Table I.H. – Exceptions and Deeded Restrictions			
Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	Proposal ID (Surveyor's Reference)
Allen Lake State Forest	23	Exception south of Seavert Road	Lot 33, Proposal J

Land Acquisition

Acquisition of property from willing sellers on the landscape surrounding the unit may be considered in the following priority areas:

- In-holdings and adjoining properties that would reduce management costs and benefit resource protection and public access goals
- the mineral estate wherever it is split from a State Forest tract
- properties within identified matrix forest blocks and connectivity corridors
- forested lands in underserved areas of the state
- forested lands in areas that are in need of watershed protection

For more information on land acquisition, please see SPSFM page 147 at <u>http://www.dec.ny.gov/lands/64567.html</u>.

Infrastructure

State Forests are managed with a minimal amount of improvements to accommodate rustic, forest based recreational opportunities while providing for resource protection; public health and safety; and access for individuals of all ability levels. For more information on infrastructure policies, please see SPSFM page 157 at <u>http://www.dec.ny.gov/lands/64567.html</u>.

Roads and Trails

DEC's GIS data contains an inventory of public forest access roads, haul roads and multipleuse-trails on the unit, including a representation of the allowable uses along each road or trail segment. Table I.J. contains a summary of roads, trails and related infrastructure on the unit.

Additional Information

State Lands Interactive Mapper (SLIM) – An interactive online mapper can be used to create custom maps of recreational trails on this Unit to help people plan outdoor activities. Located at DEC's Mapping Gateway: <u>http://www.dec.ny.gov/pubs/212.html</u>

Google Earth Virtual Globe Data - Some of DEC's map data, including accessible recreation destinations, boat launches, lands coverage, roads and trails on this Unit can be viewed in Google Maps or Google Earth. (Also located at DEC's Mapping Gateway)

Table I.J. – Existing Access and Parking				
Category	Total Amount	Needing Improvement		
Public Forest Access Roads	50.7 mi.	50.7 mi.		
Haul Roads	7.1 mi.	7.1 mi.		
Trails	60.8 mi.	53.0 mi.		
Stream Crossings				
Bridges	9	0		
Culverts	636	512		
Related Infrastructure				
Parking Areas / Trailheads	55	25		
Gates / Barriers	109	64		

See Figure 3 for Recreational Access and Facilities Maps.

Use and Demand on Roads, Haul Roads and Parking Areas

The forest roads on the Allegany Unit are used extensively, especially during the fall hunting seasons. The demand is very stable and one of the biggest challenges is procuring the resources to properly maintain the roads and parking areas.

Use and demand on multiple use trails is discussed under Recreation.

Many forest roads that are generally open to the public tend to suffer from littering and illegal dumping. Roads with wide back slopes also tend to attract illegal off-roading activity which is difficult to prevent and very expensive to repair.

Taxpayer dollars are spent each year repairing damage from vandalism, littering, and illegal offroading.

There are some forest roads currently closed to the public that will be opened if they can be upgraded to meet the public forest access road (PFAR) standards.

Signs / Kiosks

There are a total of 99 signs and kiosks on the unit.

The W.A.G. Trail, Phillips Creek State Forest, and Turnpike State Forest are all in need of new informational kiosks at their trailheads. Several I.D. signs on multiple State Forests are in need of repair or replacement.

Boating and Fishing Facilities

Allen Lake State Forest provides universally accessible fishing opportunities and a nonmotorized boat launch onto Allen Lake. Heavy aquatic vegetation can be an issue for fishing from the pier at certain times of the year.



A universally accessible floating pier on Allen Lake.

Boating and fishing facilities as well as their use and demand are discussed under Recreation.

Designated Campsites

There are 90 designated primitive campsites on the Unit. Periodically these campsites are temporarily closed or relocated as needed for maintenance and safety. Campsites are available on a first come first serve basis and require a free permit **only** if the party size is 10 or more or if the stay will be more than three nights. Local forest rangers issue permits.



A popular designated campsite on Palmer's Pond State Forest.

Once the site of a fire tower, a pavilion, and a ranger cabin, Jersey Hill State Forest offers several designated primitive campsites on Fire Tower Forest Road.



Camping facilities, as well as their use and demand are discussed under Recreation.

Communications Facilities

A police transmission tower is located on Karr Valley Creek State Forest.

Law enforcement currently uses the facility and demand for a better signal has increased.

FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS

Operations Facilities

The West Almond Field Operations Maintenance Center is located on County Route 2A on Karr Valley Creek State Forest. The Maintenance Center is the headquarters for the West Almond Operations Staff who maintains the infrastructure on the Allegany Unit.

There is currently a high demand on the Operations staff, facilities and equipment. As the infrastructure on the Unit ages, it requires continuous maintenance and as new projects are created, additional Operations resources will be needed to perform the same level of service to the public as exists now.

Non-recreational Uses

Off-Highway and All-Terrain Vehicle Use

There are currently no official ATV Trails on or near the Allegany Unit. Should an official ATV Trail system become established on adjacent properties, connector trails through the Allegany Unit will be considered on a case-by-case basis in accordance with the SPSFM.

For a comprehensive discussion of DEC's policy regarding ATV use on State Forests, please refer to page 213 of the SPSFM at <u>www.dec.ny.gov/lands/64567.html</u>.

Military Field Exercises

Temporary Revocable Permits have been issued for military helicopter training in the past. The State Forests on the Unit are available where appropriate for military field exercises.

At this time there is little to no demand for military field exercises.

Agricultural Use

There is currently no agricultural demand or use on the Allegany Unit. Should agricultural demand or opportunities arise, they will be examined on a case-by-case basis in accordance with the SPSFM.

Formal and Informal Partnerships and Agreements

Conservation and stewardship partnerships are increasingly important, especially for public land management agencies. Considering the fact that resources will always be limited, collaboration across political, social, organizational and professional boundaries is necessary for long-term success and sustainability. Encouraging the development of cooperative and collaborative relationships is and can be done through volunteer agreements with the department. For more information on these and other partnerships, please see SPSFM page 181 at http://www.dec.ny.gov/lands/64567.html.

The Allegany County Federation of Snowmobilers has entered into a volunteer stewardship (VSA) agreement with the DEC to maintain the network of snowmobile corridors throughout the Unit.

The Finger Lakes Trail association has entered into a volunteer stewardship (VSA) agreement with the DEC to maintain the Finger Lakes/North Country Trail throughout the Unit and across Region 9.

Currently there are five VSA's recently adopted to assist in maintaining the W.A.G. Trail.

A VSA is being pursued to maintain a network of horse-riding trails across the Unit. Several parties have expressed an interest in adopting an official trail system. If an agreement can be reached, it will be in accordance with both the SPSFM and this plan.

Public Use Surveys

The public comment period will be used to determine the actual use of State Forest Lands in the Allegany Unit. These public comments will be incorporated into the final draft of this plan.

Recreation

Recreation is a major component of planning for the sustainable use of State Forests on this unit. DEC accommodates diverse pursuits such as snowmobiling, horseback riding, hunting, trapping, fishing, picnicking, cross-country skiing, snowshoeing, bird watching, geocaching, mountain biking, and hiking. Outdoor recreation opportunities are an important factor in quality of life. We often learn to appreciate and understand nature by participating in these activities. However, repeated use of the land for recreational purposes can have significant impacts, and precautions must be taken to ensure that our natural resources are not degraded by overuse.

For further discussion of recreational issues and policies, please see SPSFM page 187 at <u>http://www.dec.ny.gov/lands/64567.html</u>.

The following section includes an inventory of recreational opportunities available on this unit as well as a description of use and demand for each activity. Recreational maps and geographic data are available at DEC's Mapping Gateway http://www.dec.ny.gov/pubs/212.html in Google format or in the State Lands Interactive Mapper.

Wildlife-related Recreation

Hunting

Hunting is arguably the most popular recreational activity on the Allegany Unit. All State Forests within the Unit are open to hunting (subject to the Environmental Conservation Law) and see very high use, especially during the fall deer and turkey seasons. During the fall seasons, Allegany County tends to see a dramatic increase in seasonal residents and State Forest use reaches its peak.

While most use is related to big game and turkey hunting, small game hunting is also popular. The Lands and Forest staff receive numerous phone calls every year inquiring about recently completed logging operations and clear cuts, which provide exceptional small game and bird hunting opportunities.

The most popular State Forest destinations tend to be those accessible by town and forest roads, those close to agricultural land, and those with a high proportion of early successional habitat.

For more information on the Region 9 Wildlife Management Units, visit http://www.dec.ny.gov/outdoor/9333.html#WMU9

Fishing

Allen Lake, Palmer's Pond, Keeney Swamp and Hanging Bog provide the best opportunities for lake and pond fishing. Of these, Allen Lake is the only water that is stocked annually with trout.

The WAG Trail provides fishing access to the Genesee River. Vandermark Creek and Black Creek both provide limited opportunities for fishing. Both creeks are stocked, but the deeper, faster waters downstream from the State Forests provide the best fishing.

There is stable, high demand for continued stocking and fishing opportunities at Allen Lake. Demand for fishing sites is best met outside the Unit as most of the state land within the Unit does not possess suitable habitat for sport fish populations. For more information on fishing opportunities and species found on the Unit, see Appendix F.



Young anglers catch their first fish on Keeney Swamp!

Trapping

Trapping is permitted on all areas within the Unit, though some areas see much higher use than others. Trapping is subject to the Environmental Conservation Law.

Current trapping opportunities appear to meet demand. If higher demand for trapping occurs, steps may be considered through the timber harvest program to create additional habitat for furbearers.

Viewing Natural Resources

The Allegany Unit contains exceptional opportunities for viewing natural resources. With over 46,382 acres, a diverse spectrum of habitats provides extensive natural resource viewing opportunities. These habitats range from water bodies and wetlands, open grass and brushy fields, and young to mature hardwood and conifer forests.

Natural Resource viewing is difficult to quantify, but from the public comments received, demand is being met by the opportunities currently provided.

Camping

Opportunities for camping are abundant on the Unit. There are 90 designated primitive campsites easily accessed by town or forest road. Camping for those desiring greater solitude and challenge can be found throughout the State Forests. Camping is permitted at designated campsites or anywhere on State Forest Land as long as it is at least 150 feet from a road, trail, or body of water, unless otherwise prohibited.

Camping is prohibited on Allen Lake State Forest in the area bounded by Muckle, Town Line, Seavert and West Hill Roads (around Allen Lake). Camping on the rest of the property is permitted.

Campsites are available on a first come first serve basis and require a free permit **only** if the party size is 10 or more or if the stay will be more than three nights. Local forest rangers issue the permits.

Demand for camping is moderate and stable. While most demand happens during the fair weather summer months, demand for winter camping exists as well. As primitive camping away from designated camp sites requires little to no additional work on the part of the DEC, opportunities for camping are plentiful. The Forest Roads are generally not plowed, so winter camping access is often restricted to non-motorized access.

Palmer's Pond Day Use area contains several designated campsites and a universally accessible port-a-john when funding allows.

The Stewart Road Horse Parking area contains several designated campsites and a universally accessible port-a-john when funding allows.



The newly rebuilt Stewart Forest Road Horse Parking Area.

Water-based Recreation

Swimming and non-motorized boating can be accommodated on the Genesee River, Allen Lake, Keeney Swamp, Hanging Bog and any small, unnamed ponds and streams.

