire towers at their present locations but they serve as important educational platforms about the history of fire towers in the Adirondacks.

D. **Other Private or Municipal Lands** - Fire towers on private land without secured easements can be either open or closed to the public depending on the wishes of the individual landowner. In some cases the landowner does not wish their property to be used for other recreational purposes, or access is restricted during some parts of the year. One of the benefits to the landowner of allowing public access is reduced liability. In New York State, the Recreational Use Statute (General Obligations Law Section 9-103) helps reduce a landowner's liability if someone is injured while engaging in a specific set of recreational activities on their land. Landowners can be liable, however, if they collect a fee for use of the property.

In the following cases, trail access to State-owned fire towers requires the crossing of private land. Continued public access is dependent on the willingness of the landowner to allow public access. In some instances, private landowners have authorized public use by written permission, while in other cases use has been allowed without any formal or informal agreement.

Blue Mountain (annual written permission) - The Nature Conservancy (TNC) recently purchased property in the vicinity of Blue Mountain that was previously owned by Finch, Pruyn & Company, Inc. These private commercial forest lands are actively managed for forest products and leased to recreational clubs. In 2009 the land was sold to Upper Hudson Woodlands ATP, LP a client of RMK Timberland Group. Public use of ATP lands involves access along the first 1.6 miles of the hiking trail to the summit of Blue Mountain and the trailhead parking area.

Spruce Mountain - The fire tower on the top of Spruce Mountain is located on a small parcel of land owned by Saratoga County. The existing access trail crosses three private land owners in addition to a small piece of Wilcox Lake Wild Forest. While the portion of trail over Forest Preserve lands and Saratoga PLAN property are open to the public, the sections owned by Lyme

Adirondack Timberlands LLC and Saratoga County have not been secured with an easement.

Mount Adams - The Open Space Institute (OSI) recently purchased property in the vicinity of Tahawus previously owned by National Lead Company (later NL Industries, Inc.). The State acquired a combination of fee title to protect the upper Hudson River watershed and the "southern gateway" to the High Peaks Wilderness Area and conservation easements to provide public access, limit development and provide sustainable management of a working forest. A 0.41-acre parcel surrounding the Mt. Adams fire tower and a 0.3-acre parcel around the historic observer's cabin at the base of Mount Adams was retained by OSI, subject to a conservation easement to be held by the State.

C. Closed Private or Municipal Lands - Seven fire towers within the Adirondack Park are closed to the public. A few of these towers have radio and/or communication facilities.

Buck Mountain (south of the Village of Tupper Lake and west of NYS Route 30)

This privately owned fire tower is on property owned by Lyme Adirondack Timberlands LLC. Public access is not allowed.

Cathead Mountain (northwest of the Village of Northville)

This State-owned fire tower is on property owned by the Hatchbrook Sportsman Club. The Cathead Mountain trail was a popular hiking trail that lead to a State owned fire tower located within a private inholding. The trail begins on private property, crosses wilderness and primitive classified land, then re-enters private property where the fire tower is located. In 2000, the trail was officially closed since the landowners withdrew their permission for the public to use the trail. Consequently, public access to the Cathead Mountain trail and fire tower is not allowed.

Meenahga Mountain (north of the Village of Bloomingdale)

This privately owned fire tower is on private property. The fire tower was erected under the guidance of the Conservation Department in 1927 for the Florida School. While it was built primarily for the use of the School, the tower was used to a small degree as a fire observation station through an agreement between the Department and the School. Public access is not allowed.

Mount Morris (south of the Village of Tupper Lake)

This privately owned fire tower is on property owned by the Town of Tupper Lake. In 1976 the fire tower was declared surplus and sold to the town. In 1971, the observer's cabin was abandoned to the landowner Oval Wood Dish Corp. The tower

supports numerous radio antennas at the site. While the Department does not maintain any equipment on this tower, the Bureau of Electronics confirms that Department does utilize the State Police equipment to access over half of the Region 5 radio network. Public access is not allowed.

Palmer Hill (northeast of the Village of Wilmington)
This privately owned fire tower is on property owned by John Demming. Ownership of this fire tower was transferred from DEC since the Department had no further fire control need for the structure. The tower supports various telecommunications equipment. No public access is allowed.

Salmon Lake Mountain (north of the Village of Raquette Lake)
This privately owned fire tower is on property owned by Whitney Industries LLC. This fire tower was erected by Whitney Park about 1933. No public access is allowed.

Swede Mountain (south of NYS Route 8, west of the Village of Hague) This fire tower is on property owned by Warren County that was acquired from International Paper, Co. No public access is allowed.

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CHAPTER 3: GENERAL HISTORY

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GENERAL HISTORY

A comprehensive documentation of the interesting history of fire observation stations and towers in the Adirondacks or the Department's role in wildfire management is not practical here. For this Chapter and fire tower fact sheets in Appendix, books such as Adirondack Firetowers: Their History and Lore, (Southern and Northern Districts) by Martin Podskoch, The Fire Observation Towers of New York State - Survivors That Still Stand Guard by Paul Laskey, Views from on High: Fire Tower Trails in the Adirondacks and Catskills by Jack Freeman, along with unpublished works by Bill Starr (Roster of the New York State Fire Tower Forest Fire Observers, 2009 and Historical Data of the Fire Towers operated by The New York State Bureau of Forest Fire Control, 1984 and 2001) provided valuable historical background and public use information. Additional major sources include State and National register documentation reports, various Conservation Commission Annual Reports to the NYS Legislature from 1911-1950, Wildland Fire Management Plan, 2006, Curth, 1987, Adirondack Chronology, revised 2006, and VanValkenburg, 1985. Consult the bibliography for detailed references.

A general description of historical events in the Adirondacks that relate to fire towers and the Forest Preserve in general, are as follows:

I. NEW YORK STATE WILDFIRE HISTORY

Prior to European settlement in New York State, use of fire was wide spread among hunting and gathering societies. Fire was used to encourage berries, harvest natural grains and nuts, and shape a habitat rich in game. Fire hunting was a common practice in the fall, and fires sustained the herbaceous landscape frequented by elk, deer, buffalo and turkey. The forests around native settlements were periodically burned to eliminate underbrush and other herbaceous cover. This practice effectively thinned out the forest, creating areas suitable for agriculture and reducing the opportunity for ambush by marauding enemies. Early European explorers often referred to clearings by fire as "barrens" or "deserts," and they were common sights. However, in New York, mountains, river bottoms, swampy lowlands and denser boreal forests were more or less spared from annual fire setting. European settlement expanded the process of agricultural reclamation begun by the aboriginal tribes. More forested land was cleared and new villages were created. Domestic grasses and managed pastures replaced the harvesting of natural foodstuffs and wildlife. Forest land was also cleared to satisfy the ever increasing demand for lumber.

While it would appear that naturally occurring wildfires never played a large part in Adirondack ecosystems, during the late 1800s vast acreage of forest land was heavily logged, creating heavy fuel loads in what is now the Adirondack Forest Preserve counties. Drought conditions and locomotives traveling through these areas belching sparks from stacks, and throwing live coals from fireboxes made wildland fires inevitable. During 1903 and 1908,

fires raged out of control in many of New York State's wooded areas. A combination of drought, high winds, and other conditions produced major forest fires, which consumed nearly one million acres of forest across the Adirondacks. Because of public outcry for protection from the devastation of fires, the State began a rigorous fire prevention and control program, including the setting up of fire districts, naming of fire wardens, passing stronger laws, and the building of fire towers.

II. GENERAL ADIRONDACK AND FIRE TOWER HISTORY

1870 - In the Adirondacks, public interest in the Adirondack mountains was stimulated by reports from Redfield and Emmons (1837-40) and the topographical survey by Verplanck Colvin (1872-1900). Few trails to the summits of the central Adirondacks, existed at the time, although Colvin enlarged some trails and made some summits more accessible by opening new trails. Colvin publicized the qualities of the mountains in his reports to the legislature and in 1870, recommended: "...these forests should be preserved; and for posterity should be set aside, this Adirondack region, as a park for New York..."

1885 - Forest Preserve created by law, when the NYS legislature passes Forest Preserve bill and Governor Hill signs an act establishing the NY Forest Preserve. This was one of the earliest attempts at land preservation in the United States. The Forest Ranger force was born in Chapter 283 of the Laws of 1885 authorization to appoint Firewardens in the Forest Preserve counties.

1886 - A law provided for taxation of Forest Preserve lands at the same rate as private lands.

1892 - The Adirondack Park established. Boundary delineated on official maps by a blue line.

1894/1895 - Constitutional Convention and subsequent vote by the public revised the State's Constitution. An amendment to the New York State Constitution directed: "The lands now or hereafter constituting the Forest Preserve...shall be forever kept as wild forest lands. They shall not be sold nor shall they be leased or taken by any person or corporation, public or private." This mandate, now Article XIV, Section 1 of the New York State Constitution, applies to both the Adirondack (approximately 2.72 million acres of public lands) and Catskill Forest Preserve. New York is the only state where citizens have agreed to give such constitutional protection to their lands. Its original wording survives today, although another constitutional change in 1938 recodified its provisions as Article XIV.

1903 - Fire destroys 428,180 acres of Adirondack forest between April 20th and June 8th. Heavy ash from Adirondack forest fires falls on NYC,

Utica and other northeast cities. It was the heavy and prolonged rains beginning in June that brought the fires under control.

1908 - Summer and fall fires, many caused by railroads, burn more than 368,000 acres of New York State. A forest fire burns more than 6,000 acres on DeBar Mountain. The Narrows and vicinity of NYC experience Adirondack forest fire smoke as thick as fog.

1909 - Jolted by the devastation of thousands of acres of the Forest Preserve during the Great Fires of 1903 and 1908, Governor Hughes signed amendments to the existing Forest, Fish and Game Law which would provide for a forest patrol service and provisions for the erection and staffing of forest fire observation stations.

1909 - The State of New York initiated a fire detection system. The first fire observation stations were placed on the higher Adirondack peaks. Adirondack fire observation stations were installed on Mt. Morris, Whiteface, Hamilton, Snowy, West, Hurricane, St. Regis, and Gore mountains. The first Adirondack fire tower, made of logs, was erected on Mount Morris in Franklin County.

In its 1909 report to the New York State legislature, The Forest, Fish and Game Commission articulated a strategy for prevention:

> "Measures should be taken to locate watch towers on elevations so situated as to embrace a view over large forest sections. These towers or "lookouts" should be in charge of a man familiar with the region, supplied with telescope, compass and maps, and in communication by telephone with firewardens in order that fires can be located and help dispatched at the earliest possible moment."

1910 - Eight additional Adirondack fire observation stations were installed on Cat, Moosehead, Beaver Lake, Fort Noble, Lyon, Pharaoh, Cathead, and Prospect mountains. By 1910, there were 20 stations Statewide.

1911 - Drought and lightning strikes in Adirondacks cause fires burning 27,757 acres.

1911 - Sixteen additional Adirondack fire observation stations were installed on Ampersand, Mt. Arab, Bald, Black, Blue, Boreas, Catamount, Crane, Dunn Brook, Kempshall, Makomis, Ohmer, Owl's Head, Vanderwhacker, Woodhull, and Wakely mountains. A program was initiated to construct cabins near the towers for observers to live in while working.

1911 - A federal law provided the funding necessary to improve the fire protection system. This new funding allowed for the establishment of "fire districts," expanding the wildfire jurisdiction of the Ranger force.

1912 - Ten additional Adirondack fire observation stations were installed on Mt. Adams, Belfry, Poke-O-Moonshine, Debar, Loon Lake, Moose River, Rondaxe (Bald), Stillwater, Swede, and Tomany mountains. In the 1912 Annual Report to the NYS legislature the benefit of early detection was described:

> "The fact that so many fires have burned over only small areas is due to their being discovered promptly. These fires were discovered by observers on mountain stations, and thus, by means of this information and the telephone, we were able to get men to fires quickly. There are many cases which might be cited, but the following is a good example: During the dry period of July, about noon one Sunday, a fire was discovered by the observer on Mount Adams. This fire in one of the most inaccessible portions of the Adirondack Forests, but in spite of this fact a Fire Warden with a small force of men reached there within two hours, and by five o'clock the following morning the Ranger was on the ground with a large force of men, and the fire was controlled before it had burned over more than five acres."

1913 - Intense summer drought contributes to Adirondack fires and a total of 50,389 acres burn. Tooley Pond Mountain station was erected but not operational.

1914 - Fire observation station installed on Azure Mountain.

1916 - Weather, lightning, and wind damaged the early wooden towers resulting in steel tower replacements starting in 1916. Gradually log structures on Cathead, Fort Noble, Hamilton, Makomis, Moosehead, T-Lake, Tomany, Wakely, and Woodhull mountains were replaced with steel towers, made with interchangeable parts. Ohmer Mountain station was removed.

1917 - New York State's Conservation Commissioner, George Pratt initiated a program to improve trails leading to mountain tops used as fire observation stations. The goal was to provide access to hikers and outdoorsmen. In the first year nearly 20,000 visitors were recorded at the newly opened fire tower sites throughout the State. By 1920 the number rose to 50,000 visitors, of which 21,000 utilized Adirondack fire tower sites.

1917 - The steel fire tower intended for Ohmer Mountain was erected on Hadley Mountain.

1918 - The total number of fire towers in the Adirondacks is now 52.

1919 - The Gore and Hadley mountain fire towers blown down during a hurricane. They were reconstructed the following year.

1921 - Adirondack fire observers begin using panoramic maps for fire location and control.

1927/1928 - During the winter the Loon Lake fire tower blew over. It was re-erected and re-opened in the spring of 1928.

1932 - First aircraft patrols to spot fires began to change the role of fire towers. That year, a Fleet biplane proved effective in the early detection of fires. Aerial detection flight routes were developed in succeeding years and flown as conditions warranted during fire season.

1930's - 1940's - During the thirties, Civilian Conservation Corps (CCC) laborers assisted in the construction or reconstruction of some fire observation sites. Staffing shortages during WW II brought women into several fire observer positions.

1940's - Public awareness of forest fires increased during the 1940's. Disney's movie *Bambi* in 1942 and the United States Forest Service's Smokey Bear campaign, which began in 1944, prompted voluntary public efforts to prevent and report forest fires.

1941 - Due to prolonged drought fires burned 30,000 acres in New York State, with the largest one occurring in the Adirondacks.

1941 - There were about 114 fire towers operating throughout the State.

1950 - On a statewide basis, Forest Fire Control was allocated $655,000 from Capital Construction Funds for the purpose of rehabilitation and improvements. Ten new fire towers were erected, many cabins were enlarged or replaced, as needed, and the telephone system to the fire towers was upgraded. One of these fire towers was erected on Whites Hill. At 80 feet tall, this was the tallest fire tower constructed within the Adirondack Park.

1971 - DEC Bureau of Forest Fire Control closes 62 of its 103 towers. Private contractors begin aerial detection of forest fires along designated routes throughout the state.

1972 - Individually named wilderness, primitive, canoe area, and wild forest units, were created as a result of the completion of the APSLMP by the APA in consultation with the Department of Environmental Conservation.

1977 - DEC dismantles or removes fire towers from Ampersand, Beaver Lake, Cat, Hamilton, Kempshall, Moose River, T-Lake, and West mountains.

1985-1989 - DEC dismantles or removes fire towers on Mt. Electra, Boreas, Crane, Tomany, and Fort Noble mountains. The fire towers on Mt. Electra and Tomany Mountain, while tipped over are still on the ground where they fell.

1990 - By 1990, the remaining four operational fire towers on Rondaxe (Bald), Blue, Hadley, and St. Regis mountains in the Adirondacks were closed. To date, a total of fifty-two towers were removed statewide but many remained and began to deteriorate due to lack of maintenance.

1992 - Destruction of the fire tower on Pharaoh Mt.

1994 - Present time Various tower rehabilitation efforts and adoption by friends groups.

2008 - The Nature Conservancy sold to the State lots and portions of lots in Township 4 and 5, Old Military Tract, Towns of Dannemora and Saranac, Clinton County. This acquisition included Lyon Mountain and its fire tower.

2009 - The Nature Conservancy sold to Upper Hudson Woodlands ATP, LP (ATP) parts of previous Finch, Pruyn lands. This acquisition included the parking area and beginning part of the trail to the Blue Mountain fire tower.

III. FIRE TOWER ELEMENTS

Much of the following historical background and facility description is drawn from information compiled from various sources, including fire tower nomination paperwork and unpublished works (2003) from Bill Starr of the Forest Fire Lookout Association.

A. The Fire Tower Structures

Observation stations developed in three distinct phases. During the first phase of privately operated lookouts (1887-1908), temporary wood towers were erected on mountain summits and used for one or more purposes, including visual observation of forest fires during drought conditions.

In the second phase (1909-1915), the State established an initial system of fire observation stations to provide visibility above the tree line. Many of the original towers were built with crude logs or planks often built using trees on the summit. These primitive structures varied in height from 15 to 35 feet tall and included an open platform for viewing and a weather-proof box at the base for the telephone. Each tower was equipped with a telephone, a map, and binoculars. When smoke was sighted, an observer would call in the location of the fire to a forest ranger.

Towers and platforms were only built where needed, with some summits having sufficient views that did not require a tower. On mountain tops that were void, or nearly void of trees, such as Pharaoh and Whiteface mountains, a tent usually served as the facility. The tower on Prospect Mountain was recycled from a previous use as a hotel cupola and hauled intact to the summit. The tower on Makomis Mountain was clad with clabboards from the ground up and had and enclosed cab. At Rondaxe (Bald) Mountain an abandoned steel windmill frame was used as a tower*. In the case of Ampersand Mountain a stone hut was the facility. None of these original huts or crude wood towers remain standing today.

The third phase (1916-1971) consisted of the use of the standardized steel structures we see today which comprise the existing fire towers. Fire towers were erected to provide shelter on an elevated platform for a person known as a “forest fire observer” who manned the tower. The typical fire tower contained a small room at the top, known as the “cab” where the observer would search for fires.

Getting the steel fire towers up the mountains was no easy project since each tower required four-and-a-half tons of steel. The majority of the steel fire towers were erected by 1933 and the jeep and helicopter were not readily available until after World War II. In most cases, pieces of the towers were dragged up by a horse team since logging horses were in large supply and this was the popular mode of heavy hauling at that time. In a few cases, teams of Oxen or mules were reported to have been used. On Buck Mountain, the fire tower pieces were hauled up by a dog sled team.

The fire towers were all painted with Aluminum color paint, but the interior of the cab was not. Due to a blinding affect from the aluminum paint, reflecting the sunlight, in most cases green was the

This structure should not be considered as the first steel fire tower because it was an open elevated platform.

color used for the cab interiors. New York's fire towers, while in operation, were not painted in a red/silver checker board manner typical of those in the state of New Jersey. The cab of the reconstructed fire tower at Cathedral Rock was painted red and white originally, but has since been repainted silver.

AerMotor Model # LL-25 Fire Tower (See Appendix)

The need to provide a more permanent structure which offered an enclosure to provide protection for the observer from the harsh elements prompted the State, in 1915 to consult with the AerMotor Company of Chicago, a wind mill manufacturer. Windmill towers were easily adaptable to this new purpose and site conditions. The upper stages, which carried the windmill, were left off and replaced with an enclosed steel cab. This resulted in very small cabs (measuring approximately 7 feet square) compared to other fire towers used in the western United States.

As determined by factory blue prints, fire tower height is measured from the top of the concrete footings to the floor of the tower cab. Heights were adjustable by adding standard truss sections to the bottom.

In 1916, ten AerMotor Model # LL-25 towers were ordered, with nine erected at Cathead, Fort Noble, Hamilton, Makomis, Moosehead, T – Lake, Tomany, Wakely, and Woodhull mountains. Construction of the tenth tower began late in 1916 on Hadley and was not completed until early in 1917.

The AerMotor Model # LL-25 was referred to as a “Light Construction Type” of tower, due to the lighter weight steel used for the tower legs and the ½ inch steel rods used for the “X” braces on the upper parts of the tower super structure. These fire towers were originally equipped with a twelve inch wide steel ladder attached to the exterior of the superstructure. This ladder rose up from the ground to a landing, just below the cab, that cantilevered out to provide a platform to step upon from the ladder. Then another ladder entered through a small trap door into the cab.

Due to the unsafe nature of these ladders, all the fire towers purchased in 1916 were later equipped with stairs and landings made entirely of lumber. The wooden stairs did not hold up well to use and weathering. Permanent stairs were later installed on the model LL-25 towers as funds became available, with all ten fitted by 1936.

Of the original ten Model LL-25 towers purchased by the State, only four (Cathead, Hadley, Wakely, and Woodhull mountains) remain standing today. Of these four, only the Wakely Mountain

tower has a portion of the original steel ladder still attached to the tower structure.

AerMotor Model # LS-40 Fire Tower

Introduced in 1917, this model of fire tower is the most recognized fire tower in New York State. Of the 110 steel towers that were owned by the State, 81 were the AerMotor Model # LS-40 style. Referred to as a "Heavy Construction Type" tower due to heavier steel used for the tower legs, angle iron "X" braces, and integrated stairs*. The structure consists of a square steel and glass "cab", with a hip roof, enclosing the observation platform atop a riveted and bolted frame of angular steel. Steel stair risers, supporting wood stair treads, divided into flights of stairs and landings provide access to the cab from the ground.

This is the only type of fire tower within the State that one may determine the height by counting the number of flights of stairs (excluding museum towers):

- 3 flights of stairs is a 22 foot tower, (Mt. Morris);
- 5 flights of stairs is a 35 foot tower, (Azure, Rondaxe (Bald), Black, Blue, Hurricane, Loon Lake, Lyon, Mt. Arab, Owl's Head, Poke-O-Moonshine, Salmon Lake, St. Regis and Vanderwacker mountains);
- 6 flights of stairs is a 42 foot tower (Snowy, originally 22 feet tall was enlarged by 20 feet with addition in 1933);
- 7 flights of stairs is a 47 foot tower (Belfry, Cathedral Rock, Mt. Adams, Stillwater, and Swede mountains);
- 9 flights of stairs is a 60 foot tower (Buck, Goodnow, Gore, Kane, Palmer Hill, and Pillsbury mountains);
- 11 flights of stairs is a 73 foot tower (Meenagha and Spruce mountains);
- 12 flights of stairs is a 80 foot tower (none in the Adirondacks).

B. The Map Table and Circular Map

The use of fire towers greatly reduced the number of acres destroyed by fires because they were extinguished at the early stages. In 1918, a "Osborne Fire Finder" was placed in the Poke-O-Moonshine Mountain fire tower to test the effectiveness of the instrument. This device greatly improved the ability of the observer to accurately pinpoint a fire.

"Panorama Maps" began being made and installed in the fire towers in 1919 after the successful trials at Poke-O-Moonshine

**AerMotor introduced a design to retrofit an internal structure rising from the ground within the four main legs of the tower. This internal structure was independent of the tower, supporting both the steel stair risers and platform landings, until it all tied in with the original landing/platform just below the tower cab.*

Mountain. These first circular maps, called "Panorama Maps", had the physical land features visible from a fire tower, plotted along the perimeter. They were placed on custom tables with glass tops along with an alidade-type sighting device. The map table was fastened in the center of the tower cab floor, with the map table designed to slide in order to maintain a clean line of sight. The circular maps were removed from the table at the end of each season and kept in a protected place, usually the observer's cabin. It wasn't until around 1938 when USGS topographic maps replaced the "Panoramic Maps." In the 1950s, the map employed an azimuth ring along the perimeter of the map surface plotting each of the 360 degrees of the compass, and the other fire towers that might appear on each map were identified. With an azimuth reading from two different fire towers, of the same smoke, the exact location of the fire could be pin pointed by use of a string map and triangulation.

C. The Observer's Cabin

As observers were on duty from dawn to dusk, living quarters were provided in most locations. In the early rush to get the towers built, housing for the observers was not a priority. Many locations were equipped with large wall tents as living quarters, although these structures would only last a year or two. By 1912, any station still using a tent was upgraded to a cabin. These early cabins varied greatly in style, some were crude bark shanties, others were of log construction, with a few consisting of framed lumber. The observers were paid an additional salary bonus to live on the mountain.

In an effort to provide a clean living environment to properly house employees, a standard design was adopted in 1922. The structure was rectangular in shape, 12 feet wide and 16 feet long built of lumber and roofed and sided with asphalt roofing in the form of strip-shingles. The cabin had either a gable or shed style porch roof. Some stations with this style of cabin had upgrades to them in the form of either an addition or a 10 foot by 12 foot outbuilding serving as a tool and storage shed. The original Mt. Adams cabin is intact and remains the sole surviving "Model 1922" observer's cabin in the State. An addition to the cabin built in the late 1940s has since fallen down.

In 1927, the cabin design was slightly altered with the pitch of the roof increased and the structure extended out over the front porch. This created a type of attic which could be converted into a sleeping loft. Both styles of cabins originally had asphalt shingle siding, later replaced with clapboard siding, usually on a case by case basis. Built in this style were new cabins on Loon Lake, Hurricane, Gore, Goodnow, and Spruce mountains (1928), Owl's

Head, Boreas, and Beaver Lake mountains (1929), Black (1930), and Prospect, Ampersand, and Stillwater mountains (1932).

In the 1930s additional work to improve living conditions at many sites included cabin additions or the construction of new outbuildings. With the assistance of Civilian Conservation Corps (CCC) workers access trails to many towers were built or improved and many cabins were replaced. The CCC built: new trails to the stations on Mount Morris, Ampersand, Whiteface, St. Regis, Loon Lake, and Hurricane mountains, along with new cabins on Mount Morris, Lyon, Pharaoh, Belfry, Moosehead, West, Woodhull, and Moose River mountains. More elaborate cabins were developed and placed into service in 1936, with four built at Azure, De Bar, Makomis, and Poke-O-Moonshine mountains. While the blue prints identified a stone fireplace on the front wall of the cabin, the Makomis cabin did not have this feature since road access or fireplace material was not available. An additional cabin with a stone fireplace was built on St. Regis Mountain in 1939. One stone chimney served the main fireplace in front and a smaller chimney was located in the rear left corner of the cabin to accommodate a wood burning cook stove.

In 1941, the Bureau of Forest Fire Control revised the blue prints of the “Model 1936" cabin by providing for a small wood stove chimney in the center of the cabin, and two new options for footings to replace the full stone foundation of the 1936 cabin. Both the 1936 and 1941 cabins contained knotty pine tongue and groove paneling and hardwood flooring. The cabin interior consisted of a main room called the office, a small pantry/kitchen and a bedroom just big enough for two twin size cots. The exteriors were typically clad in milled novelty “drop” siding imitating logs or rough sawn wavey-edge slab siding. Roofs were originally finished in wood shingles. In 1950, observer cabins were replaced at Blue, Hadley, Hamilton, Mount Arab, Prospect, Pillsbury, Swede, and Vanderwhacker mountains.

D. Role of the Forest Fire Observer

A person that operated a fire tower had the title of Forest Fire Observer. In addition to detecting fires and providing communications for fire fighting, the observers also offered information and conservation education to hikers, although this was not part of their official duties. Each party reaching the summit was given a card, signed by the observer on duty, to prove that they had climbed the mountain and visited the tower. With the advent of the "Smokey Bear" campaign to educate the public about forest fire danger and prevention, hikers were given a silver coin featuring Smokey Bear with the slogan, "Only you can prevent forest fires."

Observers worked seasonally, generally from the first of April until the end of October. Other duties included keeping the trail clear and passable and conducting repairs to the telephone line - their only link to their District Ranger who organized fire-fighting crews. They also participated in search and rescue operations, when needed. In 1926, flagpoles were installed on the outside cab of fire towers and uniforms were issued to project a more professional image to the public. When the flag was flying, people knew an observer was on duty.

Many of the observers felt strongly committed to the service and domesticated the grounds around the cabins with vegetable cellars, apple trees and outbuildings to store wood and perishables. Some visitors found children playing on fire tower mountains since several observers lived there with their families. For the fire observers and their families, the time spent in tiny cabins on mountaintops, were defining experiences, remembered today with nostalgia. The joys of living close to nature and doing an important job outweighed the inconveniences of minimal accommodations and the dangers of lightning strikes and bears.

E. Tower communications

Early detection of a fire was the key to reducing fire damage and loss. When a fire tower was placed into service it was equipped with a telephone. Telephone lines usually followed the trail to the tower, but occasionally went directly through the forest to the site. These primitive lines consisted of two bare copper-clad wires supported in the air by insulators on telephone poles or tree mounted standoffs.

Over the years, as technology changed, the role of the observers changed. There was a gradual transition from telephone to radio communications between the towers and their bases, and increasing use of aerial surveillance. The fire towers became important as communications centers when radios started to be used by the Department. The observers would act as relays and dispatchers. In the early 1940's, radio communications were established between each of the 57 towers located in the Adirondacks. This made the task of pinpointing the location of smoke sightings much quicker, which resulted in more efficient fire fighting efforts.

Originally the State sited observation station based on the views from the summit. However, in the 1950s, depending on a tower's location, communication played an increasingly important role. Having an observer with both a radio and telephone, allowed each tower to simulate a "dispatch center" with ties to emergency service and the community. Later in the 1950s battery operated

radios allowed for better communication. By 1952, about half of the towers were equipped with two-way radios, although almost all the fire towers remained connected with a telephone.

In 1976, a DEC radio communications center was established in Saranac Lake to provide two-way radio coverage for nights, weekends, and holidays in order to assist the Forest Rangers engaged in search and rescue missions, forest fire suppression, and other emergency operations. Currently, the DEC Dispatch Center serves as a police dispatch for DEC's Environmental Conservation Officers and Forest Rangers. The primary responsibilities of the center are helping to coordinate safety of the officers and rangers in the field, backcountry search and rescue, wildland fires and violations of Environmental Conservation Law. During non-business hours they assist in dispatching for police authorities throughout the State. Currently, radio repeaters on the summits of Belfry, Black, Blue, Cathead, Gore, Lyon, Pillsbury, and Woodhull mountains are an integral part of the Department's communications network. Additional communications facilities on the summits of Mount Morris, Palmer Hill, and Spruce Mountain provide services to municipalities and other agencies.

F. Trail and Road Features

The fire observation stations were approached by rugged wagon or jeep roads where possible and foot trails where not. Jeep roads were kept narrow, and often passed over exposed ledge. These roads can contain features such as culverts, swales, support and retaining walls.

G. Abandonment of Stations

With the enactment of stronger logging laws and decline in railroads, large fires became a rare event. The intervention of World War II and the years immediately following, led to a fire tower system in disrepair. Changes to the observer personnel due to the war effort led to the first women staffing of fire towers. Funding cutbacks following this period resulted in the temporary closure of all but the most critical stations and an investigation into a less labor intensive means of surveillance.

While the State had used a small number of aircraft on an occasional basis to spot and fight forest fires since the 1930s, the use of aircraft for fire detection increased greatly in the 1970s. Aerial detection methods proved to be far more economical when compared with existing fire tower detection costs. With the use of these flights the Department in 1971, closed 61 of the 102 stations statewide, with 22 experimental aerial detection routes established in the Adirondack Park under an aerial fire surveillance program.

Progressively through the 1980s more and more fire towers closed, but the number of aerial detection routes did not increase. By 1986, the Department had started to reduce the use of aerial detection flights. The Department concluded that the majority of fires were reported by the public and various DEC reports indicated that the fire towers were no longer needed for spotting fires. By the late 1980's, DEC discontinued regular fire detection flights and the staffing of most fire towers. The only towers left open were those frequented by large groups of visitors or those in key fire spotting locations.

The five remaining fire towers in the State were closed by Labor Day of 1990. In the Adirondack Park, this included the fire towers on Rondaxe (Bald), Blue, Hadley, and St. Regis mountains. (See Chapter 5 for specific information on individual towers)

CHAPTER 4: ENVIRONMENTAL SETTING

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ENVIRONMENTAL SETTING

This chapter will focus on the Adirondack Park in general, with an emphasis on natural and cultural resources as they relate to mountain summits and fire towers on Forest Preserve and Conservation Easement lands open to the public. Some of the material for this chapter included information from: Tourism Business, Community and Environment in the Adirondacks, Holmes & Associates, Saranac Lake NY (1999) and other sources.

I. AREA DESCRIPTION

New York State's Adirondack Park, composed of approximately six-million acres, occupies roughly 20% of the State, making the park similar in size to each of six northeastern states, including Vermont, New Hampshire, Massachusetts, Connecticut, New Jersey and Maryland. The overall Adirondack Park boundary outlines an area almost 100 by 100 miles in size located in the northeastern portion of the State.

Today the Park is the largest publicly protected area in the contiguous United States, greater in size than Yellowstone, Everglades, Glacier, and Grand Canyon National Park combined and has gained international recognition as part of a larger biosphere reserve. The region is best known for its mountains (including the highest peaks in New York), lakes (more shoreline than Vermont and New Hampshire combined) and large intact temperate hardwood forest habitats.

Established in 1892, amid concerns for the water and timber resources of the region, the Park is divided about evenly between public and private lands*, which are intermingled. The Adirondack Park contains a checkerboard of publicly owned Forest Preserve lands (2.7 million acres) and private lands (3.2 million acres), the majority of which are commercially managed forests.

The Adirondack Park's public lands provide the largest assemblage of wild lands east of the Mississippi River and belong to all the people of New York State. Of the Forest Preserve lands, nearly half of the total acreage is classified as "wild forest", which includes 15 of the Adirondack Park fire towers. Other categories of State Lands are: Wilderness, Primitive, and Canoe areas; Intensive Use areas (such as public campgrounds), and State Historic Sites. The various State Land Classifications are depicted on the

Private land, whether owned by individuals or organizations, within the Adirondack Park is under the control of the owner(s). Opportunities and resources exist on these private lands for uses that may not be available on public land and vice versa. This study will attempt to acknowledge the inter-relationship between private land and/or services to fire towers on Forest Preserve or Conservation Easement lands.

official Adirondack Park Land Use and Development Plan Map and State Land Map (APA, 2003).

Land uses in the Adirondack Park are jointly managed by the Adirondack Park Agency and local governments. The APA regulates development on private land; its land use and development plan having a tiered zoning system. All private lands are mapped into six land use classifications: hamlet, moderate intensity use, low intensity use, rural use, resource management, and industrial use. Guidelines are specified for types of allowed uses and the intensity of development within each category, based on number of buildings per square mile.

A. Adirondack Park Demographics

Within the Adirondack Park, there are about 130 settlements, 103 municipal jurisdictions and 12 counties. The Adirondack Park has a year-round population of about 135,000 permanent residents, and more than 70,000 seasonal residents. With a density of 19 people per square mile, the Adirondack Park is similar the large states out on the Great Plains and in the West, such as Nebraska or Utah (both having 21 people per square mile). In contrast, the average population density in upstate New York is 227 people per square mile.

State or Local Government provides almost 33% of employment in the Adirondack Park. Close to 7% of the employment in the Park is based in the paper, lumber and wood products sectors, compared to about 2% for the US as a whole. Tourism activity, in terms of number of people who visit the Park annually, is an unknown quantity. The wide variety of access points to the Adirondacks make an accurate total of people difficult to quantify. Estimates of seven to ten million visitors a year are common, but unsubstantiated. According to one study, tourism accounts directly for at least 17% of all employment in the Adirondack Park, including total employment in eating and drinking establishments (Rockefeller Institute, 1994). An unknown percentage of retail employment would also be dependent on tourism.

What makes the Adirondack Park unique is that it one of the most accessible wild areas in the country, within a half day's drive of 75 million people. There are at least twelve major highways entering the park, including ferries and bridges linking to Vermont, Quebec, and Ontario. The southern side of the park is closer to major population centers, and lies just north of the New York State Thruway (Interstate 90). Interstate 87 (the Adirondack Northway) traverses the eastern side of the Adirondack Park between the Capital District of New York and Montreal, Canada. The northern and western portions of the Park are somewhat more remote but can be reached from Interstate 81 or NYS routes 3, 28 and 11.

B. Terrain/Topography

The Adirondack mountains are often included by geographers in the Appalachian Mountains, but they are geologically more similar to the Laurentian Mountains of Canada. They are bordered on the east by Lake Champlain and Lake George, which separate them from the Green Mountains in Vermont. They are bordered to the south by the Mohawk Valley and to the west by the Tug Hill Plateau, and to the north by the St. Lawrence River. Unlike elongated ranges like the Rockies and the Appalachians, the Adirondacks form a circular dome, 160 miles wide and one mile high. The mountains within the region are part of the anorthositic Canadian Shield, the outer surfaces of which are typically dense, metamorphic rock. The cumulative effects of running water, weathering, and other agents of change, glacial erosion and deposition have altered the area landscapes.

Within the Park, elevations change from a few feet above sea level to 44 named peaks more than 4,000 feet high. The highest elevations are located primarily in the northeastern section of the Adirondack Park where the rounded, glaciated mountains encompass parallel ranges running southwestward from Lake Champlain. In the central and western parts of the region, the topography is generally flatter, characterized by rolling hills interrupted by isolated peaks.

While towers were generally located at high points in the surrounding terrain, four fire towers within the Adirondack Park occur at elevations below 2,000 feet, with the Palmer Hill fire tower the lowest elevation site, located at 1,146 feet above sea level. Twenty fire towers are located at elevations between 2,000 feet and 3,500 feet. Of the 100 highest peaks in the Adirondack Park*, eight have fire towers at summit elevations between 3,500 feet and just under 4,000 feet. The highest elevation fire tower is on the summit of Snowy Mountain (3,899'), which is also the highest point in Hamilton County.

C. Natural Resources

While the fire towers are no longer used as fire observation stations, wildland fire suppression and fire aviation operations are still the responsibility of DEC Division of Forest Protection (Ranger Division) as mandated by the Environmental Conservation Law and Title 6 of the New York State Code of Rules and Regulations. The State is divided into ten Fire Danger Rating Areas (FDRA). The

*List courtesy of the Adirondack Mountain Club that identifies peaks greater than 3,425 feet in elevation.

Adirondack Park includes portions of the High Peaks, Adirondack, and Upper Hudson/Champlain FDRAs. A description of each of the Adirondack FDRAs including information on vegetation, fire climate, topography, NWS fire weather zones, fire occurrence history and other influences can be found in Appendix.

The New York Natural Heritage Program (NYNHP) is a Statewide biodiversity inventory that develops, maintains, and interprets an integrated system of conservation databases. The NYNHP is a cooperative effort between the Nature Conservancy and DEC to identify, inventory, and manage the occurrence of rare plants and animals and exemplary natural communities in New York State. Some of this information is available to Department staff via Geographic Information Systems (GIS) using the DEC Master Habitat Data Bank. In an effort to maintain confidentiality and to protect these critical resources, the specific locations of sensitive species will not be identified in this study. Although the specific location of these species is exempted from public Freedom of Information Laws to protect the species, this information is used and integrated by DEC in all resource planning activities.

Based upon available UMPs and Natural Heritage Program information from a 2007 review of the Master Habitat Data Bank for Forest Preserve and Conservation Easement lands, there are three identified exemplary natural communities, four endangered, threatened, or special concern plant species, three endangered, threatened, or special concern animal species within a mile of fire tower sites. The following types sites were identified (refer to specific individual UMP for more detailed information):

Exemplary Vegetative Communities

The Adirondack Park includes many exemplary vegetative communities that serve as outstanding examples of the biological diversity of the Adirondack Park (New York State Natural Heritage Program, 2002). A brief listing of community and example fire tower summit locations include (Reschke, 1990 and Edinger et al., 2002):

- **Mountain Spruce-Fir Forest** - Not listed in New York State, not listed federally. Rarity G4, S3. Description: Within New York State, this community is limited to the Adirondack and Catskill Mountains. Concentrated in the Adirondack Mountains where it reaches large patch size in a few occurrences on mountains which underwent large historic fires. The relatively open canopy is dominated by red spruce and balsam fir, and the associated vegetation may be sparse and patchy, with numerous rock outcrops and slides. Example Locations: Black, Hurricane, and Vanderwacker mountains.

- **Cliff Community** - (G5, S4, unprotected, EO rank-AB)

Description: A sparsely vegetated cliff community that occurs on vertical exposures of resistant, non-calcareous bedrock or consolidated materials; these cliffs often include ledges and small areas of talus. Occurs at or just below the summits of Snowy and Poke-O-Moonshine mountains.

- **Calcareous Talus Slope Wooded** - Occurs at or just below the summit of Poke-O-Moonshine Mountain.

Threatened, Rare and Endangered Plants

Arctic-Alpine vegetation covers a very small area of the Adirondack Park with the majority of alpine zone communities located within the High Peaks Wilderness. While no existing mountain summits with fire towers contain this sensitive habitat, the summit of Whiteface Mountain does have some arctic plants.

The New York Natural Heritage Program (NYNHP) has identified the existence of some species known to be present in one or more locations in the immediate vicinity of a fire tower or fire tower trail. Identified species include historic instances of Northern running pine (Goodnow Mt.) and Northern wild licorice (Snowy Mt.), along with Northern wild comfrey and Appalachian fir moss (Hurricane Mt.).

Wildlife

- **Adirondack Subalpine Forest BCA**

In 1997, New York State created a model Bird Conservation Area (BCA) program based on Audubon's Important Bird Areas or (IBAs) program under §11-2001 of the Environmental Conservation Law of New York. The program is designed to safeguard and enhance bird populations and their habitats on selected state lands and waters. In November of 2001, New York State designated the Adirondack mountain summits above 2,800 feet in Essex, Franklin, and Hamilton counties as the Adirondack Subalpine Forest Bird Conservation Area (BCA). The site was nominated because of its diverse species concentration, individual species concentration and its importance to species at risk, in particular the Bicknell's Thrush (special concern).

The vision for the Adirondack Subalpine Forest BCA is to "continue to maintain the wilderness quality of the area, while facilitating recreational opportunities in a manner consistent with conservation of the unique bird species present" (NYSDEC, 2001). The Department has developed Management Guidance Summary to identify education and research needs, and to outline operational management considerations.

Of the ten mountain summits with fire towers above 2,800 feet in Essex, Franklin, and Hamilton counties, Mount Morris and Mount Adams are on private land. The remaining eight fire towers (Blue, Hurricane, Loon Lake, Lyon, Pillsbury, Snowy, St. Regis, and Wakely) are on Forest Preserve land. In addition, Gore Mountain in Warren County may contain Bicknell's Thrush habitat.

- **Common Raven Nesting Sites**

The raven generally is confined to the more remote areas of the Adirondack Park. It is a mountain bird, favoring areas with cliffs and crags suitable for nesting locations.

- **Peregrine Falcon Nesting Areas**

Peregrine falcons, an endangered species in New York State, nest on cliffs in the Adirondack region. The population of Peregrine Falcons has steadily grown in the state due to a successful hacking program initiated by DEC in this region in the late 1970s. Human disturbances, such as rock climbing on cliffs containing eyries, can be a potential problem to nesting Peregrines. Occurs near the summits of Azure, Hurricane, and Poke-O-Moonshine mountains.

- **Hawk Watching Areas**

Some of the best hawk lookouts in the Adirondacks are along the foothills of the Champlain Valley. One popular site is Belfry Mountain.

- **Timber Rattlesnake**

Timber rattlesnakes play an important ecological role in deciduous forest communities as a small mammal predator. This species has a limited distribution in the state, occurring in northeastern New York in the Lake George/Lake Champlain basins (DEC, Amphibian and Reptile Atlas Project, unpublished data). The population in this area is near the northernmost limits of its geographical range. This snake prefers forested areas with rocky outcrops (with southern exposures), dry ridges, talus slopes, and high rodent populations. (Black Mountain)

D. **Visual Resources**

New York State lands and waters within the Adirondack Park provide a diverse visual resource consisting of scenic byways, unbroken forested lands, wetlands, lakes and ponds, all within the visual backdrop of a mountain setting. The blend of private and public lands give the Adirondacks a diversity of open space and recreational lands, of wildlife and flora, of mountains and meadows, and people of all walks of life.

The existing configuration of fire towers is generally evenly distributed throughout the Adirondack Park, with a few locations (southwest and northwest parts of the Park, High Peaks area, Schroon Lake area) lacking towers. In some instances these areas include sites where historic fire towers were located in the past.

Fire towers, by their very nature, are conspicuous structures. They were built to be taller than any surrounding vegetation, and located on sites (usually mountain tops) that provided unobstructed views of the surrounding country side. Fire towers are both a destination and a focal point for hikers. Rising above the tree canopy, they can provide unsurpassed views on clear days and are generally visible from great distances. Since the fire towers were originally sited with the idea of providing a degree of overlapping land coverage, other towers or historic fire tower summits may be visible from some tower cabs, depending on area topography.

The visibility of towers from highways have enabled them to become local landmarks for some people, given the historical context of their nature and long standing presence. As discussed in Chapter 2.VII.C, many fire towers can be seen from designated scenic byways. A few other fire tower summits such as Hadley Mountain can be seen from town and county roads.

Of the 25 fire tower summits open to the public in the Adirondack Park (both private and State lands) only three (Black, Hurricane, and St. Regis mountains) provide substantial views in many directions. The majority of fire tower summits have only partial views from the base of the tower or immediate vicinity. In certain cases, rock outcrops or natural openings require walking a short distance from the summit or require leaf off conditions in late fall and winter. Eight fire towers (Mt. Adams, Cathedral Rock, Kane, Pillsbury, Spruce, Stillwater, Wakely, and Woodhull mountains) have forested summits that require a climb up the tower for any significant view. There are no documented officially maintained scenic vistas associated with fire tower summits.

E. **Air Quality**

One of the most important features of the Adirondacks is clean air*. There are no significant air polluting activities within the Adirondacks that negatively affect sight visibility, although there is evidence to indicate that particulates and sulfur oxides generated by mid-western urban/industrial sources are conveyed eastward to

Federal Clean Air Act Standards rate Adirondack air as Class II (ratings are from Class I to IV, with I being the cleanest).

the Park by the prevailing winds. Summit views can be obscured by haze caused by out of State air pollutants when a large number of small diameter particles exist in the air.

DEC measures air pollutants across the state, using continuous and/or manual instrumentation. These sites are part of the federally-mandated National Air Monitoring Stations Network and the State and Local Air Monitoring Stations Network. A few sites are located within or near the periphery of the Adirondack Park, with one site on the summit of Whiteface Mountain. For more information refer to the following link: http://www.dec.ny.gov/chemical/33276.html

F. **Sound Environment**

The natural sound environment is a valuable resource given that the pervasiveness of human made noise is increasing in our society. The majority of fire towers are at interior locations, generally well away from road traffic and its noise. Occasional complaints from the public have been received in the past concerning the noise from the wind plant on Black Mountain. Commercial and noncommercial aircraft can be seen and heard, usually more frequently at locations closer to local airports. Occasional aircraft noise in the Adirondack Park is associated with military training overflights**.

II. HISTORICAL/CULTURAL INVENTORY

The Adirondack Park's historical and cultural resources are important not only to area residents, but more generally to all the people of New York State. Within the Forest Preserve, the number and type of structures is generally limited due to the requirements of the NYS Constitution and the APSLMP.

A. Cultural Values

The term "cultural resources" encompasses a number of categories of human created resources. "Cultural resources are the collective evidence of the past activities and accomplishments of people. They include buildings, objects, features, locations, and structures with scientific, historic, and cultural value." (New York Archaeological Council, 2000.) Fire towers and observer cabins along with their remains are associated with the period of historic significance ranging from the 1890's through the 1950's, depending on the particular history of each tower site.

** *Military aircraft use the airspace over the Adirondack Park. Although aircraft noise does not appear to affect wildlife, visitors to the area are sometimes surprised by the aircraft noise and low-level overflights. Level of miliary training use and/or type of aircraft varies depending on the proximity of the identified training routes to individual fire tower sites. Some flights originate from the Air National Guard's 174th Fighter Wing, stationed in Syracuse.*

Many of the surviving fire towers have been found eligible for inclusion in the State or National Register of Historic Places and a number of towers were formally listed in 2001. Under State Law properties found eligible for listing in the National Register (a program originating in Federal Law) are automatically listed in the State Register. For state agencies, Register listing and eligibility are effectively the same; obligating the Department to treat these resources appropriately and requiring that special procedures be followed should it be necessary to remove or otherwise affect these resources. The listing of private towers requires the permission of the landowner prior to submission to the National Register. The management or preservation of privately owned fire towers such as those on Swede Mountain and Palmer Hill (on State Register and eligible for National Register), is outside the scope of this study.

The following table provides a brief inventory of cultural resources on fire tower summits on Forest Preserve, Conservation Easement, and private lands where DEC either owns the fire tower or observer's cabin or where the Department has management responsibility through an easement.

Table I - Cultural Resources

State owned Tower Name	National Register	State Register	NHLR[3]	Listed Contributing or Eligible Features
Azure Mt.[1]	X	X	X	Structure: Tower Site: 500 foot square summit area, Azure Mt. trail/jeep road, and sites of 2 former cabins
Belfry Mt.[2]	Not Eligible			
Black Mt.[2]	Not Eligible			
Blue Mt.[1]	X	X	X	Structure:Tower, stone benchmark, remains of 1949 cabin Site: 500 foot square summit area, foot trail
Cathead Mt.[2]	Not Eligible			
Gore Mt.[2]	Not Eligible			
Hadley Mt.[1]	X	X	X	Structure: Tower, cabin, root cellar, garden site Site: 1000 foot square summit area, foot trail
Hurricane Mt.	X	X	X	Structure: Tower Site: 500 foot square summit area
Kane Mt.[1]	X	X	X	Structure: Tower Site: 500 foot square summit area, Kane Mt. South trail
Loon Lake Mt.	Nominated	X	▬	Structure: Tower, cabin, wood shed Site: summit area, foot trail
Lyon Mt.	Eligible	X	▬	Structure: Tower Site: summit area, foot trail
Mt. Adams	X	X	X	Structure: Tower, cabin, shed Site: 500 foot square summit area, cabin site, foot trail
Mt. Arab [1]	X	X	X	Structure: Tower, cabin, root cellar, foundation of original cabin Site: 500 foot square summit area, trail to summit
Owl's Head Mt.	Eligible	X	X	Structure: Tower Site: summit area, foot trail
Pillsbury Mt.	X	X	X	Structure: Tower, cabin, shed Site: existing oval shaped clearing of 94' x 130' at summit, trail.
Poke-O-Moonshine Mt.[1]	X	X	X	Structure: Tower, spring box Site: 500 foot square summit area, jeep trail, cabin ruin

State owned Tower Name	National Register	State Register	NHLR[3]	Listed Contributing or Eligible Features
Rondaxe (Bald) Mt.	Eligible	X	X	Structure: Tower Site: summit area, foot trail
Snowy Mt.[1]	X	X	▬	Structure: Tower, cabin ruin, spring housing Site: 500 foot square summit area, foot trail
Spruce Mt.	Eligible	X	▬	Structure: Tower Site: summit area, foot trail
St. Regis Mt.	X	X	X	Structure: Tower Site: 500 foot square summit area, trail to summit from cabin site, previous cabin location.
Stillwater Mt.	Eligible	X	▬	Structure: Tower Site: summit area, foot trail
Vanderwacker Mt.	Eligible	X	▬	Structure: Tower, older cabin Site: summit area, foot trail
Wakely Mt.	X	X	X	Structure: Tower Site: 2,250 foot square summit area, foot trail.
Woodhull Mt.	Eligible	X	▬	Structure: Tower Site: summit area, foot trail

[1] These fire towers were part of a multiple property submission of 10 Fire Observation Stations of the New York State Forest Preserve in the Adirondack and Catskill Parks. Subsequently, with assistance from the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), Field Services Bureau, these towers were identified as meeting the criteria for listing on the State/National Register of Historic Places. Contributing features for nominated properties can be separated into structures and sites. Summit areas enclosing the fire tower can vary from 500 square feet to 1,000 square feet. Trail boundaries can be an un-described width or specified distance from each side of the center of the original foot trail, including any associated features. Specific trail names are provided when there is more than one trail to the summit to clarify which trail is within the nominated boundary.

[2] These fire towers may be ineligible due to the large amount of structural modifications to accommodate communications.

[3] NHLR- National Historic Lookout Register. NHLR listing has no legal status.

▬ Nomination candidates that have not been listed yet.

Note: Additional fire towers that are open to the public but not under the jurisdiction of DEC were excluded from this table. For example, the fire towers at Cathedral Rock and the two museum sites are not considered eligible since they did not perform a fire control function at their current location. The Goodnow Mountain fire tower is listed in the National Historic Lookout Register.

Site: location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.

Structure: a functional construction made for purposes other than creating shelter. In addition to the National and State Register listing, fire towers can be listed in the National Historic Lookout Register (NHLR)*.

Fire Tower and Observer Cabin Significance

The steel towers are significant in two contexts:

(1) they are closely associated with the conservation, development, and management of recreational use in the first public Forest Preserve in the United States; and

(2) they are part of the evolution of 19th and early 20th century mountaintop observation towers used for scientific exploration, fire protection, and recreation in the forested mountain ranges of New York State.

State/National Register Requirements for Fire Towers

The towers were intended as durable, utilitarian structures but not as permanent ones. In general, to qualify for registration, steel towers should have been built 50 years before present time.

Criteria for Evaluation: The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

a) that are associated with events that have made a significant contribution to the broad patterns of our history; or

b). that are associated with the lives of persons significant in our past; or

c). that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that

The NHLR is maintained by the American Resources Group® in Washington, D.C. This is the U.S. equivalent of the World Lookout Register. The registers are a cooperative effort of the Forest Fire Lookout Association, the National Forestry Association, the National Woodland Owners Association, the U.S. Forest Service, state foresters and Interior agencies.

Listing in the National Historic Lookout Register is often a first step toward eventual nomination to the National Register of Historic Sites maintained by the U.S. Department of the Interior. Sometimes necessary structural modifications preclude listing in the latter register, and the only appropriate recognition given to these historic lookout sites is that afforded by the NHLR.

When a structure is less than 50 years old, but has sufficient historical significance to be registered, the lookout is listed in the National Lookout Register with an NHLR number, and is automatically transferred to the NHLR upon the 50th anniversary of its construction.

represent a significant and distinguishable entity whose components may lack individual distinction; or

d). that have yielded, or may be likely to yield, information important in prehistory or history.

The Fire Observation Stations are significant under National Register criteria A and C. Under criterion A, the fire observation stations are closely associated with the development of the State's Forest Preserve, the first in the United States that predates the federal system, and the development of the Forest Ranger service. While the primary purpose of the stations was to provide early warning of forest fires, the observation towers were also instrumental in stimulating and managing recreational use in the early twentieth century, and cultivating within the public a modern conservation ethic. As such, they also represent the first public recreational structures in the nation's first Forest Preserve. Under criterion C in the area of architecture as representative examples of a distinct property type, the fire observation stations are a group of well-preserved early twentieth-century prefabricated fire observation towers and associated cabins sites and other support structures. In addition to retaining substantial physical integrity, a tower should retain its integrity of setting. A tower need not be in its exact original location but should remain on its original summit in a mountaintop setting similar to its original location.

In the case of the lightweight models purchased in 1916, the original truss design and construction, and steel staircase stringers as modified should be intact. In the case of the heavier models purchased in 1917 and later, the original truss design and construction, with integral staircase, should be intact. Non-original replacement steel members are common due to the harsh exposure on the summits subject the material to the abrasion of galvanized finishes and metal fatigue over time. Given the nature of the construction, structural repairs, reinforcement, enlargement or relocation since their original construction may be acceptable so long as the design of the original truss structure remains intact. Relocation within the confines of the original summit or extension in height by the addition of one or more lower stages in the manner of the original construction may be acceptable when done during the tower's active service life (Snowy Mountain, for example) such as or as an alternative to removing trees to maintain viewsheds from the cab. Replacement steel members, wood treads and flooring in the cab, glazing in the cab, roofing, and additions of raised stair railings which do not compromise the structural integrity, may also be acceptable. The towers should be capable of functioning, but need not be in use.

For example, collectively the existing steel fire towers on Arab, Azure, Blue, Hadley, Kane, Poke-O-Moonshine, and Snowy mountains encompassed the years 1916 to 1925 and included one of the first generation of steel towers used in the Forest Preserve. (Information from 2001 National Register nomination)

State/National Register Requirements for Observer Cabins

In general, cabins and cabin remains should have been built 50 years before present time.

Under criterion A, a cabin should be associated with the development of the station where it is placed. Under criterion C a cabin should be consistent with the rustic character of standard cabins and retain its integrity of setting. Qualifying cabins should retain the outward form, the original plan element and have outer walls finished with wood. Alterations to original roof finishes, chimneys, porch footings, and window and door treatments may be acceptable if made during the building's period of active service. The relocation of a cabin from its original site may also be acceptable if it is still located in close proximity to the tower and continues to contribute to the overall understanding of the station and its historical context. Given the severe climate extremes to which these buildings are subjected, in-kind replacement of original finishes shall not be discouraged in order to preserve the building as a whole.

Collectively (10 tower nomination), the cabins and sites encompass the years 1917 to 1950. The ruins of cabins at two stations are also considered to be contributing features due to age (Blue Mountain) or its likely association with the Civilian Conservation Corps (Poke-O-Moonshine Mountain).

Trail and Road Features Significance

Cultural significance is enhanced by the survival of original jeep trails, which were built to provide access for both fire protection and recreational needs, and/or the observer cabins or cabin sites, outbuildings and other structures.

Trails and roads are significant in two contexts:

(1) they are associated with development of conservation and recreational use in the first public Forest Preserve in the United States; and

(2) they were closely associated with the evolution of mountaintop observation towers.

Trail and Road Features Registration Requirements

In general, to qualify for registration, trails and roads leading to fire observation stations should have originated 50 years before present time and should continue to provide public access to the summit, be capable of functioning, but need not be in use. Under criterion A, a trail or road should be associated with the development of the station where it is placed. Under criterion C a trail or road should retain its integrity of setting and physical appearance which reflects its historic period of significance.

For example, access to many fire towers follows a large portion of the original trails and roads to the summit. Some were improved by the CCC in the 1930's.

Other Feature Classifications

Recent recreational functions and administrative uses by the Department after 1972, and those features associated with later time periods, may have altered the tower and/or other summit facilities. Based on whether or not these resources meet the State Register of Historic Places criteria, these features can be classified as Historic Fabric, Non-Historic Fabric, or Unevaluated.

B. New York State Historic Preservation Act of 1980

The New York State Historic Preservation Act of 1980 (SHPA) requires DEC to consult with OPRHP regarding any facilities which are listed on the National Historic Register, or are eligible for listing. An agreement between DEC and OPRHP commits the Department to taking affirmative steps to facilitate the preservation of some historic fire towers and allows for the removal of others. (See Chapter 8.V for more specific information.)

C. Other Fire Tower Roles

New York's fire towers served a dual role of aircraft spotting and detection during World War II, the Korean War and very early on in the Cold War. A quotation from a 1953 letter from the US Air Force found in the Mt. Adams observer's cabin acknowledges the vital role fire towers performed going beyond fire detection:

> "I would like to take this opportunity to express my sincere appreciation to the men who operate the fire towers throughout this area. Through their willingness to take on the additional job of Aircraft spotting, the country has benefitted by being better prepared to ward off a surprise attack from the air.
>
> This unselfish contribution on the part of these men is indicative of the spirit the founders of this country possessed. Patriotism is not measured by words and flag

waving, but by such action as exhibited by people who give their time without thought of financial rewards.

Now that the winter months have arrived and the fire towers are closed, I want to thank you, The Filter Center, and the American people for the splendid job you have done during the summer months in helping to maintain an adequate warning system for your country." Dominic Giambruno, Captain, USAF

CHAPTER 5: FIRE TOWER INVENTORY

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FIRE TOWER INVENTORY

The following Chapter includes a brief inventory of current or former fire tower locations and the relationship to individual listing on the State or National Historic Register. Specific APSLMP language concerning fire towers and communications facilities within each Forest Preserve land classification, the non-conforming status of some facilities, along with guidance for conforming facilities and uses is described. The status of towers on private land and other uses of towers, such as for radio communications is also documented.

More detailed individual fire tower records listing structures and improvements on fire tower summits including: towers, communication facilities, designated campsites, foot trails, access roads, register boxes, helicopter platforms, information boards, outhouses and springs are in Appendix.

I. GENERAL INFORMATION (map in Appendix)

Of the 110 steel fire towers built across New York State by Forest Fire Control staff* between 1909 and 1950, 57 were located in the Adirondack Park. Of those 57 towers, only 34 still exist today. Twenty are located on Forest Preserve lands and 14 on private or municipal land. Eleven towers on Forest Preserve land have been restored, or are in the process of being restored and eight towers under DEC jurisdiction are used as bases for radio relay equipment. (See fire towers facility table in the Appendix)

Three fire towers structures have been moved from their original locations. The towers at the Adirondack Museum and Adirondack Center have been reassembled from removed towers to serve as display and educational exhibits at these museums. An additional tower was reassembled at the Ranger School campus near Cathedral Rock as a memorial tower dedicated to the forest rangers and observers. These three towers never served an active fire control function at their current locations but are briefly discussed in this study due to their past use on Whiteface, Tooley Pond, West and Kempshall mountains and their important role in public recreation and education.

The height of a fire tower is measured from the tower base to the floor of the tower cab. The concrete footings are not calculated in determining tower height. These footings vary in height from fire tower to fire tower, and were placed to provide a level plane to erect the fire tower upon. Fire tower heights in the Adirondack Park range from the shortest at Mt. Morris (22 feet) to the tallest at Meenanga and Spruce mountains (73 feet). The tallest Forest Preserve fire tower in

**The Bureau of Forest Fire Control was re-named the Bureau of Forest Protection and Fire Management in 1976. The Forest Rangers are now part of the Division of Forest Protection, within the Office of Public Protection.*

the Adirondack Park is at the summit of Wakely Mountain (70 feet). The most readily accessible fire towers are those associated with the Adirondack Museum and Adirondack Center while the more remote fire towers on the summits of Mount Adams, Pillsbury, Wakely, and Woodhull mountains are a greater distance from public highways, probably contributing to the low use levels at these sites.

II. PREVIOUS FIRE TOWER MOUNTAINS

Research was started in the late 1960's into the effectiveness of all fire towers with respect to radio communications, number of fires spotted, cost of operation, and amount of visitor use. In 1971, the Department changed its reliance for forest fire detection from tower observation stations to aircraft patrols. There were several factors for this change:

- Increasing cost of maintenance and operation of fire towers.
- Problems in hiring and retaining reliable fire tower observers.
- Aerial detection would effect a saving of $100,000 per year or more.
- Aerial detection would provide better, more complete information about each smoke reported
- Detection aircraft can provide other services such as assisting in search and rescue activities and reporting non-fire related disturbances.

The number and frequency of flights was based upon fire occurrence and predicted fire danger. In order to maintain the radio communications capability necessary for administrative and fire suppression activities, 41 of the original 102 towers were retained. These remaining towers were manned for the fire season, serving to provide a radio relay point between the detection aircraft and the Forest Ranger force. The 1980's showed the observers in towers reporting only a few percent of all fires, while the public was reporting most fires. As time went on little used inactive towers were abandoned and became a safety concern.

Over the years, 26 towers in the Adirondack Park were removed due to a variety of reasons. Some of the towers were sold or given away for free. The following are locations of previous fire towers along with a summit view description, if relevant:

Ampersand Mountain (High Peaks Wilderness - 1911 station, 1921 tower erected, 1970 closed, removed in 1977) Bare summit with some of the best views in the Adirondacks. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Although an observation station was established in August 1911, the first structure was a stone hut or cabin for the observer, later replaced by a 22 foot tall steel Aermotor LS40 tower. The tower was removed in August 1977 because it was deemed excess to the needs of the Bureau of Forest Fire Control and was additionally a "non-conforming use" in a wilderness area. Ampersand has three

prominent summit knobs; its bare peak a legacy of Verplanck Colvin's surveying crew, who in 1873 cleared it for triangulation lines of sight to neighboring mountains. The fire tower was sited near the easternmost knob. About 1.5 miles from the trailhead is a small clearing where the fire observer's cabin once stood. A mountaintop plaque commemorating the observers service reads: "Hermit of Ampersand, who kept Vigil from this Peak, 1915-1923"

Bald Mountain (Private Land - 1911 station, 1919 steel tower erected, 1970 closed, removed in 1975)

The first structure was a wooden tower, later replaced by a 47 foot tall Aermotor LS40 tower. This facility is not to be confused with the Bald Mountain near Old Forge. Two Bald mountains could not exist as fire towers so the name Rondaxe was given to the Bald Mountain near Old Forge, taking the name from the adjacent Rondaxe Lake. In 1975 since the station was closed and would not re-open, ownership of the tower was transferred to the land owner at that time, the Diamond Match Company. The owner of the land did not want to encourage the public to continue to visit the tower resulting in the legs being cut and the structure being pulled over. It has been reported that the tower remains where it fell.

Beaver Lake Mountain (Pepperbox Wilderness - 1910 station, 1915 wooden tower erected, 1919 steel tower erected, 1945 temporarily closed, 1947 closed, removed in 1977)

When this observation station was established in July 1910, no tower was immediately erected due to the lack of tree cover on the mountaintop. The first structure was a wooden tower, later replaced by a 47 foot tall Aermotor LS40 tower. This facility operated continuously until World War II. It was reported that during the war turnover of observers was unusually high and it was nearly impossible to keep the tower staffed. The tower was designated as a "secondary tower" in 1941 and operated for only part of the year and briefly in 1942. The State temporarily closed the tower in 1945, and with the operation of the nearby Number Four fire tower, the Beaver Lake Mountain facility was officially closed in 1947. This structure was deemed excess to the fire detection needs of the Bureau of Forest Fire Control and was classified as a "non-conforming structure" in the Wilderness Area. In 1966, the cabin was burned. In 1977, a crew of Forest Rangers dismantled the tower, and the pieces were flown out by helicopter. The site is difficult to reach since the original trail is gone.

Boreas Mountain (Private Land - 1911 station, 1919 steel tower erected, 1971 closed, removed in 1988) Beautiful view to the east of Elk Lake, Clear Pond, Nippletop, Dix, Hough, and McComb. Limited view of Marcy and the Great Range.

The first structure was a wooden tower, later replaced by a 47 foot tall LS40 Aermotor tower. The State closed the fire tower at the end of 1971 because of a limited view. The observer could only see 31% of the surrounding area due to some

mountains blocking the view. Private trail up this mountain begins on private land at the Elk Lake Lodge. A clearing indicates the old cabin site.

Cat Mountain (Five Ponds Wilderness - 1910 station, 1917 steel tower erected, 1970 closed, removed in 1977) Views without the tower only to the east, towards Cat Mountain Pond, the Oswegatchie River valley and High Falls area.

The first structure was a 37 foot tall wooden tower, later replaced by a 47 foot tall Aermotor LS40 tower. This tower was removed about 1977 because it was deemed excess to the needs of the Bureau of Forest Fire Control and was a "non-conforming structure" in the wilderness area. The tower abutments can still be seen on the exposed rock ledges at the summit. Marked DEC trails provide access from Wanakena or Cranberry Lake.

Catamount Mountain (Private Land - 1911 station, 1917 steel tower erected, 1971 closed, removed in 1975) View of Stark Reservoir and boreal woodlands to the east.

