STATE OF NEW YORK 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.

State of New York : :ss.: County of Essex :

Tate Connor, being duly sworn, deposes and says:

I am a Forester I in the New York State Department of Environmental
Conservation (DEC or Department) Region 5 in Ray Brook, New York, and have been in this
position since September 21, 2006. I received an Associate's Degree in Applied Science in
Forest Recreation from Paul Smith's College in May 1999 and a Bachelors Degree of Science in
Forestry from the University of Maine in May 2003.

2. In my position, I am responsible for land use and recreational planning and management of Forest Preserve and other State lands under DEC's jurisdiction primarily in Essex and Franklin Counties, as well as portions of Hamilton County. My responsibilities include the administration and coordination of DEC programs on these lands, preparation of unit

AFFIDAVIT OF TATE CONNOR

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

Hon. Gerald W. Connolly

management plans (UMPs) for these lands, and the implementation of the UMPs after they are adopted by the Commissioner of DEC. I work with DEC operations and law enforcement staffs in the maintenance of trails, signage, and other facilities, administration of Volunteer Stewardship Agreements (VSAs) and Adopt-A-Natural Resource agreements (AANRs) with private groups that assist DEC in trail maintenance, and coordinate DEC's activities with other state and local governmental agencies.

3. I have had extensive experience in the layout and construction of trails on forested lands before and after being appointed to my Forester I position, as described in an affidavit previously submitted to this Court. Exhibit (Ex.) A (September 23, 2013 Affidavit of Tate Connor [9/23/13 Connor Aff.] Appendix A).

4. I have read the allegations in the complaint/petition (complaint) claiming that the construction of the Seventh Lake Mountain Snowmobile Community Connector II Trail (Seventh Lake Mountain Trail) is inconsistent with the wild forest nature of the Forest Preserve. I submit this affidavit in opposition to those allegations and in support of the State's motion for summary judgment.¹

5. Among others, I am also familiar with the following documents relating to this matter:

a. Adirondack Park State Land Master Plan (Master Plan), as it relates to trail construction;

b. 2006 Snowmobile Plan for the Adirondacks (2006 Snowmobile Plan);

c. DEC guidance document entitled "Snowmobile Trail Siting, Construction and Maintenance on Forest Preserve lands in the Adirondack Park," adopted in 2009 (2009 Guidance);

¹ Previously, I also submitted a sworn affidavit dated July 14, 2013 opposing Plaintiff's motion for preliminary injunction to prevent DEC from completing the Seventh Lake Mountain Trail and other community connector trails. My affidavit dated September 23, 2013 was part of the Department's responsive papers to the complaint, attesting that the construction of the Seventh Lake Mountain Trail does not impair the wild forest character of the Forest Preserve.

- d. Another guidance document entitled "Adirondack Park Agency State Land Master Plan Interpretation – Standard Snowmobile Trail Bridge Design and Use of Natural Materials for Design and Construction," adopted in June 2006 (2006 Snowmobile Bridge Guidance);
- e. 2009 OPRHP document entitled "Guidelines for Snowmobile Trail Groomer Operator Training"; and
- f. DEC's tree-cutting policy, LF 91-2.

The Seventh Lake Mountain Trail

6. The Seventh Lake Mountain Trail is a Class II trail on Forest Preserve land located in the Moose River Plains Wild Forest and consists of three segments, all of which were constructed between September 2012 and December 2013. The trail segments consist of segment 1 (also known as the Limekiln Lake-Cedar River Road - Seventh Lake Trail); segment 2 (Seventh Lake to Eighth Lake Trail) and segment 3 (Eighth Lake to Sagamore Road trail).

7. The Seventh Lake Mountain trail was approved in the 2011 Moose River Plains Wild Forest Unit Management Plan (UMP). Record Exhibit (R. Ex.) 5 at 116, 119 (alt.11), 125 (alt 8) and R. Ex 37 (map of Seventh Lake Mountain trail). I am familiar with this trail, having supervised its construction. The Seventh Lake Mountain Trail is a multi-use trail for hiking and mountain biking in the spring, summer, and fall, and cross-country skiing, snowshoeing, and snowmobiling during the winter. R. Ex. 39 (2013 trail photos) and Ex. B herein (2016 trail photos).

8. The basic principles involved in the design and construction of trails are described in my September 23, 2013 Affidavit. Ex. A ¶¶ 5-13.

9. A detailed description of the construction of the Seventh Lake Mountain Trail is set forth in my September 23, 2013 Affidavit. Ex. A ¶ 22-29.

10. The Seventh Lake Mountain Trail was constructed to a trail tread width of nine feet. 1,924 live trees and 161 dead trees were approved to be cut over the 11.9 miles of trail.

11. Tree-cutting was the first task in the work plan for each segment of the trail. Much of the Seventh Lake Mountain Trail was located on old woods roads that had become overgrown with trees. Tree-cutting and other ground work on the trail started in early September 2012. In each segment, as the work crew began cutting vegetation from the trail corridor, I walked ahead to restudy the proposed trail route from different perspectives and make adjustments to minimize tree-cutting and avoid cutting the larger trees. Trees previously marked for cutting were spared and other (but fewer) trees were added.² Consequently, portions of the trail wind and turn around the larger trees, as in Segment 2. I used flagging material (colored ribbon tied to brush) to inform the trail crew of changes in the course of the trail and aerosol paint sprayed on the ground to steer the crew away from previously marked trees that I decided should not be cut. In work plan modification reports, I explained changes in locations of the trail and the reasons for avoiding the cutting of a tree. In this way, we maintained the wild forest character of the area, including forest canopy over the trail. R. Ex. 36 (Work plans and Modification reports).