• A non-motorized boat launch is located on Allen Lake State Forest.

Currently there are no suitable locations along the WAG Trail to launch a canoe or kayak. The potential exists to create a boat launch on the York Corners parking area of the WAG Trail. Partnerships and cooperation will be required to accomplish this.

Demand for water-based recreation is low to moderate as the Allegany Unit has limited waterbased recreation opportunities.

Trail-based Recreation

Table I.L. – Multiple Use Trails*			
Use	Length (mi.)		
Hiking	128.9		
Cross Country Skiing	68.7		
Equestrian	87.3		
Mountain Biking	96.3		
Snowmobile	103.2		

* Length available for each use includes use on PFARs but does not include municipal roads.

See Figure 3 for Recreation Maps.

The WAG Trail

The WAG Trail is a 9-mile multi-use recreation trail and historic transportation corridor in Allegany County, extending between the Village of Wellsville and the Pennsylvania state line. It follows the route of the former Wellsville, Addison and Galeton Railroad along the upper Genesee River, just a few miles from its headwaters.



The WAG Trail winding along the Genesee River. Photo courtesy of Marilee Patterer.

The WAG Railroad was originally part of the Buffalo and Susquehanna Railroad system, which at its peak extended from Buffalo, NY to Sagamore, PA. The branch from Galeton, PA to Wellsville was constructed in 1895-1896. In 1929 the "B & S" became part of the Baltimore and Ohio Railroad system. Then, in 1956, the Wellsville branch and the branch from Galeton to Addison, NY were sold off to the H. E. Salzberg Company and became the Wellsville, Addison and Galeton Railroad. The railroad served the Sinclair Oil Refinery in Wellsville and several tanneries in Pennsylvania, hence its nickname "The Sole Leather Line."

The "WAG", as it was known, operated until 1979, but the closure of the Sinclair refinery in 1963 had already eliminated the railroad's major customer in Wellsville. The Wellsville branch ceased operating altogether in 1973 after severe damage from the flooding of Hurricane Agnes. The State of New York acquired its 9-mile section in 2009.

Since then, numerous improvements including bridge re-decking, culvert replacements, erosion control measures, trail grading and resurfacing, and new gate installations have transformed the once abandoned corridor into an attractive and popular recreational destination.

The WAG Trail is maintained by DEC Operations and several Volunteer Stewardship Agreements (VSA's).

The WAG Trail is open to the public along its entire length, though sections may be closed periodically for maintenance and renovation. The trail is open for all non-motorized uses and snowmobiling in season, and it is popular with fishermen for access to the Genesee River.



(Left) The newly designed WAG Trail sign on a newly installed gate. Photo courtesy of Marilee Patterer.

(Right) A local hiking group crossing a newly renovated bridge on the WAG Trail. Photo courtesy of Marilee Patterer.



The West Almond Trail System

The West Almond Trail System is a series of 12 trails totaling over 27 miles of trail-based recreation opportunities. The trails accommodate cross-country skiing, equestrian use, and multi-purpose use. For details on designated trails, refer to the Infrastructure and Recreation Maps in Figure 3.

The West Almond Trail System can be accessed from several locations. A spacious ski parking area off of State Route 244 serves as a trail head. An informational kiosk, a covered picnic table, horse stalls, and an orienteering course can also be found near the parking area.

The facilities at the Horse parking area on Stewart Forest Road were renovated in 2015 and include: pavilion-style picnic areas with an accessible picnic area, new campfire rings, a hand pump well, state-of-the-art horse stalls, a universally accessible loading ramp and a seasonally available port-a-john.



(Top) Trail Map at Route 244 parking area, (Bottom) Facilities available at Stewart Forest Road parking area.

Nearby, Palmer's Pond Day Use Area is a popular picnicking and camping destination. There is a large parking area and several designated campsites near the pond.

Two parking areas on Miller Road serve as the trailheads for loops 10 and 11. These trails have also been designated for CP-3 use. CP-3 trails are accessible to ATV users with a valid Motorized Access Permit for Peoples with Disabilities (MAPPWD). More information about the MAPPWD program can be found at: <u>http://www.dec.ny.gov/outdoor/2574.html</u>

For maps showing these trails, refer to Figure 3.

The Hidden Falls Trail

The Hidden Falls Trail begins at the Saunders Road parking area. This 1.5-mile long hiking trail leads to a secluded waterfall in the southwestern portion of Allen Lake State Forest. After leaving the parking area, the trail passes through a former gravel pit before climbing on top of an esker (a long, narrow glacial ridge,), which it follows for about half a mile, and crosses a stream which cuts through the esker in a deep gash. The trail then follows some rolling hills and crosses two more streams before passing by another, much older, gravel pit and then two old homestead sites. After this, the trail crosses an old town road and continues north past several different stands of trees before reaching the edge of the ravine. Listen for the falling water - you can hike down the slope to get a better look at the waterfall, which lies in a narrow gorge near the State Forest boundary. See Figure 3 for more information.

A foot bridge on the Saunders Road parking area.



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RECREATION



A portion of the Hidden Falls Trail follows a narrow glacial esker.

For more information on The Hidden Falls Trail, visit http://www.dec.ny.gov/lands/63250.html

Cross Country Skiing

There are 9.5 miles of trails designated for cross country skiing in the West Almond Trail System. General regulations apply. Some trails are directional, others accommodate both directions. In this case skiers must use the tracks on the right.

Local use and demand is consistent when weather permits. Public comments indicate a desire to see the current trail system improved and groomed.

Equestrian

Over 14 miles of loop trails are maintained for equestrian use on the West Almond trail system. In the West Almond Trail System section, new facilities are described that enhance the opportunities for horseback riding on the Allegany Unit. These trails are open to equestrian use from June 1st through September 30th each year unless otherwise designated. Equestrian users are required to have a negative Coggins Test for their horses.

The existing trail systems are heavily used during the riding season. Local demand is very high and several user groups have expressed an interest in establishing a county wide Volunteer Stewardship Agreement to maintain horse trails and establish new trail systems, particularly in the Centerville area. For organized rides or parties of 20 or more, a temporary revocable permit (TRP) is required. For more information on applying for a TRP on the Allegany Unit, contact the West Almond Forestry Staff.

Mountain Biking

There are currently no trails in the Allegany Unit dedicated or maintained exclusively for mountain biking. Mountain biking is generally permitted on multi-purpose trails except where specifically prohibited.

There has been no public comment expressing interest in establishing mountain biking trails on the Allegany Unit. Typically mountain bike users gravitate towards steep grades and extreme terrain which are atypical in the Unit. Most of the Allegany Unit does not have the soils or topography to support a mountain bike trail system, but if interest is expressed, this can be examined further in accordance with this plan and the SMPSFM.

Snowmobiling

The DEC has entered into a Volunteer Stewardship Agreement with the Allegany County Federation of Snowmobilers, Inc. to maintain an extensive network of snowmobile corridors across the Allegany Unit.

The snowmobile corridors on the Allegany Unit are used heavily during snowmobile season. At this time, the current mileage of snowmobile trails on the Allegany Unit is meeting demand. For maps of State Forests on the Unit containing snowmobile trails, see the Infrastructure and Recreation Maps in Figure 3.

Other Recreational Activities

Orienteering

State Forests within the Unit provide excellent opportunities for orienteering and geocaching.

There is one official orienteering course located at the Route 244 Ski Parking Area on Phillips Creek State Forest. The course was developed by a local Eagle Scout and offers orienteering for both GPS and map and compass users.

Currently there is a moderate demand for orienteering on the Allegany Unit. Several geocaches are located on the Unit, and the orienteering course is used by recreationists and as a training exercise for Lands and Forest Staff and the Allegany County Wilderness Search and Rescue Team.



Dog Training / Field Trials

The training of dogs on state forests is permitted. Competitive events such as field trials require special licensing and events with more than 20 people would require a TRP. These activities are regulated under Environmental Conservation Law section 11-0923, which sets specific dates for these activities. See Appendix I.

The most popular areas for dog training are near Wildlife Management Areas (WMAs), where pheasant stocking and habitat improvement activities occur.

Target Shooting

Recreational target shooting is a popular activity on State Forests within the Allegany Unit. Target shooting locations are generally informal, but there are areas that have been vandalized in the past which can lead to the closing of these areas to target shooting. One of the most persistent problems is littering where spent ammunition casings and targets are not removed after target shooting.

Shooters must always shoot into a safe backstop, and wear ear and eye protection. Using trees as targets or backstops is prohibited. Users must avoid shooting into or across these recreation areas, trails, and roads. Target shooting on State Lands is regulated by ECL and 6 NYCRR 190.8; (bb), see Appendix I.

Local use is high in the time before upcoming hunting seasons, while demand seems stable.

UNIVERSAL ACCESS

Hang Gliding

There is currently no demand or opportunity for hang gliding on the Allegany Unit.

Overall Assessment of the Level of Recreational Development

It is important that recreational use is not allowed to increase above a sustainable level. The DEC must consider the impact from recreational users on other management goals. This includes taking into account long-term maintenance and the balancing of multiple uses.

At the Unit level, there is a significant gap in the spatial distribution of trail-based recreational opportunities. The recreational opportunities are more developed for the eastern State Forests than they are for the western Forests. The lack of formal, maintained trail systems has led to the informal use of several old skid trails as horse/multi-purpose trails with illegal maintenance and marking. If this trend continues, recreational use may escalate beyond sustainable levels. The first step in addressing this is to pursue Volunteer Stewardship Agreements with user groups to allow trail adoption. Once there are groups in place to provide good stewardship, establishing formal trails can begin.

For more information on becoming a Volunteer Steward on the Allegany Unit, please visit <u>http://www.dec.ny.gov/regulations/90822.html</u> or contact the West Almond Forestry Office.

As recreational opportunities increase, so may conflicts between user groups. Conflicts on the Allegany Unit have not escalated to the point where formal intervention by DEC has been necessary. If it does, Lands and Forest staff will work hard to resolve user conflict and will continue to manage the State Forests with Best Management Practices (BMPs), design and planning that will benefit future recreational possibilities.

Universal Access

DEC has an essential role in providing universal access to recreational activities that are often rustic and challenging by nature, and ensuring that facilities are not only safe, attractive and sustainable, but also compatible with resources. For more information on universal access policies, please see SPSFM page 173 at http://www.dec.ny.gov/lands/64567.html.

A universally accessible fishing pier is located on Allen Lake State Forest.

The Allegany Unit now has two newly renovated horse stall facilities with a universally accessible loading ramp which provide access to over 14 miles of horseback riding trails. See Figure 3 for Maps showing these facilities.

Motorized Access Program for People with Disabilities

The Department's Motorized Access Program for People with Disabilities (MAPPWD) permits qualified people with disabilities to use motor vehicles along specific routes for access to programs, such as hunting, fishing, camping, and wildlife viewing on state lands. These routes

MOTORIZED ACCESS PROGRAM FOR PEOPLE WITH DISABILITIES

are provided to facilitate access to these traditional programs and not for the support of ORV or ATV riding activities. This program provides access to significant recreational opportunities throughout the state and is one more way that New York is opening the outdoors to people with disabilities. This permit program is maintained pursuant to DEC Commissioner's Policy 3 (CP-3).

MAPPWD permits may be obtained from Regional DEC Foresters through regional DEC offices. Permit holders can use specified vehicles to travel beyond the reach of public roads, to areas where others must hike or bike.

