NEW YORK SUPREME COURT
SUPREME COURT : COUNTY OF ALBANY

In the Matter of the Application of
PROTECT THE ADIRONDACKS! INC.,

Plaintiff-Petitioner,

For a Judgment Pursuant to Section 5 of
Article 14 of the New York State Constitution
and CPLR Article 78

-against-

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION and
ADIRONDACK PARK AGENCY,

Defendants-Respondents.

Index No. 2137-13
RJI No. 01-13-st-4541

Hon. Gerald W. Connolly

DEFENDANTS' PROPOSED FINDINGS OF FACT AND PROPOSED CONCLUSIONS OF LAW

ERIC T. SCHNEIDERMAN
Attorney General of the State of New York
Attorneys for Defendants-Respondents
Environmental Protection Bureau
New York State Department of Law
The Capitol
Albany, New York 12224-0341
(518) 776-2416

MEREDITH G. LEE-CLARK
LORETTA SIMON
Assistant Attorneys General
Of Counsel

Dated: July 28, 2017

TABLE OF CONTENTS

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF ALBANY

In the Matter of the Application of
PROTECT THE ADIRONDACKS! INC.,

Plaintiff-Petitioner,

For a Judgment Pursuant to Section 5 of
Article 14 of the New York State Constitution
and CPLR Article 78

-against-

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION and
ADIRONDACK PARK AGENCY,

Defendants-Respondents.

Index No. 2137-13
RJI No. 01-13-st-4541

Hon. Gerald W. Connolly
Acting Supreme Court Justice

DEFENDANTS' PROPOSED FINDINGS OF FACT AND PROPOSED CONCLUSIONS OF LAW

Plaintiff filed this hybrid complaint/petition against the New York State Department of Environmental Conservation (DEC) and the Adirondack Park Agency (APA) alleging three causes of action. Two CPLR article 78 claims were dismissed on the merits. *See* Dec. 12, 2014 Order. Plaintiff's remaining claim, the first cause of action, alleges that construction of Class II Community Connector trails (Class II trails), and any similar trails, violate the New York State Constitution Article XIV, § 1, the "forever wild" clause. Complaint ¶ 82. This Court denied summary judgment and determined that plaintiff bears the burden of demonstrating that construction of the Class II trails at issue constitutes an improper use of the forest preserve impairing such wild lands to an unconstitutional extent, as opposed to altering and modifying such lands to a constitutional extent. *See* Jan. 25, 2017 Order at 25. Further, the Court limited the scope of the case, as per its prior order (Decision/Order of October 15, 2014 [Ceresia, Jr., J.])

to Class II trails "for which construction has either been completed or is currently underway....to final plans, approvals, and policies in effect as of January 1, 2012 and going forward..." *See* Jan. 25, 2017 Order at 12. A bench trial was held from March 1, 2017 through April 4, 2017.

Pursuant to the instructions of Judge Gerald W. Connolly at the conclusion of the trial, defendants respectfully submit the following Proposed Findings of Fact and Conclusions of Law:

I. PROPOSED FINDINGS OF FACT[1]

A. BACKGROUND

The Adirondack Park

1. The Adirondack Park consists of approximately six million acres of public and private lands. Ct. Ex. 1. ¶ 1; *see also* Ex. Y (map showing public and private lands); Trial transcript at 1002:8-1003:5.[2]

2. Public lands in the Adirondack Park are protected pursuant to the New York State Constitution Article XIV, Section 1 and are known as "Forest Preserve" lands. Ct. Ex. 1 ¶ 2.

3. Kathleen Regan, Deputy Director of Regional Planning with the Adirondack Park Agency, testified that as of May 2014 there were 2,551,699 acres of Forest Preserve land in the Adirondack Park. Ct. Ex. 1 ¶ 4; 1003:13-16.

4. Forest Preserve lands are classified by the Adirondack Park Agency (APA) pursuant to the Adirondack Park State Land Master Plan (Master Plan). Ct. Ex. 1 ¶ 3; 992:7-20; Ex. X (2011 Master Plan).

5. The Master Plan was originally approved by the Legislature and the Governor in 1972 to direct the APA regarding classification of lands and development of unit management plans (992:7-20); and it defines land classifications and the basic guidelines that must be followed for each classification. 992:7-20. Ex. X (2011 Master Plan). 994:14-17.

6. The Master Plan identifies nine classifications for State Forest Preserve lands based on physical characteristics of the land and ability to withstand uses. 994:23-995:7, 999:1-5; *see also* Ex. X at 13-14.

---

[1] Although all Findings of Fact have been denominated as "Proposed," some of the essential facts have been stipulated to by the parties. The factual stipulation is found at Court's Exhibit 1. Accordingly, all facts supported by a direct citation to a paragraph of Court's Exhibit 1 have been stipulated to by the parties. Additional citations supporting these facts may also be provided where available.

[2] Trial transcript references hereinafter cited by page:line only.

7. As of May 2014, acreage for four public land classifications in the Adirondack Forest Preserve were: 1,161,257 acres classified as Wilderness, 17,637 acres classified as Canoe, 38,984 acres classified as Primitive and 1,298,209 acres of lands classified as Wild Forest. Ct. Ex. 1 ¶¶ 6-7.

8. Snowmobile trails are permitted in areas classified as Wild Forest, but are generally prohibited in Wilderness, Primitive and Canoe classifications. 999:12-16; *see also* Ex. X at 31-35 (Wild Forest definition).

9. Pursuant to the Master Plan, there can be no material increase in the mileage of snowmobile trails (and roads) used by the public since the time of adoption of the plan in 1972 (Ex. X at 32 [#4]) 1006:20-10007:3). Unit Management Plans (UMPs) for proposed snowmobile trails contain a chart that lists mileage of snowmobile trails parkwide, and the net loss by closure of trails or the net gain in mileage if additional trails are opened. 1007:14-18; e.g. Ex. D at 131 (Regan testimony).

Defendants' Roles in the Adirondack Forest Preserve and Construction of Class II Trails

The Department of Environmental Conservation (DEC)

10. The Department of Environmental Conservation (DEC) is authorized and directed to provide for the care, custody and control of the Forest Preserve. Ct. Ex. 1, ¶ 5.

11. DEC manages, develops plans and guidance and oversees construction and maintenance of trails on Forest Preserve lands (905:8-17) and recreational activities such as hiking, cross-country skiing, snowmobiling, fishing, hunting and wildlife observation. 906:9-15.

12. Forest Preserve lands are divided into units and DEC oversees development of management plans for those units, known as Unit Management Plans (UMPs). 905:8-12.

13. DEC is responsible for the construction of Class II trails. 921:21-23.

The Adirondack Park Agency (APA)

14. The Adirondack Park Agency is responsible for development and implementation of long range plans on public and private lands within the Adirondack Park (991:16-18); it also administers the Adirondack Park Agency Act, the New York State Fresh Water Wetlands Act (within the Adirondack Park) and the New York State Wild Scenic and Recreational Rivers System Act (on private land in the Adirondack Park). 991:18-22.

15. The APA is responsible for classification of State Forest Preserve lands (Ct. Ex. 1 ¶ 3) and review of unit management plans for those lands, to determine whether a plan conforms to the Master Plan. 992:1-3; 1006:13-15.

16. The Master Plan states, with regard to the Forest Preserve lands protected by the "forever wild" provisions of the New York State Constitution Article XIV, § 1, "the provisions of the master plan are intended to be constitutionally neutral." Ex. X at 1.

17. The APA's role with regard to Class II Community Connector trails (Class II trails) on Forest Preserve lands consists of review of UMPs to determine conformity with the Master Plan (992:21-993:9; 1000:13-19; 1006:13-17) and review of work plans. 993:3-5; 1000:23-1001:1.

18. The APA does not build snowmobile trails. 1000:11-12; 1439:9-15.

Policies and Documents Relevant to Forest Preserve Lands and Class II Trails

Memorandum of Understanding between DEC & APA

19. Pursuant to a Memorandum of Understanding (MOU), DEC and the APA consult on matters concerning implementation of the Master Plan (923:5-13) for the Adirondack Park, including development of UMPs, construction of new facilities, trail construction (including Class II trails), invasive species and other matters. 928:12-929:8; *see also* Ex. AA (MOU).

20. The MOU contains the procedures for developing Unit Management Plans (924:2-5) and sets guidelines for the working relationship between DEC and the APA. 1005:11-1006:10.

21. Unit Management Plans are subject to the State Environmental Quality Review Act (SEQRA), and the environmental review is part of the plans. 1247:10-1248:5.

2006 Snowmobile Plan

22. In 2006, DEC and the New York State Department of Parks Recreation and Historic Preservation developed a conceptual plan to reconfigure the snowmobile trail system in the Adirondack Park to create a system of snowmobile trail connections between communities on Forest Preserve, municipal, and private land, based on a set of criteria, including protection of sensitive resources. 908:8-15; 914:17-22; 915:12-916:8; *see also* Ex. A (Snowmobile Plan for the Adirondack Park/Final Generic Environmental Impact Statement [2006 Snowmobile Plan]) at 4, 41-42.

23. The 2006 Plan did not authorize trail construction, which requires UMP approval, work plan approval, consultation with the APA (916:19-917:10), public notice of tree cutting (917:11-14) and environmental review pursuant to the State Environmental Quality Review Act (SEQRA). 917:15-18.

2009 Snowmobile Guidance, and Class II Trails

24. DEC along with the APA, developed administrative guidance for construction of Community Connector trails titled: "Management Guidance: Snowmobile Trail Siting, Construction and Maintenance on Forest Preserve Lands in the Adirondack Park" (2009 Snowmobile Guidance), which contains a classification system for snowmobile trails in the Adirondack Forest Preserve. Ct. Ex. 1, ¶ 9; *see also* Ex. B (2009 Snowmobile Guidance).

25. The 2009 Snowmobile Guidance defines two kinds of snowmobile trails: Class I and Class II trails. 920:1-6; Ex. B (2009 Snowmobile Guidance) at 3-4.

26. Class I trails are secondary snowmobile trails that may be maintained to an 8 foot maximum cleared trail width. Ex. B at 3-4 and 9.

27. Class II trails are multi-use snowmobile trails that serve to connect communities, are located on the periphery of Wild Forest or other Forest Preserve areas (Ex. B at 3) and may be maintained to a 9 foot cleared trail width, except on sharp curves and steep running slopes where they may be maintained to a 12 foot maximum cleared trail width. Ct. Ex. 1 ¶11; Ex. B at 10; *see also* 920:7-23; 921:17-20.

28. The 2009 Snowmobile Guidance provides guidance to DEC staff on where trails should be located, how they should be constructed (Ct. Ex. ¶ 9; 918:5-10 and 919:13-21); the Guidance also includes standards for siting, construction, maintenance, route design, alignment, grade, trail width, tree cutting, rock removal, slope management and drainage. 922:20-923:3 *see also* Ex. B at 6-15.

29. The 2009 Snowmobile Guidance called for some existing trails to be abandoned or redesignated for non-motorized use (921:24-922:15; *see also* Ex. B at 2) and for shifting trails out of remote interior areas to the periphery of the Forest Preserve, with high priority given to relocating trails out of remote interior areas. Ex. B at 4.

30. Snowmobile routes existing on Forest Preserve roads, rather than on trails, are not subject to the 2009 Snowmobile Guidance, and they are managed by DEC through a policy known as CP-38 Forest Preserve Roads. Ex. B at 2. They are not at issue in this proceeding.

31. UMPs establish that Class II trails will be sited in a particular unit; specific routes are later determined by DEC foresters in consultation with the APA. DEC and the APA sign off on work plans before construction begins. Ct. Ex. 1 ¶ 13.

32. The 2009 Snowmobile Guidance is an appendix to the MOU between the DEC and APA. 923:23-924:1; Ex. AA (Appendix E).

Tree Cutting Policies for the Adirondack Forest Preserve

33. DEC policy for cutting, removal or destruction of trees in the Forest Preserve is set forth in its Division Direction Policy LF-91-2. 929:20-24; *see also* Ex. C (LF-91-2).

34. Policy LF-91-2, dated 1991, establishes administrative procedures for tree cutting by DEC in the Forest Preserve, including tree cutting associated with construction of Class II trails. The policy requires public notice of tree cutting in the Environmental Notice Bulletin, including a tally of trees 3 inches or greater diameter-at-breast height (dbh), or 4 ½ feet above ground. 930:11-19; 934:12-935:14; *see also* Ex. C (LF-91-2 tree cutting policy) at 2 and 6 (3"dbh standard).

35. DEC Forester Tate Connor follows tree cutting policy LF-91-2 (1083:13-21) and before cutting any trees in the Forest Preserve he first makes an inventory of trees to be cut, takes the dbh measurement of the trees, notes the species, produces a tally and submits the information in a workplan for approval. 1083:22-1084:11.

36. Mr. Connor tallies trees that are 3 inches dbh and greater, noting whether a tree is dead or alive, and includes large stumps in his tally. 1084:9-21.

37. In addition to the LF-91-2 tree cutting policy, the 2009 Snowmobile Guidance also provides that snowmobile trails can be cleared to a 12 foot height. Ct. Ex. 1 ¶ 12.

38. Trees are pruned on Class II trails to a 12 foot height because trails used in the winter have a snow pack that elevates the user so that the extra height (over the height of summer use trails) is needed for clearance. 1086:12-24 Connor testimony); *see also* Ex. B (2009 Snowmobile Guidance) at 10 (#3).

39. The 2009 Guidance directs that cutting of overstory trees be avoided in order to maintain a closed canopy wherever possible, and that large and old growth trees should be protected. 979:13-20; 1087:4-7; Ex. B at 10 (#1).

Trail Types, Trail Widths and Trail Construction in the Adirondack Forest Preserve

Trail Types and Widths

40. Prior to the 2009 Guidance authorizing 9 foot wide Class II trails, the maximum trail width for snowmobile trails was 8 feet on straight or gently curving stretches and 12 feet on curves and steep grades, pursuant to DEC policy ONR-2. 935:16-22; 939:15-940:7; *see also* Ex. J (ONR-2) at 6.