12. Tree cutting for the trail was completed by December 2012. Though 1,924 live trees and 161 dead trees over a distance of 11.9 miles were authorized for cutting, the final number of trees actually cut was even less than 1,924 trees because trees marked for cutting pursuant to the work plan modifications were sometimes spared. However, we did not keep a tally of marked trees that were not actually cut. This amount of cutting is an average of one live tree per 32.7 feet, or an average of 162 live trees per mile (62,832 feet divided by 1,924).

13. On Segment 1 of the Seventh Lake Mountain Trail, a portion of the existing trail sloped downward, following a stream, to a wet area at the bottom of the slope, and then

² In some instances, trees were cut to avoid the need to undertake additional bench cuts. R. Ex. 36 (Work Plan for Seg 1, mod 3, p. 8 at mile 2.05).

proceeded back up the slope. Over time, high water flowed down the trail, eroding finer earthen material and leaving only rocks. Midway down the trail, the stream jumped its bank and flowed down the bottom half of the trail, creating an eroded, rocky gully for approximately 100 feet before rejoining the existing streambed. In order to avoid the stream and gully, we relocated the trail along a horizontal bench cut approximately 60 feet in length, from the point where the existing trail began to slope downward to the point where the existing trail proceeded upslope out of the wet area at the bottom of the slope. R. Ex. 36 (Work Plan for Seg 1, Mod 6 at 14). The old eroded section of the trail is now a drainage ditch, should the water ever overflow the original stream again. A detailed description of bench cutting on the trail can be found in my September 23, 2013 Affidavit. Ex. A ¶¶ 32-37.

14. There are 29 bridges on the Seventh Lake Mountain Trail. The original work plan called for 26 bridges, and three were later added through work plan amendments. All of the bridges are designed to follow the Adirondack Park Agency/DEC 2006 Snowmobile Trail Bridge design manual that was adopted to insure that bridge designs conform to the Master Plan's "natural" materials guideline. R. Ex. 12 (Bridge Guidance). The work plans for each segment of the Seventh Lake Mountain Trail directed that all bridges on the trail be built to a width of 12 feet and lengths between 10 feet and 40, as dictated by site-specific constraints and requirements. In the work plans for each segment, we identified which bridges were critical and had to be constructed for the first season of snowmobile use of the trail. These bridges crossed larger streams with higher banks, irregular rocky bottoms, or high rates of water flow. R. Ex. 36 (Work Plan for Seg 1, at 4-6; Work Plan for Seg. 2, at 4-6; Work Plan for Seg 3, at 10-17); *see also* Ex. A, (¶ 38-45, description of bridge work).

15. During the construction of the Seventh Lake Mountain Trail, we found it necessary to temporarily "harden" the trail route to make durable surfaces that could withstand sustained heavy loads of bridge materials and avoid creating ruts in muddy areas along the trail. In many of the muddy areas, we placed logs perpendicular to the direction of travel, a process known as "corduroy," to avoid the mud and to prevent ruts in the trail tread. In the process of finishing the trail, we removed the corduroy in areas where the wet muddy areas do not cover the entire width of the trail treat; in other muddy areas, we installed cross-drains and stepping stones for hikers and mountain bikers. In natural depressions along the trail, we temporarily placed pieces of logs or branches across the depressions over which wheeled vehicles could travel. This process prevented the creation of more muddy areas and reduced the need to reduce high spots along the trail route. The logs and branches were removed once we finished the trail. As we encountered rocks during the construction, we either sought to avoid them or, if that was not possible, to move or bury them, as set forth in the work plan modifications. R. Ex. 36 (Work Plan for Seg 1, Mod 1, at 2-4, 7; Seg 1, Mod 3, at 4; Seg 3, at 6-7).

16. A bedrock ledge at the western end of Segment 2 of the Seventh Lake Mountain Trail posed a unique problem in the construction of the segment. The ledge was located about 20 feet from the approach to a proposed bridge site over a stream. Its surface was four to five feet long and about two feet wide, and jutted up into the proposed trail route, presenting a significant hazard to all users of the trail. We initially intended to armor the ledge to provide a smooth transition from the ledge to the bridge but there was not a sufficient amount of material on site to do so. To avoid having to haul in a large amount of stone to armor the ledge or construct a wooden deck around it, which would have detracted from the character of the trail and would require continual maintenance, we determined, through a work plan modification, to reduce the

height of the ledge by approximately one foot and to reshape its pointed surface. This work was done by using a portable drill to fracture the ledge and using wedges and other hand tools to chip off layers from it, a process referred to as "feathering." This process avoided the creation of an unsightly mound across the trail tread, protects the natural character of the area, and requires no maintenance. R. Ex. 36 (Work Plan Seg 2, mod 3, at 3; November 2, 2012 DEC letter to Agency); *see also* Ex. B (NYS0006661 photo of "feathered" rock in 2016).