A listing of MAPPWD routes is at www.dec.ny.gov/docs/lands_forests_pdf/mappwdroutes.pdf and is distributed to permit holders. MAPPWD routes and the types of vehicles allowed on the routes are carefully selected to protect natural areas and recreational activities. Access is restricted to designated routes only. All routes are subject to closure due to seasonal conditions or maintenance. See Table I.M.

Existing and potential MAPPWD routes will be assessed along with other recreational facilities and assets. Routes will be evaluated for the degree to which they provide inclusion and access to DEC programs and recreational opportunities. MAPPWD routes are carefully located in areas which are able to support this use. Unfortunately some trails experience unacceptable adverse impacts from illegal ATV and Off Highway Vehicle use. DEC will continue to monitor MAPPWD routes to prevent overuse, abuse or unacceptable impacts.

The Allegany Unit currently has five routes open to ATV use for recreationists holding a valid MAPPWD permit. These are located on Coyle Hill State Forest and Palmer's Pond State Forest. Maps of these trails can be found in Figure 3.

The location and acres accessible by the trails are diverse and interesting. Users can experience a broad variety of habitats and forest types, some which are easily accessed by town roads, and others which provide much more remote experiences.

Table I.M. – MAPPWD Trails within Unit					
Facility	Name	Miles	Vehicle Type	Permitted Program	
Coyle Hill State Forest	Red Trail	2.08	ATV	Hunt, Wild	
Coyle Hill State Forest	Blue Trail	1.50	ATV	Hunt, Wild	
Coyle Hill State Forest	Yellow Trail	1.02	ATV	Hunt, Wild	
Palmer's Pond State Forest	East Miller Loop, Trail 10	5.12	ATV	Hunt, Wild	

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MOTORIZED ACCESS PROGRAM FOR PEOPLE WITH DISABILITIES

Palmer's Pond State	West Miller Loop Trail 11	1 06	۸۳۱/	Hupt Wild
Forest	west while Loop, mail 11	4.90	AIV	Hunt, whu

Application of the Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA), along with the Architectural Barriers Act of 1968 (ABA) and the Rehabilitation Act of 1973; Title V, Section 504, have had a profound effect on the manner by which people with disabilities are afforded equality in their recreational pursuits. The ADA is a comprehensive law prohibiting discrimination against people with disabilities in employment practices, use of public transportation, use of telecommunication facilities and use of public accommodations. Title II of the ADA requires, in part, that reasonable modifications must be made to the services and programs of public entities, so that when those services and programs are viewed in their entirety, they are readily accessible to and usable by people with disabilities. This must be done unless such modification would result in a fundamental alteration in the nature of the service, program or activity or an undue financial or administrative burden.

Title II also requires that new facilities, and parts of facilities that are newly constructed for public use, are to be accessible to people with disabilities. In rare circumstances where accessibility is determined to be structurally impracticable due to terrain, the facility, or part of facility is to be accessible to the greatest extent possible and to people with various types of disabilities.

Consistent with ADA requirements, the Department incorporates accessibility for people with disabilities into the planning, construction and alteration of recreational facilities and assets supporting them. This UMP incorporates an inventory of all the recreational facilities or assets supporting the programs and services available on the unit, and an assessment of the programs, services and facilities on the unit to determine the level of accessibility provided. In conducting this assessment, DEC employs guidelines which ensure that programs are accessible, including buildings, facilities, and vehicles, in terms of architecture and design, transportation and communication to individuals with disabilities.

Any new facilities, assets and accessibility improvements to existing facilities or assets proposed in this UMP are identified in the section containing proposed management actions.

The Department is not required to make each of its existing facilities and assets accessible as long as the Department's programs, taken as a whole, are accessible.

For copies of any of the above mentioned laws or guidelines relating to accessibility, contact the DEC Universal Access Program Coordinator at 518-402-9428 or UniversalAccessProgram@dec.ny.gov

Mineral Resources

Oil, Gas and Solution Exploration and Development

Oil and gas production from State Forest lands, where the mineral rights are owned by the state, are only undertaken under the terms and conditions of an oil and gas lease. As surface managers, the Division of Lands and Forests will evaluate any concerns as they pertain to new natural gas leases on State Forest lands. Consistent with past practice, prior to any new leases, DEC will hold public meetings to discuss all possible leasing options and environmental impacts. A comprehensive tract assessment will be completed as part of this process. For more information on natural gas and other mineral resource policies, please see SPSFM page 225 at http://www.dec.ny.gov/lands/64567.html.

Existing leases on the unit:

Table I.M. – Current Oil and Gas Leases				
Facility Name	Contract #	Lessee	Acreage	Towns
Bully Hill State Forest	R-79548	Otis Eastern Services, Inc.	125.66	Almond

Table I.N. Active Wells on the Unit			
Facility Name	Well Name	Company	Link
Bully Hill State Forest	NYSRA 3- 6213	Otis Eastern Service, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100313549 0000

Table I.O. Plugged and Abandoned Wells on the Unit			
Facility Name	Well Name	Company	Link
Bully Hill State Forest	NYSRA 3-2	Eastern States Exploration Co.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100319094 0000
Vandermark State Forest	Tucker 1	Kendall Refining Co.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100302297 0000
Vandermark State Forest	NYSRA 7-1	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100316239 0000
Vandermark State Forest	NYSRA 7-2	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100317135 0000
Vandermark State Forest	NYSRA 7-3	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells

			/index.cfm?api=3100318849 0000
Vandermark State Forest	NYSRA 7-4	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100320348 0000
Vandermark State Forest	NYSRA 7-5	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100320714 0000
Vandermark State Forest	NYSRA 7-6	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100320405 0000
Vandermark State Forest	NYSRA 7-7	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100320869 0000
Vandermark State Forest	NYSRA 7-8	Vandermark Exploration, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100321776 0000
Coyle Hill State Forest	State of New York 1	Beers & Fralick	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100302674 0000
Coyle Hill State Forest	State of New York 2	Beers & Fralick	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100302675 0000
Plumbottom State Forest	McOmber Reba 1	Hartsville Gas & Oil, Inc.	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100304597 0000

Allen Lake State Forest	Byron Bessie	French, Harold	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100300347 0000
Allen Lake State Forest	Coon Mary V 1	Parsons Bros	http://www.dec.ny.gov/cfmx/ extapps/GasOil/search/wells /index.cfm?api=3100303907 0000

Pipelines

The Department, pursuant to ECL § 9-0507, may lease State lands for the construction and placement of oil and gas pipelines only if a portion of the mineral resources to be transported was extracted from State lands. Pipeline and road development must be in compliance with State Forest tract assessments, the Strategic Plan for State Forest Management, and the Generic Environmental Impact Statement and Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program.

Pipelines will be located immediately adjacent to Public Forest Access Roads. The location of the roads and pipelines will be in compliance with tract assessments. Pipelines may be located in stands managed for closed canopy conditions only along pre-existing roads that intersect such area. Additional surface disturbance associated with such construction will be considered only in areas other than stands which are managed for relatively unbroken canopy conditions. Areas managed for unbroken canopy conditions may be referred to using various terms such as "uneven-aged," "uneven-aged variable retention," "all aged," "high canopy," "closed canopy" or others.

Pipeline development on State land will not be permitted if the Department determines that it creates a significant long-term conflict with any management activities or public use of the State Forests, or with other management objectives in this plan. All pipelines will be gated to restrict motorized access, and if necessary hardened crossings or bridges will be installed, to allow heavy equipment access across pipelines. These requirements will be satisfied by the Lessee.

Exceptions to the above guidance must be approved by the Division of Lands and Forests, in consultation with the Division of Mineral Resources.

SUPPORTING LOCAL COMMUNITIES

• Two pipelines predating State ownership pass through Allen Lake State Forest. One pipeline was formerly abandoned by National Fuel in 2003, and the other is maintained and operated by Consolidated Natural Gas Co., a division of Dominion Resources, Inc.

Mining

There are no active gravel/shale pits or other surface mines on the Allegany Unit, though in many places old excavation sites can still be found. Most notably, Klipnocky State Forest has a historic rock quarry which was used in the construction of the nearby Almond Dam. Requests were made to reopen the quarry to supply rock for the construction of the Southern Tier Expressway, but the proposal was rejected in 1971 on the grounds that reopening the quarry would have an adverse environmental impact on the natural resources of the State Forest.

Supporting Local Communities

Tourism

State Forests can be an economic asset to the local communities that surround them. It is estimated that more than three out of every four Americans participate in active outdoor recreation of some sort each year. When they do, they spend money, generate jobs, and support local communities. For more information, please see SPSFM page 245 at http://www.dec.ny.gov/lands/64567.html.

The NYS DEC has partnered with the Allegany County Office of Tourism and Culture to promote Allegany County's spectacular natural resources. With over 50,000 acres of State Land, Allegany County provides some of the best outdoor recreation opportunities in the area. More information can be found at <u>http://www.discoveralleganycounty.com</u>

The West Almond Forestry staff has partnered with The Genesee River Wilds—a Not-for-Profit group which seeks to "restore, protect and enjoy the upper Genesee River." Through multiple partnerships and cooperative efforts, G.R.W. has established multiple parking areas, launch sites and informational kiosks along the Genesee River.

Taxes Paid

The New York State Real Property Tax Law provides that all reforestation areas are subject to taxation for school and town purposes. Some reforestation areas are also subject to taxation for county purposes. Most unique areas and multiple use areas are exempt from taxation. All of these lands are assessed as if privately owned.

FOREST PRODUCTS

Detailed tax information can be obtained by contacting Allegany County Office of Real Property. The following taxes are projected for State lands in this unit for the 2014 tax year:

Table I.N. – Real Pr	operty Taxes - 20	14		
Town	Township Tax	School Tax	Special District Tax	Total
Alfred	\$1,520	\$5,758	\$148	\$7,426
Allen	\$4,693	\$9,476	\$237	\$14,406
Almond	\$70,649	\$193,745	\$3,312	\$267,706
Amity	\$10,932	\$18,457	\$1,067	\$29,916
Angelica	\$3,178	\$11,316	\$485	\$14,979
Belfast	\$11,301	\$15,945	\$1,056	\$28,302
Birdsall	\$59,872	\$167,212	\$7,923	\$235,007
Burns	\$13,159	\$30,900	\$698	\$44,757
Caneadea	\$13,827	\$32,419	\$2,301	\$48,547
Centerville	\$42,434	\$60,151	\$2,457	\$105,042
Friendship	\$17,516	\$26,146	\$2,405	\$46,067
Granger	\$9,668	\$18,268	\$613	\$28,549
Grove	\$3,353	\$5,512	\$48	\$8,913
New Hudson	\$26,279	\$30,161	\$1,940	\$58,380
Rushford	\$4,577	\$12,650	\$564	\$17,791
Ward	\$56,899	\$136,495	\$1,644	\$195,038
West Almond	\$44,387	\$188,681	\$2,606	\$235,674
Totals	\$393,704	\$963,292	\$29,504	\$1,386,500

Forest Products

Timber

Timber management provides a renewable supply of sustainably-harvested forest products and is a tool used to enhance biodiversity. Forest products in the Unit include furniture quality

FOREST PRODUCTS

hardwoods, softwoods for lumber, utility poles, fence boards and posts, log cabins, fiber for paper making, firewood, animal bedding, wood pellets, biofuel, and chips for electricity production. For more information, please see SPSFM page 251 at http://www.dec.ny.gov/lands/64567.html.