41. In addition to snowmobile trails, the Forest Preserve is home to hiking, ski, mountain bike (1192:17-24), horse, and multi-use trails (1089:10-23) that range in width from 3 feet to 8 feet. 1054:8-11; 1055:20-23; 1060:1-4; *see also* Ex. D at 325 (trail classifications and widths); 1092:16-1093:20 and Ex. AJ (photos showing trail types on the Forest Preserve); 1042:14-7; 1056:18-1057:3.

42. Mountain bike trails have a maximum tread width of 4 feet. 1192:17-1193:6; Ex. D at 326 (IX).

43. Hiking trails range in width from 3 to 6 feet. 1189:14-17; 1093:11-15; Ex. D at 325 (III-V).

44. The width for cross-country ski trails is 6 feet except on turns and steep sections where it is somewhat wider. 1192:11-16; Ex. D at 325 (VIII).

45. In addition to marked trails, the Forest Preserve contains unmarked trails, similar to a fishing trail, that are not established by DEC, but are classified (1092:23-1093:4), as well as paths, like herd paths, that are unmarked, unofficial trails. 1093:5-11.

46. Trails in the Forest Preserve can be widened as a result of use and there are trails in the Adirondack High Peaks region that are 20 feet wide and other areas with trails on old woods roads that are 25-30 feet wide. 1094:15-1095:7 (Connor testimony); *see also* Ex. AJ, photo 6, depicting old woods road (1975:10-1076:9) that is 25-30 feet wide. 1078:5-6.

47. Trails that are for winter use only, including some Class II trails, look different from other trails because the predominant use of the trail is on snow and ice and vegetation can be largely left intact, so that vegetation such as ferns, grasses and other non-woody vegetation would be growing across the trail. 1089:24-1090:22 (Connor testimony).

Trail Construction

48. DEC has in place several types of temporary and permanent erosion control measures, including terra mats, seeding, strawing, water bars, proper side sloping, and broad-based dips. 1531:1-4, 12-13 (Ripp testimony).

49. DEC's erosion-control measures are effective at holding soil in place and maintaining the integrity of the forest floor. 1532:13-20; Exs. 159, 160.

50. Low-impact landscaping equipment used to construct Class II Community Connector trails does not significantly contribute to soil compaction. 1586:8-15.

51. DEC foresters count and tally each and every tree greater than or equal to 3 inches dbh to be cut on Class II Community Connector trails. 1524:14-19.

52. Trees cut for trail construction are not removed from the forest, but rather, are moved into the adjacent forest. 1528:5-9.

53. The DEC Regional Forester has final approval for any final workplan for trail construction in the Forest Preserve. 1526:8-13.

54. APA staff members do not participate in any trail construction. 1527:1-3.

55. Rocks moved for trail construction are either buried in the trail tread or moved into the adjacent forest. 1528:10-17; 1529:9-16; 1582:8-12.

Clearcut

56. Peter Frank is a DEC Forester 4 and Bureau Chief, with an Associate's degree in Forestry from Paul Smith's College, a Bachelor of Science with a concentration in Forestry from the SUNY College of Environmental Science and Forestry, and a Master's degree in Computer Management Systems from Union College. 903:4 -904:9.

57. Mr. Frank testified that he is aware of plaintiff's allegation that Class II trails constitute clearcutting (944:21-23); and testified that clearcutting is a silviculture technique to regenerate a forest where the entire forest is cut down to allow for regeneration of tree species that require full sunlight, cutting all trees to allow sunlight to reach the forest floor. 945:4-10.

Differences Between Roads and Trails in the Forest Preserve

58. There are differences between forest roads and trails in design, drainage, surfacing and width. 1087:11-1088:24 (Connor testimony).

59. The Master Plan defines a road as an improved or partially improved way designed for travel by automobiles 1001:16-1002:7; *see also* Ex. X at 17-18.

60. Roads are designed to be crowned (the center of the road is higher than the sides), whereas trails are not crowned. This means they drain differently. 1088:7-19; 1089:7-9 (Connor testimony)

61. Roads in the Forest Preserve are generally wider than trails, with road widths of 12-20 feet depending on their intended purpose, and up to 30 feet with linear ditching. 1088:20-1089:6; *see also* Ex. AJ, photo 6, Indian Pass Trail, High Peaks Wilderness area (1046:5-8) depicting old skid/woods road (1075:10-1076:9) 25-30 feet wide. 1078:5-6.

62. Class II trails differ from roads because roads are designed for wheeled vehicle travel, on an uninterrupted surface, with drainage structures that extend beyond the road width and they receive regular maintenance to reshape the tread of the road surface. 1095:8-23.

63. Not all of the old woods roads in the Adirondacks are shown on publicly available maps. 1516:21-23 (Ripp testimony).

B. FACTS RELEVANT TO CLASS II TRAILS

64. Joshua Clague, an Associate Natural Resources Planner with DEC (1244:1-8) testified that as part of his job he creates maps (1245:8-13) and that he created a map of Class II trails subject to the litigation. 1248:6-13, Ex. CK (map showing location of relevant Class II trails).

Stipulated Summary of Facts Relevant to Class II Trails

65. Approximately 27 miles of Class II trails have been constructed or were under construction, in the time period covered by this matter (January 1, 2012 through October 15, 2014)[3] (Ct. Ex. 1 ¶ 10), which is approximately 29 acres of Forest Preserve land. 944:1-2 and 19.

66. The following factual assertions regarding the Class II trails as provided below were stipulated as factual assertions not subject to objection by the parties at trial. Ct. Ex. 1 ¶14:

Trail Name	Unit Name	Approximate Mileage of Trail	Trees 3" DBH* or larger approved to be cut	Estimated Construction Time Period (per Work Plan)
Perkins Clearing-Lewey Lake trail	Jessup River Wild Forest	40-50 feet (remainder of the trail was existing)	3	10/1/14-10/15/14
Steam Sleigh trail	Watson's East Triangle Wild Forest	750 feet	43	6/1/13-9/30/13

[3] This mileage does not include all trail segments of the Newcomb to Minerva to North Hudson trail system. Construction was enjoined by Order of the Appellate Division dated August 25, 2016 (Palmer Pond Bridge access omitted).

Mt. Tom East trail	Independence River Wild Forest	1.15 mile	124	7/2013-9/2013
Taylor Pond to Wilmington Connector	Taylor Pond Wild Forest	0.25 mile	133	7/7/2013-1/15/2013
Gilmantown trail	Jessup River Wild Forest	2.4 (.3 new construction /2.1 old roads)	127	12/2012-1/2013
Wilmington Trail Segment 3	Wilmington Wild Forest	2.96 miles	482	6/2012-7/31/2014
7th Lake Mountain Trail	Moose River Plains Wild Forest	11.9 miles	2085	9/4/2012-2/15/2013
Santanoni to Lake Harris	Vanderwhacker/Camp Santanoni/Lake Harris Campground	2.2 miles	363	6/1/2014-2/31/2016
Hyslop to Roosevelt Truck Trail (Segment 6)	Vanderwhacker Wild Forest	2.9 miles	1148	8/15/2015-12/31/2016
Boreas River to Stony Pond (Segment 9)	Vanderwhacker Wild Forest	5.3 miles (1.85 miles new trail)	1253	6/1/2016-12/31/2018
Stony Pond to Minerva (Segment 11)	Vanderwhacker Wild Forest	2.9 miles	423	6/1/2016-2/31/2018

*DBH = Diameter at Breast Height

67. For all of the trails listed above, all "approved-to-be-cut trees 3 inches dbh or greater" have been cut *except* those on Boreas River to Stony Pond (Segment 9) and Stony Pond to Minerva (Segment 11), on which most have not been cut. Ct. Ex. 1 ¶15.

Seventh Lake Mountain Trail Construction Facts

68. The Seventh Lake Mountain Trail is a Class II, multi-use trail located in the Moose River Plains Wild Forest Unit in the southwest portion of the Adirondack Park. 1091:17-24; Ex. AE (Seventh Lake Mountain Multiple Use Trail map).

69. The Seventh Lake Mountain Class II Trail was authorized in the Moose River Plains UMP. 1090:23-1091:24; *see also* Ex. D (Moose River Plains UMP).

70. Mr. Connor was the DEC forester responsible for oversight of construction of the Seventh Lake Mountain Trail and development of the work plans. 1095:24-1096:4; *see also* Ex. AD (work plans and modifications); 1106:21-1107:17.

71. The Seventh Lake Mountain Trail is approximately 11.9 miles in length and 2,085 trees 3 inches dbh or greater were authorized to be cut. Ct. Ex. 1 ¶ 14.

72. Of the 2,085 trees authorized to be cut on the Seventh Lake Mountain Trail, 161 were dead (1105:15-16) and not all trees that are on the tally were cut. 1163:14-20 (Connor testimony).

73. Two live red maple trees 20 inches dbh were cut on the Seventh Lake Mountain Trail (1106:19-20; 1161:22-1162:7); 1 each on segments 1 and 2. 1161:22- 1162:9 (Connor testimony).

74. Four dead trees over 20 inches dbh were cut (1162:15-1163:1; 1164:9-13) and dead tree stumps were cut flush to the ground including a 28-inch American Beech tree stump (1161:12-21); and a 36-inch Sugar Maple stump (1164:1-7) all on segment 3. 1162:12-14 (Connor testimony).

75. No trees were removed from the Forest Preserve for construction of the Seventh Lake Mountain Trail, they were dispersed in the woods adjacent to the trail (1110:14-18); *see also* 1428:2-6 (referencing cut stems and brush being put in adjacent forest); 1429:11-1430:2 (tree segments were dragged or put adjacent to the trail).

76. Trees on the Seventh Lake Mountain Trail, if pruned, were pruned to a 12 foot height. 1086:9-11; 1087:1-3.

77. Seedlings and saplings were not counted (1107:18-21) nor does DEC policy require it. 1107:23-24 (Connor testimony).

78. A woody shrub species called witch hobble (1108:5-15) was present on segments 2 and 3 of the trail in thick swaths, ranging in area from 10-50 feet and larger (1109:11-14); the witch hobble was cut down to stumps at ground level (1109:15-17), with stumps ranging in size from approximately 3/8" to ½" in diameter. 1110:1-6.

79. Construction of the Seventh Lake Mountain Trail began in September 2012 (1096:7-8) and was completed at the end of 2014 (1138:5-9); tree cutting and tread development on the Seventh Lake Mountain Trail was completed by the end of December 2012. 1147:19-1148:2; 1149:6-8.

80. To lay out the trail, Mr. Connor used flagging, roughly laying out the route by hanging flagging from trees and branches to depict the centerline of the route (1101:8-14) and after subsequent trips and adjustments, a route was selected, trees were tallied, marked with paint and cut (1101:15-1102:2); then the ground was marked where bench cuts would be made with a mini excavator and hand tools. 1102:16-21 (Connor testimony).

81. The Seventh Lake Mountain Trail has 3 segments. 1097:8-1098:5; Ex. AE (map).

82. Close to 50 % of segment 1, the southern-most portion of the Seventh Lake Mountain Trail (1097:20-23), was located on previously existing routes (1099:22-24) including many existing skids roads, old woods roads, and an existing snowmobile trail that was on an old carriage road (1098:21-1099:24; Ex. AF, photo 4 [trail on existing roadway]); additionally, parts of the old road bed were 12 to 20 feet wide. 1415:19-20; 1116:12-16; *see also* Ex. AE (map).

83. Segment 2 of the Seventh Lake Mountain Trail was laid out parallel to State Route 28, and was not on existing routes. 1100:1-7; *see also* Ex. AE (map).

84. Segment 3 of the Seventh Lake Mountain Trail crossed a few old woods roads in the middle section and near the Raquette Lake Reservoir where it crosses an access road to a dam. 1100:16-24.

85. The trail tread on the Seventh Lake Mountain Trail was 9 feet and up to 12 feet wide (1178:11-15; 1180:12-16), but portions of the trail followed an old roadbed that was 20 feet wide. 1078:8-16 (Connor testimony).

86. On cross-examination when Mr. Connor was asked to estimate from a photograph, the width of trail tread, added to the width of the upslope and the downslope areas disturbed for construction of bench cuts, he estimated a width of potentially 17 feet (1203:6-18; Ex. AF, photo 2) but confirmed that the trail will be maintained to a 9 foot width. 1432:4-14.

87. Areas of the trail had hummocks and hollows and hummocks were used to fill the hollows. 1416:14-16; 1418:1(Connor testimony).

88. Following tread development on the trail, the Seventh Lake Mountain Trail was seeded with a conservation mix and straw was put down to help bind the soil to be resistant to erosion in the period post-construction, until the forest floor naturalized (1114:13-1115:9) and that reseeding of the trail was an erosion control measure. 1103:6-8; 1115:7-9.

89. DEC did not plant grass on the Seventh Lake Mountain Trail; a variety of non-woody grass, shrub and vegetation species of seeds known as conservation mix was used. 1213:11-20.

90. No rocks were removed from the trail (1110:9-11); rocks were repositioned on the trail, or consolidated to create a trail surface. 1111:10-23.

91. On segment 2 of the Seventh Lake Mountain trail, a rock that ran perpendicular across the trail corridor was shaped at its top, to allow users of the trail to travel past (1112:3-1113: 2); *see also* Ex. AG, photo NYS0006661 (photo of shaped rock), description at 1120:5-20.

92. Low impact landscaping equipment was used for trail work, including a mini excavator, six-by-six ATVs, and four wheel UTVs (1103:13-20); ATVs were used to bring in bridge materials. 1102-22-1103:12.

93. There was an access trail from Route 28 to the Seventh Lake Mountain Trail (1121:10-15), but it was not on a segment of the trail. 1122:18-23; Ex. AG (photo NYS0006663); *see also* Ex. 157, photo of vehicles on access trail to Seventh Lake Mountain Trail. 1168:23-1169:16 (Connor testimony).