Originally called Bog Mountain because of the nearby swamp, Verplanck Colvin used the summit during his survey of the Adirondacks. The first structure was a wooden tower, later replaced by a 35 foot tall Aermotor LS40 tower. This tower, situated on private lands, was removed in 1975. Summit and trail are on private land.

Crane Mountain (Wilcox Lake Wild Forest- 1911 station, 1919 steel tower erected, 1970 closed, removed in 1987) View from the summit.

The first structure was a wooden tower, later replaced by a 35 foot tall Aermotor LS40 tower. Crane Mt. Tower was declared surplus in 1984 and removed in 1987. The State sold the observer's cabin to a private individual who rebuilt the structure on his property. Few traces remain of tower or cabin. There are two trails over steep terrain to the summit.

Debar Mountain (Debar Mountain Wild Forest - 1912 station, 1918 steel tower erected, 1970 closed, removed in late 1970s or early 1980s) Partial views south towards Meacham Lake, Clear Pond, and the Deer River Flow.

The first structure was a wooden tower, later replaced by a 35 foot tall Aermotor LS40 tower. The summit can still be reached by a trail that begins at the Meacham Lake Campground that starts as gentle inclines on old logging roads becoming steep and rocky at the end. Foundations from the old observer's cabin are still visible.

Dunn (formerly Dun) Brook Mountain (Private Land - 1911 station, 1920 closed, removed in the early 1900's.)

This facility was established with a wood tower. Due to the remote location of the facility, and inactivity the site was abandoned in 1919. The Goodnow Mt. facility, opened in 1922, replaced this station.

Fort Noble Mountain (formerly Fort Noble Mt. Primitive Area, reclassified West Canada Lakes Wilderness - 1910 station, 1916 steel tower erected, 1978 closed, removed in 1985) No views at the summit. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Verplanck Colvin used the summit during his survey of the Adirondacks. The first structure on Ft. Noble Mt. was a 30 foot tall wooden tower, later replaced by a 50 foot tall Aermotor LL25 tower*. It was of a lighter weight than the 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. This structure was later removed because it was deemed excess to the fire detection needs of the Bureau of Forest Fire Control and was classified as a "non-conforming use" in the primitive area. Even though the location is close to a NYS highway, the trail has been abandoned and requires a ford across West Canada Creek. Piers from the tower are still visible.

Hamilton Mountain (Silver Lake Wilderness - 1909 station, 1916 steel tower erected, 1971 closed, removed in 1977) No views due to the height of trees at summit.

The first structure was an 18' wooden tower, later replaced by a 50 foot tall Aermotor LL25 tower. It was of a lighter weight than their 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. The site was chosen as one of the first six fire observation stations in the Adirondacks and was one of the first towers closed by DEC. This structure was removed because it was deemed excess to the fire detection needs of the Bureau of Forest Fire Control and was classified as a "non-conforming structure" in the wilderness area. Although most of the old trail is on State land, the first half mile is along private land, closed to the public.

Kempshall Mountain (High Peaks Wilderness - 1911 station, 1918 steel tower erected, 1971 closed, removed in 1977) No views due to the height of trees at summit.

The first structure was a wooden tower, later replaced by a 35 foot tall Aermotor LS40 tower. This tower was removed because it was deemed excess to the fire detection needs of the Bureau of Forest Fire Control and was classified as a "non-conforming structure" in the wilderness area. Portions of this tower and the West Mountain tower were used to erect the tower that now stands at the Essex

**For safety reasons, both for the observer and the general public, wood steps were added to all the LL25 fire towers in 1918 or 1919. A self-supporting staircase was developed by Aermotor, for installation in the towers purchased in 1916. This staircase mounted to a tower within a tower and was anchored to the original tower. These were purchased to replace the wooden stairs.*

County Historical Museum in Elizabethtown NY. Access is by boat from Long Lake or by the Northville-Lake Placid trail. The original Kempshall Mt. trail is officially "Closed". While an abandoned trail still exists, some of the trail has been obscured by fallen trees from the “microburst” blowdown of 1995.

Makomis Mountain (Private Land - 1911 station, 1916 steel tower erected, 1970 closed, removed in the 1970's)

The first structure was an unusual fully enclosed wooden tower later replaced by a 40 foot tall Aermotor LL25 tower. It was of a lighter weight than their 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. The summit area is on private land.

Moose River Mountain (Ha-de-ron-dah Wilderness - 1912 station, 1919 steel tower erected, 1970 closed, removed in 1977)

This station was originally established with a tower made of mountain top timbers in 1912 near the hamlet of Lyonsdale in Lewis County. When the steel tower was purchased, a site with higher visibility eleven miles to the northeast and three miles west of Thendara on Moose River Mountain was chosen. Once the steel tower was erected the Lyonsdale site was abandoned, and the old wood tower was removed.

The first and only structure at Moose River Mountain was a 60 foot tall Aermotor LS40 tower. Locally known as Pete's Mt, it's believed that the naming of Moose River Mountain came with the moving of the tower. This structure was removed because it was deemed excess to the fire detection needs of the Bureau of Forest Fire Control and was classified as a "non-conforming use" in the wilderness area. The summit no longer has a tower and limited views. Except for the foundation of the tower and the steps and foundation of the old cabin, the summit is overgrown.

Moosehead Mountain (Private Land - 1910 station, 1916 steel tower erected, 1968/1969 closed, removed in early 1980's) Limited views.

The first structure on Moosehead was a 20 foot tall wooden tower, later replaced by a 40 foot tall Aermotor LL25 tower. It was of a lighter weight than their 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. This summit was among the first ten peaks to receive a steel tower.

Mount Electra (Five Ponds Wilderness - about 1920 steel tower erected, dismantled in 1989) No views at the summit.

The structure on Mt. Electra, previously known as Rock Lake Mt, was a 60 foot tall Aermotor LS40 tower This tower was privately built and operated by the Webb family at their Nehasane Park at Lake Lila. The tower cooperated with the

Conservation Department towers during periods of high fire danger. Mr. Webb changed the name to "Electra" in honor of his wife. Mt. Electra was the only fire tower with a clear view along the Lake Placid Branch of the N.Y. Central Rail Road. Many of the local people still know it as the "Partlow Tower" because the easiest access to the tower was via the old "Partlow Station" along the railroad. The property and the tower became a part of the Forest Preserve in the late 1970's. Mt. Electra fell within the "Five Ponds Wilderness Area" and as such became a "Non-Conforming Structure". The tower was un-bolted from the footings, pulled over, and rests today on the spot where it fell. The trail to the summit no longer exists. A first-hand account of what it was like to be a fire observer in the Adirondacks is described in Nehasane Fire Observer: An Adirondack Woman's Summer of '42, by Frances Boone Seaman who was the observer in this fire tower.

Number Four (Private Land - 1928 station, 1958 sold to the state, 1975 standby status, removed in 1985)

Originally privately owned, built, and operated by a local land owner in 1928, the facility was later turned over to State operation. The structure was a 75 foot tall Aermotor tower, with ladders rather than stairs between the landings. The ladders were replaced with conventional stairs in the late 1940's. The only difference between a model LE-40 and a model LS-40 is the ladders instead of stairs.

The tower was dismantled and stored at the DEC office in Lowville, N.Y. about 1985, and the observer's cabin was re-built at the Nicks Lake State Campsite. Today the upper three sections of the tower, 22 feet, has been re-erected at the DEC Demonstration area in Lowville.

Ohmer Mountain (Private Land - 1911 station, closed 1915, removed in the early 1900's)

The only structure on Ohmer was a wooden tower. Since satisfactory arrangements could not be made for its continuance, a steel tower was constructed on Hadley Mt. in 1917 to replace Ohmer Mountain.

Pharoah Mountain (Pharoah Lake Wilderness - 1910 station, 1918 steel tower erected, 1987 closed, removed in 1992) Three distinct rocky areas provide excellent views of Pharoah Lake, the Green Mts., High Peaks and of Gore Mt., Blue Mt. and Vanderwacker to the west.

When this observation station was established in April 1910, no tower was immediately erected, as an unobstructed view was available due to the lack of tree cover on the mountaintop. The first structure on Pharaoh Mt. was a little more than a pole frame with a canvas tarp where the observer could get in out of the weather. A 35 foot tall Aermotor LS40 tower was later installed. This structure was later removed because it was irreparably damaged by vandals and fell to the ground in 1992. It was deemed excess to the fire detection needs of the Bureau of Forest Fire Control. It was removed from the mountain by DEC helicopter. Marked DEC trails to the summit from Pharoah Lake or the Crane Pond area.

Prospect Mountain (Prospect Mountain Parkway Day Use Area - 1910 wood tower, 1932 steel tower erected, 1970 closed, 1984 dismantled, Removed in 1987) Great views accessible by trail or vehicle. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

A 35 foot tall wooden fire observation tower was established the in July 1910. Extensive repairs and a new roof were made to the old hotel building which served as headquarters for the observer who used a cupola in the mountain top hotel for the observation station. In 1932, a 47 foot tall Aermotor LS40 tower and observer's cabin were erected by the Conservation Department replacing the previous arrangement. The tower was closed when it was structurally weakened by the blasting to build the Prospect Mountain Veterans Memorial Highway. The Lake George Historical Association removed portions of the cabin and fire tower. Prospect Mountain is a popular site for day use and picnicking by the public. In addition to vehicular access, a foot trail to the summit begins in Lake George Village.

T-Lake Mountain (West Canada Lake Wilderness - 1916 steel tower erected, 1970 closed, removed in 1977) No natural views due to height of trees at summit.

In 1916 the Conservation Commission erected a 50 foot tall Aermotor LL25 tower. It was of a lighter weight than their 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. This structure was removed because it was deemed excess to the fire detection needs of the Bureau of Forest Fire Control and was classified as a "non-conforming use" in the wilderness area. In 1977, U.S. Army engineers were allowed to test shaped explosive charges on this fire tower which brought the tower crashing down. Within a week the sections of the fire tower were flown out by helicopter. People still hike to the lean-to at T-Lake.

Tomany Mountain (Ferris Lake Wild Forest - 1912 station, 1916 steel tower erected, 1970 closed, dismantled in 1987) No views.

The first structure was a wooden tower later replaced by a 50 foot tall Aermotor LL25 tower. It was of a lighter weight than their 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. The tower was closed at the end of the 1970 season and later dismantled and the pieces scattered near the summit. The trail to the summit has been abandoned.

Tooley Pond Mountain (Grass River Wild Forest - 1913 station, 1919 steel tower erected, 1971 closed, removed in 1972) View to the east due to trees being cleared in the past, when privately owned.

The first structure was a wooden tower, later replaced with a 47 foot tall Aermotor LS40 tower. This fire tower was dismantled and removed in 1972. This mountain was private land until the State acquired the land and easements in the new Tooley Pond Tract. There are two red marked trails to the top of Tooley Pond

Mtn where the tower foundation is still visible. The tower has since been re-erected at Cathedral Rock on the Ranger School Campus.

West Mountain (Pigeon Lake Wilderness - 1909 station, 1920 steel tower erected, 1970 closed, removed in 1977) Partial view at the summit.

The first structure was a 12 foot tall wooden tower, later replaced by a 47 foot tall Aermotor LS40 tower. The structure was removed because it was deemed excess to the fire detection needs of the Bureau of Forest Fire Control and was classified as a "non-conforming use" in the wilderness area. The West Mt. fire tower summit has been a popular destination for many years. The mountain can be reached by marked trails from Raquette Lake or from the Big Moose Lake area. Portions of this tower and the Kempshall Mt. tower were used to erect the tower that now stands at the Essex County Historical Museum in Elizabethtown NY.

Whiteface Mountain (Whiteface Mountain Memorial Highway Day Use Area - 1909 station, 1919 steel tower erected, 1970 closed, 1970's dismantled, removed early 1970's) The summit is listed as a Scenic Special Management Area in the APSLMP.

Whiteface is New York's fifth tallest mountain and the only fire tower mountain over 4,000 feet in elevation. When this observation station was established in July 1909, no tower was immediately erected, as an unobstructed view was available due to the lack of tree cover on the mountaintop. All that was initially provide was a pole frame structure with a canvas tent stretched over it so that the observer could get in out of the weather.

In 1909, the State acquired a temporary easement on the summit of Whiteface, which was then privately owned. Whiteface was one of the first mountains in the Adirondacks used for forest fire detection in response to devastating forest fires that occurred across the region in 1903 and the early part of 1909. It was also the most expensive to construct due to the need to construct 7.5 miles of telephone line. The log pole station was replaced by a 22 foot tall Aermotor LS40 tower in 1919. The steel tower proved to be too small to accommodate ever increasing use and was supplanted by the current, much larger stone observation tower that was constructed in 1935, after the 4.1 acres comprising the summit were gifted to the State of New York. A road to the summit was built in the 1930's. The road is open from May to October. Foot access is available year round. This tower was dismantled in the early 1970's and the fire tower later erected at the Adirondack Museum in 1973.

Whites Hill (Private Land - 1950 steel tower erected, 1970 closed, removed in 1976)

The structure on Whites Hill was an 80 foot tall Aermotor LS40 tower. This tower was placed in service in 1951 reporting 3 fires and 588 visitors. In 1978, DEC surrendered the easement since the tower and cabin had been removed. Posted closed to the public.

III. FIRE TOWERS ON FOREST PRESERVE LAND

The primary goal of Forest Preserve management is to assure that the lands of the Forest Preserve "shall be forever kept as wild forest lands," consistent with the New York State Constitution, Article XIV, Section 1. In conformance with the constitutional constraints and the Department laws, regulations and policies that embody this goal, as well as the APSLMP guidelines for each classification, the Department manages Forest Preserve lands to preserve and protect natural resources and to provide opportunities for a variety of recreational activities for people of all abilities. The APSLMP directs that "human use and enjoyment of those lands (meaning State lands within the Adirondack Park) should be permitted and encouraged, so long as the resources in their physical and biological context and their social and psychological aspects are not degraded" (APSLMP, 2001, Page 1).

A total of 20 fire towers and 10 observer cabins are located on Forest Preserve lands. For all State lands falling within each major classification, the APSLMP sets forth management guidelines and criteria. These guidelines and criteria address such matters as: structures and improvements; ranger stations; the use of motor vehicles, motorized equipment and aircraft; roads, jeep trails and State truck trails; flora and fauna; recreation use and overuse; boundary structures and improvements and boundary markings. The APSLMP also provides guidance for those facilities that are allowed (conforming) and those which are not (non-conforming) in each classification.

Tower Removal - According to the APSLMP, a wilderness area is a place "where the earth and its community of life are untrammeled by man. . ." "A wilderness area is further defined to mean an area of state land or water having a primeval character without significant improvements or permanent human habitation . . ." (APSLMP, 2001, page 20). Except for those structures, uses, and administrative actions specifically identified by the APSLMP, the Department is mandated to remove all non-conforming structures and uses not compatible with a wilderness environment as soon as possible. (APSLMP 2001, page 20).

The feasibility of tower relocations from the wilderness summits on Pharaoh, West, T-Lake, Hamilton, and Kempshall mountains and the canoe area summit on at St. Regis mountain, was investigated in 1976. With aerial detection flights and increased reporting of fires by the public, the cost to relocate fire towers was not justified. Since fire towers were considered non-conforming in wilderness areas, the Department began the process to remove fire towers that were deemed excess to the fire detection needs of the Bureau of Forest Fire Control. By the end of 1977, seven of the ten fire towers on wilderness summits (Ampersand, Beaver Lake, Cat, Hamilton, Moose River, T-Lake, and West mountains) were dismantled and removed.

A. Primitive Areas

The Wakely Mountain and Hurricane Mountain fire towers are the only towers in primitive area classified lands. Within the Wakely Mountain Primitive Area, the fire tower, observer's cabin and helipad are nonconforming structures.* According to the APSLMP, "once the fire tower on Wakely Mountain is no longer needed, the area should be made part of the Blue Ridge Wilderness." The tower on Hurricane Mountain is specifically referenced in the APSLMP as follows: "The fire tower on Hurricane Mountain is currently an essential communication link to the Department of Environmental Conservation at present. Should it be replaced by other means of fire patrol and communications, the entire area should be reclassified as wilderness."

B. St. Regis Canoe Area

The St. Regis Mountain fire tower is the only tower in canoe area classification. With respect to the fire tower, the Master Plan states on page 31:

"The fire tower, observer's cabin, and telephone lines have not yet been removed, and under canoe area guidelines, the fire tower and observer's cabin may be retained pending final implementation of the Aerial Surveillance Program and modernization of the Department of Environmental Conservation's communications system."

Currently the Department conducts aerial detection patrols on days of very high and extreme fire danger. Since the aerial surveillance program is in place and the Department's communications have been modernized, the St. Regis fire tower is now considered a non-conforming use within the canoe area. The cabin has been removed.

C. Wild Forest Areas

Fifteen fire towers are located on wild forest classified lands. In the past, three fire towers were removed from wild forest lands at Crane, Debar, and Tomany mountains. Some guidance regarding wild forest classified lands is found on page 32 of the APSLMP:

"Those areas classified as wild forest are generally less fragile, ecologically, than the wilderness and primitive areas. Because the

**The APSLMP lists the fire tower and associated structures as nonconforming under the assumption that, when no longer needed, they will be removed, and the primitive area will be reclassified to wilderness. Conversely, as long as the structures are needed, they are in a sense conforming within the primitive area.*

resources of these areas can withstand more human impact, these areas should accommodate much of the future use of the Adirondack forest preserve. The scenic attributes and the variety of uses to which these areas lend themselves provide a challenge to the recreation planner. Within constitutional constraints, those types of outdoor recreation that afford enjoyment without destroying the wild forest character or natural resource quality should be encouraged. Many of these areas are under-utilized. For example the crescent of wild forest areas from Lewis County south and east through Old Forge, southern Hamilton and northern Fulton Counties and north and east to the Lake George vicinity can and should afford extensive outdoor recreation readily accessible from the primary east-west transportation and population axis of New York State."

A wild forest area is further defined as "an area that frequently lacks the sense of remoteness of wilderness, primitive or canoe areas.." (APSLMP, page 32).

A general description of under-utilized Wild Forest areas mentioned in the APSLMP would include areas containing the fire towers on Rondaxe (Bald), Black, Hadley, Kane, and Woodhull mountains.

Under the APSLMP list of structures and improvements on page 34, fire towers, observers cabins, and communication facilities are conforming facilities:

"The maintenance and rehabilitation of such structures and improvements will be allowed to the extent essential for the administration and/or protection of state lands or to reasonable public use thereof but new construction will not be encouraged...."

Conforming facilities include:

- storage sheds and similar rustic buildings for use of administrative personnel;
- small-scale electronic communications and relay facilities for official communications;
- telephone and electric lines to service permitted administrative structures;
- fire towers and observer cabins.

D. Intensive Use

An intensive use area is defined as "An intensive use area is an area where the state provides facilities for intensive forms of outdoor recreation by the public. " (APSLMP, page 38). Two types

of intensive use areas are defined by the APSLMP: campground and day use areas.

Under the APSLMP description of ski areas on page 41:

"Existing downhill ski centers at Gore and Whiteface should be modernized to the extent physical and biological resources allow. Cross country skiing on improved cross country ski trails may be developed at these downhill ski centers."

The Gore Mountain fire tower is the only fire tower located within an intensive use area. The tower has been modified due to the addition of microwave and other antennae. ORDA staff have posted "Closed" signs on the tower with warning information about microwave emissions. The original observer's cabin has also been modified and is used by the ORDA Ski Patrol.

E. Unclassified Lands

The recently acquired lands in the town of Saranac, Clinton County containing the Lyon Mountain fire tower are considered unclassified Forest Preserve, until the Adirondack Park Agency classification process is completed.

IV. FIRE TOWERS ON LANDS OTHER THAN THE FOREST PRESERVE

In addition to the towers on Forest Preserve land, some fire towers on private lands are open to the public. Except where there is a formal public easement, public use is at the discretion of the landowner. Two reconstructed exhibit fire towers are located on museum property. The Goodnow Mountain and Cathedral Rock fire towers are on ESF lands open to the public subject to certain restrictions. The Stillwater fire tower on Conservation Easement lands will be open subject to the terms of the easement.

A. Public Museums - People interested in what it's like to climb a fire tower without having to climb a mountain can experience the structure with limited views at two Adirondack museums:

Adirondack Center (Elizabethtown, NY) - The Adirondack History Center Museum displays artifacts from over two centuries of life in Essex County and the central Adirondacks. The museum property includes a 58 foot fire tower that was built in 1989 from the original West Mountain and Hamilton Mountain towers. From the cab a

view of Elizabethtown is possible. The Museum is generally open Memorial Weekend through Columbus Day, Monday - Saturday, 9 a.m. - 5 p.m. and Sunday, 1 a.m. - 5 p.m.

Adirondack Museum (Blue Mt. Lake, NY) - The fire tower on Whiteface Mountain was dismantled and removed in 1972, with the tower's historical sign kept on the summit until 1973. Shortly thereafter, then DEC Region 5 Director William Petty communicated his sentiment on preserving the structure to the Adirondack Museum Curator: "I know of no better place for this old tower and the historical sign which goes with it." The Adirondack Museum staff re-assembled the fire tower in the spring of 1974. It is currently on display outside the logging building. The Museum is generally open 10 a.m. - 5 p.m. daily from May 25 through Oct. 14.

B. **College of Environmental Science and Forestry Lands** - No public camping is allowed on these lands with both areas closed from sunset to sunrise.

Cathedral Rock - Wanakena Ranger School campus property. The Orin Latham Memorial Trail provides access to a rocky outcropping called Cathedral Rock, where a relocated fire tower (original Tooley Pond Mountain tower) was built.

Goodnow Mountain - Huntington Forest campus property. Interpretive trail with brochure. The fire tower at the summit affords hikers a view of the Adirondack High Peaks region. Interpretive information in the fire tower's cabin informs visitors about the tower's history and provides guidelines for identifying the surrounding landforms.

D. **Conservation Easement Lands** - There are currently over 700,000 acres of land in New York that are subject to conservation easements held by NYSDEC. The primary function of the easement is to protect open space, limit or eliminate future development and undesirable land uses on a property, while allowing for continued private ownership and traditional management.

On most of the large industrial working forest properties in the Adirondacks where the State has purchased a conservation easement, some level of public recreational rights have also been acquired, in addition to the development and land use restrictions. In some cases a wide range of recreational uses are permitted, and in others only very limited types of public use. All of these lands are actively managed for timber, and many of the timber company landowners also rely on income from hunting and fishing club

leases, so public hunting or access may be restricted or prohibited in certain areas or seasons.

Easement Terms - Conservation easements are permanent legal agreements entered into by a landowner and the State, or local government, or a non-profit land trust. DEC manages fire towers and appurtances on easement lands in accordance with the terms and conditions of the easement and applicable local laws.

Conservation Easement lands that include fire tower locations or provide trail or road access to fire towers include the following:

INTERNATIONAL PAPER/LYME ADIRONDACK TIMBERLANDS LLC

This acquisition involved the purchase of two different types of conservation easements:

Easement A - grants significant public recreation rights, including hunting, fishing, trapping, hiking, canoeing and other recreational rights, while allowing cabin lease sites on the property and limited control over current and future locations for trails as they affect forestry operations.

Kushaqua Tract (Franklin 248) will provide improved public access over Lyme Conservation Easement lands to the fire tower on Loon Lake Mountain. There is no signage or parking facilities on the Kushaqua Tract and the existing trail to the summit has not been maintained in over 30 years. The observer's cabin is located on these private lands. (See map in Appendix)

Perkins Clearing Tract (Hamilton 308) Roads over a portion of Lyme Conservation Easement lands provide access and alternate parking for Pillsbury Mountain.*

Easement B - is generally off-limits to the public and leased to hunting and fishing clubs with specific but limited recreation rights for identified corridors and trails.

Big Moose Tract (Herkimer 172B) provides access over Lyme Conservation Easement lands on a hiking trail to the fire tower on Stillwater Mountain. Public non-motorized access is granted on the trail to the summit, the fire tower, and area immediately

**Access to the Pillsbury Mountain trailhead was previously guaranteed across Lyme Adirondack Timberlands LLC property (Perkins Clearing Tract) by a past easement over IP lands. The easement provides for ingress, egress, regress to and from the private land and permits the public and DEC to pass on and over said lands on foot, skis, snowshoes, horseback or by motor vehicle, including the right to construct, improve and maintain the existing road.*

surrounding the tower. Public use is allowed from May 1 through and including the second Monday in October of each year. (See map in Appendix)

C. **Non-Forest Preserve Lands** - The existing parking area and most of the trail to the summit of Lyon Mountain is on newly acquired land in the Town of Dannemora. The Department proposes to add this land to the Clinton 9 State Forest.

V. FIRE TOWERS ON PRIVATE LANDS CLOSED TO THE PUBLIC

As mentioned in Chapter 2.VIII.C. a total of seven fire towers that are located on private lands are closed to the public. They include the summits of Mount Morris, Palmer Hill, Buck, Cathead, Meenahga, Salmon Lake, and Swede mountains. The towers on Buck, Meenagha, and Salmon Lake mountains were privately built, owned, and operated but worked in conjunction with the State fire towers.

Buck Mountain and Salmon Lake Mountain

These privately owned fire towers were erected, owned, and operated by Whitney Park. The Buck Mountain property was later sold to International Paper and recently sold to Lyme Adirondack Timberlands LLC. While other lands owned by Lyme are open to general public use or trail easements no public access has been acquired for this location. The tract is exclusively leased to clubs and remains posted land. The Salmon Lake Mountain property is owned by Whitney Industries LLC and is closed to the public.

Cathead Mountain

While a popular trail and destination for hikers in the past, this State-owned fire tower is on private property that has been closed to the public. Discussions between the owners and the Department are ongoing regarding public access to the summit and fire tower on Cathead Mountain.

Meenahga Mountain

This privately owned fire tower was erected on Adirondack - Florida School property which operated on Rainbow Lake in the 1920's and 1930's. The fire tower was erected as a memorial for two students who drowned while swimming in Rainbow Lake. The tower was used as a secondary station in periods of dry and dangerous conditions. The property is under new ownership and closed to the public.

Mount Morris (Note-Town of Altamont changed their name to the Town of Tupper Lake)

A letter (dated January 27, 1976) from J.O. Preston, Director-Division of Lands & Forests to Mr. Edward Saxby, OGS Bureau of Land Management, transmitting sale documents executed by Mr. Patrick Quinn, Town Supervisor, Town of Altamont, included a check for $1 representing the bid price for the tower. The letter states

that: "since the tower is situated upon lands under the jurisdiction of the Town of Altamont and no dismantling of the tower is anticipated, a performance guarantee and insurance fee has been waived. Since this structure is of no further use to the State and represents a liability, we feel that it is in the best interest to sell it to the Town of Altamont." The letter states that the tower will be used by the Town as a public observation point and will be managed as part of the Big Tupper Ski Area. A letter to the lawyers of Oval Wood Dish dated December 7, 1971 (from J.O. Preston) states that the observer's cabin (located on lands then owned by Oval Wood Dish Corp.) will no longer be necessary for State purposes and that "this letter may be considered as an abandonment of any and all claim the State of New York may have in and to the cabin".

The 22 foot tall AerMotor model LS-40 tower, is one of four in the state. It is the only 22 foot tower remaining in place on a mountain. The other remaining 22 foot tower, from Whiteface Mountain, is on display at the Adirondack Museum. The ski resort, summit and tower are now owned by two different private landowners. The tower supports communications and is closed to the public.

Palmer Hill

This privately owned fire tower is on private property. Originally the station was established as a secondary station for Whiteface Mountain, since the severe weather at the top of Whiteface made it difficult to open for the spring fire season. The tower supports various telecommunications equipment and is closed to the public.

Swede Mountain

An internal memo (dated February 15, 1995) from Richard Cipperly, Supervising Forester to Dale Huyck, Natural Resoucre Supervisor indicated agreement between DEC, IP, Warren County, and TNC to allow the County to control the tower site. Warren County now owns the summit. On August 1, 1983, there was approved Department paperwork for the disposition of both the tower and cabin, but the transaction was never finalized. In 2000, the declaration of surplus building paperwork was re-submitted, but has not been completed or approved.

This fire tower is on property owned by Warren County, which plans to use it as a communications tower. No public access is allowed.

VI. FIRE TOWERS WITH OBSERVER CABINS

In 1950, Forest Fire Control was allocated $655,000 from Capital Construction Funds for the purpose of rehabilitation and improvements. Within the Adirondacks, this funding was used for the replacement of observer cabins on Vanderwacker, Pillsbury, Blue, Hamilton, Tomany, Arab, Hadley, Prospect, and Swede mountains.

Of all the fire towers within the Adirondack Park, 15 towers (including Cathead, Mt. Morris and Swede mountains) still have their associated observer cabins. Many of the observer cabins have been replaced, sometimes more than once. While most

cabins were located near the fire tower on the summit, in a few cases, such as Mt. Adams, Loon Lake, Stillwater, and Vanderwacker mountains, the cabins are closer to the trailhead. Of the remaining cabins, nine are listed or considered eligible for listing in the State and National Register of Historic Places.

The following table provides a brief inventory of cabin facilities associated with fire towers on Forest Preserve, Conservation Easement, and private lands open to the public.

Table II - Fire Towers with observer cabins[1]

Tower Name	Model	Description of Structure	Built	Cabin Status
Blue Mt.	“1941"	4th cabin at summit, other tower and buildings on summit associated with communications. Modifications: past vandalism, metal door and window covers installed.	1975	closed to public
Goodnow Mt.	“1927"	cabin at summit Modifications: small exhibit on porch, glass windows allow view of interior display of tower observer artifacts.	1928	locked, museum display
Gore Mt.	“1927"	2nd cabin at summit, other tower and buildings on summit associated with communications. Modifications: structure was significantly improved, used by ski patrol in winter.	1928	closed to public
Hadley Mt.	“1941"	2nd cabin at summit, associated shed and root cellar. Modifications: unknown	1950	closed to public
Kane Mt.	“1941"	2nd cabin at summit, Modifications: some	1961	closed to public

Tower Name	Model	Description of Structure	Built	Cabin Status
		vandalism to cabin and associated pit privy, stronger door installed.		
Loon Lake Mt.	“1927"	2nd cabin at base of mountain on private lands owned by Lyme Adirondack Timberlands LLC. Modifications: unknown	1928	closed to public
Mount Adams	“1922"	cabin at base of mountain on private lands owned by Open Space Conservancy. Modifications: unknown	1922	closed to public
Mount Arab	“1941"	3rd cabin at summit Modifications: restored and used as interpretive exhibit.	1950	open to public
Pillsbury Mt.	“1941"	3rd cabin at summit, associated small shed. Modifications: none to date.	1950	closed to public
Stillwater Mt.	“1941"	2nd cabin located in Independence River Wild Forest. Modifications: rehabilitated and used by assistant forest ranger in the summer.	1966	closed to public
Vanderwacker Mt. [2]	“1941"	2 cabins, 3rd cabin at base of mountain Modifications: unknown	▬ 1950	closed to public

Tower Name	Model	Description of Structure	Built	Cabin Status
Wakely Mt.	“1941"	3rd cabin at summit, associated privy Modifications: none to date.	1972/1973	closed to public

[1] Additional observer cabins or other buildings are located on private land where there is no public easement. This includes the cabins are on Cathead, Mt. Morris and Swede mountains. They are not used by the Department for administrative purposes or as part of any interpretive program. In some cases, the observer’s cabin was moved to another location. In the case of Crane Mountain, the cabin was moved to private land. The cabin on Old #4 Mountain was relocated to Nicks Lake Campground.

[2] There are two observer cabins associated with Vanderwacker Mountain. The newer one was built in the 1950s, while the construction date of the older cabin is unknown. Both are a mile and a half walk from the fire tower.

▬ Unknown date of construction

VII. FIRE TOWERS AND COMMUNICATIONS

A major responsibility of the Department is to exercise care, custody and control of State-owned lands. The construction and maintenance of radio facilities is necessary for the Department and other governmental agencies to carry out the duties and functions of protecting the Forest Preserve and insuring public safety. The equipment that has been installed in or on the various fire towers is considered essential for Department radio communications. The Department receives an FCC license to operate repeaters and radio towers in response to a demonstrated communications need. Without these communication facilities, there would be very limited radio coverage within DEC Regions 5 and 6. In addition to Department needs, some sites are shared and utilized by county mutual aid radio networks and other municipal and state communication systems.

Statutory authority to erect and maintain communication facilities and to grant temporary revocable permits for such purposes to other governmental agencies is given to DEC through various Sections of the ECL. Section 9-0l05 (15) empowers the Department to make rules and regulations and issue permits for the temporary use of the Forest Preserve and Section 9-0303 (2) provides that no building shall be erected, used or maintained upon State lands except under permits from the Department.

The State operates radio facilities on both Forest Preserve and private land, ranging in scale from a small radio repeater with external whip antennae to large radio antennas with associated buildings. In some cases, fire towers such as those on Black and Cathead mountains have been significantly modified to accommodate NYS Police radio needs. A detailed inventory of communication facilities or management decisions regarding Department communications is beyond the scope of this study. Since this study focuses on fire towers within the Adirondack Park, study content will concentrate on the relationship of communication equipment on fire towers under the jurisdiction of DEC.

Additional radio antennae's located on fire towers or other summits outside the Park will not be addressed in this document.

While the Department acknowledges the need for effective communications structures and facilities to serve the needs of the people of the State, it also recognizes that the presence of mountaintop facilities can degrade the wild forest character of Forest Preserve lands. Further, the Adirondack Park Agency, in recognition that the hills and mountaintops are among the region's most distinctive and precious resources, and that consolidation of towers and tower facilities will result in materially less cumulative environmental impact, adopted a policy on communication towers[*]. In recognition of the impact of radio facilities on the aesthetic qualities of Adirondack mountain summits the Department developed a policy to allow for continuation of the present systems and for improvement and expansion as future needs may dictate. See Appendix.

A large portion of the communications facilities data was supplied by DEC staff (personal communications, Dan Levy and Harry Spetla). More detailed information for each fire tower site including access, type of electric supply and backup power is included in the fire tower fact sheets in Appendix.

The following table provides a brief inventory of communication facilities on fire tower summits on Forest Preserve, Conservation Easement, and private lands. In some cases, individual antennas may not be in use or are back up systems. Additional objects that can be fastened to fire towers include various mounting poles or brackets.

[*] *Pursuant to the APA Act and regulations, the APA has responsibility for regulating telecommunication towers and other tall structures within the Adirondack Park. In addition, the APA has issued a policy guidance with respect to telecommunications towers within the Adirondack Park. This policy provides that new telecommunications towers should be located to avoid undue adverse impacts and in such a manner as to be "substantially invisible." Preference is given to siting telecommunications facilities in the vicinity of existing settlements, highway corridors and where existing telephone or electric utilities are located. Facilities must be sited in a manner to minimize impacts to nearby land uses.*

Table III - Fire Tower summits with communications

Tower Name	Summit Structures	Antenna Users	Ownership[1]
Belfry Mt.	Fire tower is centrally located on a 1/2-acre Forest Preserve parcel. The tower supports several antennas and one microwave dish. Adjacent to the tower is a 40' radio tower, concrete block building, and portable building. AC power supply with electric utility line and poles present. Backup generator, microwave system has separate battery backup. Other summit structures on private land include two large radio towers and associated building.	Fire Tower: LE, SP Radio Antenna: Essex County	Portable building is owned by NY State Police. The concrete block building and small radio tower is owned by Essex County.
Black Mt. [2] (fire tower is closed to the public)	Modified fire tower, total height now 80 feet. NY State Police added a 39-foot trestle extension in 1996. Fire tower and extension supports several antennas and one microwave dish. Battery power charged by solar and/or windplant. Backup generator. Other structures include 16' x 30' building and solar panels within fenced enclosure.	Fire Tower: LE, SP	DEC owns first 41 feet (fire tower). NY State Police owns second 39 feet. Modular building owned by NY State Police.

Blue Mt.	Fire tower supports several antennas. Building enclosed within the footprint of the tower legs. AC power supply with above ground electric utility line present. Backup generator. Other summit structures include observer's cabin, 125' communications tower with microwave dish and VHF antenna and cement block building. Back up antenna on small 30' tower attached to cement block building.	Fire Tower: HCS Radio Antenna: LE, FC, AD, SP, DOT, HCEM, WXLH	Building under tower legs is owned by HCS. Cement block building owned by DEC.
Cathead Mt. (private land closed to the public)	Modified fire tower, total height now 90 feet. Private land lease. NY State Police added a 40-foot trestle extension in 1986. Fire tower and extension supports antennas and microwave dishes. Other structures include solar panels and windplant and modular building. Battery power charged by wind generator and solar. Backup generator. Other structures include helicopter landing platform and nearby observer's cabin.	Fire Tower: LE, SP	NY State Police own building and 40-foot tower extension. DEC owns 50-foot fire tower structure. Observer's cabin owned by DEC.
Gore Mt. [2] (fire tower is closed to the public)	Fire tower supports several antennas and four microwave dishes Adjacent to the tower are four buildings. Other summit structures include separate guyed 145' communications tower with microwave dish and three buildings. Nearby observer's cabin.	Fire Tower: SP, NWS Radio Antenna: LE, WXLG, WCS	NY State Police Warren County and DEC each owns one building.

Lyon Mt.	Fire tower supports one antenna and solar panels. Power supply is battery charged by solar. Repeater was installed in 2006 and is housed in a secure metal box in the tower cab.	Fire Tower: LE	All facilities owned by DEC. Land recently acquired from TNC .
Mount Morris (private land closed to the public)	Privately owned fire tower supports various communications facilities.	Tower is part of NY State Police microwave network, which DEC Law Enforcement also uses.	Privately owned
Palmer Hill (private land closed to the public)	Privately owned fire tower supports various communications facilities.	Unknown	Privately owned
Pillsbury Mt.	Fire tower cab supports one antenna and solar panels. Power supply is battery charged by solar. New repeater proposed for installation in 2009 if funded, to be housed in a secure metal box in the tower cab. Other summit structures include observer's cabin.	Fire Tower: FC	All facilities owned by DEC.
Spruce Mt. (Three private land crossings required to reach summit)	Fire tower supported communications equipment in the past. Other summit structures include private communication tower.	Fire Tower: No current users, DEC has FCC license for site.	Only the fire tower is owned by DEC.
Wakely Mt. [3]	Repeater proposed for installation in 2009 if funded. Fire tower will supports one antenna and solar panels. Power supply will be battery charged by solar. New repeater to be housed in a secure metal box in the tower cab. Other summit structures include observer's cabin and helipad.	Fire Tower: LE	All facilities owned by DEC.

Woodhull Mt.	Fire tower supports one antenna and solar panels. Power supply is battery charged by solar.	Fire Tower: FC	All facilities owned by DEC.

[1] All listed fire towers, communication towers, and buildings are owned by NYS and are under the jurisdiction of DEC except as noted above.

[2] Both of these fire towers have significant communication facilities. Due to various reasons, these towers have been closed to the public. The Black Mountain fire tower is unique since in 1938 an aerial beacon light was installed.

[3] The installation of a repeater facility at Wakely Mountain is anticipated to occur , pending the reconstruction of the helipad.

Antenna Users: LE-DEC Law Enforcement, FC-DEC Fire Control, AD-DEC Administrative, SP-New York State Police, DOT-Department of Transportation, WXLH-St. Lawrence University Public Radio, ECS-Essex County Fire, HCS-Hamilton County Sheriff's, HCEMS-Hamilton County Emergency Management Services and NWS-National Weather Service. Various radio antennas and repeater equipment owned by respective entities.

Emergency Facility: For public safety reasons after the Blowdown of 1995, a radio repeater was installed on Cat Mountain in 5-Ponds Wilderness. The facility consists of a steel box approximately three feet square and 1.5 feet tall. Two solar panels 36" long and 18" wide top mounted on the box. Inside are four batteries and a radio repeater. One 22 foot long fiberglass antenna is mounted on a galvanized tripod.

VIII. LEGAL AGREEMENTS AND OWNERSHIP

Practically all of the labor to erect the fire towers was performed by members of the Forest Ranger force. The cost of a steel fire tower in 1916, not including ranger labor, averaged about $530. In some cases like Goodnow Mountain, the Conservation Commission erected towers purchased by private landowners.

During the establishment of a fire tower system various methods were used to secure access for and get permission to install the fire towers, observer cabins, and associated telephone lines. In some cases such as Hamilton Mountain the access over private lands to the fire tower was by a verbal agreement only. For many locations, legal authorization for telephone lines and appurtances as a means of communications to prevent forest fires was secured using Forestry Form #44 (Conservation Commission Privilege for Right of Way) which was recorded and filed. The right to install and maintain telephone lines continued as long as the line was operational and in use.

The authorization for construction of the fire tower itself or observer's cabin on private lands in some cases is not clear. At some locations such as Palmer Hill, the tower was originally erected using Forestry Form #44 (Privilege for Observation Station). These agreements established the right to erect a fire tower and observer's cabin, along with a right-of-way for a telephone line. At many other sites, no specific agreement authorizing the fire tower itself was secured.

At locations such as Palmer Hill, Mount Morris (to the Town of Altamont in 1976), and Stillwater Mountain the fire towers had not been used by the Department for many years. The state transferred ownership of the Palmer Hill and Mount Morris facilities, thereby saving costs associated with their removal[*]. While the Department maintained and manned the Goodnow Mountain tower, when the active use was terminated, DEC relinquished all administrative interest and the tower reverted to the landowner. In the case of the Goodnow Mountain observer's cabin, the state went through the surplus-building process to dispose of the structure. The Swede Mountain fire tower and observer's cabin is currently in the process of being transferred to the Warren County Sheriff Department through the surplus-building process. For the Stillwater Mountain fire tower, existing Department documentation seems to indicate that ownership never officially passed from NYS to International Paper even though most of the necessary paperwork was completed and approved in 1992 and 1993.

[*] *When the Department no longer had any use for fire towers and observer cabins on private land, efforts were made to either surplus the facilities for sale and removal through the OGS bidding process or in cases where there was little demand or where there was a lack of overland access, to transfer ownership to the underlying landowner as the most cost effective solution. This saved an estimated cost to the State ranging from $5,000 to $15,000 to bring men and equipment to the mountain summits to remove these facilities. There would be no cost to the State for the relinquishment of such improvements to the underlying fee owner, in exchange for a release from our removal obligation.*

On Cathead Mountain, the State claims ownership of the observer's cabin and fire tower structure. The observer's cabin on Mount Adams is owned by the private landowner, subject to the terms of a CE. While there is no dispute over private ownership of the underlying land, the ownership of the Loon Lake observer's cabin is unclear. No documents regarding the cabins actual ownership have as yet been located.

IX. OTHER FACILITIES

A variety of other improvements (privies, picnic tables, signs, storage buildings, helicopter landing areas, etc.) can be found on fire tower summits. More detailed information is included in the fire tower fact sheets in Appendix.

Of the fire towers on Forest Preserve land within the Adirondack Park, only four have helicopter landing facilities. One other facility is on private land. They range is size from small summit openings to developed landing platforms and cleared landing areas. In some cases, materials are transported to fire tower sites by helicopter using a sling, (as with many rehabilitation projects) so that the helicopter does not have to land.

A helicopter requires a smooth, level landing area. The landing spot and approach and departure paths are kept in a brush and tree free condition by removal of all vegetative obstructions that may encroach on the rotor blades. On some locations, the maintenance of a cleared area is sufficient on others a man-made platform is needed.

Table IV - Fire Tower summits with helicopter landing areas or platforms

Tower Name	Summit Structures	Helicopter Use	Maintenance
Black Mt.	Open rock landing area adjacent to the old observer's cabin site.	Maintenance flights.	
Blue Mt.	Landing area adjacent to the old radar site.	Maintenance flights, occasional rescues.	Kept in a brush and tree free condition.
Cathead Mt. (private land closed to the public)	Developed pad near the fire tower.	Maintenance flights.	
Pillsbury Mt.	Natural rock outcropping with painted X.	Maintenance flights, occasional rescues.	Kept in a brush and tree free condition.
Wakely Mt.	Uneven ground surface requires a helipad to allow for safe landing. Wood deck on wood posts. The entire structure has weathered and shows evidence of significant decay. The helipad is accessible by a short spur trail.	Maintenance flights.	UMP proposed to reconstruct the helipad. Work to occur in 2010.

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CHAPTER 6: PUBLIC USE

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PUBLIC USE

In the Adirondacks, some of the first public interest in the mountains was stimulated by early scientific reports and surveys. In 1838, Ebenezer Emmons named the Adirondack Mountains and acquainted the public with the region during the New York Natural History Survey. Between 1872 and 1900, Verplanck Colvin conducted a topographical survey. Before Emmons and Colvin, the mountain ranges of the Adirondacks were little known and only used superficially. A few peaks were climbed, but the majority of mountains were essentially untouched and untraveled and few summit trails existed. Beyond making some summits more accessible by enlarging or opening new trails, Colvin also publicized the qualities of the mountains in his reports to the legislature. After the surveys were completed, nearly every corner of the Adirondack Park was explored. Within a few years, people came to climb them, trails were built, guidebooks published, and maps distributed. The wave of recreational users that followed has never receded.

Although the original purpose of the fire towers was fire control, they also provided a site for recreation and public education in forest fire prevention. The first generation of steel towers erected in 1916, were accessed only by an exterior ladder that was not suitable for public use. Heavier towers with integral stairs were later constructed to address this public safety issue. In 1917, the Conservation Commission established the policy of having all trails to the observation stations marked at the point where they left highways, with a sign giving the name of the mountain and the words “Public Welcome” printed thereon.

Public interest in fire towers has changed. The towers are no longer just a destination or somewhere to meet a person to learn about the area; for many people they are an important part of the heritage of the Adirondacks. This can be seen in the number of books which have been written about Adirondack fire towers in recent years, museum exhibits, and the formation of several fire tower “friends” groups. Some people derive pleasure from viewing the mountaintop towers from a distance or just knowing the fire towers exist, although they may never climb them.

I. EARLY FIRE TOWER USE

Early on, information on visitor numbers was collected at each station. When there were 47 stations in the Park, the 1919 Annual Report of the Conservation Commission stated: “On the tops of these mountains, the observers each season now welcome more than 20,000 people...”. The Conservation Commission’s 1920 Annual Report carries the first summary record of visitor registration. The Recreation Technical Report 5, from the Temporary Study Commission on the Future of the Adirondacks, included a table that compares the 1920 figures with the ten year time period between 1959-1969.

A review of the reports and DEC staff observations generally show increased public use of these sites over the years. In 1921, a total of 30,578 visitors signed fire tower registers throughout the state. In this year, Rondaxe (Bald) had 4,121 registered users, with Blue Mountain second with 2,936. Occasionally there was a great variation in visitor numbers from one year to another. This was primarily due to the availability or unavailability of the register to the public rather than the actual numbers of people. For example, the register on Debar Mountain indicated 1,005 visitors in 1967 and only 138 visitors in 1968. This discrepancy was due to the lack of an observer on duty in 1968, while for most of the fire season the tower was manned in 1967. Other sources of error included timing of observation position, pass days, register locked in cabin, and refusal of some people to sign in. During the ten-year period between 1959 and 1969, the year with the highest use was 1967 with a total of 77,558 people signed in for all 50 towers.

An additional table in the Temporary Study Commission report showed a comparison between the number of visitors seen by the observer and the number of visitors that actually signed the register. This survey was conducted to ascertain how many visitors failed to sign the register and to judge the part these stations played in the overall recreation picture. The observer on each of the 42 manned stations in the Adirondacks counted the number of visitor during the first two weeks in July, 1970. An analysis of this small sample* indicated that during the survey, approximately 22 percent of visitors failed to sign in.

II. CURRENT FIRE TOWER USE

Trail use to fire towers is still monitored through voluntary registration. There are currently 19 register booths that sample public use related to fire tower trails. Although this is the best source of information currently available, register figures tend to be inaccurate because some users do not sign in at trailhead locations. Certain groups of users who are believed to register less frequently than others include day-users and frequent users of the same site. This means that registers can have a large margin of error, as some use is underestimated (Hendee, Stankey, and Lucas, 1990). Voluntary trail register compliance percentages can vary depending on register location, time of visit (season, day of week), entry hour, length of stay and group size. Some register data is lost or stolen over time, but patterns and general levels can be obtained from data collection over an extended period.

In some years there is a lack of complete trailhead data due to some missing pages. A recently developed Standard Operating Procedures (SOP) outlining responsibilities of DEC Forest Rangers and Foresters in Region 5 addresses trail register data. This strategy should help to improve collection, retention, and

**Of the 51 towers, data was missing for several sites since some towers were not manned, had incomplete information, or were blocked to visitors. The effect of inclement weather on public visits was also examined. For example, using data from Rondaxe (Bald) Mountain, rain or fog on specific days seemed to significantly reduced the number of people who visited the summit compared to clear days.*

reliability of public use data. Region 6 is in the process of implementing a similar policy. See Appendix.

Recent efforts to study register compliance have been conducted in a few locations within the Adirondack Park. In 2003, the DEC and the APA entered into an agreement with the SUNY College of Environmental Science and Forestry and Cornell University to conduct studies on visitors to Forest Preserve lands. Under this agreement, ESF and Cornell University gathered information in visitor use studies on DEC planning areas and developed reports from this data. The reports detail baseline information on visitor use, user characteristics, and user attitudes and preferences. The survey investigated aspects as seasonality, modality and total level of use of public lands and combined state of the art technology and traditional methods, including trail counters, interviews with visitors, trail register data analysis and mail survey questionnaires. These surveys included the fire tower trails to the summits of Pillsbury and Arab mountains.

In the case of Cathead Mountain, the foot trail was closed and register removed in 2000, so public use data will not be shown since the public is not allowed on the property.

The following table provides trail register data for fire tower summits on Forest Preserve, Conservation Easement, and open private lands. The most current year where complete information was available was used when available.

Table V - Fire Tower trails with registers

Tower Name	Trail Name	Annual Range Register Data	Year Collected	Register Data
Azure Mt.	Azure Mt. Trail - 1.0 miles	3,800-5,200	2006	4,235
Black Mt. [2]	Black Mt. Summit Trail-2.5 miles	3,000-3,900	2005	3,171
Blue Mt.	Blue Mt. Trail - 2.2 miles	10,000-12,000	2002	10,277
Goodnow Mt.	Goodnow Mt. Trail - 1.9 miles	5,000-7,000	2005	5,043
Gore Mt.	Schaefer Trail [1] - 4.5 miles	200-400	2006	374
Hadley Mt.	Hadley Mt. Trail - 1.3 miles	13,000-14,000	2002	13,387
Hurricane Mt. [2]	Hurricane Trail - 2.3 miles Hurricane East Trail - 2.0 miles Hurricane North Trail [3] - 2.7 miles	3,400-4,300 ▬ ▬	2006 2006 2006	3,340 366 897
Kane Mt. [2]	Kane Mt. East Trail [3] - 0.8 miles	2,800-3,800	2004	3,695
Mount Adams	Hanging Spear Falls/Adams Mt. Trail [3] - 2.4 miles	1,000-1,400	2006	1,049
Mount Arab	Mt. Arab Trail - 1.1 miles	4,000 - 5,000	2006	4,588
Owl's Head Mt.	Owl's Head Mt. Trail - 3.1 miles	▬	2003	1,588
Pillsbury Mt.	Pillsbury Mt. Trail [3] - 1.6 miles (estimated fire tower trail use)	1,200-1,800 600-800	2002 2002	1,767 ±817
Poke-O-Moonshine	Poke-O-Moonshine Trail - 1.2 miles from campground	3,300-5,300	2005	3,291

Tower Name	Trail Name	Annual Range Register Data	Year Collected	Register Data
Rondaxe (Bald) Mt.	Rondaxe Mt. Trail - 1.0 miles	15,000-23,000	2006	22,015
Snowy Mt.	Snowy Mt. Trail - 3.9 miles	3,500-5,100	2004	3,498
St. Regis Mt.	St. Regis Mt. Trail - 3.4 miles	3,200-7,000	2006	3,927
Vanderwhacker Mt.	Tower Trail - 2.5 miles	700-1,000	2003	768
Wakely Mt.	Wakely Mt. Trail - 3.0 miles	▬	2002	1,300
Woodhull Mt. [2]	Administrative Road and Woodhull Mt. Trail - total of 6.5 miles Remsen Falls crossover trail - 4.5 miles	250-400	2005	310

[1] Records of use data has been collected at the Gore Mt. trailhead since 1998. Relatively few people hike this trail, continuing on the Cloud Trail or tower access road to finally reach the fire tower. An unknown number of people who ride the gondola in the fall proceed to the fire tower or summit area. The Schaefer trail was closed in 2008. The expansion of the Gore Mt. Ski Center has eliminated a portion of the original trail and the trailhead parking area is now within the Little Gore ski and tubing area. The new trailhead will be located on the Transfer Station access road. Parking for five vehicles will be available. The trail will begin on Town of Johnsburg property then enters state land halfway up Little Gore Mountain. The route to the summit and fire tower will be approximately four miles depending on the final route chosen. The fire tower is closed although views to the south and east are possible from the top near the observer's cabin.

[2] These summits have more than one access trail. In the case of Kane Mountain portions of the two alternate trails are proposed to be closed in the UMP.

[3] The actual numbers of people who only climbed Hurricane, Kane, Mt. Adams, and Pillsbury mountains has not been determined. These trailheads serve more than one trail or provide access to other State lands. The East River trailhead serves as access to Mt. Adams, Flowed Lands, and the start of the Allen Mountain herd path. The Pillsbury Mountain trailhead also collects data on people entering the West Canada Lake Wilderness on the Cedar Lake Trail. The Kane Mountain trailhead records the people using area ski trails. An average of 33% of the registrants (2,691 in 2006) at that Crow Clearing trailhead use the Hurricane North Trail to the fire tower. This trail requires hikers to use the Gulf Brook Trail for 1.0 miles and the Hurricane Trail (from Route 9N) for 0.1 miles making the total distance of 2.7 miles from the Crow Clearing trailhead to Hurricane Mountain. For Woodhull Mountain the Remsen Falls crossover trail is 4.5 miles, 2.0 along the administrative road and 2.5 miles up the foot trail to the summit.

▬ Data not available.

Note - While the summits on Gore and Black mountains are open to the public, the fire towers are closed. The fire tower on Black Mountain has not been available for public use since the State Police modified the fire tower for communications in 1990. A fence was erected around the tower to keep the public off the structure. On Gore Mountain, the fire tower is closed and posted with microwave emission warning signs.

Some UMPs contain little specific information regarding register information for fire tower trails, while other plans contained detailed analysis of register information including monthly analysis data. For the purposes of this study, low use will refer to estimated or registered use levels of less than 1000 people annually, light to moderate use will include use levels between 1,000 to 2,500 people, and moderate use will include use levels between 2,500 to 5,000 people. Moderate to heavy use will include use levels between 5,000 to 10,000 people and heavy use will include use levels over 10,000 people. More detailed use data for some individual towers can be found in Appendix. An examination of distribution and estimated level of public use on fire tower summits follows:

Fire Towers sustaining apparent <u>low use</u> include:

Because of the limited access from public road, rugged terrain, or remote location, the fire towers on Gore, Pillsbury, Vanderwhacker, and Woodhull mountains receive low use. They offer visitors a greater opportunity for solitude compared to other popular summits.

Fire Towers sustaining apparent <u>light to moderate use</u> include:

Even in summer and fall, use levels at some fire tower summits are relatively light. They include the towers at Mount Adams, Owl's Head, and Wakely mountains.

Fire Towers sustaining apparent <u>moderate use</u> include:

A large portion of total public use occurs on Azure, Black, Hurricane, Kane, Mt. Arab, Poke-O-Moonshine, Snowy, and St. Regis mountains.

Fire Towers sustaining apparent moderate to heavy use include:

Only the Goodnow Mountain fire tower has a documented level of public use in the moderate to heavy range. Heavy use occurs on the Blue, Hadley, and Rondaxe (Bald) mountains, with the greatest annual use occurring on Rondaxe (Bald) Mountain.

Periods of Use and Distribution Patterns

Use of individual fire towers at any particular time can be quite variable dependant upon time of day, day of the week, or season of the year. Weather can have a dramatic effect on the use during a particular day or weekend. In the past, the majority of recreational activity occurred in the spring and summer, and tended to be heaviest on the weekends and holidays. More recently, there is increasing use in the fall and winter.

Use at individual fire towers can vary greatly both yearly and during the various seasons. Specific information where available on type or types of activities, location of activities, length of stay and group size and distribution of use can be found in the individual fire tower reports in Appendix.

An examination of trail register information for some of the more popular fire tower mountains along with Department staff interviews enabled some general conclusions regarding public use of fire towers:

- On average, the largest number of annual registered use occurs on the Blue, Hadley, and Rondaxe (Bald) mountain trails.
- On average, the smallest amount of registered use occurs on the Gore, Pillsbury, Vanderwacker, Wakely, and Woodhull mountain trails. These are some of the more remote fire tower locations.
- Rehabilitated fire towers generally receive increased use following restoration.
- Public use levels at fire tower locations have been fairly stable with no significant increase in use observed over the last decade.
- The majority of use is day use.
- Use is greatest in summer and fall, coinciding with school vacations and popular holidays. The months of July, August, September and October see the highest use levels.
- Limited data on some fire tower summits make it difficult to quantify overall public use. Proposals to obtain use data for DEC trails and facilities for which there are currently no registers, will be discussed later in this document in the Management Recommendations section.

III. TYPES OF PUBLIC USE

Public use of fire tower trails can be enhanced via the large number of available Adirondack hiking publications. In addition to specific trail guides and guidebooks, several fire tower summits are also identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list or the Fire Tower Challenge program. In descending elevation, Snowy, Lyon, Blue, Wakely, Hurricane, Pillsbury, Gore, and Adams mountains are included within the 100 Highest Mountain Peaks list. To complete the Fire Tower Challenge and receive the official patch, hikers must climb

and document, by date, ascents of at least 23 fire tower summits: 18 of 23 Adirondack Park summits and all 5 Catskill Park summits. The Adirondack summits include: Adams, Arab, Azure, Belfry, Black, Blue, Cathedral Rock, Goodnow, Gore, Hadley, Hurricane, Kane, Lyon, Owl's Head, Pillsbury, Poke-O-Moonshine, Rondaxe (Bald), Snowy, Spruce, St. Regis, Vanderwacker, Wakely, and Woodhull mountains.

One of the more popular activities associated with fire towers is day hiking. Various Department brochures along with The Adirondack Great Walks and Day Hikes (Adirondack Regional Tourism Council, 2007) and the Empire State Trails: Highlights of New York State (State of New York, 2000) publications identify some locations of past fire tower mountains or summits with restored fire towers. Other activities such as rock climbing or raptor watching tend to be specific to individual locations such as Poke-O-Moonshine and Belfry mountains.

Camping on most fire tower summits is uncommon due to the lack of available water and preference for day use due to short round trip times. In some cases, summit users on Owl's Head and Poke-O-Moonshine mountains camp at adjacent DEC campgrounds where there is parking and trail access to these fire towers. Except where marked by a "Camp Here" disk, camping is prohibited by regulation within 150 feet of summit roads or trails, rendering a no camping zone near the fire tower, foot trail, or observer's cabin, if present. Occasional camping occurs at the designated site near the fire tower on Mt. Arab. In addition near the Poke-O-Moonshine summit at the old cabin location a lean-to can be used for camping. Non-designated and user-created campsites are known to exist along the Vanderwhacker Mountain trail (one several hundred yards above the observer's cabins and one a similar distance below). Some UMPs such as the St. Regis Canoe Area, proposed to prohibit camping and camp fires on summits above 2,700 feet.

The following table provides a brief inventory of trailhead access information for fire tower summits on Forest Preserve, Conservation Easement, and open private lands.

Table VI - Fire Tower Trailhead Access*

Trail Name	Trail Type	Parking Facility	Vehicle Capacity	Alternative Access
Azure Mt. Trail [2]	Class V - Trunk	Developed lot	9 car	No
Belfry Mt. Trail	▬	Shoulder parking	▬	Private Land
Summit Trail	Snowmobile Trail	Developed lot	12 car	
Black Mt. South Summit Trail	Class IV - Secondary			Lake Access
Blue Mt. Trail	Class V - Trunk	Private Land lot	20 car	DEC Road
Cathedral Rock Trail	▬	SUNY lands	▬	Private Road
Goodnow Mt. Trail	▬	SUNY lands	▬	No
Gore Mt. (Schaefer Trail)	▬	Developed lot	▬	Private Road Gondola
Hadley Mt. Trail	Class V - Trunk	Developed lot	15 car	No
Hurricane Trail [1] Hurricane East Trail [2] Hurricane North Trail [2]	Class V - Trunk Class III - Primitive Class IV - Secondary	Developed lot Private land Developed lot	5 car 3 car 11 car	No
Kane Mt. East Trail [2] Kane Mt. South Trail [2] Kane Mt. North Trail [2]	Class V - Trunk ▬ ▬	Developed lot Private Land Private Land	8 car ▬ ▬	 Private Land Private Land
Loon Lake Mt. Trail	To be determined	No facility yet	▬	Private Land
Lyon Mt. Trail	Class V - Trunk	Developed lot	8 car	Private Land
Mount Adams (Hanging Spear Falls/Adams Mt. Trail)	▬	Developed lot	15 car	No
Mount Arab Trail	Class IV - Secondary	Developed lot	10 car	No
Owl's Head Mt. Trail	Class IV - Secondary (portion is also snowmobile trail)	Shoulder parking	6 car	Lake
Pillsbury Mt. Trail [2]	Class IV - Secondary	Developed lot	15 car	No
Poke-O-Moonshine	Class IV - Secondary	campground	▬	Access Road

**In accordance with past DEC practice, the majority of fire tower trails are marked with red DEC trail markers. With the exception of marked snowmobile trail to Owl's Head and Black mountains, most fire tower trails are designated as foot trails to accommodate pedestrian uses such as day hiking, backpacking, snowshoeing, and cross country skiing. The trails are maintained according to the DEC trail classification system described in Appendix.*

Trail Name	Trail Type	Parking Facility	Vehicle Capacity	Alternative Access
Trail [2]				
Rondaxe (Bald) Mt. Trail	Class V - Trunk	Developed lot	30 car	No
Snowy Mt. Trail	Class IV - Secondary	Developed lot	13 car	No
Spruce Mountain Trail [2]	Unofficial trail	Shoulder parking	▬	Private Road
Stillwater Mt. Trail	To be determined	Shoulder parking	2 car	No
St. Regis Mt. Trail	Class IV - Secondary	Developed lot	15 car	Lake
Vanderwhacker Mt. Trail [2]	Class IV - Secondary	Developed lot	4 car	No
Wakely Mt. Trail [2]	Class IV - Secondary	Developed lot	20 car	No
Woodhull Mt.Trail [2]2	Class III - Primitive [2]	Developed lot	7 car	Private Land

▬ Not applicable or information not available.

[1] These trailheads are not officially plowed in winter, although some sites are occasionally plowed by unknown people. The lack of winter parking can have a negative impact on winter fire tower use unless the trailhead can be legally reached by snowmobile.

[2] To access Woodhull Mountain it is necessary hike the administrative road (only DEC vehicles except bicycles on the road) from the McKeever trailhead (4 miles along road and 2.5 miles up a foot trail.) It is estimated that 30% of the public ride mountain bikes along the administrative road and then hike up the trail. Additional use from Adirondack league club property occurs. Members or invited guests of the club have easier access to the fire tower since it is less than a mile hike to the summit.

Other Uses/Benefits

In addition to spotting and reporting wild fires, the observers often valued interaction with the public. This included not only providing fire prevention information, but also explaining the history of the area, natural interpretation, and geographical identifications. For many people, the interaction with the observers was one of the reasons fire towers became popular hiking destinations, especially for family groups. Several fire towers have summit guides in the summer that perform a similar educational role as the original observers.

While backpacking is not normally associated with fire tower use, one existing long trail (Northville - Lake Placid Trail) passes near the Pillsbury Mountain and Wakely Mountain trailheads, Blue Mountain, and Kempshall Mountain. The Draft North Country National Scenic trail plan proposed one route that passes near the Pillsbury Mountain trailhead. The existence of a fire tower attraction next to these long trails may encourage some day use.

IV. PUBLIC USE ACCESS CONSTRAINTS

Most of the Adirondack fire towers are fairly accessible between Spring and Fall due to the abundance and proximity of public roads. In some cases public access can be restricted due to road conditions or private land uses during portions of the year.

A. Private Lands

Several fire tower trails originate on and/or cross private lands. These trails are either secured with easements or are allowed with the permission of the various landowners. This use is subject to the owners' discretion and is not guaranteed. Marked public trails that rely on private land for fire tower trail parking or access include:

Cathead Mountain

The Cathead Mountain trail was a popular hiking trail to a State owned fire tower located within a private inholding. For years the public was granted permission by the private land owners to cross a portion of their property to access the tower. In September 2000, the property owners withdrew their permission for public use of the Cathead Mountain trail. Additional information can be found in the Silver Lake Wilderness UMP.

Table VII- Fire Tower trails or fire tower summits that utilize private land.

Trail Name	Miles on Private Land	Miles on Forest Preserve or Conservation Easement	Total
Belfry Mt. Access Road	0.3 miles over private road [1]	0 miles (summit only)	0.3 miles
Blue Mt. Trail	1.2 miles over ATP lands	0.6 miles on Blue Mountain Wild Forest	2.2 miles
Oran Latham Memorial Trail (Cathedral Rock)	1.0 miles over SUNY lands	0 miles	1.0 miles
Goodnow Mt. Trail	1.9 miles over SUNY lands	0 miles	1.9 miles
Loon Lake Mt. Trail	1.1 miles over Lyme lands	1.6 miles	2.7 miles
Mount Adams Trail	Small summit parcel	2.4 miles	2.4 miles
Mount Arab Trail	0.8 miles over CE lands (Lyme and Rayonier)	0.3 miles on Horshoe Lake Wild Forest	1.1 miles
Pillsbury Mt. Trail	0 miles	Deeded ROW over private lands provides access to DEC trailhead. Alternate parking on CE lands	0 miles
Spruce Mt. Trail (no official trail)	0.3 miles over Lyme lands, 0.6 miles over Saratoga Plan lands, 0.1 miles over Saratoga County lands	0.3 miles on Wilcox Lake Wild Forest	1.3 miles
Stillwater Mt. Trail	0.8 miles over Lyme lands	0.4 miles on Independence River Wild Forest	1.2 miles

[1]Many people walk the private access road to Belfry Mountain. This road although marked with DEC trail markers does not follow the 12' wide strip owned by the State.

B. Trailhead Access

The lack of parking facilities and/or failure to plow them in the winter can affect public use or access. Of the fire towers open to the public, only a few have parking lots that are plowed. At other locations such as Pillsbury, Vanderwacker, and Wakely, mountains the access roads are generally closed to motor vehicles between December and May, which limits public use until after "mud season". Access over private lands may also be closed during the hunting season, for example the trails to Stillwater and Loon Lake mountains.