Information on upcoming timber management activities on the unit is contained in the land management action schedules in Part III of this plan.

Allegany County has a rich heritage of timber production and harvesting. Sawmills across western New York and northern Pennsylvania provide a market for both hardwood and softwood sawtimber. An increase in personal portable mill ownership and Amish operated sawmills and has created many local niche lumber markets.

Timber markets were quite strong for several years but collapsed within the Unit as well as across the region in 2008. Since then, timber prices slowly increased until 2016, when some species declined suddenly in value.

Forest products specific to State Forest management are generally broken down into hardwood sawtimber, softwood sawtimber, hardwood pulpwood/low-grade, softwood pulpwood, and fuelwood. While each of these products vary greatly depending on a large number of variables, trends have been observed which provide useful insights into the local demand for forest products.

The following data was computed from the West Almond Lands and Forests Sub-Office Timber Sales data from years 2010-2015. Cordwood volumes are 4X4X8 standard cords, and sawtimber volumes are International ¹/₄" Rules for MBF (1000 Boardfeet)

The average price for hardwood sawtimber was \$374.94/MBF

The average price for softwood sawtimber was \$72.05/MBF

The average price for hardwood fuelwood/pulpwood/low-grade was \$26.30/Cord

There were no sales that were primarily softwood pulpwood. Sales that contained large amounts of softwood pulpwood generally sold for less than \$10/cord.

There is a stable demand for hardwood sawtimber from State Lands because of the size, age, quality, and volume available in sales. The bidding can be quite competitive among hardwood timber buyers, but it is subject to the market in general; which fluctuates with demand for different species.

There is high demand for softwood sawtimber. Utility poles, dimensional lumber, fence boards, and fence posts are a few examples of products made from softwood sawtimber. Species such

as spruce, red pine, and especially larch are in high demand. Much of the softwood sawtimber market has to do with a productive softwood sawmill in Angelica, NY, as well as an abundance mature conifer stands planted by the CCC. Many state land contractors sell their softwood products to this mill.

Fuelwood is a very common heat source in Allegany County, and the local demand for fuelwood products is very high. While not as financially lucrative, local fuelwood sales remove low value trees from stands and greatly improve the value and quality of the remaining trees over time.

One of the biggest challenges for local forest products companies and land managers has been responding to a frequently fluctuating softwood pulp market. Cogeneration plants which chip the forest products for combustion, or pulp plants which produce paper products from wood fibers are the two most common end products for softwood pulpwood. This market is very "soft," meaning demand changes often and businesses typically cannot be assured that their products will always be purchased. This leads to reluctance to purchase large softwood pulp sales, especially when the length of a timber sale contract process could mean the difference of selling the products or not. More research is needed to help create a market for these low-value products.

Non-Timber Forest Products

At the time of writing this plan, no significant demand for non-timber forest products such as maple tapping has been observed. There are several maple producers in the area, but there has been little to no interest in purchasing a maple tapping contract on the Unit. If through the UMP or otherwise demand becomes evident, maple tapping contracts on certain stands can be pursued in accordance with the SPSFM.

Forest Health

Forest health is pursued with the goal of maintaining biodiversity. Any agent that decreases biodiversity can have a deleterious effect on the forest as a whole and its ability to withstand stress. Forest health in general should favor the retention of native species and natural communities or species that can thrive in site conditions without interrupting biodiversity. For more information on forest health, please see SPSFM page 277 at http://www.dec.ny.gov/lands/64567.html.

Invasive Species

As global trade and travel have increased, so have the introduction of non-native species. While many of these non-native species do not have adverse effects on the areas in which they are introduced, some become invasive in their new ranges, disrupting ecosystem function, reducing biodiversity and degrading natural areas. Invasive species have been identified as one of the greatest threats to biodiversity, second only to habitat loss. Invasive species can damage native habitats by altering hydrology, fire frequency, soil fertility, natural species regeneration and other important ecosystem processes.

Table I.N. – Invasive Species, Pests and Pathogens			
Plants	Status		
Common Buckthorn	Well established in certain areas of Unit and competing with		
Rhamnus cathartica	native vegetation, inhibiting native regeneration.		
Multiflora Rose	Widely dispersed across Unit and seriously inhibiting native		
Rosa multiflora	regeneration.		
Non-Native Honeysuckle	Widely dispersed carees Unit, cariously inhibiting native		
(Hollow Pith)	regeneration, and competing with pative vegetation		
Lonicera spp.			
Autumn Olive	A problem in certain areas, somewhat competing with native		
Elaeagnus umbellata	regeneration.		
Russian Olive	Uncommon in most areas, potentially competing with native		
Elaeagnus angustifolia	vegetation.		
Japanese Knotweed	A problem in some areas, where present it severely competes		
Fallopia japonica	with native vegetation.		
Giant Hogweed	Presently not known to be in the Unit but confirmed outside		
Heracleum mantegazzianum	the Unit. Reported sites will be closely monitored.		
Garlic Mustard	Common throughout the Unit, but not considered a serious		
Alliaria petiolata	problem at this time.		
Japanese Barberry	Occasionally found throughout Unit, not considered a		
Berberis thunbergii	significant problem at this time.		
Insects	Status		
Hemlock Woolly Adelaid	Presently, the adelgid has not been found in the Allegany		
Adelaes tsuaae	Unit. Plans to monitor HWA are proposed with current staff		
	and partnerships with local groups.		
Emerald Ash Borer	Presently, EAB has not been found in the Allegany Unit. All		
Agrilus planipennis	suspicious ash mortality will be investigated and treated as an		
	ongoing action in this UMP.		
Gypsy Moth	1987-88. Present in Unit. outbreaks occur cyclically.		
Lymantria dispar			
Forest Tent Caterpillar	2010-12. No significant mortality. Present in Unit, outbreaks		
Malacosoma disstria	occur cyclically.		
Eastern Tent Caterpillar	Present in Unit, outbreaks tend to be less severe in the Unit		
Malacosoma americanum	than Forest Tent Caterpillar.		

Table I.N. – Invasive Species, Pests and Pathogens		
Beech Scale	Common on all forests of this Unit.	
Cryptococcus fagisuga		
Peach Bark Beetle	Periodically a problem—some timber sales have restrictions	
Phloeotribus liminaris	on timings of harvests to mitigate potential outbreaks.	
Cherry Scallop Shell Moth	Occasional outbreaks-not a concern except for repeated	
Hydria prunivorata	outbreaks.	
Sirex woodwasp	No known recent infectations, not a major concern in this I Init	
Sirov postilio		
Silex hoculio		
Diseases	Status	
Diseases Beech Bark Disease (Fungus)	Status	
Diseases Beech Bark Disease (Fungus) Nectria spp.	Status Very common throughout Unit.	
Diseases Beech Bark Disease (Fungus) Nectria spp. Dutch Elm Disease (Fungus)	Status Very common throughout Unit. Very common, though it is still possible to find mature elm	
DiseasesBeech Bark Disease (Fungus)Nectria spp.Dutch Elm Disease (Fungus)Certatocystis ulmi	Status Very common throughout Unit. Very common, though it is still possible to find mature elm trees within the area of this Unit.	
Diseases Beech Bark Disease (Fungus) Nectria spp. Dutch Elm Disease (Fungus) Certatocystis ulmi Chostput Blight (Eungus)	Status Very common throughout Unit. Very common, though it is still possible to find mature elm trees within the area of this Unit. American chestnut saplings are present on several of the	
Diseases Beech Bark Disease (Fungus) Nectria spp. Dutch Elm Disease (Fungus) Certatocystis ulmi Chestnut Blight (Fungus) Camphonectria parasitica	Status Very common throughout Unit. Very common, though it is still possible to find mature elm trees within the area of this Unit. American chestnut saplings are present on several of the forests within this Unit, but it is uncommon for a tree to survive	

Invasive species present a significant problem in areas of this Unit. For potentially catastrophic invasive species such as the Emerald Ash Borer (EAB) and Hemlock Woolly Adelgid (HWA), efforts will be made to monitor susceptible areas within the Unit for any sign of an infestation. See the Special Maps section in Figure 4 for a map showing the Unit-wide distribution of ash and hemlock stands.

In the case of EAB, silvicultural treatments focus on removing mature ash trees as part of harvests and managing for other species. White ash (*Fraxinus Americana*) regenerates regularly and abundantly on most areas in the Unit, and thus is a very important species on the Unit. If an outbreak does occur or EAB spreads from one of many known infestations surrounding the County, action will be taken to salvage ash where it is possible.

HWA is a concern as most of the eastern hemlock grows on sensitive sites such a swamps, steep ravines, riparian areas, etc. Hemlock is rarely harvested in the Allegany Unit as it provides little economic incentive to cut. Alternatively, hemlock trees add high value to the forest for riparian buffers, wildlife habitat, and aesthetic values. Hemlocks will be monitored as part of the actions prescribed by this plan, and outbreaks will be treated on a case-by-case basis.

For most other invasive pests, silviculture and timber sale activities will address infestations and outbreaks. Sale stands with invasive vegetation will be treated as a standard silvicultural

practice. Insect outbreaks will be mitigated indirectly by ensuring our forest stands are managed to promote healthy, vigorous trees and biodiversity.

Developing habitat for natural predators of detrimental insects can also be useful for preventing and controlling outbreaks. For example, over sixty species of birds as well as frogs, mice, and skunks feed on forest tent caterpillars (Witter and Kuhlman, 1972). Predation of the late pupal stages of forest tent caterpillars by birds has been known to have devastating impacts on the forest tent caterpillar populations. (Parry, et al., 1997). Enhancing wildlife habitat through forest management has the potential to increase the Unit's natural defenses against these pests.

For more information on invasive species in the Northeast please follow link:

http://na.fs.fed.us/fhp

For more information on Emerald Ash Borer please follow the links:

http://www.nyis.info/?action=eab

http://www.dec.ny.gov/animals/7253.html

For more information on Hemlock Woolly Adelgid please follow the links:

http://www.nyis.info/index.php?action=invasive_detail&id=24

http://www.dec.ny.gov/animals/7250.html

Managing Deer Impacts

The most effective method of keeping deer populations in line with management objectives is to monitor impacts while working with the Division of Fish and Wildlife to observe and manage the herd. On properties where deer are suspected to be negatively impacting values and objectives associated with biodiversity and timber management, such impacts must be inventoried and assessed. For more information on managing deer impacts, please see SPSFM page 291 at http://www.dec.ny.gov/lands/64567.html.

Sustainable Forest Management must take into account the impacts of deer browse. Deer are a non-selective browsing species which eat a wide range of herbaceous and woody plants. They do however have preferred foods, which are mainly native woody browse and forbs. This can create an over browsing problem in an area with high deer densities. Native plant species which are preferred by deer can be removed from the local landscape by over browsing, leaving voids filled by undesirable, and sometimes nonnative invasive plants. This can significantly affect the composition and structure of forests; impacting the entire ecosystem.

With proper herd and habitat management, deer can contribute to a healthy forested ecosystem. Without proper forestry and wildlife management, the deer population may have a

negative impact on the landscape by consuming more than an ecosystem can support. The concept of what population levels are able to be supported in a given system is called the carrying capacity.