94. John Burth, an Environmental Program Specialist with the APA testified that he investigates violations of the Freshwater Wetlands Act (1438:1-20), and that he received three complaints about the construction of the Seventh Lake Mountain Trail. 1439:16-22.

95. The APA found no wetlands violation for two of the complaints (1441:3-10); discussions with DEC resolved the third complaint, involving wood debris located at a bridge crossing along the trail. 1443:19-1444:13; 1445:13-15 (Burth testimony).

Newcomb to Minerva to North Hudson (NMNH) Trail Construction Facts

96. Mr. Ripp is the DEC Forester responsible for planning and construction of the Newcomb to Minerva to North Hudson Trails (NMNH) (1516:24-1517:6), which was approved in the 2015 Community Connector Trail Plan UMP. Ex. BE.

97. The NMNH Trail has 4 sections (Ex. BE, Appendix 5, third map), but construction has only been done on sections 1, 2, and 4. 1518:5 (Ripp testimony).

98. In Mr. Ripp's professional opinion, the construction of trails on NMNH has not negatively affected the condition of the forests through which the trails travel because, among other reasons, they are kept to the periphery of the forests and the canopy has been maintained. 1545:16-1546:5.

99. DEC staff considers impacts to both timber-sized and non-timber-sized trees when constructing Class II Community Connector trails. 1524:2-5 (Ripp testimony).

Beech Bark Disease on NMNH

100. Beech bark disease exists throughout the NMNH trails. 1523:4; Ex. BP (photos of beech bark disease on NMNH) (Ripp testimony).

101. Beech bark disease is a fungus carried by an insect that ultimately kills an infected tree and causes the infected tree to send up root sprouts, which creates beech brush, outcompeting and overshading other native vegetation. 1520:24-1521:3; 1522:2-5, 16-22.

102. When presented with beech bark infestations, Mr. Ripp chose to route the trail through those infestations rather than through healthy trees which, because of beech root sprouts, would have inflated his tree counts. 1523:4-12.

Balsam Woolly Adelgid Infestation

103. Balsam woolly adelgid is a small insect that attacks balsam trees, weakens the trees and spreads easily tree to tree. 1538:13-1539:4. Ex. BQ (photos of infestation on NMNH).

104. Mr. Ripp testified that segment 9 of the NMNH trail has a balsam woolly adelgid infestation. 1538:7-12.

105. Mr. Ripp testified that as with beech bark disease, he would favor cutting trees with the infestation, rather than going through a healthier adjacent forest. 1539:5-13.

Camp Santanoni to Lake Harris Trail

106. Section 1 of the NMNH trail, the Camp Santanoni to Lake Harris section, is listed in the 2015 Community Connector Trail Plan and the 2005 Vanderwhacker Mountain Wild Forest Unit Management Plan, and goes through the Camp Santanoni Historic Area, the Vanderwhacker Mountain Wild Forest, and the Lake Harris Intensive Use Area. 1519:14-23.

107. The Santanoni to Lake Harris trail is approximately 2.2 miles long and 363 trees 3 inches dbh or greater were authorized to be cut (Ct. Ex. 1, ¶ 14) approximately 70 of which were dead. Ex. BG (work plan tree tally) at 2 and Ex. BN (workplan modification).

108. The Camp Santanoni to Lake Harris segment of the Newcomb to Minerva to North Hudson system was a mixed wood forest, with hardwoods and softwoods, of mixed age, with a significant amount of beech bark disease. 1520:3-8.

109. Prior to the start of any trail construction, segment 1 of the NMNH trail exhibited beech bark disease. 1520:8-16; Ex. BP.

110. Despite being barred from implementing preventative or protective measures from the Court's preliminary injunction (1531:22 -1532:3), because the trail had been seeded, soil remained in place and no erosion has occurred in the Camp Santanoni to Lake Harris segment. 1532:13-15; Exs. 159, 160.

111. The condition of the Camp Santanoni to Lake Harris segment of the NMNH trail, after most of the construction has been complete, is "very similar" to its pre-construction condition because there is a closed canopy and the forest on either side of the trail looks like it did prior to construction. 1533:12-17 (Ripp testimony).

Hyslop to Roosevelt Truck trail (segment 6)

112. The Hyslop to Roosevelt Truck trail (segment 6) trail is approximately 2.9 miles long and 1,148 trees 3 inches dbh or greater are authorized to be cut (Ct. Ex. 1, ¶ 14) of which hundreds are dead and diseased. Ex. BO (workplan) at 1 (¶ 2 [a]).

113. DEC began planning for segment 6 of the NMNH trail in the fall of 2013 (1534:23); to date, the trail corridor has been cleared and a small section of the trail has been excavated on segment 6. 1535:7-8 (Ripp testimony).

Roosevelt Truck Trail to Boreas River (segment 8)

114. No construction has taken place on segment 8 of the NMNH trail. 1537:11. *See also* 1606:4-1607:2 (no work has been done, there is no workplan, and the final route is not determined).

115. While planning segment 8 of the NMNH trail, Mr. Ripp observed old woods and logging roads, which indicate previous disturbance of the forest by people. 1537:4-9 (Ripp testimony).

Boreas River to Stony Pond (Segment 9)

116. The Boreas River to Stony Pond (segment 9) trail is approximately 5.3 miles long and 1253 trees 3 inches dbh or greater are authorized to be cut (Ct. Ex. 1, ¶ 14) of which over 900 are in poor health and over 200 are dead. Ex. BL (workplan) at 2 (¶ a).

117. In segment 9, only 8 out of 1253 trees approved to be cut were 20 inches dbh or greater, and all 8 were dead trees. 1541:19-1542:1; *see also* Ex. BL (workplan) at 2 (Ripp testimony).

118. No construction on the northern portion of segment 9 has taken place, and, for the southern portion, the trail corridor has been cut open, but tree cutting is not complete. 1542:9-13 (Ripp testimony).

119. Segment 9 of the NMNH trail had both beech bark disease and balsam wooly adelgid (1538:11-12), an invasive insect that weakens balsam trees and spreads easily among trees. 1538:21-1539:4; Ex. BG, 1538:13-18.

120. When planning the trail route in areas infested with balsam wooly adelgid, Mr. Ripp would favor going through the infested trees, rather than healthy trees. 1539:8-13 (Ripp testimony).

121. Old woods roads exist on segment 9. 1539:14-16 (Ripp testimony).

122. As part of his research for planning segment 9, Mr. Ripp discovered that most of the deeds of this area indicated that the State purchased these lands well after the adoption of article XIV of the State Constitution. 1540:7-11 (Ripp testimony).

123. The deed history of segment 9 indicated that, in Mr. Ripp's professional opinion, the area was likely logged at various times prior to State acquisition. 1540:22-24 (Ripp testimony).

Stony Pond to Minerva (Segment 11)

124. No construction has taken place on segment 11 of the NMNH trail. 1544:14-15.

125. Stony Pond to Minerva trail is authorized at 2.9 miles in length and 423 trees 3 inches dbh or greater are to be cut (Ct. Ex. 1, ¶ 14) of which over 50 are dead and several hundred are distressed or diseased. Ex. BM at 1-2.

126. The area through which segment 11 of NMNH passes showed evidence of old forest roads. 1543:23-24 (Ripp testimony).

127. The presence of aspen trees in segment 11 indicated that the area had been previously disturbed, through timber harvesting or fires or blowdowns, as aspens typically live only about 80 years. 1544:6-9 (Ripp testimony).

128. Mr. Ripp compared his tree count for segment 11 and the maps in Ex. 87, and concluded that the sizes of trees indicated in Ex. 87 are significantly bigger than those listed on his tree

count, so those larger trees cannot be located in the corridor, and therefore will not be cut as part of trail construction. 1545:4-13 (Ripp testimony).

Palmer Pond Bridge Access

129. The Palmer Pond bridge access is not open for snowmobile use (1518:24) and it is not a Class II community connector trail. 1519:3-4; 1572:10-16.

C. FACTS RELATED TO TRAIL CLOSURES

130. Generally, trails designated for closure in a UMP are closed upon the adoption of a UMP; however, when there is a proposed trail with better construction and location, DEC doesn't close the existing trail until the new one is completed. 1277:10-17 (Clague testimony).

Snowmobile Trail Closures in the Moose River Plains Wild Forest Unit

131. Jonathan DeSantis is a DEC Forester (1449:17-1450:2) assigned to manage 800,000 acres of Forest Preserve land (1450:14-24), including the Moose River Plains Wild Forest and the Jessup River Wild Forest Units. 1451:11-17.

132. The Moose River Plains Wild Forest UMP called for closure of 45.66 miles of snowmobile trails; the effective date of the closures was upon approval of the UMP, which was January 2011. 1452:24-1453:10; Ex. D at 131 (DeSantis testimony).

133. Mr. DeSantis testified that he is the DEC forester responsible for managing the Moose River Plains Wild Forest Unit (1452:3-9) and that trails listed for closure to snowmobiles in the Moose River Plains UMP have been closed. 1453:12-22; *see also* Ex. D (UMP) at 113-114; 135.

134. Mr. Clague testified that he created a map showing snowmobile trail closures in Moose River Plains Wild Forest UMP, as well as the new trail proposed in the UMP. 1250:18-1251:5; Ex. BU (map of trails opened and closed in Moose River Plains Wild Forest Unit) (Clague testimony).

135. Mr. DeSantis testified that DEC enters into agreements with municipalities and clubs (stewardship agreements and temporary revocable permits) for grooming of snow on trails, but that as unit manager he has not authorized any agreements for closed trails listed in the plan since he took his current position in 2013. 1454:5-1455:5; 1464:22-1465:1.

136. Mr. DeSantis testified that he used the trail closure map from the Moose River Plains Wild Forest UMP and superimposed letters on the closed trails in the unit, which correspond to the letters on the list of closed trails at pages 113 and 114 in the UMP (1455:6-1456:7; Ex. BR) and that the red lines on the map depict the trails that are now closed to snowmobiling. 1457:16-17.

137. Mr. DeSantis testified that in the fall of 2016 he took photos of gates and barriers at trailheads of trails closed to snowmobiles in the Moose River Plains unit. 1457:23-1458:2; Ex. BS.

138. The gates depicted in the photos of Exhibit BS are locked in the winter to prevent motor vehicle access onto the trails, including snowmobiles. 1463:1-8.

139. Some of the eight gates or barriers depicted in Exhibit BS block access to more than one trail (1463:13-14); including the last photo of a barrier, which blocks access to 3 trails.

140. In addition to the 8 gates/barriers depicted in Exhibit BS, there is also a gate at the Otter Brook Bridge (Ex. BR, letter o), and an additional gate at the Butter Brook Trail (Ex. BR, letter e). 1464:6-21.

Old Uncas Road (Seventh Eighth Lake Loop) Closure

141. Plaintiff's Exhibit 90 depicts Old Uncas Road in red, in the lower boundary of the block, and that the road is closed to snowmobiles, except for the portion that is part of the Seventh Lake Mountain Trail. 1466:14-20 (DeSantis testimony).

142. Old Uncas Road is also referred to as the Seventh Eighth Lake Loop (1466:-21-23) and is depicted in Exhibit BR as trail f.

Snowmobile Trail Closure in Jessup River Wild Forest Unit: Closure of Dunning Pond Trail

143. Mr. DeSantis is the Forester responsible for the Jessup River Wild Forest Unit (location of the Gilmantown Trail). 1467:20-24.

144. Mr. DeSantis testified he took photos of the Dunning Pond Trail (Ex. DE; 1470:10-14) and that the trail is closed to snowmobiles pursuant to the UMP, no stewardship agreements have been issued authorizing grooming or maintenance since 2013 and there is no signage on the trail authorizing snowmobile use. 1476:14-19.

145. Mr. Clague testified that he created a map depicting a portion of the Jessup River Wild Forest Unit showing a portion of a trail to be opened in the unit and a segment proposed to be closed. 1259:13-1260:1; *see also* Ex. BW.

146. DEC intended that the Dunning Pond trail be closed upon adoption of the UMP. 1278:5-7; *see also* Ex. F (Jessup River UMP dated September 2010) (Clague testimony).

147. Dr. Howard's study area depicted in Exhibit CV is located in the lower right portion of the map for the Jessup River Wild Forest unit (Exhibit F, second to last page) above the Village of Wells (1468:19-1469:8) ; the unit map does not show any additional roads or trails in Dr. Howard's study area. 1469:9-15 (DeSantis testimony).

Snowmobile Trail Closures in the Wilmington Wild Forest Unit

148. Mr. Clague testified that he created a map of the Wilmington Wild Forest showing the Class II trail and that the trail was closed to snowmobiles. 1254:21-1255:9; Ex. 68 (Wilmington unit map of trails opened and closed).

149. Mr. Clague testified that he visited the trailhead of the trail to be closed in the Wilmington Wild Forest Unit and took photographs (1256:5-20; *see also* Ex. CT [photos depicting Cooperkill trailhead]) and that there is a sign at the trailhead that says "Motorized Vehicles Prohibited." 1257:19-21.

D. DEFENDANTS' EXPERT WITNESSES

Expert Witnesses: Trail Construction and Forestry

DEC Forester Tate M. Connor, Expert Qualifications

150. Defendants' expert witness Tate Connor, is a qualified expert in the field of forestry, forest management, forest recreation and trail construction, as evidenced by his resume. *See* Ex. AC.

151. Mr. Connor has been a Forester with DEC since 2006 in the Adirondack Park (1017:4-9; 1018:1-4); and currently manages over 400 miles of public trails (1021:20-22; 1237:4), on nearly 300,000 acres of Forest Preserve land in the High Peaks, the largest Wilderness area in the Adirondacks and has oversight responsibility for recreation, UMPs, work plans, construction and maintenance of trails, campsites, lean-tos, and other facilities. 1020:7-1021:23.