V. ASSESSMENT OF NEEDS AND PROJECTED USE

Projecting future use of fire towers can be difficult. Economic, social and political changes can all affect use patterns in the Adirondacks. Economic changes have the potential to affect annual use of the area as much as weather patterns. When the national or regional economy takes a down turn people tend to take less expensive vacations closer to home. The proximity of the Adirondack region to major eastern metropolitan centers makes primitive camping an attractive alternative. However, if the price of gasoline continues to increase, people may be less likely to drive to the Adirondacks from areas such as New York City. Also, tougher border crossing restrictions may decrease the number of Canadian visitors to the region. Other factors, such as the aging of the baby-boomer generation may reduce the overall population interested in backcountry recreation activities.

In order to predict future use it is helpful to analyze general trends in outdoor recreation. The initial step is an evaluation of current supply and demand by the examination of the results of past research. Future projections based on recent studies (SCORP, 2003) forecast an increase in outdoor recreational activities in New York State. Estimated increases in recreational activity are projected on a general State wide basis, and would vary locally depending on available opportunities in a particular county and distance from population centers. The demand for hiking and camping is expected to increase as the median age of the population increases and is expected to grow about 5.2% over the next twenty years. The number of participants cross country skiing and snowshoeing is predicted to increase approximately 5.4% over the next twenty years.

OPRHP surveyed residents in 1998 to find out how satisfied they were with the recreation facilities available and asked them to identify deficiencies in recreational opportunities. Within the SCORP, a comparison is made between estimated future recreation demand (year 2020) and the present supply. A scale was developed ranging from one to 10. An index number with a value of five indicates that for a given activity, the projected supply/demand ratio in the year 2020 will be at the Statewide average. A one indicates a large availability relative to demand with little or no crowding. A three or four rating indicates a need for projected new recreational facilities to replace existing ones as they become obsolete or wear out over the next twenty years. Since the data was calculated on a county wide level, individual locations may have demand substantially greater or lower than the county-wide average. More information on SCORP can be found at the following link: www.nysparks.com

The viewing of natural or cultural resources is expected to grow. Between 1980 and 1995, the US Fish and Wildlife Service (USDA, 1995) reported that all regions of the country experienced at least a 52% increase in nature viewing activities. Bird watching increased more than any other activity they examined in the National Survey on Recreation and the Environment. The results of this survey indicated a 155% growth in participation in birdwatching between 1982-83 and 1994-95. The demand for birding, wildlife/nature observation and similar activities is predicted to increase through 2010.

Other Factors Influencing Demand

While at this time it may not be possible to accurately predict future numbers and patterns of public use, it is expected that use levels on fire tower trails (especially those that have been rehabilitated) will continue to remain steady or grow slowly. With the exception of Blue, Hadley, and Rondaxe (Bald) mountains use levels are generally expected to remain on the low to moderate end of the spectrum of Adirondack Forest Preserve use.

Some factors which could increase use of fire towers and their access trails include: increase in population, desire for quiet areas to unwind, increased knowledge through publications and brochures, increased popularity in outdoor recreation, and an economic downturn resulting in people taking vacations closer to their homes. Factors which could decrease use include: previous bad experience in the area, increase in sedentary lifestyles, availability of other more attractive Forest Preserve areas, and economic boom where people may chose to travel to more distant locations.

VI. ECONOMIC BENEFITS

Various local businesses such as motels, gas stations, restaurants, food stores, establishments which sell and rent goods or services benefit from the influx of recreationists attracted by nearby State lands and Conservation Easements. While some Forest Preserve visitors spend all their time on public land, many are day users who participate in a variety of activities. They may combine a walk on a fire tower trail with visits to local shops and restaurants and an overnight stay at an inn or motel. This business has been an important part of the local economy and is dependent, in part, on undeveloped State lands.

Tourism is significant to Adirondack communities because it represents a common thread unifying development and conservation issues in the Adirondacks. A recent study by Holmes & Associates and SUNY-Plattsburgh (Holmes and Associates, 1999) noted the significant lack of research concerning the economic contribution of tourism to the economy of the Adirondack Park. The focus of the study was “the views and observations of small business owners” in the central and western Adirondacks. Among the major findings of the study was the following: After sightseeing, the activities viewed as making the largest contribution to the area’s tourism economy included snowmobiling, canoeing and kayaking, hiking, cross-country skiing, downhill skiing and observing birds and animals, in that order. A

majority of respondents view those six recreation activities as “very important” to their local economies. The different parts of the Adirondacks showed substantial geographic variation in perceived economic opportunities.

As a follow-up to the 1999 study, the Wildlife Conservation Society and Holmes & Associates hosted a work-shop in 2000 to provide an opportunity for small business owners to further define priority issues and to outline an agenda for outdoor recreation tourism planning and promotion for an area of the Adirondacks most in need of economic assistance. The main issues raised in discussion sessions involved: Needed Innovations in Outdoor Recreation Tourism Development; Trails & Recreation Corridors; and, Unit Management Plans. Under those topics, the priority issues were categorized under three main areas of focus: Information and Education Priorities, Land Use Management Priorities, and Research and Marketing Priorities. More information on the workshop can be found at the following link: http://adirondackresearch.com/projects/hpriority.html

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CHAPTER 7: EDUCATION AND INTERPRETATION

EDUCATION AND INTERPRETATION

Fire towers have been the subject of considerable public interest over the last decade, remnants of an era gone by. With the passage of time, the role of Adirondack fire towers has changed. Originally erected solely for forest fire detection, eventually fire towers became family hiking destinations and features of the landscape, symbols of Adirondack history. This Chapter will discuss educational efforts associated with fire towers along with information regarding various volunteer groups and internship programs. More detailed information on past management activities related to individual fire tower restoration projects can be found in Chapter 8 and Appendix.

I. GUIDANCE

General guidance regarding educational and interpretive themes on Forest Preserve lands is found in Recreation Technical Report 5, from the Temporary Study Commission on the Future of the Adirondacks and the APSLMP.

The Temporary Study Commission report noted the disadvantage of towers, particularly in remote areas, due to destruction of aesthetic values. It was stated that telephone lines, towers, and cabins detract from the wilderness aspect. The report also acknowledged the value of the mountain stations for recreation, while recognizing the opportunity for public education in fire prevention and conservation. Stations on summits which have a large number of visitors each year, were suggested as possible public information points.

On easement lands, the level of educational and interpretive programs or type of allowed structures is dependent on the terms of the easement. APSLMP language regarding signage on Forest Preserve land allows directional, informational, and interpretive signs of rustic materials in limited numbers. Nature and interpretive trails are only allowed in wild forest or intensive use areas. A key APSLMP wild forest guideline concerning fire towers provides:

"The educational and informational aspects of certain fire towers should be encouraged and wherever feasible these fire towers should be retained where consistent with their need from a fire control and communications standpoint."

From a practical point of view, the rehabilitation of Adirondack fire towers has been proceeding since 1993, when the first public/private preservation partnership was formed to rehabilitate the Blue Mountain tower. Subsequent restoration partnerships between the DEC and other organizations have also resulted in a range of educational initiatives at towers, including passive interpretation in the form of guidebooks, brochures, and signage for trailheads, nature trails, and displays in

tower cabs and cabins; and active interpretation in the form of volunteer and paid summit guides.

II. HISTORIC PRECEDENCE

While the historic function of fire towers in Adirondack and Catskill conservation history is widely acknowledged, their role in public education is less well known. The first elevated platforms on New York's mountain summits were erected in the 1870s by private interests in the Catskills to serve scenic tourism. In these years the first state-built towers, temporary signal stations for Verplanck Colvin's survey, became popular Adirondack tourist destinations for years after their original purpose was served. They offered a rare opportunity for the early vacationing public to appreciate first-hand the grand vistas of forested mountains, lakes, and rivers that otherwise could only be seen in landscape paintings—and that conservationists of the day were seeking with growing urgency to protect.

After the extensive fires of 1903 and 1908 had prompted the first phase of constructing towers dedicated to fire prevention on Forest Preserve as well as private lands, the Conservation Commission's growing concern with recreational management led to the recognition that fire towers could be important sites for public conservation education. The advent of the automobile, with more roads and marked trails, brought both increased public access to the woods along with a greater frequency of fires caused by recreational visitors. So under Commissioner George DuPont Pratt, the expansion of the system for fire observation included initiatives after 1916 that promoted public access to the new steel towers. Camping sites were provided adjacent to trailheads, which offered parking and displayed uniform "guideboards" that mapped routes to summits. Tower ladders were replaced by internal staircases with wooden treads for less daunting access. Public education became as important as fire spotting in the observers' mission, for a state-wide educational campaign called attention to the towers' purpose, with the observer as its public face. Trained to teach fire safety and to demonstrate the use of their Osborne Fire Finders to visitors, many observers became well known as naturalists and storytellers, acquiring some of the aura of the vanishing Adirondack guide.

Fire tower visitation increased steadily over two decades, reaching nearly 91,000 in 1941.

With annual registered visitation ranging from 15,000 to 20,000 at such towers as Rondaxe (Bald) and Blue mountains, the opportunity for an expanded program of public education is clear.

III. EXISTING EDUCATIONAL PROGRAMS

The Department enters into partnerships with local governments and not-for-profit organizations for the purpose of educating and assisting Forest Preserve users.

In the case of partnerships that have been formed with fire tower committees, AANR stewardship agreements primarily define restoration and maintenance activities. AANR terms governing educational programs have been generally limited to passive educational projects. The active educational programs described below have been developed at some fire towers since 1994 on the initiative of local "friends" committees. Limited oversight has been provided by a DEC ranger or forester at a few locations.

A. Passive Interpretation: Signage, Brochures and Displays

The Department of Environmental Conservation publishes numerous brochures with simple maps orienting visitors to areas of the Forest Preserve. DEC publications such as the Adirondack Forest Preserve Map and Guide show the locations of most fire towers, parking areas, and access trails along with general information on ecology, history, recreation, and wildlife of the Adirondack Park.

Passive interpretation of Adirondack fire towers or their access trails is currently very limited and its development irregular. This is primarily because the initiative for interpretive devices usually is taken by local friends committees whose motivations and opportunities to fundraise vary widely. In some cases the Department has provided support for design and production, such as the Poke-O-Mooshine tower cab interpretive panels; in others the local committees' success in annual fundraising has enabled them to carry out interpretive projects with little or no DEC support. The remote location of some towers, such as Woodhull Mountain limit the ability for a community funding base.

Only a few trailheads or summits have signs or kiosks that provide detailed fire tower related site information. The most substantial structure is a kiosk for the Bald (Rondaxe) trailhead that was constructed in 2008. It replaced a normal sized DEC trailhead register that was often overlooked by the public. Self guiding nature trail brochures have been developed for the Blue Mountain, Goodnow Mountain, and Mt. Arab fire tower trails, with the focus on interpretation of the trail and limited information about the fire towers themselves. The first two guides were developed by SUNY-ESF students and staff and the Mt. Arab guide was composed by a member of the Friends committee. Additional brochures for Hadley and Poke-O-Moonshine mountains, also developed by local committee members, include a greater level of information. Both add elements of cultural history and conservation topics to nature interpretation at trail stations, and Hadley's brochure adds a topographic map and directional guide to landmarks that perform a few functions of the original observer's map and alidade. To

supplement the numbered stops along the trail, the brochure links conservation topics for example, water supply and the importance of trees to the landscape.

In addition to nature trail brochures, there have been other brochures developed by various friends organizations for Hadley, Poke-O-Moonshine, and Mount Arab to describe restoration efforts at each individual fire tower. These publications serve a different purpose with an emphasis on tower rehabilitation, enabling the public to assist through monetary contributions or volunteer efforts. Some "friends" groups like the ones for Hadley, Poke-O-Moonshine, and Mount Arab produce a newsletter to keep their members and the public up to date on fundraising, trail work, guided nature hikes, and other fire tower related activities.

The DEC has funded and helped the Friends of Poke-O-Moonshine to design a set of panels, now installed in the tower cab, consisting of panoramic photographs which identify major features of the surrounding landscape (mountains, water bodies), with brief descriptions of historic events interposed. These have proved to be both popular with visitors and valuable to summit guides, for the panels free them from task of repetitive identification to do more significant interpretation. As a result, summit guides from SUNY-Potsdam, who are required to complete an interpretive project for a specific tower, have completed the photography and design of similar panels for the tower cabs at Mt. Arab, Hadley, and Rondaxe (Bald) mountains. The production of these panels awaits future funding.

Another summit guide at Poke-O-Moonshine reproduced the historic spotting map and a replicated alidade for the map table in the tower cab. , The friends group installed a Osborne Fire Finder in the tower cab on Mt. Arab during the summer of 2009 as part of the restored cabin's several displays at the summit. These projects were funded by the tower committees.

B. Active Interpretation: Volunteers and Summit Guides

While fire towers* are no longer manned by forest fire observers, these natural outdoor classrooms provide a unique opportunity to educate the public on a variety of Forest Preserve topics via signage, interpretive trails and displays, or through the

Additional interpretation occurs associated with the relocated fire towers at the Adirondack Museum in Blue Mt. Lake and Adirondack Center in Elizabethtown. These sites are used by some teachers who bring their students during school field trips.

use of a "summit guide." To assist the Department some local committees schedule volunteers to provide information at the towers they sponsor, and several have funded seasonal positions for "summit guides." Summit guides at fire towers are distinguished from summit stewards on Adirondack High Peaks by the differences in their roles. Whereas summit stewards' specific purpose is to help visitors recognize the need to protect sensitive alpine flora, fire tower summit guides partially fill the role of fire observers of the past. Developments in the definition of and training for summit guides' stewardship and interpretation responsibilities are described below.

Volunteer Summit Guides

Local committees for the fire towers at Blue (1995), Hadley, Poke-O-Moonshine, and Kane mountains (occasionally), as well as at Azure Mountain (more regularly), have delegated volunteers to greet and inform the visiting public. Even though they employ a summer summit guide, the Hadley and Poke-O-Moonshine committees also schedule volunteers to cover busy weekends when the summit guide is absent, particularly in the spring and fall. Rather than employing a summit guide, the Friends of Azure Mountain have produced an excellent guidebook on tower and friends organization history, and local flora, fauna, and geology, and have organized an effective volunteer program over the last several years.A small fund supports occasional paid supplements to the volunteers along with a $350 scholarship award program. In 2007 they became the only Adirondack tower friends committee to achieve independent incorporation as a 501(c)(3), not-for-profit organization under state and federal law.

Paid Summit Guides

The first summit guide at an Adirondack fire tower was employed from July 5 to August 21, 1994 by the coalition of organizations that restored the Blue Mountain tower. AARCH provided the non-profit status necessary for an AANR agreement, while the Cornell Cooperative Extension of Hamilton County provided employee payroll services and basic insurance. Although the committee dissolved and the position was discontinued, within a few years three other tower committees had formed and, following the precedent of the Blue Mt. tower, were raising funds to employ their own summit guides.

The Hadley Mountain Fire Tower Committee, for example, funded its position in 1996 first with a grant from the International Paper Foundation, and more recently with an annual newsletter

that solicits individual membership contributions. Their non-profit status and employee payroll and insurance services are all provided by the Cooperative extension of Saratoga County. Since 2002, the Friends of Mt. Arab and Poke-O-Moonshine have also solicited annual individual contributions to fund their summit guides. Both committees initially received non-profit status from Adirondack Architectural Heritage, and when that was withdrawn in 2005, from membership in the Adirondack Fire Tower Association, formed in 2006 under the non-profit Potsdam College Foundation in large part to serve those purposes. The Friends of Mt. Arab receive funding support, employee payroll and insurance services through the St. Lawrence County Youth Bureau, while the Friends of Poke-O-Moonshine receive employee payroll and insurance services from the Town of Chesterfield. During the summers of 2005 and 2006, the Friends of Bald (Rondaxe) Mountain funded summit guides with support from the Central Adirondack Association (of local businesses). Their non-profit status is still temporarily provided by AARCH, while the Town of Webb provided book-keeping services and insurance.

Temporary lodging for summit guides necessarily differs depending on each fire tower's circumstances. With DEC permission the observer cabins at Hadley Mt. and Mt. Arab have been used on nights between days on duty, and at Poke-O-Moonshine Mountain the summit lean-to or a site at the DEC's public campground have been provided by the Department. At towers without an observer's cabin, local committees do not generally provide off-site housing for summit guides, which limits their hiring to candidates who are willing to camp or arrange for their own lodging.

The job descriptions and informal training which friends committees have provided their summit guides place primary emphasis on stewardship duties, which commonly include deterring vandalism, assisting with local fundraising, and providing ongoing tower, observer's cabin, and trail maintenance services. Most training limits educational responsibilities to identifying features of the surrounding landscape, to providing information about the tower's history, and in some cases to amplifying factual information in trail guides about local flora, fauna, and geology. Depending upon their degree of involvement with the friends committee, DEC rangers and foresters upon occasion provide training for emergency services support, orientation to basic regulations governing public use of Wild Forest lands, and in a few cases radios, training in communication protocol, and elements of a uniform. Because the training of summit guides has until recently depended upon the

independent initiative of each local committee as the sole employer, the educational priorities and content have necessarily been limited and varied among tower sites. With a primary emphasis on stewardship activities, educational priorities have generally been limited to providing factual information rather than interpretation of the Forest Preserve or Adirondack Park.

In 2003 SUNY-Potsdam created a new major in Environmental Studies of the Adirondacks, with a curriculum designed to provide a consistent, effective educational program for Adirondack fire towers. Partnerships were formed with the DEC, and first with Friends of Mt. Arab (2004), then with the Hadley Mountain Tower Committee and Friends of Bald Mt. (2005), and most recently with Friends of Poke-O-Moonshine (2006), with the agreement annually to provide student summit guides fulfilling a service-learning residency during the summer following their junior year as a requirement for completion of their B.A. degree.

At the end of three years of study, including courses in Adirondack history, ecology, and geology, candidates who qualify for Potsdam College's summit guide service take a ten-week course specifically designed to prepare them for stewardship and public interpretation at a fire tower. Informed by professional interpretive standards and techniques, and guided by the "unifying theme" of the Adirondack Park State Land Master Plan, students are prepared to explain to the public the special history and unique character of the Forest Preserve and Adirondack Park. Candidates are interviewed by DEC site supervisors and tower committee leaders, who also offer stewardship training in class sessions. All summit guides must further demonstrate substantial outdoor experience, and have at least basic certification in First Aid/CPR and Leave-No-Trace teaching skills.

The Potsdam College faculty member who instructs the preparatory course also supervises the student summit guides at their tower sites to ensure that their service meets expectations and entails substantial learning; attends tower committee meetings and communicates with DEC site supervisors; and advises in the design of a project, acceptable both to the DEC and the local committee, which contributes materially to public interpretation at the tower. This project is completed during the fall of senior year, and is included in an "archive" to develop each fire tower's interpretive resources year by year.

From 2003 through 2007, Potsdam's Environmental Studies program has successfully provided a total of sixteen student summit guides at five fire towers. In the summer of 2009, summit guides worked on Hadley, Poke-O-Moonshine, Blue and Arab mountains. Given the potential for fire tower restorations on Forest Preserve and easement lands, however, it appears likely that within a short time the needs for summit guides will exceed the optimum capacity of Potsdam's program.

Other Projects

Students from Paul Smith's College under the Watershed Stewardship Program have performed recreational use studies and interpretive services in association with St. Regis Mountain during summers from 2000 through 2003. The first year there was coverage for the whole week, since then the steward was only on the summit for weekends. The main focus of the program was the protection of the watershed through public education aimed at promoting the quality of the mountain ecosystem and secondarily, the quality of human recreational pursuits. They were not present on the summit for the years 2004 -2006, although they did do some light trail maintenance consisting of clearing water bars and drainage dips, along with pruning and hand-sawing blowdowns. They were on the summit in 2007 on the weekends. The stewards would record data on summit visitation and then talk to visitors about the importance of watershed protection, especially as it relates to hiking.

While not directly an educational project, a recent cooperative effort involved the construction of a new 3.5 mile more leisurely trail to the to the 3,830-foot summit of Lyon Mountain. Scouting and design of the new trail was completed in 2006 with the help of funding from ADKs Algonquin Chapter. The trail was built in 2008 by ADKs professional trail crew working under contract with DEC. The project is an example of modern trail layout, utilizing 11 switchbacks in some of the steepest sections while keeping the trail grade from 8 to 15 degrees.

Table VIII - Fire Towers with education or interpretation programs

Tower Name	Friends Group or Organization [1]	Summit Guide	Cabin Use	Nature Trail
Azure Mt.	Azure Mountain Friends	Yes, volunteer	No cabin	No
Blue Mt.	Blue Mt. Fire Tower Committee replaced by the Friends of Blue Mountain	Yes, intern	Shelter [2]	Yes Trailhead Brochure
Cathedral Rock	SUNY ESF	No	No cabin	No
Goodnow Mt.	SUNY ESF	No	Museum	Yes Trailhead Brochure
Hadley Mt.	Hadley Mountain Fire Tower Committee	Yes, intern	Shelter [2]	Yes Trailhead Brochure
Hurricane Mt.[1]	Friends of Hurricane Mountain	No	No cabin	No
Kane Mt.	Canada Lake Protective Association	Yes, volunteer	Proposed exhibit [2]	UMP Proposal
Loon Lake Mt.	Pending group	No	Private cabin	No
Lyon Mt.	None to date	Yes, volunteer	No cabin	No
Mt. Adams [1]	Friends of Mount Adams	No	Private cabin	No
Mt. Arab	Friends of Mount Arab	Yes, intern	Exhibit	Yes Trailhead Brochure
Owl's Head Mt.	Friends of Owl's Head Fire Tower	No	No cabin	No
Pillsbury Mt.	Friends of the Forest at Pillsbury Mountain	Pending tower rehab	Proposed exhibit	UMP Proposal

Tower Name	Friends Group or Organization [1]	Summit Guide	Cabin Use	Nature Trail
Poke-O-Moonshine Mt.	Friends of Poke-O-Moonshine	Yes, intern	Cabin remains	Yes Brochure
Rondaxe (Bald) Mt.	Friends of Bald Mountain	Yes, intern	No cabin	No
Snowy Mt.	Individual under AANR	Yes, volunteer	No cabin	UMP Proposal
Spruce Mt.	Pending public access	No	No cabin	No
St. Regis Mt.	The Friends of St. Regis Mt. Fire Tower	Yes, Paul Smith's	No cabin	No
Stillwater Mt.	Friends of Stillwater Fire Tower	No	Shelter	No
Vanderwacker Mt.	Friends of Vanderwacker Fire Tower	UMP proposal	None	UMP proposal
Wakely Mt.	Friends of Wakely Mountain	Pending tower rehab	UMP Proposal	UMP proposal

[1] Although a friends group has been formed for this fire tower, no AANR agreement with DEC has been authorized.
[2] These cabins have occasionally been utilized for temporary shelter by summit guides during the summer, under the terms and conditions of an AANR.

C. Museums

Detailed fire tower displays and information on Adirondack Park history and cultural resources is available to the public at the Adirondack Museum and Adirondack Center Museum.

The original Whiteface Mountain fire tower is now located at the Adirondack Museum. On May 23, 1972, the dismantled fire tower was taken off Whiteface Mountain. The fire tower's historical sign was kept on top of the mountain until the spring of 1973, when the fire tower and the sign were transported to the DEC maintenance offices at Saranac Inn. The tower's historical marker, erected in 1935, erroneously gives 1909 as the year the tower was constructed. A fire observation station was placed on top of Whiteface Mountain on this date, but this particular tower wasn't built until 1919.

The Adirondack Museum staff re-assembled the fire tower in the spring of 1974. It is currently on display outside the logging building, and visitors may climb to the top of the tower and enjoy a great view of the museum grounds and Blue Mountain Lake.

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CHAPTER 8: PAST MANAGEMENT

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PAST MANAGEMENT

The following Chapter includes an overview of past management activities related to wild fires, fire towers, and installation of appurtenances such as radio repeaters. Included are initiatives undertaken by not-for-profit groups, discussion of recent fire tower restoration efforts, and formation of fire tower "friends groups."

I. FOREST PROTECTION AND FIRE MANAGEMENT

The fire management role of Forest Rangers has evolved in response to an extensive history of both natural and human-caused fire in New York's wildlands. The NYSDEC* Division of Forest Protection (Ranger Division) has proven itself by not only suppressing fires, but by also preventing them. Prevention and aggressive suppression actions have led to reduced numbers of human-caused fires and acreage burned in recent years.

A. Wildfire Causes

There have been many different causes of wildland fires in New York State. The Division of Forest Protection classifications for wildland fire causes include: debris burning, campfires, lightning, railroads, smoking, children, equipment use, arson/incendiary and miscellaneous. Human caused wildfires are the leading category of reported fires, with debris burning the leading human caused fire category. The primary cause of wildland fire on public lands is unattended campfires. Over the past 20 years, lightning strikes have accounted for approximately four percent of the total reported fires in the state. However, in 2002, at the end of a five year drought, lightning caused 12 percent of the total fires reported. Those fires proved to be difficult and costly to control due to the number of starts, the remoteness of locations, and resistance to control.

B. Origin of Rangers' Responsibilities

The creation of the forest fire protective force in1885 gave Forest Rangers the responsibility of wildland fire protection and prevention. Later, "fire towns" were established in townships containing vast tracts of public lands, which were considered to have the greatest need of wildland fire protection. In 1911 funding to improve the fire protection system allowed for the establishment of "fire districts," expanding the wildfire jurisdiction of the Ranger

The New York State agencies and its successors over time were the Forest Commission (1885-1894), the Fisheries, Game and Forest Commission (1895-1899), the Forest, Fish and Game Commission (1900-1910), the Conservation Commission (1911-1926), Conservation Department (1927-1969), and the Department of Environmental Conservation (1970-present).

force. In the protected areas of fire districts and fire towns, Forest Rangers share dual jurisdiction with village and town fire departments under the General Municipal Laws.

II. ORGANIZATIONS PROVIDING MANAGEMENT SUPPORT

In addition to individual friends groups that focus on a particular fire tower, a few larger organizations involved with fire tower restoration or educational efforts include:

Adirondack Architectural Heritage (AARCH) is a nonprofit historic preservation organization for New York State's Adirondack Park. AARCH was formed in 1990 with a mission to promote better public understanding, appreciation and stewardship of the Adirondack's unique and diverse architectural heritage. AARCH fulfills its mission through educational programs and publications, by providing technical assistance, through advocacy, and by restoring and managing historic sites through partnership arrangements. This includes not only the nationally recognized "Great Camps" and other rustic buildings but also many other structures that embody the whole range of human experience, including the sponsoring of three fire tower restoration projects.

AARCH has encouraged the preservation of fire observation towers, beginning with its involvement with the Blue Mountain Fire Tower Restoration Committee. In 2000, AARCH successfully nominated ten New York State fire towers to the National Register of Historic Places and made it possible for other towers to be added to the Register. This effort enabled a better understanding of the contextual framework and a fuller appreciation of fire towers and cabins connected to it.

AARCH actively enabled the establishment of four fire tower “friends” committees on Azure, Bald, Mt. Arab, Poke-O-Moonshine, and Rondaxe (Bald) mountains, by providing interim non-profit sponsorship and related financial services. For more information visit http://www.aarch.org/

With other demands on its time and resources, AARCH made the decision, beginning in 2005, to "spin-off" the four fire tower friends groups operating under its auspices. This was done for a number of reasons. First, all four of the groups had completed all of their major goals and had matured sufficiently as organizations to operate independently. Second, AARCH wanted to be in a position to take on other friends projects, as they might arise. At the end of 2004, AARCH spun-off the Azure Mountain Friends and Friends of Mt. Arab and, at the end of 2006, did the same for the Friends of Poke-O-Moonshine and the Friends of Bald Mountain. After exploring alternatives and reluctant to engage in a long, expensive process of independent incorporation, both the Friends of Poke-O-Moonshine and the Friends of Mt. Arab affiliated with the newly created Adirondack Fire Tower Association, under the auspices of the Potsdam College Foundation. The Friends of Mt. Arab had previous worked with SUNY Potsdam to provide summit guides.

AARCHs current role with Adirondack fire towers is as an advocate for the preservation of the few remaining towers whose future is still in jeopardy. These include the towers on Hurricane and St. Regis mountains. AARCH has also given advice to fledgling friends groups and serves on the advisory board of the Adirondack Fire Tower Association. If the occasion and need arise, AARCH will lend its more formal nonprofit support to future fire tower friends organizations.

Adirondack Fire Tower Association (AFTA) was established in 2006 under the not-for-profit auspices of the Potsdam College Foundation. "Contributing" charter members (requiring non-profit status and related financial services) are the Friends of Mt. Arab and Poke-O-Moonshine towers, while the Hadley Mt. Fire Tower Committee joined as the "associate" charter member.

AFTAs purposes include:

- to promote and enable the effective use of Adirondack fire observation towers for public education purposes, particularly with respect to the character of the Adirondack Park and the role of the NYS Forest Preserve.

- to support local fire tower committees in pursuing their educational and stewardship missions;

- to support and facilitate the partnerships between local committees and the DEC; and

- to encourage and support the establishment of new committees for fire towers.

AFTAs purposes do not extend to advocacy for any fire tower whose preservation has not been approved by the DEC, and endorsed by the Adirondack Park Agency. For more information visit http://www.adirondackfta.org/index.html

Forest Fire Lookout Association (FFLA) is a national organization, founded in 1990, involved in research of former forest fire lookout sites, ground cabins and early forest fire detection methods. The organization encourages efforts of public groups and others in the restoration of forest fire lookouts. The FFLA prepares nominations for the National Historic Lookout Register. For more information visit http://www.firelookout.org/

The New York Chapter of the FFLA follows the National Bylaws of the organization. Relevant language describing FFLAs organization includes:

- Every effort will be made to cooperate with other organizations and agencies with similar interests and aims.

- So long as the National Historic Lookout Register exists, this Corporation will endeavor to do all things proper and reasonable to facilitate the work of the Register.

- While being supportive with information and historic research to individuals and agencies, this Corporation will at all times avoid a political or lobbying role in the matter of lookout job retention or those matters related thereto.

Adirondack Mountain Club (ADK) has 27 Adirondack Mountain Club chapters located across New York State. Individual chapters have assisted in fire tower restoration efforts, such as the Genessee Valley Chapter's work on Rondaxe (Bald) Mountain. The club coordinates volunteer trail projects involving trail maintenance on fire tower trails and the Fire Tower Challenge program. Most recently in 2008, ADKs professional trail crew worked under contract with DEC to construct a new trail up Lyon Mountain. Additionally, the Adirondack Mountain Club, through its chapters occasionally offers hikes to fire towers, which provide direct educational and interpretive opportunities for visitors. For more information visit www.adk.org

Student Conservation Association (SCA, previously called Americorps) is a nonprofit organization that offers conservation internships and summer trail crew opportunities. Their mission is to build the next generation of conservation leaders and inspire lifelong stewardship of the environment by engaging young people in hands-on service to the land. This organization has provided assistance with various fire tower trail maintenance and fire tower rehabilitation efforts since 2000.

III. FIRE TOWER RESTORATION EFFORTS

For the last century, fire towers have remained popular with the public. There are those who see fire towers as priceless historical artifacts. Other people see them as valuable tools for environmental education. Fire towers are also considered important tourist attractions and destinations for hikers. Although the demise of individual fire towers began as a result of neglect, abandonment, and declining State budgets, many towers are finding new life as support has grown for the retention of these structures as both recreational destinations and cultural resources. The Department has responded by entering into stewardship agreements with volunteer organizations interested in assisting in restoration work and conducting interpretive activities, so that the views and educational aspects of the towers can now be enjoyed by the public.

A. Fire Tower Restorations (See map and table in Appendix)

The movement to preserve fire towers was partially galvanized by an act of vandalism. During the weekend of April 18-19, 1992, the decommissioned tower on Pharaoh Mountain was toppled by a vandal and subsequently removed by helicopter by DEC. The public outrage over this act spurred grassroot efforts by some groups to save some of the remaining fire towers.

The Blue Mountain Fire Tower Committee was the first recognized Adirondack tower public/private tower preservation partnership to form. In 1993, a steering committee composed of representatives from DEC, non-profit groups, concerned individuals,

and the local towns met to address restoration efforts on Blue Mountain. This committee included representatives from the Adirondack Museum, Cornell Cooperative Extension, Adirondack Ecological Center, Adirondack Mountain Club, Adirondack Architectural Heritage, Town of Indian Lake and DEC. Additional assistance was provided by the Forest Fire Lookout Association and the NY Conservation Council. The idea was to use the project as a demonstration for other groups interested in preserving fire towers.

The goals of the project were fourfold:

- To document the process so other organizations would have a model for reopening additional fire towers.
- To provide the framework for an effective environmental education effort with a trained educator and to publish a self-guided trail brochure.
- To develop the fire tower as an anchor for economic development through tourism.
- To preserve the fire tower for its historical value and recapture some of the heritage of the colorful observers who staffed the towers for decades.

The fire tower was reopened in 1994 after it was rehabilitated and staffed with an Interpretive Intern from the Adirondack Wildlife Program of the NYS College of Environmental Science and Forestry. This first "summit guide" worked from July 5 through August 21, four days a week (Thursday-Sunday) at the fire tower and one day at the Adirondack Museum. Education efforts concentrated on the history, geology, and ecology of the Adirondack Park in general and Blue Mountain in particular. Associated with the fire tower rehabilitation effort, a 14 stop, self guiding nature trail and brochure was developed in the summer of 1995. While the group was not able to fund a summit guide in 1995, volunteers staffed the summit on key weekends. The program did not continue in the following years, but recent public donations have enabled a summit guide (with the help of the Town of Indian Lake) to be on Blue Mountain in the summers of 2007, 2008 and 2009.

Following this initial effort, other fire towers have been restored or are in the process of undergoing restoration both in the Adirondack and Catskill Parks[*]. In the Adirondacks the fire towers on Azure, Blue, Cathedral Rock, Goodnow, Hadley, Kane, Mt.

[*] *In 1997, a group of volunteers formed the Catskill Fire Tower Restoration Project for the preservation of the five remaining Catskills fire (Mount Tremper, Hunter, Balsam Lake, Red Hill, and Overlook mountain) towers.*

Adams, Mount Arab, Owl's Head, Poke-O-Moonshine, Rondaxe (Bald), Snowy, and Vanderwacker mountains have been restored to various degrees. The towers on Lyon, Pillsbury, and Wakely mountains are in the process of being restored.

The restoration of other fire towers such as Loon Lake, Spruce, and Stillwater are possible in the future pending funding for rehabilitation, friends group interest, and resolution of any public access issues over private lands.

B. Partnerships

Fire tower restoration and interpretive work has occurred as a result of partnership efforts among various groups, towns, and the Department. Many of the fire towers owned by DEC are being restored or maintained by volunteers acting under a "Adopt-A-Natural Resource" agreement (AANR) with DEC.

Each group operates under an AANR specifically for the fire tower that each individual group has adopted. The AANR provides for Workers Compensation should someone become injured while performing pre-approved work. The agreement spells out the allowed activities and responsibilities of the steward along with the technical services to be provided by the Department. (For an example of the AANR agreement for Kane Mountain, see Appendix)

In order to promote a consistent, coherent education program for fire towers, basic standards for interpreter training are recommended to be incorporated in the terms of future AANR Agreements. (See Appendix)

The following table provides information on the status of fire towers on Forest Preserve, Conservation Easement, and private lands open to the public.

Table IX - Fire Tower Restoration

Tower Name	Tower Status	AANR	Comments
Azure Mt.	Adopted and restored.	Yes	Restored in 2002 by DEC staff, SCA, and Azure Mountain Friends
Belfry Mt.	Restoration in progress.	No	Tower partly restored in 1999.
Black Mt.	Closed to public - Used for communications purposes by NYS Police.	No	Tower closure and modifications for communications render the tower unsuitable for adoption.
Blue Mt.	Adopted and partly restored.	Yes	Restored in 1994 by DEC staff, Town of Indian Lake, and other groups.
Cathedral Rock	Maintained by ESF and restored.	N/A	N/A
Goodnow Mt.	Maintained by ESF and restored.	N/A	N/A
Gore Mt.	Closed to public - Used for communications purposes by DEC.	No	Tower closure and modifications for communications render the tower unsuitable for adoption.
Hadley Mt.	Adopted and restored.	Yes	Restored in 1994 by DEC staff and the Hadley Mountain Fire Tower Committee.
Hurricane Mt.	Abandoned	No	UMP under development.
Kane Mt.	Adopted and restored.	Yes	Restored in 2003 by DEC staff and the Canada Lake Protective Association.
Loon Lake Mt.	Abandoned	Yes	Awaiting funding for trail and parking development.
Lyon Mt.	Restoration in progress.	No	Work conducted from 2005 - 2008 by DEC staff, SCA, and ADK .

Tower Name	Tower Status	AANR	Comments
Mt. Adams	Restoration in progress.	No	Partially restored in 2005 by DEC staff, OSI, and SCA. Currently closed.
Mt. Arab	Adopted and restored.	Yes	Restored in 1999 by DEC staff and Friends of Mt Arab.
Owl's Head Mt.	Adopted and restored.	Yes	Restored in 2002 by DEC staff and the Friends of Owls Head
Pillsbury Mt.	Restoration in progress.	Yes	Partially restored by DEC staff and SCA.
Poke-O-Moonshine Mt.	Adopted and restored.	Yes	Partially restored in 2004 by DEC staff and Friends of Poke-O-
Rondaxe (Bald) Mt.	Adopted and restored.	Yes	Restored in 2005 by DEC staff, Genesee Valley Chapter of ADK,
Snowy Mt.	Adopted and restored.	Yes	Restored in 2001 by DEC staff and SCA.
Spruce Mt.	Abandoned	No	Resolve public access.
St. Regis Mt.	Abandoned	No	UMP Amendment under development.
Stillwater Mt.	Abandoned	Yes	Awaiting funding for restoration.
Vanderwacker Mt.	Adopted & restored.	Yes	Restored in 2004 by DEC, SCA, and the Friends of
Wakely Mt.	Restoration approved in UMP.	Yes	Awaiting funding for restoration.
Woodhull Mt.	Abandoned.	No	Awaiting funding for restoration.

IV. COMMUNICATIONS EQUIPMENT

Initially the fire towers and mountain summits were primarily used for DEC fire control and communication purposes. As technologies advanced radio use by Division of Lands and Forests and Fish and Wildlife was allowed as there was no interference with existing radio facilities and consolidation served the needs of all Divisions. Several fire tower summits are now being utilized by the Department for the operation of the Fire Control, and Law Enforcement radio systems. Over time these locations became increasingly more in demand by other agencies requesting to use the summits for repeater stations.

In the past, the Department has permitted local and state government agencies to co-locate telecommunication equipment on existing towers through administrative agreements when the local or state agency intended use served a public purpose. Some sites are shared and utilized by county mutual aid radio networks and other municipal and state communications systems. The installation and upkeep of repeaters on these mostly remote summits has been afforded to other agencies through a means of Temporary Revocable Permits (TRPs) as required by Section 9-0l05 and longer term Use and Occupancy Agreements. After installation, longer term Use and Occupancy Agreements were drawn up. These agreements outlined what would be done to maintain the facilities and specified the allowed equipment each agency was to have installed. As technologies advanced, systems were routinely upgraded, added and removed.

As more and more agencies applied for permission to install equipment issues over space availability and over loading began to emerge. This prompted the DEC to more closely manage the sites and review the existing uses of summit facilities. During the spring of 2007 the task of inventorying all the radio and transmission facilities on mountain summits owned, leased or managed by DEC was initiated on the 12 mountains in the Region 5 management area.

V. HISTORIC PRESERVATION

The New York State Historic Preservation Act of 1980 (SHPA) requires DEC to consult with OPRHP regarding any facilities which are listed on the National Historic Register, or are eligible for listing. State and National Register listing may create a conflict between the New York State Historic Preservation Act (SHPA) of 1980 (Article 14 of Parks, Recreation and Historic Preservation Law), which mandates that state agencies act as stewards of historic properties under their control, and the APSLMP, which has the force of law.

However, historic preservation needs should be balanced with the concept behind another, earlier historic designation for the Adirondack Park - the 1963 designation of the Adirondack Forest Preserve as a National Historic Landmark. Specifically, the national designation recognizes:

> "...the first state forest preserve in the nation when New York State established it as a wilderness area in 1885. The act of establishment encompassed all state-owned lands in the Adirondack region, along with those in three

counties in the Catskills, and directed that they be forever kept as a wilderness" (Statement of significance, NHL designation May, 23, 1963).

Many of the fire towers located within the Adirondack Forest Preserve are considered as contributing features to this National Historic Landmark. As such, any undertaking planned for fire towers that retain sufficient integrity for listing on the State/National Register would be subject to 14.09 review.

A. Fire Tower Assessment

In early 1990, OPRHP identified the need for DEC to prepare a contextual study to document the types of fire towers, their dates of construction, and to clarify the agency's present and future plans for the structures. The Bureau of Forest protection and Fire Management conducted an inventory of fire towers and observer cabins statewide. A list of historic resources (unpublished inventory prepared by the New York State Department of Environmental Conservation) in 1991, categorized fire towers under different categories. Three categories of fire towers were identified; those that would be retained by DEC that are eligible for inclusion into the State and National Registers of Historic Places, those towers which were not considered eligible for Historic Registrations, and those towers which were eligible for Historic Registrations that the DEC would either remove or transfer ownership.

DEC worked with OPRHP to identify which of the fire towers owned by DEC should be considered for historic preservation. The Department and OPRHP entered into a SHPA Letter of Resolution in 1994. This agreement commits the Department to taking affirmative steps to facilitate the preservation of historic fire towers in those Forest Preserve land classifications where the APSLMP permits it and allows for the removal of fire towers from Forest Preserve land classifications where towers are non-conforming to the Master Plan. The Letter of Resolution (draft versions developed in early 1991) reflected agency and public attitudes toward fire towers at the time. Increasing public awareness about their historic importance and passion to rehabilitate fire towers, led to a dramatic change in interest by the general public, state agencies, nonprofit organizations, and municipalities. Due to this change, many groups have commented the SHPA Letter of Resolution should be updated.

Within the SHPA Letter of Resolution the status of individual fire towers was listed as either National Register Eligible (NRE) or National Historic Landmark (NHL), with tower disposition identified as remove, transfer, or retain. Fire tower status can involve separate Federal programs which have different criteria. The NHL

list is authorized by the Historic Sites Act of 1935 and is intended to be a rather short list of places that are very important in American history, archaeology or culture. This listing is entirely a federal program in which the states play no role. By federal regulation (36 CFR 60) NHL sites are also automatically listed in the National Register. The National Register was created by the National Historic Preservation Act of 1966 (NHPA) and is intended to be a big list of places, sites, buildings, or objects that are important in national, state or local history. The states play a key role in this through the State Historic Preservation Officer (a position created by NHPA but designated by the States). To be listed in the NRHP, properties first have to be found eligible by SHPO staff professionals, then recommended for nomination by the National Register Review Board. The keeper of the National Register (National Park Service staff), then review the nomination, mainly for technical completeness but they can disagree with the SHPO as to whether a property should be listed. After the NPS review and approval, the property is listed.

B. Fire Tower Nominations

In the late 1990's, only 36 of the State's 120 towers built between 1917 and 1930 remained. All were deactivated and most scheduled for removal. In 1998, the Preservation League of New York State and the New York State Council on the Arts awarded a grant to the Adirondack Architectural Heritage (AARCH) to complete the documentation necessary for nominating ten historic fire towers in the Adirondack and Catskill Mountains to the State and National Registers of Historic Places. According to Charles Vandrei, DEC's historic preservation officer, "To be considered for the National Register, the structure must be in good condition and its appearance must not be greatly modified from the period during which it was used." In submitting the nomination paperwork, the potential local historic significance of each fire tower was taken into account. For each eligible fire tower there was a rating form, including a description of the property's boundaries, a USGS quadrangle map locating the fire tower, and photographs showing views from the cab. Following approval, the ten towers were listed in the State and National Registers in 2002.

C. National/State Register Listing Implications

The recognition and status of a National Register listing helps provide additional protection to preserve one of NY State's most visible conservation efforts. Following the multi-tower listing in 1998, several new fire tower "friends groups" were formed and existing ones strengthened, helped by technical and administrative support from AARCH. Some of the nomination paperwork has been accomplished by friends groups and other volunteers.

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CHAPTER 9: MANAGEMENT ISSUES

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MANAGEMENT ISSUES

The following Chapter identifies the principal issues affecting existing fire towers, observer cabins, and associated communication facilities. More detailed information on recommendations to address some of these concerns can be found in following Chapters.

I. GENERAL QUESTIONS

Public comments related to fire towers received during the development of Department UMPs have covered a wide range of topics. Recent efforts to rehabilitate fire towers and the formation of "friends groups" has led to a variety of different management approaches along with the identification of several issues that need resolution or further clarification. Some of the major questions considered during the development of this study include:

- Fire Tower status: Fire towers and associated structures have not been used or maintained for fire detection purposes for many years. What purpose should they serve today? Are all the fire towers still needed?

- In addition to fire towers in general, some issues are specific to individual towers. For example, how should the APSLMP non-conforming status of Hurricane and St. Regis towers be addressed? Is there a need for the Hurricane or St. Regis towers for Department communications?

- Electronic communications (existing and proposed): Which power facilities such as generators, solar panels, or wind turbines are more appropriate? Who are legitimate users? What agreements are in place?

- Observer's cabin status: Keep or remove solely based upon value for historic interpretation? What type of displays should be allowed? Question as shelter by DEC staff or volunteers.

- Historic value and designation: How does this influence management actions? What measures should be taken to protect and interpret cultural resources? What modifications can be allowed that will not compromise the historic integrity of the facility? What type of displays such as a map table should be in each fire tower cab or observer's cabin?

- Staffing of towers by summit guides: What message to deliver to the public? Long term viability of programs? Role of the Department?

- Fire Tower maintenance concerns: What needs to be done to safely accommodate existing and anticipated future public use? Concerns with vandalism? Funding sources? Use of volunteers and friends groups.

- Natural resource impacts: What impacts do fire towers and associated public use have on the natural resources of the summit and access trails? Are there habitats of rare, threatened, or endangered species that need protection?
- Wild Forest Character: What facilities and/or level of development or public use are appropriate for fire tower locations? Appropriate level and types of signage on tower and at summit.

- Public Use: What measures should be taken to provide managers with a more accurate picture of public recreational use numbers, patterns and trends, as well as a better measure of the expectations and interests of the public? In the context of the character of the area and historic use patterns, what kinds and levels of use are appropriate? Need for regulations?

- Access: Is the present level of access to fire tower summits appropriate? What can be done to increase access where appropriate or to reduce access when necessary to protect natural resources or user experience?

- Classification and Reclassification: The classification or reclassification of any part of the Adirondack Forest Preserve constitutes an amendment to the APSLMP and is the responsibility of the APA, in consultation with the Department. In the context of existing fire towers and their access trails, should any of the boundaries be changed? When historic or natural resources cannot be adequately protected or managed under the existing land classification, should a change in APSLMP classification be considered?

II. ISSUES OUTSIDE THE SCOPE OF THIS STUDY

These issues while outside the scope of this study were briefly considered.

- Fire towers on adjacent State lands outside the Adirondack Park or fire towers on private property are beyond the scope of this document and will only be discussed as they relate to fire tower access or Department communications.

- Acquisition: With the exception of documenting current Department acquisition projects, this study will not make any specific recommendations concerning acquisition of private lands with fire towers.

CHAPTER 10: MANAGEMENT STRATEGIES

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MANAGEMENT STRATEGIES

This Chapter includes a discussion of fire towers and observer cabins in general within the context of historic preservation and recreational use. A summary of past use, existing use and condition, and anticipated future Department use for each remaining DEC owned tower within the Adirondack Park is discussed in the following sections.

I. STATUS OF STATE OWNED FIRE TOWERS ON FOREST PRESERVE LANDS

At their peak in the 1940s and1950s, some 8,200 forest fire lookouts were scattered across the nation. Only 800 towers remain, of which 300 are active. On the eastern coast there once was a system of lookout stations spread along the mountaintops from Florida to Maine. Many of these towers have fallen into disuse, or have been abandoned.

In the New England area, government officials have taken a variety of positions regarding fire towers and their uses. The Forest Fire Lookout Association maintains an inventory of fire towers in the country and has identified by State the towers that are active, towers that are still standing but inactive, and towers that were removed. A comparison of fire tower status for states in close proximity to New York indicates that Maine (3 active, 64 still standing- inactive), Vermont (16 still standing-inactive), and Connecticut (9 still standing-inactive) have eliminated the active use of most fire towers, favoring aircraft surveillance for fire control. But in Pennsylvania (26 active, 37 still standing-inactive), Massachusetts (43 active, 13 still standing-inactive), New Jersey (21 active, 7 still standing-inactive), and New Hampshire (17 active, 10 still standing-inactive) fire towers are still in use and functioning for their original purpose of fire control.

New York State had 124 fire detection sites with 110 of the steel towers originally owned by Forest Fire Control. (See map in Appendix) Four were private towers that worked in conjunction with the State network. In 1959, all of the seven Long Island towers were closed due to low fire incidents, with many sold as scrap or dismantled for spare parts. Following the closure of the last four operational Adirondack fire towers in 1990, the fire towers in New York State under the jurisdiction of DEC were no longer considered essential for fire control purposes. Presently the bulk of the Department's fire detection is accomplished by Forest Rangers while on patrol. While the division relies on reports from civilian aircraft and the public, aerial detection flights are typically flown when certain Regional Preparedness Levels are reached. Limited fire tower use by OPP staff does still occur during high fire danger times. Occasional use is also associated with search and rescue efforts when a portable radio on the fire tower is used like a "repeater."

Excluding towers moved to new locations, there are 60 standing fire towers in New York State. Nineteen of these towers are closed to the public with the other 41 fire towers or fire tower summits open to the public. The Sterling fire tower is the only remaining operational fire tower in New York State and is operated by Bear Mountain State Park fire control.

Within the Catskill Park, five of the original nine (55%) fire towers remain. All of the existing towers are located on Forest Preserve land. Within the Adirondack Park, 32 (not including two reconstructed towers at museum sites) of the original 57 (56%) fire towers remain. Of the existing Adirondack fire towers, 20 (62%) are located on Forest Preserve land.

Fire towers are listed as conforming structures in wild forest, The APSLMP (page 36) states:

> "The educational and informational aspects of certain fire towers should be encouraged and wherever feasible these fire towers should be retained where consistent with their need from a fire control and communications standpoint."

While fire towers are no longer used as observation points for fire detection, the towers on Belfry, Black, Blue, Gore, Lyon, Pillsbury, Wakely (future repeater), and Woodhull mountains remain as essential components of a radio communications network. New developments in communications technology might render tower-based radio repeater stations obsolete in the future.

There is no formal comprehensive policy governing the management of fire towers on Forest Preserve lands in the Adirondacks. This has led the APA and DEC through the UMP process to address fire towers as conforming or non-conforming facilities within Primitive and Canoe Areas, while without exception approving plans that called for the retention of fire towers in Wild Forest.

A general listing of existing use, present status, and anticipated future Department activities planned for each remaining tower and cabin under DEC jurisdiction is summarized in the following table. Recreation: identifies the fire tower, trail, and summit uses and condition. Education: includes the presence of summit guides or volunteers, interpretive exhibits, displays, or brochures. Communications: documents radio and other associated facilities on or adjacent to the fire tower.

Table X - Fire Tower and Cabin Status Summary

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Azure Mt.* (1978) Farthest northwest tower in the Park. Partial views from base of tower.	Debar Mountain Wild Forest Summit area, foot trail, and fire tower are located on a 535-acre tract acquired in 1934. No UMP	Recreation: Open cab with map table. Moderate public use, short hike suitable for families with kids. Education: Summit guide. Active Friends Group.	Tower restored and adopted. Fair/Good condition. Trail in fair condition. Historic Status: NRHP listing. Existing trail follows jeep road, original trail may have went to Blue Mt. House.	Recreation: Continue rock work at summit for erosion control. Education: Continue summit guide and volunteer efforts. Cab needs interpretative panels.
Observer's Cabin removed in 1995.		Picnic table and fireplace at site.	▬	▬
Belfry Mt.* (1988) Shortest tower hike in the Park with smallest vertical ascent. Lowest elevation tower under DEC jurisdiction. Partial views from base of tower.	Hammond Pond Wild Forest Total State ownership is 0.76 of an acre, which includes the summit and deeded access. UMP completed in 1988.	Recreation: Open cab. Popular short hike, summit also used for hawk watching. Communications: Tower modified to accommodate radio use. Other nearby structures. No Friends Group.	Tower partly restored. Fair condition. Trail along access road in good condition. Historic Status: may be ineligible for NRHP listing.	Recreation: Clarify public access along private road, address parking needs. Needs trail register. Communications: Continue DEC and SP use.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Observer's Cabin removed in 1990's		▬	▬	▬
Black Mt.* (1988) Only fire tower adjacent to a DEC snowmobile trail. In the past, an airway beacon was mounted above the tower cab roof that warned pilots flying from Glens Falls to Montreal of the Black Mountain summit. Full views from base of tower.	Lake George Wild Forest Summit and trails within of large block of State land. UMP for Black Mt. completed in 1986. Draft UMP released in 2007.	Recreation: Tower is closed with fencing at base. Moderate public use on summit. Two hiking trails, one provides access from Lake George. Communications: Tower modified to accommodate radio use. Other nearby structures. No Friends Group.	Tower used as supporting base for radio facility. Fair condition. Trails are in fair condition. Historic Status: may be ineligible for NRHP listing.	Recreation: No identified trail needs. Communications: Continued use of site by State Police and DEC Law Enforcement.
Observer's Cabin removed in 2006.		▬	▬	▬
Blue Mt.* (1990) One of the most heavily used trails in Hamilton County. Summit was the location	Blue Mountain Wild Forest Summit within large block of State land, part of access trail and parking on private land owned by ATP. UMP completed in 1995.	Recreation: Open cab. High public use, partly due to proximity of Adirondack Museum. Education: Summit guide.	Tower is restored and adopted. Fair condition. Trail is in fair condition. Access road is in poor condition.	Recreation: Future CE will secure trail access and parking. Access road needs maintenance. Education:

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
of a Cold War era radar facility used in the national defense. First fire tower on Forest Preserve to be rehabilitated in the Park. Partial views from base of tower.		Communications:Some antennaes on tower and building in base to accommodate radio use. Other nearby structures. Active Friends Group.	Historic Status: NRHP listing.	Continue summit guide and volunteer efforts. Cab needs map table and interpretative panels. Communications: Proposal to move Hamilton County facilities to radio tower building.
Observer's Cabin on summit, built in 1975.		Storage/Summit Guide use.	Cabin changes to deter vandalism.	Storage/Summit Guide use.
Cathead Mt. (1988) Partial views from base of tower.	Private land Summit and part of access trail on private land. Parking and part of access trail on State land. Proposed Constitutional amendment by private landowners. Mentioned in SLW UMP completed in 2006.	Communications:Antennaes on tower for radio use. Private land lease. Other nearby structures and helicopter landing platform. No Friends Group.	Tower and trail are closed to the public. Condition is undetermined. Historic Status: may be ineligible for NRHP listing.	Recreation: If amendment is approved would allow public access to fire tower and cabin. Communications: Continued use of site by State Police and DEC Law Enforcement.
Observer's Cabin near summit, built pre-1964.		No DEC use.	No DEC use.	If amendment approved could allow cabin use.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Gore Mt.* (1988) One of the first four towers erected in the Park. Partial views below the summit.	Gore Mountain Intensive Use Area Summit, access trail, and parking within large block of State land adjacent to Siamese Ponds Wilderness.	Recreation: Low public use. Tower has health warning signage. Communications:Antennaes on tower for radio use. Other nearby structures. No Friends Group.	Tower is closed to the public. Condition is unknown. The Schaefer Trail is closed until the spring of 2009. Historic Status: may be ineligible for NRHP listing.	Recreation: Trail relocation due to ski bowl development. Communications: Continued use of site by State Police and other parties.
Observer's Cabin near summit, built in 1928.		Cabin was modified for ski patrol use.	No DEC use.	Continue ski patrol use.
Hadley Mt.* (1990) Tower was used by the National Oceanic and Atmospheric Administration for Saratoga County in 1973 to establish permanent bench markers for preparing county tax maps. Partial views from base of tower.	Wilcox Lake Wild Forest Summit, access trail, and parking within large block of State land. Draft UMP released in 2007.	Recreation: Closed cab High public use. Education: Summit guide. Brochure. Active Friends Group.	Tower is restored and adopted. Condition is fair/good. Trail is in fair condition. Historic Status: NRHP listing.	Recreation: Trail reroute proposed in UMP. Education: Continue summit guide and volunteers. Cab needs map table and interpretative panels.
Observer's Cabin below summit, built around 1950.		Storage/Summit Guide use.	Partial restoration. Condition is fair/good.	Storage/Summit Guide use.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Hurricane Mt.* (1982) The summit was used as a station during the Verplanck Colvin survey in 1873. Full views from base of tower.	Hurricane Mountain Primitive Area Summit, access trail, and parking within large block of State land. No UMP	Recreation: Tower closed Lower sections of stairs have been removed. Moderate public use on summit. Communications: No longer used for fire control or communications. Friends group	Tower abandoned. Condition scrap. Trails in fair condition. Historic Status: NRHP listing.	Recreation: Trail relocations needed for several portions of the North trail and Hurricane trail. Non-conforming status of tower. Recommend removal.
Observer's Cabin removed in 1982.		▬	▬	▬
Kane Mt. (1988) Most southern tower in the Park. No views from base of tower.	Shaker Mountain Wild Forest Summit, access trail, and parking within large block of State land. UMP completed in 2006.	Recreation: Open cab Moderate public use. Education: Occasional volunteer. Friends Group	Tower is restored and adopted Condition is fair/good. Trail is in fair/good condition. Historic Status: NRHP listing.	Recreation: Expand parking, designate North Trail, and close South Trail. Education: Continue summit guide and volunteers. Cab needs map table and interpretative panels. Communications: Possible repeater location.
Observer's Cabin on summit, built in 1941.			Cabin changes to deter vandalism.	Proposed cabin exhibit.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Loon Lake Mt. (1971) Partial views from base of tower.	Debar Mountain Wild Forest Summit and part of trail, within block of State land, part of trail, cabin and parking on private land owned by Lyme Timber. No UMP	Recreation: Tower closed. Lower sections of stairs have been removed. Year-round public foot access over CE lands begins on 4/22/09. ANNR for volunteer.	Tower abandoned. Condition fair. Existing trail not maintained for over 30 years. Trail is in fair/poor condition. Historic Status: NRHP listing.	Recreation: Develop signage and parking facilities. Needs trail register. Additional work on tower needed prior to opening for public use.
Observer's Cabin, base of mountain, built in 1928.	Cabin on private land	Currently used by Lyme lessees.	Condition fair/poor.	Possible cabin restoration.
Lyon Mt.* (1988) In 1878 Verplank Colvin used the summit as one of his summer headquarters while surveying the Adirondacks. Partial views from base of tower.	Unclassified State Land Summit, access trail, and parking within large block of State land acquired in 2008.	Recreation: Open cab Communications: Antennae and repeater on tower for radio use, critical for communications in the area. Friends Group not formed to date.	Tower partly restored. Condition fair. Trail relocated in 2008. Condition good. Historic Status: may be eligible for NRHP listing.	Recreation: Future use of tower dependent on classification. Needs trail register. Communications: Future use dependent on classification.
Observer's Cabin destroyed in 1980.		Cabin foundation remains.	▬	▬
Mount Adams * (1971)	Private land under CE, 0.41-acre parcel with tower.	Recreation: Open cab	Tower partly restored. Condition fair.	Recreation: Proposal to reroute the

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
In 1948, the National Lead Company granted an easement to trails, Mt Adams for use by state employees and the public. In 2008, the State acquired 6,813 acres of the Tahawus tract. No views from base of tower.	Access trail, and parking within large block of State land. UMP completed in 1999, although lands around tower are a recent State acquisition.	Closed to public in 2008 due to ice storm damage. Low-moderate public use. Public access to the fire tower and observer's cabin facilities is subject to the terms of the easement. Friends Group status unknown.	Trail steep and eroded. Condition fair. Historic Status: NRHP listing.	summit trail. Additional work on tower needed including replacement of tower roof and installation of railings in the cab and on windows. Education: Potential for map table and interpretative panels.
Observer's Cabin at base of mountain, built in 1928. Only "Model 1922" cabin in the State.	Private land under CE, 0.3-acre parcel with cabin.		Partial maintenance by volunteer group.	Use subject to Conservation Easement.
Observer's Cabin on summit, built around 1948.		Storage/Summit Guide interpretive use.	Cabin repaired in 1999. Condition good.	Storage/Summit Guide interpretive use.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Owl's Head Mt.* (1970) DEC snowmobile trail to cabin site. DEC Campground provides alternative access to the fire tower. Partial views from base of tower.	Sargent Ponds Wild Forest Summit, access trail, and parking within large block of State land. No UMP	Recreation: Open cab. Low-moderate public use. Tower was reopened in 2002, following rehabilitation. Friends Group has since disbanded.	Tower restored. Condition fair/good. Trail Condition fair/good. Historic Status: NRHP listing.	Recreation: No identified trail needs. Education: Potential for educational and interpretive signage.
Observer's Cabin below summit, removed in 1979.		Footings and sign at site.	▬	▬
Pillsbury Mt.* (1983) Summit area acquired during the Perkins Clearing land exchange in 1983. No views from base of tower.	Jessup River Wild Forest Summit, access trail, and parking within 2,000-acre block of State land adjacent to WCL Wilderness. Access road partly over Lyme CE lands. UMP completed in 2006.	Recreation: Closed cab Low public use. Communications: Antennae on tower for radio use. Cleared area used for helicopter access. Active Friends Group.	Tower partly restored and adopted. Condition fair/poor. Some trail work in 2008. Condition fair. Historic Status: NRHP listing.	Recreation: Continue maintenance efforts on upper section of trail. Education: Replace boarded up windows with a galvanized steel grid system. Cab needs map table and interpretative panels. Communications: Install new repeater in a secure metal box in tower

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
				cab. Continued use of site by DEC Fire Control. Maintain helicopter clearing
Observer's Cabin on summit, built in 1950.		Storage	Some cabin repairs in 2008. Condition fair/poor.	Proposed cabin exhibit. Storage/Summit Guide use.
Poke-O-Moonshine * (1988) The summit was used during the Verplank Colvin Adirondack survey. Trailhead located on adjacent DEC Campground. Partial views from base of tower.	Taylor Pond Wild Forest Summit, access trail, and parking within block of State land. Portion of access road on newly acquired State lands. Initial Draft UMP	Recreation: Closed cab Moderate public use. Mountain cliffs also popular for rock climbing. Education: Summit guide. Interpretation panels, trail, and brochure. Active Friends Group	Tower restored and adopted, including map table with alidade. Condition fair/good. Trail condition fair/good. Historic Status: NRHP listing.	Recreation: Potential to reroute the trail and develop new parking. Parking available at campground. Education: Continue summit guide and volunteers.
Observer's Cabin destroyed by fire in 1991.		Cabin foundation and chimney.	Leanto south of cabin site.	▬

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Rondaxe (Bald) Mt.* (1990) One of the most popular summits and the most-visited fire tower in the Adirondacks. Partial views from base of tower.	Fulton Chain Wild Forest Summit, access trail, and parking within large block of State land. UMP completed in 1990.	Recreation: Open cab with map table High public use, partly due to proximity to Old Forge tourist attractions. Education: In 2005 and 2006, friends group funded summit guides. Assistant Forest Rangers currently patrol. Active Friends Group.	Tower restored and adopted. Condition fair/good. Trail condition fair/good. The size of the parking area was doubled in 2006. Historic Status: eligible for NRHP listing.	Recreation: No identified trail needs. Education: Cab needs interpretative panels.
Observer's Cabin removed.		-	-	-
Snowy Mt.* (1971) One of the first four towers erected, highest elevation fire tower in Park. Used as a triangulation vertex during the 1872 and 1885 topographical expeditions by Verplanck Colvin.	Jessup River Wild Forest Summit, access trail, and parking within large block of State land. Trail begins in West Canada Lake Wilderness. UMP completed in 2006.	Recreation: Open cab Moderate public use. Education: AANR agreement is issued to an individual for the repair and maintenance of the tower and for various restoration and interpretive activities. No Friends Group.	Tower restored Condition fair/good. Past trail work in 1988 to correct erosion problems on the lower portions of the trail. Condition fair. Historic Status: NRHP listing.	Recreation: To complete the stabilization and reconstruction of the trail, the upper portion will be relocated, if possible. Alternatives include new switchbacks, rock steps and drainage control devices. Proposal to ban camping and fires at the summit. Future acquisition of a

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
The 50th highest peak in the Adirondack Park. Greatest vertical ascent of any fire tower trail. The first steel tower was 22 feet, later in 1933, increased to its current height due to the high growth of surrounding trees. Partial views from rock outcropping near base of tower.				easement on ATP lands will allow for a trail connection to a proposed ridge trail along nearby summits. Education: Cab needs map table and interpretative panels.
Observer's Cabin removed in 1990.		Former cabin site is an open grassy clearing.	Helicopter access for rescue operations.	Maintain helicopter clearing.
Spruce Mt.* (1988) The tallest tower in Park. Summit very close to blue line. Closest tower to the Capital Region. No views from base of tower.	Private land Trail crosses part of Wilcox Lake Wild Forest, Saratoga Plan, Lyme Timber, and Saratoga County lands. Other nearby private summit structures include a tower and building. Mentioned in Draft WLWF	Recreation: Tower closed Lower sections of stairs have been removed. No public access over Lyme Adirondack Timberlands LLC easement lands Communications: Supported communications equipment in the past.	Tower abandoned. Condition unknown. Existing trail not maintained. Condition poor. Portion of access road part of snowmobile trail system. Transfer of summit parcel	Recreation: Tower needs rehabilitation. Trail requires secure public access across private lands; may require re-route over State land. Needs trail register. Education: Cab needs map table and interpretative panels.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
	UMP released in 2007.	Friends Group Organizing.	to NYS ownership has been suggested. Historic Status: eligible for NRHP listing.	Communications: Department has obtained a FCC licenses for the site and is in the process of getting the proper APA permits to locate repeaters in or on the tower.
Observer's Cabin removed.		▬	▬	▬
St. Regis Mt. (1990) Longest operating fire tower in NYS. The most heavily used section of the St. Regis Canoe Area is the trail to the summit of St. Regis Mountain. Full views from base of tower.	St. Regis Canoe Area Summit, access trail, and parking within large block of State land. UMP completed in 2006.	Recreation: Tower closed Lower sections of stairs have been removed. Moderate public use. In 1999, DEC rerouted the trail to place it entirely on State lands. Education: Paul Smith's College students have conducted some interpretive services. Communications: No longer used for fire control or communications. Friends Group.	Tower abandoned. Condition scrap. Trail condition Past trail work in 1999 to correct erosion problems on beginning portions of the trail. Condition fair/good. Historic Status: NRHP listing.	Recreation: Proposed prohibition on camping and camp fires on summits above 2,700 feet. Proposed day use group size maximum of 15 people for the summit. Non-conforming status of tower. Recommend removal.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Observer's Cabin removed in 1995.	Observer's Cabin removed in 1995.	Observer's Cabin removed in 1995.	Observer's Cabin removed in 1995.	Observer's Cabin removed in 1995.
Stillwater Mt. (1988) Once tower is rehabilitated, public use will be allowed from May 1 through and including the second Monday in October of each year. No views from base of tower.	CE land owned by Lyme Timber. Beginning portion of foot trail, informal parking, and observer's cabin are within the Independence River Wild Forest. UMP completed in 1986. Final CE plan will be included with IRWF UMP revision.	Recreation: Tower closed. Under the Conservation Easement, public non-motorized access is granted on the trail to the summit, the fire tower, and area immediately surrounding the tower. Friends Group being organized.	Tower abandoned. The tower is in disrepair but is structurally intact. Condition fair/poor Trail Condition fair/poor Historic Status: eligible for NRHP listing.	Recreation: Additional work on tower needed prior to opening for public use. Proposal to relocate trail and establish parking on State land. Trail needs brush clearing and remarking. Needs trail register. Education: Conservation Easement Recreation plan will be developed that will address future uses of the fire tower.
Observer's Cabin near trailhead.		Assistant Forest Ranger use.	Some cabin repairs. Condition fair/poor.	Assistant Forest Ranger use.
Vanderwhacker Mt.* (1988) In 1880 Verplanck Colvin and his survey crew used the summit for triangulation.	Vanderwacker Mountain Wild Forest Summit, access trail, and parking within large block of State land.	Recreation: Open cab Low public use. Access road to parking lot can be difficult for a low clearance vehicle. The road	Tower Restored & Adopted. Condition fair. Trail re-route in 2006. Trail Condition fair. Historic Status: eligible	Recreation: Continue work on trail for erosion control, such as installation of additional water bars, stepping stones, and/or dry tread

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Partial views from base of tower.	UMP completed in 2005.	is generally closed between December and May, which limits public use until after "mud season". Active Friends Group.	for NRHP listing.	Education: Proposed summit guide. Cab needs map table and interpretative panels.
Observer Cabin's closer to base of mountain.			New cabin is in fair condition. Older cabin in poor condition.	Proposed cabin exhibit. Storage/Summit Guide use.
Wakely Mt.* (1988) Of the original LL25 AerMotor towers, only two, on Hadley and Wakely mountains, have not been structurally altered in any way and only Wakely has three quarters of the original ladder still attached to the tower. Tallest tower in Park on Forest Preserve land. Helicopter Landing Platform No views from base of tower.	Wakely Mountain Primitive Area Summit and end of access trail in 235 acre Primitive Area. Parking and beginning of trail within large block of Moose River Plains Wild Forest. UMP completed in 2006.	Recreation: Open cab Low-moderate public use. The remote location and limited seasonal access to the trailhead has made Wakely Mountain one of the Adirondacks' lesser visited fire tower summits. Active Friends Group.	Tower Adopted. Condition fair. Existing trail has significant erosion. Condition poor. Helicopter Landing Platform, poor condition. Historic Status: NRHP listing.	Recreation: Tower Restoration awaiting funding. Proposed new trail to summit. Education: Proposed summit guide. Cab needs map table and interpretative panels. Communications: Repeater proposed to be installed, pending the reconstruction of the helipad.