Properly managed habitat will provide the proper balance of food, shelter and needed space without causing undue stress to the animals living there. When the local carrying capacity is exceeded the landscape ecology starts to decline and some preferred species may be removed from the local landscape. It is at this point that anything within reach of the deer can be impacted negatively, including plant growth rates and seedling/sapling survival. This situation is compounded because some non-preferred plant species start to colonize the sites and gain an advantage over the preferred browse species. This trend can have long lasting impacts on future forest stands and the overall diversity of a forest affecting other plants, mammals and birds.

Scientists at Cornell University estimate the current deer population is ten times the pre-colonial historical population. Studies show that properly managed forests can support 10 to 15 deer per square mile and still successfully regenerate tree and plant species. This number although favored by those in the field of forestry, is often a point of debate amongst the general public, who prefer to see more deer on the landscape. Finding common ground on this matter while using sound science is the key to better management of the public resources. State Forests in areas near dense agricultural lands show heavy browse during winter months.

Regularly scheduled forest inventories will be conducted and will include deer browse observations. In areas where deer damage is identified, efforts will be made to gather specific information to estimate the local deer population based on USFS data. This data will be shared with the Regional Big Game Biologist to plan any required response to conditions specific to the deer population and forest health. The information will also be used to select appropriate silvicultural treatments prior to any forest management. Deer Management Assistance Program (DMAP) permits and other measures may be necessary such as adjusting the size, type and timing of a harvest, and the use of enclosures. (Shaffer, 2014).

For more information on the 2014 deer harvest levels in Allegany County, visit <u>http://www.dec.ny.gov/outdoor/42232.html</u>

Summary of Eco-Region Assessments

To practice ecosystem management, foresters must assess the natural landscape in and around the management unit. State Forest managers utilized The Nature Conservancy Eco-Region Assessments to evaluate the landscape in and around this management unit. The Allegany Unit falls within the High Allegheny Plateau (HAP) Eco-Region.

ECO-REGION SUMMARY

Eco-Region Summary

The High Allegheny Plateau (HAP) Eco-Region is located along the southern tier of New York and the northern tier of Pennsylvania (Zaremba and Anderson et. al. 2003). It also includes a small portion of New Jersey. Well known features in the HAP include: The Catskills, The Shawangunks, The Kittatinny Ridge, The Poconos, Allegany State Park, Allegheny National Forest, and a large mass of Pennsylvania state-owned land.

The HAP eco-region is defined by high elevation features at the northern end of the Appalachian Plateau. Most of the eco-region is above 1200 feet. The general land form of the area is mid-elevation hills separated by numerous narrow stream-cut valleys.

One of the main features of the eco-region is an abundance of rivers and streams. The Genesee, Chemung, and Allegheny Rivers and their many tributaries flow through thousands of acres in the ecoregion. The Genesee River drains into Lake Ontario. The Chemung River flows into the Susquehanna River, which eventually empties into the Chesapeake Bay. The Allegheny River flows into the Ohio River, and eventually flows into the Mississippi River. These three different drainages contribute to the high overall aquatic diversity in the eco-region.

The northern and eastern portions of the eco-region were glaciated; the southwest portion in neighboring Cattaraugus County was not. Many northern species and communities reach their southern limit in HAP, while many southern species extend into the eco-region but not beyond. Species and communities associated with glaciated landforms occur in the north and east; biodiversity associated with older substrate and deeper erosional soils occurs in the southwest.

Another prominent feature of the eco-region is a low population density, although major population centers are nearby. There are 1.7 million people living within the 16.9 million acres of the HAP (2000 census data). The largest city is Binghamton, New York at 47,000. Only 250,000 people in the HAP live in cities over 10,000. The overall population trend indicates that people are emigrating from the region with the notable exception of the areas within reach of New York City by major highways.

There are large and significant managed tracts of land in the HAP, including three large intact forested areas: the Catskills, the Allegheny National Forest/Allegany State Park complex, and Pennsylvania state land in central PA.

Eco-Region Assessment

ECO-REGION ASSESSMENT

Table II.A. Land Use and Land Cover for the Landscape Surrounding Allegany Unit		
Land Use and Land Cover	Approximate Acreage	Percent of Landscape
Mixed Forest	422,274.6	57.9%
Crop Land and Pasture	208,657.2	28.6%
Conifer Forest	2,539.8	0.3%
Deciduous Forest Land	41,946.5	5.8%
Shrub and Brush Range Land (includes seedling/sapling type)	3,949	0.6%
Developed	3,262.5	0.5%
Other Urban/Built-up Land	19,523.4	2.7%
Open Water	2,831.2	0.4%
Forested Wetland	18,320.3	2.5%
Non-forested Wetlands	4,840.8	0.7%
Total	728,145.3	100

LOCAL LANDSCAPE CONDITIONS

Local Landscape Conditions

JR Thompson, DN Carpenter, and CV Cogbill published a study in 2013 comparing our modern northeastern forests and the forest believed to exist prior to European colonization. With the notable exception of the loss of American chestnut, Thompson et al. says, "Our analyses document a remarkable paradox about the eastern forest after 400 years of land use: it is at once largely unchanged and completely transformed." Our modern forests are similar that nearly all the taxa that were present in the precolonial forests are still present in the modern forest. What is drastically different is the relative abundance of some species. For example, in some areas hemlock and beech comprised most of the precolonial forest, and now the species is dominated by mid-successional species such as red maple and poplar. Despite the threat of invasive species and huge changes in land use, the forests as a whole remain remarkably resilient.

Compared to the early forest, we have most of the same species, but in different abundances. It seems that now, the presence or absence of species has less to do with the environment than with land use. Simply said, if one encountered a certain forest type in the precolonial forest, it was safe enough to assume that the species present were well-adapted to the site and had arrived there over many generations of forest. The same cannot be said with the modern forest; the last 400 years of land use has homogenized our landscape to a great extent. (Thompson et al, 2013).

Local landscape trends within Allegany County vary slightly when compared to averages in the High Allegheny Plateau (HAP) Eco-region and statewide trends. Whereas the State is currently 63% forested, Allegany County is 66.5% forested. As seen in Table II A., 28.6% of the local landscape is agricultural cropland, and only 3.2% of the land area is built up or developed. Many indicators predict that reforestation has peaked and will either remain the same or decline over time as development and land clearing occurs.

The 2013 Allegany County census showed a population of 48,109, or 47 people per square mile. The 2011 data received from the Allegany County Real Property Tax Service showed that there are over 34,400 tax parcels in Allegany County. Parcel sizes averaged 19 acres. Trends seem to indicate that the average parcel size is decreasing as properties are subdivided and sold.

Consistent with the statewide patterns, the vast majority of forests in the local landscape are even-aged. Most of these forests were cleared in the 18th and 19th centuries, abandoned, and reforested. The USFS Forest Inventory and Analysis Resource Update FS-59 (Widmann, 2015) shows that statewide, large diameter stands now account for 62% of the timberland, while 27% is in medium diameter stands, and only 11% is in small diameter stands. The rates of harvesting and natural tree mortality has been significantly less than growth, thus our forests have been getting older and larger.

Table II A. indicates that within the local landscape, 0.6% of the acreage is in the brush/seedling sapling stage.

The trends on the Allegany Unit, as seen in Table I.D., shows 3086 acres or 6.6% of State Forest acreage within the Unit are in the seedling-sapling stage. While this is more promising than the local landscape in general, forests are still maturing faster than they are being replaced.

The other noticeable gap within the Unit is the lack of large diameter late-successional forests. While there are no confirmed old growth stands within the Unit, there are places which exhibit late-successional forest characteristics. The State Forest Inventory Database shows 3.5% of stands have average tree diameters of 18-22 inches and 0.1% of the acres within the Unit have average stand diameters greater than 23 inches.

It should be noted that average diameter is most telling in even-aged stands. Uneven –aged stands, including old-growth, are comprised of many age and size classes, and the smaller size classes tend to reduce the average diameter. Different metrics will be needed to evaluate the quality and abundance of late-successional habitat (LSH), especially as the stands begin to form an uneven-aged character.

As the majority of land holdings in the landscape are private property, there is little that can be done to address management outside of the Unit. Opportunities to educate landowners and encourage participation in sound and sustainable land management are addressed through many public programs; including, the NYS DEC Private Land Services program. It is outside the scope of this plan to address agricultural and crop land management, and there is no potential or legislation for development on the majority of the Unit. Other than limited potential for grassland and shrub land creation, this plan will seek to address the forest age, structure, and composition, drawing insight from what is occurring at the landscape level and incorporating it into this plan.

Habitat Related Demands

As noted above, the most significant gap occurring at the landscape level and within the Unit is the seedling-sapling type, which makes up Early Successional Habitat (ESH). The northern portion of the county has greater habitat diversity as there is a broader mix of open and forested conditions. The southern part of the county is typically mature even-aged forests with little understory.

Early successional habitat is an important component of many animal species life requirements, such as: the chestnut-sided warbler, golden-winged warbler, yellow-breasted chat, ruffed grouse, cottontail rabbit, woodcock, white-tail deer, red and gray foxes, and many others. As land-use patterns change and population increases, intentionally maintaining ESH on public lands to meet the habitat requirements of these species is of utmost importance. In nature, ESH occurs as a result of natural disturbances such as wildfires, wind events, etc. These disturbances are unpredictable.

During the decades following the land abandonment between the 1850s through the 1930s, the natural conversion of agricultural fields to brushy fields and seedling/sapling forests allowed for a balance of ESH and the surrounding landscape. As land abandonment has slowed down

considerably and the young forests have matured, the loss of ESH can be seen across the landscape.

Even-aged regeneration methods, which produce ESH, tend to happen less frequently on private land due both to small parcel size and reluctance of private landowners to convert mature tracts of forest to ESH. There are large, suitable tracts on the Unit which can be managed for ESH on a sustainable basis. This can help ensure a component of ESH throughout our forest landscape.

This plan proposes harvests intended to increase the percentage of early successional habitat to 10-15% within the Unit. Depending on future trends and needs, this proportion will be maintained to balance the structure and composition of our forests over time.

One method of describing the age, maturity and relative size of forests is to measure and average the size of individual trees. The easiest method to acquire this data is to measure the total height of the tree and the diameter of their trunks. However, since most species reach their maximum height long before they stop growing, diameter measurements have proven to be the most reliable metric for determining the maturity of a tree. Most of the time, older trees have thicker trunks than younger trees. Diameter measurements are correlated to tree age and maturity, though there are many factors which influence diameter growth. Standard forest measurement protocol measures the "DBH" or diameter at breast height, which is 4.5 feet off the ground on the uphill side of the tree. Henceforth, any discussion of diameter classes is referring to the aggregate diameter measurements of a forest.

As the USFS FIA Data shows, 62% of timberland statewide is in large diameter classes. The metrics for measuring this indicate an average tree diameter greater than 12 inches. This high percentage can be taken to indicate that eventually, late successional, large diameter forest stands will be prevalent at the landscape level—particularly on Preserve Lands.

The State Forest Inventory Database provides the opportunity to further dissect the acreage on the Unit to produce data on stands with diameter ranging from 1-5 inches, 6-11 inches, 12-17 inches, 18-22 inches, and 23+ inches. As discussed above, 3.5% of forested acres within the Unit have average tree diameters of 18-22 inches, and 0.1% have average tree diameters greater than 23 inches.