152. Mr. Connor holds an Associate's degree in Applied Science in Forest Recreation from Paul Smith's College, a Bachelor of Science in Forestry from the University of Maine (1017:12-14. Ex. AC [resume]) with a focus on forest systems of the Northeast and he spent a semester at Utah State University where he studied Rocky Mountain forest ecosystems. 1037:9-14; *see also* 9/23/13 Connor Aff., Appendix (Experience Constructing Trails on Forested Lands).

153. Mr. Connor's coursework also included trail construction (1018:11-15), silviculture, dendrology, forest ecology, forest management, and erosion control. 1037:5-24.

154. Mr. Connor has extensive trail construction experience, having built foot trails, cross-country ski trails, horse trails and snowmobile trails, including the Seventh Lake Mountain Class II trail in the Adirondack Park (1019:3-11); he has scouted and laid out new trails, has experience in trail rehabilitation and re-routing of existing trails (1019:14-20) and worked seasonally in 2000, 2001 and 2002 on DEC trail crews. 1018:18-20.

155. Mr. Connor has nearly twenty years of public and private sector experience in forestry and forest recreation (1019:20-1020:1) including with the United States Forest Service in Wyoming and Utah on a timber crew and as a crew chief (1036:22-1037:4) and private sector custom saw mill work (1035:8-12), work as a timber faller and forest technician, and in logging, forest inventory, harvest layout and timber sale marketing. 1035:17-1036:21.

156. In 2015, Mr. Connor received an award from the American Trail Association for the construction of the Seventh Lake Mountain Trail. 1017:17-21.

DEC Forester Robert Ripp, Expert Qualifications

157. Robert Ripp is a qualified expert in the field of forestry and commercial forestry practices, as evidenced by his resume. *See* Ex. BC.

158. Mr. Ripp is currently a forester with DEC, managing the Lake George Wild Forest, Vanderwhacker Mountain Wild Forest, Hoffman Notch Wilderness, and the Camp Santanoni Historic Area, totaling approximately 200,000 acres. 1511:15-20; Ex. BC.

159. Mr. Ripp holds Associate's Degrees in Professional Forestry and Fish and Wildlife Technology from Paul Smith's College (1509:18-20, 22; Ex. BC) and a Bachelor's Degree in Ecological Forest Management from Paul Smith's College. 1509:19-20, 22; Ex. BC.

160. Mr. Ripp also holds a certificate in Geographic Information Systems. 1510:5-6.

161. Mr. Ripp worked as a procurement forester for Trathen International for six months in 2005 (1510:19-24; Ex. BC) and as a forester for Gateway Properties from 2005 to 2013. 1511:2-3; Ex. BC.

162. Mr. Ripp testified that, in his professional experience as a forester, he marked trees for timber procurement. 1513:17-18; 1514:1.

163. Mr. Ripp testified that, as part of his private forestry industry experience, he conducted research on the histories of forests in which he worked, primarily through deed research. 1516:17-20.

164. Plaintiff did not object to the Court finding that Mr. Ripp qualifies as an expert. 1512:10.

Expert Testimony on Construction Features and Characteristics of Trails in the Adirondacks

165. Mr. Connor testified in his professional opinion, within a reasonable degree of certainty in his field, that Class II trails have the same general features and characteristics of hiking trails in the Adirondack Forest Preserve, with little to no difference, except for size. 1138:10-19.

166. Historically, trails in the Adirondacks would follow old woods roads that were not designed for hiking or all-season use, were oversized and without purpose-built drainage or design (1076:10-1077:22); or trails would go straight up a mountain, creating a fall line that over time proved problematic because the trail tread would be eroded by water and use. 1040:1-8 (Connor testimony).

167. Sustainable trail construction focuses on designing trails that resist erosion from weather and use (1039:12-1040:1) through use of features such as bench cuts, turnpiking, water bars and broad based dips. 1041:19-1042:13 (Connor testimony).

168. A key component of the development of a trail is bench cutting, which is used when developing a trail across a rolling or mountainous terrain or slope and involves creating a relatively flat tread surface going across a hill, with a slight downhill slope to allow water to

drain directly to the side of the trail, and an uphill side of the shelf where a bank of material is shaped or "upsloped." 1040:17-1041:11 (Connor testimony).

169. Bench cuts are a feature used in construction of Class II trails, hiking and foot trails and cross-country ski trails. 1068:3-6; 1069:2-14; *see also* at Ex AJ (photos of bench cuts: photo 1, hiking trail Hurricane Mountain (1043:8-19; 1052:12-14) description at 1068:3-1069:1); Ex. AF, photo 2, Seventh Lake Mountain Class II trail (1113:7-24) description at 1115:14-22; Ex AF, photo 5, Seventh Lake Mountain Class II trail segment 3, description at 1117:7-19; Ex. AG photo NYS0006662, Seventh Lake Mountain Class II trail, discussion at 1120:21-1121:9 (Connor testimony).

170. Turnpiking is an erosion control feature used in trail construction on Class II trails (1071:14-19); hiking and or foot trails (1071:20-22) and may be used on cross-country ski trails (1071:23-1072:4) using rocks and mineral soil to raise the trail tread above the adjacent area (1041:12-18); *see also* Ex. AJ, photo 2, turnpiking on combination horse, hike, ski trail, Pharoah Lake Wilderness (1043:20-1044:2) description at 1070:1-14; photo 3, hiking and horse trail, Pharoah Lake Wilderness (1044:15-17; 1056:3-9; 1059:1-3); description at 1072:5-1073:3 (Connor testimony).

171. Water bars are a drainage feature used on hiking trails, Class II trails, cross country ski trails, and horse trails (1079:7-16); they consist of a depression dug into the trail tread, or a barrier, across the trail to intercept water that is traveling down the trail tread and transfer it off the trail. 1041:22-1042:7: 1078:17-1079:6; *see also* Ex. AJ, photo 7 (water bar on Cascade Mountain trail, High Peaks Wilderness); 1046:15-19.

172. A hummock, also referred to as "pit and mound," refers to a raised section of earth where in the past, a tree uprooted, tipped over and pulled up dirt and rocks, and left a hole where the material got pulled out. 1417:4-12 (Connor testimony).

173. Full trail tread development is not needed on a snowmobile trail; development of trail tread would be for non-winter users of the trail. 1178:19-1179:2 (Trail tread is the durable surface that is defined within the trail corridor for the purpose of traveling on. 1040:10-12) (Connor testimony).

174. Trail hardening is the placement of mineral soil or rock on the trail tread in areas where the soil is not substantial enough to hold up to use (1079:17-24); it is a feature used on hiking trails, and can be used on Class II trails depending on other uses, to accommodate the non-winter use. 1080:4-11.

175. Brushing is the act of clearing vegetation out of trail corridor (1080:12-24); it is done on every trail through a forested area, including on hiking trails, Class II trails and cross-country ski trails. 1081:1-9.

176. Leaf litter is the previous year's leaves that are lying on the forest floor or in the process of decomposing to organic material. 1114:9-12; *see also* Ex. EF photo 4, (leaf litter on segment 1) and photo 5 (leaf litter on segment 3). 1116:10-1117:9.

Expert Testimony on Bridges Used on Trails in the Forest Preserve

177. A range of trail construction features is used for crossing waterways; the characteristics of the water crossing, the classification of the trail, and the amount of use, dictate the technique. 1081:10-17 (Connor testimony).

178. For crossing low volume streams, DEC may harden the stream base on the approach and use stonework in the stream bed (1081:10-1082:3); on a stream with little to no flow, on a smaller trail, two to four logs may be used over stream (1128:2-6; 1130:1-22); bog bridging can be used for wet ground or swampy areas (1082:11-17); and span bridges for streams or rivers, with abutments and decking. 1082:21-1083:6 (Connor testimony).

179. Smaller two-log bridges can be used for a primitive trail, but they present problems on high volume Adirondack trails, particularly in the winter when users would not be able to stay on the narrow bridge, and may go around the bridge, with associated impacts. 1130:11-22 (Connor testimony).

180. Mr. Connor disputed the testimony of plaintiff's witness, Mr. Amadon, that a foot trail bridge would not exceed 3 feet in width. To the contrary, Mr. Connor testified that DEC regularly has bridges that are greater than 3 feet on foot or hiking trails and on ski trails. 1126:11-23.

181. Bridge widths vary for various types of trails in the Forest Preserve (1127:2-5); horse trail bridges have a 6 foot minimum width with kick rails (1127:21-22); ski trails bridges are 6 to 8 feet wide (1127:22-1128:2); and trunk or primary trails could have 4 foot wide bridges. 1128:5-6.

182. Mr. Connor took photos of bridge structures in the Adirondack Forest Preserve (1042:14-1043:1) including a photo of a walkway bridge on foot trail at Avalanche Lake, High Peaks Wilderness area (Ex. AJ, photo 5, and 1045:18-22) showing a feature used to keep users on the trail for minimum impact to the adjacent forest (1075:7-9); and a 12 foot wide Class II bridge he constructed on the Seventh Lake Mountain trail, typical of the bridges he built on the trail. Ex. AG, photo NYS0006660, and 1119:18-1120:1; *see also* photo NYS0006661, bridge on Class II trail (1120:5-16).

183. DEC constructs bridges on Class I and Class II snowmobile trails pursuant to its bridge design guidance (1125:8-17; *see also* Ex. AA, appendix D) with a maximum deck width of 12 feet. Ex. AA, appendix D at 5.

184. The deck of a 12 foot wide bridge is wider than the trail width for safety reasons. The width allows tapering of snow on the bridge, because of the conical tendency of snow to build up on bridges. 1432:15-1433:4 (Connor testimony).

185. Exhibit 155 is a photo of a bridge on segment 1 of the Seventh Lake Mountain trail (1135:13-18) that is under construction (1429:4) and follows the basic bridge design used in the bridge guidance. 1136:20-21 (Connor testimony).

186. Exhibit 155 depicts the foundation and stringer logs for the bridge; across the bottom of the stringers is the abutment for the bridge, which is the foundation that holds the bridge up on the banks. 1166:5-1167:1.

187. Fundamental parts of snowmobile trail bridge design are also used in bridges for hiking trails, though hiking trail bridges vary in their development. 1126:8-10.

Expert Testimony on Forestry and Timber

188. The current forestry understanding of "timber" is "a sal[e]able, marketable forest product." 1514:5 (Ripp testimony).

189. Trees under 3 inches dbh do not constitute "timber" as understood within the forestry profession. 1516:8-11 (Ripp testimony).

190. During his time as a private forester, Mr. Ripp marked and harvested trees no smaller than 8 inches dbh as "timber." 1515:1-13.

Defendants' Expert Witness: Forest Ecology

Dr. Timothy Howard, Ph.D., Expert Qualifications

191. Dr. Howard is the Director of Science at the New York Natural Heritage Program, (1282:19-24) and oversees ecology, zoology, botany and landscape ecology programs (1287:6-9). The mission of the Natural Heritage Program is to support New York State conservation with science, and provide scientific expertise in a variety of fields to the New York State Department of Environmental Conservation (1286:5-15) as well as state, federal and private organizations, including the Environmental Protection Agency (EPA). 1288:18-1289:6

192. Dr. Howard holds a B.A. in Biology, cum laude, from Middlebury College; and an M.S. and Ph.D. in Biology, University of Michigan, Ann Arbor, Mi. 1283:1-13 *see also* Ex. BX (curriculum vitae)

193. Dr. Howard's areas of study and/or field work include: plant community ecology and plant competition (1283:14-24), landscape ecology, modeling, forest ecology (1284:11-15); prioritizing landscapes, inventories of northern forests, landscape assessments in New York (1285:8-15); identification and assessment of forests, field ecology, mapping, including Geographic Information Systems mapping (1286:17-23); botanical field work surveying rare, threatened and endangered plants of the state (1288:1-9), including rare species on state forest lands (1288:23-24); size and condition of natural communities such as forests, bogs, ponds, fields (1288:10-17), and the study of forests within the Adirondack Park. 1289:17-23

194. Dr. Howard has conducted research on forest health and forest age (1287:17-19) and has published numerous peer reviewed articles (1284:23-24), as well as non-peer reviewed articles and reports in his field. 1285:8-10; *see also* Ex. BX at 2-3.

195. Dr. Howard's training and experience include an understanding of forest canopy, clearcutting, forest fragmentation, and the ecology and impacts to forests of roads and trails that sustain recreational activities. 1289:24-1290:11.

196. Dr. Howard was a visiting professor at Middlebury College, visiting assistant professor at SUNY Stony Brook, guest faculty at the University of Michigan and a high school science teacher. 1285:16-24; *see also* Ex. BX at 2.

197. Dr. Howard is a member of the Ecological Society of America, the American Institute of Biological Sciences and the Society for Conservation Biology. Ex. BX at 3.

Expert Testimony Overview

198. Dr. Howard testified that every transportation corridor that goes through a forest has ecological effects, from the tiniest foot trail to a large superhighway (1375:20-23); that roads and trails have detrimental impacts on plants and animals that can extend into the forest (1385:19-1386:130); and that "all trails have an impact and the magnitude of the impact is what matters." 1386:8-9.

199. Dr. Howard made assessments of clearcut, canopy and forest fragmentation of Class II snowmobile trails and testified within a reasonable degree of certainty that: the trails are not clearcuts (1314:12-1315:7; 1322:17-1323:2; 1376:15-23; 1377:1); the canopy overall on the Seventh Lake Mountain Trail is closed (1315:11-12); the canopy on the Wilmington trail portion he evaluated is closed (1323:3-5); and fragmentation was lessened with the practice of closing interior trails and adding trails to the edges of the forest blocks he assessed (Moose River, Wilmington and Gilmantown trail study areas). 1363:3-21.

Dr. Howard's Testimony on Clearcuts

200. Dr. Howard testified that the term clearcut comes from the standard forest practice of cutting all the trees out of an area, which creates a tree line at the forest edge (1295:2-7); there is a clear open spot in the forest, a clear forest edge, and then a closed canopy adjacent to that. 1313:10-17.