17. Construction of the Seventh Lake Mountain Trail finished on December 15, 2013.

18. I visited portions of Segments 1 and 2 of the Seventh Lake Mountain Trail on July 14, 2016, and took photographs of how various trail features appeared on that date, over 2 ½ years since construction. These photographs show that the trail construction features are consistent with the wild forest character of the adjoining lands and areas where the vegetation is growing are blended in with the forested area. Ex. B (2016 Photos). Additionally, I did not observe any evidence of extensive erosion of the trail tread.

19. The allegations in the complaint are misleading because they give an incomplete description of the trail, at the time when the trail was an unfinished construction site. Ex. A (¶¶ 50-55). As demonstrated in the photos taken in 2016, the trail has re-vegetated, bench cuts blend with the surrounding forest and the trail tread is stable. The forest canopy was preserved through careful planning and construction and the trail is consistent with the surrounding wild forest. Ex. B (2016 photos).

20. One of my current responsibilities is maintenance of trails in the area of the Adirondack Park known as the "High Peaks." Many of the trail construction techniques used to develop the Seventh Lake Mountain trail are techniques used to stabilize and maintain foot trails in the High Peaks, an area that experiences extensive public use. As stated in my previous

affidavit, trails intended for public use are constructed in the same manner, whether they are snowmobile trails or hiking trails to a high peak. Ex. A ¶ 6-13. While each trail presents unique terrain and obstacles, the construction features used are the same, and the goal is to prevent erosion and maintain a sustainable, safe trail that protects the forest preserve and provides an enjoyable experience for users.

Accordingly, trail design and construction features of the Seventh Lake Mountain 21. Trail facilitate safe recreational access to the Forest Preserve, provide erosion control, protect wetlands and streams and preserve the forest canopy, while maintaining the essential wild forest character of the Forest Preserve.

Sworn to before me this 7 day of August, 2016

Cive C

Chen Maria is part of the state

A. 3

Kathy R. Scriver Notary Public, State of New York No. 01Sc6146364 Qualified in Franklin County Commission Expires May 15, 20

AFFIDAVIT OF TATE CONNOR EXHIBIT LIST

Exhibit A: September 23, 2013 Affidavit of Tate Connor

Exhibit B: Seventh Lake Mountain trail photos taken by Tate Connor on July 14, 2016

EXHIBIT A

STATE OF NEW YORK 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 the New York State Constitution and CPLR Article 78

-against-

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

Defendants-Respondents.

State of New York : :ss.: County of Essex :

Tate M. Connor, being duly sworn, deposes and says:

 I have been employed as a Forester I in the New York State Department of Environmental Conservation (DEC) Region 5 Warrensburg Sub-office located in Warrensburg, New York since September 21, 2006. I received an Associate's Degree in Applied Science in Forest Recreation from Paul Smith's College in May 1999 and a Bachelors Degree of Science in Forestry from the University of Maine in May 2003.

2. In my position, I am responsible for land use and recreational planning and management of Forest Preserve and other State lands under DEC's jurisdiction primarily in Warren, Essex, and Saratoga Counties, and portions of Hamilton County. This responsibility

ANSWSERING AFFIDAVIT of TATE CONNOR

Index No. 2137-13 RJI No. 01-13-ST-4541 Hon. George B. Ceresia, Jr. includes the administration and coordination of DEC programs on these lands, preparation of "unit management plans" ("UMPs") for these lands and the implementation of the UMPs after they are adopted by the Commissioner of Environmental Conservation. I work with DEC operations and law enforcement staffs in the maintenance of trails, signage, and other facilities, administration of Adopt-A-Natural Resource agreements (AANRs) with private groups that assist DEC in trail maintenance, and in coordinating DEC's activities with other state and local governmental agencies. I have had extensive experience in the layout and construction of trails on forested lands before and after being appointed to my Forester I position. I describe my past experience in constructing trails in Appendix A (attached).

3. I have read the allegations in the complaint/petition (complaint) claiming that the construction of the Seventh Lake Mountain Snowmobile Community Connector Trail (Seventh Lake Mountain Trail) is inconsistent with the wild forest nature of the Forest Preserve. I submit this affidavit in opposition to those allegations.¹ I am familiar with this trail, having supervised its construction. As explained below, construction of the trail is not yet complete, though it is presently open to snowmobile use when there is sufficient snow coverage. When completed, the trail will be a multi-use trail for hiking and mountain-biking in the spring, summer and fall, and cross-country skiing and snowshoeing as well as snowmobiling during the winter.

- 4. Among others, I am also familiar with the following documents relating to this matter:
 - a.
- Adirondack Park State Land Master Plan (Master Plan) as it relates to trail construction;

¹ Previously, 1 submitted an affidavit sworn to July 14, 2013 opposing Protect's motion for a preliminary injunction to prevent DEC from completing the Seventh Lake Mountain Trail and other community connector trails (July 14, 2013 affidavit).

- b. 2006 Snowmobile Plan for the Adirondacks (2006 Snowmobile Plan);
- c. DEC guidance document entitled "Snowmobile Trail Siting, Construction and Maintenance on Forest Preserve Lands in the Adirondack Park adopted in 2009 (2009 Guidance);
- d. another guidance document entitled "Adirondack Park Agency State Land Master Plan Interpretation – Standard Snowmobile Trail Bridge Design and Use of Natural Materials for Design and Construction" adopted in June 2006 (2006 Snowmobile Bridge Guidance);
- e. 2009 OPRHP document entitled "Guidelines for Snowmobile Trail Groomer Operator Training;" and
- f. DEC's tree cutting policy, LF 91-2.