Tower Facts (Date last manned)	Land Classification	Existing Use	Present Status	Anticipated Future Use/Needs
Observer Cabin on summit, built in 1972/1973.			Cabin is in fair condition	Proposed cabin exhibit. Storage/Summit Guide use.
Woodhull Mt. (1970) One of the most remote fire towers. No views from base of tower.	Black River Wild Forest Summit, access trail, and parking within large block of State land.	Recreation: Closed cab, windows are boarded up. Low public use. The interior access road and trailhead parking are not plowed in the winter and are closed during the Spring mud season, thereby restricting motor vehicle access during portions of the year. Communications: Antennae on tower for radio use. No Friends Group	Tower abandoned. Condition fair/poor. Existing trail Condition fair. DEC administrative road Historic Status: eligible for NRHP listing	Recreation: Tower Restoration awaiting funding Proposed new trail to summit Education: To be determined. Communications: No known maintenance needs. Install repeater in a secure metal box in tower cab. Continued use of site by DEC Fire Control.
Observer's Cabin removed in 1970's.				

[1]The future of the fire tower on Lyon Mountain will be based on how the land is classified.

▬ Not Applicable *Fire Tower Challenge Tower NRHP-National Register of Historic Places

Detailed engineering assessments for Adirondack Park fire towers have only been completed for a couple of towers. See Chapter 12.IV. Lacking a detailed report a general condition was assigned using the Department's MMS descriptions. Condition is described when known as: good, fair, poor or scrap:

Good - In like-new condition or minor deterioration is visible.
Fair - Normal wear and tear is apparent.
Poor - Definite deterioration is obvious or Asset is not usable because of poor condition.
Scrap - Needs to be removed or somehow eliminated.

Note: Closed cab means the top portion of the fire tower is closed to the public most of the year, except when staffed with a summit guide. Open cab towers are not locked and are available to the public year round. Summit guides are different than the High Peaks summit stewards. These summit guides are usually Adirondack Fire Tower Association (AFTA) interns+ working primarily on weekend days (typically more Saturdays than Sundays) during a core season between late May/early June through Columbus Day. In addition, individuals from friends groups assist at particular fire tower locations, often during the period a summit guide is not present at the site. In this case they are referred to as tower volunteers.

Table X identifies activities planned for each remaining tower and cabin under DEC jurisdiction within the Adirondack Park, under the assumption that the facility would remain on-site for some period of time. Various alternatives for the non-conforming fire towers on St. Regis and Hurricane mountains are described in the individual tower discussion in Section II.

During the development of this study, existing conforming fire towers were assessed. As a result of this analysis, the study makes the following general recommendations:

- The New York State Department of Environmental Conservation will work to retain a system of fire towers throughout the Adirondack Park.

- Decisions regarding individual fire towers and associated structures and improvements on Wild Forest or Intensive Use classified lands will be made on a unit by unit basis through the UMP planning process.

- Existing fire towers on Forest Preserve lands that conform with the Adirondack Park State Land Master Plan may be restored as historic structures and maintained for safe and enjoyable public recreational use with compatible radio communications, where necessary.

- New York State Department of Environmental Conservation will consult with OPRHP as required under New York Historic Preservation Act of 1980 (SHPA) regarding any actions related to fire towers and related facilities which are listed on the National Historic Register, or eligible for listing.

- The New York State Department of Environmental Conservation and OPRHP should develop and updated SHPA Letter of Resolution on Fire Towers to reflect this study.

- Existing fire towers on Forest Preserve lands that conform with the Adirondack Park State Land Master Plan will be managed to protect their wild forest setting and promote public education about their history in the context of the history of the Forest Preserve and the evolution of its cultural and natural resource values.

- The Department will work with the owners of private and municipal lands where fire towers are located to maintain and manage fire towers for the purposes of historic preservation, public recreation and education, and compatible electronic communications.

- The Department will coordinate fire tower restorations to further ensure the safety of employees, volunteers and visitors to fire towers sites

- The Department will encourage partnerships with the private sector and local governments that will assist the Department to maintain fire towers and their access trails.

- The Department will enhance opportunities to access fire towers on conservation easement or other private lands through cooperative agreements with private landowners, consistent with the provisions of the Open Space Plan

II. INDIVIDUAL TOWERS

A comprehensive and balanced review of the fire towers on state land within the Park must take into account wilderness values in addition to cultural and recreational values. A fire tower is a type of structure that due to its purpose and height, can be a prominent feature of the landscape. As a result, the structure has been consistently identified as non-conforming in Wilderness, Primitive and Canoe areas through repeated public process during the development and revision of the APSLMP. Both Primitive and Canoe Areas are statutorily required to be maintained as close to a wilderness condition as safety and practicality allow.

The Saint Regis, Hurricane, and Wakely mountain fire towers have been high profile issues during the development of UMPs for the Forest Preserve lands they are located on. Partly as a result of the public interest in the future of fire towers in general and the status of the compliance of these UMPs with the APSLMP, the Department committed to the development of a comprehensive study for fire towers before any fire towers were removed.

APA resolutions approving the St. Regis Canoe and Blue Ridge Wilderness/Wakely Mt. Primitive area plans included language to:

"Commit to the development of a comprehensive fire tower plan which will address all State owned fire towers in the Adirondack Park.

Address most appropriate future use of individual fire towers and observers' cabins for communication, fire control, education and information use."

Through the UMP planning process, the planning teams for the St. Regis Canoe and Blue Ridge Wilderness/Wakely Mt. Primitive areas analyzed each fire tower site and weighed their advantages and disadvantages with regard to legal, cultural, educational and environmental considerations. The intent of this section is not to replace the detailed analysis conducted in individual UMPs but to allow a comparison of individual towers within the context of all the remaining towers in the Adirondack Park. While the previous section, examined fire towers in general, this section will document the unique qualities of the Hurricane and St. Regis fire towers.

Management Alternatives were only developed for proposals that: (1) may have significant environmental impacts, (2) involve land classification changes, or (3) involve controversial actions such as fire tower removal. In describing and comparing the various alternatives

included for discussion, the extensive knowledge provided by various Department staff was utilized. Since the need to retain the Wakely Mountain fire tower for communication, historic preservation, and recreational purposes was described in great detail in the Blue Ridge Wilderness/Wakely Mt. Primitive UMP, the retention of this tower is not in question. This Section will focus on the fire towers on St. Regis and Hurricane mountains.

A. St. Regis Mountain Fire Tower

St. Regis Mountain is a prominent feature which is visible from much of the surrounding area. There are few people alive today who could recall the sight of St. Regis Mountain without the fire tower on the summit and there is considerable public support for this local landmark. The opinions of those who wish the St. Regis Mountain fire tower to remain have been expressed in public meeting comments, letters, and local government resolutions. As with many other fire towers in the State, a "friends group" has formed to advocate for the retention and restoration of the fire tower through a petition and letter writing campaign. To date over 2,500 individuals/families have added their names to a petition to retain the tower. Several organizations and local government bodies have written resolutions of unanimous support for the retention of this tower. These government bodies include the Franklin County Legislature, the Town of Santa Clara, the Town of Brighton, the Rainbow Lake Association, and the Adirondack Park Local Government Review Board. The most common position is to retain the fire tower for its value to the local community as a historic landmark and to continue its use for public recreational and educational purposes. Those who are opposed to retention of the fire tower and request that the tower be removed have also expressed their desires. They include groups such as the Adirondack Mountain Club, Association for the Protection of the Adirondacks, Residents Committee to Protect the Adirondacks, and the Adirondack Council. The position of these groups generally centered around the land classification and non-conforming status of the fire tower. They point out that the tower is not needed to obtain a view from the summit and that its removal will return the summit to a more natural state. Furthermore the tower is visible from much of the canoe area, after removal of the tower the view of the mountain from the canoe area will be more natural.

Present Conditions:

With the combination of a relatively short hike and great views, the St. Regis Mountain summit is a popular destination within the St. Regis Canoe Area. By far, the most heavily used section of the St. Regis Canoe Area is the trail to the summit. Roughly as many people hike this 3.4 mile trail as visit the rest of the unit. The summit is mostly rock, with some patches of grasses growing in crevices. Trees are growing around the summit and over time may eventually block the views. The summit of St. Regis Mountain is part a Bird Conservation Area, designated to protect habitat for the Bicknell's Thrush.

While the view is predominately of forested mountains, you can also see the castle on Whiteface Mountain and other man-made features from the summit. The St. Regis Mountain tower, although it is only 35 feet tall, stands out on the rocky summit. For many people in the local area, the tower has become a welcome part of the landscape.

The fire tower is readily visible from the Visitor Interpretive Center at Paul Smiths College.

Only from the fire tower cab can a full panoramic summit view be seen. On a clear day with the naked eye the fire towers on Azure and Loon Lake mountains can be seen. The summits of two mountains that used to have fire towers Debar and Ampersand are also visible. Numerous ponds and lakes can be seen including Meacham, Clear, Upper and Lower St. Regis, Cranberry, Tupper, and Upper and Lower Saranac . As well, many of the High Peaks of the Adirondacks can be seen with the exception of some of the southern most summits.

The summit of St. Regis Mountain has been designated as a Special Management Area by the Adirondack Park Agency in recognition of its outstanding scenic qualities. The APAs identification of the fire tower as a non-conforming use in the Canoe Area has been consistent since the first adopted Master Plan in 1972 and through two subsequent revisions to the APSLMP, all involving considerable public process. The 1979 revision to the Master Plan refers to the fire tower having not yet been removed pending the Department's evaluation of the need for this facility. During the 1987 revision of the Master Plan, the last time the public had a chance to comment on changes to the Master Plan, it was revised to state that the:

> "fire tower may be retained so long as retention is considered essential by the Department of Environmental Conservation pending ultimate removal upon final implementation of the aerial surveillance program and modernization of the Department of Environmental Conservation's communication system."

The Department's radio communications have been improved since the time the Master Plan went into effect and DEC only conducts aerial detection patrols on days of very high and extreme fire danger. Since the aerial surveillance program is in place and the Department's communications have been modernized, the St. Regis fire tower is not considered essential and therefore is a non-conforming use within the St. Regis Canoe Area.

The St. Regis fire tower is listed in the State and National Registers of Historic Places. An agreement between DEC and OPRHP (SHPA Letter of Resolution,1994) commits the Department to taking affirmative steps to facilitate the preservation of historic fire towers in those Forest Preserve land classifications where the Master Plan permits it and allows for the removal of fire towers from Forest Preserve land classifications where towers are non-conforming to the Master Plan. The St. Regis fire tower is among those identified as non-conforming with respect to the Master Plan, therefore requiring removal.

Unique Features (Additional information in Appendix):

The first lookout on St. Regis Mountain was established in 1910 following several bad fire years. In 1918, the steel fire tower was constructed. The associated observer's cabin and telephone lines were removed by the Department in the mid 1990's. St. Regis

Mountain had the longest active fire observation station in New York State, operating from April 1910 through 1990, for a total of 81 years. The fire tower was one of the key towers in the system and was a valuable communications relay point, overlooking the high-use area to the south, including Fish Creek and Rollins Pond Campground. To the north and northwest, the tower protected a large amount of privately owned land, a significant part was the William Rockefeller property. The fire tower is visible from much of the surrounding area and serves as a local landmark significant to the history of the area and neighboring communities.

Discussion of Alternatives

The preferred alternative in the Final St. Regis UMP was the development of this comprehensive fire tower study. There are three primary alternatives for dealing with the St. Regis Fire Tower: retain it, remove it, or take no action. The following section discusses the pros and cons of various alternatives. Listed under the alternative of retaining the tower are several options that were considered as ways to justify that alterative. For additional information on the selection of a preferred alternative, potential impact to resources, and unavoidable adverse environmental impacts, see the Saint Regis Canoe Area Draft Amendment/EIS.

Alternative 1: Retain the tower

There have been numerous comments received regarding the community significance of this historic resource. Local governments, area residents, and visitors to the area have expressed their feelings that the tower should be retained. However, tower retention would require compliance with the Master Plan and ECL § 9-0109(4), and as previously discussed, the Master Plan requires tower removal: the tower "may be retained so long as retention is considered essential … pending ultimate removal…" This section is clear that the Master Plan was intending that the tower remain for only a limited period and for specific reasons. Since the tower is not essential for fire observation or communication purposes the tower cannot be retained unless the Master Plan is amended.

There are other guidelines in the Master Plan that would be in conflict with the retention of the tower. There would be a direct violation of the sixth basic canoe area guideline, which states "all conforming structures and improvements will be designed and located so as to blend with the surrounding environment and to require only minimal maintenance." The fire tower is obvious from many vantage points and would require significant repairs and then periodic maintenance to allow its retention. Retaining the tower would also seem to be in conflict with the spirit of the seventh basic guideline: "all management and administrative actions and interior facilities in canoe areas will be designed to emphasize the self-sufficiency of the user …" In order to enjoy the views from St. Regis Mountain visitors should walk to the various vantage points, not climb up a fire tower provided by the Department.

The retention of the tower would contradict the principle that the canoe area should be managed as essentially wilderness. This alternative would leave in place a work of man that is noticeable and that dominates the landscape, these are antithetical to the definition of wilderness. Some public comments mentioned the visual degradation to a wilderness

experience if the St. Regis Mountain fire tower remained. This degradation would occur not only on the summit, but on some of the ponds in the SRCA.

Other people believe that fire towers are a symbol of the Adirondack wilderness, and their very presence can be a reminder of some of the first efforts to protect the Forest Preserve. A fire tower symbolizes a different use of the land than many other visible Adirondack Park features. For instance, one can see the Olympic ski jumps from Algonquin Mountain, and development on East Hill in Keene from Porter Mountain. While many wilderness areas in the Park offer profound solitude and wildness, others locations, such as the summit of St. Regis Mountain, provide less expectation for privacy.

There are structures that have been allowed to remain in wilderness areas even though this would seem to be inconsistent with the wilderness definition. However, these inconsistencies should not be used as a justification for the creation of new inconsistencies. The Department should mange wilderness areas in a way that would decrease the numbers of structures and inconsistencies present.

If this alternative were selected then the tower would need to be restored. The repair of the tower would produce noise not usually associated with a wilderness, such as helicopter flights and use of power tools. The repairs would require a structural inspection, painting, replacing steps and floor boards, and possibly other repairs.

Options for retaining the tower:

a) Request a revision to the Master Plan. Existing fire towers could be added to the list of structures that are considered as conforming to canoe area standards. The revision would also state that no new fire towers would be constructed in canoe areas.

This alternative would allow the fire tower to remain, similar to other improvements allowed in wilderness areas, such as dams, which are conforming structures under wilderness guidelines.

b) Request a reclassification—to historic or primitive—of the land the tower stands upon. A small parcel of land could be reclassified so that the tower would conform with the Master Plan. This alternative attempts to reconcile the existence of the tower with the requirements of the Master Plan.

This alternative will require the APA Board to vote to recommend the classification change and the Governor to approve the change. However, as mentioned above, DEC could not maintain any tower unless it met the requirements of ECL § 9-0109(4)(b) which states that the Commissioner find that historic structure can be maintained for public enjoyment and understanding of the Forest Preserve.

c) While there are some radio coverage lapses in the Meacham Lake and Debar Mountain areas that a repeater on St. Regis Mountain could potentially solve, there have been few complaints from Department staff regarding radio coverage in the area. It is likely that the emergency use of the tower as a temporary repeater station by a person with a portable radio would be infrequent. It would be hard to justify the retention and maintenance of the tower

just for infrequent emergency use. This option would not be a permanent resolution of this issue because if the observer program ended again it would recreate the current situation.

d) Retain the tower until it is no longer structurally sound. As a steel structure exposed to the elements the tower will eventually need to have significant structural components replaced. At that time the tower will be removed, but until then it will be maintained. The Master Plan states that the tower may be retained "pending ultimate removal". By adding the word ultimate to the sentence a sense is given that the removal of the tower is far in the future. Like all other human created structures it will not last forever and will ultimately require removal.

Alternative 2: Remove the tower

The tower will be removed from the mountain, thereby removing a non-conforming use from the SRCA. This is the option that the Master Plan directs the Department to ultimately implement. This will improve the wilderness setting for those using the SRCA by removing a work of man that is noticeable and that dominates the landscape. By removing the tower the Department will also be eliminating a long term maintenance obligation and liability.

While it is likely that a volunteer group could be found to assume some of this obligation by doing most of the work and even purchasing much of the material needed, there would still be requirements placed upon the Department for the upkeep of the tower. The major difficulty in conducting maintenance on the tower would be its distance from a road. It is likely that helicopters flights would be needed to bring material to the summit, especially for the initial major repairs.

The removal of the tower will result in the elimination of an existing structure of historic importance to the local community. This is a significant impact that cannot be avoided, but may be mitigated to a degree if the tower were rebuilt in the local area. In 1994 the Office of Parks, Recreation, and Historic Preservation signed a letter of resolution with the Department which stated that eight fire towers could be removed by the Department, even though the towers were or could be listed as National Registry of Historic Places.

There are several advantages if the tower were to be removed from the summit of St. Regis Mountain and then rebuilt at a location close to a road. The costs and time needed for maintenance would be significantly reduced. The tower would be easier for the public to reach, meaning that people who would not be capable of doing the hike to the summit could visit the tower. This would then facilitate opportunities for better interpretive displays.

Alternative 3: No action

Retain the tower at its current location, but do not maintain it. This would result in the tower slowly falling apart and becoming a safety hazard. This is probably the worst choice, because it would not resolve any issues. The tower would further deteriorate until it collapses and would still be an affront to the wilderness definition.

B. Hurricane Mountain Fire Tower

The most prominent natural feature in the Hurricane Mountain Primitive Area is the rocky summit of Hurricane Mountain. The status of the fire tower on Hurricane Mountain has generated the greatest amount of public comment during the planning process. The opinions of those who wish the Hurricane Mountain fire tower to remain have been expressed in public meeting comments, local government resolutions, letters from members of the state senate and assembly, and individuals.

Most of the public comment received was in favor of retaining the tower. As with many other fire towers in the state, a "friends group" has formed that is advocating for the retention and restoration through a petition and letter writing campaign. To date over 4,600 signatures in support of preserving the tower have been submitted to the APA and DEC. Further support for the tower to remain was expressed in letters from Assemblyman Ortloff, Assemblywoman Sayward, the Elizabethtown American Legion, Essex County Fish and Game, Mt. Fay Fish and Game, and Elizabethtown Fish and Game clubs. Resolutions from the County of Essex, Town of Elizabethtown, Town of Westport, Town of Lewis, Town of Jay, Town of Chesterfield, and Town of Essex along with letters from elementary school students from Keene Valley School and Elizabethtown Lewis Central School also supported keeping the tower.

Opposition to the fire tower has also been expressed. The Hurricane Mountain Chapter of the Adirondack Mountain Club has adopted the tower as a symbol of their group, although the executive board unanimously supports the removal of the fire tower. Various environmental organizations and some individuals have argued that the fate of the tower has already been determined in the APSLMP. Comments suggested that the tower infringes on the character of the Hurricane Mountain Primitive Area and stands in the way of the unit being reclassified to wilderness.

Present Conditions:

Hurricane Mountain is the single most popular destination in the Primitive Area and sees the greatest concentration of public use. Hurricane Mountain is ranked #74 in the Adirondack Hundred Highest Peaks list with the summit consisting of an open rock face with a commanding 360° view of the High Peaks, Jay Range, Champlain Valley, and Green Mountains (in Vermont). While the view is predominately of forested mountains, you can also see portions of the Northway and other roads, along with the cleared downhill ski runs on east side of Whiteface Mountain. The Hurricane Mountain tower, although it is only 35 feet tall, stands out on the bald summit of the mountain. The structure is relatively intact and retains most of its original integrity. The fire tower is visible from the nearby hamlets of Elizabethtown and Keene, and can be seen from neighboring mountains. For many people in the local area, the tower has become a welcome part of the landscape.

While the summit offers substantial views, many hikers are attracted to the Hurricane Mountain Fire Tower. Since most of the summit area is bare rock, it has been able to sustain high public use levels without a significant amount of resource damage to the thin soils and plant communities.

Primitive Areas fall into two different categories: (1) those areas that are essentially Wilderness in character, and are destined to be reclassified as Wilderness Areas when certain non-conforming uses or structures can be removed (or the issues surrounding them can be resolved); and (2) those areas that are essentially not Wilderness in character and are unlikely to become wilderness, but require a level of protection equal to that of Wilderness due to the high quality or fragility of their associated resources. The Hurricane Mountain Primitive Area represents the first type of Primitive Area.

The summit of Hurricane Mountain has been designated as a Special Management Area by the Adirondack Park Agency in recognition of its outstanding scenic qualities. The tower on Hurricane Mountain is specifically referenced in the APSLMP as follows: "The fire tower on Hurricane Mountain is currently an essential communication link to the Department of Environmental Conservation at present. Should it be replaced by other means of fire patrol and communications, the entire area should be reclassified as wilderness."

Wilderness areas are recognized as a truly unique, and increasingly rare, natural resource that warrants a high degree of protection to ensure their continued well being. Private roads and a 100 feet wide power line one mile long are found within the Hurricane Mountain Primitive Area. These facilities and motor vehicle use associated with these non-conforming facilities have obvious impacts on the "wilderness character", and to some people may be more of a visual impact than the fire tower on the summit.

The Hurricane Mountain Fire Tower is on the National Historic Lookout Register and was listed in 2007 on the National Register of Historic Places. An agreement between DEC and OPRHP (SHPA Letter of Resolution, 1994) commits the Department to taking affirmative steps to facilitate the preservation of historic fire towers in those Forest Preserve land classifications where the Master Plan permits it and allows for the removal of fire towers from Forest Preserve land classifications where towers are non-conforming to the Master Plan. The Hurricane Mountain fire tower is among those identified as non-conforming with respect to the Master Plan and therefore requiring removal.

<u>Unique Features</u> (Additional information in Appendix):

The trail historically used by the observers and public approached the mountain from the east. In 1935, Department staff and Civilian Conservation Corps employees constructed new trails, from the north and south, to the fire tower. The observer's cabin, once located on the trail where it crosses Falls Brook, was removed sometime after 1982, as was the lean-to. A total of 27 different observers worked on Hurricane Mountain between 1910 and 1982 when the tower was manned.

Discussion of Alternatives

Like the Saint Regis Canoe Area UMP, several management alternatives were considered for the Hurricane Mountain Fire Tower. A further discussion of potential benefits for use as a communications facility can be found in Chapter 12.II. For additional information on the selection of a preferred alternative, potential impact to resources, and unavoidable adverse environmental impacts, see the Hurricane Mountain Primitive Area Draft UMP.

Alternative 1

This alternative proposes no action. This "no action" alternative would avoid decision making and leave the future of the fire tower in doubt. The tower would no longer be in use as a fire observation platform, would have no proposed utility for Forest Preserve management since the wood steps have been removed, and would become increasingly unsafe for public use over time. The un-maintained structure would fall into disrepair and pose a public safety hazard. This alternative does not comply with the APSLMP which calls for the tower's removal when it is replaced by other means of fire patrol and communications.

Alternative 2

This alternative would retain the tower at its current location to preserve its value as a historic structure, but discontinue any maintenance that would make it suitable for public recreational use or interpretation. Similar to alternative 1, this alternative fails to comply with the requirements of the ASLMP, and the letter of resolution between DEC and OPRHP which recommended that the tower be removed.

Alternative 3

This alternative would retain the fire tower and operate a station for wildfire observation or emergency communications purposes. The tower would be restored as needed to allow use of a permanent radio repeater or occasional use as a temporary radio repeater platform when needed by the Department for fire suppression, law enforcement and search and rescue purposes. The added benefit is that a historic structure would be maintained intact.

The Department's wildfire detection system has generally progressed beyond the need for fire towers, so the Hurricane tower is no longer needed as a wildfire observation station. Emergency use of the tower as a temporary repeater station by a person with a portable radio would likely be infrequent. It would be hard to justify the retention and maintenance of the tower just for infrequent emergency use.

Alternative 4

This alternative would reclassify the land around the tower as wild forest or historic, so that the tower would conform with APSLMP guidelines. This alternative attempts to reconcile the existence of the tower with the requirements of the APSLMP.

While a UMP can recommend that lands be reclassified, in this case the reclassifications called for would contradict the current language in the APSLMP regarding the HMPA and the Hurricane Mountain Fire Tower which state:

> "The fire tower on Hurricane Mountain is currently an essential communication link to the Department of Environmental Conservation at present. Should it be replaced by other means of fire patrol and communications, the entire area should be reclassified as wilderness".

The intent is obviously to reclassify the area to a more restrictive classification (wilderness), not a less restrictive one (wild forest). Likewise, reclassifying the land as Historic was clearly not the intent of the letter of resolution between DEC and OPRHP which allowed for the removal of the tower.

Alternative 5

This alternative would request a revision to the language in the Master Plan to add existing fire towers to the list of structures that are considered as conforming to wilderness standards. The revision would also state that no new fire towers would be constructed in wilderness, primitive, or canoe areas.

The APSLMP could potentially be revised to allow for fire towers in wilderness areas, and the Department (along with any other state agency, local government, private organization, or citizen) could request such a revision. The outcome of such a request would necessarily be determined by the APA.

The Department has been mandated, through the APSLMP, to manage Forest Preserve lands within the Adirondack Park under the various land classifications outlined in the plan. As stated above, the HMPA was originally destined to be a wilderness area (pending removal of non-conforming structures) and the Department has strived to manage the area as such. Retaining the tower on Hurricane Mountain would be in direct opposition to maintaining or enhancing the wild character of the HMPA.

Alternative 6

This alternative would remove the fire tower as a non-conforming structure as per APSLMP guidelines. Public comments have been largely in support of retaining the fire tower for its recreational and historic preservation values, but to do so would be in violation of the requirements of the APSLMP and the Department's previous agreement with OPRHP relating to fire towers.

C. Study Recommendations and Mitigation Measures

In recent years there has been a growing interest in fire towers, and they are seen by many as a unique, and increasingly rare, historical resource that warrants a high degree of protection. A few groups have suggested that the state reclassify the land around non-conforming fire towers as wild forest or historic, so that the towers would conform with the Master Plan. The alternative to create a small Historic Area on the summit and by this action make the tower a conforming structure does not give adequate attention to the potential impacts to future wilderness classification or management implications of such a designation.

The tower would still be a noticeable structure that could adversely affect the wilderness quality of the summit and adjacent area even if the structure itself was located in a Historic Area.

The APSLMP identifies that Historic Areas are locations of buildings, structures or sites owned by the State (other than the Adirondack Forest Preserve itself) that: (1) are significant in the history, architecture, or culture of the Adirondack Park, the state or the nation; (2) are either state historic sites, properties listed on the National Register of Historic Places, or properties recommended for nomination by the Committee on Registers of the New York State Board for Historic Preservation; and (3) are of a scale, character and location appropriate for designation as an historic area under the APSLMP and the state has committed resources to manage such areas primarily for historic objectives.

While fire towers taken together or singly do have historic value, declaring the summit where the tower stands a Historic Area, is not easily justified as it was for locations such as John Brown's Farm, Crown Point and most recently Camp Santanoni. DEC and OPRHP have taken the approach that fire towers as historic artifacts should only be retained where not in conflict with the APSLMP.

The New York State Historic Preservation Act of 1980 (SHPA) requires DEC to consult with OPRHP regarding any facilities which are listed on the National Historic Register, or are eligible for listing. With respect to fire towers in the Adirondacks this consultation took the form of a SHPA Letter of Resolution in 1994. This agreement commits the Department to taking affirmative steps to facilitate the preservation of some historic fire towers, but allows for the removal of towers from lands units in which they are considered non-conforming by the APSLMP.

From a geographic distribution standpoint, while the St. Regis fire tower is the only fire tower in the Town of Santa Clara, there are four other fire towers (Mount Morris Azure, Loon Lake, and Meenagha mountains) in Franklin County. Two of these four fire towers are open to the public. An additional fire tower on Mt. Arab is located less than 20 miles away in St. Lawrence County. From a geographic distribution standpoint, while the Hurricane Mountain fire tower is the only fire tower in the Town of Keene, there are six other fire towers (Mt. Adams, Belfry, Goodnow, Poke-O-Moonshine, and Vanderwhacker mountains) in Essex County, including the museum exhibit at the Adirondack Center in Elizabethtown. All six of these fire towers are open to the public. An additional private fire tower on Palmer Hill is located approximately 20 miles away in Clinton County.

The towers on St. Regis and Hurricane mountains represent two out of the 13 existing 35 foot high Aeromotor LS40 towers in the Adirondack Park. With the exception of the 22 foot tall Mt. Morris tower, the 35 foot LS40's are the shortest Adirondack towers, compared to Wakely and Spruce mountains with towers over 70 feet high.

Neither the St. Regis or Hurricane tower has its associated observer's cabin and both towers are in a state of disrepair. Both summits receive a moderate amount of public use and provide substantial views in several directions from the tower base.

The choice of a preferred alternative for the St. Regis and Hurricane Mountain fire towers will not be made in this study. Due to the availability of nearby fire towers open to the public, numerous other representative examples of the 35 foot high Aeromotor LS40 towers, and requirement to comply with the Master Plan guidelines, this study makes the following recommendations:

- The Hurricane Mountain fire tower in the Hurricane Mountain Primitive Area should be removed in conformance with Master Plan guidelines.

- The St. Regis Mountain fire tower in the St. Regis Canoe Area should be removed in conformance with Master Plan guidelines.

Mitigation

The removal of either fire tower will affect a historic structure, an aesthetic resource, and the character of the existing community. The action would remove an important area landmark that has value from historic and cultural perspectives.

Relocating a historic fire tower to a site outside its original location may be considered a way to partially mitigate the adverse effects of the proposed removal. However, properties that are relocated are automatically delisted from the State and National Registers by law. While it may be possible to reapply for listing, the State Board for Historic Preservation rarely approves them (Charles Vandrei, personnal communication). When historic fire towers must be removed, the documentation of the structure shall be provided for. The salvage of architectural or engineering elements may be an appropriate mitigation measure allowing parts to be reused or possibly saved for curation.

If removed, the Hurricane and St. Regis Mountain fire towers could be restored and erected at an alternate site where they could serve as an educational and recreational tool. Several New York fire towers have been similarly relocated in the past. These include the fire tower at the New York State Fairgrounds (originally located on Padlock Hill), the fire tower at the Adirondack Museum (originally located on Whiteface Mountain), and the fire tower at the Adirondack History Center (constructed from parts of two separate towers originally located on Kempshall and West Mountains). Decisions regarding how towers are removed and the future use of the structure will be included in the specific UMP and/or UMP Amendment.

III. OBSERVER CABINS

Most of the original fire towers were equipped with a cabin as living quarters for the observer. These cabins were not only important for the operation of the fire towers, but were valuable in the case of an emergency, since the observer resided at the cabin even during off-duty hours. Of the 20 fire towers on Forest Preserve land within the Adirondack Park, nine towers still have their associated observer cabins. Most of the older cabins are listed or eligible for listing in the National Register of Historic Places. (See Chapter 4.II) Other sites such as Blue,

Kane, and Wakely mountains with cabins less than 50 years old, still share a strong association between the cabin and tower in the minds of many people. While the previous section addressed the fire tower structure itself, this section will discuss existing uses for observer cabins. The future of observer cabins on private lands is beyond the scope of this study, with the exception of lands to be acquired by the State. For example, the cabin on Mt. Adams, while still in private ownership is subject to a Conservation easement to the State.

The APSLMP lists ranger stations and observer cabins separately in the list of conforming structures, with clear guidance for ranger stations, but no specific guidance for observer cabins. By inference, the use of cabins follows the use of fire towers. Cabins were allowed to remain as long as the towers were being used, since you needed both in order to have an effective fire observation system. In a few instances, the public has questioned the need and continued maintenance of observer cabins, their interpretation value, and the overnight use of cabins by volunteers. Concerns were expressed that members of the public would be living on Forest Preserve lands, and that a more permanent human presence in the vicinity of the summit, may have a negative impact on the recreational experience or detract from the wild forest character.

During the development of this study, the existing conforming observer cabins were assessed. As a result of this analysis, the study makes the following general recommendations:

- Decisions regarding individual observer cabins on Wild Forest or Intensive Use classified lands will be made on a unit by unit basis through the UMP planning process.

- Existing observer cabins on Forest Preserve lands that conform with the Adirondack Park State Land Master Plan may be restored as historic structures and maintained for safe public use, where necessary.

- Existing observer cabins on Forest Preserve lands that conform with the Adirondack Park State Land Master Plan will be managed to protect their wild forest setting and promote public education about their history in the context of the history of the Forest Preserve and the evolution of its cultural and natural resource values.

- The Department will work with the owners of private and municipal lands where observer cabins are located to maintain and manage these facilities for the purposes of historic preservation, public recreation and education.

- The Department will establish a clear set of standards for the use of observers cabins on public lands.

- The Department will coordinate observer's cabin restorations.

- The Department will encourage partnerships with the private sector and local governments that will assist the Department to maintain these facilities.

Administrative Use of Observer Cabins

For over a decade, the Department has been promoting a program of using fire towers and observer's cabins for recreation, education, and interpretation in both the Adirondack and

Catskill Parks*. The Department's AANR policy and the law that underlies it encourages volunteers in the care of State resources. The presence of summit guides in the towers, make the cabins just as appropriate for their shelter as for that of the original forest fire observers, even if limited to weekends under the terms and conditions of a AANR. In the context of a site occupied by a restored fire tower used by hikers to the summit, the presence of the cabin probably would not be as objectionable to visitors as it would be in a more isolated location without any historic association to a fire tower.

As mentioned in Chapter 5.VI, there are a wide variety of activities associated with observer cabins both by the general public and administratively by the Department. Observer cabins on Forest Preserve land are used by Department staff such as the Stillwater Mountain cabin (temporary use for assistant forest ranger) or by summit guides, like at Hadley Mountain. The Hadley Mountain cabin requires a moderately difficult 1,500 foot climb, so for efficiency purposes and to better serve the public, the Department has allowed the summit guides to stay in the cabin for their five day work week, instead of going up and down the trail on a daily basis. This activity when allowed under the terms of an AANR, is generally at the more remote fire tower locations or where volunteers must travel a long distance just to reach the trailhead. A cabin, not in plain view from the summit, such as the one on Hadley Mountain, would also be at risk if left unlocked for the public to visit.

This study makes the following recommendations:

- Use of the observer cabins will be limited to approved activities identified in the individual AANR agreements for each fire tower site.

- Overnight stays in the cabin by the general public or by individuals only engaged in maintenance activities will be generally prohibited.

- The cabin cannot be used for fund-raising efforts, private events or selling of any items to the public.

- The use of observer cabins on private land depends on Department needs and ownership of the structure. In the case of Loon Lake Mountain, ownership of the observer's cabin is the subject of debate. No documents regarding its actual ownership have as yet been located. At present, the Department and Lyme Adirondack Timberlands LLC have agreed that the cabin can continue to be leased on a year-to-year basis by private individuals. Annually at lease renewal time (typically April 1), the lease will be reviewed and if the Department desires, the lease can be terminated for the purposes of returning use of the structure to either DEC or a DEC cooperator.

IV. ADMINISTRATION

In the Catskill Park, rehabilitated observer cabins are used for several purposes, including incident command center for search and rescue, secure staging place for equipment and material storage, and occasionally, overnight quarters for volunteer interpreters and sometimes DEC staff.

The Adirondack Park encompasses portions of two different DEC regions. Region 5 includes Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington counties. Region 6 includes Herkimer, Jefferson, Lewis, Oneida and St. Lawrence counties. The administration of the Forest Preserve and Conservation Easement lands and more specifically the fire towers, observer cabins, and associated communication facilities is shared by several programs in the Department:

The Division of Lands and Forests is responsible for the preparation of unit management plans, overseeing the implementation of UMPs, coordinating Forest Preserve management activities with APA, preparing budget requests and overseeing the expenditure of funds for Forest Preserve construction and maintenance, protecting open space and providing educational materials for the public. The Regional Foresters oversee the activities of the Division, with Supervising Foresters and Foresters responsible for the development of AANRs and coordination of projects with "friends" groups, Use and Occupancy agreements, unit management planning, and other state land management tasks.

The Division of Fish, Wildlife and Marine Resources protects and manages fish and wildlife species, provides for public use and enjoyment of natural resources and licences for fishing, hunting and trapping. The Regional Wildlife Managers oversee the activities of the Division, with Senior Wildlife Biologists responsible for wildlife concerns.

The Division of Operations provide technical services, designs, builds and maintains Department facilities and infrastructure to insure effective and efficient operation of the Department and safe public use of DEC lands. More specifically, the Division operates Department campgrounds and day-use facilities and maintains interior structures such as fire towers, observer cabins, parking lots, and trails. Other responsibilities include radio systems maintenance and specialized electronic systems development. The Regional Operations Supervisors oversees division activities in the region.

The Division of Law Enforcement is responsible for enforcing New York's Environmental Conservation Law, which relates to hunting, fishing, trapping, licence requirements, endangered species, the possession, transportation and sale of fish and wildlife, trespass, and damage to property by hunters and fishermen. Environmental Conservation Officers (ECOs) focus on the enforcement of the Environmental Conservation Law.

The Division of Forest Protection is responsible for the preservation, protection, and enhancement of the State's forest resources, and the safety and well-being of the public using those resources. The Division is composed of Forest Rangers, Lieutenants, Captains and Directors, stationed at various locations across the State with the greatest numbers located in the Adirondack and Catskill Mountains. Forest Rangers are the stewards of the Forest Preserve and are the primary public contact. They issue camping permits and educate the public about proper backcountry behavior. They are responsible for fire control and search and rescue functions.

The Division of Public Affairs and Education is the public communication wing of the Department. The Division communicates with the public, promotes citizen participation in the UMP process, produces, edits and designs Department publications.

This study makes the following recommendation:

- Continue current shared administration of fire towers, observer cabins, and associated communication facilities.

A. Funding

The Division of Lands and Forests received $250,000 for work associated with fire towers on a statewide basis. Approximately $60,000 will be held for DEC fire tower projects with the remaining $190,000 to be allocated for a grant program overseen by DEC.

B. Volunteer Programs

Many "friends groups" have adopted or are willing to "adopt" individual towers. Private funds have been generated through mail order sales of individual patches for the Hadley, Bald (Rondaxe), and Kane Mountain Fire Towers along with the NYS Fire Tower Centennial patch. In some cases such as Bald (Rondaxe) Mountain, the patches are also available locally. Proceeds from these sales have gone to the friends groups and have been used for specific restoration projects.

Groups have formed in anticipation of future restoration efforts. One example is the Friends of the Spruce Mountain Fire Tower. This group, under the auspices of Saratoga PLAN proposes to raise money to fix the steps, railings and fire tower cab and provide volunteer labor.

This study makes the following recommendation:

- Volunteers will be utilized when possible to help maintain fire towers and conduct interpretive programs at little or no cost to the State.

C. Unit Management Plans

The ongoing interaction between DEC and APA in the management of the Forest Preserve and public input is governed by two APA policies (Agency Public Comment Policy and Agency Review of Unit Management Plans Pursuant to the Adirondack Park State Land Master Plan) and the DEC/APA MOU concerning implementation of the APSLMP. The memorandum details the procedures to be followed by both agencies in meeting the requirements of the APSLMP. To assist in the UMP planning effort one member of the team is from the APA, serving an advisory role.

This study makes the following recommendation:

- Approval for specific activities on Forest Preserve lands will be done through the Unit Management Planning process established in the APSLMP, including determinations by APA regarding APSLMP conformance.

D. Department Motor Vehicle and Helicopter Access

Department staff will occasionally be allowed to access fire tower sites by motorized means in non-emergency situations where necessary to carry out the course of their

duties. It is anticipated that the amount of limited motorized administrative access that is authorized will gradually decrease as the maintenance activities on fire towers progresses and are completed. Over the long term, the amount of motorized administrative access authorized is expected to be minimal. In accordance with CP-17, the Commissioner's Policy relating to reporting and record keeping of motorized access to the Forest Preserve, this access will be documented. In the event of a sudden, actual, ongoing emergency involving the protection or preservation of human life or intrinsic resource values, access by motor vehicles and aircraft will be permitted by and under the supervision of appropriate officials, to the extent necessary to address the emergency situation. This study makes the following recommendations:

- Continue maintenance of existing helicopter landing areas, as needed.

- Limit administrative access by other State agencies to that level of motorized access which is necessary to conduct maintenance activities authorized under a UMP, AANR, or Use and Occupancy Agreement.

V. PUBLIC USE

The APSLMP requires "an assessment of physical, biological and social carrying capacity with particular attention to portions of the area threatened by overuse in light of its resource limitations and its classification under the master plan." (APSLMP, June 2001, page 10). Most fire tower locations are not experiencing significant overuse problems.

A. Public Use Restrictions

There are currently no restrictions limiting day use at any fire tower location on Forest Preserve lands. It may be a source of visitor dissatisfaction when large groups, just by their sheer size, displace other users. Day use group size restrictions of a maximum of 15 people are recommended for the summit of Wakely, Hurricane, and St. Regis mountains in order to protect the natural resources and the wilderness character. This number is consistent with group size limitations recently established in other Wilderness Areas, and will help to set a standard for recreational use of Wilderness within the Adirondack Park. Other restrictions regarding prohibition of camping near fire towers are addressed in UMPs such as the St. Regis Canoe Area proposal to prohibit camping and camp fires on summits above 2,700 feet.

This study makes the following recommendation:

- Specific locations where public use levels are approaching the maximum sustainable by the resources will be determined and resolved through the UMP process.

B. Public Use Data

Public use information is currently collected for 19 different fire tower locations in the Adirondack Park. (See Table IV in Chapter 6.II)

This study makes the following recommendations:

- Construct and install a new standard trail register and/or kiosks at fire tower locations that will be open to the public and under DEC jurisdiction such as Belfry, Loon Lake, Lyon, Spruce, and Stillwater mountains.

- At appropriate fire towers, include a journal book to capture public comments similar to what ADK provides at Adirondack lean-tos.

VI. ACQUISITION

There are a number of factors that will influence the ability of the public to access the fire towers on private land at Mount Adams, and Spruce Mountain. These factors include, but are not limited to willing participation by private landowners and community or local governmental support for State acquisition of fee title or easements. When appropriate, DEC will work with private landowners to secure permission for access to State owned fire towers. These incentives may take the form of permanent recreational easements, seasonal easements, or permission agreements.

A. Recent Acquisitions

The State of New York purchased 6,813 acres of the Tahawus tract in the central Adirondacks on January 31, 2008. Open Space Institute retained a few key historical and recreational parcels on the land, including small parcels containing the Mt. Adams fire tower and the associated observer's cabin at the bottom of the mountain. Public access to these facilities is subject to the terms of the easement. If the observer's cabin and/or fire tower is removed, destroyed, or not maintained in a safe condition, OSI intends to convey the underlying parcel to the State in accordance with the purchase option included in the easement.

Acquisition of Lyon Mountain and surrounding lands occurred in 2008. The existing parking area and most of the trail is in the Town of Dannemora, with the Dannemora lands proposed to become part of Clinton 9 State Forest. The summit and tower are in Town of Saranac with the lands considered unclassified Forest Preserve, proposed for a wild forest classification to become part of the Chazy Highlands Unit. The classification of these lands (CL-01: Towns of Saranac and Dannemora, Clinton County) by the Adirondack Park Agency is currently underway. Five public hearings will be held pursuant to Section 816 of the Adirondack Park Agency Act.

B. Potential Projects

One fire tower location with potential as a future acquisition to accommodate public access or for Department communications follows:

Spruce Mountain - The fire tower on the top of Spruce Mountain is located on a small parcel of land owned by Saratoga County. There are no radio users on the Spruce Mountain fire tower, although the Department has obtained a FCC license for this site. The county is restructuring its emergency radio system and no longer needs the land under the fire tower. The county's radio microwave dishes and other broadcast

equipment have been moved several hundred feet away, to a second Spruce Mountain radio tower owned by National Grid. A permit issued to the county by the Adirondack Park Agency requires that the old antenna tower be removed and the site "restored to its natural state." The county maintains a maintenance road up the mountain, but it is off-limits to the general public, although both all-terrain vehicles and snowmobilers unofficially use it.

A complicated series of land ownerships on the trail up the mountain has been an impediment to public access. The existing trail starts on state land, then crosses Saratoga PLAN property and private land belonging to Lyme Adirondack Timberlands LLC before reaching the county-owned summit. Lyme Timber* hasn't granted the public approval to cross its land.

In 2008, Julie Stokes, chairwoman of the Board of Directors of Saratoga PLAN (Preserving Land and Nature) and Jack Freeman of the Adirondack Mountain Club (ADK) hosted a meeting at the town of Greenfield Community Center to discuss fire towers and the potential opening and restoration of the Spruce Mountain fire tower. More than 30 people attended along with the town supervisors from Corinth and Greenfield. It was suggested that the Friends of the Spruce Mountain Fire Tower, under the auspices of Saratoga PLAN, raise money to fix the steps, railings and tower cab and provide volunteer labor, once there's permission from county and state officials to begin work. While Saratoga County has agreed in principle to give about three acres of the summit parcel to the state for public use, any fire tower restoration work awaits agreement by the three owners of the access trail, DEC, Lyme Adirondack Timberlands LLC lands, and Saratoga PLAN property.

This study makes the following recommendation:

- Resolve access issues across private land before any tower restoration could be considered.

**DEC has been in discussion with Lyme Timber about the agency's interest in access to the fire tower. Lyme Adirondack Timberlands LLC may be interested in modifying its Conservation easement to include recreational access by the public.*

CHAPTER 11: PROPOSED MAINTENANCE AND INTERPRETATION STANDARDS

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PROPOSED MAINTENANCE AND INTERPRETATION STANDARDS

While the previous Chapter identified existing uses and future needs of fire towers and observer cabins, this Chapter will further discuss historic preservation guidelines, radio facilities, maintenance standards, and interpretive/educational programs. Proposals were developed keeping in mind the scope of the document; compatibility with various laws; the APSLMP, DEC's statutory responsibility for the care, custody, and control of these lands, and the purpose and significance of Article XIV of the Constitution.

I. FIRE TOWERS AND OBSERVER CABINS

In order to partly fulfill its responsibilities under the National Historic Preservation Act, the Department has developed this study for fire towers. The primary goal is to preserve Department fire towers which are listed or eligible for listing in the National Register and whose existence is not in conflict with Master Plan guidelines. State law sets out a procedure for identifying structures with historical or cultural significance and establishes a set of procedural steps governing changes or removal. DEC and OPRHP have taken the approach that all fire towers are historic artifacts and should be retained where not in conflict with the APSLMP. Some components located outside the National Register of Historic Places boundary (for example, on Blue Mountain this would include the original jeep road and the newer observer's cabin), may also be considered contributing elements as defined in the National Register of Historic Places. By managing these properties with preservation as an important goal, the Department will preserve a significant element of its history and cultural values.

DEC has determined that the management of fire towers and observer cabins may have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places. Questions regarding what types of tower and cabin modifications are allowed, suitable maintenance alternatives, and a decision making process regarding when to keep an individual tower or cabin have been discussed. The lack of uniform standards and guidelines has allowed different treatment options and management strategies for these facilities.

Maintenance activities to structural elements when done in kind to match existing material and design* do not normally require further consultation from OPRHP. For example, use of interpretive signs or exhibit structures which are not attached to the structure and do not visually intrude on the historic property would be considered acceptable.

Getting a formal engineering assessment for each fire tower can take a fair amount of time. This does not mean that work cannot be done to the towers, as has been accomplished with several tower restoration projects by friends groups. To expedite repairs, a check list of work that can take place in the interim has been developed. (See Appendix)

**As an alternative to replacing the original cab glass windows with lexan, fabricated replacement window grids have been installed on the Azure, Blue, and Rondaxe (Bald) fire towers. They provide a finished appearance that reflects the grid pattern of the original tower windows, while keeping people from climbing out the window. The eight openings around the cab are secured with welded channel iron, which is galvanized for long life.*

This study makes the following recommendations:

- All work related to the rehabilitation of fire towers and observer cabins shall be reviewed and evaluated in accordance with the New York State Historic Preservation Act of 1980 and approved in a UMP.

- No work may be conducted without the advance written permission of the Department in the form of a completed work plan or "Application for Routine Maintenance Projects on Forest Preserve Land" (Attached to AANR) which has been signed by the Regional Forester.

- Exhibits should be constructed of materials and painted colors consistent with the historic resource and its natural setting.

- Adopt the standards identified in the General Fire Tower Check List

II. FIRE TOWER COMMUNICATIONS

This section will examine existing and proposed communication facilities that are associated with Department fire towers. Issues related to overall Department communication needs or policy is beyond the scope of this study.

To date, the UMP planning process has authorized the continued use and maintenance of five fire tower related communication facilities with two new facilities proposed for Wakely and Kane mountains. In addition, a plan prepared by Olympic Regional Development Authority (ORDA) for the Gore Mountain Intensive Use Area and a UMP for the Black Mountain section of the Lake George Wild Forest include fire towers that were significantly modified to accommodate communication facilities. One UMP (Lake George Wild Forest) released as a Draft plan in 2006, will provide additional information concerning public use and the communication facilities on Black Mountain. The recent acquisition of Lyon Mountain involves an additional fire tower with a radio repeater.

Department Policy was clarified* in 1980 to preserve the mountain tops within the Adirondack and Catskill Parks under the jurisdiction of DEC. Guidelines were provided on DEC's use of communication equipment as well as the conditions allowing other agencies to use the summits and summit facilities.

> "While the Department recognizes the need for effective communication structures and facilities to serve the needs of the people of the State, it also recognizes that the presence of these other facilities on the mountain tops within the Adirondack and Catskill Parks degrade the aesthetic qualities which are important and integral parts of the parks." (Norman J. VanValkenburgh, 1980)

While radio communications are essential to the Department, it is also desirable to preserve mountain tops in a natural condition unencumbered by manmade facilities. The

**Policy Statement on the Preservation of Mountaintops within the Adirondack and Catskill Parks under the Jurisdiction of the Department of Environmental Conservation. (See Appendix)*

towers on Gore, Cathead, and Black mountains have been modified significantly to enhance communications. The fire towers on Gore and Black mountains are closed to public use and the private lands on the summit of Cathead Mountain are posted as private property, closed to the public.

There is a concern that communications related facilities should not substantially alter the fire tower appearance, historic fabric of the tower, or cause a restriction to public access to the cab and its view. In some cases, members of the public have complained that the natural and historic character on the summits of Gore and Black mountains has been diminished due to the presence of communication equipment. It has been suggested that the Department should address the current status and need for the State police communications tower on Black Mountain while other people would like to see the Black Mountain or Gore Mountain fire towers open to the public.

This study makes the following recommendation:

- The management of individual communications facilities is most appropriately addressed on a site specific basis, changes to existing facilities or new proposals will need to be thoroughly analyzed and justified within the appropriate UMPs or UMP amendment.

A. Fire Tower Communication Needs and Changes

Shaker Mountain Wild Forest (Voice Over IP)

Because of the topography around Kane Mountain, the Caroga area has poor Department radio coverage. The existing Petersburg Repeater covers the area fairly well, but does not allow for direct communications with the DEC Ray Brook office. The approved UMP indicated that the Kane Mountain tower site will be evaluated for the Department's administrative communication needs. It was suggested that with changes in technology, i.e. voice over IP, a repeater on Kane may be feasible in the future. While ECO's have a repeater on nearby Cathead Mountain, there is no Forest Ranger frequency capablity currently at this tower.

This mode of communications allows for remote radio communications and control. The scenario to use Kane Mountain (once a repeater is installed) from Ray Brook would entail the installation of a "gateway" at the Northville DEC office. This gateway would be comprised of a file server and a radio connected to the internet. Using the internet, the Ray Brook DEC office could access the Northville gateway*, and make radio transmissions to key up the Kane Mountain repeater. The gateway is essentially a remote controlled transceiver controlled via the internet. The dispatcher would select the Kane Mountain repeater on the computer screen, hit a transmit button on the screen and talk, and the Kane Mountain repeater would key up just like the dispatcher was right next to the repeater.

Horseshoe Lake Wild Forest (conventional repeater)

A gateway was established at the Forest Ranger shop in 2008.

The Adirondack Blowdown of 1995 was a natural event at an exceptional scale. Portions of the Five Ponds Wilderness had some of the most continuous and intense areas of blowdown in the entire Adirondacks. For public safety reasons a radio repeater was installed on Cat Mountain. (See specific details in Chapter 5.VII) Prior to removal of this repeater , a permanent repeater is needed on Mt. Arab to fill in for dead radio spots around Lows Lake and gaps into the region 5 area where the Blue Mountain repeater does not cover. The Department did install an antenna for a one day test but did not adequately test the site over a longer period with more adequate equipment. Region 6 proposed to install a solar powered radio for a month to determine the sites value for long term communication purposes. This action would require filing with the FCC for temporary authorization to conduct the test.

Blue Mountain Wild Forest (Relocation of conventional repeater)

Hamilton County received a substantial grant for use in improving emergency radio communications. It has been suggested that part of the grant be used to relocate the radio equipment presently attached to the Blue Mt. fire tower over to the existing radio building and antenna tower. The removal of radio equipment from the fire tower would consolidate radio equipment at the existing Department radio building and antenna tower. It would also allow for the removal of the building owned by Hamilton County between the legs of the fire tower. In addition to the benefit to the public who use the summit recreationally, a consolidation of the radio equipment could be linked to the installation of a single backup generator that would serve all parties.

St. Regis Mountain Canoe Area

While there are some radio coverages lapses in the Meacham Lake and Debar Mountain areas that a repeater on St. Regis Mountain could potentially solve, there have are no documented problems reported by Department staff regarding radio coverage in the area.

Lyon Mountain

Staff from the Department's Office of Public Protection have been aware of problems with radio communications in the northern part of Clinton and Franklin Counties. This limited communication impeded the ability of Department staff to provide required services to help maintain public order, human safety, environmental protection and the protection of private property. Based upon this need, a repeater at this location was deemed critical to significantly improve DLE and Forest Ranger communications in the area.

In 2006, in consultation with APA staff, DEC proposed the addition of a small communication facility on the fire tower on Lyon Mountain. Upon securing an APA permit in 2006, a solar powered low frequency radio repeater, set of batteries, four solar panels and an antenna were added to the tower. At the time of the installation of the repeater the land was in private ownership. In 2008, the summit area of Lyon Mountain was sold to the State. See Chapter 10.V for additional information.

Spruce Mountain

There are no radio users on the Spruce Mountain fire tower, although the Department has obtained FCC licenses for this site and is in the process of getting the

proper APA permits to locate three low-powered repeaters in or on the tower. The repeaters would be solar powered, similar to the one installed on Lyon Mountain. This additional repeater capability would reduce the load on the Ranger frequency, which can become congested during searches or fires. There is road access and power to the tower location.

Other Alternatives

Other alternatives to permanent radio repeaters such as the use of satellite phones are not considered a viable option given today's technology limits. The use of fire towers for possible intermittent use for emergency communications purposes as a temporary repeater station by a person with a portable radio can be justified in certain circumstances. It would be hard to justify the retention and maintenance of towers solely for infrequent emergency use and this alternative would not remedy day-to-day radio communications problems.

Initially, communication facilities on the fire towers and mountain summits were only used for Department fire control and communication purposes. As technologies advanced and other agencies developed a need for the use of the summits for repeater stations, requests for permitting began to grow. While the Department recognizes the need for effective communications structures and facilities to serve the needs of the people of the State, it also recognizes that the presence of these and other facilities on the mountain-tops within the Adirondack Park can degrade the aesthetic qualities which are important and integral parts of the Park. Further, the Adirondack Park Agency, in recognition that the hills and mountain-tops of the Adirondack Park are among the region's most distinctive and precious resources, and that consolidation of towers and tower facilities with existing towers and tower facilities will result in materially less cumulative environmental impact, adopted as policy that all new communication towers and other tower facilities be consolidated with existing towers. In order to prevent further degradation of these aesthetic qualities and to allow for continuation of the present communications systems and for the improvement and expansion of these system as future needs may dictate, a mountaintop policy was adopted in 1980. See Appendix.

This study recommends that No fire tower under the jurisdiction of the Department of Environmental Conservation within the Adirondack and Catskill Parks which does not have existing communication structures, antennas or other facilities may be altered for communications or any other purpose, unless directly related to the communication needs of the Department.

This study also supports the following broad recommendations contained in the Departments mountain top policy:

- No mountain-top under the jurisdiction of the Department of Environmental Conservation within the Adirondack and Catskill Parks which does not have existing structures, towers or other facilities may be used as a site for structures, towers or other facilities for communications or any other purpose.

- On mountain-tops under the jurisdiction of the Department of Environmental Conservation within the Adirondack and Catskill Parks where structures, towers, or other facilities presently exist and have appurtenant service routes, new facilities may be added if: (a) such new facilities are consolidated with existing structures, towers or other facilities and (b) such new facilities, in the case of governmental agencies other than the Department, area permitted in accordance with a Temporary Revocable Permit (TRP) as required by Section 9-0l05 (15).

- Existing structures, towers and other facilities located on such mountain-tops will be evaluated on a periodic basis to determine if they continue to serve a Departmental purpose or function. If it is determined that such structures, towers and other facilities do not serve a Departmental purpose or function, then they shall be proposed and schedule for removal through the unit management planning process.

- As technology develops and it becomes feasible to consolidate communication and other electronic facilities in one structure or tower without interference, such structure and towers will be consolidated for the purpose of reducing the numbers of each at any one site or on anyone mountain-top.

B. Fire Tower Modifications and Closure to the Public

Some fire towers like those on Black and Gore mountains are fenced at the base or posted closed to help prevent vandalism and keep the public from climbing the tower structure.

A 10-foot tall chain-link fence surrounds the radio tower, shelter, and solar panels on Black Mountain. The wind turbine tower was destroyed by vandalism in late 2006, leaving only the solar panels and generator to power the site. The windplant was replaced in 2008. This telecommunications complex that the State Police and the Department of Environmental Conservation built around the fire tower on top of the Black Mountain is considered by some people to be an example never to be repeated. The addition of a new tower higher than the fire tower, communications building, barriers against public access, and separate wind generation tower can make this facility appear out of place on a mountain summit in the Adirondack Forest Preserve.

There has also been concern that the attachment of solar panels on proposed repeater facilities such as the fire tower Wakely Mountain would affect the tower's historic appearance. The installation of this equipment for emergency and day-to-day communications is considered sufficiently important to justify some impacts to the use and appearance of the tower. However, because all components would be mounted on the tower, overall the installation would have less visual impact than other systems, which have included a separate tower for a wind generator and a separate building for the radio and batteries.

On Gore Mountain no maintenance has been performed on the tower since ORDA put plywood on the window holes and replaced a couple of steps approximately 10 years ago. The fire tower and all the radio equipment around it make the tower itself somewhat unattractive and there is a fine view to the southeast without climbing the tower. Visitors to the summit and other interest groups have expressed an interest in using the fire tower. DEC Engineers have declared it as structurally unsound for public

use, due to all the modifications for communications equipment. “Closed" signs are posted on the Gore Mountain tower warning the public about microwave emissions.

Should the facilities on Gore Mountain be replaced by other means of communications, and communication equipment removed, it would be unlikely that the fire tower could ever be restored to its historic condition due to the modifications and additional steel welded to the structure.

This study makes the following recommendations:

- In the case of the proposed repeater and solar panels on Wakely Mountain, efforts should be made to insure that the installation of the equipment will not involve the removal or alteration of the original components of the tower structure.

- If the State Police were to remove their communications tower in the future, the option of reopening the Black Mountain fire tower would be reviewed in a future revision to the Lake George Wild Forest UMP.

C. Fire Tower Repeater Security

Because of advancements in technology*, the use of fire towers for radio communications does not have to detract from public use and enjoyment. Needed radio equipment, including batteries and solar panels, can be configured to permit safe public access to the tower cab without subjecting the equipment to undue risk of vandalism. Putting the box for the radio under the map table would leave more room for people.

The option of closing the cabs seasonally (where there are glass or wood windows on some fire towers, such as Woodhull Mountain) could make the radio equipment last longer and keep the batteries warmer to some extent, by keeping snow and ice from the cab. This alternative is limited since the majority of restored fire towers do not have glass windows but are open with galvanized steel window grids.

This study makes the following recommendations:

- Secure radio repeaters in locked boxes, allowing the Department to continue maintaining important communication needs while safely accommodating public recreational activity.

- When feasible, install a map table over the radio box, so that the space in the cab is more efficiently used.

**Radio equipment can be secured against vandalism and configured to permit safe public access to the tower cab without making permanent alterations to the historic tower structure. Future installations planned for Wakely and Pillsbury mountain will have the repeater system mounted within a protective enclosure in the tower’s cab measuring approximately 40 inches by 23 inches by 17.5 inches. This box will occupy approximately 5.5 square feet (11 percent) of the cab’s 49 square feet of floor space. It will be located under a map table in the center of the room, leaving the rest of the cab open for public use. A low-profile antenna that projects approximately four feet above the peak of the roof will be mounted on a corner of the tower cab roof. Four solar photovoltaic panels, each measuring 46.8 inches by 20.9 inches by 1.5 inches, on the tower structure below the cab, will supply power to the batteries.*

III. OTHER ISSUES

A. Fire Tower Capacity

Fire towers were not originally intended as recreational platforms for the public. While there has not been a formal determination of capacity, an approved Department sign states: "No More Than 6 people on the Tower at One Time." This sign is used on all the open towers in the Catskills and some of the towers in the Adirondacks. In the DEC checklist , a recommended capacity of eight people for the cab and four people for the landings was identified. These numbers identify a safe and practicable number of people that can be accommodated on a fire tower while trying to avoid congestion at the landings. With more than four people on a landing at one time, especially young children there can be problems with congestion when one group is going up and another going down.

This study makes the following recommendation:

- Establish a maximum of six people for the cab (regardless of radio equipment or presence of map table) with a total maximum tower capacity of 12.

B. Vandalism

The observer's cabin in some instances can be a focal point for vandalism which occurs more frequently from Friday night through Sunday night, and on holiday weekends. At some fire tower locations, Kane Mountain for example, for many years the cabin was left open, with minor problems occurring, mostly people writing or carving their names on the walls. Since inappropriate public use of the cabin could occur if the building was left open, the door was secured shut. Unfortunately, the act of locking the cabin to prevent public entry, seems to present a challenge for some people to force their way in, resulting in cabin break ins.

At a few locations, such as Blue Mountain sheet metal panels that are painted brown were installed over the windows of the cabin. Doors have also been reinforced or second doors have been added. The simple presence of a volunteer or summit guide at the fire tower during the weekends can often eliminate this problem.

This study makes the following recommendations:

- Where vandalism is a recurring problem the Department will take additional steps to secure the cabin from further damage or remove the cabin, through the UMP process.
- Use oversized hardware (hinges and hasps), metal plates when necessary, and more secure padlocks on all observer cabins.

IV. INTERPRETATION AND STAFFING STANDARDS

Though the Department provides information about the Forest Preserve in a number of ways, it has not yet adopted a formal plan for providing information to visitors. There is no system for presenting information about the broad range of Forest Preserve topics to all prospective users in a comprehensive and organized way. Many people do not clearly understand that all State lands within the Adirondack Park are part of a single Adirondack Forest Preserve. They often cannot differentiate between the Forest Preserve and the other public lands in the state. People can also be confused about the distinctions between public and private lands in the Park because of its complex pattern of public and private ownership.

Better information about the natural, cultural and recreational values of the Forest Preserve could lead to better visitor experiences for a wider range of visitors and the development of a broader constituency for the Forest Preserve.