201. In a clearcut, there is no forest canopy (1296:2-9); all trees are removed from the canopy. 1297:18-19.

202. Many studies exist on the ecological effects of clearcutting, and the differences between areas in a clearcut and outside of a clearcut, including differences in vegetation and temperature variation. 1294:7-1295:7; and 1314:4-6.

203. "Forest edge" a term used in scientific and ecological literature, describes a distinct phenomenon in an area where trees have been removed and there is a wide clearing, but the forest remains relatively intact at that edge or boundary where the trees were not removed. 1295:8-1296:1.

204. Trails are not clearcuts. 1376:15-23 and 1377 (Howard testimony).

Dr. Howard's Testimony on Forest Canopy

205. Forest canopy typically refers to the upper portion of trees at the highest level, that have leaves fully oriented to capture as much sunlight as possible (1296:10-23) (Howard testimony).

206. There are sub-canopy layers below the canopy, including a layer of trees that haven't made it to the full sunlight yet, a shrub layer and the lowest layer, which might consist of non-woody plants such as herbs and wildflowers. 1296:7-15.

207. In addition to clearcuts, other factors affect a forest canopy (1297:16-18), including natural canopy gaps caused by fallen trees, by multiple trees blown down, or hurricanes that can knock down hundreds of thousands of trees (1297:21-1298:4). Natural gaps in the canopy also occur at river shores, stream edges, cliffs, and natural outcrops, where trees can't grow. 1298:5-12.

208. While it can take decades for canopy closure to take place over a linear corridor cut through a forest, the length of time would vary depending on soil type, habitat type, forest type, tree size, size of the corridor and many other features. 1386:20-1387:9 (Howard testimony).

Dr. Howard's Testimony on Class II Trails Regarding Clearcut and Canopy

Seventh Lake Mountain Trail is not Clearcut

209. Dr. Howard's expert professional opinion within a reasonable degree of certainty is that the Seventh Lake Mountain Trail is not a clearcut. 1314:15-1315:7.

210. The Seventh Lake Mountain trail does not have a forest edge as defined by clearcut, and the linear disturbance is not large enough to create the ecological effects of a clearcut; accordingly the trail does not constitute a clearcut per ecological definitions. 1313:18-1314:14; *see also* 1315:6-7 (Howard testimony).

Seventh Lake Mountain Trail Canopy, Overall, is Closed

211. Dr. Howard's expert opinion within a reasonable degree of certainty is that the canopy, overall, is closed on the Seventh Lake Mountain trail. 1315:8-12.

212. Dr. Howard visited the Seventh Lake Mountain Trail and observed that there were parts of the trail where the canopy was closed, and parts of the trail where there are canopy gaps (1298:13-24), including a natural savannah type environment on segment 3 of the trail where the canopy is more open both on and off the trail, than a typical closed canopy forest. 1299:1-22.

213. Dr. Howard's expert opinion regarding the canopy of the Seventh Lake Mountain trail is based on on-the-ground observations and aerial images, which show the trail does not create any linear opening and there is no linear feature visible in the landscape (1314:18-1315:7; 1311:3-20); *see also* Ex. CC (aerial image, Seventh Lake Mountain trail, segment 3, leaf-off) and Ex. CU aerial image, Seventh Lake Mountain trail, segment 3, leaf-on).

214. An aerial image showing leaf-off conditions (1303:15-17) for a portion of segment 3, the northern segment of the Seventh Lake Mountain trail (1300:11-1301:24) depicts an area of the trail near Route 28 and a portion of Eighth Lake. 1305:16-1306:16; Ex. CC.

215. The leaf-off image of Seventh Lake Mountain trail shows green areas, which are coniferous trees without leaf needles, and brownish areas, which are deciduous trees, bare stems and trunks of the trees. 1306:22-1307:4; Ex. CC.

216. While bridges and streams are visible in the leaf-off aerial imagery of the Seventh Lake Mountain trail, and one can see through the trees to the ground, the trail is very difficult to see (1306:22-1307:22), which indicates that the canopy is relatively contiguous and unbroken over the trail. 1307:19-1308:13; Ex. CC.

217. The leaf-on image of the Seventh Lake Mountain trail (Ex. CU) depicts the same location of segment 3 as the leaf-off image (Ex. CC) (1308:14-1309:1; 1311:3-6) and the ground is not visible. 1312:1-2); Ex. CU.

218. The leaf-on aerial imagery of the Seventh Lake Mountain trail is a good resolution image; the tree canopy and tops of individual trees are visible; there is clearly no opening in the canopy; and neither the trail nor the bridges are visible. 1311:3-22; Ex. CU.

219. "Leaf-on" (or "leaf-out") refers to the condition of deciduous trees after their buds and leaves have emerged in the spring; deciduous trees drop their leaves every year, and every spring they create buds, then leaves. 1145:24-1146:7 (Connor testimony); 1306: 17-22.

220. The leaf-on aerial image of the Seventh Lake Mountain trail (Ex. CU) taken in July of 2013 (1308:14-22) and the leaf-off aerial image (Ex. CC) taken in May of 2013 (1300:11-21), were taken after tree cutting was completed on the trail in December 2012 (Connor testimony at 1147:19-1148:2; *see also* 1149:6-8).

Wilmington Trail is not Clearcut and it has a Closed Canopy

221. Dr. Howard's expert professional opinion within a reasonable degree of certainty is that the Wilmington trail is not a clearcut.1322:19-1323:2.

222. Dr. Howard's expert opinion within a reasonable degree of certainty, based on high resolution imagery (Ex. CB and DD), the canopy is closed throughout the trail for this section of the Wilmington trail. 1323:3-8.

223. A leaf-off aerial image of the northern portion of Wilmington trail taken April 2014 (1315:13-1316:6 and 1318:2-3, Ex. CB) shows a bridge, stream and a contiguous forest, but most of the trail is not visible. 1318:6-16.

224. A leaf-on aerial image of the northern portion of Wilmington trail taken June 2015 (1319:15-17 and 1322:3-9, Ex. DD) shows tree canopy, individual trees, contiguous forest and a closed forest canopy, the trail is not visible and there is no clear linear feature of the trail. 1322:10-18.

Expert Testimony Regarding Forest Fragmentation

Definition and Expert Opinion

225. Dr. Howard testified that forest fragmentation is the phenomenon of breaking a large forest into smaller pieces by fragmenting features such as roads, rivers or streams, and it is used as a metric of forest condition. 1323:9-17.

226. Dr. Howard's opinion within a reasonable degree of certainty with regard to three Class II study areas is that, overall, fragmentation tended to be lessened by the practice of closing interior trails and adding trails to the edges of the forest blocks assessed, though there were some small negative metrics. 1363:3-21.

227. Forest fragmentation has significant effects on plants and animals that live in a forest. 1323:20-1324:1.

228. There is an ecological benefit to defragmenting the forest and reducing fragmentation in a forest block can improve the health of the forest. 1324:2-11.

229. There are many different ways to evaluate forest fragmentation and Dr. Howard chose metrics that are known, available, and have been used in the past to measure forest fragmentation. 1325:4-11.

230. It is generally accepted practice to use metrics for forest fragmentation analysis. 1327:1-13.

Class II trails and Forest Fragmentation Assessment and Metrics

231. Dr. Howard analyzed trail closures and their impacts on forest fragmentation in the area of the Gilmantown, Seventh Lake Mountain and Wilmington (1324:12-20) Class II trails, using the trail information provided to him by DEC as well as data on trail and road networks. 1324:23-1325:3.

232. Dr. Howard used three metrics to evaluate fragmentation (1326:18-24 and 1327:8-13 [summarizing the three metrics]) and to compare forest blocks before and after a Class II trail was constructed (1327:12-13): 1) the size of the largest forest block (1325:12-20); 2) the shape index of the largest block (a measure of the relationship between the length of the perimeter or roads, or the fragmenting feature, around the block) (1325:21-1326:10); and 3) the average shape index for all the remaining areas of forest. 1326:11-17.

233. Forest block metrics were measured in acres (1327:14-17); the larger the block, the more ecologically beneficial it is (1323:20-1324:11) and the largest block used in the methodology was calculated by Dr. Howard's computer program. 1390:22-24.

234. The shape metrics with a smaller number indicated less fragmentation (1327:18-22), while a larger number indicated more fragmentation. 1326:9-10.

235. The practice of closing interior forest trails while adding a trail to the perimeter of the forest block increases and improves the forest fragmentation measures. 1333:10-16 (Howard testimony).

236. Dr. Howard's fragmentation assessment was based on closure of snowmobile trails and he did not include the cumulative impacts of all trails and roads (1382:15-16; *see also* 1394:16-21), but if he had included all the trails that penetrate the forest block, with a reasonable degree of scientific certainty, his analysis would still be a positive number. 1395:13-16.

Gilmantown Trail Fragmentation Analysis: Closure of Dunning Pond Trail Improved all Three Fragmentation Metrics

237. Dr. Howard's fragmentation analysis for the Gilmantown Class II trail study area showed that closing an interior trail, the Dunning Pond trail, to snowmobile use and opening the Gilmantown Class II trail on the perimeter of the forest focus area, improved the forest fragmentation measures (1333:12-16) in all three metrics. 1341:16-1342:3; *see also* Ex. BY (showing % changes for each metric).

238. The block metric analysis showed that the Dunning Pond trail (*see* Ex. CV, left-side map "before" scenario depicted in pink) was a fragmenting feature (1331:14-18) in the Gilmantown forest focus area (1329:17-1330:12), where the largest block size was approximately 7,900 acres. 1331:14-1332:12.

239. Closure of the Dunning Pond trail to snowmobile use ("before" scenario) and opening of the Gilmantown trail ("after" scenario) (1328:15-21) resulted in a 22% increase in size of the largest forest block from 7,900 acres to 9,700 acres. 1331:14-1332:16; Ex. BY (showing "before" and "after" scenarios).

240. Dr. Howard's fragmentation assessment for the Gilmantown study area was based on closure of the Dunning Pond trail (Ex. BY, trail depicted in pink) to snowmobile traffic, not all uses. 1382:3-16.

Seventh Lake Mountain Trail Fragmentation Analysis Was Performed Twice, Both Times Showing Benefits to the Forest Study Area

241. Dr. Howard performed two fragmentation analyses for the Seventh Lake Mountain Class II trail study area, the first, based on snowmobile trail closure information from DEC (1342:17-19) and the second, incorporating trail information based on plaintiff's critique of the first analysis. 1348:19-1349:1 and 1349:16-19.

242. Both fragmentation analyses for the Seventh Lake Mountain study area depict the same study area shown on maps at Ex. CX and Ex. CZ, and outlined in black (1343:12-19) and use the same USGS base map. 1342:21-22 and 1349:9-10.

243. Removing snowmobile trails and stopping snowmobile travel on them, reduces the big picture fragmentation, and adding a new trail along the edge of a block, long term, would likely lead to improvement in the forest status. 1353:17-23 (Howard testimony).

244. The first analysis, based on DEC snowmobile trail closures, showed a decline of 4.3% in the largest block size from 89,270 acres to 85, 611 acres, while the two shape metrics improved, thus showing an improvement in the forest fragmentation metric. 1347:18-1348:16.

245. After adding more snowmobile trails and roads raised in a critique by plaintiff's expert, Stephen Signell (1349:16-24 and 1351;16-1352:1) to the forest fragmentation analysis, Dr. Howard calculated improvements in each fragmentation metric: acreage of the largest block increased from 80,956 acres to 84,857 acres, a 4.6% increase, and both shape index measures showed improvements. 1355:23-1356:4 and Ex. CG (*see* metric, before, after and % change).

246. The second fragmentation analysis, using Mr. Signell's critique, showed an increase in the largest block size due to the closing of Old Uncas Road. 1352:10-1353:2.

247. Mr. Signell's critique of Dr. Howard's fragmentation analysis includes before and after maps for a 6,000 acre block, a very small portion of the study area examined by Dr. Howard in the Seventh Lake Mountain study area, and an area that Dr. Howard incorporated into his second fragmentation analysis. 1356:5-23 and 1358:8-15; *see also* Exs. 90 and 91.

248. Dr. Howard testified that Mr. Signell's fragmentation assessment missed a key point, the closing of Old Uncas Road, and when interior roads and snowmobile trails are closed , and snowmobile trails are moved to the perimeters, smaller blocks are created, but larger forest is opened in the interior. 1357:9-1358:4.

Wilmington Trail Fragmentation Analysis Showed Improvement in the Largest Block Size after Closure of the Cooperkill Trail

249. Dr. Howard's fragmentation analysis for the Wilmington trail study area showed improvement in the largest block size after closure of a portion of the Cooperkill trail and opening of the Wilmington trail study area from 10,700 acres to 12,300 acres (1360:13-20 and Ex. CA showing before and after maps and metrics); and showed that shape indexes increased by just over 4%. 1360:21-1361:12.

Dr. Howard's Expert Testimony Regarding Seedlings and Saplings

250. Dr. Howard testified that acorns, seedlings and samplings are all biologically "trees" (1363:22-1364:3) and that seedlings and saplings support the forest ecosystem. 1378:5-6.

251. Dr. Howard testified that in forest ecology, a tree may produce tens of thousands of seeds and only a few will grow tall enough to be saplings and only a few saplings will then grow to be trees. 1364:4-14.

252. In a closed forest canopy, the survival rate for seedlings over the years is low. 1364:16-18.

Expert Testimony of Dr. Howard Regarding Allegations of Invasive Plants on Class II Trails

253. Dr. Howard testified that he has access to a database for invasive species in New York State. 1372:7-15.

254. Dr. Howard consulted the state database for invasive species and testified that Japanese knotweed was first found at the Santanoni Historic area in 2004 and again in 2007 (1372:16-1371:8), which was years before construction began on the Santanoni to Lake Harris trail in 2014. Ct. Ex. 1 at ¶ 14; *see also* 1007:19-1008:9; 1009:2-13, testimony of Ms. Regan, APA.