General Principles of Trail Construction

5. Before I describe the construction of the Seventh Lake Mountain Trail, it is necessary to explain the basic principles that are involved in the design and construction of any public trail over forested lands.

6. Trails vary in shape, dimensions, and purpose. All trails intended for public use are constructed in the same manner, with similar basic components that have evolved over the past 100 years. Years of experience have exposed the problems that result from improperly laid out trails. As managers have gained a better understanding of user impacts and more expertise in building trails, they have become better able to develop more suitable trails that provide a safe and enjoyable experience for users while also minimizing the potential degradation of the natural environment of their setting.

7. Whether the trail to be constructed is a hiking trail to a mountain peak, a corsscounty ski or snowshoe trail within a circuit of connected trails, or a long distance community connector trail suitable for snowmobiling or mountain biking, the considerations remain the

same. Each trail corridor requires a well-defined tread, management of vegetation along the trail, proper water drainage, and bridges or walkways over water courses, wetlands, and similar types of obstacles, all in a manner that blends the trail into the adjacent natural environment and makes the trail as maintenance-free as possible. However, the terrain of a particular trail my present unique obstacles that require different solutions to implement in order to complete the trail and allow users to have an experience that they could not obtain in the absence of the trail. Particularly, a snowmobile trail that reduces straight sections and incorporates twists and turns is safer because the twists and turns require snowmobile operators to reduce their speeds.

8. "Trail tread" refers to the actual portion of the trail corridor upon which travel occurs. The width of the tread of a particular trail depends on the intended use or uses of the trail, terrain over which the trail extends, the soils in the trail corridor, and regulatory provisions that may limit the width of the trail corridor. A properly developed trail tread will withstand the impacts of all intended uses and provide a safe surface while blending in with the surrounding forest floor. Generally, hiking trails are built with little or no material brought in to cover the surface of the trails but may require additional protective measures. Other trails involve the same practice, depending on the level of and type of use.

9. Management of vegetation along a trail corridor is necessary to define the corridor and prevent users from creating braids of side trails or wandering away and becoming lost. The level of management depends on the type and level of use of the trail. Typically, vegetation management involves the removal of downed trees and brush² from along the trail corridor in

² DEC considers "tree" to be woody vegetation of three inches or more at breast height (dbh), the diameter of tree measured 4 ½ feet from the ground surface. DEC considers woody vegetation within a trail corridor less than three inches dbh as "brush."

order to delineate the corridor boundaries and the cutting of brush within the corridor and tree branches intruding over the corridor to make the corridor boundaries more visible and allow safe passage over the trail tread. In a naturally occurring forest where trees grow randomly, the amount of cutting can be reduced by weaving the trail around these trees. However, limited cutting will remain necessary to remove hazardous trees, trees that would otherwise block safe usage of the trail corridor, or to meet the required width specifications necessary for the projected use of the trail.

10. Control of water drainage is the single most important aspect of constructing and maintaining sustainable trails. Standing water or wet soils in the trail corridor turns the tread into an impassable quagmire requiring extensive repair. Surface water runoff traveling downhill creates gullies within the trail corridor and sedimentation in areas off the trail. Unless controlled, runoff will continually erode the trail tread away. Water bars of earth, wood, and rock, cross drains (channels cut into the trail tread), and broad-based dips are the more engineered methods of diverting water off or across a trail.³ On a sloped trail corridor, these devices should be sited to prevent flowing water from gaining momentum that exacerbates erosion of the trail tread.

³ A water bar is a sloped depression dug into the trail tread, backed by a mound of earth, logs, or rocks. The depression intercepts water, and the backing material diverts the intercepted water off the downhill side of the trail.

A cross-drain is basically a ditch dug from side to side into the trail tread and lined with stone or logs to concentrate standing water or a consistent flow of water into one location where the water can flow over the downhill side of the trail without saturating the trail tread.

A broad-based dip is a more elaborate form of waterbar that requires more work to install but is easier to maintain. It is a very long and shallow depression constructed in the trail tread, uphill of a long and low berm of dirt. The dip is sloped outward from the tread in order to allow water to flow off the tread. Dips are used where possible in place of deep log or stone waterbars and cross-drains, which can obstruct travel by mountain bikes, and which mountain bikers try to avoid or bypass.

Generally, water bars and cross drains are most effective when constructed at a 45 degree angle to the trail tread, although site conditions may require a different angle. Broad based dips provide the best transition for mountain bikes, skis, and snowmobiles as they allow uninterrupted travel on the trail tread.

11. Bridges and walkways become necessary to keep users out of stream beds or areas of excessive wetness. The design of a bridge or walkway depends on the intended use of the trail, the length of the span to be crossed, and the weight of the load that the bridge or walkway must support. Bridge design can vary from a two-log bridge to an engineered suspension bridge. However, regulations, guidance, and safety policies dictate the design and construction of a particular bridge.

12. In addition, problems encountered while constructing trails that are safe and need only minimal maintenance can require steps that might include bench cuts,⁴ rock reduction or removal, removal of stumps and the hardening of trail tread as needed. The extent of these actions is determined by the site characteristics of the proposed trail, as limited by the Master Plan and the 2009 Snowmobile Trail Guidance.