The focus of management actions will be on "protecting the ecological, scenic, and historical characteristics of the summit and providing a worthwhile educational experience to the public." The impact a summit guide or volunteer can have on the public that hike to fire towers is immeasurable. This educational effort in combination with funding to restore fire towers to their safe original condition are important parts of Forest Preserve stewardship.

This study makes the following recommendation:

- Support the development of a consistent Park-wide program of public education at restored Adirondack fire towers to: disperse recreational use of the Forest Preserve; support local partnerships; and utilize the unique opportunity at fire tower locations to educate the recreating public about the special character and importance of the Preserve and the Park.

A. Standards for Education and Training

Since 1993, new partnerships between DEC and other organizations have enabled several tower rehabilitation projects, development of nature trails and in some cases, the placement of seasonal "summit guides." Local tower committees have acknowledged the advantages of having an assured succession of annual summit guides who receive course preparation in stewardship and site-specific public interpretation in advance of their appointment.

For the sake of a consistent, coherent education program for fire towers, the Adirondack Fire Tower Association (AFTA) derived from the Potsdam ES program's curriculum some basic standards for educational and training requirements for fire tower stewards involved with public education. These standards have not been incorporated into Department policy, and are only considered suggested standards. Applicants for NYS funding are not required to meet these standards.

At a few specific fire tower locations, no NYS funding is involved with volunteers working for free or a small stipend. Since 2003, the Azure Mountain Friends provide volunteer interpreters on weekend days on Azure Mountain during the period from

Memorial Day through Columbus Day. Their tasks include monitoring the condition of the parking area, trail, tower, and summit; picking up litter; performing light trail work, putting the flag up on the tower; greeting hikers and providing educational information about the landmarks, history, and restoration of the tower. In addition, Azure Mountain Friends Scholarships have been created to encourage the involvement of area teens. Each year there is award of one or two $350 scholarship to a 'north country' high school senior or college student who volunteers to serve as a Fire Tower Interpreter for 5 days. The student's training includes a three hour mentoring session with an experienced volunteer interpreter.

This study makes the following recommendations:

- Support development of a summit guide training program by 2010 (as alternative to Potsdam College's program, and when demand may exceed supply*)
- Whenever local funding is unavailable, fund directly if visitation justifies.
- Encourage volunteer interpreters, not as substitutes for summit guides, but in spring and fall, and during absence of summit guide. Minimal training would consist of guidebook (Azure Mt. Example) and appropriate guidelines.
- AFTA to collaborate with DEC in offering a two-week, residential, spring training program. The standards would be less demanding than the Potsdam curriculum, limited to what could reasonably be delivered in a two-week intensive program, with some advance reading.

B. Adopt-A-Natural Resource Stewardship Program (AANR)

There can be differences between the activities and responsibilities of the steward authorized in individual AANRs along with the list of activities allowed by the agreement. For example, a small group such as the Friends of Wakely Mountain had reservations about funding or hiring of an intern. The AANR was written to accommodate the groups concern.

This study makes the following recommendation:

- Develop more standardized language for Adirondack firetower AANRs, allowing for some variation depending on the group, the specific site and other considerations. See sample DEC fire tower AANR in Appendix.

Within the terms and conditions of current AANR Agreements educational and interpretive activities authorized by the Department may include:

- Providing interns to meet the public and deliver spoken or written messages interpreting fire tower history, local geography and geology, natural and cultural history, and the history and values of the Forest Preserve and the Adirondack Park.
- Creating, installing and maintaining simple, portable interpretive displays inside the observer's cabins to support interpretive messages.

**With the Kane and Stillwater mountain tower committees ready to sponsor guides, Mt. Adams and Lyon Mountain fire tower restorations underway, and committees sure to form over the next few years for the restorations of Loon Lake, Pillsbury, Wakely, and Woodhull mountain fire towers, it is likely that the need for summit guides will exceed the optimum capacity of Potsdam's program.*

- Creating and installing a map and map table inside the fire tower cab, meeting guidelines for historic preservation, public use and safety.
- Creating and distributing a fire tower brochure presenting interpretive messages.
- Developing the fire tower trail as an interpretive trail with numbered locations tied to descriptions in a brochure.
- The Steward may hire or support the placement of an intern provided by AFTA to conduct public educational and interpretive activities at the fire tower site. Educational and interpretative activities conducted by AFTA interns will be subject to a separate agreement with the Department. In cases where the steward is not able, the Department will seek to provide an intern or other individual to serve as a summit guide.
- Should an AFTA intern not be available, the Steward may propose a candidate for the position of fire tower interpreter, along with an outline of the activities, displays and messages to be developed and presented by the candidate to the public. After the Department has interviewed and approved the candidate and approved the proposed activities, displays and messages, the Steward may hire or sponsor the candidate. The Steward will monitor the activities of the interpreter to assure that the conduct of the interpreter and the message delivered to the public conform with this agreement and Department management goals.

C. Fund Raising Concerns

Activities on state lands related to the raising of funds to support the purposes of an AANR agreement is normally limited to the distribution of information. The sale of goods or the acceptance of donations is conducted off state lands. While the Department does not allow these kinds of activities through current practice and language within AANRs, there is no policy in place that specifically prohibits them.

D. Public Education and Brochures

The Department has not yet produced an informational brochure specific to fire towers and observer cabins open to the public. A publication should be developed that would include a map of the Adirondack Park in the broader context of surrounding communities with interpretive information related to fire towers and observer cabins. The publication should be designed as a component of a family of publications patterned after the Adirondack Forest Preserve Map and Guide.

This study makes the following recommendations:

- Develop a high-quality color map and brochure with the graphic design elements of the Adirondack Forest Preserve Map and Guide focusing on fire towers open to the public. Include information about fire towers and their early role in protecting the Forest Preserve.

E. Interpretation

Interpretation efforts can play a vital role in preserving and interpreting this important State resource. A few observer cabins open to the public like the one on Mt. Arab primarily serve an educational function. There are minimal accommodation for the intern or volunteers to stay at Mt Arab, since the cabin is not set up like a residence.

Most rooms are used by the summit guides for educational or informational displays, to facilitate the mission to communicate the natural and social history of the area.

This study makes the following recommendations:

- Interpretive activities and methods will be limited in scope and subject to approval by the Department.
- A portion of visitors to fire tower sites have a fear of heights and therefore do not climb the tower. For these people and when summit visibility is poor, panoramic photographs of the view from the cab could be on display.
- During periods of inclement weather, especially rainy and/or high wind days, some of the cabins that are not normally open to the public, such as those on Blue and Hadley mountains, can function as a welcoming location where the public can meet the FT summit guide. When suitable, the front entrance of the cabin will contain portable displays that support educational efforts in interpreting fire tower history, local geography and geology, natural and cultural history, and the history and values of the Forest Preserve and the Adirondack Park.

APPENDICES

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APPENDIX A. ACRONYMS AND DEFINITIONS

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ACRONYMS AND DEFINITIONS

6NYCRR	Title 6 of the Official Compilation of Codes, Rules and Regulations
AANR	Adopt a Natural Resource Agreement
AARCH	Adirondack Architectural Heritage
AATV	Adirondack Association of Towns & Villages
ADA	American with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
ADK	Adirondack Mountain Club
AFTA	Adirondack Fire Tower Association
APA	Adirondack Park Agency
APLUDP	Adirondack Park Land Use Development Plan
APSLMP	Adirondack Park State Land Master Plan
ARTC	Adirondack Regional Tourism Council
ATB	All Terrain Bicycle
ATP	Upper Hudson Woodlands, LP a client of RMK Timberland Group.
ATV	All Terrain Vehicle
BBA	Breeding Bird Atlas
DEC	Department of Environmental Conservation
DOT	Department of Transportation
DSP	Division of State Police
EPA	Environmental Protection Act of 1993
EQBA	Environmental Quality Bond Act
ECL	Environmental Conservation Law
ESF	College of Environmental Science and Forestry
FDRA	Fire Danger Rating Area
FFLA	Forest Fire Lookout Association
GIS	Geographic Information System
IMBA	International Mountain Biking Association
LAC	Limits of Acceptable Change
MOU	Memorandum of Understanding
NYCRR	New York Code of Rules and Regulations
NYS	New York State
NYSM	New York State Museum
OPRHP	Office of Park, Recreation & Historic Preservation
OSP	Open Space Plan
ROW	Right-of-Way
SEQRA	State Environmental Quality Review Act
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SUNY	State University of New York
TNC	The Nature Conservancy
TRP	Temporary Revocable Permit
USGS	United States Geological Survey
UMP	Unit Management Plan

DEFINITIONS

This list was developed from a variety of sources, including the APSLMP. When there was a difference in content, the APSLMP definition is used.

Adirondack Forest Preserve - consists of land owned by the State within the 12 Adirondack counties. Essentially all of the 2.72 million acres of State land within the Adirondack Park is Forest Preserve and is protected by Article 14 of the State Constitution.

Adirondack Park - consists of six million acres of public and private land within a boundary delineated in the Environmental Conservation Law. At the present time, State ownership accounts for some 45 percent of this area.

Adirondack Park State Land Master Plan - A document prepared by the Adirondack Park Agency in consultation with the Department of Environmental Conservation that is designed to guide the preservation, management, and use of all State lands within the Adirondack Park.

Administrative Barrier - A barrier that can be opened to allow travel over the road by State personnel for administrative or emergency purposes. An administrative barrier should consist of a swing barrier constructed of pipe.

All Terrain Bicycle - A non-motorized bicycle designed or used for cross-country travel on unimproved roads or trails.

Americans with Disabilities Act - a major civil rights law prohibiting discrimination on the basis of disability in the private and public sectors.

Americans with Disabilities Act Accessibility Guidelines - guidelines for ADA compliance in the construction of new facilities and the alteration of existing facilities.

Americans with Disabilities Act Accessibility Guidelines, Proposed - guidelines recommended in the September 30, 1999 Report by the Federal Regulatory Negotiation Committee on Outdoor Developed Facilities to the U.S. Architectural and Transportation Barriers Compliance Board (Access Board), including the appendix to the Report.

Campground - A concentrated, developed camping area with controlled access which is designed to accommodate a significant number of overnight visitors and may incorporate associated day use facilities such as picnicking.

Controlled Access Barrier - A barrier that can be opened to allow travel over the road by private individuals or organizations who have the legal right of such travel. A controlled access barrier should be of the same design and construction as an administrative barrier.

Cross-Country (Nordic) Ski Trail - A marked and maintained path or way for cross-country ski or snowshoe travel, which has the same dimensions and character and may also serve as a foot trail, designed to provide reasonable access in a manner causing the least effect on the surrounding environment and not constructed,

maintained or groomed with the use of motor vehicles.

Cultural Resources - Any building, structure, district, area, site or object including underground and underwater sites, that is of significance in the history, architecture, archaeology or culture of the State, its communities or the nation. (New York Code Rules and Regulations title 9 part 426.2)

Easement - An interest in land owned by another that entitles its holder to a specific limited use or enjoyment. Easements are reserved for specific purposes, typically trails, roads, etc. Easements are restricted in physical size and the use(s) allowed. The season and duration of use may also be restricted. Easements cannot be used for other purposes.

Eminent Domain - The power of government to acquire real property for a public purpose upon payment of just compensation.

Exemplary Natural Community - An assemblage of plant and animal species living together and having close interaction that has been largely undisturbed by humans.

Fee Acquisition - The Term "fee" applies to the purchase of all rights to property. This differs from purchasing an easement in which only certain rights are purchased.

Foot Trail - A marked and maintained path or way for foot travel.

Motor Vehicle - A device for transporting personnel, supplies or material that uses a motor or an engine of any type for propulsion and has wheels, tracks, skids, skis, air cushion or other contrivance for traveling on, or adjacent to air, land and water or through water.

Multiple Use Trail-A trail that accommodates more than one trail use. Trail uses could include, but not necessarily limited to: walking, hiking, backpacking, bicycling, mountain bicycling, horseback riding, off-highway vehicle riding, snowmobiling, jogging, running, etc.

Natural Materials - Construction components drawn from the immediate project site or materials brought into the construction site that conform in size, shape and physical characteristics to those naturally present in the vicinity of the project site. Such materials include stone, logs and sawn and treated timber. Natural materials may be fastened or anchored by use of bolts, nails, spikes or similar means.

Permanent Barrier - A barrier that will close a road permanently to all future travel -- public or administrative -- on such road. A permanent barrier should consist of an earth, rock, or ditch (or any combination thereof) barricade of substantial proportions so as to be obvious and require little or no maintenance.

Primitive Tent Site - An undeveloped camping site providing space for not more than three tents, which may have an associated pit privy and fire ring, designed to accommodate a maximum of eight people.

Right-of-Way (ROW) - A corridor of land used by a public or private entity for a specific purpose, usually related to transportation or access.

Recreationist - Someone who directly participates in an outdoor recreational activity either as a resident or non-resident of the Park or as a visiting tourist.

Resident - One of approximately 130,000 or more people who permanently resides on private lands within the Park.

Road - An improved way designed for travel by motor vehicles and either, (a) maintained by a State agency or a local government and open to the general public; or (b) maintained by private persons or corporations primarily for private use but which may also be partly or completely open to the general public for all or a segment thereof; or (c) maintained by the Department of Environmental Conservation and open to the public on a discretionary basis; or (d) maintained by the Department of Environmental Conservation for its administrative use only.

Seasonal Resident - Individuals who have their permanent residence outside the Park but who own a second home; rent or lease a residence, cabin, or campsite; or temporarily reside in the Park for a month or more on a seasonable basis.

Snowmobile - A motor vehicle designed primarily to travel on snow or ice by means of skis, skids, tracks or other devices. It is specifically excluded from the definition of "motor vehicles" in 6NYCRR and the Vehicle and Traffic Law.

Snowmobile Trail - A marked trial designated by the Department of Environmental Conservation on which, when covered by snow and ice, snowmobiles are allowed to travel.

State Environmental Quality Review - Is a process which requires all levels of State and local government to assess the environmental significance of actions which they have discretion to approve, fund or directly undertake.

Tourist - A person who resides outside the Park and stays one night in or near the Park for purposes of engaging in recreational or leisure activities.

Trailhead - A point of entrance to State land which may contain some or all of the following: vehicle parking, trail signs, and visitor registration structures.

Unit Management Plan - a document that identifies the natural resources, man-made facilities, public use, and past management within a described geographic unit of State land. The plan covers all aspects of the environment and is the basis for all future activities on State lands for a period of five years.

APPENDIX B. DEC PUBLIC PARTICIPATION SUMMARY

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List of Public Officials, Agencies and Organization Contacts

Elected Officials
Governor - David Paterson
U.S. Senator - Charles Schumer
NY Senator - Elizabeth Little
Assemblywoman - Teresa Sayward, Assembly District 113
U.S. Representative in Congress - Bill Owens - Hamilton & Fulton County
U.S. Representative in Congress - Scott Murphy - Essex and Warren County
Senate Tourism, Recreation & Sports Development Committee

State Agencies
Adirondack Park Agency - Curt Stiles, Chairman
Advocates Office for Persons With Disabilities
New York State Department of Transportation
New York State Parks Recreation and Historic Preservation
New York State Museum
New York State Natural Heritage Program
SUNY ESF - Adirondack Ecological Center
SUNY College of Environmental Science & Forestry - Chad Dawson
SUNY Plattsburgh - James Dawson

Agencies and Elected Officials
Adirondack Association of Towns and Villages
Adirondack Park Local Gov't Review Board
Town of Altamont Supervisor
Town of Arietta Supervisor
Town of Benson Supervisor
Town of Black Brook Supervisor
Town of Caroga Supervisor
Town of Chesterfield Supervisor
Town of Corinth Supervisor
Town of Dannemora Supervisor
Town of Dresden Supervisor
Town of Elizabethtown Supervisor
Town of Fine Supervisor
Town of Franklin Supervisor
Town of Hadley Supervisor
Town of Hague Supervisor
Town of Indian Lake Supervisor
Town of Johnsburg Supervisor
Town of Keene Supervisor
Town of Lake Pleasant Supervisor
Town of Long Lake Supervisor
Town of Minerva Supervisor
Town of Moriah Supervisor

Town of Newcomb Supervisor
Town of Piercefield Supervisor
Town of Santa Clara Supervisor
Town of Saranac Supervisor
Town of Waverly Supervisor
Town of Webb Supervisor

Interest Groups/Organizations:
Adirondack Arch. Heritage
Adirondack Conservation Council
Adirondack Council
Adirondack Fairness Coalition - Chestertown office
Adirondack Fire Tower Association
Adirondack Forty-Sixers, Inc. - Marrisonville office
Adirondack Landowners Assoc
Adirondack Mountain Club
Adirondack Museum - Blue Mountain Lake office
Adirondack Nature Conservancy & Adirondack Land Trust
Adirondack North Country Assoc.
Adirondack Park Institute
Adirondack Park Local Gov't Review Board
Adirondack Region Bike Club
Adirondack Regional Tourism
Adirondack Snowmobile Association
Adirondack Trail Improvement
Adirondack Wildlife Program
Adirondack Ski Touring Council - Lake Placid office
AMC
Animal Protection Institute
Audubon Society of NYS
Blue Mt Lake Assoc
Blue Ribbon Coalition
Catskill 3500 Club
Central Adirondack Association
Coalition of Watershed Towns
Empire State Forest Products Association
Environmental Advocates
Federation Of NYS Bird Clubs
Fish and Wildlife Management Board, Region 5
Forest Fire Lookout Association (NY Chapter)
Forest Practice Board - Reg. 5
Forest Preserve Advisory Committee
Izaak Walton League
National Audubon Society of NYS
Natural Resources Defense Council
National Parks and Conservation Association
NY Archaeological Council
NY Blueline Council

NY Chapt of Wildlife Soc.
NY Parks and Conservation Association
NYS Conservation Council
NYS Snowmobile Association
NYS Trails Council
NYS Outdoor Guides Assoc. Inc.
NY - NJ Trail Conference
NY Natural Heritage Program
New York Rivers United
NYS Horse Council
NYS Off-Highway Recreational Vehicle Association
NYS Olympic Regional Development Authority
North Country Off Roaders
Open Space Institute
Protect the Adirondacks
Sierra Club - Atlantic Chapter, Hudson Mohawk Chapter
Trout Unlimited - Adir. Chapter
Wilderness Society
Wildlife Society - NYS Chapter

Fire Tower Restoration/Friends Groups:
Azure Mountain Friends
Friends of Mount Arab
Friends of Bald Mountain
Friends of Blue Mountain
Friends of the Forest at Pillsbury Mountain
Friends of Hurricane Mountain Fire Tower
Friends of Mount Arab
Friends of the Owl's Head Fire Tower
Friends of Poke-O-Moonshine
Friends of St. Regis Mountain Fire Tower
Friends of Vanderwhacker Fire Tower
Friends of Wakely Mountain
Hadley Mountain Fire Tower Committee
Kane Mountain Fire Tower - Canada Lake Protective Association
Snowy Mountain Fire Tower

SUMMARY OF ISSUES ASSOCIATED WITH FIRE TOWERS

The following issues are comment excerpts specific to fire towers and associated trails, cabins, and electronic facilities raised by members of the public at the various public meetings held by the DEC for the purpose of gathering public input.

Black River Wild Forest (June, 1996)

- No specific fire tower comments published in the plan.

Bog River Complex/Horshoe Lake Wild Forest (November, 2002)

- The Friends of Mt. Arab would like to designate an interpretive trail near the summit of Mt. Arab.

Blue Mountain Wild Forest (May, 1995)

- Is it true that the Blue Mountain Trail is not protected by an easement where it crosses private land?

Blue Ridge Wilderness/Wakely Mountain Primitive Area (September, 2006)

- Retain the fire tower and observer's cabin, but the helipad should be removed. Materials can be transported to the site by helicopter using a sling, so that the helicopter will not have to land. The clearing for the helipad will be excessive.

- Remove the helipad, because it is not needed. A helicopter may land without a helipad, as on Pillsbury Mountain.

- Retain the fire tower, but remove the observer's cabin and helipad. The cabin is a focal point for vandalism and littering and would be costly to maintain. The cabin and helipad lack historical significance.

- Remove the fire tower, observer's cabin and helipad and reclassify the primitive area to wilderness. The fire tower is obsolete, and the retention of the tower and other structures would violate the APSLMP. A radio repeater is not needed, because satellite communication technology is available.

- The Department should provide for the long-term retention of the fire tower and associated structures by requesting reclassification of the area in the immediate vicinity of the structures to wild forest, and the rest of the primitive area to wilderness.

- The primitive area classification for the area including the fire tower and associated structures should remain. When the fire tower is no longer needed, it should be removed, and the land reclassified to wilderness.

- Permit educational activities to occur at the fire tower site, possibly through a stewardship agreement with a volunteer group.

- Retain the picnic table on top of Wakely Mountain.

- Do not use a wind generator to power the radio equipment to be installed in the tower.

- Do not rebuild the helipad or cut trees around it to permit helicopter landing. Tree cutting and disturbance in this area will reduce the already severely reduced habitat necessary for Bicknell's thrush and other bird species. Tree cutting will fragment the forest, thereby allowing predators to prey on species requiring deep woods.

- Do not rebuild the helipad or cut trees around it until a detailed bird species inventory of all areas above 2,800 feet is conducted and a standardized monitoring program for at-risk species is implemented.

- When the new trail to the summit of Wakely Mountain is constructed, maintain the existing trail as well. It is historic and will increase recreational opportunity and reduce environmental impacts on each trail. It is more convenient in terms of highway access. The two trails would make a good loop hike. The existing trail would be a better route from the proposed reroute of the NPT.

- When the new trail to the summit of Wakely Mountain is constructed, close the existing trail.

- When the new trail to the summit of Wakely Mountain is constructed, maintain the existing trail and build a connector trail to allow a loop hike.

- The new trail should be routed to be gradual and not require significant tread hardening.

- The new trail should be routed to avoid sensitive habitats.

- Do not build a new trail to the summit of Wakely Mountain. The existing trail is a historic route.

- Do not build a new trail to the summit of Wakely Mountain. Reduce the grade on the upper section by constructing switchbacks.

Debar MountainWild Forest (UMP still under development)

Fulton Chain Wild Forest (January, 1990)

- No specific fire tower comments published in the plan.

Hurricane Mountain Primitive Area (UMP still under development) Summary of public comment received to date (07/05/06)

- Remove fire tower, per APSLMP, and reclassify to wilderness with primitive corridors remaining for roads and power line.
- Remove fire tower, per APSLMP, and reclassify to wilderness
- Keep the fire tower in place.
- Be aware of increase in usage over the past years (busses) on Hurricane trail from 9N.
- Concerned that more and more people ("busloads") will be climbing at Hurricane Crag.
- Reroute the northern trail to Hurricane Mtn. To avoid numerous stream crossings.
- Build Bridge over Gulf Brook to serve the northern trail to Hurricane Mountain.

- Keep east trail to Hurricane Mtn. open.

Independence River Wild Forest (October, 1986)

- No specific fire tower comments published in the plan.

Lake George Wild Forest (Black Mt. Section - April, 1986)

- No specific fire tower comments published in the plan.

Lake George Wild Forest (Draft Plan 2006)

- The Department should address the current status and need for the police communications tower on Black Mountain.
- Would like to see the Black Mtn firetower open to the public.
- The trail damage to the summit of Black Mountain is a direct result of the electronic equipment and the firetower.

Sargents Ponds Wild Forest (No UMP)

Shaker Mountain Wild Forest (January, 2006)

- General support for the retention and preservation of the fire observation tower on Kane Mountain as an important public recreation and education value. A few comments suggested that any repeater mounted on it should not substantially alter the tower's looks, deny public access to the cab and its view, or negatively impact the Forest Preserve's wild character.
-
- A few comments supported continued use and maintenance of the Observer's Cabin and DEC's plan to work out an AANR agreement with a local organization. The "living museum" concept should be taken a step further by having the summit guide dressed in a period uniform. One comment suggested the Kane Mountain cabin is a problem. Discontinue south trail up Kane Mountain. Agree with marking the north trail. Support conversion of ski trail to a loop hiking trail.
- Object to changes to Fish Hatchery Pond Road trailhead parking capacity without prior discussion with adjoining landowner. Use parking area adjacent to School House Road. One comment supported an enlarged parking lot at the eastern trailhead to Kane.

St. Regis Canoe Area

- The UMP needs to adhere to the Master Plan, the tower is non-conforming and needs to be removed.
- If tower is moved it may be more accessible.
- There are plenty of other towers in the Adirondacks.
- The relocation and restoration of the St. Regis tower could be acceptable mitigation for the State Historic Preservation Act.
- Add wording to the UMP reflecting that the tower is on the NRHP.

- The tower could be useful for education.

- The fire tower is an important part of past efforts to protect the wilderness and reminds us of the need to protect it in the future.

- The tower will encourage more people to go to the mountain and enjoy the SRCA, making them more likely to protect this area.

Vanderwacker Mtn. Wild Forest (April, 2005)

- The Vanderwhacker fire tower should be retained and maintained for educational use. General support for recommendations regarding rehabilitation of the Vanderwhacker fire tower.

- The tower trail should be open to ATB's from Moose Pond Rd to the observer's cabins.

Wilcox Lake Wild Forest (Draft UMP)

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APPENDIX C. DEC POLICIES

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MOUNTIAN TOP POLICY

(12/03/1980)

Preservation of Mountain tops within the Adirondack and Catskill Parks and under the jurisdiction of the Department of Environmental Conservation.

Background

The responsibility for the care, custody and control of the lands now owned or hereafter acquired by the State and which constitute the Forest Preserve rests with the Department of Environmental Conservation. The Division of Lands and Forests is the program unit within the Department which administers that responsibility.

The construction and maintenance of some communications and other mountaintop sited facilities or towers are necessary for the Department and other governmental agencies to carry out the duties and functions of protecting the Forest Preserve and insuring public safety.

Many suitable and desirable sites for communications and other purposes such as the construction and maintenance of transmission and relay towers with necessary appurtenances are located on mountain tops within the Forest Preserve in the Adirondack and Catskill Parks. Several of these sites are now being utilized by the Department for the operation of the Fire Control, Law Enforcement, Flood Control and Fish and Wildlife radio systems. Some sites are shared and utilized by county mutual aid radio networks and other municipal and state communications systems. However, it is also desirable to preserve mountain tops in a natural condition unencumbered by manmade facilities.

The Forest Preserve is protected by Article XIV of the New York State Constitution which mandates that these lands “shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed”.

Statutory authority to erect and maintain communication facilities and to grant temporary revocable permits for such purposes to other governmental agencies is given to the Department of Environmental Conservation through Section 3-0301 (l.) (3.) Of the Environmental Conservation Law, which charges the Department with the care, custody and control of the Forest Preserve; Section 9-0l05 (15.) which empowers the Department to make rules and regulations and issue permits for the temporary use of the Forest Preserve and Section 9-0303 (2.) which provides that no building shall be erected, used or maintained upon State lands except under permits from the Department.

While the Department recognizes the need for effective communications structures and facilities to serve the needs of the people of the State, it also recognizes that the presence of these and other facilities on the mountaintops within the Adirondack and Catskill Parks degrades the aesthetic qualities which are important and integral parts of the Parks. Further, the Adirondack Park Agency, in recognition that the hills and mountaintops of the Adirondack park are among the region's most distinctive and previous resources, and that consolidation of towers and tower facilities with existing towers and tower facilities will result in materially less cumulative environmental impact, adopted as policy that new communication towers and other tower facilities by consolidated with existing towers.

In order to prevent further degradation of these aesthetic qualities and to allow for continuation of the present communications systems and for the improvement and expansion of these system as future needs may dictate, the following policy is adopted.

Policy

1. No mountaintop under the jurisdiction of the Department of Environmental Conservation within the Adirondack and Catskill Parks which does not have existing structures, towers or other facilities may be used as a site for structures, towers or other facilities for communications or any other purpose.

2. On mountaintops under the jurisdiction of the Department of Environmental Conservation within the Adirondack and Catskill Parks where structures, towers, or other facilities presently exist and have appurtenant service routes, new facilities may be added if: (a) Such new facilities are consolidated with existing structures, towers or other facilities and (b) Such new facilities, in the case of governmental agencies other than the Department, are permitted in accordance with a temporary revocable permit as required by Section 9-0l05 (15.) as noted above.

3. Existing structures, towers and other facilities located on such mountaintops will be evaluated on a periodic basis to determine if they continue to serve a departmental purpose or function. If it is determined that such structures, towers and other facilities do not serve a departmental purpose or function, then they shall be proposed and schedule for removal through the unit management planning process of the Department.

4. As technology develops and it becomes feasible to consolidate communication and other electronic facilities in one structure or tower without interference, such structure and towers will be consolidated for the purpose of reducing the numbers of each at any one site or on any one mountaintop.

5. Where no electrical power is available at existing and utilized mountaintop sites, such power as needed will be provided by solar or other means of on-site generation within the provision of No. 2 above.

6. New communications facilities added at existing and utilized mountaintops sites within the provisions of No. 2 above will not interfere, electronically or other, with existing site communication systems.

APPENDIX D. FIRE DANGER RATING AREAS (FDRA)

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Adirondack Fire Danger Rating Area (FDRA)

1. Location
This area generally encompasses the Adirondack Park, excluding the High Peaks area. It is bordered on the west by the Tug Hill Plateau, the north by the St. Lawrence Valley, the east by the High Peaks and Upper Hudson/Champlain Valley, and the south by the Mohawk Valley. The area is within DEC Regions 5 and 6.

2. Vegetation
Mixed hardwoods are broken by extensive spruce and fir stands.

3. Topography
This area is mountainous with elevations up to 3,000 feet interlaced by river valleys, streams and beaver flows.

4. Climate
Climate in this area is heavily influenced by the Great Lakes. This area experiences prolonged winters with snowfall from late October to late March and early April. Temperatures range from the 90s in summer to minus 40 degrees in winter. Summer storms, tracking from the west and northwest, move across the mountains. These storms are influenced by orographic lifting caused by the mountains, thus providing greater amounts of rainfall on the western edge of the Adirondacks. The southwestern portion of this area receives the greatest rainfall of any area of the state. Wildfires caused by lightning strikes are a common occurrence in this area.

5. Fire Weather Sources
Wanakena and Lake Pleasant RAWS are located in this FDRA. Fire weather program services are the responsibility of the Albany, Buffalo, Binghamton and Burlington, VT NWS Offices. NWS forecast zones NYZ 008, 009, 029, 030,032,033 and 038 are in this FDRA.

6. Fire Season
This area generally experiences two fire seasons, spring and late summer to fall. Spring fire season typically begins in early April and progresses through green-up in late May. Late summer to early fall fires are typically ground fires started by debris burning, unattended campfires or lightning strikes.

7. Fire History
This area has experienced large historical fires, especially the famed fires of the early 1900s.

8. Fire Behavior
The majority of fires in this area burn with low intensities and rates of spread. However, fires burning under critical weather parameters can exhibit high resistance to control.
9. Critical Fire Weather Situations
RH <35%
10 days without measurable precipitation

Winds >25 mph

High Peaks FDRA

1. Location
This area in the eastern Adirondack Mountains is bordered on the west by the Saranac Chain, the north by the St. Lawrence Valley, the east by the Champlain Valley, and the south by the Blue Ridge Road. The area is completely within DEC Region 5 and the Adirondack Park.

2. Vegetation
Extensive spruce and fir stands exist at lower elevations and again at subalpine elevations below timberline. Mixed hardwood forests occur from valley bottoms to upper slopes.

3. Topography
This area is composed of steep sloped mountains interlaced by river valleys, streams and beaver flows. Elevations range from 1,500 feet in the river valleys to 5,000 feet or more in the High Peaks.

4. Climate
Climate in this area is determined by the effects of high elevations and is somewhat influenced by the Great Lakes. This area experiences prolonged winters with snowfall from late October to late March and early April. Temperatures range from the 90s in summer to minus 40 degrees in winter. Summer storms track from the west and northwest. Lightning strikes are a common occurrence in this area.

5. Weather Sources
The Mt. Van Hoevenberg RAWS is located in this FDRA. Fire weather program services are the responsibility of the Burlington, VT NWS Office. NWS forecast zones NYZ 030, 031, and 034 are in this FDRA.

6. Fire Season
This area generally experiences two fire seasons, spring and late summer to fall. Spring fire season typically begins mid to late April and progresses through late May green-up. Late summer to early fall fires are typically ground fires started by debris burning, unattended campfires or lightning strikes.

7. Fire History
This area has experienced large historical fires, especially the famed fires of the early 1900s.

8. Fire Behavior
The majority of fires in this area burn with low intensities and rates of spread. However, fires burning under critical weather parameters on steep slopes can exhibit high resistance to control.

9. Critical Fire Weather Situations
RH <35%
10 days without measurable precipitation
Winds >25 mph

APPENDIX E. TRAILHEAD REGISTER MAINTENANCE

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S O P

TRAILHEAD REGISTER MAINTENANCE

for Division of Forest Rangers and Division of Lands and Forests
Region 5

Objective:

The following **S**tandard **O**perating **P**rocedures (SOP) is to provide a better system for collecting accurate state land user information. This information is imperative to; search and rescue activities, UMP planning, and state land user trends and also allows Forest Rangers to plan daily/seasonal activities. The procedures listed below are in place for guiding the activities of Forest Rangers and Foresters, in order to meet our objective. Please contact your chain of command when working outside of these parameters.

Guidelines:

Trailhead registers and kiosk information are the responsibility of the Forest Ranger and Lands and Forests Staff.

The Forest Ranger's duties will be to:

A. Maintain current/blank register sheets for users.
B. Maintain a working writing instrument (pencil) at the register.
C. Report any mechanical or aesthetic problems with the register or trail head kiosk to the Lands and Forests Staff utilizing an operations work request and copying appropriate Operations Staff.
D. Work in concert with Lands & Forests Staff to ensure that information at the trailhead is current and accurate.
E. Check trailhead registers and information kiosks on a frequent basis.
F. Sign trail registers, in user information fields, whenever an inspection of the register or an interior patrol is conducted, unless signing would jeopardize an enforcement action.

Trail register sheets will:

A. Be collected by the Forest Ranger who has the administrative responsibilities for such trailhead.
B. Be labeled by the Forest Ranger to show the trailhead at which they originated and the year
C. Be sent (original, photocopy, or statistically*) on a quarterly basis, to the appropriate Forester for the UMP to which the trail head belongs.
D. Be maintained by the Forestry Staff in such a manner that:
   1. Sheets are grouped by trailhead.
   2. Pages are consecutive (chronological order)
   3. Files can easily be accessed by Forest Ranger Staff at any time (day or night).
E. Be kept on record for 7 years.

*Completion of user information tallies are optional for the Forest Ranger. If tallies are kept Rangers will utilize an Excel Spreadsheet for data storage and send an electronic copy to the appropriate Forester on a quarterly basis.

Lands and Forests Staff will:

A. Send UMP user information back to Forest Rangers on a quarterly or yearly basis, dependingon trail usage.

Conclusion:

Trail head registers and kiosks are often the only interaction that state land users have with our department. For this reason it is imperative that we maintain these structures and show a routine presence in the register pages.

APPENDIX F. SAMPLE AANR

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New York State Department of Environmental Conservation

Stewardship No. _____
Project _____
Acres _____

ADOPT-A-NATURAL RESOURCE
STEWARDSHIP PROGRAM

This agreement is made between the **Canada Lake Protective Association, Inc.**, hereinafter called the "Steward", and the Department of Environmental Conservation of the State of New York, hereinafter called the "Department."

WHEREAS, Section 9-0113 of the Environmental Conservation Law authorizes a stewardship program between the Commissioner and an individual, group or organization for the purpose of preserving, maintaining or enhancing a state-owned natural resource or portion thereof in accordance with the policies of the Department; and,

WHEREAS, there is need for the services and support of volunteers provided through this new stewardship opportunity to aid the preservation, maintenance and enhancement of state-owned natural resources at minimum cost to the state:

NOW, THEREFORE, it is agreed that this Stewardship Agreement for a period of **5 years** from the date hereof, shall provide that the natural resource named in this agreement be preserved and maintained in its natural state or managed to enhance or restore the natural resource values it provides, involving the activities specified in this agreement and consistent with the policies of the Department.

The resources covered by this agreement consist of: **(1) the Kane Mountain Fire Tower and observer's cabin; (2) the official Kane Mountain trails approved in the Shaker Mt. Wild Forest unit management plan; (3) Nick Stoner Island in Canada Lake; and (4) designated campsites on Lily Lake in the Ferris Lake Wild Forest.** The Kane Mountain fire tower, observer's cabin and trails are situated on forest preserve lands within the Shaker Mountain Wild Forest. Nick Stoner Island and the Lily Lake campsites are located on forest preserve lands within the Ferris Lake Wild Forest. All are located within the town of Caroga, Fulton County.

IT IS MUTUALLY AGREED THAT:

1. **Activities**
   a. Activities of the Steward permitted by this agreement are:
   b. Repair and maintenance of the Kane Mountain fire tower and observer's cabin in accordance with Department specifications and standards.
2. Activities in support of public education and interpretation conducted by interns from the SUNY Potsdam Environmental Studies Program or another organization or individual approved by the Department.

3. Maintenance of the official Kane Mountain trails approved in the Shaker Mt. Wild Forest unit management plan, in accordance with Department specifications and standards.
4. The removal of garbage from the area of the Kane Mountain tower, observer's cabin, fire tower trails, Nick Stoner Island and Lily Lake campsites.

5. **Technical Services**
   a) Assistance provided by the Department shall consist of:
   b) Providing guidance to assure that educational activities and repair and maintenance efforts meet Department specifications and standards.
   c) Supplying materials needed in repair and maintenance work to the extent that funding is available.

6. **Responsibilities**

The Steward is responsible for:

   a) Completing the activities in the manner agreed upon with the Department.
   b) Providing the identification of each volunteer in advance of the performance of activities. This information is needed to afford the participants liability and workers' compensation protection. The participant list shall be kept current and attached as part of the agreement.
   c) Complying with the Child Labor Law, as it pertains to under-aged volunteers; parent signature is required for volunteers under the age of 18 and volunteers under 16 may only participate in yard/household type work activities (no machinery) as part of an organization.
   d) Reporting to the Department annually on work accomplished and number of volunteer hours spent on activities.
   e) Discussing with the Department's contact person any problems, disagreements, questions of interpretation regarding the agreement or other concerns as soon as possible.

7. The Department is responsible for:
   a. Evaluating stewardship activities annually to determine their merit for continuation.
   b. Discussing with the Steward's contact person any problems, disagreements, questions of interpretation regarding the agreement or other concerns as soon as possible.

8. **Contacts**
   a. The contact person for the Steward is William Fielding, Canada Lake Store and Marine, 103 Old State Road, Caroga Lake, NY 12032, 518/835-6069 (home), 518/835-2138 (fax).
   b. The contact person for the Department is Richard Fenton, Supervising Forester, NYSDEC, 701 S. Main Street, P.O. Box 1316, Northville, NY 12134, 518/863-4545, ext. 3002. E-mail: rtfenton@gw.dec.state.ny.us.

9. **Recognition**
    a. The Department shall provide recognition of the stewardship activities by appropriate signage on or near the adopted natural resource and may provide recognition by such other measures as it may determine appropriate.

10. **Land Use**
    a. Nothing contained herein shall prevent or hinder the Department from carrying out its regular activities on, nor alter or change the traditional access to and public use of the lands covered by this agreement.

11. **Agreement and Renewal**
    a. This agreement may be modified in scope or altered in any other manner, upon mutual agreement by the Department and the Steward. The Steward shall have the option of renewing the agreement with the approval of the Department and subject to the continuation by the Department of the Adopt-A-Natural-Resource Stewardship program.

12. **Termination**
    a. The Department may terminate this agreement and remove signs upon thirty (30) days written notice, if in its sole judgment it finds and determines that the Steward or anyone working there under are not meeting the terms and conditions of this agreement. The Steward shall provide the Department thirty (30) days written notice prior to terminating this agreement.

13. **Liability Protection**
    a. As volunteers, participants in the program are accorded the same liability and workers' compensation protection as salaried state employees, provided they are acting within the scope of the agreement.

SPECIAL CONDITIONS

1. **The following activities are prohibited unless specifically authorized by this agreement or an amendment hereto:**

    a. Trail relocation;
    b. Trail widening;
    c. New trail construction;
    d. The removal of rocks or earth moving activity;
    e. The cutting of any tree three inches or larger in diameter at breast height;
    f. The construction, repair, or replacement of ditches, culverts, waterbars, bridges, or other structures or improvements;
    g. The placement of any material/fill or any construction activity that may impact wetlands.

2. **Only the activities specifically authorized by this agreement may be conducted.**

a. **Fire Tower and Observer's Cabin**

Work affecting the Kane Mountain fire tower or observer's cabin will be limited to the maintenance of the structures in keeping with their historic design and appearance. No work may be conducted without the advance written permission of the Department in the form of a completed "Application for Routine Maintenance Projects on Forest Preserve Land" **(Attachment A)** which has been signed by the Regional Forester.

b. **Trail Corridor Dimensions**

All trail maintenance work on foot trails will be confined generally to within two feet of the center line of the trail, for a total trail corridor width of four feet. The trail clearing height of foot trails is eight feet from ground level.

c. **Removal of Fallen Trees and Woody Debris (Blowdown)**

Trails will be cleared of fallen trees, limbs, and branches. All cut material will be cut into lengths short enough to lie flat on the ground, and dispersed clear of the trail corridor, out of sight if possible, and not left in piles next to the trail.

d. **Brushing**

Brushing of a trail means the cutting of live shrubs and saplings smaller than 3 inches in diameter at breast height. Brush may be cut within the approved trail corridor dimensions. All brush will be cut as close as possible to ground level in order to eliminate stubble and stumps. All cut material will be cut into lengths short enough to lie flat on the ground, and dispersed clear of the trail corridor, out of sight if possible, and not left in piles next to the trail. **No standing trees 3 inches in diameter or larger at breast height may be cut.**

e. **Pruning**

Pruning is the removal of limbs and branches from live standing trees. Tree branches that extend into the approved trail corridor dimensions may be pruned. All pruning of tree limbs will be to between 0.5 and 1.5 inches from the main trunk or stem. All cut material will be cut into lengths short enough to lie flat on the ground, and dispersed clear of the trail corridor, out of sight if possible, and not left in piles next to the trail.

f. **Bridge, Culvert, Waterbar and Ditch Maintenance**

Individual broken or worn planks on wooden bridges may be replaced in kind. Culverts, waterbars, and ditches may be cleaned using hand tools only. **No bridges, culverts, waterbars, trail hardening or drainage structures of any kind may be installed or replaced unless specified in a signed routine maintenance request form signed by the Regional Forester.**

g. **Trail Markers and Signs**

DEC has specific restrictions that apply to trail markers and signs on State lands. The wording, color, size, and placement of all trail markers and signs must be approved by the Supervising Forester or his designee prior to any trail marker or sign placement. Trails will be marked in accordance with DEC trail marking standards **(Attachment B)**. All requests for trail markers and signs must by submitted to the Supervising Forester or his designee.

h. **Motorized Saws**

Chain saws and brush saws may be used, but only to perform the maintenance work authorized by this agreement and any amendments hereto. Chainsaws and brush saws can be used only if the operator wears boots that provide cut-resistant protection for the entire foot, gloves, safety chaps and a hardhat with hearing protection and a protective face shield. Chainsaw operators also must be able to provide proof that they have received First Aid, CPR and Blood Borne Pathogens training, and have attended a Game of Logging Level 1 course or viewed an approved chainsaw safety video with an approved instructor present.

i. **Motor Vehicles**

Motor vehicles may only be used on roads open to motor vehicle use by the general public.

3. All maintenance work authorized by this agreement shall be accomplished by the Steward. At no time may the authority granted by this agreement to perform maintenance activities on State lands be delegated to any outside agency, organization or individual without prior Department approval.

4. Whenever any of the activities authorized by this agreement is conducted, at least one member of the work party will carry a copy of this agreement for presentation upon demand to the Supervising Forester or his designee.

5. The Steward will insure that all volunteers performing any of the activities authorized by this agreement are aware of all the requirements and limitations of this agreement and that such requirements and limitations are adhered to.

6. **Education and Interpretation**

a. Educational and interpretive activities will be approved in advance by the Department and limited to:

7. The placement of interns to meet the public and deliver spoken or written messages interpreting the history and values of the Forest Preserve and the Adirondack Park, fire tower history, local geography and geology, and natural and cultural history.

8. Creating and installing an interpretive display at the trailhead.

9. Creating, installing and maintaining simple, removable displays inside the observer's cabin to support interpretive messages. The original configuration of the cabin will not be altered to accommodate interpretive displays.

10. Creating and installing a map and map table inside the fire tower cab, meeting guidelines for historic preservation, public use and safety.

11. Creating and distributing a fire tower brochure presenting interpretive messages.

12. Developing the fire tower trail as an interpretive trail with numbered locations tied to descriptions in a brochure.

a. The Steward will hire or support the placement of an intern participating in SUNY Potsdam's Environmental Studies Program to conduct public educational and interpretive activities at the fire tower site. Educational and interpretative activities conducted by SUNY Potsdam interns will be subject to a separate agreement with the Department.

b. Should a SUNY Potsdam intern not be available, the Steward may propose a candidate for the position of summit guide, along with an outline of the activities, displays and messages to be developed and presented by the candidate to the public. The candidate will meet Adirondack Fire Tower Association standards for education and training of fire tower interpreters. After the Department has interviewed and approved the candidate and approved the proposed activities, displays and messages, the Steward may hire or sponsor the candidate. The Steward will monitor the activities of the summit guide to assure that the conduct of the guide and the message delivered to the public conform with this agreement and Department management goals.

13. The Department and the Steward will agree on the summit guide's manner of dress.

14. **Fund Raising Activities**
    a. No commercial activity is permitted on state lands. Activities on state lands related to the raising of funds to support the purposes of this agreement will be limited to the distribution of information. The sale of goods or the acceptance of donations will be conducted off state lands.

15. **Use of the Kane Mountain Observer's Cabin**
    a. The Kane Mountain observer's cabin may occupied overnight by a summit guide on those nights immediately preceding or following the days spent conducting educational and interpretive activities. The cabin will not be occupied by any other person at any time without specific Department approval.
    b. Cabin furnishings will be appropriate to the historic character of the cabin and approved in advance by the Department.
    c. During the time when the cabin is occupied by a summit guide, a sign reading, "Cabin Occupied by State Land Summit Guide" must be posted on the cabin door. The sign will be provided by DEC.
    d. All refuse must be removed from the cabin at the end of each outing.
    e. The summit guide or other volunteers will not have campfires on the summit of Kane Mountain. The guide and other volunteers will use portable stoves for cooking.

16. **Notification**
    a. The Steward will designate one person to act as coordinator. This individual will be responsible for communicating with the appropriate Supervising Forester or his designee as follows:

    b. **Within one week of every election of officers**, the Steward will notify the supervising forester in writing of the names, addresses, telephone numbers and e-mail addresses of all officers. The Steward also will notify the supervising forester of any change in the name, address, telephone number or e-mail address of the contact person.

    c. **At least two weeks before each work project**, the Steward will provide the Department contact person information about the location and type of work to be performed and the names of those who will be doing the work. All proposals to do work that will affect the Kane Mountain fire tower or observer's cabin or to install or replace bridges, waterbars, trail hardening or drainage structures of any kind on trails will be submitted to the Supervising Forester on the form, "Application for Routine Maintenance Projects on Forest Preserve Land" **(Attachment A)**, and the work may not begin until the form has been signed by the Regional Forester. The Steward will notify the Department contact person within 48 hours of completing the work.

d. **Within one week after the completion of routine maintenance activities**, or other activities authorized through an amendment to this agreement, the Steward will report the details of the work accomplished. The Supervising Forester or his designee will verify this report through on-site inspections to assure that the work was accomplished in compliance with the agreement conditions. This will also enable the Department trail crew to keep track of trail conditions and avoid duplication of effort.

e. **By December 31 of each year**, the Steward will submit a report to the Supervising Forester or his designee on the form, "Division of Lands & Forests, Interior Facilities Maintenance Report" **(Attachment C)**, giving a detailed account of work accomplished and the number of person-hours spent on trail maintenance activities.

f. The Steward will notify the Supervising Forester of any injury sustained by any volunteer **within 24 hours** of the incident.

g. As soon as possible after discovery, the coordinator will report unsafe trail conditions or bridges.

h. The coordinator will notify the Supervising Forester or his designee if the Steward is unable for any reason to continue trail maintenance during the term of the agreement.

i. **Amendments**

Before any work not specifically authorized by this agreement may be performed, it must be included in an approved amendment to this agreement after on-site review by the Supervising Forester or his designee.

Date of Agreement (Date of Last Signature): _____

Expiration Date of Agreement (Five Years from Date of Agreement): _____

STEWARD: **CANADA LAKE PROTECTIVE ASSOCIATION, INC.**

Address: P.O. Box 209
Caroga Lake, NY 12032

Signature: _____ **Date:** _____
(President)

COMMISSIONER OF ENVIRONMENTAL CONSERVATION

By: _____

Title: _____
(Authorized Representative)

Signature: _____ **Date:** _____

Attachment B

Trail Marking Standards

On Forest Preserve and State Forest lands, all trails are marked with small, colored plastic disks nailed to trees or posts at regular intervals. In the past on hiking trails, blue markers were used for north-south trails, red markers for east-west trails and trails to fire towers, and yellow markers for connector trails.

The following markers are used today. All are available in blue, yellow, and red.

Foot Trail - Used on all trails where only foot traffic is permitted.

Trail - Used along multiple-use trails. Other markers appropriate on a given trail, such as foot, snowmobile, horse, and bicycle trail markers, are posted together at trailheads and intersections on guideboards. "Trail" markers are used along the trail to mark the trail route.

Canoe Carry - Used on designated canoe carry trails.

Cross-country Ski Trail - Used on trails considered suitable for cross-country skiing. Cross-country skiing is permitted anywhere on the Forest Preserve.

Snowmobile Trail - Used on trails where snowmobiles are permitted. Snowmobiles are only permitted on trails marked as snowmobile trails.

Horse Trail - Used on trails where horses are permitted. Horses may not be ridden on foot trails that are not also marked as horse trails, nor on snowmobile or cross-country ski trails when they are covered with ice and snow.

Bicycle Trail - Used on trails where bicycles are permitted. Bicycles are permitted in wild forest areas except where posted. In wild forest, it is not necessary for a trail to be marked as a bicycle trail for bicycles to be permitted. They may be used in primitive, and canoe areas only on designated roads. They are not permitted in wilderness.

Markers should be applied so that they appear on the right side of the trail to the traveler. They should be close enough that a person standing at one marker can see the next marker ahead clearly, but cannot see more than two markers ahead. Long straight trails or naturally well-defined trails should be marked less frequently (one every 100-200 feet). This guideline is especially applicable in wilderness areas where markers should be kept to a minimum. Markers should be posted at a point on the tree at least six feet above the ground.

Markers should be applied in **one direction at a time** to assure that they are located where appropriate for those traveling in that direction.

Appearance is extremely important. Old and damaged markers should be removed wherever it is possible to do so without further damage to the tree before posting the new marker. If the old marker can't be removed, cover it with a new marker, rather than setting the new marker in a different spot. Use **two** l ½-inch roofing nails, preferably aluminum (untreated steel nails rust and can stain markers), one near the top and one near the bottom of the marker. Unless vandalism is a problem, do not drive the nails home. Sinking the nails no more than one-half to two-thirds of the way into the wood allows the tree to grow for a few years without damaging the marker.

Contact the supervising forester for a supply of markers and nails.

APPENDIX G. FIRE TOWER FACT SHEETS

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FIRE TOWER FACT SHEETS

Name:	**Azure Mountain Fire Tower (Also known as "Blue Mountain")**
Location:	Franklin County. Town of Waverly: at the summit of Azure Mountain (USGS elevation 2,518 feet). State land classified as Debar Mountain Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Ray Brook, NY. Summit area, 1.0 miles of foot trail, and fire tower are owned by the State, located on a small Forest Preserve tract.
Facility Description:	Steel Aermotor LS40 tower with 16' x 16' base, without guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail.
Historical Significance:	This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The boundary for the nominated area is drawn to include a 500-foot square area surrounding the fire tower and the full length of the trail. Contributing resources: 5 (tower, jeep road, and sites of former observer's cabins, foot trail) Non-contributing resources: 0 The first lookout on the site was a wood platform built in 1914. In 1918, the Conservation Commission replaced the wooden tower with a 35' Aermotor tower LS40. It is typical of the "heavier type" structures with integral staircases. The legs of the structure are anchored by four standard connection plates which are bolted into concrete pads on the exposed bedrock on the summit. The steel and other materials were hauled, some say by mule, others say by horses, up and around the mountain to the ledges, where they were block-and-tackled to the top. During construction, W.H. Finney of Keeseville, New York, wrote his name and date "7/29-18" in wet concrete at the base of the northeast tower leg.

The first observer's cabin is reported to have been a small log or board cabin built in 1914 was later replaced in 1919 with a 10' x 18' cabin. In the 1930's a telephone line was strung from the observer's cabin at the base of the mountain up to the steel tower at the peak. In 1936 CCC workers built a new cabin on a fieldstone block foundation with a stone fireplace. Under the cabin was a small basement that contained a galvanized water tank with spigot. Water was piped in by gravity feed from a spring near the cabin. A small flowerbed, with old fashioned hollyhocks and ferns, was planted in front of the porch.

In 1934 the State acquired the 535 acre Azure Mountain tract and continued to staff the lookout until 1978. After the towers closure, the cabin was vacant and at the mercy of vandals and the elements. For safety reasons it was decided to have the cabin removed. In July, 1995 DEC forest rangers, with the aid of correctional facility inmates, demolished the cabin on Azure Mountain.

Since the establishment of an observation station at Azure (Blue) Mountain, at least 14 people were appointed observers over a sixty-five year period. The Azure Mountain Fire Observation Station is significant under criteria A and C for its association with the New York State Forest Preserve and as a representative example of an early twentieth century fire observation tower.

The Azure Mountain fire tower is the only fire tower in the town of Waverly and one of five interior towers (three open to the public) in Franklin County.

Maintenance Needs:

Status - Tower adopted and restored. The tower was restored in 2002 by a team from DEC, AmeriCorps, and a group known as Azure Mountain Friends. By the fall of 2002, the tower was open to the public.

Fire Tower - Cab is open. The wooden stairs and landings are new and freshly painted. The cab ceiling is new. There are no glass panes in the window frames and no door to the cab. A large circular map of the area is attached to the floor on a metal frame. A logbook hangs from a canvas bag for people to add an entry.

Trail - A pile of rocks stands at the trailhead, with a sign encouraging hikers to help carry them up the mountain to help erosion control on the summit. Significant efforts have been conducted when necessary, to define the trail corridor with rock edges. Wood waterbars and staircases have also been installed.

Summit - The summit contains numerous rocks brought up from below to help stabilize area soils. A small clearing with a picnic table and fireplace document the site of the former observer's cabins.

Access: Azure Mountain is located near the northern edge of the Adirondack Park, south of NYS Route 458, west of NYS Route 30 and north of NYS Route 3.

Trail/Trailhead Information: **Azure Mt. Trail** (Class V, Red markers) - 1.0 miles
From Blue Mt. Road trailhead to the fire tower and summit. Vertical ascent, 1,000 feet. The trail follows the route of the original jeep road to the site of the former observer's cabins. The character of the trail changes to a foot trail between the cabin site and summit.

Parking capacity (Blue Mt. Road) - nine vehicles, not plowed in winter. A privy is available at the trailhead.

Staffing: This tower ceased operation at the end of the 1978 season. A tower guide is on duty on weekends in the summer. Azure Mountain Friends has published a Fire Tower Interpreter's Guide.

Use Data: The trail is a popular two mile round trip hike, mentioned as a great hike for families with kids. In 1920, 188 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 94 - 413 people who climbed Azure Mountain annually during this time period. Recent trail register figures range from 3,800 to 5,200 visitors a year. The tower is listed as part of the Fire Tower Challenge.

Summit/Tower Views: The mostly bare summit can provide some views. To the north are woods, but the partial views toward the west, south and east are possible. A small rocky ledge faces south, ending in a cliff. According to Barbara McMartin, ravens and falcons have been observed on this cliff, and it has been used as a hacking site to release young birds.

The fire tower stands in a clearing on exposed ledge at the summit. According to Paul Laskey, “The views this tower has to offer are unmatched by many others in the Park. This is partially because this tower holds the title of being the farthest northwest tower in the Adirondack Park.” According to Jack Freeman “Mt. Marcy and the Seward Range can be seen to the south; the pointed summit of Whiteface to the southeast; and DeBar Mountain looms large to the east, while below some shimmering ponds of the St. Regis Canoe Area.” The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Sponsor/Cooperator: In addition to the tower's restoration, the Azure Mountain Friends provide volunteer interpreters on some spring, summer and fall weekends that highlight the mountain's human history and natural features. The group also helps with summit environment protection efforts, along with maintenance of the trail and parking lot. Associated Group: Azure Mountain Friends.

Name:	**Belfry Mountain Fire Tower**
Location:	Essex County. Town of Moriah: at the summit of Belfry Mountain (USGS elevation 1,820 feet). State land classified as Hammond Pond Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Warrensburg, NY. Summit area, 12 foot wide deeded access lane, fire tower, repeater building and radio repeater are owned by the State. Communications equipment is owned by various state agencies including: DEC Law Enforcement and the Division of State Police. Portable repeater building is owned by NY State Police. Non state ownership includes Essex County. The fire tower and two buildings are located on a small 0.5-acre Forest Preserve parcel on the summit. Total State ownership is 0.76 of an acre which includes the summit parcel and a 12 foot wide deeded access (not developed). Roadside parking, existing access road, electric poles and power line over private land. Additional concrete block building on the summit adjacent to the fire tower and small radio tower is owned by Essex County.
Facility Description:	Steel Aermotor LS40 tower with guy wires. 47 feet high with seven flights of stairs to floor in 7' x 7' tower cab. The tower supports multiple radio antennas. Current access over private road not along 12 foot wide deeded access. AC power supply with electric utility line and poles providing electrical power to the repeater building along with various equipment and other private lands in the vicinity of the summit. Backup generator, microwave system has separate battery backup in NY State Police building.
Historical Significance:	This tower has not been nominated for listing on the National Historic Lookout Register or the New York State and National Registers of Historic Places. Modifications to the fire tower due to the extensive addition of communication facilities may make it ineligible for listing.

Original station established in 1912 (no tower needed because the mountain had been cleared of trees and used for grazing); Present tower erected in 1917. In 1934 the state constructed the observer's cabin at the summit. In 1933 the State purchased the summit where the tower was located along with an access strip to the highway.

The Belfry Mountain Forest Fire Observation Station was used until its closure at the end of 1988. The tower was closed between 1971 and 1982. The cabin was removed sometime in the 1990's due to vandalism.

Since the establishment of an observation station at Belfry Mountain, at least 14 people were appointed observers over a seventy-seven year period.

The Belfry Mountain fire tower is the only fire tower in the town of Moriah and one of six interior towers in Essex County.

Maintenance Needs:

Status - Tower partly restored in 1999.

Fire Tower - Cab is open. Painted, new steps and a new floor in the cab. Railings and fencing are in good condition. Cab walls in good condition. Roof appears in good condition with a few holes. No windows are in cab. Graffiti in cab on walls

Communication Tower/Antennae - The tower supports several antennas and one microwave dish. Adjacent to the tower is a 40' radio tower, concrete block building, and portable building.

Other summit structures on private land include two large radio towers and associated building.

Trail/Road - Road is in good condition. Maintenance needs undetermined.

Summit - No maintenance needs.

Access:

Belfry Mountain is located on the eastern side of the Adirondack Park, west of County Route 70 and generally east of Exit 30 on the Adirondack Northway (I 87).

Trail/Trailhead Information:	**Access Road** (Class V, Red markers) - People have generally hiked the 0.3 mile gravel access road on private land from Dalton Hill Road (County Route 70) to the summit. Vertical ascent, approximately 120 feet. Trail markers are on the access road and sign is at entrance gate. This access road does not follow the 12 foot wide strip owned by the State. Use of this private land is not secured by an easement. Parking capacity - (Dalton Hill Road) no established capacity, not plowed in winter. Parking on the shoulder of the highway.
Staffing:	This tower ceased operation at the end of the 1988 season. No volunteers or summit guides to date.
Use Data:	The access road is the shortest hike to an interior fire tower in the Adirondack Park and is advertized as a good hike for families with kids. In 1920, 160 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 140 - 365 people who climbed Belfry Mountain annually during this time period. While the lack of a trail register prevents an accurate estimate of current use, the location is reported to be popular with the public. Additional use by the public to observe hawks during the spring and fall migrations. The tower is listed as part of the Fire Tower Challenge.
Summit/Tower Views:	Area of bedrock. Summit is a combination of grassy patches with some tree cover. Partial views. According to Barbara McMartin, "from the tower the towns of Mineville and Witherbee, with their conical piles of tailings, lie to the southeast, with Lake Champlain beyond. The Green Mountains of Vermont spread across the eastern horizon. Directly west the high peaks of the Dix Range lift their rocky profiles. To the northwest the slopes of Giant and Rocky Peak Ridge tower skyward..."
Sponsor/Cooperator:	No associated group.

Name:	**Black Mountain Fire Tower**
Location:	Washington County. Town of Dresden: at the summit of Black Mountain (USGS elevation 2,646 feet). State land classified as Lake George Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Warrensburg, NY. Summit, access trails, fire tower, and radio communications equipment are owned by the State. Communications equipment is owned by various state agencies including: DEC Law Enforcement and the Division of State Police. DEC owns first 41 feet (fire tower). NY State Police owns second 39 feet. Repeater building, battery power supply, and back-up propane generator owned by NY State Police.
Facility Description:	Steel Aermotor LS40 tower without guy wires. Modified fire tower, total height now 80 feet. NY State Police added a 39-foot trestle extension in 1996. Fire tower and extension supports several antennas and one microwave dish. Battery power charged by solar, with backup generator. Access is by DEC foot trail. Occasional administrative use by helicopter. Other structures include 16' x 30' modular building and solar panels within a fenced enclosure. There is a large DEC sign stating, “This facility provides emergency radio communications for search and rescue and other agencies. It could save your life. The Black Mountain site relies on solar energy for most of its needs. As technology increases this facility will be removed and replaced with satellite communications.”
Historical Significance:	This tower has not been nominated for listing on the National Historic Lookout Register or the New York State and National Registers of Historic Places. Modifications to the fire tower due to the extensive addition of communication facilities may make it ineligible for listing.

The mountain got its present name from an event that occurred in the 1600's. During a violent thunderstorm, lightning started a fire near the tip of the mountain. Eventually the fire burned itself out leaving the entire mountain, and much of the surrounding forest, a charcoal black. Green vegetation did not appear on the charred, less fertile outcrops for almost a decade. As the mountain trees recovered from the fire over time, spruce and fir trees became established. These conifers retain their dark green appearance year round. In the late nineteenth century Princeton University professor J. Geugot named the mountain Black Mountain because of its darker appearance due to the predominance of the conifers.

The history dealing with this mountains summit is significant. The mountain was used for scouting in the French and Indian War. It is believed that in 1763, Captain Robert Rogers of the famous Rogers Rangers carved this name and date, R. Rogers 1763 into the summit of the mountain and now under the fire tower.

Original 35 foot high wood tower erected in 1911; Steel tower erected in 1918. The Department continued to staff the lookout until 1988. The observer's cabin and utility shed, that once existed on the summit, were taken down in 2005 and 2006 due to vandalism. All that remains of the cabin are the concrete piers.

Adirondack photographer Seneca Ray Stoddard wrote in 1914: "Black Mountain is the 'Monarch of the Lake.' A sentinel overlooking the whole lake and mountains round about...the first to welcome the splendor of the dying day, while the valleys below are misty with the shadows of the common night."

At one point in time, there was an airway beacon mounted above the tower cab roof. The light was powered by acetylene gas. The beacon was part of an aircraft navigation guidance system from Burlington to Albany that warned pilots flying from Glens Falls to Montreal of the Black Mountain summit, similar to the way a lighthouse in the ocean warns ships of getting too close to shore. The system was retired as radar came into use.

Since the establishment of an observation station at Black Mountain, at least 14 people were appointed observers over a seventy-eight year period.

The Black Mountain fire tower is the only fire tower in the town of Dresden and the only fire tower in Washington County (Colfax is in the county but outside of the Adirondack Park).

Maintenance Needs:

Status - Tower closed to the public.

Fire Tower - Incorporated into communications tower. Cab is rusty and has large hole in roof.

Communication Tower/Antennae - The site is self-contained, with no access to commercial power or telephone service. Power to the site is provided via a battery bank charged by solar panels and/or windplant. A propane generator provides backup power. The generator automatically activates should weather conditions prevent the natural power systems from recharging the battery bank for an extended time. Communication structures are maintained by each respective owner. The DEC uses this tower as a radio repeater station. No known maintenance needs.

Helicopter Landing Area - Black Mountain, has an open rock area that is used to land helicopters, in front of the observer's cabin clearing.

Trail - No identified maintenance needs.

Summit - Camping is not allowed on the summit due to the proximity of the trail system. (No camping with in 150' of trail).

Access:

Black Mountain is located on the southeast side of the Adirondack Park, on the east side of Lake George and west of County Route 6.

Trail/Trailhead Information:	**Black Mt. Summit Trail** (snowmobile trail, Red markers) - 2.5 miles. From Pike Brook Road to the fire tower and summit. Vertical ascent, 1,560 feet. Additional access from the shores of Lake George with the South Summit trail starting at Black Mountain point. This is a steep and strenuous hike with many switchbacks and views. Additional access from Lake George at Black Mt. Point. While there is no trail register at this location, a significant number of people access Black Mt. in the Summer/Fall/Spring from this foot trail. There is no snowmobile access from the lake trail. Parking capacity (Pike Brook Road) - twelve vehicles, plowed in the winter.
Staffing:	This tower ceased operation at the end of the 1988 season.
Use Data:	In 1920, 1,501 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 599 - 3,000 people who climbed Black Mountain annually during this time period. Recent trail register figures range from 3,000 to 3,900 visitors a year. The tower is listed as part of the Fire Tower Challenge.
Summit/Tower Views:	Small area of bedrock. Summit is tree covered with open rock areas, so overlooks in most directions can be found at ground level. Black Mountain is the highest peak in the two ranges of mountains that shelter Lake George. It lies about halfway along the lake's eastern shore. Views of the north end of lake George, the High Peaks to the northwest, and the Green Mountains to the east.
Sponsor/Cooperator:	No associated group.