255. Ragweed is not an invasive species in the Adirondacks; it is a native plant and not on any state or regional invasive species list. 1372:1-6 (Howard testimony), *contra* 441:18-24 (Sutherland testimony).

E. PLAINTIFF'S EXPERT WITNESSES

Stephen Signell

Mr. Signell's Conflicts of Interest Affect His Credibility

256. Mr. Signell is being paid for the work he is doing for the plaintiff on this case. 702:4-6.

257. Mr. Signell was paid by SUNY Research Foundation (702:7-10) to work with DEC on plans and trails at issue in this litigation as a contributor to the Moose River Plains UMP. 703:12-21; Ex. D page i.

258. Mr. Signell testified that he worked with DEC to map the Seventh Lake Mountain Trail. 704:1-10; 704:18-705:5; *see also* maps at Ex. D pgs. 121, 125.

259. Mr. Signell testified that he participated in on-the-ground work with DEC and the APA to find a route and scout or site sections 3 and 4 of the Newcomb to Minerva to North Hudson Class II trail. 706:7-11; 707:23-708:8.

260. Mr. Signell testified that he was involved in the early stages of development of the trails and he collected data to be used to map routes for section 3 and 4 of the Newcomb to Minerva to North Hudson trail. 708:14-709:9.

Mr. Signell's Protocols Are Not Generally Accepted Protocols in the Field, and His Stump and Tree Counts are Flawed and Inconsistent

261. Dr. Howard testified that the protocol used by Mr. Signell to determine the diameter-at-breast height of a tree, by measuring the diameter of the stump, is not a generally accepted protocol in his field. 1366:13-1367:8.

262. Dr. Howard testified that peer-reviewed sampling protocol (1368:18-21) would involve measuring a group of standing trees nearby, by forest type, for the diameter at stump level and diameter-at-breast height, then developing a formula to estimate the dbh of stumps on the trail. 1367:9-1368:17.

263. Mr. Signell testified that to estimate the number of trees 3 inches dbh in size from stumps "is not an exact thing;" so he counted every stump that was greater than 4 inches diameter and "made the assumption" that it was going to be 3 inches at breast height. 215:8-18.

264. Mr. Signell used multiple different protocols: counting every stump above 3 inches diameter (195:9-14; 229:6-14); and "just tallied the smaller things ....stumps smaller than 3 inches (229:15-19); and above 1/4 inch in diameter (231:20-22;); and every stump above 1 inch in diameter (252:20-24); and for an uncut portion of the trail from Boreas to Hewitt, he counted trees zero to one inch at breast height, as well as 1-3 inch at breast height and above 3 inches (276:2-6) and for the southern cut portion every stump greater than 1 inch. 277:17-21; and for an uncut portion of segment 8 of NMNH he measured trees "about a quarter inch up to three inches." 240:23-241:1.

265. Mr. Signell's count of standing trees on the Roosevelt to Boreas segment of the NMNH trail (238:5-9) is speculative because Mr. Ripp testified that the Roosevelt to Boreas segment of the NMNH trail is segment 8, and that no trees have been cut, no construction has taken place (1536:3-5; 1537:13); there is no work plan (1606:11-12); and the final route still needs to be determined for segment 8. 1607:1-4.

266. Mr. Signell testified that to determine which trees to count on the Roosevelt to Boreas segment of the NMNH trail he "had to eyeball it" (239:1-3) and for a section where trees were not painted he testified that he used his arm ("I know my wing span") to determine which trees were in the unmarked trail corridor. 239:13-240:2.

267. In the case of the Seventh Lake Mountain trail, plaintiff's Executive Director Peter Bauer photographed stumps during the summer of 2016 (804:7-10, 22-23), nearly 4 years after the trees were cut on the trail. 1147:24-1148:2; 1149:6-8.

268. Mr. Bauer was not certified as an expert in plant identification (857:2-2-858:3) and did not testify that he could distinguish witch hobble stumps from tree stumps, nor did he testify that his training on protocols included plant identification. 804:24-805:8.

269. It would be very difficult, perhaps impossible, to identify a tree from a photograph of a stump less than one inch in diameter, taken years after it was cut, without seeing its bark, leaves or buds. 1369:5-22 (Howard testimony).

270. One can determine the age of a tree by counting its rings (1370:14-19); woody plants and shrubs also have rings (1370:21), and witch hobble is a woody plant found in the Adirondacks. 1371:5-9 (Howard testimony).

271. Thick swaths of witch hobble were present on the Seventh Lake Mountain Trail on segments 2 and 3. 1109:8-15 (Connor testimony).

272. It would be very difficult to distinguish between witch hobble stumps and tree stumps, less than 1 inch in diameter, in a photograph, taken three years after being cut. 1371:14-24 (Howard testimony).

273. Mr. Signell testified that academic research professionals involve graduate students or hire field assistants to collect data (710:3-6), however, Mr. Signell did not use a graduate student or hire a field assistant; he relied on plaintiff's Executive Director Peter Bauer to collect data for his research. 710:13-17.

274. Mr. Signell did not check any of the stumps counted by Mr. Bauer on the Gilmantown Trail. 712:18-20.

Mr. Signell Old Growth Analysis is Flawed

275. Mr. Signell did not conduct a survey pursuant to any academic standard for determining old growth anywhere on the Seventh Lake Mountain Trail. 709:16-18.

276. Mr. Signell did not do an official census of old growth trees. 560:22-23; 566:4-7.

277. Mr. Signell conceded that a map he created allegedly showing old growth trees on a portion of the NMNH trail (Exhibit 86, *see* legend showing "Old Growth") "does not necessarily delineate the boundary of old growth." 563:6-8.

278. Mr. Signell mapped the Seventh Lake Mountain Trail for DEC with a proposed trail route on segment 3: the same area he testified has old growth forest. 704:23-705:15; *see also* Ex. D at 125 (map).

279. Mr. Signell testified that he observed two trees with growth rings indicating old growth on the Seventh Lake Mountain Trail, one of which was a "tree that had fallen across the path" with a cut 15 feet above the ground. 572:1-10. *See also* testimony and photographs of Mr. DeSantis of downed tree on Seventh Lake Mountain Trail at 1477:4-24 and Ex. BT (photos).

280. Mr. DeSantis investigated an alleged old growth tree identified by Mr. Signell on segment 3 of the Seventh Lake Mountain Trail based on the GPS/GIs coordinates disclosed by Mr. Signell (1476:23-1477:16) and found a large downed tree with a trunk with splintered edges approximately 8 feet high, with signs of rot and decay, with no cut marks on the stump (1483:5-16; Ex. BT, figures 4, 5), and a cut of a fallen section of the tree at 26.5' from the base, leading him to believe the tree fell from natural causes. 1484:11-23; Ex. BT (figures 1, 2).

Dr. Ronald Sutherland, Ph.D.

281. Dr. Sutherland spent 12 hours of field work in connection with this case (329:20-22) and observed portions of two Class II trails; the Seventh Lake Mountain Trail and the NMNH trails. 331:4-10; 337:18-20.

282. Dr. Sutherland has no expertise, experience, training or research in road construction, trail construction, or in erosion control measures used in road or trail construction. Ex. 92 (CV).

283. Dr. Sutherland characterized a portion of the NMNH Class II trail as a "small forest road" (364:15-16; Ex. 95) and he defined a forest road as an unpaved road "usually gravel or dirt" (341:5-7) but he provided no photographic evidence or testimony of having observed any gravel roads used as Class II trails or in the Forest Preserve.

284. Dr. Sutherland's testimony with respect to his expert documents produced at trial regarding a study on the effect of roads on salamanders, confirmed that the study only examined the effects of gravel roads (514:24-515:10; 515:23) and that it is conceivable that gravel roads, by creating a substantial amount of dust, do cause greater impacts than dirt roads. 524:21-24.

285. Dr. Sutherland testified that the portion of the NMNH trail he observed in Exhibit 97 appeared to be 8 to 10 feet wide (371.19), which is inconsistent with the testimony of Mr. Connor that Forest Preserve roads are generally 12 to 20 feet wide, depending on the purpose of the road and with features such as ditching, can be up to 30 feet wide. 1088:20-1089:6.

286. Dr. Sutherland testified that several photos of segment 1 of the Seventh Lake Mountain Trail were indicative of an open canopy (422:9-10; 423:8-10; 424:11-12; 425:8-10; 426:12-13; *see also* Exs. 105, 106, 107); however, Mr. Connor testified that close to 50 % of segment 1 was located on previously existing routes (1099:22-24), including an old road bed 12 to 20 feet wide. 1415:19-20.

287. Dr. Sutherland confirmed during his testimony that he submitted an affidavit in this matter that referenced Class II trails, which noted "these trails retained a closed canopy for much of their length." 514:9-14.

288. Dr. Sutherland testified that, in his research on the impacts of roads on wildlife, he did not typically use trails in an analysis of that sort "because trails are not thought to have very much impact" (342:7-11); because "hiking trails don't lead to road mortality" where animals get run over (342:12-17); and because hiking trails are typically much narrower and "don't inflict openings in the canopy." 342:20-22.

Philip Terrie, Ph.D.

289. The 1915 proposal to add the words "and trees" after the word "timber" to Article XIV of the Constitution, did not become part of the constitution, it was voted down. 120:13-121:3 (Terrie testimony).

F. SNOWMOBILE USE

290. Defendants' objection to testimony on snowmobile *use* was sustained after the Court read into the record an affidavit of John Caffry, dated December 11, 2013, stating that the first cause of action is directed solely at the construction of Class II trails, not at snowmobile trails in general (349:13-23), and the deposition testimony of Mr. Bauer as representative of Protect the Adirondacks! Inc., that snowmobiling is an allowable activity in the Forest Preserve. 350:3-15; 354:15-20.

II. PROPOSED CONCLUSIONS OF LAW

The New York State Department of Environmental Conservation and the Adirondack Park Agency have together developed the concept of Class II Community Connector Trails, which are intended to preserve the wild character of the Forest Preserve by moving trails on which snowmobiles are permitted away from remote interior areas and toward roadways.

In the decision denying both motions for summary judgment, this Court determined there existed six issues of fact that required a fact-finding trial: (1) the trails subject to the Court's determination, (2) the number of trees cut for Class II trail construction, (3) the length of the trails at issue, (4) what constitutes "timber" for purposes of the New York State Constitution, (5) whether only trees 3 inches diameter-at-breast-height (dbh) should be counted, and (6) whether the closing of trails in remote interior areas has occurred and to what extent. Dec. & Order (Jan. 25, 2017) at 21-22.

After a month-long trial, plaintiff has not met its "burden of demonstrating that construction of the Class II trails at issue constitutes an 'improper use[]' of the forest preserve impairing such 'wild forest lands' to an unconstitutional extent." Dec. & Order on Summary Judgment (Jan. 25, 2017), at 25. To the contrary, evidence presented at trial demonstrates that Class II trails create reasonable public access to these state lands while preserving the forest lands in a wild state, and involves an immaterial amount of tree cutting. As such, this Court finds that Class II trails are consistent with article XIV, § 1, of the New York State Constitution, also known as the "forever wild" clause.

A. Defendants' Trail-Building Practices are Consistent with the Historical Development of the "Forever Wild" Clause.

Since January 1, 1895, the People of the State of New York have given constitutional protection to the Forest Preserve. A primary purpose of this constitutional protection is to

provide unique and healthful public recreation opportunities in a wild, natural environment, and "to preserve it from the interference in any way by the hand of man." *See, e.g., Association for the Protection of the Adirondacks v. MacDonald*, 253 N.Y. 234, 238-239 (1930); *Helms v. Reid*, 90 Misc.2d 583, 590-592 (Sup. Ct., Hamilton County 1977). This protection is set forth in article XIV, § 1, of the New York State Constitution, also known as the "forever wild" clause, which requires that Forest Preserve lands "be forever kept as wild forest lands," and further says that such lands may not be leased or sold, "nor shall the timber thereon be sold, removed or destroyed." N.Y. Const., art. XIV, § 1.

Historical and Current Understandings of "Timber"

Article XIV, § 1, was added to the New York State Constitution following the 1894 Constitutional Convention. As Dr. Terrie stated in his testimony, Verplanck Colvin, the state surveyor between 1870 and 1905, was an early proponent of the Forest Preserve. 55:14-22. Dr. Terrie cited an account of Colvin's ascent of Mount Seward, which was a foundational document in the push for the Forest Preserve. 56:12-57:5, *citing* Colvin, "Ascent of Mt. Seward and its Barometrical Measurement," Twenty-Fourth Annual Report on the New York State Museum of Natural History (Apr. 19, 1871), 171-180. Dr. Terrie also testified that Colvin was referenced as a proponent of the Forest Preserve during debate in the 1894 Constitutional Convention. 74:15-75:13. In his testimony, Dr. Terrie did not discuss the addendum to that report, which actually advocated for the creation of the Forest Preserve, citing conservation of forests as reservoirs important to navigability. *Id.* at 179. "The remedy for this," Colvin posited, "is the creation of an Adirondack Park or timber preserve, under charge of a forest warden and deputies. The 'burning off' of mountains should be visited with suitable penalties[.]" *Id.* at 180. Colvin did not, however, advocate for a total ban on tree-cutting. Rather, he argued that "cutting of pines under ten inches or one foot in diameter should be prohibited," and specified no limits to the

cutting of larger trees.[4] *Id.* Thus, even the most vocal proponent of creating the Forest Preserve advocated for a less stringent tree-cutting standard than DEC now employs in its care and management of the Forest Preserve.