13. For example, the Master Plan states that snowmobile trails shall have the essential character of a foot trail, and the Master Plan favors the use of already existing routes to reduce the amount of tree cutting and trail manipulation. Historically, in the Adirondacks, most routes were created simply as the shortest distance between two points, without regard to the impacts arising from their location and use. The routes were used primarily to move logs during the

⁴ Bench cutting is the process of constructing a trail across the side slope of a hill. Cutting into the slope and removal of the cut material creates a stable "bench" on which a trail can be placed. Proper bench cutting prevents the tread of the trail from sloughing off down the hill.

winter and were never intended for year-round recreational use. These routes therefore followed or crossed drainage ways, or proceeded directly up a fall line.⁵ Surface water flowing down such routes eroded the routes and transformed them into muck and new watercourses, which now require more bridging and other repairs than would otherwise be necessary. Under such circumstances, it is necessary to angle routes over less steep contours, with more management of water so that the trail surface is more suitable for recreational use throughout the year.

The 2009 Snowmobile Trail Guidance⁶

14. I am aware that in October 2006, shortly after I became a DEC Forester I, DEC and the New York State Office of Parks, Recreation and Historic Preservation adopted the *Snowmobile Plan for the Adirondack Park/Final Generic Environmental Impact Statement (2006* Snowmobile Plan; Exhibit No. 3). This plan called for the development and maintenance of a snowmobile trail system within the Adirondack Park. As part of this system, the Snowmobile Plan called for the construction of a number of "community connector" trails that provide snowmobile corridors between populated areas in the winter and that could be used for hiking and mountain bike riding during the rest of the year. The Plan also called for the closing of several snowmobile trails that are located in the interior portions of Forest Preserve units. The Affidavit of Karyn B. Richards discusses more fully the 2006 Snowmobile Plan.

15. In May 2009, I participated with other DEC staff and staff from the Adirondack Park Agency (the Agency) to develop concepts to provide guidance for the siting, construction,

⁵ The "fall line" is the direction down a hill with the most slope and provides the most natural course for water to flow downhill.

^b The full name of the Guidance is *Management Guidance*: Snowmobile Trail Siting. Construction and Maintenance on Forest Preserve Lands in the Adirondack Park.

and maintenance of snowmobile trails on the Forest Preserve lands in the Adirondacks. The staffs drafted the basic concepts, which incorporated in large part the provisions of the 2006 Snowmobile Plan. In November 2009, the Agency determined these concepts, organized as the 2009 Snowmobile Trail Guidance (2009 Guidance), conformed to the Master Plan. In November 2009, the Commissioner of Environmental Conservation adopted the Guidance, which was incorporated as part of a memorandum of understanding (MOU) between DEC and the Agency and released to the staff of both agencies to implement. *See* Exhibit No. 2 (MOU); Exhibit No. 3 (2009 Guidance).

16. The 2009 Guidance defines a system for classifying existing and future trails and directs what amount of work is allowed on each type of trail. Because the Master Plan requires that snowmobile trails have "essentially the same character as a foot trail," the methods for laying out snowmobile trails that are set forth in the Guidance are basically the same as those that are used in laying out and building a foot trail. The Guidance addresses tree cutting, terrain manipulation and rock removal to provide a trail that best blends with the landscape, assures user safety, and minimizes user impacts to the environment. In addition, the Guidance directs the types of small landscaping equipment that may be used in the construction and maintenance of a snowmobile trail.

17. The 2009 Guidance requires that community connector trails are to be located as much as possible along the peripheries of Forest Preserve units or within 500 feet of a travel corridor, as authorized by "unit management plans" (UMPs). The trails would incorporate as much as possible existing roads and trails designated as open to snowmobile use. Where new trail segments must be created, the trail segments would be sited to avoid wetlands, steep slopes, and habitats of endangered species, and in a manner to avoid tree cutting to the greatest extent

possible. Trails would follow the existing contours of natural forest floor and would not be graded flat, except that rocks that are identified in a work plan as presenting demonstrable safety hazards to snowmobile riders may be removed. The tread of trails would be maintained up to a maximum cleared width of 9 feet (one foot wider than a ski or horse trail) except on curves and steep running slopes, which may be cleared up to a maximum width of 12 feet. The maximum width of groomers to be used on the community connector trails would be less than the allowable minimum width of the trail tread.

Work Plan for the Construction of the Seventh Lake Mountain Trail

18. I am aware that, in January 2011, the DEC Commissioner adopted the Moose River Plains Wild Forest UMP after the Agency determined that the UMP conformed to the Master Plan. Among the management projects proposed in the UMP was the construction of the Seventh Lake Mountain Community Connector Snowmobile Trail connecting the Moose River Plains Road in the Town of Inlet with Raquette Lake in the Town of Long Lake (Seventh Lake Mountain Trail). The trail was so named because it proceeds around the south side of Seventh Lake Mountain, south of NYS Route 28, using as a much as possible existing public roads, trails, and old wood roads. In late August 2012, 1 was asked to oversee construction of this trail.

19. The first step in constructing the Seventh Lake Mountain Trail was the development of a work plan that implemented the Snowmobile Trail Guidance. The development of the work plan required DEC and Agency staffs to work together to identify routes to be followed, bench cuts to be made, trees and other vegetation to be cut, bridges to be built, and areas where the terrain requires manipulation. The process was flexible to allow

adjustments to a work plan through modification reports to address unforeseen problems that were encountered while the trail was being constructed.