Name:	**Blue Mountain Fire Tower**
Location:	Hamilton County. Town of Indian Lake: at the summit of Blue Mountain (USGS elevation 3,759 feet). State land classified as Blue Mountain Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Northville, NY. Summit area, 0.6 miles of foot trail, 0.2 miles of access road, fire tower, observer's cabin, and radio communications tower are owned by the State. Summit area acquired between 1905 and 1908. Communications equipment is owned by various state agencies including: DEC Law Enforcement, Fire Management, and Administration, the Division of State Police, and Department of Transportation. Non state ownership includes: Hamilton County Sheriff, Emergency Medical Services, Hamilton County Highway Department, and National Public Radio. The emergency power plant is owned and maintained by Hamilton County. Upper Hudson Woodlands (ATP) owns the land where the first 1.6 miles of foot trail and 2.2 miles of access road are located. Road subject to ROW and includes NYSEG electric poles and line.
Facility Description:	Steel Aermotor LS40 tower, without guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Attached equipment includes two exterior antennas mounted to the tower cab or support. Access is by DEC foot trail or by motor vehicle on existing DEC road. Occasional administrative use by helicopter. Hamilton County Generator Building - A 9' x 9' metal-clad storage structure with a shed roof encloses the Hamilton County radio, fuel storage, and generator equipment. While this building is built within the tower base it is independent of the lower stage of the tower. The building was constructed in the late 1970's under a TRP with the purpose of allowing Hamilton County to occupy state land with the appurtences necessary for the operation of the county Sheriff's Department mobile radio system.

Radio Building - This steel fence enclosed 12'x 18' cement block building is located next to the radio tower and contains two DEC repeaters for the ECOs and forest rangers. In addition it houses radio equipment for DOT and the State police (microwave system). A 30' tall communications tower/antennae is located next to the building.

Blue Mountain Radio Tower - To the north of the fire tower and south of the observer's cabin is a 125' guyed radio tower. The tower was erected in 1980 and sized high enough for radio signals to be able to reach the Ray Brook office. Mounted on the radio tower are various antennas.

NYSEG electric poles and line - These facilities are located along the access road and provide electrical power to the cell phone tower on private lands below the summit along with various equipment at the summit.

Observer's Cabin - The structure is sited in a sheltered site immediately below the summit. This single story rustic dwelling was erected in 1975.

Historical Significance:

This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The boundary for the nominated area includes a 500' square surrounding the tower and a 15-foot buffer from the centerline on either side of the hiking trail from the base of the mountain to the station's site.

Contributing resources: 4 (tower, trail, 1890s stone benchmark, and remains of the 1949 observer's cabin)
Non-contributing resources: 2 (observer's cabin, remains of radar station)

Blue Mountain, long recognized by its peculiar misty blue color, dominates the local landscape and is the namesake for the wild forest lands that lie adjacent to this popular scenic attraction. Blue Mountain was called *To-War-Loon-Da* by the Indians, meaning "Hill of Storms". It was later named Mt. Clinch after a state assemblyman and Mt. Emmons in honor of Professor Ebenezer Emmons, an eminent geologist who explored many of the Adirondack ranges.

The mountain was visited by Verplanck Colvin in 1870, 1873, and 1876 in the course of his topographical expeditions. Colvin made barometric readings from the thickly forested summit during his first ascent, when he selected the site as an observation station. "This peak," Colvin observed in 1876, "...commanded a view of all the more important mountain stations in the southern centre of the wilderness." During the 1873 expedition, his crew erected a rustic signal tower and cleared alleys through the trees to permit measurement of adjacent peaks. "The view northward was beautiful," he reported to the legislature, "the cluster of high peaks surrounding Mt. Marcy, sharp in outline, were whitened, as with snow, and between us and them was stretched a dark billowy sea of lesser mountains, among which we detected familiar mountain landmarks, from here appearing changed and new... At the east our more southern stations were visible -- Van de Whacker Mountain and the Chain Lakes -- and southward, through a long lane cut in the timber, Snowy Mountain." The visibility of the peak from other stations also led Colvin to establish it as "the referring station for Albany observatory time," where a powder flash scheduled at 9 p.m. during July through mid-September, 1876 coordinated time-keeping among the other stations and improving the accuracy of latitude and longitude determinations based upon observations of the sun. The measuring teams established lean-to shelters at the summit, of which there are no extant remains.

A benchmark placed by the Colvin survey in the 1890s remains in place near the tower. It is a small rectangle with illegible text bordered by a yellow margin containing symbols of unknown meaning.

By the 1870's primitive trails to the summit had been established by local guides. The trail cleared in 1876 was wide enough to carry the theodolite to the summit and to permit Colvin to make an ascent on horseback. After Colvin, the summit became a destination for recreational hiking by guests at the hotels in Blue Mountain Lake. By the end of the 1870s the view from the signal station was being enjoyed by tourists and was helping to shape a positive popular attitude toward the forest according to a published account of an ascent of the mountain:

....we came to a "timber slash" of ten or fifteen acres, where the trees had been felled to give an unobstructed view in every direction. In the midst of this opening, founded upon primeval rock which bears the surveyor's cabalistic characters ineradicably sunk into the solid mass, is erected a tall, steeple-like skeleton structure strongly-brased timbers, on the top of which is fastened the signal of bright tin, which can be seen flashing in the sun many miles away, from valley and mountain peak.....Upon these timbers we climbed, and perching there, twenty feet from the rocks beneath, gazed in every direction upon a wonderful scene. Until then we had never properly conceived of the grandeur of this remarkable region, nor the "general plan," of the mountains, lakes and rivers of the Adirondack wilderness. It is forest every where, and mountain, lake and river repeated on every hand; and all these are seen, I imagine, with something of the effect produced upon the mind of the beholder by looking down upon these features of nature from a balloon (Northrup, 1880).

After Colvin's signal tower had fallen and the alleys had grown back, recapturing Colvin's lost view provided the impetus for erecting the second tower on the summit in 1907. It was a 35' rustic observation tower, paid for by public subscription. The tower was built by M. Tyler Merwin, proprietor of the Blue Mountain Hotel. The tower was a sturdy rustic structure built with four log pole legs secured with pole cross braces and approached by a polework ladder. This tower was brought into the state's fire observation system in 1911. In 1917, the Conservation Commission replaced the wooden tower with a 35' Aermotor LS40 tower. This was one of the first 12 fire towers described as a heavier type equipped with steel stairs. In 1920, an Osborne Fire Finder panoramic map for use with alidade was prepared and installed in the cab.

Four observer's cabins, including the existing one, have been built at the summit. A log cabin was built in 1917 southeast of the tower, with the location still marked by a few logs. A new cabin was built according to a "standard' design in 1927 to the north of the log cabin. An isolated rectangular slab marks the site of this building. In 1949, a new 16' x 20' wood frame cabin (model 1941) was built close to the base of the tower. The tower was struck by lightning in 1968 and the cabin burned to the ground, requiring the observer to live in the one-room wooden building left by the Air Force. Its foundation survives at the base of the tower. The latest observer's cabin was built in 1975 to the northeast of the tower.

The benchmark at the foot of the tower was put in during the 1942 survey and marks the "official" summit of the mountain. Other benchmarks are scattered on the mountaintop with arrows pointing to the summit.

In 1957, the US government appropriated Forest Preserve lands on the summit of Blue Mountain to construct a Cold War era radar facility used in the national defense. At the same time a perpetual easement and right of way over private lands was secured and a road built along with power lines to service the mountaintop station. The station was under the jurisdiction of 764th Aircraft Control and Warning Squadron, St. Albans Air Force Station, St. Albans, Vermont. The radar station was obsolete by the time it was completed in 1961. This facility was closed and the improvements were removed. A large L-shaped foundation at the foot of the tower identifies the foundation of the radar station. The three slabs identify emergency generators sites. In 1968, the summit lands were returned to the State which also acquired the road right-of-way.

Two trails lead away from the fire tower. The newer trail, constructed when the radar station was established, runs to the southeast toward the existing observer's cabin, Below this, the trail widens to a primitive jeep trail leading down to NYS Route 28/30. The older of the two trails leaves the tower toward southwest, switching back toward the northwest as it descends to the trail head on Route 30. Remnants of the original telephone line are visible from the trail for approximately 100 yards below the summit.

The Blue Mountain Forest Fire Observation Station was used continuously until its closure at the end of 1990. It was one of the last operating fire towers in New York State. Since the establishment of an observation station at Blue Mountain, at least 25 people were appointed observers over a seventy-nine year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer's cabin.

The Blue Mountain fire tower is one of two fire towers in the town of Indian Lake and one of eight interior towers (five open to the public) in Hamilton County. The observer's cabin is one of three cabins on Forest Preserve land in Hamilton County.

Maintenance Needs:

Status - Tower restored. The Blue Mountain Fire Tower was reopened in 1994 after a rehabilitation by DEC.

Fire Tower - Cab is open. The tower is intact and was recently subject to some repairs including replacement of stair treads, landings, and fencing, along with window grid treatment in the cab. Some of the screening needs fixing. Some of the cement footers have disintegrated and need repair.

Communication Tower/Antennae - No known maintenance needs.

Radio building - Ice falling from radio tower has caused damage to roof.

Radio Tower - Communication structures are maintained by each respective owner. The DEC uses this tower as a radio repeater station, powered by a NYSEG line. No known maintenance needs.

Cabin - Vandalism to the observer's cabin occurred in 1992. The cabin is boarded up and secured with wood over the windows and door, but requires additional strengthening of door and windows to prevent break-ins. New windows installed. This cabin is one of the few remaining observers cabins that has electric power. The surface electric line needs to be recovered with cement for public safety reasons. The cabin is open and used by the summit guide for shelter from bad weather. The cabin is occasional used to store supplies and materials for maintaining the summit facilities.

Helicopter Landing Area - The existing clearing on the concrete foundations of the old radar facility is a stable landing area. A small amount of land adjacent to the landing spot and approach and departure paths is kept in a brush and tree free condition by removal of all vegetative obstructions that may encroach on the rotor blades. In addition to tower maintenance flights, the site has been used in the past for occasional rescues.

Trail - The upper portion of the trail is worn to bedrock in several locations. The lower portion of the trail is rocky with occasional exposed roots. Existing trail improvements include bridges and dry tread, stone steps, and water bars. Trail stabilization and reconstruction efforts conducted in 1988 and 1989, and more recently in 2004 by ADK trail crews and DEC staff have helped mitigate resource impacts due to erosion.

Summit - Large open area with partial views.

Blue Mt. Tower Road - A barrier adjacent to NYS Route 28/30 restricts use of the road. The road is kept open to service the telecommunication equipment at the summit. While the lower portion of the road follows an old tote road and is in fair shape, the upper section follows a series of switchbacks while climbing steep grades. This upper section contains numerous maintenance problems such as frequent washouts and exposed or damaged culverts. In 2007, DOT repaired the bottom portion of the road. In the future , the goal is to replace culverts and smooth out and stabilize the portions of the road between the flat rock faces on the upper portion of the road. Additional maintenance such as brush cutting is needed along the access road and utility line.

Access: Blue Mountain is located close to the geographic center of the Adirondack Park, north of NYS Route 28, east of NYS Route 30, and south of NYS Route 28N, just outside the Hamlet of Blue Mountain Lake and north of the Adirondack Museum.

Trail/Trailhead Information: **Blue Mt. Trail** (Class-V, Red markers) - 2.2 miles
From the trail head on NYS 28N/30 to the fire tower and summit. Vertical ascent, 1,550 feet. The trail to the summit of Blue Mountain starts along an old logging road on ATP lands. The trail is not secured by an easement, although written permission has been granted annually in the past for DEC to maintain the trail, when the property was owned by Finch, Pruyn Co. Inc.

Parking capacity (NYS Route 28/30) - 20 vehicles, shared parking also providing access to the Tirrell Pond Trail. While the large parking area is closed in the winter, a length of NYS Route 30 highway shoulder is plowed for parking.

Staffing: This tower ceased operation at the end of the 1990 season. In 1994, a student intern worked from July 5 through August 21 as a summit guide on Blue Mountain. In 2007, the fire tower cab was opened to the public and a summit guide hired by the Town of Indian Lake worked on Blue Mountain to greet and educate the public. The summit guide worked Wednesday through Sunday, from August 3-24. In 2008, another summit guide was on Blue Mountain.

Use Data:

Blue Mountain, rising directly from the eastern shore of Blue Mountain Lake, has been one of the most frequently climbed Adirondack peaks for over a century. In 1920, 2,800 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 2,085 - 5,102 people who climbed Blue Mountain annually during this time period.

An examination of the 1987 register pages for the Blue Mountain Trail indicated that at least 8595 people utilized this trail. The prime season extended from 6/1/87 through 10/1/87 and accounted for 80% of the yearly use figure. Overall, day-use figures for this 120-day season were low in early summer with the greatest use occurring on the weekends and holidays. Upwards of 300 individuals signed in on peak days. Actual use on these popular days may have ranged from 500 to 600 people. Information from Chris Saunders (1994 Blue Mt. Summit seasonal Intern/Guide) documented that most visitors arrive between 11 am and 2 pm with Friday, Saturday and Sunday being peak days. People from every state except Alaska were observed along with several nationalities; especially Canadians. Approximately 80% of visitors were tourists, 17% summer people and 3% locals. The close proximity of the Blue Mt. trailhead to the popular Adirondack Museum may encourage increased use of this trail. Recent trail register figures range from10,000 to 12,000 visitors a year.

The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .

Summit/Tower Views:	Flat-topped summit with areas of bedrock and open ground. Views are partially obscured by spruce and balsam fir vegetation, although the northeast face of the summit is bare, enabling views without climbing the tower. Because the mountain stands alone, views are not obstructed by nearby peaks. The tower stands in a clearing on exposed ledge at the summit. From the cab numerous lakes and ponds are visible as well as a panorama of the High Peaks to the northeast, including Mt. Marcy, highest peak in the State, and Snowy Mountain, highest peak in Hamilton County, to the south. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.
Sponsor/Cooperator:	In 1993, a steering committee composed of representatives from DEC, non-profit groups, concerned individuals, and the local towns to address restoration efforts on Blue Mountain. This committee was the first Adirondack public/private tower preservation partnership to form and included representatives from the Adirondack Museum, Cornell Cooperative Extension, Adirondack Ecological Center, Adirondack Mountain Club, Adirondack Architectural Heritage, Town of Indian Lake and DEC. Additional assistance was provided by the Forest Fire Lookout Association and the NY Conservation Council. The idea was to use the project as a demonstration for other groups interested in preserving towers. The tower was rehabilitated in 1994. The same year an interpretive program was started and the tower was staffed by a student from the SUNY Environmental Science and Forestry Interpretive Internship Program with funds secured through Hamilton County and private donations. The student intern worked four days a week during the summer. Education efforts concentrated on the history, geology, and ecology of the Adirondack Park in general and Blue Mountain in particular. While the original restoration group had dissolved, a new friends group has formed. Associated Group: Friends of Blue Mountain.

Name:	**Cathead Mountain Fire Tower**
Location:	Hamilton County. Town of Benson: at the summit of Cathead Mountain (USGS elevation 2,423 feet). Private land.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Northville, NY. Fire tower, cabin, radio repeater, and portion of access trail are owned by the State. Communications equipment is owned by various state agencies including: DEC Law Enforcement and the Division of State Police. DEC owns first 50 feet (fire tower). NY State Police owns second 40 feet. Repeater building, battery power supply, and back-up generator owned by State Police. Private land lease.
Facility Description:	Steel Aermotor LL25 tower without guy wires. Modified fire tower, total height now 90 feet. NY State Police added a 40-foot trestle extension in 1986. Fire tower and extension supports antennas and microwave dishes. Other structures include solar panels, windplant, and helicopter landing platform. Battery power charged by wind generator and solar, with backup generator. Access is by helicopter. No public access. Other structures include a modular repeater building at the base of the fire tower and a 16' x 27' observer's cabin (pre-1964) approximately 0.25 miles from the summit.
Historical Significance:	This tower has not been nominated for listing on the National Historic Lookout Register or the New York State and National Registers of Historic Places. Modifications to the fire tower due to the extensive addition of communication facilities may make it ineligible for listing.

Original 15 foot high wood tower erected in 1910; Present tower erected in 1916. It was of a lighter weight than their 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. Wooden steps were added within the structure to ease access for both the Observer and the general public in 1918 or 1919. Of the original ten Model LL-25 towers purchased by the State, Cathead Mountain is one of only four that remain standing today.

Since the establishment of an observation station at Cathead Mountain, at least 16 people were appointed observers over a seventy-seven year period. In 1986 an extension to the tower was constructed for communications purposes by NYS Police.

The Cathead Mountain fire tower is the only fire tower in the town of Benson and one of eight interior fire towers (five open to the public) in Hamilton County. The cabin is one of four observers cabins in Hamilton County.

Maintenance Needs: Status - Tower and access trail closed to the public.

Fire Tower - Incorporated into communications tower.

Communication Tower/Antennae - The site is self-contained, with no access to commercial power or telephone service. Power to the site is provided via a battery bank charged by solar panels. A propane generator provides backup power. Communication structures are maintained by each respective owner. The DEC uses this tower as a radio repeater station. No known maintenance needs.

Helicopter Landing Area - Cathead Mountain, has a developed pad used to land helicopters, near the fire tower.

Access: Cathead Mountain is located on the south side of the Adirondack Park, west of NYS Route 30 and north of County Route 6.

Trail/Trailhead Information: **Trail Closed**

	The original trailhead (now closed to the public) is on the North Road.
Staffing:	This tower ceased operation at the end of the 1986 season.
Use Data (Past):	In 1920, 160 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 386 - 1,281 people who climbed Cathead Mountain annually during this time period. This fire tower was a popular local attraction, previously open to the public with the permission of the landowner. The owner closed the trail in the fall of 2000.
Summit/Tower Views:	Area of bedrock. Summit is tree covered with partial views.
Sponsor/Cooperator:	None

Name:	**Gore Mountain Fire Tower**
Location:	Warren County. Town of Johnsburg: at the summit of Gore Mountain (USGS elevation 3,583 feet). State land classified as Gore Mountain Ski Center Intensive Use Area.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Warrensburg, NY. The ski center is currently under the control of the Olympic Regional Development Authority (ORDA). Summit, access trail and road, fire tower, communication tower, and observer's cabin are owned by the State. Communications equipment is owned by various agencies including: DEC Law Enforcement, DEC Fire Control, and NY State Police. Non state ownership includes: North Country Radio, National Weather Service, and Warren County Sheriff.
Facility Description:	Steel Aermotor LS40 tower, with guy wires. 60 feet high with nine flights of stairs to floor in 7' x 7' tower cab. Fire tower supports several antennas and four microwave dishes used by the NYSP and NWS. Access is by DEC foot trail or motor vehicle use on existing road. Other summit structures include separate guyed 145' DEC communications tower with microwave dish used by LE, WXLG, and WCS. Three repeater buildings (NY State Police, Warren County and DEC), observer's cabin, and a new gondola building are also in the vicinity of the summit.
Historical Significance:	This tower has not been nominated for listing on the National Historic Lookout Register or the New York State and National Registers of Historic Places. Modifications to the fire tower due to the addition of communication facilities may make it ineligible for listing. The first state fire towers in the Adirondacks were established in the Adirondacks in 1909 on Mount Morris in Franklin County, Gore Mountain in Warren County, and West, Snowy and Hamilton mountains in Hamilton County.

Original 18 foot high wood tower erected in 1909; Present tower erected in 1918. However in October of 1919 a fierce storm blew this tower over and it was returned to service the next year.

During the 1970s, the NYSP added radio repeater antennas on the side of the tower and built a structure to house a power generator. About 1985, four microware antennas were added to the fire tower and the tower legs were streghened for the extra weight.

Since the establishment of an observation station at Gore Mountain, at least 14 people were appointed observers over a eighty year period.

The Gore Mountain fire tower is the only fire tower in the town of Johnsburg and one of two fire towers (only the summit of Gore Mt. is open to the public) in Warren County.

Maintenance Needs:

Status - Tower closed to the public. Warning signs on the tower caution the public about the microwave emissions.

Fire Tower - This fire tower has been modified to support four microwave dishes below the tower cab. The roof was blown off several years ago. DEC staff have declared the tower structurally unsound for public use, since a determination could not be made, due to all the past modifications for equipment.

Communication Tower/Antennae - Unknown maintenance needs.

Cabin - A second cabin at the summit was built in 1928. The mountains ski patrol uses the observer's cabin in the winter months and in the summer it is locked.

Trail - Maintenance needs include blowdown and brush removal. Future relocation.

Summit - Open grassy area with picnic table.

Access:	Gore Mountain is located on the southeast side of the Adirondack Park, west of NYS Route 28 and north of NYS Route 8.
Trail/Trailhead Information:	**Schaefer Trail** (Blue Markers) - 4.5 miles From North Creek Ski Bowl to summit. Vertical ascent, 2,533 feet. Additional access possible from gondola ride and walking about a mile to the tower. The gondola is open in the fall foliage season and at special dates in the summer. Note: The Schaefer Trail will be closed until the spring of 2010. The closure is to avoid ski center construction and to relocate it away from the new expansion on Burnt Ridge and Little Gore. When completed the new route will start by the tubing hill at the Ski Bowl, precede on the north side of Roaring Brook to a location above the Reservoir, and then follow the old narrow ski trails on the North Face up to the summit.
Staffing:	This tower ceased operation at the end of the 1988 season.
Use Data:	In 1920, 84 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 10 - 765 people who climbed Gore Mountain annually during this time period. Recent trail register figures range from 200 to 400 visitors a year on the Schaefer trail. The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .
Summit/Tower Views:	Summit is tree covered with partial views below the summit.
Sponsor/Cooperator:	No associated group.

Name:	**Hadley Mountain Fire Tower**
Location:	Saratoga County. Town of Hadley: on Wells Peak (USGS elevation 2,675 feet) portion of Hadley Mountain. State land classified as Wilcox Lake Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Warrensburg, NY. Access trail, fire tower, and cabin are owned by the State.
Facility Description:	Steel Aermotor LL25 tower with guy wires. 40 feet high with six flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail. Observer's cabin near summit, with associated shed and root cellar.
Historical Significance:	This tower appears on both the National Historic Lookout Register and the National Register of Historic Places. The boundary for the nominated area is drawn to include a 1,000 foot square area surrounding the tower which includes the observer's cabin and former garden, and the full length of trail from the base of the mountain to the tower. Contributing resources: 5 (tower, observer's cabin, root cellar, hiking/jeep trail, garden site) Non-contributing resources: 2 (woodshed, privy)

A state historic marker at the parking area mentions the forest fires of 1903, 1908, 1911 and 1913 that burned 12,000 acres of the surrounding area. The Hadley Mountain fire tower was one of the original ten steel fire towers purchased by the state. The 12,000 acre area surrounding the tower had burned repeatedly during the previous decade despite a station located on nearby Ohmer Mountain. The Hadley Mountain tower was originally slated to replace the wood tower station maintained on Ohmer Mountain. However, a dispute with the property owner resulted in the tower being placed on Hadley Mountain and the Ohmer Mountain site was discontinued . Present tower erected in 1917 and was the last of the "lighter duty" towers erected. The Hadley Mountain tower was blown over in 1919 and subsequently re-erected, and retrofitted with an internal staircase in 1929. The existing tower is typical of the "lighter duty" structures initially built by the Conservation Commission and subsequently retrofitted with staircases.

The tower was used by the National Oceanic and Atmospheric Administration for Saratoga County in 1973 to establish permanent bench markers for preparing county tax maps.

Nestled into a shoulder east of and below the summit is the observer's cabin and associated outbuildings. The date of the original observer's cabin has not been documented. A new cabin was built in 1926, and in 1934, the cabin was "improved." The cabin was subsequently replaced with a rustic one-story structure around 1950 on new footing piers next to the earlier cabin. The one-story, gable roofed cabin is sided with rough-sawn, waney edged siding and roofed with asphalt shingles. It windows are boarded up and it has a plank door. It is divided into three rooms with an integral porch and constructed on footings. The cabin conveys a strong feeling of association with the station and is considered a contributing resource. To its west, built into the hill, is a primitive root cellar built of dry-laid rubble stone. It too is considered a contributing resource. Behind the cabin, to its south, is a one-story shed-roofed woodshed clad in T-1-11 siding which is not considered a contributing element on the basis of its recent age. The outline of a rectangular plan vegetable garden sited west of the cabin remains visible. It terminates in two apple trees at its north end. A privy of recent construction is sited at the northwest corner of the garden.

From the summit, the trail descends the mountain in a southeasterly and easterly direction over a moderate grade to a town road. The route of the current trail incorporates stretches of the jeep road used when the station was active.

The Hadley Mountain Forest Fire Observation Station was used continuously until its closure at the end of 1990. It was one of the last operating fire towers in New York State. Since the establishment of an observation station at Hadley Mountain, at least nine people were appointed observers over a seventy-four year period. The tower is significant for it’s association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer’s cabin. Of the original ten Model LL-25 towers purchased by the State, Hadley Mountain is one of only four that remain standing today.

The Hadley Mountain fire tower is the only fire tower in the town of Hadley and one of two interior towers in Saratoga County. The observer's cabin is the only cabin in Saratoga County.

Maintenance Needs:

Status - Adopted and restored. The Hadley Mountain Fire Tower was reopened after a rehabilitation by DEC in 1996/1997.

Fire Tower - Cab is closed. The tower is intact and was recently subject to extensive repairs including replacement of some steel members, stair treads, and glazing in the cab.

Cabin - Partial restoration. A new roof was installed, a fresh coat of stain applied, windows and shutters were replaced, and storm covers and a door were installed. Replacing the porch railings and other minor work is needed to complete the restoration. The cabin and storage shed are occasional used to store supplies and materials for renovation and maintaining the summit facilities.

Trail - The middle portion of the Hadley Mountain Trail shows signs of erosion. In order to lessen erosion, a re-route is proposed in the Draft UMP. Some waterbars have been installed.

Summit - No other facilities.

Access:

Hadley Mountain is located west of the popular Lake George tourist area at the southern end of the Adirondack Park, generally west of NYS Route 9N and north of the Great Sacandaga Lake.

Trail/Trail head Information:

Hadley Mt. Trail (Class V, Red marker) - 1.3 miles
From Tower Road trail head to the fire tower and summit.
Vertical ascent, 1,525 feet.

Parking capacity (Tower Hill Road) - 15 vehicles, parking area is occasionally plowed in the winter.

Staffing: This tower ceased operation at the end of the 1990 season. In the summer months, from the fourth of July to Labor Day, a summit guide is hired to educate visitors and provide information. The summit guide lives in the observer's cabin when working. The summit guide receives a stipend from the fire tower committee and workers compensation coverage from the Saratoga County Cooperative Extension. Volunteers also perform some of the summit guide duties on weekends through Columbus Day.

Use Data: Easy access to the trailhead via an improved dirt road, a relatively short hike (1.3 miles), and an excellent view help to make Hadley Mountain one of the Adirondacks' most popular summits. In 1920, 100 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 258 - 922 people who climbed Hadley Mountain annually during this time period.
A summit guide, renovations to the tower and observer's cabin, and self-guided hiking brochures paid for by donations generated by the Hadley Mountain Fire Tower Association and DEC funds have added to the attractiveness of this destination. Two years of complete register box data (2001 and 2002) indicate that a minimum of 13,000-14,000 people climb Hadley each year. Actual use is likely somewhat higher. Monthly use patterns reflect this; over 70% of the registered use at Hadley Mountain in 2002 occurred in the July to October period. Overnight use of Hadley Mountain is basically non-existent due to the lack of overnight facilities.

The tower is listed as part of the Fire Tower Challenge.

Summit/Tower Views:	The tower stands alone in a clearing on exposed ledge at the summit. The exposed summit and tower offer 360° panoramic views of the surrounding mountains. On a clear day the High Peaks are visible to the north, the Green Mountains to the east, most of the southern Adirondack peaks to the west, and the ridges of the Catskills to the south. From the tower there are views of the Great Sacandaga Lake to the south and southwest, Blue Mountain and Snowy Mountain to the northwest, and Crane Mountain to the north. On a clear day, one can see Algonquin Peak just to the left of Crane Mountain and Mt. Haystack and much of the Great Range just to the right. Some views are possible from the open bedrock below the tower, due to repeated fires that swept the summit during the first 15 years of the 20th century. Cab is closed unless summit guide is on duty, but the tower is still climbed by the public to the top landing. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP. The Hadley Mountain Brochure (available at the trail register) identifies various features within the viewshed, including the distant High Peaks and Catskill Mountains and provides cultural and natural history information about the fire tower and its surroundings, as well as tips on how to be a safe and responsible hiker.
Sponsor/Cooperator:	Restoration group established. The Hadley Mountain Fire Tower Committee was formed in 1995 by a group of citizens interested in saving and restoring the fire tower. The committee solicited support and financial assistance from the general public, local government and community organizations. By early 1996 the surrounding local towns had endorsed the restoration program and funds were raised. While the committee paid for the materials, DEC engineers evaluated the fire tower and identified needed repairs; a state helicopter transported equipment and materials to the summit; DEC Operations staff dismantled and replaced stairs, landings and the compartment floor, and DEC Forest Rangers replaced or repaired the support footers, structural steel components and all the windows in 1996.

This Committee has been one of the most successful tower groups in the state and responsible for the tower and trails excellent condition. Recently, the Committee celebrated its 10th anniversary and is viewed as a model for fire tower adoption and restoration across the Adirondacks.
Associated Group: In 2008, an AANR was issued to the Hadley Mountain Fire Tower Committee.

Name:	**Hurricane Mountain Fire Tower**
Location:	Essex County. Town of Keene: at the summit of Hurricane Mountain (USGS elevation 3,694 feet). State land classified as Hurricane Mountain Primitive Area.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Ray Brook, NY. Summit, access trails, and fire tower are owned by the State.
Facility Description:	Steel Aermotor LS40 tower with no guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail.
Historical Significance:	This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The boundary for the nominated area includes a 500 foot square area of the summit surrounding the tower.

Contributing resources: 1 (tower)
Non-contributing resources: 0

Native American use of the surrounding area is known from historical records and archeological evidence, but no permanent settlements have been documented. The name, Hurricane Mountain, is reportedly derived from a Native American name for the mountain, *No-do-ne-yo*, which means hill of the wind.

The summit of Hurricane Mountain was used as a station during the Verplanck Colvin survey in June of 1876. The summit of Hurricane Mountain was used as a station during the Verplanck Colvin survey in July of 1873. This initial survey is described in the excerpts from Colvin's 1873 report below. The summit continued to be used as a survey station in subsequent years and in June of 1876 a wooden pole survey tower was erected at this site. Several wrought iron eyes that Colvin used to anchor the survey tower can still be seen in the rock on the summit. Colvins original copper bolt is also still in place on the summit, but it has been disfigured by people trying to remove it.

Colvin's survey was based on triangulation, and in order to tie his survey in with known points, he planned on establishing two great primary triangles using lighthouses on Lake Champlain whose exact coordinates and distances from each other had been determined by the United States Coast Survey. Split Rock and Juniper Island lighthouses were determined favorable for the baseline of the northern Triangle, but it was difficult to find a location in the Adirondacks that offered a clear view of both of these points. After climbing several mountains in the Elizabethtown area, Colvin climbed Hurricane Mountain and found the station he had been looking for. Through triangulation from the two lighthouses, the exact position of Hurricane Mountain was determined, and used to extend the survey inland to the high peaks region of the Adirondacks.

The following excerpt from Colvin's 1873 Report on the Topographical Survey of the Adirondack Wilderness of New York, highlights the importance of Hurricane Mountain to this work.

"July 21st was beautifully bright, and will remain a memorable day in the in the annals of this survey. In doubt and gloom at the failure of two attempts to find for the vertex of this triangle a suitable mountain, which would command a view of the extremities of the Lake Champlain base, I determined to separate the party... I took with me three men, with barometers, transit, etc., and drove to the foot of Mount Hurricane, a prominent peak , about six miles west of Elizabethtown".

"After a lunch in the woods at the foot of the mountain, the men shouldered the heavy knapsacks containing the transit instrument in its box, etc., and we made a rapid ascent. The prospect from the summit was enchanting. In the east , midway between us and the billows of the Vermont Mountains, lay Lake Champlain.... while in the south-west the haughty, high peaks of the Adirondacks were clustered in dark magnificence"....

"The theodolite being set up, a careful search was begun with the telescope for our lake stations. It was soon found that Juniper Island was visible, and a careful focusing at length made clear and distinct the tower of the light-house. Still the mountains southward seemed to hide the Split Rock station, and with little hope the instrument was brought to bear upon that portion of the lake, when to our delight, as the telescope slowly traversed southward, the Split Rock light-house came into view, just at the edge of the hills which we feared were hiding it. We had found the station! No better or more appropriate one, than this mountain top, could have been selected".

"We had secured a complete circuit of the horizon with the theodolite , besides repeating the angles; and had sunk a copper bolt (No. 8) at the theodolite station".

"Now the sharp peaks of mountains were measured upon, and now the angular distance of the dark defiles and passes found - all from this new and advantageous station whose absolute position on the world's surface we would soon be able to determine".

During the early part of the 20th century, devastating fires swept through much of the Adirondacks. Roughly 15 % of the lands now in the Adirondack Park were burned during this period (Smith, 1990). One fire in 1903 swept north from North Hudson and burned the peak of Noonmark Mountain. The fire threatened St. Huberts, Keene Valley and Keene. In 1908, the fire started on East Hill in Keene and spread north and east consuming much of the forest in the Hurricane Mountain Primitive Area and the nearby Jay Mountain Wilderness Area (Reveille, 1957). A 1916 Conservation Department map of the Adirondacks shows that most of the lands now contained in the Hurricane Mountain Primitive Area burned in these fires (Schmitt, 1916). The numerous rock outcrops and stands of white birch that are common in the unit are a result of these fires.

The Forest Fish and Game Commission (forerunner of the Department of Environmental Conservation) responded by establishing a lookout station on the bald summit of Hurricane Mountain in 1910. The observer watched for wisps of smoke in the Giant Mountain wilderness to the south and the Keene Valley to the west. For the first decade there wasn't a wooden tower like there was on most Adirondack mountains because the observer had a clear view in all directions. In 1917, there wasn't a log tower on the mountain although the Champlain Realty Company gave permission to build one. The present tower was erected in 1919 to give the observer a better view and protection from the weather. The tower was one of thirteen new steel towers erected that year in the state and was one of the heavier type towers, equipped with steel stairs. The other twelve towers erected that year were: Twaddle Point, Bald Mountain, Tooley Pond Mountain, Beaver Lake Mountain, Moose River Mountain, Stillwater Mountain, Boreas Mountain, Mt. Morris, Whiteface Mountain, Owl's Head Mountain, Crane Mountain, and High Point Mountain. Practically all the labor in erecting these towers was performed by members of the ranger force. An Osborne Fire Finder, a type of panoramic map for use with an alidade, was installed in the cab in 1921.

Several observer cabins were built on Hurricane Mountain. The first, a simple log structure, was erected in 1916 and used for one year. In 1917, a new cabin was built. The Conservation Report of 1928 stated that state workers built a new standard size cabin on Hurricane Mountain. This cabin was 12'x16' and was roofed and sided with asphalt shingles. The observer's cabin was located on the East trail where it crosses Falls Brook, was removed sometime after 1982, as was a lean-to. All that remains of the cabin site are some foundation (stone) rubble and miscellaneous pieces of wood.

The trail historically used by the observer and public approached the mountain from the east. In 1935 the Conservation Department rangers or Civilian Conservation Corps employees constructed new trails, from the north and south, to the fire tower.

The Hurricane Mountain Forest Fire Observation Station was used continuously until its closure at the end of 1982. Since the establishment of an observation station at Hurricane Mountain, at least 25 people were appointed observers over a seventy-three year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower. The Hurricane Mountain fire tower is the only fire tower in the town of Keene and one of six interior towers in Essex County.

Maintenance Needs:

Status - Tower abandoned. In 1987, the DEC declared the fire tower surplus property.

Fire Tower - Tower is closed. The treads from the lower two sections of stairs have been removed, as has one (steel) stringer from the first/lowest flight of stairs. The tower is relatively intact and retains most of its original integrity. There are no windows in the tower cab, and a section of the tower cab roof (west side) has been torn off. The steel structure has rust but, otherwise, the remainder of its fabric is extant.

Trail - Past trail maintenance has been carried out by DEC and various volunteers. Volunteer organizations that have contributed include the Hurricane and Genesee chapters of the Adirondack Mountain Club, and the Alpine Club of Canada. Maintenance needs:

North Trail - Reroute trail away from tributary of Gulf Brook, near the site of the Gulf Brook Lean-to. There is currently no bridge at this site and hikers are required to ford the stream or cross on rocks.

Hurricane Trail - Several sections in the lower third of this trail need to be rerouted to avoid steep, eroded areas and a streambed.

Summit - The summit consists of an open rock face with a commanding 360° view. The Hurricane Mountain tower, although it is only 35 feet tall, stands out on the bald summit of the mountain.

Access: Hurricane Mountain is located in between Keene and Elizabethtown in the northeast part of the Adirondack Park. The mountain is located generally west of NYS Route 9 and north of NYS Route 9N.

Trail/Trailhead Information: **Hurricane Trail** (Class V, Red markers) - 2.3 miles
From NYS Route 9N to the fire tower and summit. Vertical ascent, 2,000 feet. While this is the most popular route to the summit of Hurricane Mountain, two additional trails are also utilized by the public. Parking capacity (NYS Route 9N) - five vehicles, occasionally plowed in the winter.

Hurricane East Trail (Class III, Red markers) - 2.0 miles
From private land to the fire tower and summit. Vertical ascent, 1,700 feet. Also referred to as the "Elizabethtown trail" The first 1.2 miles of this trail follow the old road to the site of the observer's cabin. The parking area is located on private property at the end of the town maintained portion of Hurricane Road, but the trail register is located roughly half a mile beyond this point along the old road to the fire observer's cabin. There is an informal agreement with the landowner to allow the public use of the parking area. Parking capacity (Hurricane Road) - three vehicles.

Hurricane North Trail (Class IV, unknown markers) - 2.7 miles
From Crow Clearing trailhead to the fire tower and summit. This trail requires hikers to use the Gulf Brook Trail for 1.0 miles and the Hurricane Trail (from Route 9N) for 0.1 miles making the total distance of 2.7 miles from the Crow Clearing Trailhead to Hurricane Mountain. Vertical ascent, 1,600' elevation change. Parking capacity - 11 vehicles.

Staffing: This tower was manned until 1982.

Use Data: In 1920, 211 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 290 - 805 people who climbed Hurricane Mountain annually during this time period.

Hurricane Mountain is the most popular destination in the Primitive Area. Recent trail register figures range from 3,400 to 4,300 visitors a year. Analysis of user data has lead to the following conclusions: Much of the visitor use appears to be either day trips or short-term overnights. Use levels are generally low enough throughout the year to provide solitude for individual users with the exception of summer weekends and holidays. Use is greatest in summer and fall, coinciding with school vacations, and popular holidays. The months of July, August, September, and October see the highest use levels. Although there has been fluctuation in the number of users in the Primitive Area from year to year, the total number of users has been trending downwards for the period of 2000-2005.

The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .

Summit/Tower Views: The Hurricane Mountain summit is a mostly open rock face and has a commanding 360° view of the High Peaks, Jay Range, Champlain Valley, and Green Mountains (in Vermont). The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Sponsor/Cooperator: As with many other fire towers in the state, a “friends group” has formed for the Hurricane Tower; advocating for its retention and restoration.

Name:	**Kane Mountain Fire Tower**
Location:	Fulton County. Town of Caroga: at the summit of Kane Mountain (USGS elevation 2,060 feet). State land classified as Shaker Mountain Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Northville, NY. Summit, main access trail, fire tower, and cabin are owned by the State. Summit area acquired in 1918. ATP owns the land where the beginning portion of the Kane Mountain - South Trail (from Old Schoolhouse Road) that follows the old telephone route to the summit.
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Facility Description:	Steel Aermotor LS40 tower without guy wires. 60 feet high with nine flights of stairs to floor in 7' x 7' tower cab. Access is by two different DEC foot trails and one herd path. Associated wood observer's cabin is 20' long x 16' wide with a 16' x 7' open porch.
Historical Significance:	This tower appears on both the National Historic Lookout Register and the National Register of Historic Places. The boundary for the nominated area includes a 500 foot square area surrounding the tower and the full length of the trail leading up to the tower from the base of the mountain and related features. The tower and foot trail are considered contributing resources, while the is listed as a non-contributing resource. Contributing structures: 2 (tower, foot trail [South Trail]) Non-contributing structures: 1 (observer's cabin)

"On account of the accessibility of the forests in the vicinity of this station, and the large number of lakes and ponds, there is probably no area of equal size anywhere in the Adirondacks that is more used by the public for camping, hunting and fishing. Existing observation stations were too far away to cover this area efficiently and therefore the Kane Mountain station was established." (National Register of Historic Places registration form, 2001.)

The 60-foot tower was prefabricated by the Aermotor Corporation and erected in 1925. The legs of the structure are anchored by four standard connection plates, which are bolted into the exposed bedrock on the summit.

An observer's cabin was built on the site soon after 1925. The Kane Mountain - East trail follows an old jeep road that was cut up the mountain to haul materials for the cabin. This cabin was abandoned in1961 and replaced by a larger cabin (Model 1941) at a slightly different location. The cabin is situated within view of the tower approximately 170 feet to its southwest. The cabin is a single-story rustic dwelling. The building is classified as a non-contributing building due to its age. Even though the existing cabin is not the original cabin, the structure was an essential component in the operation of the fire tower and provided living quarters for the forest fire observer for many years.

The Kane Mountain Forest Fire Observation Station was used continuously until its closure at the end of 1988. Since the establishment of an observation station at Kane Mountain, at least 17 people were appointed observers over a sixty-four year period. The tower is significant for its association with the Forest Preserve and as an example of an early twentieth century fire observation tower. The tower was the only station put into service in 1925.

Kane is the only fire tower in the town of Caroga and the only tower in Fulton County. This structure is the most southern tower in the Park. The cabin is the only observers cabin in Fulton County.

Maintenance Needs: Status - Tower restored.

Fire Tower - Cab is open. In 2003, the tower was painted along with repairs made to the steps and landings.

Cabin - In 2003, the observer's cabin was secured to help prevent vandalism. Break ins have still occurred. Remains of old observer's cabin consists of exposed wood flooring that is deteriorating.

Trail - On the East trail there are 13 waterbars with some of the steeper grades needing additional waterbars to help prevent erosion. On the South trail there are no trail improvements and the trail is no longer maintained due to lack of parking and unsecured private land crossing. The North trail needs erosion control and trail maintenance.

Summit - A privy is located near the observer's cabin and hiking trail. The privy was vandalized in 2007 and has been relocated a short distance from the cabin down the side of the mountain.

Access: Kane Mountain is located in the southern part of the Adirondack Park, east of NYS Route 10 between the hamlets of Caroga Lake and Piseco. From the State highway a town highway and DEC open motor vehicle road are used to reach the DEC trailhead.

Trail/Trailhead Information: **Kane Mountain - East Trail** (Type-V, Red markers) - 0.8 mi. From the Fish Hatchery Pond Road parking area to the fire tower at the summit. Vertical ascent, 430 feet.

Parking capacity (Access from Green Lake Road) - 8 vehicles, not plowed in the winter. Shared parking also providing access to Fish Hatchery Pond and DEC Cross Country Ski Trails.

Kane Mountain -South Trail (Type-II, red markers) - 0.3 miles [additional 0.2 mile on private land from Schoolhouse Road to State land boundary] From the Schoolhouse Road to the fire tower. This trail rises nearly 600 feet and is not suitable for family groups. This trail begins at the Old Schoolhouse Road and follows the old telephone line route up the mountain. While this is the shortest trail to the summit, it begins along private land without an easement or formal agreement authorizing public use or parking.

Kane Mountain - North Trail - (To be designated) - This existing unmarked trail is approximately 0.7 miles in length and connects the Pine Lake cross country ski trail to the top of the mountain. The trail is starting to show signs of erosion due to increased public use by people walking a loop around the mountain.

Staffing: This tower ceased operation at the end of the 1988 season with the tower officially closed in 1989. A former Adirondack fire tower observer has volunteered as an interpretive guide on an intermittent basis between 2002 and 2005. While there is an existing AANR for maintenance of the site, no summit guide program currently exists for this location.

Use Data: Given its proximity to a State highway and location near urban areas outside the Adirondack Park, Kane mountain has been a popular location for day hiking. In 1926, 2,535 visitors signed the guest register. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 1,818 - 2,883 who climbed Kane Mountain during this time period.

A trail register was first installed in 1995. Several years ago the register was moved to the summit area to better capture total use from the alternate trails to the mountain. In late 2003, a kiosk with register was installed at the Fish Hatchery Pond Road trailhead. Recent trail register figures range from 2,800 to 3,800 visitors a year. It has been estimated by the area forest ranger and the volunteer steward that approximately one-half of the people using the area actually sign the register. This would indicate that the summit and fire tower could receives actual use more in the range of 5,600 to 7,600 visitors each year.

The core season where use is the highest occurs between April and October. Within this popular period, the four months of July, August, September, and October receive the greatest use, mostly on the weekends and holidays. In 2002, a maximum of 75 users signing in per day was recorded for a total of three days, with only four other days having totals exceeding 50 people. Large groups of 10 to 25 people do not commonly visit this area. In 2002, there were 22 days when larger groups visited Kane Mountain with the most common group size between 10 and 13. The only large group in 2002 consisted of two school busses that brought a total of 128 students for a field trip on one day of the year. Most activity consists of very small groups of between two to four people in size.

Public use of Kane Mountain is almost entirely day use related. The lack of views from the summit area probably contributes to a shorter stay, with many groups going back down the trail after only a brief visit to the tower. Some users loop back to the trailhead by using a combination of the Kane Mountain - North and Pine Lake trails. Alternate access via Old Schoolhouse Road, or through the Pine Lake campground account for a portion of overall use.

Within the last couple of years, a volunteer steward has been on the tower for one day a weekend for a part of the summer.

Summit/Tower Views: Summit is tree covered with no views. Cab open to the public. From the tower cab there are views of the Canada Lakes region, Peck Lake, and Caroga Lake. Fire towers mountains such as Hamilton Mountain in the Silver Lake Wilderness and Cathead Mountain to the northeast are also visible. Additional views are possible of the Mohawk Valley, the Helderbergs to the southeast, and the Catskills to the south. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Sponsor/Cooperator: In 2007, an AANR was issued to the Canada Lakes Protective Association to help with stewardship of the Kane Mountain trail, cabin, and tower.

Name:	**Loon Lake Mountain Fire Tower**
Location:	Franklin County. Town of Franklin: at the summit of Loon Lake Mountain (USGS elevation 3,355 feet). State land classified as Debar Mountain Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Ray Brook, NY. Portion of access trail and fire tower are owned by the State. Ownership of the observer's cabin in unclear. Lyme Adirondack Timberlands LLC owns the observer's cabin, beginning portion of the trail (1.1 miles) and access road.
Facility Description:	Steel Aermotor LS40 tower without guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail. Associated wood observer's cabin. Dimensions not provided.
Historical Significance:	This tower does not appear on the National Historic Lookout Register but is on the New York State Register of Historic Places since it is eligible and has been nominated to the National Register of Historic Places. The boundary for the nominated site includes the summit area where the tower is located, the area where the observer's cabin once stood, and fifteen feet on each side of the center of the trail from the cabin to the summit. Contributing Resources: 5 (Tower, Trail, Observer's Cabin, Wood Shed, Foot Trail) Non-contributing structures: 0 The mountain derives its name from the large lake with the same name to the east. Original wood tower erected in 1912; Present tower erected in 1917. This tower is typical of the "Heavier Type" tower, with integral staircase, built by the Conservation Commission between 1917 and 1950.

It is unclear when the first observer's cabin was built. The first noted mention of this observation station's cabin was in 1922 when a notation was made that the cabin was repaired. This original cabin was of no standard design. This original cabin was replaced in 1928 by a 1928 model observer's cabin. To get to the observer's cabin a separate footpath off the main trail to the summit was used. In 1921 a "Panoramic Map" was installed in the Loon Lake fire tower. The fire tower blew over during the winter of 1927-28, and was re-erected in the spring of 1928. In 1934 a new foot trail up the mountain was cut by the C.C.C.

The Loon Lake Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1970 season. Since the establishment of an observation station at Loon Lake Mountain, at least 25 people were appointed observers over a fifty-nine year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer's cabin.

The Loon Lake Mountain tower is the only fire tower in the town of Franklin and one of five (three open to the public) interior towers in Franklin County. The cabin is the only remaining observer's cabin in Franklin County.

Maintenance Needs:

Status - Tower abandoned.

Fire Tower - Tower closed. Lower sections of stairs have been removed. Structural reinforcements are needed for the wooded decks, railings and tower footings. The eastern panel of the cab needs to be replaced.

Cabin - The observer's cabin on private land is still standing however it is in significant disrepair.

Trail - The trail has received no maintenance for almost 40 years and is not well marked or signed.

Summit - No identified maintenance needs.

Access:	Loon Lake Mountain is located in the northern part of the Adirondack Park, north of NYS Route 28, east of NYS Route 30 and Meacham Lake, and west of Old County Route 99. In the past, exclusive rights for lessees prevented the public from crossing Lyme Adirondack Timberlands property to reach the fire tower during parts of the year. Since April 22, 2009, year-round public foot access is permitted.
Trail/Trailhead Information:	**Loon Lake Mt. Trail** (Class unknown) - 2.7 miles 1.1 miles over Lyme lands and 1.6 miles over Forest Preserve lands. Vertical ascent, 1,650 feet. Parking capacity - 8 vehicles, not plowed in the winter. No developed facilities. Signage and parking facilities will be developed on the Kushaqua Tract as soon as funding and personnel resources permit.
Staffing:	This tower ceased operation at the end of the 1970 season.
Use Data:	In 1920, 22 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 40 - 99 people who climbed Loon Lake Mountain annually during this time period. No recent public use information is available.
Summit/Tower Views:	Summit is a mix of open rock outcrops, shrubs, and forested areas, partial views. The summit contains evergreen trees, low blueberry bushes, and occasional mosses. The tower is located towards the north end of the only clearing of the summit. This open portion of the summit measures approximately 35 feet by 75 feet. The west portion of this opening has a rock face.
Sponsor/Cooperator:	Volunteer for Loon Lake is approved under an AANR.

Name:	**Lyon Mountain Fire Tower**
Location:	Clinton County. Town of Saranac: at the summit of Lyon Mountain (USGS elevation 3,830 feet). Unclassified State Land.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Ray Brook, NY. Fire tower and radio repeater are owned by the State. Communications equipment is owned by DEC Law Enforcement.
Facility Description:	Steel Aermotor LS40 tower without guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Fire tower supports one antenna and solar panels. Power supply is battery charged by solar. Access is by DEC foot trail.
Historical Significance:	This tower does not appear on the National Historic Lookout Register but is on the New York State Register of Historic Places since it is eligible for listing on the National Register of Historic Places. When this observation station was established in 1910, no tower was immediately erected due to the lack of tree cover on the mountaintop. According to Paul Laskey, records of 1910 indicated a log tower station. Present tower erected in 1917. According to Wallace's Guide to the Adirondacks (1894), Lyon Mountain was called Lion Mountain because its "peculiar form strikingly suggests the figure of the 'king of beasts' in couchant attitude, as if to spring upon its prey." Chazy Lake historian Kathleen King said the mountain was named after Nathaniel Lyon who cleared land at the base of the mountain for a farm. In 1878 Verplank Colvin used the summit as one of his summer headquarters while surveying the Adirondacks. The summit contained a log house, observation tower, and seven cleared lanes. The lanes of downed trees allowed his survey crew to view other tower sites. The steel fire tower is on the same location that Colvin had his wooden tower.

Original log observer's cabin may have been constructed around 1916. In the 1930s additional work to improve living conditions was conducted at many fire tower sites. Civilian Conservation Corps (CCC) workers built a new cabin on Lyon. The observer's cabin was located half way up the mountain and was burned down by vandals in 1979 or 1980.

The Lyon Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1988 season. Since the establishment of an observation station at Lyon Mountain, at least 26 people were appointed observers over a seventy-nine year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower.

The Lyon Mountain fire tower is the only fire tower in the town of Saranac and one of two interior towers (Palmer Mountain is closed to the public) in Clinton County.

Maintenance Needs:

Status - Tower partially renovated. Work conducted from 2005 - 2007 by DEC staff, SCA, and ADK volunteers.

Fire Tower - Cab is open. The footers need to be repaired. The stairs, landings, and cab floor are new. Railings need to be installed in the cab and on the windows. There are holes in the roof, which should be replaced or repaired.

Communication Tower/Antennae - Repeater was installed in 2006 and is housed in a secure metal box in the tower cab.

Trail - A new 3.5 mile trail was constructed to the to the summit of Lyon Mountain. Scouting and design of the new trail was completed in 2006 with the help of funding from ADKs Algonquin Chapter. The trail was built in 2008 by ADKs professional trail crew working under contract with DEC. The new trail section provides a more scenic walk and passes many exposed bedrock outcrops.

Summit - There are no other facilities on the summit.

Access:	Lyon Mountain is located at the northeast corner of the Adirondack Park, south of Route 374 and west of Chazy Lake and Dannemora.
Trail/Trailhead Information:	**Lyon Mt. Trail** (Class V, Red markers) - 3.0 miles From trailhead to fire tower and summit. Vertical ascent,1,790 feet. The trail is reached from an unmarked trailhead off the Chazy Lake Road. The "new" trail is approximately 3 miles total length with about 2.5 miles of new construction and the remaining 0.5 miles using parts of the old trail. The relocation is an example of modern trail layout, utilizing 11 switchbacks in some of the steepest sections while keeping the trail grade from 8 to 15 degrees. Parking capacity (Chazy Lake Road) - eight vehicles, not plowed in the winter.
Staffing:	This tower ceased operation at the end of the 1988 season.
Use Data:	In 1920, 64 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 10 - 437 people who climbed Lyon Mountain annually during this time period. While the lack of a trail register prevents an accurate estimate of current use, the location has been used by the public. The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .
Summit/Tower Views:	Area of bedrock. Summit contains conifers and mountain ash with partial views. The western view blocked by trees. Cab open. From the tower there are views of Lake Champlain, the Green Mts. of Vermont, the High Peaks and skyline of Montreal.
Sponsor/Cooperator:	The tower is not sponsored, but there has been some interest in forming a friends group.

Name:	**Mt. Adams Fire Tower**
Location:	Essex County. Town of Newcomb: at the summit of Adams Mountain (USGS elevation 3,584 feet). Private land.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Ray Brook, NY. Fire tower owned by the State. Observer's cabin owned by the private landowner. Summit, access trail, and trailhead on State land. Fire tower and observer's cabin are on small pieces of private land subject to a conservation easement. Until recently, the tower and trail lay on property of the National Lead Co. (later NL Industries, Inc. and Kronos) After acquiring the property the Open Space Institute (OSI) sold the northern third of the land to New York State. A 0.41-acre parcel surrounding the Mt. Adams fire tower and a 0.3-acre parcel around the observer's cabin were retained by OSI, subject to a conservation easement to be held by the State.
Facility Description:	Steel Aermotor LS40 tower with guy wires. 47 feet high with seven flights of stairs to floor in 7' x 7' tower cab. An observer's cabin is located at the base of the mountain, along the foot trail to the tower. A 116' x 72' clearing contains the12'x 16' cabin, a 10' x 16' storage shed, and a 4' x 3' privy.
Historical Significance:	This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The boundary for the nominated area includes a 500 square foot area around both the tower site and cabin, along with the entire length of the foot trail from the trailhead to the fire tower site, fifteen feet on each side of the center of the foot trail. Contributing Resources: 5 (tower, observer's cabin, shed, privy, foot trail) Non – Contributing Resources: 0

The first tower on Mt. Adams was a 20 foot high wooden structure built in 1912 at the request of the Tahawus Club. In 1917 the state erected the present tower and staffed it until 1970. The tower was shipped, in pieces, by railroad from the AerMotor Company factory. From the railroad depot the tower was transported by truck to very near the bottom of the mountain. From this point the tower pieces were drawn up the mountain by a horse team. It has been reported that incorrectly placed anchor holes required use of block and tackle to complete construction, resulting in a tower with legs that spiraled. In 1922 a thirty inch round Panoramic map, with alidade and associated support table, was installed in the tower.

The significance of the forest fire observation stations, in general, and of Mt. Adams was expressed in a statement contained in the 1912 Annual Report to the NYS Legislature. The statement reads as follows;

"The fact that so many fires have burned over only small areas is due to their being discovered promptly. These fires were discovered by observers on mountain stations, and thus, by means of this information and the telephone, we were able to get men to the fires quickly. There are many cases which might be cited, but the following is a good example: During the dry period of July, about noon one Sunday, a fire was discovered by the observer on Mount Adams. This fire in one of the most inaccessible portions of the Adirondack forests, but in spite of this fact a fire warden with a small force of men reached there within two hours, and by five o'clock the following morning the ranger was on the ground with a large force of men, and the fire was controlled before it had burned over more than five acres."

The first observers lived in a crude wooden hut near the base of the tower. In 1922 the state constructed a 12' x 16' cabin 1,408 feet below the summit. The roof and sides of the cabin had asphalt shingles. Later the state built a 10' x 16' storage shed. Drinking water was supplied by a surface pipe from a small concrete reservoir built about a quarter mile up the brook. The reservoir was breached in 1972.

The observer's cabin is situated in the northeast corner of the clearing with the privy, and shed in close proximity. The modest one story cabin, with gable roof, faces southeast. The shed style roof over the cabin porch has fallen down, but is still attached to the front of the cabin. In 1950 a 10' X 8' addition was placed onto the rear of the cabin, but two walls and the roof of this addition have since fallen down. The original portion of the cabin remains intact and remains the sole surviving "Model 1922" observer's cabin in the State.

On February 27, 1948, the National Lead Company granted the state an easement to maintain the three trails (Calamity Brook, Adams Mountain, and Indian Pass) through their land for use by state employees and the public.

The Mt. Adams Forest Fire Observation Station was used continuously until its closure at the end of 1970. Since the establishment of an observation station at Mt. Adams, at least 20 people were appointed observers over a fifty-nine year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer's cabin.

The Mt. Adams fire tower is one of two fire towers in the town of Newcomb and one of six interior towers in Essex County. The cabin is on private land and the only remaining observer's cabin in Essex County.

Maintenance Needs:

Status - Restoration in progress. In 2004 partial repairs to the fire tower were undertaken. If the observer's cabin and/or fire tower is removed, destroyed, or not maintained in a safe condition, OSI intends to convey the underlying parcel to the State in accordance with the purchase option included in the easement.

	Fire Tower - Partially restored by DEC, OSI, and SCA. Cab is open. Some steps and landings have been replaced. Remaining tasks include replacement of tower roof and installation of railings in the cab and on windows. The cab of the Mt. Adams Fire Tower was heavily damaged by windstorms in January 2008. The fire tower is closed to public access until DEC can make repairs to the structure. Cabin - . Some repairs have been conducted to the cabin by volunteers in 2007. Trail - The existing trail is steep and eroded. Planning is underway to reroute the summit trail to a location that meets Department trail construction guidelines.
Access:	Mt. Adams is located slightly north and east of the geographic center of the Adirondack Park, south of the High Peaks Wilderness and north of NYS Route 28N and Newcomb.
Trail/Trailhead Information:	**Mt. Adams Trail** (Class - TBD, Yellow/Red markers) - 2.4 miles From the trailhead to fire tower and summit. Vertical ascent,1,800 feet. From Blue Ridge Road, the Lower Works Road and Upper Works Road provide access to East River trailhead. The trail begins along the yellow marked Hanging Spears Falls trail with a rock cairn approximately 0.8 miles from the trailhead indicating the fork to the red marked fire tower trail. Parking capacity - 15 vehicles, plowed in the winter. Shared parking provides access to Flowed Lands, Mount Adams and Mount Allen.
Staffing:	This tower ceased operation at the end of the 1970 season.
Use Data:	In 1920, 35 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 25- 310 people who climbed Mt. Adams annually during this time period.

An examination of the 2006 register pages indicated that at least 1,049 people utilized the trailhead. Recent trail register figures range from 1,000 to 1,400 visitors a year. The actual numbers of people who only climbed Mt. Adams has not been determined since the trailhead provides access to other State lands and allows access to Flowed Lands, and the start of the Allen Mountain herd path.

Prior to OSI acquisition in 2003, the trail and summit were closed to visitors. It is not known at what point markers were removed from the trail and the trail closed to public use.

The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .

Summit Views: Area of bedrock is only large enough for the tower. The tower is located in a 24' x 30' clearing. Summit is tree covered with conifers with no views. From the tower there are views of Marcy, McIntyre, Colden, Redfield, Cliff, Calamity, Algonquin, Marshall, Allen, Iroquois and the Santanonis. In addition, the remains of the old MacIntyre mining site are visible. The proximity of this tower to the High Peaks offers one of the finest views of the High Peaks from the south.

Sponsor/Cooperator: Friends of Mount Adams had an initial meeting of individuals interested in preservation of the cabin. There is no AANR agreement with any individual or group to do work on the fire tower. Current status of group unknown, although volunteers from the Friends of Mount Adams have worked on repairs to the Mt. Adams cabin in 2007.

Name:	**Mt. Arab Fire Tower**
Location:	St. Lawrence County. Town of Piercefield: at the summit of Arab Mountain (elevation 2,545 feet). State land classified as Horseshoe Lake Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 6. Potsdam, NY. Summit area, 0.3 miles of foot trail, fire tower, and observer's cabin are owned by the State. Lyme Timber and Rayonier own the land where 0.8 miles of foot trail are located. The trail is under a conservation easement.
Facility Description:	Steel Aermotor LS40 tower without guy wires, 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail. Observer's cabin at summit, with associated privy.
Historical Significance:	This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The fire observation station includes a steel frame lookout tower, an observer's cabin, a trace of the foundation of the site's original observer's cabin, a structure probably used as a root cellar, and a privy of recent construction. The boundary for the nominated area is drawn to include a 500-foot square area surrounding the tower and the full length of the foot trail from the base of the mountain to the tower. The name "Arab" is believed to have been a result of inaccurate translation of the French word, "arable," meaning Maple (Mountain). Originally called Arab Mountain, it was later referred to as Mount Arab. Contributing resources: 5 (tower, observer's cabin, root cellar, foot trail, and foundation of original cabin) Non-contributing resources: 1 (privy)

The observation station was established in 1911. Original wood tower erected in 1912. It was one of sixteen new stations put into service during the third year of the State's program, bringing the total number of stations to thirty-six. In 1912, a wooden observation tower was erected on the summit. The steel tower was prefabricated by the Aermotor Corporation and erected in 1918 and is typical of the "heavier type" structures with integral staircases built by the Conservation Commission. The tower was one of fourteen new steel towers purchased that year. Installation of this group continued the program initiated in 1916 and brought the number of substantial steel towers with enclosed cabs to 36 of the 52 stations. In 1920, an Osborne Fire Finder, a type of panoramic map for use with an alidade was installed in the cab. The observer communicated by a magneto telephone over a party line well into the thirties. The mountain became a popular climb for families during the 1920s.

First observer lived in log cabin next to the wood tower, but in 1923 the State built a 12' x 18' cabin. The site of the original observer's cabin is marked by a trace of foundation material situated immediately north of the tower. The existing observer's cabin, erected c. 1948, is situated on the summit just to the northwest of the tower. This modest, gable-roofed one-story rustic cabin with integral porch faces east. The walls are clad with rough-sawn, waney-edge siding and is roofed with asphalt shingles. The front entrance has a plain plank door. When the new cabin was built, the old one was temporarily used as a garage, when observer drove to the top in a Jeep. The old cabin is reported to have collapsed in the early 1960s. To the north of the old cabin foundation are two 55 gallon drums buried and covered with an aluminum door. They are believed to have been used by the observer as a root cellar in the past. A privy of more recent construction is sited near the southeast of the tower.

A jeep trail previously provided access to the summit across private land, but it is now overgrown and indistinguishable. A foot trail leads away from the tower toward the northwest, descending the mountain to the trailhead.

The Mt. Arab Forest Fire Observation Station was used continuously until its closure at the end of the 1988 season. Since the establishment of an observation station at Mt. Arab, at least seven people were appointed observers over a seventy-nine year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer's cabin.

Mt. Arab is the only fire tower in the town of Piercefield and one of two interior towers (including relocated Tooley Pond Mt. fire tower on Cathedral Rock) in St. Lawrence County. The cabin is the only observer's cabin in St. Lawrence County.

Maintenance Needs:

Status - Tower adopted and restored and is in good condition.

Fire Tower - Cab open. The tower is intact and was recently subject to extensive repairs including as a joint project between NYSDEC and Friends of Mt. Arab, a not-for-profit group. The tower has received a new roof, windows, and floor in the cab. Windows have new large plexiglass panes that can be opened for better views. Cement footings are secure. The stair treads were replaced with new wood matching the dimension of the original treatment. In 2006, the replacement of all wooden structures on the tower was completed. The safety screen along stairways and landings has been partially repaired. The FOMA installed a Osborne Fire Finder in the tower cab on Mt. Arab during the summer of 2009.

Cabin - Repaired in 1999. Work on the cabin completed with the interior restored similar to what it was in the 1950's. Used as interpretive exhibit with various displays installed in the spring.

Trail - Extensive trail work in 1999 by Friends of Mt. Arab volunteers and SCA work crews. A detailed trail inventory and erosion control structures such as rock water bars and stepping stones were installed and maintained as an ADK trail project. The ADK Pro crew worked for 2 weeks under contract during the summer of 2007 on trail rock work, including steps and waterbars. Boy scouts from Massawepee work on the trail occasionally and visit the fire tower frequently. The county Youth Conservation Corps also performs some trail maintenance. Work completed on the "Interpretive Trail" and brochure developed identifying various geological formations and vegetation along the trail.

Summit - A seismic station is located near the summit under a temporary revocable permit issued to SUNY Potsdam for research purposes. Near the summit is a wooden bench dedicated via a brass plaque to a couple who found the mountain for someone in 1929.

Access: Mt. Arab is located in the northern part of the Adirondack Park, west of NYS Route 30 and the hamlet of Tupper Lake and south of NYS Route 3.

Trail/Trailhead Information: **Mt. Arab Trail** (Class IV, Red marker color) - 1.1 miles From Eagle Crag Lake Road trailhead to the fire tower and summit. Vertical ascent, 760 feet. The trail to the summit of Mt. Arab starts on private lands, secured by an easement.

Parking capacity (Eagle Crag Lake Road) - 10 vehicles, plowed in the winter.

Staffing: This tower ceased operation at the end of the 1988 season. In the summer months, a summit guide is hired to educate visitors and provide information. With DEC permission the observer's cabin on Mt. Arab has been occasionally used by summit guides on nights between days on duty. Sign at trailhead lets public know when summit guide is on duty.

Use Data:	A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 670 - 1450 people who climbed Mt Arab annually during this time period. Occasional camping occurs at the designated site near the fire tower on Mt. Arab. A trail register was installed in mid-July of 1998, with approximately 2,200 people signing the register over the period from July 21 to the third week in October. Recent trail register figures range from 4,000 to 5,000 visitors a year. Recent efforts to study register compliance have been conducted in 2003. ESF and Cornell University gathered information in visitor use studies and developed reports on visitor use, user characteristics, and user attitudes and preferences. These surveys included the fire tower trail to the summit of Mt. Arab. The tower is listed as part of the Fire Tower Challenge.
Summit/Tower Views:	Limited views from the open cliffs. Vegetation consists of hardwoods such as mountain ash and black cherry. The tower stands in a clearing on exposed ledge at the summit. Summit guide on the mountain every day of the week during the summer months. According to the brochure, “Looking to the east from the tower you have great views of the Village of Tupper Lake with Mt. Morris and the High Peaks beyond. To the south you can view Mt. Arab and Eagle Crag lakes, including portions of the Adirondack railway. Massawepie and further portions of eastern St. Lawrence County may be seen to the west. To the north you will see the village of Piercefield in the Raquette River valley and Mt. Matumbla, the highest point in St. Lawrence County.