Plaintiff's definition of "timber" is likewise inconsistent with that in the public record at the time of article XIV's adoption. For example, the Fisheries, Game and Forest Law, in place during and after the enactment of the "forever wild" clause of the Constitution, demonstrates this nuanced understanding of trees and timber. *See* Former Fisheries, Game and Forest Law § 280 (preventing and prosecuting trespass on Forest Preserve lands "for cutting or carrying away or causing to be cut or assisting to cut or carry away *any tree, bark or timber* within the Forest Preserve" [emphasis added]). Further, in its Annual Reports to the Legislature throughout the 1890s and into the early 1900s, the Forest Commission consistently used the word "timber" to refer to a volume of marketable wood product. *See* 1898 Assembly Doc. 74, at 270 (distinguishing "sawing timber" and "pulpwood"), 274 (describing an area burned by wildfire as having "only a scant growth of trees and no merchantable timber), and 301 (the reforestation of the Forest Preserve leading to a "time when the different species in our forest, both conifers and broad-leaved trees, will become merchantable timber"); 1901 Assembly Doc. 85, at 77 (tables of volume of trees, with columns differentiating "Timber Only, Down to 3 In. Diameter" and "Whole Tree Exclusive of Root Wood"); 1907 Assembly Doc. 71, at 444 (noting that "the timber in the body of the tree is usually of the best quality"), 446 (stating that "log buyers and dealers in pulpwood will offer some objections to removing the timber to as small a diameter as five inches, since when a tree is cut down to six inches in diameter in the tops there is usually but

[4] This Court may take judicial notice of this and other documents cited below because they are part of the public record. *See Affronti v. Crosson*, 95 N.Y.2d 713, 720 (2001). For this reason, the Court need not solely rely on Dr. Terrie's interpretation of these documents.

little timber having any commercial value remaining, even for pulpwood"), and 454 ("[n]o trees shall be cut for timber which are not marked"). Thus, although there were multiple lay understandings of the word "timber" when the "forever wild" clause was enacted (*see, e.g.,* Ex. 7), years of New York legislative documents distinguished between "tree" and "timber" in the context of Adirondack forests. This understanding continues to the present day. Robert Ripp, a Senior Forester for DEC and a qualified expert in forestry practices, testified that "[t]imber is a sal[e]able, marketable forest product." 1514:5.

The Department's long-recognized 3 inches diameter at breast height (dbh) as the threshold point for distinguishing between trees and timber to be cut in the Forest Preserve for public access and safety is consistent with article XIV, § 1's use of "timber." *See* Dep't of Envtl. Cons., Divisional Direction LF91-2, Cutting, Removal, or Destruction of Trees and Endangered, Threatened, or Rare Plants on Forest Preserve Lands (1991), Exh. C at 2, 6; Forest Preserve Policy Manual (1986), Exh. I at 11. This threshold of 3 inches dbh dates to the tree tallies accepted by the courts in *Association for the Protection of the Adirondacks v. MacDonald* (253 N.Y. 234 [1930]) and *Matter of Balsam Lake Anglers Club v. Dep't of Envtl. Conservation* (199 A.D.2d 852 [3d Dep't 1993]), discussed more fully below. Regardless of its origin, though, DEC's threshold is more conservative than other recognized measurement standards for saleable timber. In timber harvesting generally, Mr. Ripp testified that trees under 3 inches dbh are not "timber" because "[t]hey are not marketable or sal[e]able. There is not enough volume per stem." 1516:10-11. Rather, the smallest tree for pulpwood products is generally 8 inches dbh, while the smallest tree for lumber products is generally 14 to 15 inches. *See* 1514:8-16; 1515:1-7.

New York State regulations addressing contexts outside the Forest Preserve are consistent with this understanding of "timber." Trees measuring less than 5.5 inches dbh are considered saplings, not timber, for the purpose of taxing forest lands. 6 NYCRR § 199.1(k)(1). On private lands in the Adirondack Park, Executive Law § 806(3)(a) limits cutting trees in excess of 6 inches dbh near shorelines and APA regulations define clearcutting to mean cutting of trees over 6 inches dbh under certain circumstances. 9 NYCRR § 570.3(f). As a result, the Department's calculations of timber to be cut for the purposes of the "forever wild" clause protects Forest Preserve trees smaller than the standards adopted by the forestry industry, both during the 1890s and presently, or in contexts outside the Forest Preserve.

Considering both the historical and current usages of "timber" in New York State, the distinction drawn between "trees" and "timber" in article XIV, § 1, this Court concludes that the term, "timber" as used in article XIV, § 1, means a tree of merchantable size.

Development of Article XIV, § 1, the "Forever Wild" clause

David McClure of New York City, Chair of the Convention's Special Committee on State Forest Preservation, introduced the "forever wild" clause to the 1894 Constitutional Convention. Rev. Rec. of Const. Conv. of 1894, Vol. II, at 1201. The Convention adopted it in large part to preserve the Adirondack watershed to meet the needs of New York City's burgeoning metropolitan population. *See id.*, Vol. IV, at 132 ("We will one day need that water stored in the Adirondacks to drink in the city of New York."). Delegates were also deeply concerned with rampant deforestation occurring on the national level and with the fact that commercial logging was still occurring on state land in the Adirondacks despite legislative protections. The delegates acted in response to commercial removal of timber. *Id.* at 139, 140.

Accordingly, Chairman McClure originally proposed language referring only to timber being sold. *Id.*, Vol. II at 1201. The additional "destroyed" language ("nor shall the timber

thereon be . . . destroyed") responded to flooding caused by a number of new dams, which destroyed vast amounts of timber. *Id.*, Vol. IV at 142. Finally – and perhaps most importantly – the delegates perceived the "forever wild" amendment as a means by which to preserve the Adirondack Forest Preserve as a place for the public to recreate and seek solace and refreshment in the outdoors. *Id.* at 131-132. Thus, the framers of article XIV, § 1, had three primary purposes in adopting it: (1) to end commercial logging on state-owned lands in the Adirondacks, (2) to protect the Adirondack watershed for future use, and (3) to ensure that the Adirondacks are preserved for the public use.

Some twenty years later, the Constitutional Convention of 1915 revisited the language of the "forever wild" clause. One of the proposed amendments to the clause was to change "timber thereon" to "trees and timber thereon." Rev. Rec. of the Const. Conv. of 1915, Vol. II at 1448. Although this added language would presumably have broadened the protections afforded by article XIV, some delegates to the convention successfully opposed it. Their comments demonstrate that the commercial destruction of timber, rather than ancillary cuttings, was still of primary concern. *See id.* at 1448 ("It will be impossible, under this provision, for anyone to cut a tent pole, a tent stick, or anything in the Adirondacks"); 1469 ("I don't believe it is a possible thing to control a lumberman if he once takes an axe into a forest"); 1511 ("No cutting should be done which has for its purpose the making of money, the security of revenue, the satisfying of the craving of any industry").

The delegates to the Convention of 1915 also discussed at length the issue of public access to the Adirondack Forest Preserve, since preservation of the Preserve as a public retreat was one of the motivations of the 1894 Convention. Certain delegates were concerned that the wild portions of the Park were not readily accessible to the elderly or those citizens without the

disposable income to travel into the Park's interior. *See id.* at 1484-1486. The fear that the addition of "trees and timber" to the "forever wild" clause would prevent the construction of roads and campsites needed to facilitate greater public access to the Forest Preserve was likely one of the reasons the amendment was opposed. As one of the delegates stated: "It is said that the presence of roads and camps would mar the scenic beauty of the natural forest [...]. Is it not better that a large number of our people should be able to visit and enjoy a forest of even slightly marred scenic beauty, than that only a privileged few should be able to enjoy an unmarred forest?" *Id.* at 1505 (emphasis in original). The delegates voted against the proposed amendment to article XIV and ultimately did not adopt the entire proposed Constitution of 1915. Thus, as Mr. Terrie acknowledged (121:3), the framers of the 1915 Constitutional Convention rejected the interpretation that plaintiff now advocates.

After reviewing the constitutional conventions in which article XIV, § 1, was discussed, this Court concludes that there is insufficient evidence to support plaintiff's contention that the framers intended a complete ban on tree-cutting for any purpose in the Forest Preserve.

B. <u>The Department Constructs Class II Community Connector Trails in a Manner that Facilitates Safe Recreation in the Forest Preserve While Maintaining the Forest Preserve's "Wild Nature."</u>

Class II Trails Are Consistent With Controlling Case Law.

The landmark case and continuing controlling authority on article XIV, § 1, is *Association for the Protection of the Adirondacks v. MacDonald*, 228 A.D. 73 (3d Dep't 1930), *aff'd* 253 N.Y. 234 (1930). *MacDonald* concerned the construction of a bobsled run on Forest Preserve land in preparation for the 1932 Winter Olympics. The land selected for the bobsled run would have been completely cleared of trees. *MacDonald*, R. 10. For the one-and-a-quarter-mile run, an estimated 2,500 trees of 3 inches dbh or greater would have been cut, including first growth trees, allowing for a road with a width of 16 to 20 feet, a return road with a width of 8

feet, a motor-powered pull line, and the blasting of 50 cubic yards of rock ledge. *MacDonald*, R. 10-11. The Third Department held that the "forever wild" clause requires the Forest Preserve to be kept "in its wild nature" and that "sports which require a setting that is man-made are unmistakably inconsistent." *MacDonald*, 228 A.D. at 81-82. Accordingly, the court determined that the State could not cut "2,600 trees which must unquestionably be regarded as of 'timber' size" for such a purpose as it would set a precedent for the construction of "automobile race tracks, toboggan slides, golf courses, baseball diamonds, tennis courts, and airplane landing fields" within the Forest Preserve. *Id.* (emphasis added).

On appeal, the Court of Appeals further clarified the permissibility of timber-cutting under the "forever wild" clause while noting that words of the Constitution "must receive a reasonable interpretation, considering the purpose." *MacDonald*, 253 N.Y. at 238. Relying on the records of the Convention of 1894, the Court held that the "forever wild" clause prohibits "any cutting or any removal of the trees or timber to a substantial extent." *Id.* (emphasis added). However, the Court refused to read the clause as implying an absolute restriction. Instead, it held that article XIV, § 1, permits necessary measures to preserve the Adirondack Park that do "not call for the removal of the timber to any material degree." *Id.* Nor did the Court specifically adopt the Third Department's "wild forest character" and "man-made setting" language.

The questions for this Court, as articulated by the Court of Appeals are: (1) is the proposed use reasonably necessary to provide for public use of the Park, and (2) will it require the cutting of "timber" to a material degree? 253 N.Y. at 238; *see also Matter of Balsam Lake Anglers Club v. Dep't of Environmental Conservation*, 153 Misc. 2d 606 (Sup. Ct., Ulster County 1991), *aff'd* 199 A.D.2d 852 (3d Dep't 1993); *Helms v. Reid*, 90 Misc. 2d 583 (Sup. Ct.,

Hamilton County 1977); *Flacke v. Fine*, 113 Misc. 2d 56 (Sup. Ct., St. Lawrence County 1982). As Supreme Court in *Helms v. Reid* noted, *MacDonald* held that "[r]easonable cutting and removal of timber is permitted, …so that campers and others may receive their full recreational benefit from the area, always remembering that such enjoyment must not harm or injure the wild forest nature of the preserve in any way." 90 Misc.2d 583, 598 (Sup. Ct., Hamilton County 1977). And the *Helms v. Reid* court defined "reasonableness" as "a cutting that is necessary for the purpose, but which does not injure in any way the wild forest character of the very preserve which the Constitution seeks to protect." *Id.* Here, the cutting that has occurred or is approved to occur on Class II Community Connector trails is "reasonable."

DEC's and the APA's policies and practices ensure that Class II trail-siting, construction, and maintenance comply with *MacDonald*'s two-prong test. By individually assessing and marking each tree to be cut, DEC ensures that the minimum amount of timber is cut during this process. *See, e.g.,* Testimony of Tate Connor, 1083:22-1084:11, 1084:9-21; Testimony of Robert Ripp, 1524:14-19; 1527:16-18. Further, the record establishes that the Department preserves even trees that have been approved for cutting when on-the-ground conditions allow. *See, e.g.,* Testimony of Robert Ripp, 1524:2-5. Here, DEC is carefully constructing environmentally sustainable multiple-use trails that allow access to the Adirondack Park, acting pursuant to its statutory authority to maintain and provide access to the Forest Preserve for the people of the State of New York. *See* ECL § 9-0105.

The Class II trail system also easily satisfies the test set forth by the Third Department in *Matter of Balsam Lake Anglers Club v. Dep't of Envtl. Conservation*, 199 A.D.2d 852. In Balsam Lake, the petitioners challenged the Department's plan to relocate several existing trails, and construct a hiking trail, a cross-country ski loop, and five new parking lots. 199 A.D.2d 852.

The trail relocation alone required the cutting of 350 trees, as well as saplings and "vegetative growth that DEC does not classify as trees." 199 A.D.2d at 854. The number of trees to be cut for the new trails and parking lots had not been determined when the petition was filed. *Id.* at 853. In reviewing the Department's plans, Supreme Court rejected an absolutist interpretation of the forever wild clause that would permit no cutting whatsoever and found "no indication of any intent to maintain the forest in an 'absolutely' wild state with no organized human alteration of intervention at all." 153 Misc. 2d at 610.

On appeal, the Third Department agreed that article XIV, § 1, did not prohibit all cutting of timber from the Forest Preserve and concluded that the "proposed uses appear compatible with the use of forest preserve land, and the amount of cutting necessary [was] not constitutionally prohibited." 199 A.D.2d at 853-854. As *amici* argued "[t]rail maintenance and construction in the Forest Preserve has been unquestionably sanctioned by the Legislature as a reasonable use of the Forest Preserve in conformity with the MacDonald decision" and the Legislature "authorizes DEC … to develop and improve these trail systems in order to make them suitable and available for public use." Brf. for amicus curiae, at 9 (emphasis in original).