20. The work plan for the Seventh Lake Mountain Trail and plan modifications provide a basis for each act involved in the construction of the trail. The plan included a tree count by species and size, and also the dimensions of the bridges that were needed along this trail's route. The work plan also included general discussions about the need for specific terrain modifications to be conducted both on the old routes and the portions of new trail that were to be built or rerouted off of old trails. After I drafted the work plan, I forwarded it to Walter Linck at the Agency for his review and then to Kristofer Alberga, the DEC Region 5 Regional Forester who supervised my construction of the trail. *See* Exhibit No. 36 (Seventh Lake Mountain Trail work plan and work plan modifications).

21. The Seventh Lake Mountain Trail was constructed in three segments. Segment 1 proceeded eastward from the Moose River Plains Road for approximately 5.1 miles to a point about 1000 feet southeast of the Seventh Lake boat launch, where it met a spur trail that proceeds eastward from NYS Route 28 over an existing snowmobile and old carriage trail. An area just east of the junction of Segment 1 and the spur trail served as a staging area for the winter delivery of bridge materials for the construction of bridges on Segments 1 and 2, discussed in ¶ 42 below. Segment 2 began east of the junction and staging area and proceeded northeastwardly for 1.6 miles to a point on the Old Uncas Road, about 0.2 miles south where the road meets Route 28, across from the Eighth Lake campground. Segment 3 proceeded eastward from the Old Uncas Road about 5.2 miles to a point on the Sagamore Road about a mile south of NYS Route 28. *See* Exhibit No. 37 (map of the Seventh Lake Mountain Trail showing the three segments).

Construction of the Seventh Lake Mountain Trail

22. Previously, in the summer of 2012, Keith Rivers of DEC and Mr. Linck studied various potential routes for Segment 1 of the snowmobile trail, from the Moose River Plains Road behind Seventh Lake Mountain to the Seventh Lake boat launch. They conducted a tree tally and provided me with that information as I was writing the work plan for the trail. They chose a route that used as many existing old woods routes as possible to reduce impacts on the wild forest environment, as required by the Master Plan. Because it was necessary to use the existing Seventh Lake Inlet Bridge to cross the Inlet, they found that the existing snowmobile trail by the Seventh Lake Boat Launch was the best possible route to follow.

23. Construction of Segment 1 of the Seventh Lake Mountain Trail began at the Seventh Lake Boat Launch on the eastern end of the segment and proceeded westward towards the Moose River Plains Road. About a half-mile from the boat launch, the route of Segment 1 is an existing carriage trail, which was extensively eroded in places from a lack of maintenance. Except for two sections that were extensively eroded, we maintained the existing trail's already cleared width. In addition, about .75 miles from the boat launch, we constructed "bridge 9" with material that we hauled to the site.⁷ *See* Exhibit No. 36 (Work Plan for Segment 1, modification 1 [Seg 1, mod 1], pages 1-2 of 8).

24. From the point where Segment 1 leaves the existing carriage trail, the route follows an old roadbed on an already-existing broad bench that had been cut from a slope. We found several areas of ponded water along the inside of this roadbed adjacent to the cut, which

⁷ The hauling of material for the construction of this bridge and other bridges on the Seventh Lake Mountain trail is discussed separately in ¶ 43 below.

could not be drained away. To avoid the ponded water, we shifted the trail to the drier outer shoulder of the roadbed. This shift required vegetative cutting along the outer shoulder, including some trees. Although this shifting of the trail to the outer shoulder appears to make the trail wider than nine feet, the actual trail tread maintained the nine-foot width called for in the 2009 Snowmobile Trail Guidance. Exhibit No. 36 (Work Plan for Seg 1, mod 1, page 2 of 8).

25. When the westward construction of Segment 1 reached the segment's midpoint, we began construction of the rest of the segment by proceeding eastward from the Moose River Plains Road. From the Moose River Plains Road, the segment proceeds along the bed of an old logging road for about a third of a mile up at a moderately steep slope. The old roadbed follows the fall line of the slope in some locations and in others it follows an angular upslope route. Segment 1 then leaves the old roadbed and proceeds over unbroken terrain slowly up Seventh Lake Mountain. Toward the top of the mountain, the segment joins an old logging route and goes up and over the side of the mountain and then round and down its southern slope. At the bottom of the slope, the segment again crosses unbroken terrain as it proceeds to its midpoint where it joins the portion discussed in ¶¶ 23 and 24 above.

26. The old roadbed section of Segment 1 referred to in ¶ 25 was originally used mostly during the winter months when the ground was frozen and sleds could be used for moving logs and other material. Because the roadbed followed existing drainages and went directly up the slope's fall line, portions of the roadbed in the lower elevations became very wet after the ground thawed and were therefore unusable as a hiking and biking trail.⁸ In order to construct a durable multi-use trail, we installed several large water bars in some locations on the

⁸ For this reason, a trail should never follow the fall line of a hill, as that line will enable water to travel down and erode the trail, which will then need constant repair.

old roadbed to divert water off the roadbed and, in other locations, we moved the route of Segment 1 off the roadbed by making horizontal bench cuts along the slope until the cuts rejoined the roadbed.⁹ *See* Exhibit No. 36 (Work Plan for Seg 1, mod 1, pages 3-4 of 8). The water bars required careful sizing, siting, and construction in order to shed as much water as possible without overtopping during large rain events and to avoid damage by trail users.¹⁰