Increasing the amount of large diameter trees will be addressed very slowly. While it is relatively easy to create ESH, creating late-successional and old growth habitat requires the cooperation of many generations of managers, suitable conditions and species, and a great deal of time. Non-management will eventually produce areas with late-successional habitat (LSH), but choosing to do nothing carries as serious a risk for ESH as it does for LSH. Other factors such as invasive species and forest health concerns will play a major role in the success or failure of these endeavors.

Forest Management

The Helms Dictionary of Forestry defines Forest Management as "the practical application of biological, physical, quantitative, managerial, economic, social, and policy principles to the regeneration, management, utilization, and conservation of forests to meet specified goals and objectives while maintaining the productivity of the forest —*note* forest management includes management for aesthetics, fish, recreation, urban values, water, wilderness, wildlife, wood products, and other forest resource values." (Helms, 1998).

This paradigm is a far cry from where we as Americans began in our understanding of forestry. The term most used to describe our forest resources in the 19th century was "inexhaustible." The ambition of man would soon prove otherwise. The resulting mass deforestation and other unsustainable land management practices resulted in calamities. A good example of this was the Dust Bowl. It was an event characterized by massive erosion and loss of organic matter, timber scarcity, and soil and water quality degradation.

Gifford Pinchot, often cited as the Father of Modern-Day Conservation, says, "Without natural resources, life itself is impossible. From birth to death, natural resources, transformed for human use, feed, clothe, shelter, and transport us. Upon them we depend for every material necessity, comfort, convenience, and protection in our lives. Without abundant resources, prosperity is out of reach." (Pinchot, 1998).

Gifford Pinchot is credited with introducing systematic forestry to public lands during his term as Chief of the United States Forest Service. Experience has taught us that our forest resources *are* exhaustible, and without careful forest management, we are bound to repeat our follies. With conservation as our highest goal, forest management on the Allegany Unit will be implemented using current science and sustainable silviculture to manage ecosystems, with the ultimate aim of delivering the "the greatest good for the greatest number."

Silviculture

Silviculture is the art and science of controlling the establishment, growth, composition, health and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis (Helms, 1998). Silviculture generally falls into two schools of management: even-aged and uneven-aged. The difference between the two is the amount and quality of sunlight that reaches the forest floor and the prevailing structure of the forest.

Even-aged silviculture creates large openings to regenerate trees which are the same age (give or take 20 years). This type of management is best for tree species which require abundant sunlight (aspen, paper birch, red and white oaks, etc.). There are three benchmark silvicultural prescriptions which remove varying levels of tree stocking: the shelterwood method, the seed tree method, and the clearcut method. There are variances on all of these techniques, which allow tailored prescriptions to match the unique quality and desired outcome of each stand.

The basic goal of each of these even-aged management techniques is to tend a cohort of trees by periodically thinning out the poorest trees and allocating extra growing space and resources

to the residual trees. Eventually, the stand matures to seed-bearing age and a new generation of suitable tree seedlings is started, usually following a well-timed thinning. When the new cohort is established and deemed ready for "release" (a dramatic increase the light levels available to the remaining trees), a final overstory removal is implemented and the process begins anew. Most of our forests can grow a "crop" of trees in 80-100 years (a "rotation"), while some species such as red and white oak can be managed with longer rotations.

Uneven-aged silviculture can be done in a stand that contains 3 or more age classes of trees. This kind of silviculture is affected by removing single trees or small groups of trees in regular intervals in the same stand. Usually the harvests happen every 15-25 years, depending on how heavy the removals are. Uneven-aged silviculture usually retains a nearly constant canopy cover, which in turn favors the more shade tolerant species.

Both methods have their pros and cons, and each stand has be evaluated for the most effective management methods. Bearing in mind that the vast majority of the Allegany Unit's forests are even-aged and 60+ years old, many stands will continue to be managed as even-aged or they will be converted to uneven-aged. Converting from even-aged to uneven-aged is done by removing patches of trees periodically. Usually, it takes a century or longer to achieve a complete conversion.

Addressing the Early Successional Habitat Gap

Discussions with the Fish and Wildlife Staff and an analysis of the land cover in the Local Landscape Conditions section, revealed that approximately 3,900 acres of ESH can be found in the landscape, which is slightly beyond the boundary of Allegany County. Analysis shows that 3086 acres of this occurs on the Allegany Unit (6.6% of the Unit acreage). In order to sustain our forest resources, this plan proposes to increase and maintain the Allegany Unit ESH percentage to 15% of the total Unit acreages, or approximately 6,600 acres. Ideally, our ESH will have a conifer component, a hardwood component, and a mixed conifer hardwood component.

One significant shortcoming on the Unit is that there was no natural conifer seedling sapling stands found during the 2007-2016 inventory. There is no easy way to address this gap as the stands that would produce natural conifer seedlings are usually the stands that are not suitable for management (for example, hemlock ravines or swamps, or white pine along glacial eskers). This plan will therefore propose management to increase the young conifer component through tree planting and naturalized conifer species such as Norway or white spruce. Any outstanding opportunities to promote native and planted balsam fir regeneration will be explored. Given the historical importance of white pine and eastern hemlock, opportunities to retain these species into the future will be explored as well.

This plan will recommend treating 3,575 acres with even-aged techniques to convert target acres to ESH. Efforts will be made to ensure conifers remain an integral component of the Unit.

Plantations older than 80 years, on suitable soils, with a basal area of 90 square feet/acre* and higher were examined for regeneration potential. In stands where desirable regeneration has

been established, overstory removal is scheduled. In stands where little to no desirable regeneration is found, thinnings are scheduled to establish desirable regeneration. Where invasive species or undesirable regeneration is present, control measures including herbicide or mechanical removal will be scheduled, followed by measures to establish desirable regeneration.

*Basal area, BA, is the cross sectional area of a tree measured at breast height and is expressed per tree, or over a unit of land area. The formula for calculating BA is .005454xDiameter². Basal area is used with average diameter and the total number of trees per acre to determine stocking levels. Generally, high basal areas indicate high stocking levels or overcrowded conditions.

Addressing Emerald Ash Borer and Hemlock Woolly Adelgid

At the time of writing, neither emerald ash borer (EAB) nor hemlock woolly adelgid (HWA) have been discovered on the Unit. Surveillance during inspections and forest inventory always includes looking for symptomatic trees. It seems likely that these invasive insects will eventually reach Allegany County.

Hemlock trees are rarely harvested on the Unit. Hemlock is a relatively low timber value native conifer, but it proves invaluable for riparian buffers, wildlife habitat, and aesthetic values. In addition, many areas where hemlock is abundant are naturally sensitive sites which are generally avoided during harvest. Therefore the management for HWA will consist of promoting vigorous, healthy stands through silviculture, where appropriate, and monitoring for the insect and responding with pesticides if conditions are right.

In preparation for the impending possibility of EAB entering the Unit, this plan proposes Active Forest Management designed to pre-salvage our ash stands. The threat of EAB arrives at a time where a majority of the Unit's predominant ash stands are reaching maturity and would benefit from harvesting. Mature ash will be routinely selected for harvest and other species will be retained in stands.

It is not this plan's intention to completely eradicate ash from the Unit. Young, vigorous male and female ash trees will be retained in the event that: a control for EAB is discovered and implemented, natural resistance in the Unit's ash is discovered, or the insect does not reach the Unit. Ash produces seed prolifically and as the Forest Inventory and Analysis report for New York State reported, ash shares a majority of seedling prominence along with American beech. Simply put, white ash (*Fraxinus americana*) has regenerated abundantly and will likely continue to do so as long as trees of seed producing age are common. It seems that ash will play a large part in the next generation of forests on the Unit, though what will happen beyond the next generation is difficult to predict. A map showing the locations of hemlock and ash dominated stands is included in the Special Maps section of Figure 4.

Management Objectives and Actions

Objectives

The following section introduces broad objectives this plan hopes to achieve at the Unit level, and proposes actions to achieve those objectives.

Ecosystem Management

Table III.A. Ecosystem Management Objectives and Actions	
Objective	Actions
Active Forest Management	
AFM I – Apply sound silvicultural practices	Forest stands will be identified through the State Forest Inventory Database (SFID) and evaluated using professional judgment, and a compliment of forestry decision making tools. All stands will be managed based on appropriate silviculture.
AFM II – Use harvesting plans to enhance diversity of species, habitats & structure	All harvesting shall be thoughtfully planned in accordance with both the SPSFM and this plan with the express goals of ensuring successful regeneration of future cohorts, improving forest health, enhancing biodiversity, improving growth and yield, and providing societal benefits. Prescriptions will be made with stocking charts, silvicultural guidelines, and professional judgment.
AFM III – Fill eco-regional gaps to maintain and enhance landscape-level biodiversity	A.F.M. will elevate the current 6.6% of ESH to 15% in the next ten years. Areas suitable for long term retention will be identified and managed for LSH. Wetland habitat will be managed through Special Management Zones with input from the appropriate agencies. Adaptive Management will be used to address unexpected needs and gaps during the implementation period. Native Conifer stands will be maintained and planted conifers shall be converted to naturalized conifers where appropriate.

Table III.A. Ecosystem Management Objectives and Actions		
Objective	Actions	
AFM IV – Enhance matrix forest blocks and connectivity corridors where applicable	This plan shall not propose any long-term fragmentation in the Matrix Forest Blocks or Connectivity Corridors, but shall retain these pathways through area-based, even-aged management and time-based, uneven-aged management.	
AFM V – Practice forest and tree retention on stands managed for timber	Forest retention shall continue to be considered and implemented where appropriate in accordance with the Retention Standards.	
HCVF- Identify and maintain HCVFs	High Conservation Value Forests will be identified during the inventory process and maintained using appropriate management.	

Resource Protection

Table III.B. Resource Protection Objectives and Actions		
Objective	Actions	
Soil and Water Protection		
SW I – Prevent erosion, compaction and nutrient depletion	Incorporate NYS Water Quality BMPs while laying out timber harvests and recreational projects. Implement and enforce NYS Water Quality BMPs during timber harvests and post-harvest clean-up. Appropriate levels of coarse woody debris (CWD) and fine woody material (FWM) will remain in the forest following harvests per our Retention policy.	
SW II – Identify and map SMZ's and adapt management for highly-erodible soils	Locate SMZs during inventory and timber harvests. Current SMZ's shall be ground- proofed during inventory and updated as needed. See SMZ Guidelines.	
At-Risk Species and Natural Communities		

Table III.B. Resource Protection Objectives and Actions		
Objective	Actions	
ARS I – Protect ARS&C ranked S1, S2, S2 -3, G1, G2 or G2 where present	Continue to work with NYNHP to identify species of concern and/or their associated habitats. Ensure that management incorporates findings in the planning and implementation of this plan.	
ARS II – Conduct habitat restoration and promote recovery of declining species	This may include tree planting and promotion of species more suitable to a site. Of high concern is retaining a native or naturalized conifer component and increasing the acreage of natural forest conifer and early successional habitat (ESH). Replanting of disease resistant variety of American Chestnut will be a priority. Grasslands and food plots will continue to be maintained by periodic mowing.	
ARS III - Consider protection and management of Species of Greatest Conservation Need	No management shall proceed without first checking for Rare, Threatened or Endangered element occurrences or predicted habitats. All management will incorporate potential impacts (both positive and negative) of SGCN known or potentially within unit.	
Visual Resources and Aesthetics		
VR I – Maintain or improve overall quality of visual resources	Existing vistas and visual resources will be managed to promote the scenic beauty of our natural resources. Proposed vistas and visual improvements will enhance this unique experience. Roadside stands which will benefit from timber stand improvement, as well as increasing the sight distance and visual quality will be proposed. New landing construction will be located further into stands to limit potential view shed impacts where possible. BMP's and buffers will be used in all appropriate circumstances.	