According to McMartin “South are the seemingly endless stretches of forested ridges and intervening streams and rivers. The flatland of marshes, bogs, peatland, and swamps spread out to the far west and north, punctuated by lakes and ponds and meandering rivers.” The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Sponsor/Cooperator: On Earth Day 1997, the St. Lawrence County Environmental Management Council convened a group of concerned citizens and interested organizations to discuss the deteriorating conditions of the Mt. Arab summit facilities and the feasibility of undertaking a restoration project. With the support of St. Lawrence County, the Town of Piercefield, the DEC, the Adirondack Mountain Club, the Adirondack Architectural Heritage and others , the "Friends of Mt. Arab" was formed. Restoration of the tower, in cooperation with NYSDEC, began in 1998. The Friends of Mount Arab raise money through private and corporate donations, sale of patches and fundraising activities.

In 2007, an AANR amendment was issued to the Friends of Mt Arab to conduct fire tower repairs. Associated Group: Friends of Mt Arab.

Name:	**Owl's Head Mountain Fire Tower**
Location:	Hamilton County. Town of Long Lake: at the summit of Owl's Head Mountain (USGS elevation 2,780 feet). State land classified as Sargent Ponds Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Northville, NY. Access trail and fire tower are owned by the State.
Facility Description:	Steel Aermotor LS40 tower, no guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot/snowmobile trail.
Historical Significance:	This tower appears on the National Historic Lookout Register and New York State Register of Historic Places; it is eligible for listing on the National Register of Historic Places. Original wood tower erected in 1911 in response to a disastrous series of forest fires in the Long Lake area; Present tower erected in 1919. In 1929 the state constructed the observer's cabin a short distance below the summit. The observer's cabin was burned in 1979 with only the footings and a sign to indicate the location of the site. The Owl's Head Mountain Forest Fire Observation Station was used until its closure at the end of 1970. It was not staffed in 1969. Since the establishment of an observation station at Owl's Head Mountain, at least 22 people were appointed observers over a sixty year period. The Owl's Head Mountain fire tower is one of three fire towers in the town of Long Lake and one of eight interior towers (five open to the public) in Hamilton County.
Maintenance Needs:	Status - Tower restored. The Owl's Head Mountain Fire Tower was reopened in 2002 after a rehabilitation by DEC and Friends of Owl Head Fire Tower.

Fire Tower - Cab is open. The tower is intact and was recently subject to repairs including replacement of stair treads and cab floor. The frame and cab have been painted and fencing has been replaced. Some repairs have been made to the footings.

Trail - Some maintenance work through AmeriCorp volunteers of the Student Conservation Association.

Summit - No maintenance needs.

Access: Owl's Head Mountain is located just west of the geographic center of the Adirondack Park, west of NYS Route 30 and the hamlet of Long Lake, and north of NYS Route 28. The parking area is plowed in the winter.

Trail/Trailhead Information: **Owl's Head Mountain Trail** (Class IV, Red and snowmobile markers) - 3.1 miles
From Endion Road to fire tower and summit. Vertical ascent, 1,150 feet. The Lake Eaton Campground provides alternative access to the fire tower.

Parking capacity (Endion Road) - six vehicles, plowed in the winter.

Staffing: This tower ceased operation at the end of the 1970 season.

Use Data: In 1920, 671 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 219 - 1,222 people who climbed Owl's Head Mountain annually during this time period. An examination of the 2003 register pages for the Owl's Head Mountain Trail indicated that at least 1,588 people utilized this trail.

The tower is listed as part of the Fire Tower Challenge.

Summit/Tower Views:	Area of bedrock. Summit is tree covered with partial views from ledge areas. From the summit area there are views of Kempshall, Blue, Wakely, and Snowy mountains. Parts of Long Lake, Forked Lake, and Raquette Lake are visible along with some of the High Peaks to the northeast.
Sponsor/Cooperator:	Friends Group disbanded. AANR has expired. Member of the ADK Cold River chapter has shown an interest in developing a nature trail brochure for the Owl's Head Mountain trail and summit area.

Name:	**Pillsbury Mountain Fire Tower**
Location:	Hamilton County. Town of Arietta: at the summit of Pillsbury Mountain (USGS elevation 3,597 feet). State land classified as Jessup River Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Northville, NY. Summit, access trail, fire tower, cabin, and radio repeater are owned by the State. Summit area acquired during the Perkins Clearing land exchange in 1983. Lyme Adirondack Timberlands LLC owns the land where a portion of the access road is located. Deeded ROW over this land provides access to DEC trailhead.
Facility Description:	Steel Aermotor LS40 tower with 16' x 16' base, no guy wires. 60 feet high with nine flights of stairs to floor in 7' x 7' tower cab. The tower houses and supports a two-way radio repeater. Equipment includes a solar panel on the exterior South wall of the tower cab, whip antenna mounted to the tower cab via a heavy metal bracket and the radio equipment and batteries which are housed within the tower cab. Associated wood observer's cabin is 20.5' long x 16' wide with a 16' x 7' open porch. Additional two wood outbuildings consisting of a 8.5' long x 6.5' wide tool shed and the remains of 6.5' wide x 6.5' long woodshed. Access is by DEC foot trail or administrative use of helicopter landing area.
Historical Significance:	This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The boundary for the nominated area includes the existing oval shaped clearing of 94' x 130' which contains the fire tower, observer's cabin and shed. Contributing resources: 2 (tower, observer's cabin and shed) Non-contributing resources: 0

Original wood tower made from mountain top timbers erected in 1918 by the land owner of the time, the Champlain Reality Company. The station was operated by the company in conjunction with Forest Fire Control as a secondary station during periods of dry weather. A log cabin was built in 1919 to house an observer. The specific site of this cabin has not been documented. In 1924 the Champlain Reality Company purchased the steel tower and delivered the pieces to the top of Pillsbury Mountain. The State erected the fire tower and took over operation of the facility. In 1927, the State constructed the standard 12' x 16' cabin. This observer's cabin was replaced by a larger cabin (Model 1941) at the same location in 1950. Even though the existing cabin is not the original cabin, the structure was an essential component in the operation of the fire tower and provided living quarters for the forest fire observer for many years. An unmarked trail below the summit leads to the old spring used by the tower observer when the tower was manned.

The Pillsbury Mountain Forest Fire Observation Station was officially decommissioned in 1983. In 1984, forest rangers installed a solar powered two-way radio repeater on the Pillsbury Mountain fire tower, and the site was incorporated into the NYS Forest Ranger radio network.

The Champlain Reality Company was one of several private interests that established forest fire detection stations on their own lands. These privately owned and operated fire detection stations worked in conjunction with the State fire towers in providing triangulation assistance when fires were spotted.

Of these private fire towers, which came into ownership of the State of New York, the Pillsbury Mountain tower is the sole surviving facility documenting the resolve of private Adirondack land owners to protect the value of their land, timber and water shed from fires.

In its 1970 report "The Future of the Adirondack Park" the Temporary Study Commission recommended that there should be a detailed appraisal of the Perkins Clearing area to determine the feasibility of a land exchange proposal to help to eliminate a long-standing checkerboard pattern of private and public lands. Negotiations determined that NYS would gain ownership of Pillsbury Mountain and the northerly valleys of the Perkins Clearing area and International Paper Company would gain ownership of the southerly valleys. This provided for ease in administration through separation of the two ownerships by terrain and natural features. The Constitutional amendment allowing exchange of International Paper and Forest Preserve lands was approved in 1980. The official land exchange did not occur until 1983. After public hearings, 2,240 acres of the least sensitive portion of the newly consolidated State lands were classified as wild forest. This allowed vehicular access to the Pillsbury Mountain trailhead and retention of the tower. The remainder of the property was classified as wilderness and added to the West Canada Lake Wilderness.

The Pillsbury Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1983 season. Since the establishment of an observation station at Pillsbury Mountain, at least 25 people were appointed observers over a sixty-four year period when the State staffed observers between 1920 and 1983. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer's cabin.

The Pillsbury Mountain fire tower is the only fire tower in the town of Arietta and one of eight remaining interior towers (five open to the public) in Hamilton County. The cabin is one of three cabins on Forest Preserve land in Hamilton County.

Maintenance Needs:

Status - Partially restored. In 2000, the facilities received minor maintenance and the cabin was secured to help deter vandalism. Additional work to replace two of the four roof panels and repair window panels was conducted in 2003. In 2005, minor restoration work was performed through AmeriCorp volunteers of the Student Conservation Association.

Fire Tower - Cab is locked containing windows boarded up with plywood (having peep holes). One of the cement footings has been reported as damaged. The tower was last painted in the late 1970's and needs to be painted. The fencing is rusting and in some places is missing. Roof may need to be replaced along with cab floor. Pending available funding to fix the tower, a map table will be installed in the cab and the boarded up windows will be replaced with a galvanized steel grid system.

Communication Tower/Antennae - The DEC uses this tower as a radio repeater station, powered by a solar panel mounted on the tower side. Power supply is battery charged by solar. No known maintenance needs. New repeater proposed for installation in 2010, to be housed in a secure metal box in the tower cab.

Cabin - The observer's cabin has wood siding and a cedar shake roof, with the windows and door boarded up. The door needs to be better secured to allow access while preventing vandalism. The porch is dilapidated. While the outside appearance of the cabin appears weathered, the interior of the structure is mostly intact. The cedar shake roof is in poor condition. The structure has been used to store construction materials with various types of debris such as scrap lumber and wire that need to be removed A small shed is located next to the cabin that is starting to deteriorate. Concrete block foundations support both the cabin and shed. Late in the summer of 2008, vandals damaged the roof and tore a hole in the side of the observer's cabin. The Friends of the Forest at Pillsbury Mt. repaired to the roof and cabin side within a couple of weeks. Later in the Fall, the group wire brushed and stained almost the entire cabin, with the exception of the area under the porch. Additional repairs to the porch and roof are anticipated in 2010, pending available funding.

Helicopter Landing Area - This area consists of an undeveloped natural rock outcropping with painted X on the rock surface. A small amount of land adjacent to the landing spot and approach and departure paths is kept in a brush and tree free condition by removal of all vegetative obstructions that may encroach on the rotor blades. Maintenance of a cleared area conducted as needed. In addition to repeater and tower maintenance flights, the site has been used in the past for occasional rescues.

Trail - Minimal existing trail improvements with the exception of the Miami River bridge. Minor erosion on some of the steeper grades along with occasional wet trail sections. Some light trail work has been conducted by the Friends of the Forest at Pillsbury Mountain. The ADK Pro crew worked under contract during the summer of 2008 on trail rock work, including 16 rock and earthen waterbars. Additional trail needs include additional waterbars and ditching and a possible relocation of the last steep section to summit to avoid the fall line.

Summit - The summit is relatively flat consisting of a small clearing with exposed bedrock surrounded by a dense forest made up mostly of Balsam fir with scattered Yellow Birch and Mountain ash. Occasional fire rings.

Access: Pillsbury Mountain is located in the south central part of the Adirondack Park, west of NYS Route 30 between the hamlets of Indian Lake and Speculator. From the State highway a combination of town highway, Lyme easement roads, and DEC open motor vehicle road are used to reach the DEC trail head.

Trail/Trailhead Information: **Pillsbury Mountain Trail** (Class-IV, Red markers) - 1.6 miles from the Old Military Road trail head parking area to the fire tower and summit. Vertical ascent, 1,417 feet. The trail follows the border between the Jessup River Wild Forest and the West Canada Lake Wilderness.

Parking capacity (Old Military Road) - 15 vehicles, not plowed in the winter. Shared parking also providing access to West Canada Lake Wilderness Area. In the past, the portion of the access road over State lands was rough and passable only by high clearance or four-wheel drive vehicles. Recent road work in 2007, improved the access road to make it more passable. The town highway, interior access roads, and trailhead parking are not plowed in the winter and are closed during the Spring mud season, thereby restricting motor vehicle access during portions of the year. Some people park on easement lands near the Sled Harbor gravel pit, to avoid driving the last section to the trail head. Privy located at trailhead. Alternate parking available on adjacent easement lands. Access roads are generally closed to motor vehicles between December and May, which limits public use until after "mud season".

Staffing: This tower ceased operation at the end of the 1983 season. While there is an existing AANR for maintenance of the site, no summit guide program currently exists for this location.

Use Data: In 1924, fifty visitors signed the trail register. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 72 - 140 people who climbed Pillsbury Mountain during this time period. While a range of between 1,300 to 1,800 people sign the register at the trailhead annually, a portion of this use is by people entering the West Canada Lake Wilderness. Annual use of the Pillsbury Mountain trail based upon an examination of register pages for two different years indicated that approximately half the registered users hike to the summit. Public use appears to be staying at approximately the same level. In 2002, the highest use recorded during the year occurred in July and August, with 200 - 300 registered people a month. Use was significantly lower in May, June, September, and October ranging between 60 - 90 registered people a month. Occasionally, large groups climbed the mountain with group sizes ranging from 10 to 15 people.

The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .

Summit/Tower Views: Area of bedrock. Summit is tree covered with no views. Cab closed to the public, but the tower is still used by the public to the top landing. From the tower cab there are views of the High Peaks, the Blackhead Range in the northern Catskills, Mt. Equinox in Vermont, and Mt. Greylock in Massachusetts. Numerous fire towers mountains such as Wakely, Blue, Snowy, Vanderwacker, Crane, Hadley, Hamilton, T-Lake, Fort Noble and Woodhull are also visible. The Pillsbury tower is the only fire tower facility that has a direct line of site of the West Canada Lakes Wilderness. According to McMartin, “from the tower you can see a panorama that begins with the IP lands to the southeast, and going clockwise, the newly acquired Little Moose Lake lies west of south, Sampson Bog is more distant. Whitney Lake is directly west, with South Lake just in front of it and to the left and Mud Lake to the right. You can spot the slide on South Lake Mountain and the range of cliffs on West Lake Mountain. North of West Lake Mountain is Kitty Cobble; together they are the two highest peaks on the western horizon. Only a couple pieces of the Cedar Lakes are visible, but the massif of Little Moose and Manbury mountains behind clearly show three sets of cliffs. To the north lies the Cedar River Flow with the Sugar Loaf Mountain clearly defined in the valley beyond and Wakely to the west of it. To the northeast, Snowy’s cliffs often glisten in the sun.”

Sponsor/Cooperator: Restoration group underway. In 2005, an AANR was issued to Friends of the Forest at Pillsbury Mountain. Associated Group: Friends of the Forest at Pillsbury Mountain.

Name:	**Poke-O-Moonshine Mountain Fire Tower**
Location:	Essex County. Town of Chesterfield: at the summit of Poke-O-Moonshine Mountain (USGS elevation 2,170 feet). State land classified as Taylor Pond Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Ray Brook, NY. Access trail and fire tower are owned by the State. The fire tower sits in Lot 56 (200 acres) that was acquired by a tax sale in 1876. An additional 1,882 acres surrounding the mountain were acquired between 1931 and 2004. A recent acquisition places the entire fire tower access road in State ownership.
Facility Description:	Steel Aermotor LS40 tower, no guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail. Administrative use of fire tower access road. .
Historical Significance:	This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The boundary for the nominated area is drawn to include a 500 foot square area surrounding the tower and a 15-foot buffer from the centerline on either side of the hiking/jeep trail from the base of the mountain to the tower. Contributing resources: 4 (tower, spring box, jeep trail, observer's cabin ruin) The mountain may have gotten its name from the word “poke,” a term once used to refer to a “bag of corn whiskey”. Available information (McMartin, 1987) suggests that the name may have originated from Algonquin words “Pohqui Moosie” which mean "broken" and "smooth" possibly referring to the summit rocks and broken slabs on the southeast side. The summit was used as Station #26 during the Verplank Colvin survey when a high wooden signal tower was erected near the site of the present tower.

A wooden fire tower and trail to the summit were established on the mountain in 1912. This fire observation station was one of thirteen new stations added to the system during the fourth year of the State's program, bringing the total number of stations to forty-nine. The steel tower was erected in 1917 and is typical of the "heavier type" structures with integral staircases built by the Conservation Commission. The tower was one of thirteen new steel towers that year and one of the first twelve described as a heavier type equipped with steel stairs.

In 1920, the station was the first in the New York State system to be equipped with an experimental Osborne Fire Finder, a type of panoramic map developed by the U. S. Forest Service for use with an alidade.

The station was equipped with a small observer's cabin south of the fire tower in 1924 consisting of a frame building constructed on a rubble stone footing. In 1936, it was replaced with a new observer's cabin, one of six erected that year with the possible participation of the CCC. The cabin was built on the north side and terminus of the jeep road a little more than half way up from the base of the mountain. The cabin ruin consists of a 16" wide mixed rubble foundation raised approximately 12" above grade, the remains of the chimney stack of matching masonry, and a charred floor beam in situ. The foundation measures approximately 16' east-west by 27' north-south and is divided into three cells. The south and center cells are enclose shallow crawl spaces. The north cell, open at the north room, is excavated to a depth of approximately 4' and is backfilled with site related debris. Two steps are situated on the south elevation at the east end. The chimney, rising to a height of approximately 15' is centered on the wall dividing the south and center cells. It contains a segmental-arch hearth lined with firebrick and a stove thimble above. The water source for the cabin site was a spring situated approximately 500' to the east of the intersection along a footpath. The spring is housed in an old spring box. Although the cabin and woodshed were destroyed by fire in 1991, its rubble foundation and chimney stack remain standing.

A lean-to is situated approximately 180' south of the cabin site along the old jeep trail descending the mountain. The lean-to, sited north of the jeep road, is of standard plan and constructed of logs. An open fireplace is sited between the lean-to and the jeep road.

The Poke-O-Moonshine Mountain Forest Fire Observation Station was used continuously until its closure at the end of 1988. Since the establishment of an observation station at Poke-O-Moonshine Mountain, at least 21 people were appointed observers over a seventy-seven year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with associated structures that were possibly upgraded by the CCC in 1936.

The Poke-O-Moonshine Mountain fire tower is the only fire tower in the town of Chesterfield and is one of six interior fire towers in Essex County.

Maintenance Needs:

Status - Adopted and restored. The Poke-O-Moonshine Mountain Fire Tower was reopened in 1996 after a partial restoration by DEC and Friends of Poke-O-Moonshine.

Fire Tower - Cab is open. In January 1998, an engineering assessment report of the tower was completed. During the months of July and August, 1998, the deteriorated wood steps and landings were removed and replaced with pressure treated lumber. The tower cabin windows were removed, repaired and replaced later that year. The balance of the work required under the engineering assessment was completed in subsequent years.

Lean-to - A recently constructed privy is located approximately 35' northwest of the lean-to.

Trail - Ice storm damage in 1998 that blocked the trail and old jeep road were removed by a volunteer work crew from ADK and inmate crew from Moriah. Volunteers have put up 11 interpretive stops at regular intervals along the trail, and the accompanying pamphlet tells its readers about the natural history and wildlife that you can expect to encounter along the way.

Summit - Two benchmarks are embedded in the exposed ledge immediately east of the tower. The summit has small signs in grassy areas requesting hikers to stay off recent reseeding locations.

Access: Poke-O-Moonshine Mountain is located at the northeast end of the Adirondack Park, generally west of NYS Route 9 and the Northway and south of NYS Route 9N. The trailhead is less than three miles south of Exit 33 on the Northway.

Trail/Trailhead Information: **Poke-O-Moonshine Trail** (Class IV, red marker) - 1.2 miles from campground to fire tower and summit. Vertical ascent, 1,280 feet. Two routes up the mountain converge at the site of the observer's cabin ruin. The older route, originates at a foot trail head in Poke-O-Moonshine Campground. The old jeep road follows a meandering route of gentle ascent beginning south of the campground on NYS Route 9.

Parking capacity - undetermined number of vehicles in campground parking, not plowed in the winter. The Poke-O-Moonshine campground provide parking and access to the fire tower when open from mid-May until Labor Day. The recent State acquisition of adjoining private land may result in a new trailhead and parking area for the Poke-O-Moonshine Trail that will avoid the need for the public to use the Poke-O-Moonshine Intensive Use Area Campground.

Staffing: This tower ceased operation at the end of the 1988 season. In the summer months, a summit guide is hired to educate visitors and provide information. The Poke-O-Moonshine committee also schedule volunteers to cover busy weekends when the summit guide is absent. The summit guide has utilized the lean-to or a site at the DEC's public campground when working.

Use Data: In 1920, 764 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 310 - 890 people who climbed Poke-O-Moonshine annually during this time period.

A tower guide, renovations to the tower, short distance from the road, and its spectacular cliffs have added to the attractiveness of this destination. Recent trail register figures range from 3,000 to 5,000 visitors a year, with July and August reported to be the busiest times.

The tower is listed as part of the Fire Tower Challenge. Other activities associated with the mountain include rock climbing and camping. In some cases, summit users on Poke-O-Moonshine camp at the adjacent DEC campground or use the lean-to near the old cabin location.

Summit/Tower Views: Area of bedrock. Summit is tree covered with open rock areas with views. The tower stands alone in a clearing on exposed ledge at the summit. The east face of the mountain has a 1,000 feet of cliffs that are easily recognized from NYS Route 9 and Interstate 87. According to McMartin, there are views of "Lake Champlain and the Green Mountains to the east. Derfield Mountain can be seen in the southwest and beyond it the open ridges of the Jay Range." Additional views to the southwest include Whiteface Mountain and parts of the Adirondack Northway are visible to the north and south. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Sponsor/Cooperator: Restoration group established. In late 1995, NYSDEC made public its intention to disassemble and remove the Poke-O-Moonshine tower. The Adirondack Mountain Club, Adirondack Architectural Heritage and Town of Chesterfield organized a meeting of concerned individuals with NYSDEC in early 1996 resulting in the establishment of the Friends of Poke-O-Moonshine. The group succeeded in convincing NYSDEC to keep the tower, and with the cooperation of NYSDEC to launch a program of restoring the tower, improving the trail, and developing an educational interpretive program. The DEC has funded and helped the Friends of Poke-O-Moonshine to design a set of panels, now installed in the tower cab, consisting of panoramic photographs which identify major features of the surrounding landscape (mountains, water bodies), with brief descriptions of historic events interposed. Associated Group: Friends of Poke-O-Moonshine.

Name:	**Rondaxe (Bald) Mountain Fire Tower**
Location:	Herkimer County. Town of Webb: at the summit of Bald Mountain (USGS elevation 2,350 feet). State land classified as Fulton Chain Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 6. Herkimer, NY. Access trail and fire tower are owned by the State.
Facility Description:	Steel Aermotor LS40 tower, no guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail.
Historical Significance:	This tower appears on the National Historic Lookout Register and New York State Register of Historic Places; eligible for listing on the National Register of Historic Places. Early trappers and visitors called it Pond Mountain named after the small waterbody at the base of the southern face. Later, it was called Bald Mountain, due to its rocky appearance. The open summit was used by Verplank Colvin during his survey work since it was the only bald summit in the western Adirondacks. In 1876, he described the mountain: "Beyond the forest at the foot of Fourth Lake, arose, like a battlement, a mountain crest all devoid of timber; its black front frowning southward upon the valley of the lakes...To avoid the common and indefinite name of 'Bald Mountain,' which is given to so many of the cleared peaks I now named this Mount St. Louis; a party from that western city having for many seasons annually made their camp on the lake at the foot of the mountain."

It's believed that the State named the mountain "Rondaxe" in 1912 after a nearby lake to prevent any confusion between this mountain and the Bald Mt. in Lewis County, only 23 miles to the northwest Two Bald mountains could not exist as fire observation stations so the name Rondaxe Mt. was given to the Bald Mt. near Old Forge.

Original 20' wood tower erected in 1912; Present tower erected in 1917. The first observers first lived in a tent on the summit. A log cabin was built around 1919 and later replaced with a larger cabin in 1927. The original observer's cabin was about 100 ft. west of the fire tower. This overnight cabin was used by the observer along with the original trail from Old Forge. This trail went straight up the mountain from NYS Rte 28, but this route has been officially closed by the Department. The original trail, early 1900's started somewheres near Bald Mt. Pond, went north to the top of the ridge, then easterly along the top of the ridge to the tower. After the cabin was removed a large shed was maintained for storage of fire suppression tools, extra lumber, and hardware. Occasionally the observer would use the shed to get out of a lighting storm. After 1990, the storage shed received increased vandalism and was eventually removed.

The Rondaxe (Bald) Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1990 season. Since the establishment of an observation station at Rondaxe (Bald) Mountain, at least 29 people were appointed observers over a seventy-nine year period. The fire tower on Rondaxe (Bald) is unusual in that it had three women observers. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower.

Rondaxe (Bald) is one of three fire towers in the town of Webb and one of three interior towers in Herkimer County.

Maintenance Needs:

Status - Adopted and restored. The Rondaxe (Bald) Mountain Fire Tower was reopened in 2005 after a rehabilitation by DEC staff, Genesee Valley Chapter of ADK, and Friends of Bald Mt.

Fire Tower - Cab is open. The tower is intact and was recently subject to repairs including replacement of stair treads, landings, and security fencing. Work in 2007 consisted of re-staining of wooden stairs, platforms, and cab flooring, and painting of the cab. No known structural concerns with the tower, footers or anchors. Footers had concrete work done by volunteers during restoration. Cab is in good shape but does have increased graffiti. There are no windows in the cab. Map table in cab, with map made of an all-weather composite material that will resist scratching and will remain in the tower year-round.

Trail - The trail follows narrow ridges of rock near the summit. In some locations the trail is worn to bedrock or shows signs of exposed root systems. Trail condition to the summit is good. Trail markers are replaced annually by Assistant Rangers but disappear regularly. The open rock surfaces can be slippery during periods of wet weather. During the winter months ice conditions are present on some of the exposed rock.

Summit - There is a Balancing Rock on the south west end of the ridge about 200 yards from the tower. There is no official trail to the rock but there is a well defined herd path. This can be a popular location.

Access: Rondaxe (Bald) Mountain is located in the south west part of the Adirondack Park, near the popular Old Forge tourist area. The mountain is north of NYS Route 28, between the communities of Inlet and Old Forge.

Trail/Trailhead Information: **Rondaxe Mountain Trail** (Class V, Red markers) - 1.0 miles from Rondaxe Road trailhead to the fire tower and summit. Vertical ascent, 390 feet. New kiosk installed in 2008.

Parking capacity (Rondaxe Road)- 30 vehicles, half of the parking area is plowed in the winter. The parking area was doubled in 2006 to reduce the amount of cars parked on Rondaxe Road. Although this did make an improvement to the parking there are still days when the lot is full and parking occurs along the road.

Staffing: This tower ceased operation at the end of the 1990 season. In the summer months, a summit guide is hired to educate visitors and provide information. During the summers of 2005 and 2006, the Friends of Bald (Rondaxe) Mountain funded summit guides with support from the Central Adirondack Association (of local businesses). Their non-profit status is still temporarily provided by AARCH, while the Town of Webb provided book-keeping services and insurance. There is no longer a summit guide on Rondaxe (Bald) Mountain during the summer. Assistant Rangers are tasked with performing a daily patrol of the summit.

Use Data: Easy access to the trail head from a popular tourist location, relatively short hike, and an excellent view help to make Bald (Rondaxe) Mountain one of the most popular summits and the most-visited fire tower lookout in the Adirondacks. In 1920, 5,878 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 6,373 - 18,242 people who climbed Bald (Rondaxe) Mountain annually during this time period.

Recent trail register figures range from 15,000 to 23,000 visitors a year. Information for 2006 indicated 22,015 people signed the trail register. According to the area forest ranger, many hikers are part of family groups visiting the Old Forge area. Several school groups make trips up the mountain each year. Summer camps also make a trip to the fire tower part of their curriculum in the summer. Most public use occurs in the summer and fall months during peak leaf color. However, with snowshoeing increasing as a winter sport there is increasing use during snow season. Occasional rappelling from the face of the mountain on the south west end near the Balancing Rock. The tower is listed as part of the Fire Tower Challenge.

Summit/Tower Views:	Large open areas of bedrock. Summit is lightly tree covered with views of First through Fourth Lakes of the Fulton Chain to the south and east, part of Little Moose Lake to the south, and Blue Mountain to the northeast. More extensive views are possible from the cab, including views of several High Peaks in the distance. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.
Sponsor/Cooperator:	Restoration group established. In May of 2002, members of the Rochester based Genesee Valley Chapter of the Adirondack Mountain Club organized a meeting in Old Forge, to form a committee for restoring the fire tower. A committee was formed to begin the task of restoring the tower to its original condition, developing an educational component that highlights the tower's human and environmental history, and to recruit partners who would lend manpower and financial support for the project. An AANR has been issued to Friends of Bald Mountain. In addition to restoring the tower, the committee plans to work with local DEC personnel on trail maintenance, improve signage, and an educational component that teaches good conservation practices including fire prevention. Associated Group: Friends of Bald Mountain.

Name:	**Snowy Mountain Fire Tower**
Location:	Hamilton County. Town of Indian Lake: at the summit of Snowy Mountain (USGS elevation 3,899 feet). Part of summit and upper portion of trail is State land classified as Jessup River Wild Forest. Beginning of hiking trail is State land classified as West Canada Lake Wilderness.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Northville, NY. Summit, access trail, and fire tower are owned by the State. Summit area acquired between 1877 and 1885.
Facility Description:	Steel Aermotor LS40 tower with 16' x 16' base, no guy wires. 45 feet high with six flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail.
Historical Significance:	This tower does not appear on the National Historic Lookout Register but is on the New York State and National Registers of Historic Places. The boundary is drawn to include a 500 foot square area surrounding the tower, and the 3.9 mile trail leading up to the tower from the base of the mountain. Contributing resources: 3 (tower, trail, observer's cabin ruin) Non-contributing resources: 1 (privy) Snowy Mountain, (earlier names were Squaw's Bonnet and Squaw Mt. Bonnet), dominates the local landscape and was first included in a map in 1868. During the 1872 and 1885 topographical expeditions by Verplanck Colvin, a triangulation vertex was established on the summit. The mountain was also known as Devil's Ear and Baldface prior to the standardization of place names resulting from the Colvin survey.

The Snowy Mountain Fire Observation Station was established in August, 1909, and was one of the first five stations in the Adirondack Park the others being established on Whiteface, Mount Morris, West, Hamilton, and Gore mountains. The station had a 15-foot wooden tower providing 40 miles of view to the east, 25 to the west and north, and 20 to the south. In the annual report for 1909, it was reported that 11.5 miles of telephone line were connected from the summit of Snowy Mountain in August to Indian Lake and additional lines had been purchased for connects to Blue Mountain Lake and North Creek.

The original wooden tower on Snowy Mountain was replaced in 1917 with a steel tower, which initially was 22 feet tall. It was one of 13 new steel towers that year and one of the first 12 described as a heavier type equipped with steel stairs. The steel tower reached its height in two stages. The first steel tower was 22 feet. It was typical of the Aeromotor Corporation “heavier type” structures with integral staircases built by the Conservation Commission, consisting of a square steel and glass “cab” enclosure for observation erected atop a riveted and bolted frame of angular steel. In 1920, an Osborne Fire Finder panoramic map for use with alidade was prepared and installed in the cab. In 1933, the tower was increased in height by approximately 20 feet (making it a 45-foot tower) due to high growth attained by surrounding trees. Also of historic interest are two benchmarks embedded in the exposed ledge immediately east of the tower.

Three observer cabins have been built at this general location. Around 1909 the state constructed a log cabin for the observer on the summit. Later a model 1922 cabin and model 1941 cabin were constructed replacing the earlier structures. In 1990, the observer's cabin was removed from Snowy Mountain leaving an open grassy clearing.

The Snowy Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1971 season. Since the establishment of an observation station at Snowy Mountain, at least 18 people were appointed observers over a sixty-three year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower.

Snowy Mountain is one of two fire towers in the town of Indian Lake and one of eight interior towers (five open to the public) in Hamilton County.

Maintenance Needs:

Status - Tower restored. The Snowy Mountain fire tower was refurbished in July of 2001 with a joint effort of DEC, State Police aviation, and Student Conservation Association members. Later that year the cab was painted inside and out, with the rest of the tower painted in 2002. Due to the remoteness of Snowy Mountain, all the materials and equipment were flown to the summit.

Fire Tower - Cab is open. Concrete footings on the stairs have been repaired, all the stairs, landings, and floor in the tower were replaced with pressure treated wood. A new roof was bolted in place and the windows were barred with angle iron and left open. Fencing was installed around the entire staircase.

Trail - In 1988, professional crews and volunteers from the Adirondack Mountain Club worked with DEC to correct erosion problems on the lower portions of the Snowy Mountain Trail. Numerous existing trail improvements consisting of foot bridges, drytread, waterbars, stone steps and rock staircases. The upper section of trail near the summit has worn through the thin soils to bedrock. This steep section has eroded from five to twenty feet in width and down to bedrock in several places. There are islands of soil and vegetation with 30 to 40 degree slope. The trail edges are one to three feet in height and are losing lateral support due to rapid water runoff and the parallel herd paths. In order to lessen erosion on the upper part of the trail, various trail rehabilitation options are proposed in the UMP. To complete the stabilization and reconstruction of the Snowy Mountain trail, the upper portion of the trail will be relocated, if possible. If relocation of the trail is not feasible, the Department will establish switchbacks, rock steps and drainage control devices (wood or rock waterbars, etc.) on the lower part of the top section. The use of low angle wooden ladders will be used on the summit cone only if no other practical solution is possible.

Helicopter Landing Area - The existing clearing at the site of the observer's cabin is a stable landing area. A small amount of land adjacent to the landing spot and approach and departure paths is kept in a brush and tree free condition by removal of all vegetative obstructions that may encroach on the rotor blades. In addition to tower maintenance flights, the site has been used in the past for occasional rescues.

Summit - The area between the summit and the observer's cabin clearing contains several herd paths

Access: Snowy Mountain is located slightly south of the geographic center of the Adirondack Park, south of NYS Route 28, west of NYS Route 30.

Trail/Trailhead Information: **Snowy Mountain Trail** (Class-IV, Red markers) - 3.9 miles

From NYS Route 30 to the fire tower and summit. Vertical ascent is 2,106 feet, which is greater that many of the High Peaks. The first mile of trail is within the West Canada Lakes Wilderness Area. The Jessup River Wild Forest portion of the trail continues to the fire tower and 3899' summit.

Parking capacity (NYS Route 30) - 13 vehicles on paved shoulder of DOT lands, plowed in the winter.

Staffing: This tower ceased operation at the end of the 1971 season.

Use Data: Ranked the 50th highest peak in the Adirondack Park, Snowy Mountain, with its fire tower is a popular destination. The tower observer recorded only 492 visitors in 1920. A tabulation of mountain station reports for the years 1959-1969 indicated a range of between 426 - 2,280 people who climbed Snowy Mountain annually during this time period.

Recent use has been fairly constant, with an examination of trail data indicating that registered public use ranges from 3,500 to 5,100 users annually. It has been estimated by the area forest ranger that only one-third to one-half of the people using the area sign the register. This would indicate that the summit and fire tower receives actual use numbers in the range of 8,000 to 11,000 visitors each year.

An examination of the register pages for 2003 indicates several trends. The core season where use is the highest occurs between May and October. Within this five month popular period, the months of July, August, September, and October receive the greatest use, mostly on the weekends and holidays. Most activity consists of very small groups of between two to four people in size. Large groups do not commonly visit this area. In 2003, there were 26 days when larger groups visited Snowy Mountain with the most common group size between 10 and 12. The only large group in 2003 consisted of a total of 40 people. Some use by large groups occurs as day hiking with group camping known to occur near the Snowy Mountain trail in the vicinity of Beaver Brook. Glade skiing has occurred in association with an open rock face on Snowy Mountain.

The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .

Summit/Tower Views: Summit is tree covered without views. The summit is relatively flat consisting of a small exposed section of bedrock that supports the tower surrounded by conifers. The tower provides views from the top of the mountain which are mostly obscured by existing vegetation at ground level. Occasional views from rocky summit ledges, can be dangerous due to cliffs. From the tower there are views of Indian Lake, the distant High Peaks and unbroken wilderness to the west. The northern view opens to a ridge line and vast expanse of forests that fall within a 14,500-acre private land parcel. From the cabin clearing, an open grassy spot on an exposed ledge, views to the north and east are possible.

The view from Snowy Mountain was described in a 1928 guidebook: "...when you look around from the observation tower, you peer down into the deep valleys that fall away so steeply as to make you feel as if you were standing directly over them. Beyond these valleys your eye takes in a long series of ridges and summits, extending a distance horizon which includes in one sector the view of the high peaks of the Adirondacks."

Snowy Mountain is well away from NYS Route 30 road traffic and its noise. But Snowy is prominent from the road, a lonely balding peak rising above the treetops.

Sponsor/Cooperator: Adopted and restored. At this time, a "friends" group has not been organized for this tower. An AANR agreement was issued to an individual for the repair and maintenance of the tower and for various restoration and interpretive activities.

Name:	**Spruce Mountain Fire Tower**
Location:	Saratoga County. Town of Corinth: at the summit of Spruce Mountain (USGS elevation 2,005 feet). Private land at summit.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Warrensburg, NY. A 0.3 mile portion of foot trail is on Wilcox Lake Wild Forest. The fire tower is owned by the State. The existing trail crosses three private land owners in addition to a part of Wilcox Lake Wild Forest. Saratoga County owns the summit area where the fire tower and county and state communication towers are located. Lyme Timber Company and Saratoga Plan own the land involving 0.3 miles and 0.6 miles of foot trail respectively. The access road is entirely on private lands.
Facility Description:	Steel Aermotor LS40 tower, no guy wires. 73 feet high with 11 flights of stairs to floor in 7' x 7' tower cab. Access is by foot trail or motor vehicle use on private road. Administrative use of fire tower access road is by permission of the landowner, Lyme Adirondack Timberlands LLC. In Winter, the road is part of the county snowmobile trail system.
Historical Significance:	This tower does not appears on the National Historic Lookout Register but is on the New York State Register of Historic Places; eligible for listing on the National Register of Historic Places. Through funds made available by the International Paper Company, the City of Amsterdam and Saratoga County; the fire tower was erected in 1928. In 1928, the state constructed the observer's cabin a short distance from the tower. The tower was located to spot fires in the central and western areas of Saratoga County which were not visible by the Cornell Hill and Hadley Mountain towers. A new service road was built in 1958 to provide access to the communications towers on the mountain.

The Spruce Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1988 season. Since the establishment of an observation station at Spruce Mountain, at least 11 people were appointed observers over a sixty-one year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower.

Spruce Mountain is the only fire tower in the town of Corinth and one of two towers in Saratoga County.

Maintenance Needs:

Status - Abandoned. Pending public access. Tower in disrepair and not recommended for climbing.

Fire Tower - Tower is closed. At the request of Saratoga County, the lower three sets of stairs have been removed.

Communication Tower/Antennae - Fire tower supported communications equipment in the past. The Department has obtained a FCC licenses for this site and is in the process of getting the proper APA permits to locate three low-powered repeaters in or on the tower. The repeaters would be solar powered. There is road access and power to the tower location. Other nearby summit structures include a private communication tower and building.

Trail - A re-route of the foot trail across state and private lands may be necessary to minimize trail length across one or more private parcels.

Summit - Private land.

Mitton Road - This private access road is approximately 2 miles long from the gate at the Spruce Mt. Tower Road to the fire tower.

Access:

Spruce Mountain is located close to the southern edge of the Adirondack Park, west of NYS Route 9N.

Trail/Trailhead Information:	**Spruce Mountain Trail** (Unofficial, red markers, occasional cairns) - 1.3 miles from Spruce Mt. Road to summit and fire tower. Vertical ascent, 1,003 feet. The existing access trail follows the route of an old jeep road that crosses three private land owners in addition to a small piece of Wilcox Lake Wild Forest. While the portion of trail over Forest Preserve lands and Saratoga PLAN property are open to the public, the sections owned by Lyme Adirondack Timberlands LLC and Saratoga County have not been secured with an easement. Currently the trail is closed during the hunting season since the Lyme lands are leased to various hunting clubs. Parking capacity (Spruce Mt. Road) - No developed parking, plowed in the winter as a turnaround.
Staffing:	This tower ceased operation at the end of the 1988 season.
Use Data:	A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 198 - 645 people who climbed Spruce Mountain annually during this time period. Spruce Mountain has been an attraction for hikers, primarily due to the presence of a fire tower at the summit offering panoramic views of the southern Adirondacks and beyond. The access road, although gated provides easy access to the summit by motorized vehicles. The road is part of the Mulleyville Snowmobile Trail System, and is designated as part of C8A with a secondary snowmobile trail to the summit of Spruce Mountain. The tower is listed as part of the Fire Tower Challenge.
Summit/Tower Views:	Area of bedrock where fire tower is located. Summit is tree covered without views. From the fire tower views are possible of the Catskill Mountains to the south, Thousand Acre Swamp to the west, High Peaks to the north, and the Green Mountains of Vermont to the east.

Sponsor/Cooperator:	A 100 acre parcel on Spruce Mountain was purchased in 2004 by Saratoga Plan to help protect public access to the hiking trail leading up to the summit and fire tower. The project was undertaken in partnership with members of the Adirondack Mountain Club. While the tower restoration has been approved by Saratoga County which owns the land at the summit, any work awaits agreement by the three owners of the access trail, DEC, Lyme Adirondack Timberlands LLC lands, and Saratoga Plan property. Once public access is resolved, DEC will work with interested parties to rehabilitate and maintain the fire tower, opening it to the public. Associated Group: Friends of the Spruce Mountain Fire Tower.

Name:	**St. Regis Mountain Fire Tower**
Location:	Franklin County. Town of Santa Clara: at the summit of St. Regis Mountain (USGS elevation 2,874 feet). State land classified as St. Regis Canoe Area.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Ray Brook, NY. Access trail and fire tower are owned by the State.
Facility Description:	Steel Aermotor LS40 tower, with no guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail.
Historical Significance:	This tower appears on the National Historic Lookout Register along with the New York State and National Registers of Historic Places. The boundary for the nominated site is being drawn to include a 500 foot square area of the summit surrounding the tower, the trail to the summit from the observer's cabin and the site where the observer's cabin once stood. Contributing resources: 3 (tower, observer's cabin location, and foot trail) Non-contributing resources: none The summit is partially bare rock due to a fire that was started in 1876 by Verplanck Colvin's surveyors and their guides to remove brush loggers had left behind. The fire got out of control and burned most of the summit's vegetation.

This observation station was established in April 1910, following several bad fire years. No tower was immediately erected, as an unobstructed view was available due to the lack of tree cover on the mountaintop. At this time only a tent served as the Observatory. There were a few fires in the area of this tower. On the afternoon of May 31, 1915, a fire in the town of Santa Clara, destroyed 1,550 acres of state land, a large portion which had been burned over from a previous fire. The fire tower was both a key tower in the fire tower system and valuable communications relay point, overlooking the high use area to the south including Fish Creek and Rollins Pond Campground. To the north and northwest, the tower protected a large amount of privately owned land, among which a significant part was the William Rockefeller property.

In 1918 a thirty-five foot tall, steel frame lookout tower was erected on St. Regis Mountain. This tower is typical of the "Heavier Type" tower, with integral staircase, built by the Conservation Commission/Department between 1917 and 1950. In 1919 a “Panoramic Map” was installed in the St. Regis fire tower.

The original 1922 style observer’s cabin was built in 1925. In 1939 a new 1936 style Observer’s cabin with fireplace was built by the Civilian Conservation Corps (CCC) replacing the older style cabin. The associated observer’s cabin was removed by the Department in 1995.

With the assistance of CCC workers access trails to many towers were built or improved and many cabins were replaced. The CCC built the new trail to St. Regis Mountain in 1934. The trail and parking area were on private land owned by Marjory Merriweather Post and Paul Smith’s College. Recently in 1999, DEC rerouted the trail to place it entirely on State lands. The original trail location is unchanged for the 0.9 mile trail section from the observer’s cabin site to the summit.

The St. Regis Mountain Forest Fire Observation Station was used continuously until its closure at the end of 1990 making it not only the longest operating fire tower in the Adirondack Mountains, but the longest operating fire tower in the State of New York. Since the establishment of an observation station at St. Regis Mountain, at least 19 people were appointed observers over a eighty-one year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower.

The St. Regis Mountain tower is the only fire tower in the town of Santa Clara and one of five towers (three open to the public) in Franklin County

Maintenance Needs:

Status - Tower abandoned.

Fire Tower - Tower is closed. The tower is in a condition of disrepair. There is rust on the steel parts of the tower. Parts of the cab roof are missing. The first two flights of stairs and the first landing are missing.

Trail - The first part of the trail has been rerouted several times. In the summer of 1999 a new parking and the first two-thirds of the trail was rebuilt by the professional ADK trial crew under DEC supervision. The trail contains waterbars, bridges, and stone steps. Light trail maintenance consisting of clearing water bars and drainage dips, along with pruning and hand-sawing blowdowns conducted by Paul Smith students.

Summit - No other facilities.

Access:

St. Regis Mountain is located in the north central part of the Adirondack Park, west of NYS Route 30 and north of Upper Saranac Lake and the railroad tracks of the Remsen-Lake Placid Travel Corridor.

Trail/Trailhead Information:

St. Regis Mt. Trail (Class IV, Red markers) - 3.4 miles from trail head to summit and fire tower. Vertical ascent, 1,250 feet. Additional access from lake trail.

Parking capacity (Keese Mills Road) - 15 vehicles, plowed in the winter.

Staffing:	This tower ceased operation at the end of the 1990 season. Students from Paul Smith's College under the Watershed Stewardship Program have performed recreational use studies and interpretive services in association with St. Regis Mountain from 2000 through 2003, and 2007 on the weekends.
Use Data:	With the combination of a relatively short hike and great views, the St. Regis Mountain summit is a popular destination within the St. Regis Canoe Area. In 1920, 552 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 124 - 517 people who climbed Saint Regis Mountain annually during this time period. The most heavily used section of the St. Regis Canoe Area is the trail to the summit of St. Regis Mountain. Roughly as many people hike this 3.4 mile trail as visit the rest of the unit. Recent trail register figures range from 3,200 to 7,000 visitors a year. The tower is listed as part of the Fire Tower Challenge. The UMP for the St. Regis Canoe Area, proposed to prohibit camping and camp fires on summits above 2,700 feet. The observer's cabin site below this elevation is a designated camping area. In addition, day use group size restrictions of a maximum of 15 people are recommended for the summit of St. Regis Mountain.
Summit/Tower Views:	Large area of bedrock with substantial views in many directions. The tower is located in the area between the three US Geological Survey Markers on the highest point, off to the side, of the large open summit of St. Regis Mountain. The summit is mostly rock, with some patches of grasses growing in crevices. There are conifers growing on the north and northeast portion of the summit, generally less than ten feet of height which over time may eventually block the views.

From the tower there are panoramic summit views. On a clear day with the naked eye the fire towers on Azure and Loon Lake mountains can be seen. The summits of two mountains that used to have fire towers Debar and Ampersand are also visible. Numerous ponds and lakes can be seen including Meacham, Clear, Upper and Lower St. Regis, Cranberry, Tupper, and Upper and Lower Saranac . As well, many of the High Peaks of Adirondack can be seen with exception of some of the southern most summits. The tower is readily visible from the Visitor Interpretive Center at Paul Smiths. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP.

Sponsor/Cooperator: Associated Group: A "friends" group has been formed called The Friends of St. Regis Mt. Fire Tower.

Name:	**Stillwater Mountain Fire Tower**
Location:	Herkimer County. Town of Webb: at the summit of Stillwater Mountain (USGS elevation 2,264 feet). Private land at summit.
Agency/Owner:	NYS Department of Environmental Conservation. Region 6. Lowville, NY. The 0.4 mile beginning portion of foot trail, informal parking, and observer's cabin are within the Independence River Wild Forest. The existing trail crosses one private land owner in addition to a part of Independence River Wild Forest. Lyme Adirondack Timberlands LLC owns the summit area where the fire tower and last and 0.8 miles of foot trail are located. While the fire tower structure was previously owned by the State, the Department relinquished ownership to the underlying fee owner of the property in 1992. On Stillwater Mountain the fire tower exists on lands under a conservation easement, which will be open to the public subject to seasonal restrictions.
Facility Description:	Steel Aermotor LS40 tower, with guy wires. 47 feet high with seven flights of stairs to floor in 7' x 7' tower cab. Access is by foot trail only. Observer's cabin is adjacent to the Big Moose Road on opposite side of road from trailhead.
Historical Significance:	This tower does not appear on the National Historic Lookout Register but is on the New York State Register of Historic Places; eligible for listing on the National Register of Historic Places. The station was established on an open summit as most of the trees were destroyed by the fires of 1903 and 1908. Original wood tower erected in 1912; Present tower erected in 1919 The first cabin associated with Stillwater Mountain was erected in 1932. At a later date, a "model 1941" wood frame building measuring 16' by 18' with porch, was constructed.

The Stillwater Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1988 season. Since the establishment of an observation station at Stillwater Mountain, at least 15 people were appointed observers over a seventy-seven year period. The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer's cabin.

The Stillwater Mountain fire tower is one of three fire towers in the town of Webb and one of three towers in Herkimer County. The cabin is the only remaining observer's cabins on Forest Preserve land in Herkimer County.

Maintenance Needs: Status - Abandoned.

Fire Tower - Tower closed. The bottom two sections of stair tread were removed and are hanging from the tower. The tower is in disrepair but is structurally intact. The map table is in the cab. The footers appear to be in good shape. All wood materials need to be replaced. Guy lines need replacement. A few sections of cross-bracing have cracks in the steel where the angle iron was compressed to be bolted. These braces should probably be replaced.

Cabin - Partial restoration.

Trail - Trail needs brush clearing and remarking when tower rehabilitation is complete.

Summit - No other facilities. Some recent blowdown around tower site.

Access: Stillwater Mountain is located in the west central part of the Adirondack Park. The mountain is west of the Big Moose Road near the Stillwater Reservoir.

Trail/Trailhead Information: **Stillwater Mt. Trail** (Class undetermined, Red markers) - 1.2 miles from trail head to summit and fire tower. Vertical ascent, 560 feet. Access road over Lyme to tower area

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	Parking capacity (Big Moose Road) - 2 vehicles, shoulder parking not plowed in the winter. Formal parking area needs to be established.
Staffing:	This tower ceased operation at the end of the 1988 season. Observer's cabins used by Department staff (temporary lodging for assistant forest ranger) in the summer.
Use Data:	In 1920, 196 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 145 - 618 people who climbed Stillwater Mountain annually during this time period. The lack of a trail register prevents an accurate estimate of current public use. Under the Conservation Easement, public non-motorized access is granted on the trail to the summit, the fire tower, and area immediately surrounding the tower. Public use is allowed from May 1 through and including the second Monday in October of each year.
Summit/Tower Views:	Area of bedrock. Summit is tree covered with limited views from the ground. . While the mountain is not very high in elevation, in a region characterized by flatlands and plains, the summit is one of the highest spots in the area. From the tower there are views of Stillwater Reservoir to the north, some of the High Peaks, Mount Morris, the Seward Range, and West Mountain to the east, Tug Hill to the west, and Rondaxe (Bald) Mountain to the south.
Sponsor/Cooperator:	A Conservation Easement Recreation plan will be developed that will address the fire tower on Stillwater Mountain. Restoration pending future funding for rehabilitation, and resolution of any public access issues over private lands. Associated Group: . A "friends" group has been formed called The Friends of the Stillwater Fire Tower.

Name:	**Vanderwhacker Mountain Fire Tower**
Location:	Essex County. Town of Minerva: at the summit of Vanderwhacker Mountain (USGS elevation 3,386 feet). State land classified as Vanderwhacker Mountain Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 5. Warrensburg, NY. The access trail, fire tower, cabins, and trailhead are owned by the State.
Facility Description:	Steel Aermotor LS40 tower, without guy wires. 35 feet high with five flights of stairs to floor in 7' x 7' tower cab. Access is by DEC foot trail. Two observer cabins located closer to trailhead than summit. There are two privies near the cabins.
Historical Significance:	This tower does not appear on the National Historic Lookout Register but is on the New York State Register of Historic Places, and is eligible for listing on the National Register of Historic Places. Vanderwhacker Mountain Wild Forest is named after the mountain at its heart, but it is no longer clear for whom the peak was originally named. Some believe it was named after an old-time pioneer, who lived at the base of its northern slopes. It is also quite possible that the mountain's name is derived from a corruption of the local surnames Vanderwarker and/or Vanderwalker, especially since there is some confusion as to the proper spelling. The mountain appears on most modern maps as "Vanderwacker" or "Vanderwhacker." It is quite possible that early mapmakers mistook the second "r" in "Vanderwarker" for a "c." It is not known for sure how the "h" may have entered the spelling, although it may have been due to Verplanck Colvin's spelling in his survey notes as "VanDeWhacker." Incidentally, this is how it also appears on many maps from the late 19th century. In October of 1880 Verplanck Colvin and his survey crew used the summit for triangulation. The original survey marker stamped station No. 55, 1880 is still visible on the summit.

Original wood tower erected in 1911; Present tower erected in 1918. In 1950 the state constructed new observer's cabin on Vanderwacker Mountain according to the Conservation Department's Annual Report of that year. The construction date of the older cabin is unknown. Both are a mile and a half walk from the fire tower.

The Vanderwhacker Mountain Forest Fire Observation Station was used until its closure at the end of the 1988 season. The tower was closed from 1971 to 1979 and 1983 to 1984. Since the establishment of an observation station at Vanderwhacker Mountain, at least 15 people were appointed observers over a seventy-eight year period. The tower is significant for its association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of associated observer cabins.

The Vanderwhacker Mountain fire tower is the only fire tower in the town of Minerva and is one of six interior fire towers in Essex County. The cabins are the only two observer cabins on Forest Preserve land in Essex County.

Maintenance Needs:

Status - Adopted and restored. The Vanderwhacker Mountain Fire Tower was reopened in 2004 after a rehabilitation by DEC, AmeriCorp volunteers of the Student Conservation Association and the Friends of Vanderwhacker Fire Tower.

Fire Tower - Cab is open. The tower was painted, two of its concrete footings repaired, and the cab floor replaced. The windows were restored and re-installed in 2007, but without glass, so as to facilitate picture-taking and avoid glass breakage. The map table has been removed to be restored and re-installed at future date.

Cabin - The new cabin is in fair condition and is still useable. The roof is sound and all the windows and doors are OK. The original cabin is in extremely poor condition. The porch roof is completely caved in and the main roof is partially caved in. One privy is still in use, but is in poor shape.

	Trail - New waterbars were installed along the trail to the summit. A trail re-route was constructed in 2006 and is now in use. The old section of trail was closed. Additional future erosion control will include installation of additional water bars, stepping stones, and/or dry tread, and may also include temporary/seasonal closing of facilities and development of a loop trail to the tower using a portion of the Old Military Road. The Department and the Moose Pond Club may also work together to discourage public use of the Moose Pond Road during mud season, in order to protect the tower trail, as well as the road, from negative impacts due to foot and vehicle traffic during mud season. Summit - No additional facilities.
Access:	Vanderwhacker Mountain is located near the geographic center of the Adirondack Park, generally southwest of NYS 28N and south of Newcomb.
Trail/Trailhead Information:	**Tower Trail** (Class IV, Red and partial snowmobile trail markers) - 2.5 miles From Moose Pond Road trailhead to the fire tower and summit. Vertical ascent, 1,700 feet. The 2.5 mile long section of Moose Pond Road to the parking lot can be difficult for a low clearance vehicle. The road is generally closed to public motor vehicles between December and May, which limits public use until after “mud season”. Alternative parking at Rt 28N would require an additional 2.5 mile hike. Parking capacity (Moose Pond Road) - 4 vehicles, not plowed in the winter.
Staffing:	This tower ceased operation at the end of the 1988 season.

Use Data:

Remote location and limited seasonal access to the trailhead has made Vanderwhacker Mountain one of the Adirondacks' lesser visited fire tower summits. In 1920, 82 visitors were reported. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 23 - 175 people who climbed Vanderwhacker Mountain annually during this time period.

Between 1994 and 2003 trail register data indicated a range of 600 - 900 visitors to the trailhead. More recent trail register data collected between 2004 and 2007 indicated a range of 700 - 1,000 visitors. Based on register data within the unit, the majority of registered use occurs at the Vanderwhacker Mountain tower trail, in large part during the mid- and late summer months. Non-designated and user-created campsites are known to exist along the Vanderwhacker Mountain trail (one several hundred yards above the observer cabins and one a similar distance below). There is also a designated campsite at the trailhead. Registered overnight use at the Vanderwhacker Mountain trail is low.

The tower is listed as part of the Fire Tower Challenge.

Summit/Tower Views:	Area of bedrock. A glacial erratic is located near the top of Vanderwhacker Mountain, indicating that the peak was completely covered by ice in the past. Summit is tree covered with only partial views. According to Freeman, "the summit is closed in on three sides, but magnificent open views can be obtained to the north. Algonquin Peak and Avalanche Pass stand out. Mount Colden, Redfield, Marcy, Haystack, Allen, Gothics, Sawteeth, Nippletop, Dix, and Macomb, as well as the Boreas Range and many minor peaks can be seen." From the tower there are views of the Adirondack High Peaks and the course of the Boreas River can be followed to the Hudson. Other peaks include: Hoffman Mountain, Gore Mt., Blue Mt., and the North River Mountains. The summit of the mountain is listed as a Scenic Special Management Area in the APSLMP. The APSLMP (pg 91) specifically recognizes this view: "Vanderwhacker Mountain... provides perhaps the best view of the High Peaks from the south in the Park."
Sponsor/Cooperator:	Restoration group established. In 2001, a "Friends of Vanderwhacker Mountain Fire Tower" group was formed in the interest of rehabilitating the tower so it could be open to the public for its valuable scenic and educational character. The group has adopted the following mission statement: "An organization of people dedicated to restoring, preserving, and promoting the stewardship of the Vanderwhacker Fire Tower, observer cabins, and the public lands adjacent to it." In 2002, the group entered into an Adopt-a-Natural-Resource Stewardship Agreement with the Department which allows them to perform specific tasks relevant to rehabilitating the tower and enhancing its recreational and educational potential. The AANR was renewed in 2007. Associated Group: Friends of Vanderwhacker Mountain. The map table and alidade are currently being kept by the group.

Name: **Wakely Mountain Fire Tower**

Location: Hamilton County. Town of Lake Pleasant: at the summit of Wakely Mountain (USGS elevation 3,744 feet). State land classified as Wakely Mountain Primitive Area.

Agency/Owner: NYS Department of Environmental Conservation. Region 5. Northville, NY. Access trail, fire tower, and cabin are owned by the State. The State of New York acquired the lands including the Wakely Mountain summit when they were given to the State by Finch, Pruyn and Company in 1959. The Wakely Mountain Primitive Area, which encompasses 235 acres, was created to accommodate the Wakely Mountain fire tower and associated structures when the APSLMP was adopted in 1972. At that time the lands immediately south of the summit of the mountain, now part of the Moose River Plains Wild Forest were privately owned.

Facility Description: Steel Aermotor LL25 tower, with guy wires. 70 feet high with 11 flights of stairs to floor in 7' x 7' tower cab.

Associated wood observer's cabin is 20.5' long x 16' wide with a 16' x 6.5' open porch. Access is by DEC foot trail or administrative use of 25' x 25' helicopter landing platform.

Historical Significance: The fire tower is listed on the National Historic Lookout Register and the State and National Register of Historic Places. The boundary for the nominated area includes the lookout tower, a 2,250-foot square area surrounding it, and the full length of the trail from the base of the mountain.

Contributing resources: 2 (tower and foot trail)
Non-contributing resources: 1 (observer's cabin)

Wakely Mountain, Wakely Dam and, in recent years, a pond and a golf course on the Cedar River Road, bear the name of a pioneer entrepreneur of the area. Although the name lost an 'e' somewhere along the line, the mountain got its name from William D. Wakeley, whose parents came to America from Scotland. William D. Wakeley, in 1875, cut the last six miles of road up the Cedar River to Cedar River Falls. He erected a dam, a sawmill, and the Cedar Falls Hotel at the site of the present Wakely Dam. The hotel and its replacements came to be known as “Headquarters” - the name that still marks the spot, long after the demise of the hotels.

The first structure on Wakely Mt. was a wooden tower constructed in 1911. In 1916, it was replaced with a 70' Aermotor LL25 tower. It was of a lighter weight than their 1917 design and originally had a 74' outside ladder. Wooden steps were added within the structure to ease access for both the Observer and the general public in 1918 or 1919. In 1927 AerMotor designed a steel stairway system to be installed inside the four legs of a tower using a four-leg structure that was erected and secured to the uppermost platform of the tower. From 1928 to 1932 each of the original ten towers was equipped with this new stairway, including Wakely in 1930. When the permanent stairs were installed at each tower, the lower quarter of the ladder was removed to discourage use and, over time, most of the ladders were removed. Of the original ten LL25 AerMotor towers, only four (Cathead, Hadley, Wakely and Woodhull mountains) remain standing today: Of these four towers only two, on Hadley and Wakely mountains, have not been structurally altered in any way and only Wakely has three quarters of the original ladder still attached to the tower. Wakely is the tallest of the original ten LL25 steel towers, the third tallest tower now standing within the Adirondack Park, and the fourth tallest ever erected in the Park.

Three observer cabins, including the existing one, have been built at the summit. The first cabin was built for the original observation platform erected in 1911. The present cabin replaced the second cabin constructed about 1920 that stood in the clearing between the present cabin and the tower. The existing cabin is a Model “1941" cabin constructed in 1972/1973 with associated pit privy. The observer’s cabin sits at the other end of the summit clearing (approximately 85' to the west) facing the fire tower. It is typical of the small, one-story, gable front, wood sided observer cabins. The building is on concrete block piers and has an asphalt shingle roof.

According to Gary Lee, the wood helicopter landing platform was built around 1972 in order to facilitate bringing supplies to the fire tower.

The Wakely Mountain Forest Fire Observation Station was used until its closure at the end of 1988. The tower was closed in 1971. Since the establishment of an observation station at Wakely Mountain, at least 26 people were appointed observers over a seventy-eight year period. The tower is significant for its association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower with the site of an associated observer’s cabin. The Wakely Mountain and Hurricane Mountain fire towers are the only towers in primitive area classified lands.

The Wakely Mountain fire tower is the only fire tower in the town of Lake Pleasant and one of eight remaining interior towers (five open to the public) in Hamilton County. The cabin is one of three cabins on Forest Preserve land in Hamilton County.

Maintenance Needs: Status - Restoration approved in UMP, awaiting funding.

Fire Tower - Cab is open with no hatch door. Roof, stairs, landings intact, but deteriorated. Guy wires are sagging. The tower's cab is sound with a sound roof. The wood window frames are intact but weathered, with all the glass missing. The railing along the staircase is in good condition, but wire fencing has not been added. Some of the concrete around the tower's footings is spalling. A larger style privy with a peaked roof located near the fire tower is used for storage. In accordance with the UMP, this structure will be removed.

Communication Tower/Antennae - Repeater proposed in UMP to be installed , pending the reconstruction of the helipad. Fire tower will supports one antenna and solar panels. Power supply will be battery charged by solar. New repeater to be housed in a secure metal box in the tower cab.

Cabin - The wooden observer's cabin, constructed with a concrete block foundation, rough-sawn siding, knotty pine paneling and oak flooring, is generally sound with a good roof and windows. The windows are boarded up, but the front door stands open. Only a few signs of vandalism beyond graffiti. According to the UMP the privy located near the observer's cabin will be replaced with a new one at a location screened from the summit clearing. The observer's cabin will be cleaned up and secured. The retention of the cabin to keep the fire tower complex intact is important to fire tower advocates, and it is likely that a friends group would provide most of the labor needed for restoration. It would likely be used by the friends group in the interpretation of the fire tower complex.

Helicopter Landing Area - Wood deck on wood posts made of wooden decking and uses unmilled logs as joists, posts, sills, and braces. Deck deteriorated. The helipad is some distance from the tower and accessible by a short spur trail, It is only visible from the fire tower or from the air. The entire structure has weathered and shows evidence of significant decay. A dense growth of small balsam fir and red spruce trees surrounds the deck, leaving a clear space only about 30 feet in diameter. The UMP proposes to reconstruct the helipad to maintain helicopter access to the summit for the maintenance of the tower and the radio repeater. Work expected to begin in 2010.

Trail - Long stretches of the former road that constitutes the first two miles of the fire tower trail have sustained significant erosion. Water flowing down the middle of the road has created channels that continue to expand. In most places, erosion could be arrested through the maintenance of existing ditching and the installation of water bars. The steep final section also shows evidence of ongoing erosion. Proposed new trail to summit will reduce use impacts on existing trail.

Summit - Though vegetation is lacking and bare soil is exposed in the core area between the tower and observer's cabin, the area is level and soil erosion is minimal. The area of bare soil does not appear to be expanding. Outside the observer's cabin are propane tanks. A picnic table and pit privy are located nearby. The telephone line to the tower appears to have been removed, but the corridor is still visible.

Access: Wakely Mountain is located slightly southwest of the geographic center of the Adirondack Park, south of NYS Route 28 and west of NYS Route 30.

Trail/Trailhead Information: **Wakely Mt. Trail** (Class IV, Red markers) - 3.0 miles

From parking area off Cedar River Road to summit and fire tower. Vertical ascent, 1,636 feet. From NYS Route 28/30 a combination of town and county highways are used for approximately 12 miles to reach the DEC trailhead. The last four miles of town highway and trailhead parking are not plowed in the winter, thereby restricting motor vehicle access during portions of the year.

The trail to the Wakely Mt. summit begins within the Moose River Plains Wild Forest near the Cedar River entrance at Wakely Dam. Most of the trail is within the Moose River Plains Wild Forest; with only the last 0.5 miles in the Wakely Mountain Primitive Area. The UMP proposes a new trail to the summit, which would ascend the mountain from the southwest.

Parking capacity (Cedar River Road) - 20 vehicles, not plowed in the winter. This parking area also providing access to the Moose River Plains Wild Forest.

Staffing: This tower ceased operation at the end of the 1988 season. No tower guide program currently exists for this location.

Use Data: The remote location and limited seasonal access to the trailhead has made the Wakely Mountain one of the Adirondacks' lesser visited fire tower summits. In 1920, 28 visitors signed the trail register. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 11 - 58 people who climbed Wakely Mountain during this time period.