27. As stated in ¶ 21 above, Segment 2 began east of the junction of Segment 1 and the spur trail and proceeded northeastwardly to the Old Uncas Road. Before we started construction, Mr. Linck and I reviewed a previous layout of the segment and found that portions of the layout were inadequate and did not incorporate the concepts of the Snowmobile Trail Guidance. In many places, the trail was laid out along the bottom of drainage ways. In our work plan for Segment 2, Mr. Linck and I relocated the trail above drainage ways to avoid the wet areas as much as possible in order to construct a sustainable trail surface. We also reviewed the trees that were previously marked for cutting. This section of Segment 2 was in an area that had a higher percentage of larger, mature trees of about 25 inches or more dbh. We located a route that minimized tree cutting and avoided cutting all of the larger trees. Consequently, this portion of the trail winds and turns around the larger trees. Exhibit No. 36 (Work Plan for Seg 2, mod 1, page 5 of 9).

⁹ Bench cutting is described in ¶¶ 32-37 below.

¹⁰ Large water bars were necessary for long term effectiveness in controlling drainage on the trail. Smaller bars would have a higher likelihood of failing. However, large water bars make snowmobiling over them difficult. Grooming that packs snow below and above the bars is necessary to make the trail safe and useable for snowmobiling. During warmer times of the year, hikers should be able to negotiate the large water bars but bikers may encounter problems passing over them, particularly while proceeding downhill. Depending on reports of these problems, modification of the bars to make them more negotiable for mountain bikes is possible while still providing the same control of water drainage.

28. After we completed the plan for Segment 2, the crew began clearing the trail of vegetation. After the vegetation was cleared, excavation work for bench cuts and other trail manipulation began. In addition, as trail construction proceeded, we constructed 8 bridges, one at a time so that bridge material could be transported over newly-constructed bridges to the next bridge site without causing adverse impacts to any stream bed or banks.

29. As stated in ¶ 21 above, Segment 3 begins at the Old Uncas Road south of the Eighth Lake Campground. The segment proceeds in a northeasterly direction on an access road to water tanks for the campground, then climbs up and follows a small ridge before descending to a point near Route 28 east of the campground. From that point, the segment crosses relatively level terrain to the outlet of the Raquette Lake Reservoir. The segment crosses the outlet over a new bridge which we constructed below the spillway of the Reservoir dam (discussed in ¶ 45 below) and ends at a point on the Sagamore Road, about a mile south of Route 28. Because the terrain for this segment was flatter than the terrain of Segments 1 and 2 and trees were spaced more widely, construction of Segment 3 involved less tree cutting, rock removal, construction of drainage devices, and other terrain manipulation.

Tree Cutting for the Seventh Lake Mountain Trail

30. Tree cutting was the first task in the work plan for each segment of the trail. As explained above, much of the Seventh Lake Mountain Trail was located on old woods roads that had become overgrown with trees. Tree cutting and other ground work on the trail started in early September 2012. In each segment, as the work crew began cutting vegetation from the trail corridor, I walked ahead to restudy the proposed trail route from different perspectives and make adjustments to minimize tree cutting and avoid cutting all the larger trees. Trees previously

marked for cutting were spared and other (but fewer) trees were added.¹¹ Consequently, portions of the trail wind and turn around the larger trees, as in Segment 2, discussed above. I used flagging material (colored ribbon tied to brush) to inform the trail crew of changes in the course of the trail and aerosol paint sprayed on the ground to steer the crew away from previously marked trees that I decided should not be cut. In work plan modification reports, I explained changes in locations of the trail and the reasons for avoiding the cutting of a tree. In this way, we maintained the wild forest character of the area, including forest canopy over the trail.

31. Tree cutting for the trail was completed by December 2012. Although the work plan for the trail initially estimated that 2,220 trees of 3 inches or more dbh would be cut over a distance of 12.74 miles, modifications to the work plan reduced the estimated tally to only 1,924 live trees and 161 dead trees, over a distance of 11.9 miles. This is an average of one live tree per 32.7 feet, or an average of 162 live trees per mile (62,832 feet divided by 1,924). *See* Exhibit No. 38 (tally of trees cut). The final number of trees actually cut was even less than the reduced tally of 1,924 trees because trees marked for cutting pursuant to the work plan modifications were sometimes spared. However, we did not keep a tally of marked trees that were not actually cut.

Bench Cutting for the Seventh Lake Mountain Trail

32. Bench cuts allow hikers, mountain bikers, cross-country skiers, and snowmobiles to safely cross extensive side slopes. Bench cuts allow snowmobile trails to be groomed with

¹¹ In some instances, trees were cut to avoid the need to undertake additional bench cuts. *See*, *e.g.*, Exhibit No. 36 (Work Plan for Seg 1, mod 3, page 8(of 13), at mile "2.05").

small tracked vehicles or snowmobiles pulling a drag. Bench cuts are also used to relocate a trail route from eroded sections of an existing trail.