Table III.B. Resource Protection Objectives and Actions		
Objective	Actions	
VR II – Use natural materials where feasible	Where possible and practical, natural/native materials will be used to protect resources and direct uses and activities.	
VR III – Lay out any new roads/trails to highlight vistas and unique natural features	New roads/trails will be located to highlight vistas and natural features wherever possible where it will not negatively impact the resource.	
VR IV – Develop kiosks to provide education and reduce sign pollution	New kiosks with improved panels are being constructed for use on the Allegany Unit. The new designs will be used when replacing aging kiosks/signage.	
Historic and Cultural Resources		
HC I – Preserve and protect historic and cultural resources wherever they occur	No management activities are scheduled which will negatively impact known resources.	
HC II – Inventory resources in GIS and with OPRHP	Staff will be instructed to look for resources during management. For more information see the Cultural Resources section. Any historic or cultural resources found during inventory or inspections will be located by GPS and added to the existing database for future reference and protection.	

Infrastructure and Real Property

Table III.C. Infrastructure and Real Property Objectives and Actions		
Objective	Actions	
Boundary Line Maintenance		
BL I – Maintain boundary lines	Lines will be maintained and inspected per NR-95-1 standards as time, staff and funds permit. Boundary lines will be maintained to the highest level appropriate every 7-10 years.	
BL II – Address encroachments and other real property problems	Lines will be inspected for encroachments during maintenance and inspections. Real Property and/or Law Enforcement will be notified if any encroachments are found. Known encroachments will be pursued through the established legal process.	
Infrastructure		

Table III.C. Infrastructure and Real Property Objectives and Actions	
Objective	Actions
INF I – Provide and maintain public forest access roads, access trails, haul roads, parking areas, and associated appurtenances	Inspections will be conducted annually and appropriate work, materials or funds will be requested. New construction and road improvements which will open currently closed Forest Roads to the public are proposed in this plan.
INF II – Upgrade, replace or relocate infra- structure out of riparian areas where feasible	Any new forest access will follow proper BMPs and SMZ's. Existing infrastructure located in sensitive areas will be relocated as possible in more appropriate places via timber sales and additional funding where available.
INF III – Resolve issues of uncertain legal status or jurisdiction	Any uncertain legal status or jurisdiction of infrastructure will be investigated and reported to the appropriate authority.
INF IV – Prevent over-development	The guidelines concerning development as found in the SPSFM, Road, Trail and Recreation Manuals/ Policies will be applied.

Public/ Permitted Use

Table III.D Public / Permitted Use Objectives and Actions		
Objective	Actions	
Universal Access		
UA I – Use minimum tool approach to provide universal access to programs	The Guidebook of Approved Accessible Design for Universal Access will be used for all new projects.	
Formal and Informal Partnerships and Agreements		
PRT I – Collaborate with local organizations and governments to reach mutual goals	Volunteer Stewardship Agreements (VSAs) will be continued and pursued to partner with local groups and government agencies in order to help maintain identified features in the Unit's infrastructure. These valuable relationships contribute greatly to meeting the maintenance and recreation goals on the Unit.	

Table III.D Public / Permitted Use Objectives and Actions		
Objective	Actions	
PRT II – Consider full range of impacts associated with AANRs (adopt-a-natural-resource agreements) and recurring TRPs	VSA activities will be inspected and inventoried. Objective indicators will be used to determine the effectiveness of VSAs. TRP requests will be evaluated upon receipt. Requests will not be granted if conditions will not support the use or activity requested.	
Rec	reation	
REC I – Accommodate public use while preventing illegal activity, reducing impacts and enhancing public safety	Forest Roads on the Allegany Unit generally remain open year round to permit snowmobiling access—though very few receive any kind of winter maintenance. Forest Roads may be periodically closed, at the discretion of the DEC, for routine maintenance or public safety concerns. Illegal activities will be monitored and reported to Law Enforcement. If such activities are deemed to be creating unacceptable negative impacts to the Unit, Forest Roads may be closed to Motor Vehicles to ensure public safety and the protection of resources.	
REC II – Provide public recreation information	This plan and the NYS DEC public website will serve to provide information to the public about recreational opportunities.	
REC III – Inventory recreational amenities and schedule recreation management actions	Recreational facilities will be located with GPS and updated during the inventory process. Recreation trails will be inspected at least annually and semi-annually when staff, timing, and funding are available. Recreation management will be proposed and implemented in the annual Operations Work Plan Meeting.	
REC IV – Enhance fish & game species habitat	Cooperation between Lands and Forests and the Division of Fish and Wildlife will occur to promote ideas for game, non-game and fish species habitat. Silviculture will be the primary tool to create and maintain critical habitats.	
Off-Highway and All-Terrain Vehicle Use		

Table III.D Public / Permitted Use Objectives and Actions		
Objective	Actions	
ATV I – Enhance recreational access by people with disabilities under the MAPPWD program	Currently the demand has not indicated a need for more access, but plans for increasing CP-3 trails for MAPPWD holders shall be considered if demand increases.	
ATV II – Consider requests for ATV connector routes across the unit	Requests for ATV connector routes have not been received, but will be considered upon request. No connector routes will be approved without a VSA in place to adopt and maintain them.	
Mineral Resources		
MR I – Provide for mineral exploration and development while protecting natural resources and recreation	The current mineral leases are discussed in the Oil, Gas and Solution Exploration and Development section. If requests are made, the procedures in the SPSFM will be followed.	
Supporting Lo	ocal Communities	
LC I – Provide revenue to New York State and economic stimulus for local communities	Over \$1.3 million dollars was paid in local taxes in 2014 local taxes for State Forest land in the Unit. This money is given to local communities annually and will continue. The forest products industry is absolutely vital to the local economy. The forest resources in the Allegany Unit are paramount in contributing to all levels of this industry and promoting a locally healthy economy. The timber sales program also generates revenue for New York State; providing additional means to create and develop infrastructure and habitat improvements. The proposed plans for habitat improvement, public access and recreation will be funded in large part by the sustainable management of our forest resources.	

Table III.D Public / Permitted Use Objectives and Actions			
Objective	Actions		
LC II – Improve local economies through forest-based tourism	Forest-based tourism is extremely important to the economy of local communities. A large portion of seasonal business comes from hunters who visit the substantial areas of state forest in Allegany County. This plan proposes habitat improvements that are intended to positively affect wildlife habitat and public access and improve user experiences on the Unit. Additionally, recreational opportunities can also increase area tourism. Keeping our forest resources productive, healthy, and diverse, as well as maintaining access, is the soundest way to improve forest-based tourism. Strategic partnerships shall be explored to maximize benefits for the local communities and the State.		
LC III – Protect rural character and provide ecosystem services to local communities.	No management which will damage the rural character of the Unit is proposed. The focus of this plan shall be to provide ecosystem services such as watershed protection, timber and non-timber forest products, forest-based recreation, visual aesthetics, wildlife habitat and open space.		

Forest Management and Health

Table III.E. Forest Management and Health Objectives and Actions			
Objective	Actions		
Forest Products			
FP I – Sustainably manage for forest products	All silviculture will be based on sound forest management practices and backed up by professional literature, marking guides, stocking charts and professional experience with the goal of enhancing biodiversity, promoting healthy forest communities, and establishing/protecting well- suited species for each site. Sustainability is built into silviculture.		

Table III.E. Forest Management and Health Objectives and Actions				
Objective	Actions			
FP II – Educate the public about the benefits of silviculture	Continue to use platforms such as the New York Logger Training Program, public outreach, and community involvement to educate the public about the benefits of using proper silviculture in forest management			
Plantation	Management			
PM I – Convert plantation stands to natural forest conditions where appropriate	Stand conditions will guide decisions of plantation management. This plan proposes to allow certain non-native conifer species, which have demonstrated non-invasive characteristics and provided multiple benefits, to continue to naturalize. Where possible, plantations will be treated to promote seedling and sapling tree stands of conifer species, to address a growing gap in forest stand structure and composition. On appropriate sites, the plantations will be converted back to natural species compositions using the SPSFM and the NYS DEC Plantation Guidelines.			
PM II – Artificially regenerate plantations where appropriate	In situations where there is no desirable regeneration in stands, reforestation through planting of naturalized or native, site- appropriate species may be considered.			
Forest Health				
FH I – Use timber sales to improve forest health and the diversity of species	Timber sales will be planned to address specific management goals and will seek to promote biodiversity. Timber sales shall also be used to shift species composition towards site-appropriate species following the highest and best use approach. High quality timber sites will be managed for timber production unless it conflicts with the HCVF concept. All timber sales will address establishing desirable regeneration and removal of undesirable species and trees in their prescriptions.			

Table III.E. Forest Management and Health Objectives and Actions			
Objective	Actions		
FH II – Protect the unit and surrounding lands from introduced diseases, and invasive plant and animal species	Forested stands or areas of greatest concern shall be identified and mapped. AFM will be used to keep our forest resources as healthy and diverse as possible. This is generally considered the best defense against invasive species and diseases. Cooperation with other local, state and federal agencies is essential. Any dumping or storage of any untreated, contaminated, or infested materials on State Forest is strictly prohibited and violations will be prosecuted.		
Managing	Deer Impacts		
DM I – Monitor impacts of deer browsing on forest health and regeneration	Periodic inventory and pre-sale harvest inventory will include inspecting stand understories for deer browse and other impacts on forest health and regeneration.		
DM II – Address issues of over-browsing	Over-browsing may be addressed by working with DFWMR to create a DMAP system or by altering the management scheme to increase tree regeneration.		
Fire Ma	inagement		
FM I – Support Forest Rangers in controlling the ignition and spread of wildfires	Current and future access will be maintained so that wildfires can be reached as efficiently as possible. Staff will be encouraged to maintain wildland firefighter status, attend annual training, and assist the Forest Rangers as needed.		
FM II – Maintain naturally occurring fire- dependent communities	Controlled burns may be prescribed in order to promote fire dependent communities or to give a competitive advantage to species such as oak which respond well to certain fire disturbances as funding, personnel and resources are available.		
Carbon Sequestration			
CS I – Keep forests as forests, where appropriate	No conversion of forest acres to non-forest acres is considered in this plan, excepting minimal amounts needed to improve public access.		

Table III.E. Forest Management and Health Objectives and Actions			
Objective	Actions		
CS II – Enhance carbon storage in existing stands	Carbon storage shall be maximized in forest stands where timber production is not desirable. Stands not scheduled for maintenance will eventually produce the largest volume of wood fiber possible on the site.		
CS III – Keep forests vigorous and improve forest growth rates	Proper forest management will remove diseased, unsuited and poor quality trees from a stand and promote maximum growth on the species which will respond best. Older, senescent stands sequester less carbon than younger, vigorous stands. Young, fast-growing stands will be promoted through even-aged silviculture where appropriate.		
CS IV – Sequester carbon in forest products	On appropriate sites, species that are used in ong-lived wood products will be favored. Healthy, managed forests more often produce he high-grade lumber necessary for furniture naking. Focusing growth on the best trees in orest management will best achieve this objective and regenerating stands after peak growth rates have declined will contribute to greater carbon sequestration.		