On summer weekend days seldom more than 15 parties climb to the summit. In 1995, 1,424 people signed the Wakely Mountain trailhead register. In 2002 when 9,924 registered at Blue Mountain and 3,473 signed in at Snowy, approximately 1,300 people signed in at the Wakely Mountain trailhead. Available information indicates that use levels on the Wakely Mountain trail have remained fairly steady over the years.

While backpacking is not normally associated with fire tower use, one existing long trail (Northville - Lake Placid Trail) passes near the Wakely Mountain trailhead. A large number of available roadside designated campsites in the Moose River Plains Wild Forest, enables campers the option of a day hike up this fire tower mountain. Day use group size restrictions of a maximum of 15 people are proposed in the UMP for the summit of Wakely Mountain in order to protect the natural resources and the area's wilderness character.

The tower is listed as part of the Fire Tower Challenge and the summit is identified within the Adirondack Mountain Club's "100 Highest Mountain Peaks" list .

Summit/Tower Views: Small open area with some exposed bedrock. The spruce-fir forest on the summit is tall and dense enough to obstruct almost all views, and without the tower the summit would have little potential as a scenic vista. From the tower there are views of the Blue Ridge Wilderness, West Canada Lake Wilderness, Moose River Plains Wild Forest, Blue Mountain Wild Forest, Sargent Ponds Wild Forest and Pigeon Lake Wilderness. According to Barbara McMartin, Payne Mountain is visible to the southeast, and beyond stretches the Cedar River Flow. To the west you can see Fourth Lake beyond Lake Kora, with Sagamore Lake north of Kora. To the north you can see Raquette Lake. On a clear day other fire towers on the summits of Pillsbury, Blue, and Snowy mountains are visible. The summit of Wakely Mountain is listed as a Scenic Special Management Area in the APSLMP.

Sponsor/Cooperator: At this time, a "friends" group is being organized. In 2001, the Save Wakely Tower group was formed. In 2007, AANR application materials were sent to the Friends of Wakely Mountain. Associated Group: Friends of Wakely Mountain

Name:	**Woodhull Mountain Fire Tower**
Location:	Herkimer County. Town of Webb: at the summit of Woodhull Mountain (USGS elevation 2,362 feet). State land classified as Black River Wild Forest.
Agency/Owner:	NYS Department of Environmental Conservation. Region 6. Herkimer, NY. Access trail, fire tower, and radio repeater are owned by the State.
Facility Description:	Steel Aermotor LL25 tower, no guy wires. 50 feet high with eight flights of stairs to floor in 7' x 7' tower cab. The tower houses and supports a two-way radio repeater. Equipment includes a solar panel, whip antenna mounted to the tower cab and the radio equipment and batteries which are housed within the tower cab. Access is by DEC administrative road and foot trail.
Historical Significance:	This tower does not appear on the National Historic Lookout Register but is on the New York State Register of Historic Places; eligible for listing on the National Register of Historic Places. In 1903 a large fire burned 25,000 acres west of Woodhull Mountain. The first tower was a wood tower erected in 1911. Present tower erected in 1916. It was of a lighter weight than the 1917 design and had no stairs but only a ladder up the exterior for the purpose of ingress and egress. Wooden steps were added within the structure to ease access for both the Observer and the general public in 1918 or 1919. In 1983, the tower was approved to be disposed. Due to an identified dead spot in radio reception for the area, the Department decided to keep the tower and install a radio repeater. In the 1980s, forest rangers installed a solar powered two-way radio repeater on the Woodhull Mountain fire tower, and the site was incorporated into the NYS Forest Ranger radio network.

The Woodhull Mountain Forest Fire Observation Station was used continuously until its closure at the end of the 1970 season. Since the establishment of an observation station at Woodhull Mountain, at least 16 people were appointed observers over a sixty year period. The observer's cabin was burned down in the early 1970's shortly after the tower was no longer manned.

The tower is significant for it's association with the Forest Preserve and as an example of an early twentieth century forest fire observation tower. Of the original ten Model LL-25 towers purchased by the State, Woodhull Mountain is one of only four that remain standing today.

The Woodhull Mountain fire tower is one of three fire towers in the town of Webb and one of three remaining interior towers in Herkimer County.

Maintenance Needs:

Status - Tower abandoned, with the exception of associated repeater use. Awaiting funding for restoration.

Fire Tower - Tower cab is closed and windows are boarded up. The stairs have recently been replaced

Communication Tower/Antennae - The DEC uses this tower as a radio repeater station, powered by a solar panel mounted on the tower side. Power supply is battery charged by solar. No known maintenance needs.

Trail/Access Road - Maintenance needs undetermined.

Summit - No other summit facilities.

Access:

Woodhull Mountain is located in the south western part of the Adirondack Park, south of NYS Route 28 and immediately north of Woodhull Lake.

Trail/Trail head Information:	**Woodhull Mountain Trail** (Class III, red and yellow markers) - Administrative Road/ Remsen Falls crossover trail and Woodhull Mt. Trail - total of 6.5 miles from trailhead to fire tower and summit. The trail begins along the old Moose River Company Railroad right-of-way. To access Woodhull Mountain it is necessary to hike the administrative road (only DEC vehicles except bicycles on the road) from the McKeever trailhead (4 miles along road and 2.5 miles up a foot trail.) Vertical ascent, 812'. Parking capacity (McKeever trailhead) - 7 vehicles, not plowed in the winter. The interior access road and McKeever trailhead parking are not plowed in the winter and are closed during the Spring mud season, thereby restricting motor vehicle access during portions of the year. This parking area also provides access to other parts of the Black River Wild Forest.
Staffing:	This tower ceased operation at the end of the 1970 season.
Use Data:	In 1920, 187 visitors signed the trail register. A tabulation of mountain station reports for the years 1959-1969 was conducted by the State to determine fire tower use by the public. Information from this summary report (Temporary Study Commission, Technical Report, Recreation, 1970) indicated a range of between 40 - 101 people who climbed Woodhull Mountain during this time period. Remote location and limited seasonal access to the trailhead has made Woodhull Mountain one of the Adirondacks' lesser visited fire tower summits. While a range of between 250 to 400 people sign the register at the trailhead annually, a portion of this use is by people using other parts of Black River Wild Forest. It is estimated that 30% of the public ride mountain bikes along the administrative road and then hike up the trail. Additional use from Adirondack league club property occurs. Members or invited guests of the club have easier access to the fire tower since it is less than a mile hike the to the summit.
Summit/Tower Views:	Small area of bedrock and open grass. Summit is tree covered without views. Small grassy area indicates site of observer's cabin.

From the tower there are views of the southern Adirondacks. To the west and northwest are views of Tug Hill and Thendara. According to Freeman, “To the south, one can see part of Woodhull Lake, with Big Island visible at the near end...To the north, Nicks Lake is visible...Looking west, the South Branch of the Moose River appears nearby, passing through an interesting gorge on its journey west.” To the east, are private lands owned by the Adirondack League Club.

Sponsor/Cooperator: No associated group.

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APPENDIX H. FIRE TOWER CHECK LIST

FIRE TOWER CHECK LIST

Replace/repair roof and other missing cabin components. Use Grade 5 or better bolts in all locations unless noted otherwise

Replace/repair windows and window frames in cabin

Inventory existing handrail top to bottom at all levels and adjust for uniform height. Replace lost or damaged rails and securely fasten loose members at all locations

Replace the hardware that fixes the floor cross-bracing to the cabin (ends only)

Inventory all wooden members of the cabin, stairs, and platforms. Replace obviously weak, worn, or broken planks with pressure treated lumber

Install a 42" safety rail w/ mid-rail, chain, and clasp at entrance to cabin (See Drawing #1). Chain off opening between rail and wall when occupied

Inventory all diagonal cross bracing in all faces of each tier of the tower. Replace obviously bent, broken, and/or severely corroded members in kind (size, shape, and material). New members must be fabricated with the same end detail as the originals. Drill new members only as required to fasten as original. Replace all end fasteners in new members with A325 Type I galvanized high strength bolts. Replace interior fasteners with Grade 5 hardware or better. (See Drawing #2)

Retrofit page wire fence to all platform handrails on the periphery of the tower. Fasten securely on all sides at even intervals. Avoid sharp burrs and exposed ends of fence fabric and tie wires

Mount signs (posted occupancy limit, interpretive, etc, if applicable) with clamps to structure or on posts independent of structure. Confirm that existing signs are not installed in a deleterious manner. No unnecessary/unauthorized drilling of tower members. Maximum occupancy of the cabin is 8. The landings should be limited to an occupancy of 4

Clear footprint of the tower of all leaves, branches, and debris and grade to drain. Anchors should be high and dry and monitored at regular intervals to insure that water does not pond at the corners. Some locations may require careful chipping of the natural rock to create a path for passive drainage

Inspect existing base pads and anchors. Concrete should be inspected for cracks and spalling - metal anchors for corrosion. Cracked anchor pads should be removed to inspect and clean the anchor within. Clean and paint anchor assemblies. Cast new concrete base pads with steel fiber reinforcement and/or a loop of #4 reinforcing steel to same size and shape as originals. The pads will serve to protect the integrity of the original anchor bolts

Paint is not necessary to preserve structure, but may be desired to provide a uniform restored appearance. If desired, paint all exposed structural steel with an appropriate coating (MC Urethane). Corroded or peeling areas should be prepared beforehand by power tool cleaning and primed

A visual inspection of the tower should be performed on an annual basis in perpetuity. This inspection should check the general condition of all components for deterioration, damage, missing or loose fasteners, base drainage, and coating performance. Any significant changes in expected use or otherwise questionable findings should be reported to the Engineer for further investigation.

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APPENDIX I. AFTA STANDARDS AND GENERIC JOB DESCRIPTION

6/1/07

PROPOSED AFTA STANDARDS: EDUCATION AND TRAINING FOR FIRE TOWER INTERPRETERS

The purpose of the following standards is to promote a consistent, coherent program of public education at NYS-owned fire tower facilities on Forest Preserve or easement lands. These standards are intended to guide both *information-providing*, which entails command of factual materials, and *interpretation*, which entails explaining what facts mean in a context.

PRIMARY PUBLIC EDUCATION OBJECTIVE

To instill understanding of the importance of protecting the natural resources and ecological integrity of the Forest Preserve; to facilitate sustainable public use and enjoyment of public lands in the Adirondack Park (derived from the "unifying theme" of the *APSLMP*). More specific objectives may be inferred from the learning objectives below, and the attached generic job description for summit guides.

LEARNING OBJECTIVES FOR INTERPRETATION

- to understand the basic principles and practices of environmental interpretation and its role in sustainable recreation and natural resource management;

- to acquire competence through practice of the basic skills of interpretation, including the ability to design and adapt a thematic narrative for non-captive audiences, and differing circumstance and subjects.
- Relevant reading: Sam H. Ham, *Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets* (Golden, CO: Fulcrum Publishing, 1992).

- to gain some knowledge of and ability cogently to explain the conservation history and distinctive character of the NYS Forest Preserve and Adirondack Park.
- Relevant readings: Jerry Jenkins, *The Adirondack Atlas: A Geographic Portrait of the Adirondack*
- *Park* (Wildlife Conservation Society/Syracuse UP/Adirondack Museum, 2004).
- Philip Terrie, *Contested Terrain: A New History of Nature and People in the Adirondacks*
- (NY: Ak Museum/Syracuse U.P, 1997).

- to explain the history of one fire tower in relation to others, and in the context of Adirondack conservation history.
- Relevant reading: John P. Freeman, *Views from on High: Fire Tower Trails in the Adirondacks*
- *and Catskills* (LakeGeorge, NY: Adirondack Mt. Club, 2001).

- to explain how the environmental characteristics of the tower site and its surrounding landscape are the result of intertwined natural and cultural history.
- Relevant readings: Michael G. DiNunzio*, The Adirondack Wildguide: A Natural History of the*
- *Adirondack Park* (Elizabethtown, NY: The Ak. Nature Conservancy and the Ak. Council,1984)
- and tower/trail interpretive brochures.

- to acquire a basic understanding of and ability to explain the agencies, laws, and policies governing public use of the NYS Forest Preserve and conservation easement lands.
- Relevant readings: *The Adirondack Park State Land Master Plan* (NYS Ak Park Agency,
- 1987) and Unit Management Plans for Forest Preserve lands in tower's vicinity.

FURTHER TRAINING

Factual knowledge and desired skills are specified in the responsibilities and qualifications of the generic job description for summit guides on the reverse side.

GENERIC JOB DESCRIPTION:
ADIRONDACK FIRE TOWER SUMMIT GUIDE

General responsibilities

- To assist the NYS Dept. of Environmental Conservation in educating, monitoring, and managing public recreational use of Forest Preserve and conservation easement lands so as to protect and preserve the area's natural resources. Responsibilities include the access trail, fire tower and related facilities, and surrounding Forest Preserve lands.

- To assist the tower friends committee in their stewardship mission.

Specific responsibilities

re visitors:

- interpret fire tower history, local geography, ecology, and geology, in light of the intertwined natural and cultural histories and other values of the Forest Preserve and the Adirondack Park.
- teach trail etiquette and leave-no-trace practices;
- provide information about local recreational opportunities, services, etc.;
- provide communication and emergency services

re summit facilities and access trail:

- monitor and help to maintain trail for erosion, deadfall, and other
- conditions that affect safety;
- deter vandalism, monitor condition of, and help to maintain tower and
- other summit facilities;
- assist in maintaining trail register and providing interpretive trail brochure;

other stewardship responsibilities:

- maintain a daily journal of visitor statistics, incidents, and comments; weather events; and record of stewardship activities;
- attend meetings, and assist friends committee in fund-raising;
- other stewardship duties according to needs and qualifications.

Position: A 40-hour week at $8-10.00/hour for 8-10 weeks includes weekends in July and August.

Qualifications: Upper-division college undergraduates or graduates with appropriate field(s) of study, and strong interpersonal and public speaking skills. Basic Red Cross 1st Aid/CPR certification required; WFR & LNT cert. preferred. Candidates must have, or undergo, training according to AFTA/DEC standards, and must provide their own transportation.

To Apply: Provide a resume or c.v., a cover letter, and the names/titles/phones of three references to . . . . Candidates must interview with DEC site supervisor and the tower friends committee.

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BIBLIOGRAPHY

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MAPS AND DRAWINGS

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Existing Towers

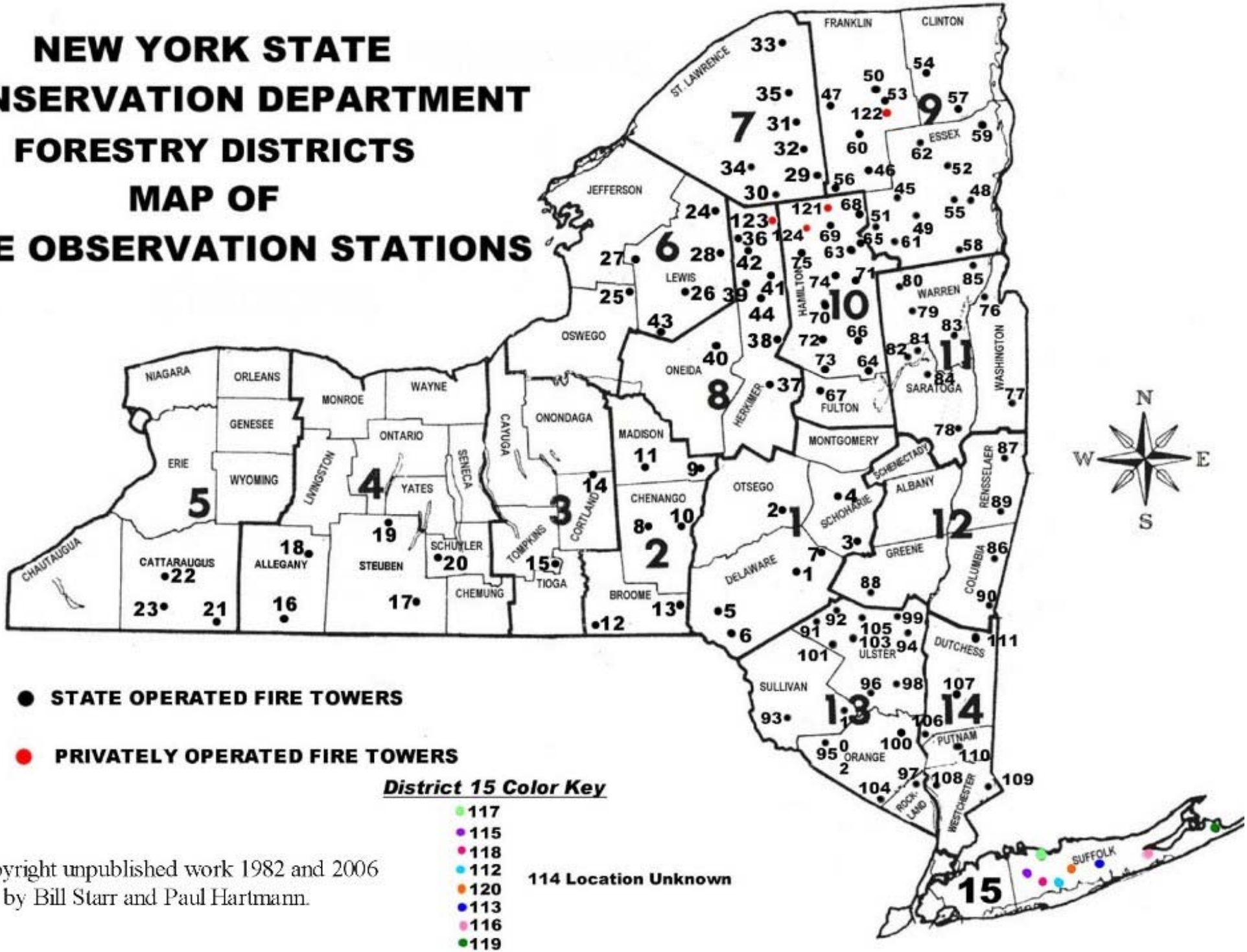
Facility Name	County	Town	DEC Region	DEC Jurisdiction	APA Land Class/Unit	Station established	Tower Age and Type	Tower Height			Public access	Tower Status	Trail access	Elevation	Ascent	Difficulty	Views		Road Access	
Adirondack Center	Essex	Elizabethtown	5	N/A	Private	N/A	LS40 re-erected	58			Yes	Relocated with parts of West and Kempshall								
Adirondack Museum	Hamilton	Blue Mt. Lake	5	N/A	Private	N/A	LS40 re-erected	22			Yes	Relocated from Whiteface								

Facility Name	County	Town	DEC Region	DEC office	APA Land Class/Unit	Station established	Tower Age and Type	Tower Height	Year Closed	Observer Cabin	Public access	Tower Status	Trail access	Elevation	Ascent	Difficulty	Summit Views	Commuications	Road Access	UMP
Azure Mt.	Franklin	Waverly	5	Ray Brook	DMWF	1914	1918-LS40	35	1979	No	Yes	Restored	1.0 mile	2,518'	1,000'	Easy	Partial	No	No	in progress
Belfry Mt.	Essex	Moriah	5	Warrensburg	HPWF	1912	1917-LS40	47	1988	No	Yes	P. Restored	0.4 mile	1,820'	120'	Easy	Partial	Yes	Yes	in progress
Black Mt. (tower closed)	Washington	Dresden	5	Warrensburg	LGWF	1911	1918-LS40	35	1988	No	Yes	Converted	2.5 miles	2,646'	1,046	Mod-Strenuous	Full	Yes	No	1986,2007*
Blue Mt.	Hamilton	Indian Lake	5	Northville	BMWF	1911	1917-LS40	35	1990	cabin-1975	Yes	Restored	2.2 miles	3,759'	1,560'	Moderate	Partial	Yes	Yes	1995
Buck Mt.	Hamilton	Long Lake	5	N/A	Private	1930	1930-LS40	60	1970s	No	No	Abandoned	Private land	2,440'	N/A	Closed to Public	N/A	No	N/A	N/A
Cathead Mt.	Hamilton	Benson	5	Northville	Private	1910	1916-LL25	50	1988	cabin-pre1964	No	Converted	Private land	2423'	N/A	Closed to Public	N/A	Yes	No	N/A
Cathedral Rock	St. Lawrence	Fine	6	N/A	Private	N/A	1919-LS40	47	N/A	No	Yes	Relocated	1.2 miles	1,700'	200'	Easy	No	No	Yes	N/A
Goodnow Mt.	Essex	Newcomb	5	N/A	Private	1922	1922-LS40	60	1979	cabin-1928	Yes	Restored	1.9 mile	2,685'	1,050'	Moderate	Partial	No	No	N/A
Gore Mt. (tower closed)	Warren	Johnsburg	5	Warrensburg	GMIU	1909	1918-LS40	60	1988	cabin-1928	Yes	Converted	4.5 miles	3,583'		Strenuous	Partial	Yes	Yes	ORDA plan
Hadley Mt.	Saratoga	Hadley	5	Warrensburg	WLWF	1917	1917-LL25	40	1990	cabin-1950	Yes	Restored	1.3 miles	2,675'	1,525'	Moderate	Partial	No	No	2007*
Hurricane Mt.	Essex	Keene	5	Ray Brook	HMPA	1910	1919-LS40	35	1982	No	Yes	Abandoned	2.6 miles	3,694'	2,000'	Strenuous	Full	No	No	in progress
Kane Mt.	Fulton	Caroga	5	Northville	SMWF	1925	1925-LS40	60	1988	cabin-1961	Yes	Restored	0.9 miles	2,180'	570'	Moderate	No	No	No	2006
Loon Lake Mt.	Franklin	Franklin	5	Ray Brook	DMWF	1912	1917-LS40	35	1971	cabin-1928	Yes	Abandoned	2.7 miles	3,355'	1,650'	Moderate	Partial	No	No	in progress
Lyon Mt.	Clinton	Saranac	5	Ray Brook	Unclassified	1910	1917-LS40	35	1988	No	Yes	P. Restored	3.0 miles	3,830'	1,920'	Moderate	Partial	Yes	No	after classification
Meenagha Mt.	Franklin	Altamont	5		Private	1927	1927-LS40	73	1950's	No	No	N/A	0.5 miles	2,092'	N/A	Closed to Public	N/A	N/A	N/A	N/A
Mount Adams	Essex	Newcomb	5	Ray Brook	Private	1912	1917-LS40	47	1971	cabin-1922	Yes	P. Restored	2.4 miles	3,584'	1,800'	Difficult	No	No	No	N/A
Mount Arab	St. Lawrence	Piercefield	6	Potsdam	HLWF	1911	1918-LS40	35	1988	cabin-1950	Yes	Restored	1.1 miles	2,545'	760'	Easy	Partial	No	No	N/A
Mount Morris	Franklin	Altamont	5	N/A	Private	1909	1919-LS40	22	1971	No	No	N/A	Private land	2,539'	740'	Closed to Public	N/A	Yes	N/A	2002
Owl's Head Mt.	Hamilton	Long Lake	5	Northville	SPWF	1911	1919-LS40	35	1970	No	Yes	Restored	3.1 miles	2,780'	1,150'	Moderate	Partial	No	No	in progress
Palmer Hill	Clinton	Black Brook	5	N/A	Private	1930	1930-LS40	60	1988	No	No	N/A	Private land	1,146'	N/A	Closed to Public	N/A	Yes	N/A	N/A
Pillsbury Mt.	Hamilton	Arietta	5	Northville	JRWF	1918	1924-LS40	60	1984	cabin-1922	Yes	P. Restored	1.6 miles	3,597'	1,600'	Strenuous	No	Yes	No	2006
Poke-O-Moonshine	Essex	Chesterfield	5	Ray Brook	TPWF	1912	1917-LS40	35	1988	No	Yes	Restored	1.2 miles	2,170'	1,280'	Strenuous	Partial	No	No	in progress
Rondaxe (Bald) Mt.	Herkimer	Webb	6	Herkimer	FCWF	1912	1917-LS40	35	1990	No	Yes	Restored	1.0 mile	2,350'	390'	Easy	Partial	No	No	1990
Salmon Lake Mt.	Hamilton	Long Lake	5	N/A	Private	1933	1933-LS40	35	1970s	No	No	N/A	Private land	2,530'	N/A	Closed to Public	N/A	No	N/A	N/A
Snowy Mt.	Hamilton	Indian Lake	5	Northville	JRWF	1909	1917-LS40	42	1971	No	Yes	Restored	3.9 miles	3,899'	2,106'	Strenuous	Partial	No	No	2006
Spruce Mt.	Saratoga	Corinth	5	Warrensburg	Private	1928	1928-LS40	73	1988	No	Yes	Abandoned	1.3 miles	2,005'	1,003'	Moderate	No	Yes	Yes	N/A
St. Regis Mt.	Franklin	Santa Clara	5	Ray Brook	SRCA	1910	1918-LS40	35	1990	No	Yes	Abandoned	3.4 miles	2,882'	1,250'	Strenuous	Full	No	No	2006
Stillwater Mt.	Herkimer	Webb	6	Warrensburg	Private	1912	1919-LS40	47	1988	cabin-1966	Yes	Abandoned	1.2 miles	2,264'	560'	Moderate	No	No	No	N/A
Swede Mt.	Warren	Hague	5	N/A	Private	1912	1919-LS40	47	1970	cabin	No	Transfer of Ownership	0.6 miles	1,904'	N/A	Closed to Public	N/A	N/A	N/A	N/A
Vanderwhacker Mt.	Essex	Minerva	5	Warrensburg	VMWF	1911	1918-LS40	35	1988	older cabin, cabin-1950s	Yes	Restored	2.9 miles	3,386'	1,700'	Strenuous	Partial	No	No	2005
Wakely Mt.	Hamilton	L ake Pleasant	5	Northville	WMPA	1911	1916-LL25	70	1988	cabin-1973	Yes	Pending	3.2 miles	3,744'	1,636'	Strenuous	No	Future	No	2006
Woodhull Mt.	Herkimer	Webb	6	Herkimer	BRWF	1911	1916-LL25	50	1970	No	Yes	Abandoned	7.6 miles	2,362'	812'	Strenuous	No	Yes	No	1996

DMWF - Debar Mountain Wild Forest
HPWF - Hammond Pond Wild Forest
LGWF - Lake George Wild Forest
BMWF - Blue Mountain Wild Forest
GMIU - Gore Mountain Intensive Use Area
WLWF - Wilcox Lake Wild Forest
SMWF - Shaker Mountain Wild Forest
HLWF - Horshoe Lake Wild Forest
SPWF - Sargent Ponds Wild forest
BRWF - Black River Wild Forest

TPWF - Taylor Pond Wild Forest
JRWF - Jessup River Wild Forest
FCWF - Fulton Chain Wild Forest
VMWF - Vanderwacker Mountain Wild Forest
SRCA - St. Regis Canoe Area
HMPA - Hurricane Mountain Primitive Area
WMPA - Wakely Mountain Primitive Area

NEW YORK STATE CONSERVATION DEPARTMENT FORESTRY DISTRICTS MAP OF FIRE OBSERVATION STATIONS



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District 1 (R4)

1. Bramley Mtn.
2. Hooker Hill
3. Leonard Hill (S)
4. Petersburg Mtn.
5. Rock Rift Mtn. (PL)
6. Twadell Point Mtn. (PL)
7. Utsayantha Mtn. (RS)

District 2 (R7)

8. Berry Hill (S)
9. Brookfield Mtn.
10. Chenango Lake
11. Georgetown Mtn.
12. Ingraham Hill (PL)
13. Page Pond Hill (PL)

District 3 (R7)

14. Morgan Hill
15. Padlock Hill

District 4 (R8)

16. Alma Hill (PL)
17. Erwin Mtn.
18. Jersey Hill
19. Prattsburg Mtn.
20. Sugar Hill (S)

District 5 (R9)

21. Hartzfelt Hill
22. Mc Carty Hill
23. Summit Hill (RS)

District 6 (R6)

24. Bald Mtn.
25. Caster Hill
26. Gomer Hill (S)
27. New Boston
28. Number Four

District 7 (R6)

29. Arab Mtn. (RS)
30. Cat Mtn.
31. Catamount Mtn.
32. Moosehead Mtn.
33. Sand Hill
34. Tooley Pond Mtn.
35. Whites Hill (4)(removed)

District 8 (R6)

36. Beaver Lake Mtn.
37. Dairy Hill
38. Fort Noble Mtn.
39. Moose River Mtn.
40. Penn Mtn.
41. Rondaxe Mtn. (Bald) (RS)
42. Stillwater Mtn. (PL)
43. Swancott Hill (3)(removed)
44. Woodhull Mtn. (S)

District 9 (R5)

45. Adams Mtn. (RS)
46. Ampersand Mtn.
47. Azure Mtn. (RS)
48. Belfry Mtn. (S)
49. Boreas Mtn.
50. De Bar Mtn.
51. Goodnow Mtn. (RS)
52. Hurricane Mtn. (S)
53. Loon Lake Mtn. (S)
54. Lyon Mtn. (PL)
55. Makomis Mtn.
56. Mt. Morris (2) (PL)
57. Palmer Hill (PL)
58. Pharoah Mtn.
59. Poke-O-Moonshine (RS)
60. St. Regis Mtn. (S)
61. Vanderwacker Mtn. (RS)
62. Whiteface Mtn.

District 10 (R5)

63. Blue Mtn. (RS)
64. Cathead Mtn. (S)
65. Dunn Brook Mtn.
66. Hamilton Mtn.
67. Kane Mtn. (RS)
68. Kempshall Mtn.
69. Owls Head Mtn. (RS)
70. Pillsbury Mtn. (RS)
71. Snowy Mtn. (RS)
72. T-Lake Mtn.
73. Tomany Mtn.
74. Wakely Mtn. (RS)
75. West Mtn.

District 11 (R5)

76. Black Mtn. (S)
77. Colfax Mtn. (PL)
78. Cornell Hill (PL)
79. Crane Mtn.
80. Gore Mtn. (S)
81. Hadley Mtn. (RS)
82. Ohmer Mtn.
83. Prospect Mtn.
84. Spruce Mtn. (S)
85. Swede Mtn. (PL)

District 12 (R4)

86. Beebe Hill (RS)
87. Dickinson Hill (S)
88. Hunter Mtn. (RS)
89. Number Seven Hill
90. Washburn Mtn.

District 13 (R3)

91. Balsam Lake Mtn. (1)(RS)
92. Belleayre Mtn.
93. Chapin Hill
94. Gallis Hill
95. Graham Mtn. (S)
96. High Point Mtn.
97. Jackie Jones Mtn. (S)
98. Mohonk Mtn. (PL)
99. Overlook Mtn. (RS)
100. Pocatello Mtn.
101. Red Hill (RS)
102. Roosa Gap (S)
103. Slide Mtn.
104. Sterling Mtn. (RS)
105. Tremper Mtn. (RS)

District 14 (R3)

106. Beacon Mtn. (S)
107. Clove Mtn. (PL)
108. Cross River Mtn.
109. Nelson Mtn.
110. Ninham Mtn. (RS)
111. Stissing Mtn. (RS)

District 15 (R1)

112. Bayshore
113. Camp Upton
114. Clock
115. Dix Hill
116. Flanders Hill
117. Kings Park
118. Oakdale
119. Stony Hill
120. Telescope Hill

Private Towers that Worked in Conjunction with the State

121. Buck Mtn. (PL)
122. Meenagha Mtn. (PL)
123. Mt. Electra
124. Salmon Lake Mtn. (PL)

Fire towers with no notations indicates the tower has been removed from that site.

1- Oldest Site in State 2- Oldest Site in Adirondacks 3-Tallest Tower in State 4-Tallest Tower in Adirondacks
RS-Tower Restored/Restoring S-Tower Remaining in Place PL-Tower Remaining in Place/Private Land
Tower Status Current to Feb. 24, 2006. © 1983, 2006 Unpublished Work by Bill Starr, Former Forest Fire Observer & Historian.

New York State Forestry Districts
Fire Tower Restoration Projects

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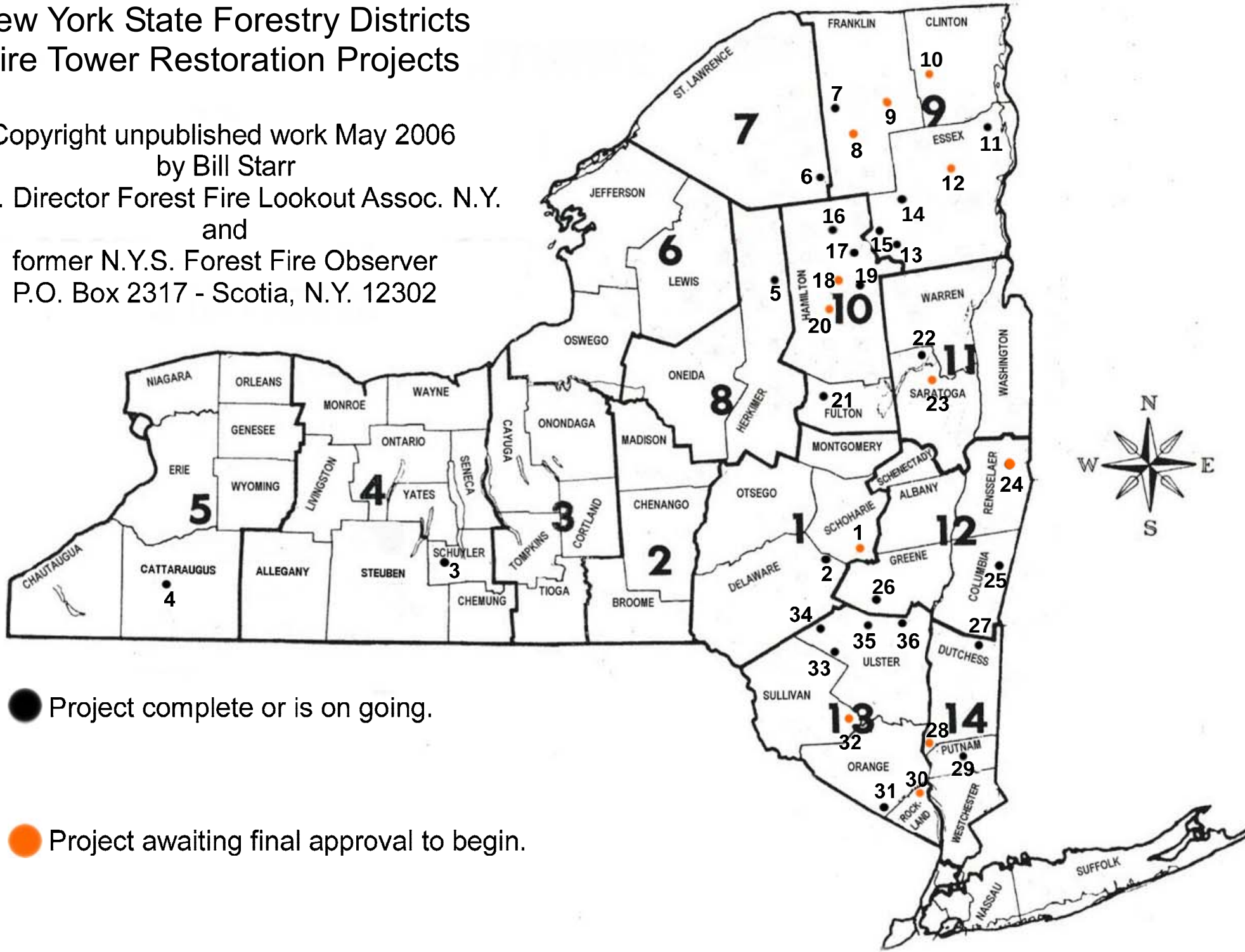
Div. Director Forest Fire Lookout Assoc. N.Y.
and
former N.Y.S. Forest Fire Observer
P.O. Box 2317 - Scotia, N.Y. 12302



Project complete or is on going.

Project awaiting final approval to begin.

Fire tower restoration projects in New York State

1. Leonard Hill: awaiting inspection before work begins.

2. Utsayantha Mtn: Work has been complete by Village of Stamford.

3. Sugar Hill: Maintain by NYS-DEC.

4. Summit Hill: Work being done by the Allegany State Park.

5. Rondaxe (Bald) Mtn: Work is complete by Friends of Bald Mt.

6. Arab Mtn: Work complete by the friends of Mount Arab.

7. Azure Mtn: Work complete by friends Azure Mtn.

8. St. Regis Mtn: Awaiting approval to start.

9. Loon Lake Mtn: Awaiting adoption by a group.

10. Lyon Mtn: Awaiting land sale and unit mgt. plan.

11. Poke-O-Moonshine: Work complete by Friends of Poke-O.

12. Hurricane Mtn: Awaiting approval to start.

13. Vanderwacker Mtn: Work complete by Friends group.

14. Adams Mtn: Awaiting formal restoration plan.

15. Goodnow Mtn: Work complete by SUNY-ESF.

16. Owlshead Mtn: Work is nearly complete by NYS-DEC.

17. Blue Mtn: Work complete by Friends of Blue Mtn.

18. Wakely Mtn: Awaiting approval to begin work.

19. Snowy Mtn: Works is complete by NYS-DEC.

20. Pillsbury Mtn: Awaiting approval to begin work.

21. Kane Mtn: Work continues.

22. Hadley Mtn: Work complete by Friends of Hadley Mtn.

23. Spruce Mtn: Awaiting land dispute settlement.

24. Dickinson Hill: Awaiting transfer from State Police to the Grafton Lakes State Park.

25. Beebe Hill: Work nearing complete by volunteers.

26. Hunter Mtn: Work has been completed.

27. Stissing Mtn: Work completed by Friends of Stissing.

28. Beacon Mtn: Awaiting formation of friends group.

29. Ninham Mtn. Work complete by Friends of Ninham.

30. Jackie Jones: Awaiting adoption by group and approval.

31. Sterling Mtn. Work completed by volunteers at state park.

32. Roosa Gap: Awaiting unit mgt. plan.

33. Red Hill: Work has completed by Friends of Red Hill.

34. Balsam Lk. Mtn: Work complete by Friends of Balsam.

35. Tremper Mtn: Work completed by Friends of Mt. Tremper.

36. Overlook Mtn: Work completed by Friends of Overlook.

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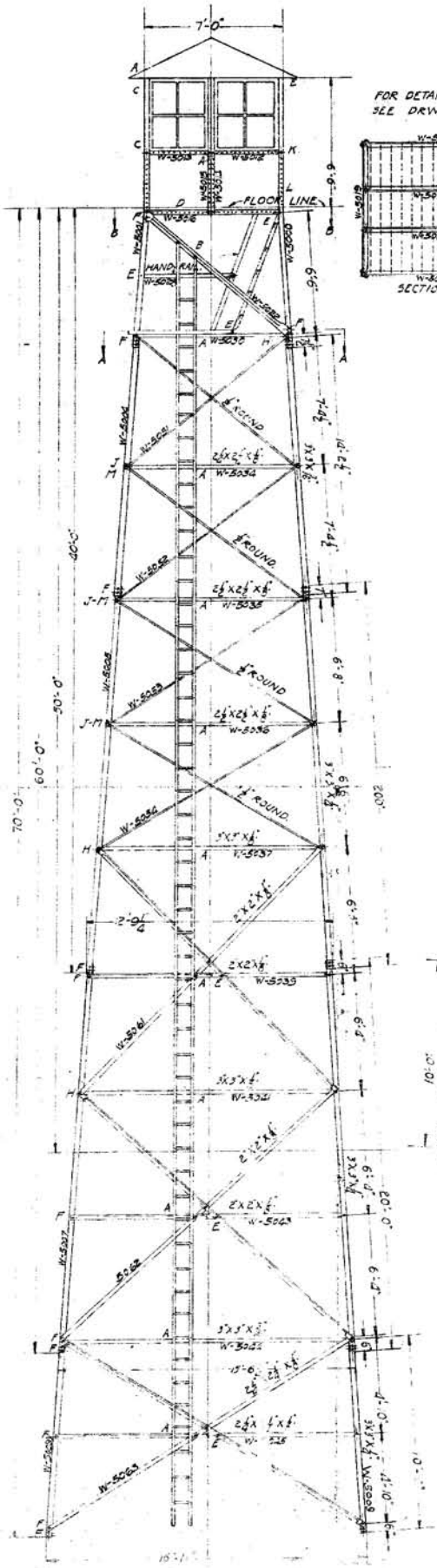
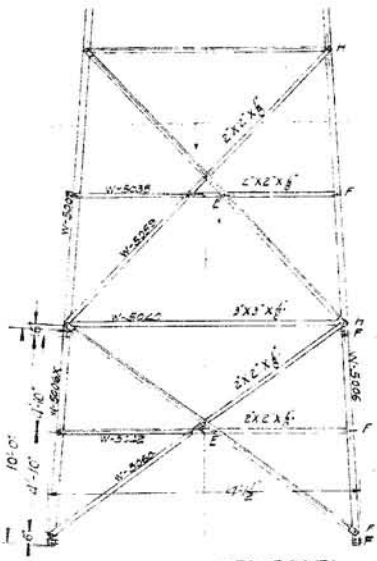
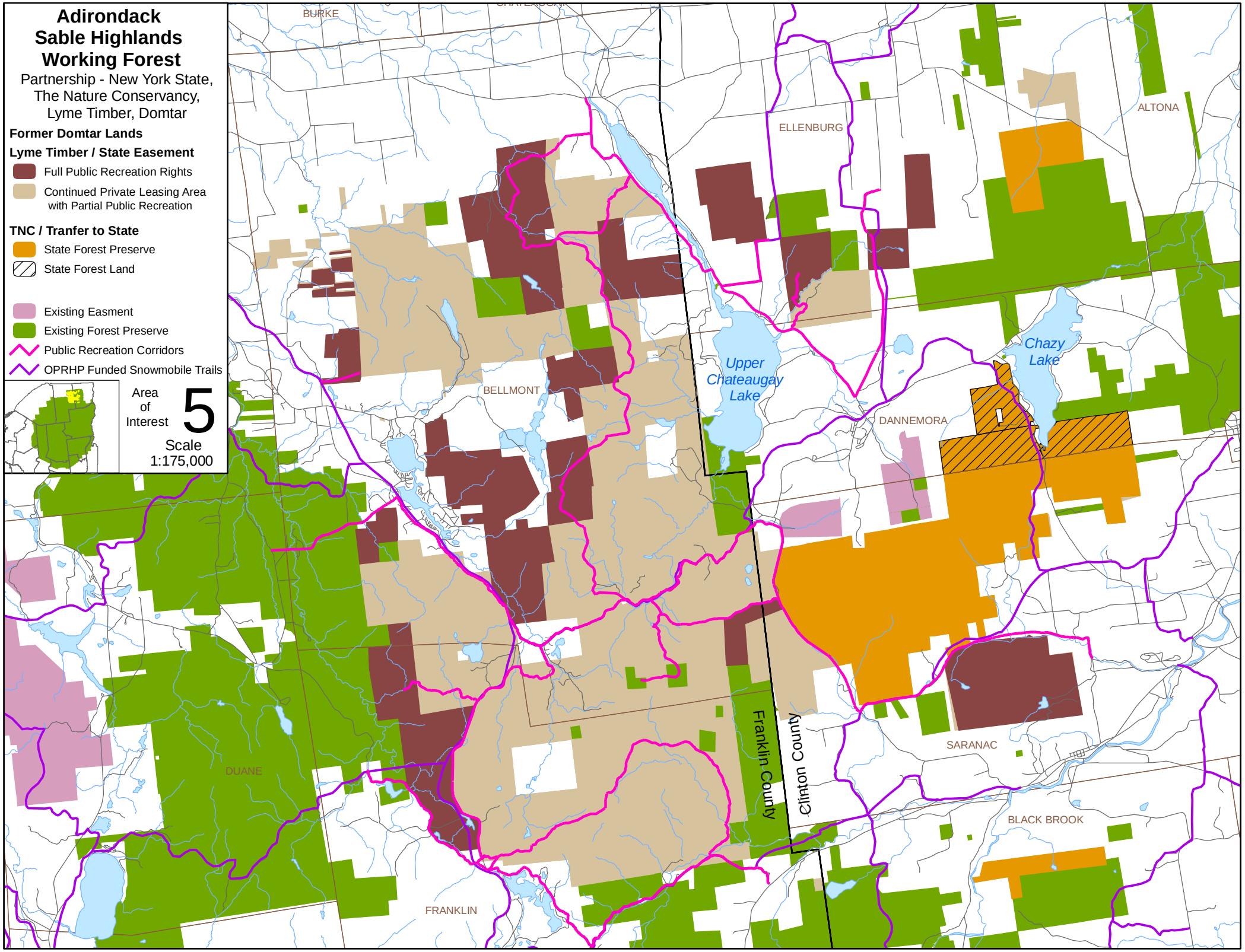




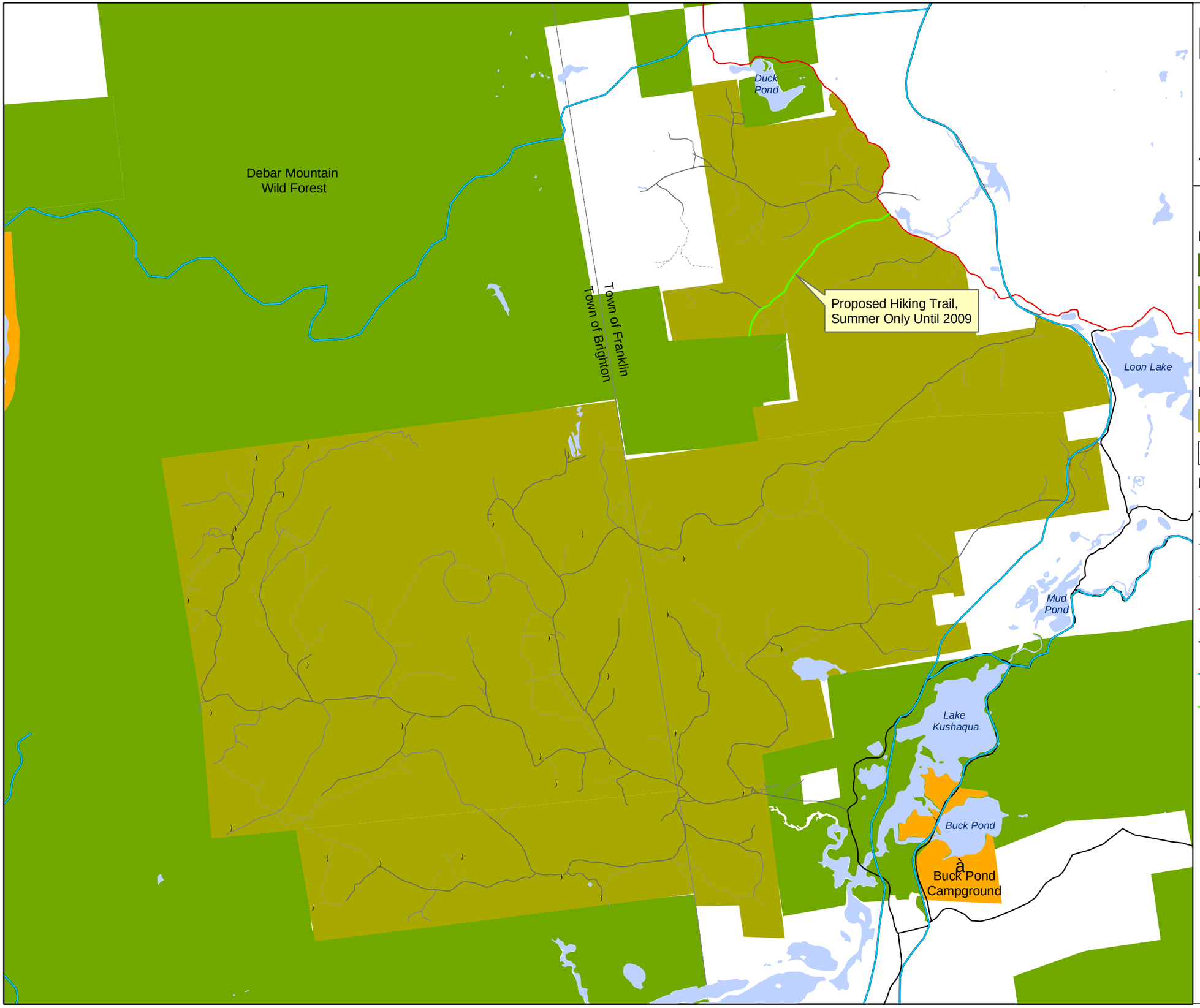
LISTS OF BOLTS

				DESCRIPTION	LOCATION
40	50	60	70	3/4"X1" GALVANIZED BOLTS	A
16	20	20	20	3/4"X1"	B
8	2	4	4	3/4"X1"	C
17	4	4	4	3/4"X1"	D
65	75	85	14	3/4"X1"	E
50	55	55	16	3/4"X1"	F
4	105	105	30	3/4"X1"	G
7	7	7	7	3/4"X1"	H
11	12	12	7	3/4"X1"	I
13	14	14	7	3/4"X1"	J
30	34	34	12	3/4"X1" SEAT STRUCTURAL STEEL	K
12	12	12	12	3/4"X1"	L
12	12	12	12	3/4"X1"	M
12	12	12	12	3/4"X1"	N
12	12	12	12	3/4"X1"	O
12	8	8	12	3/4"X1" HINGED DOOR	
12	8	8	12	3/4"X1"	
60	60	60	12	3/4" FLAT HEAD BOLTS FOR HANDRAIL	
4	4	4	4	3/4"X1"	
4	4	4	4	3/4"X1"	
4	4	4	4	3/4"X1"	
4	4	4	4	3/4"X1"	
4	4	4	4	3/4"X1"	
4	4	4	4	3/4"X1"	
2	2	2	2	3/4"X1"	
2	2	2	2	3/4"X1"	
2	2	2	2


Adirondack
Sable Highlands
Working Forest
Partnership - New York State,
The Nature Conservancy,
Lyme Timber, Domtar
Former Domtar Lands
Lyme Timber / State Easement
Full Public Recreation Rights
Continued Private Leasing Area
with Partial Public Recreation
TNC / Tranfer to State
State Forest Preserve
State Forest Land
Existing Easment
Existing Forest Preserve
Public Recreation Corridors
OPRHP Funded Snowmobile Trails
Area
of
Interest
5
Scale
1:175,000
BURKE
ELLENBURG
ALTONA
BELLMONT
Upper
Chateaugay
Lake
Chazy
Lake
DANNEMORA
Franklin County
Clinton County
SARANAC
DUANE
BLACK BROOK
FRANKLIN

Kushaqua Tract, Franklin 248

Public Recreation Access Map
Tract 1, Phase 2



Legend:

NY Owned Land

- Wilderness
- Wild Forest
- Intensive Use
- Water

IP Tracts

- Easement A (Full Rec.)
- Not Conservation Easement

Roads

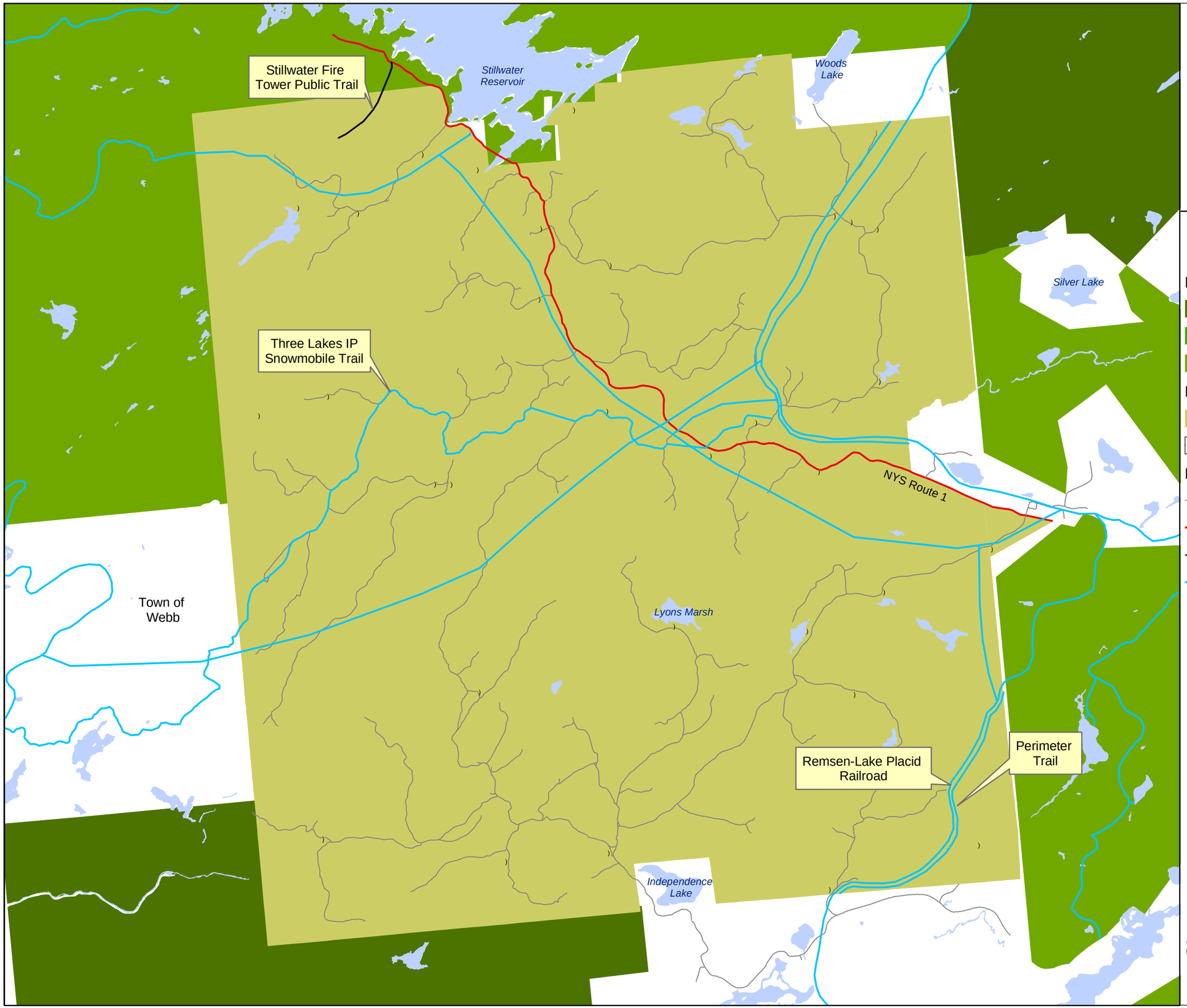
- Gravel
- Seasonal
- Trail
- Highway
- Secondary
- Proposed State Public Snowmobile Corridors
- Proposed State Public Hiking Trail
- IP Lease Camps

0 0.5 1 2 Miles

Produced by: Lands & Forests GIS
NYSDEC, 3.13.2006

Big Moose Tract,
Herkimer 172

Public Recreation Access Map
Tract 18, Phase 3



Legend:

NYS Owned Lands
- Wilderness
- Primitive
- Wild Forest

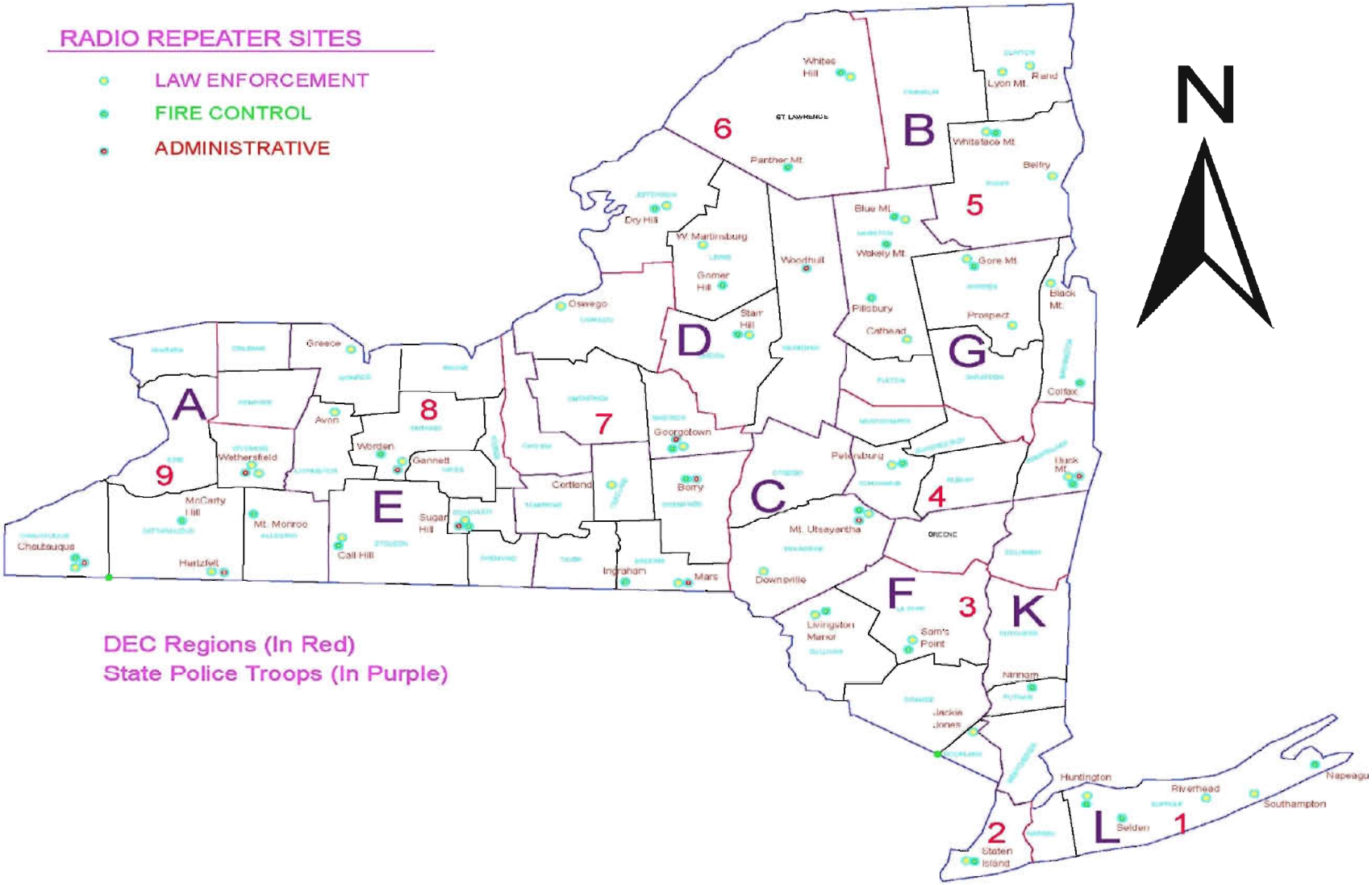
IP Tracts
- Easement B (Non-development)
- Not Conservation Easement

Roads
- Private Roads/Trails
- Highway
- Secondary
- Proposed State Public Snowmobile Corridors
- Private Lease Camps

0 0.45 0.9 1.8 Miles

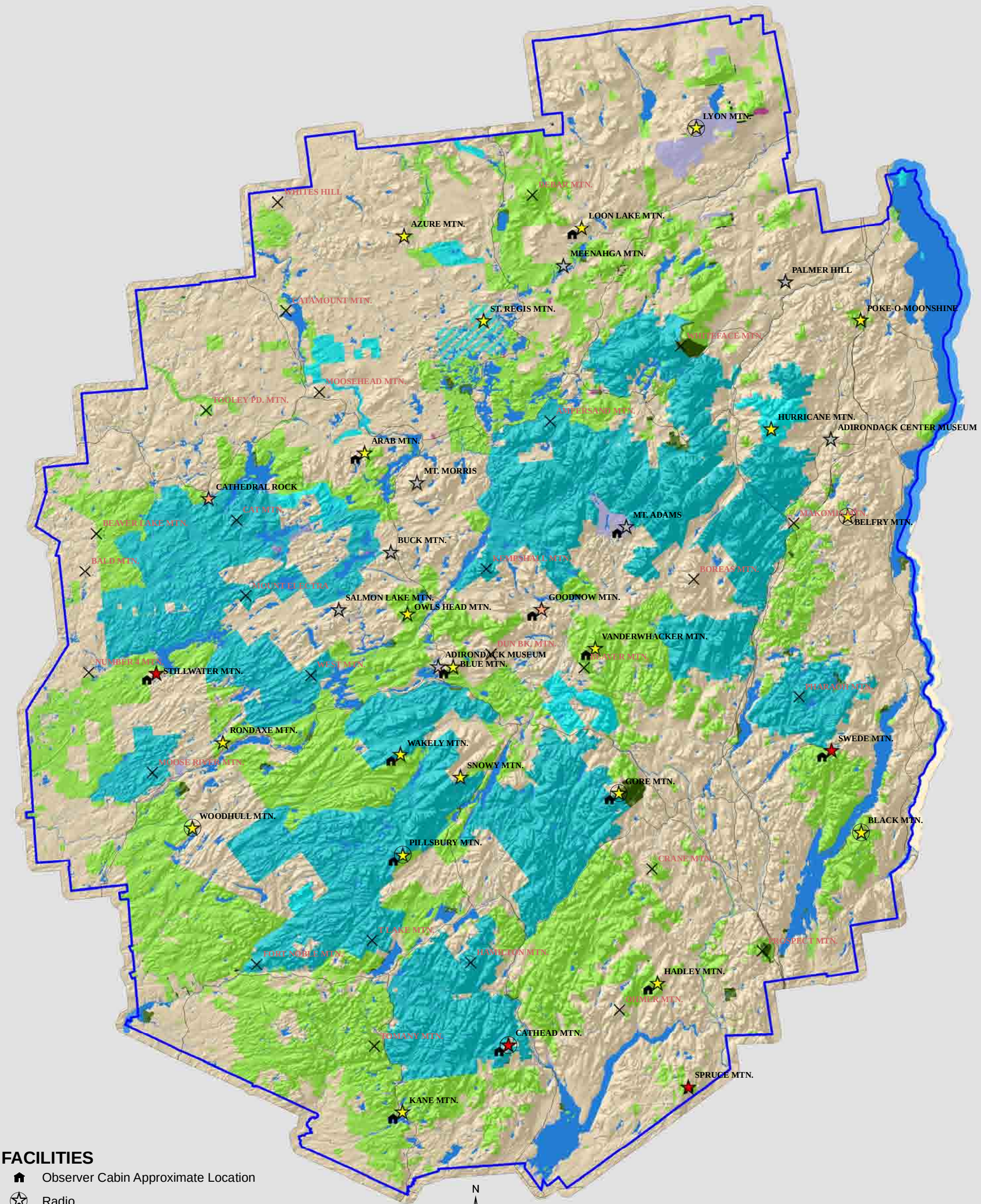
Produced by: Lands & Forests GIS
NYSDEC, 3.13.2006

4) NYS Repeater Locations Map



A D I R O N D A C K P A R K

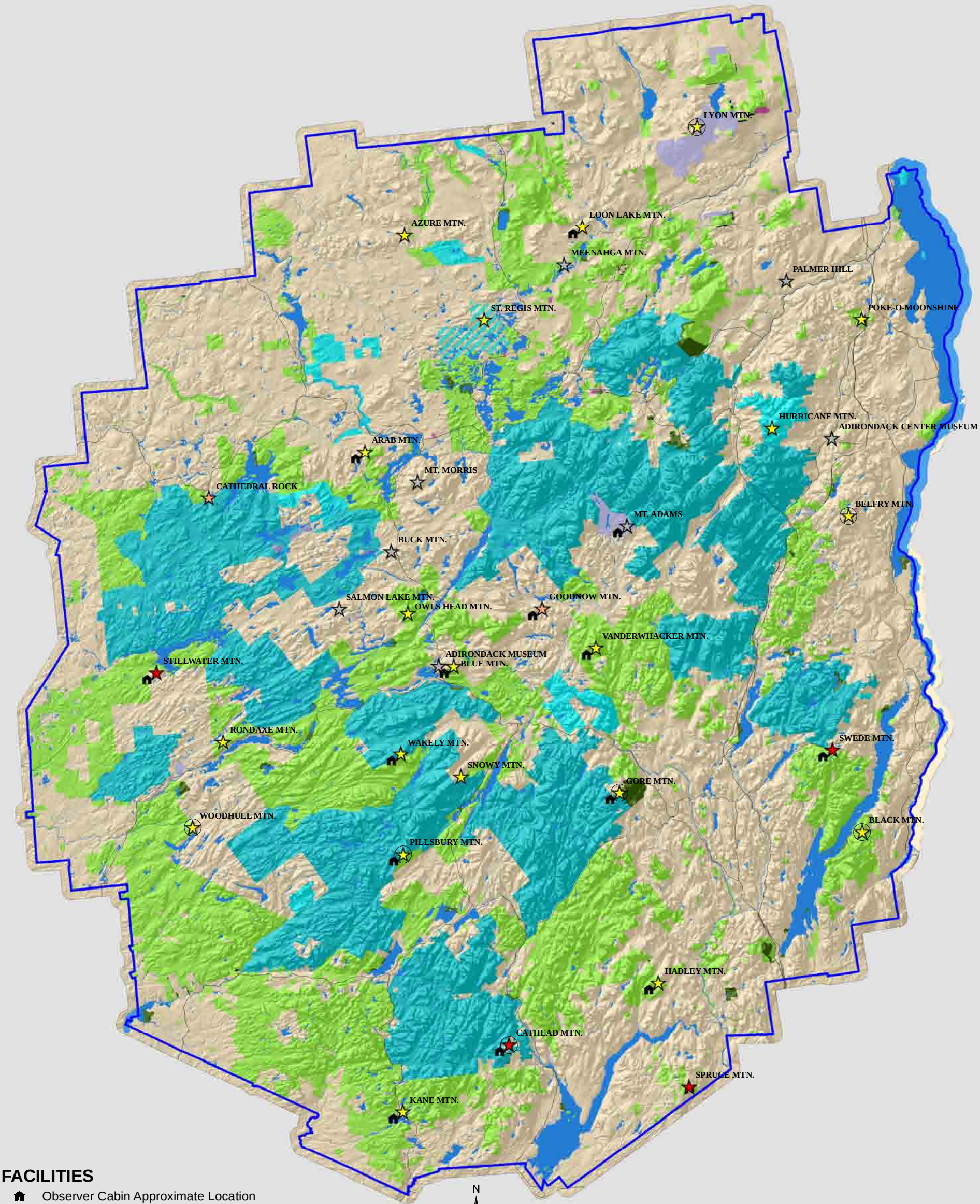
FIRE TOWERS, OBSERVER CABINS AND RADIO FACILITIES PAST AND PRESENT



A D I R O N D A C K P A R K

FIRE TOWERS, OBSERVER CABINS AND RADIO FACILITIES

2010



FACILITIES

- Observer Cabin Approximate Location
- Radio

FIRE TOWERS

- Fire Towers (State Owned) On Forest Preserve
- Fire Towers (State Owned) On Private Land
- Fire Towers Under Jurisdiction Of ESF
- Fire Towers (Privately Owned) On Private Land

N
W E
S

Miles
5 2.5 0 5 10 15 20

2/04/10

LAND CLASSIFICATION

- Wilderness
- Canoe Area
- Primitive
- Wild Forest
- Intensive Use
- Historic
- State Administrative
- Pending Classification