Consistent with *Balsam Lake*, this Court rejects plaintiff's attempt to preclude public access to the Forest Preserve on sustainable trails and to prevent the Department from implementing the Class II trail system, which will replace old, poorly built trails in the interior remote areas of the Forest Preserve with properly constructed trails located near major transportation routes. The difference between Class I and Class II trails is one foot in width: trail tread for Class II trails is nine feet wide, compared to an eight foot width for Class I trails. Ex. B at 9-10 (2009 Guidance). Class II trails are designed and constructed with the same features and characteristics as foot trails and Class I trails, but are one foot wider. Ex. B at 2. The additional

one-foot width of these multi-use, multi-season Class II trails is designed to facilitate safe public use of the Forest Preserve, including to safely accommodate two-way snowmobile travel. Ex. G at 52-53; Ex. B at 2, 5. The additional one-foot width does not, however, automatically make these Class II trails unconstitutional. Rather, in light of the careful and environmentally sensitive siting, construction, and erosion control measures that DEC employs, the development of Class II trails is a "reasonable" part of DEC's statutory care and custody of the Forest Preserve. *See Helms*, 90 Misc.2d at 598.

Plaintiff's allegations that the trails will be "clear cut" (Complaint ¶¶ 71, 82, 96, 112) are not supported by the evidence. First, the number of trees authorized to be cut on each trail segment, as set forth in the tree tally, is not substantial and is fewer than the 2,600 trees at issue in *MacDonald*. *See* Ct.'s Exh. 3. Second, evidence presented at trial proved that Class II trail construction does not constitute "clearcutting." 1314:12-1315:7; 1322:17-1323:2; 1376:15-23; 1377:1. As understood by the forestry industry, "clearcut" eliminates an entire stand of trees, including necessarily the canopy. *See* 945:4-10; 1295:2-7; 1313:10-17. The evidence amply demonstrates that the Department does not "clearcut" when constructing trails. The ecological effects of clearcuts have also been studied for many years, and their characteristics include wide open spaces with no canopy overhead, and forest edges with abrupt change in vegetation. *See* 1294:7-1295:7; 1314:4-6. Both Dr. Howard's testimony and the aerial photographs conclusively demonstrate that Class II trails do not have these characteristics and that Class II trail canopy is largely closed. *See, e.g.,* 1376:15-23; 1377:1, Exs. CB, CC, CU, DD. Even plaintiff's expert, Dr. Sutherland, conceded that Class II trails retained their closed canopy for much of their length. 514:9-14.

Likewise, there is simply no support for plaintiff's argument that the tree tallies do not reflect the full extent of tree cutting because they exclude saplings and trees under 3 inches dbh. Complaint ¶ 92. As explained above, article XIV, § 1, prohibits sale, removal or destruction of "timber," not seeds, saplings, or even trees. DEC policy and forestry standards do not consider trees under 3 inches dbh to be timber, and the caselaw does not support plaintiff's position. The *MacDonald* case counted only trees 3 inches dbh or greater in determining whether the cutting of trees met the constitutional standard. *See MacDonald* R. on App. 12. The Court considered trees greater than 3 inches dbh to be "timber size" pursuant to the Constitution's "forever wild" clause. 253 N.Y. at 242. Additionally, the Appellate Division in *Balsam Lake* only counted 350 trees, but was fully aware, as was the court below, that as many as 2,000 seedlings, saplings, and "trees" were to be cut in total. 199 A.D.2d at 853-854; *see also* 153 Misc.2d 606, 608 (Supreme Court citing petitioner's contention regarding the cutting of as many as 2,000 "trees," most of which are less than 3 inches dbh). Indeed, New York courts have consistently classified trees with a dbh of 5 inches or less as saplings, not timber or trees. *See, e.g., Calli v. Sorci*, 203 A.D. 327, 330 (3d Dep't 1922) (classifying a tree 4 inches dbh as a sapling); *Save our Parks v. City of New York*, 2006 N.Y. Misc. LEXIS 2365 (Sup. Ct., N.Y. County 2006) (referring to trees of a "3.5. inch caliper" as saplings). The constitutionality of DEC's 3-inch dbh standard is further supported by the legislative history of the 1915 Constitutional Convention and long-standing forestry industry standards for timber.

Further, plaintiff has failed to present consistent, reliable evidence of the number of saplings and seedlings under 3 inches dbh that have been cut. Mr. Signell alternately estimated the number of trees under 3 inches dbh (215:8-18) and used multiple different protocols for measuring and counting (195:9-14; 229:6-19; 231:20-22; 240:23-241:1; 276:2-6; 277:17-21).

Additionally, it is not clear that Mr. Signell and Mr. Bauer were actually counting trees, as opposed to woody brush or other vegetation. *See* Testimony of Dr. Howard, 1369:5-22. Accordingly, this Court will not consider Mr. Signell's counts of cut trees, saplings, and seedlings under 3 inches dbh.

Likewise, there is no merit to plaintiff's argument that Class II trails violate the forever wild clause (Complaint ¶¶ 99, 111) because trail construction includes grading, leveling, and flattening of trails, trail tread widths of nine feet rather than eight feet (Complaint ¶¶ 103-104); rutting on trails during construction (Complaint ¶ 107); bridges (Complaint ¶ 108); and cutting of brush (Complaint ¶ 109). Although current trail construction techniques may seem more invasive during the construction stage than the older trail-building methods used at the Forest Preserve's infancy, DEC foresters and trail crews design and construct trails – including Class II trails – in a manner that will minimize their environmental impact on the surrounding forest and reduce the maintenance required. R. Ex. 8 at 6-13; *see also* Connor Testimony, 1138:10-19, 1039:12-1040:1, 1040:1-8, 1040:17-1041:11, 1041:19-1042:13, 1076:10-1077:22, 1068:3-6, 1069:2-14, 1078:17-1079:6, 1079:7-16. DEC foresters testified at length about the erosion control features they employ on these trails. Further, photographs of Camp Santanoni to Lake Harris trail, for example, demonstrate that these features, even when only partially implemented, are effective at maintaining a sustainable trail tread. *See* Exs. 159, 160; 1531:22, 24; 1532:1-3, 13-15. This Court rejects plaintiff's arguments that these erosion control features violate the "forever wild" clause (Complaint ¶¶ 103, 106, 111). To the contrary, evidence presented at trial demonstrates that the construction techniques that the Department uses to build Class II trails protect the Forest Preserve by minimizing the need for future disruption and maintenance. *See, e.g.,* 1039:12-1040:1, 1041:19-1042:13.

Moreover, constructing Class II trails on the forest perimeter and closing interior trails to snowmobiles positively impacts the Forest Preserve by defragmenting the forest, thus improving overall forest health. 1324:2-11; 1363:3-21. Despite plaintiff's insistence to the contrary, trial evidence adequately established that trails are effectively closed to snowmobiles through unit management plans, or signage, gates, and barriers at the trailhead and discontinuance of grooming and maintenance agreements 2377:10-17; Ex. D at 113-114, 131, 135; 1452:24-1453:22; 1257:19-21; 1476:14-19; Ex. BS. For the purposes of defragmentation analysis, this Court finds that defendants have sufficiently shown that they have closed old, interior trails, as designated in unit management plans. *See* Clague Testimony 1277:10-17; *see also generally* DeSantis Testimony. Dr. Howard analyzed the effects of these closures and convincingly concluded that construction of Class II trails along the periphery of forest blocks, combined with the closure of interior trails, improved the forest fragmentation metrics for all three trails systems that he examined. 1333:10-16, 1331:14-1332:16, 1355:23-1356:4, 1360:21-1361:12; Exs. BY, CA, CG.

Although Mr. Signell asserted that certain Class II trails passed through old growth forests, he admitted that did not conduct any formal academic survey to determine the presence of an old growth forest on any Class II trail. 560:22-23, 563:6-8, 566:4-7, 709:16-18. When questioned about the map he created purportedly showing old growth, Mr. SIgnell also admitted that the lines on that map did "not necessarily delineate the boundary of old growth." *Id.* At most, Mr. Signell observed two trees on Seventh Lake Mountain Trail with growth rings indicating that the trees were over 200 years old, one of which was later identified by DEC forester Jonathan DeSantis as a downed tree – one that had likely fallen across the trail corridor prior to being cut by a DEC trail crew. *See* 572:1-10; 1476:23-1477:16, 1483:5-16, 1484:11-23;

Ex. BT. In any event, defendants have produced evidence that the construction of Class II trails does not unreasonably impact the forests through which they travel, but rather preserves and protects those natural resources.

Finally, even if Class II trails are viewed in terms of acres of Forest Preserve impacted, the acreage of all Class II trails is a small, insignificant fraction of Forest Preserve acreage. The total acreage of Class II trails, constructed in the timeframe of this action, assuming a 9' to 12' width would range from 29.5 acres (at a 9' width) to 39.3 acres (at a 12' width). *See* Ct. Exh. 1 ¶ 14. There are 2,551,699 acres of State Forest Preserve land in the Adirondack Park. *See* Ct. Ex. 1 ¶ 4. Of these lands 1,161, 257 acres are classified as "Wilderness"; 17, 637 are classified as "Canoe"; and 38,984 acres are classified as "Primitive" pursuant to the Adirondack Park State Land Master Plan. *See* Ct. Ex. 1 ¶ 6. Snowmobile trails are prohibited in each of these areas. Furthermore, snowmobile trails are allowed in "Wild Forest" areas, a classification totaling 1,298,209 acres. *See* Ct. Ex. 1 ¶¶ 7, 8. Additionally, defendants have imposed an overall limit for snowmobile trails to 848.88 miles, of which there are currently 780.13. *See* Ex. D at 131. Even if viewed in the context of forest units, Class II trails are a de minimis portion of each unit. For example, the Seventh Lake Mountain Trail is an 11.9-mile ribbon that travels through the 81,947-acre Moose River Plains Wild Forest unit. *See* Ct. Ex. 1 ¶ 14; Ex. D at 6.

DEC's plan to construct multiple-use trails, like its plan to construct trails in *Balsam Lake*, is consistent with the use of Forest Preserve land and does not violate article XIV, §1. As this Court has repeatedly held, the number of trees to be cut for Class II trails does not constitute destruction of the Forest Preserve to a "substantial extent." Further, DEC's trail construction techniques, its maintenance of a closed canopy, its defragmenting of the forest, and the small size of the trails, both in the context of individual forest units as well as the entire Adirondack Forest

Preserve, all indicate that Class II trails do not constitute destruction of the Forest Preserve to a "substantial extent." Accordingly, for all these reasons, the Court rejects plaintiff's allegations that Class II trails destroy the wild forest character of the Forest Preserve and dismisses the remaining cause of action in its entirety.

C. Defendants' Motion for a Directed Verdict in Favor of the Adirondack Park Agency is Granted.

Plaintiff has not established that the Adirondack Park Agency had a role in the Construction of Class II Community Connector trails. At the close of plaintiff's case in chief, and twice during defendants' case – once after the testimony of John Burth and again after the testimony of Robert Ripp – defendants moved for a directed verdict as to the Adirondack Park Agency. This Court reserved. Now, after consideration of the evidence, the Court concludes that plaintiff did not meet its burden as a matter of law as to the Adirondack Park Agency, even "when viewing the evidence in a light most favorable to the nonmoving party[.]" *Dumas v. Adirondack Medical Center* (89 A.D.3d 1184, 1885 [3d Dep't 2011]).

The evidence here establishes that the Department consults with the Agency prior to adopting Unit Management Plans or finalizing work plans for trail construction. *See* 928:12-929:8; Ex. AA. *See* Ct. Exh. 1 ¶ 13. The Agency's role is limited to the responsibilities and authority in the Master Plan, which is, by its own terms, constitutionally neutral. *See* Ex. X at 1; *see also Helms*, 90 Misc.2d at 606. Plaintiff has not established that Agency staff participate in the construction of Class II trails. 1000:11-12; 1439:9-15; 1527:1-3. As fully explained by witnesses from both DEC and the APA, ultimately, DEC foresters determine which trees are cut.

Accordingly, defendants have met the threshold requirements for a directed verdict in CPLR 1101. Plaintiff's complaint against the Adirondack Park Agency is, therefore, dismissed in its entirety.

D. Conclusions as to Witness Testimony

Finally, the Court finds that, because plaintiff's expert, Mr. Signell, participated in planning, mapping and on-the-ground work for the two largest Class II trails, Seventh Lake Mountain and Newcomb to Minerva to North Hudson, he had a conflict of interest. 703:12-21 (Ex. D, pg. i); 704:1-10; 704:18-705:5 (Ex. D, pgs 121, 125) 706:7-11; 707:23-708:8 708:14-24. I have taken his conflict into account when considering his testimony.

The Court further finds that plaintiff did not sufficiently demonstrate that its expert, Mr. Amadon, has adequate experience, training, or skills in trail construction to qualify as an expert in that field. Accordingly, any opinions that he gave during his testimony will be disregarded.

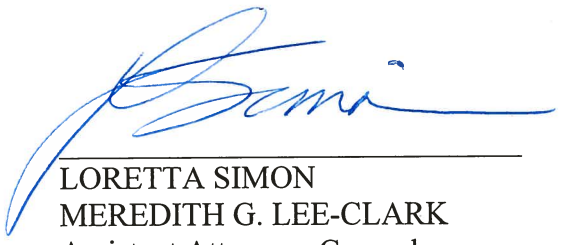
As to defendants' experts Tate Connor, Robert Ripp, and Dr. Timothy Howard, ample evidence demonstrated that all three possess the experience, skills, and knowledge in their fields to be deemed experts. This Court has, therefore, taken their expertise into account when considering their opinion testimony.

E. Conclusion

The evidence at trial conclusively demonstrated that DEC's plan to construct multiple-use trails to provide access and use of Forest Preserve land does not violate article XIV, § 1. The amount of timber to be cut for these Class II trails does not constitute destruction of the Forest Preserve to a "substantial extent" and this Court rejects plaintiff's allegations that they destroy

the Forest Preserve. Accordingly, for all the foregoing reasons, the Court dismisses plaintiff's remaining cause of action in its entirety.

Dated: July 28, 2017
Albany, New York



LORETTA SIMON
MEREDITH G. LEE-CLARK
Assistant Attorneys General
Attorney for Defendant/Respondents
New York State Department of
Environmental Conservation and
Adirondack Park Agency
New York State Department of Law
Environmental Protection Bureau
The Capitol
Albany, New York 12224