Ten-Year List of Management Actions

Unit-wide Actions

Action 1

Develop and subsequently adopt this UMP with future amendments as needed and periodic updates at least every ten years.

Action 2

Create/ update the web page for each State Forest in this unit, including an electronic, printable map showing the location of recreational amenities.

Action 3

Maintain PFARs and other forest access roads and trails including parking areas and camp sites annually using the Operational work plan. This will include mowing, grading, clearing culverts, cleaning ditches and filling potholes or graveling roads to maintain safe public access.

Action 4

Continue the process of requesting surveys of questionable boundaries from Real Property. Follow up on the requests already in the process of being surveyed.

Action 5

Install, repair or replace gates as needed along PFARs and other forest access roads and trails. Use gates to close public access during periods of routine maintenance, bad weather or unforeseen events.

Action 6

Use the timber sale process to improve habitat, access and recreational opportunities on State Lands. Collaborate this work with conservation groups such as NWTF, RGS, and QDMA. Maintain food plots by annual/semi-annual mowing.

Action 7

Use the VSA Policy to make improvements to recreational opportunities on State Lands through the work of volunteers. Maintain inspection log.

Action 8

Process and inspect TRPs issued on State Lands as needed.

Action 9

Follow acquisitions of properties currently in the GA-56 process, including properties previously listed in this UMP, which would improve public access to State Lands.

Action 10

Install and replace proper signage on State Forests to direct the public and inform of uses and rules. Include area identification signs and road and trail signs.

Action 11

Update the digital state forest shapes with assistance from Central Office staff to reflect Real Property surveys and ground-proofing prior to inventory. Revise the current inventory strategy to maintain or increase the accuracy of forest inventory while streamlining the process.

Phillips Creek State Forest Actions

Phillips Creek SF Action 1 Forest Inventory (2023)

Phillips Creek SF Action 2 Boundary Line Maintenance (2017)

Turnpike State Forest Actions

Turnpike SF Action 1 Forest Inventory (2022)

Turnpike SF Action 2 Boundary Line Maintenance (2017)

Turnpike SF Action 3 Upgrade a haul road to PFAR standards to extend south from Turnpike Forest Road into State Forest Land to improve public access.

Bully Hill State Forest Actions

Bully Hill SF Action 1 Forest Inventory (2017)

Bully Hill SF Action 2 Boundary Line Maintenance (2022)

Bully Hill SF Action 3 Shorten Mike Dixon Forest Road to eliminate illegal driveway across State land to private property.

Palmer's Pond State Forest Actions

Palmer's Pond SF Action 1 Forest Inventory (2025)

Palmer's Pond SF Action 2 Boundary Line Maintenance (2018)

Keeney Swamp State Forest Actions

Keeney Swamp SF Action 1 Forest Inventory (2018)

Keeney Swamp SF Action 2 Boundary Line Maintenance (2021)

Keeney Swamp SF Action 3 Reroute Gordon Forest Road to eliminate an inadequate intersection on County Route 16 and circumvent a dangerous hairpin turn on the internal road.

Klipnocky State Forest Actions

Klipnocky SF Action 1 Forest Inventory (2018)

Klipnocky SF Action 2 Boundary Line Maintenance (2020)

Vandermark State Forest Actions

Vandermark SF Action 1 Forest Inventory (2019)

Vandermark SF Action 2 Boundary Line Maintenance (2017)

Vandermark SF Action 3 Construct a new section of PFAR off of Allen FR to access state forest south of the road. Shorten the existing Allen FR to eliminate illegal driveways onto private property.

Gillies Hill State Forest Actions

Gillies Hill SF Action 1 Forest Inventory (2020)

Gillies Hill SF Action 2 Boundary Line Maintenance (2022)

Gillies Hill SF Action 3 Create a moderate difficulty hiking trail from County Route 16 west to Petit FR utilizing existing routes.

Hiltonville State Forest Actions

Hiltonville SF Action 1 Forest Inventory (2019)

Hiltonville SF Action 2 Boundary Line Maintenance (2019)

Gas Springs State Forest Actions

Gas Springs SF Action 1 Forest Inventory (2026)

Gas Springs SF Action 2 Boundary Line Maintenance (2021)

English Hill State Forest Actions

English Hill SF Action 1 Forest Inventory (2023)

English Hill SF Action 2 Boundary Line Maintenance (2022)

Lost Nation State Forest Actions

Lost Nation SF Action 1 Forest Inventory (2024)

Lost Nation SF Action 2 Boundary Line Maintenance (2019)

Lost Nation SF Action 3 Construct a horse stall facility on Newland FR or Lost Nation Road and convert several miles of skid trails into multi-purpose recreation trails to be maintained under a VSA. This shall not be pursued until after the proposed harvests are completed.

Jersey Hill State Forest Actions

Jersey Hill SF Action 1 Forest Inventory (2019)

Jersey Hill SF Action 2 Boundary Line Maintenance (2018)

Karr Valley Creek State Forest Actions

Karr Valley Creek SF Action 1 Forest Inventory (2021)

Karr Valley Creek SF Action 2 Boundary Line Maintenance (2019)

MANAGEMENT OBJECTIVES AND ACTIONS

TEN-YEAR LIST OF MANAGEMENT ACTIONS

Cold Creek State Forest Actions

Cold Creek SF Action 1 Forest Inventory (2023)

Cold Creek SF Action 2 Boundary Line Maintenance (2019)

Crab Hollow State Forest Actions

Crab Hollow SF Action 1 Forest Inventory (2026)

Crab Hollow SF Action 2 Boundary Line Maintenance (2020)

Coyle Hill State Forest Actions

Coyle Hill SF Action 1 Forest Inventory (2024)

Coyle Hill SF Action 2 Boundary Line Maintenance (2018)

Rush Creek State Forest Actions

Rush Creek SF Action 1 Forest Inventory (2024)

Rush Creek SF Action 2 Boundary Line Maintenance (2023)

Swift Hill State Forest Actions

Swift Hill SF Action 1 Forest Inventory (2026)

Swift Hill SF Action 2 Boundary Line Maintenance (2020)

Swift Hill SF Action 3 Upgrade Turk Forest Road and Turk Spur Forest Road to PFAR standards and open the roads for motor vehicle use.

Plumbottom State Forest Actions

Plumbottom SF Action 1 Forest Inventory (2020)

Plumbottom SF Action 2 Boundary Line Maintenance (2021)

Plumbottom SF Action 3 Reroute the portion of Reddy Forest Road which exceeds grade standards for PFAR to an acceptable slope to reduce safety risks.

Slader Creek State Forest Actions

Slader Creek SF Action 1 Forest Inventory (2025)

Slader Creek SF Action 2 Boundary Line Maintenance (2020)

Bald Mountain State Forest Actions

Bald Mountain SF Action 1 Forest Inventory (2017)

Bald Mountain SF Action 2 Boundary Line Maintenance (2019)

Allen Lake State Forest Actions

Allen Lake SF Action 1 Forest Inventory (2021)

Allen Lake SF Action 2 Boundary Line Maintenance (2023)

Allen Lake SF Action 3 Cooperate with Law Enforcement to reopen Saunders Road and reestablish access from County Route 26 in the Town of Belfast.

Allen Lake SF Action 4 Extend the Hidden Falls Trail north to connect to Gorge Forest Road. Install kiosk at existing trailhead and construct trail head on Gorge FR.

Allen Lake SF Action 5 Upgrade the path between the Allen Lake Parking Area and the pier to universally accessible standards.

W.A.G. Trail Actions

W.A.G. Trail Action 1 Resurface trail with stone dust (Starting in 2017)

W.A.G. Trail Action 2 Boundary Line Maintenance (2019)

W.A.G. Trail Action 3 Post WAG Trail ID and VSA signs on the trail.

Management Plan Summary

Forest Management Plans			
Forest Management	Acres	% of Total (46,305 Acres)	
Harvests Scheduled in Years 1-5	4,514	9.7%	
Harvests Scheduled in Years 6-10	3,895	8.4%	
Natural Areas (Non-Management)	4,729	10.1%	
No Harvests Scheduled in the next 10 years	33,244	71.8%	

Boundary Line Maintenance Schedule				
Facility Name	Length of Boundary (mi.)	Length Needing Maintenance	Scheduled Maintenance	Total Miles
Phillips Creek State Forest	20	17.87	2017	
Turnpike State Forest	26.4	22.95	2017	
Vandermark State Forest	16	16	2017	56.82
Palmer's Pond State Forest	31.3	29.53	2018	
Jersey Hill State Forest	8.8	7.58	2018	
Coyle Hill State Forest	16.2	16.2	2018	53.31
W.A.G. Trail	17.5	17.5	2019	
Hiltonville State Forest	9.7	8.12	2019	
Lost Nation State Forest	10.9	10.89	2019	
Karr Valley Creek State Forest	12.6	10.7	2019	
Cold Creek State Forest	6.5	6.49	2019	
Bald Mountain State Forest	7.1	7.1	2019	60.8
Klipnocky State Forest	16.72	14.61	2020	
Crab Hollow State Forest	11.8	11.8	2020	
Swift Hill State Forest	17.3	17.3	2020	
Slader Creek State Forest	10.7	9.1	2020	52.81
Keeney Swamp State Forest	16.34	16.34	2021	
Gas Springs State Forest	22.5	21.99	2021	
Plumbottom State Forest	12.5	12.5	2021	50.83
Bully Hill State Forest	17.41	17.41	2022	
Gillies Hill State Forest	19.8	19.8	2022	
English Hill State Forest	14.8	14.8	2022	52.01
Rush Creek State Forest	13.4	13.4	2023	
Allen Lake State Forest	16.4	16.4	2023	29.8
			Total	356.38

Forest Inventory Schedule			
State Forest	Acreage	Year Scheduled	Total Acres
Bully Hill State Forest	3505.95	2017	
Bald Mountain State Forest	760.48	2017	4,266.43
Keeney Swamp State Forest	2407.97	2018	
Klipnocky State Forest	2634.06	2018	5,042.03
Vandermark State Forest	2383.73	2019	
Hiltonville State Forest	1008.7	2019	
Jersey Hill State Forest	1088.15	2019	4,480.58
Gillies Hill State Forest	2332.26	2020	
Plumbottom State Forest	1667.24	2020	3,999.5
Karr Valley Creek State Forest	1917.43	2021	
Allen Lake State Forest	2421.37	2021	4,338.8
Turnpike State Forest	4748.65	2022	4,748.65
Phillips Creek State Forest	2706.7	2023	
English Hill State Forest	1396.87	2023	
Cold Creek State Forest	502.51	2023	4,606.08
Lost Nation State Forest	1343.55	2024	
Coyle Hill State Forest	2351.32	2024	
Rush Creek State Forest	1402.51	2024	5,097.38
Palmer's Pond State Forest	3504.31	2025	
Slader Creek State Forest	1229.67	2025	4,733.98
Gas Springs State Forest	2273.38	2026	
Crab Hollow State Forest	1153.48	2026	
Swift Hill State Forest	1564.83	2026	4,991.69
Total Acreage	46,305.12		46,305.12