33. On Segment 1 of the Seventh Lake Mountain Trail, a portion of an existing trail sloped downward, following a stream, to a wet area at the bottom of the slope and then proceeded back up the slope. Over time, high water flowed down the trail, eroding finer earthen material and leaving only rocks. Midway down the trail, the stream jumped its banks and flowed down the bottom half of the trail, creating an eroded, rocky gully for approximately 100 feet before rejoining the existing streambed. In order to avoid the stream and gully, we relocated the trail along a horizontal bench cut approximately 60 feet in length, from the point where the existing trail began to slope downward to the point where the existing trail proceeded upslope out of the wet area at the bottom of the slope. *See* Exhibit No. 36 (Work Plan for Seg 1, Mod 6, page 14 of 19). The old eroded section of the trail is now a drainage ditch, should the water ever overflow the original stream again.

34. Bench cuts made on the Seventh Lake Mountain Trail involved excavating the "overburden" (organic material and uncompacted earthen material) from the full width of the trail tread across the hill side down to a base of undisturbed "mineral soil" that lies underneath the organic overburden material. A base of mineral soil will not wash away. It will support the trail with little need for maintenance and prevent the trail from eroding and sloughing off downhill. The resulting trail tread is slightly sloped downward to its outer edge (the out slope of the bench cut) to allow water to run off the side of the tread.

35. The back slope of the bench cut is the section of hill on the uphill side of the trail tread. The back slope needs to be "tapered." *i.e.*, cut, stabilized, and revegetated to prevent

material on it from eroding onto the trail tread, which, over time, will recreate the slope. The extent of tapering of the back slope along the trail tread is dependent on the width of the tread and the angle of the back slope (the steeper the slope, the more tapering is required to reach an angle of repose that will not cause material to slough off onto the trail).

36. The overburden material that is removed from the trail tread is generally placed below the out slope of the trail tread to recreate the natural slope of the hill and disperse water from the tread. The removed material can also be used to build water bars and other drainage features elsewhere on the trail.

37. A "Bobcat E32 Compact Excavator" was used to construct the bench cuts, under the supervision of a DEC Lands and Forest Forester. This excavator is less than six feet wide on rubber tracks and weighs about 7,500 pounds. Excavation started at the Moose River Plains Road end of the trail and proceeded eastward to avoid traveling over the same section of trail more than once. The excavator was also used for major digging and grubbing of roots from the trail tread. After the overburden was removed, a crew of trail workers would follow with hand tools to smooth out the rough grubbing done by the excavator, fill in unsafe holes, and remove remaining broken roots from the trail tread. After this work was completed, the crew placed a layer of leaves or straw over the cut area to disperse rainfall and protect the exposed soil from erosion as the area revegetated.

Construction of Bridges on the Seventh Lake Mountain Trail

38. When completed, there will be a total of 29 bridges on the Seventh Lake Mountain Trail. As of September 6, 2013, 18 bridges are fully constructed, ramps and finishing touches for 10 other bridges remain to be constructed, and 1 bridge is yet to be constructed. All the bridges are designed to follow the Agency/DEC 2006 Snowmobile Trail Bridge design manual (Exhibit No. 12) that was adopted to insure that bridge designs conform to the Master Plan's "natural" materials guideline. The work plans for each segment of the Seventh Lake Mountain Trail directed that all bridges on the trail be built to a width of 12 feet and lengths between 10 feet and 40 feet as dictated by specific site constraints and requirements. In the work plans for each segment, we identified which bridges were critical and had to be constructed for the first season of snowmobile use of the trail. These bridges crossed larger streams with higher banks, irregular rocky bottoms, or high rates of water flow. *See* Exhibit No. 36 (Work Plan for Seg 1, pages 4-6 of 12; work plan for Seg 2, pages 4-6 of 11; work plan for Seg 3, pages 10-17 of 22).

39. Bridges require solid foundations. At each bridge site, we first removed the duff and organic material at the location of the bridge abutments until we reached bedrock or mineral soil, except where we could not reach bedrock or mineral soil, we brought in rocks to build a solid, stable foundation for the abutment footers. The footers were generally 12 inches wide and 12 feet long and 4 to 12 inches thick, depending on the site. Once a footer was placed, we put metal rebar rods through the footer into the soil to help hold the footer in place. This method of construction is used for all types of bridges, including for hiking trails.

40. Each bridge has 6 or 8 stringers, depending on the length of the span and diameter of the poles, if poles are used.¹² Most of the stringers were placed using the manual labor. On two 40-foot bridges in Segment 3 (including the bridge over the Raquette Lake Outlet), a large

¹² Bridge stringers are metal or wooden bars that cross over a stream, from abutment to abutment, and support the bridge's deck. The layout for stringers is depicted in a diagram attached to the 2006 Snowmobile Bridge Guidance document.

excavator was used when it was near a bridge site. Stringers were notched in order to sit at the same level. Deck boards were then nailed on the stringers. A layer of running boards was installed over the deck boards, with gaps no larger than ³/₄" between them. This spacing prevents bicycle tires from getting stuck in the gaps. The running boards are designed to take wear on a bridge and can be replaced as needed because, when there is little snow, snowmobile skis, hiker's snowshoes or crampons, and snowmobile tracks chew up the running boards. The ability to replace the running boards prolongs the life of the deck boards.

41. During the 2012-2013 winter months, we hauled bridge materials from staging areas to the bridge sites using ATVs.¹³ For the bridges on Segments 1 and 2 of the trail, we used a spur trail of about 1000 feet on an existing roadbed that extends from Route 28, across from the Seventh Lake Boat Launch for access to a staging area between the two segments, referred to in ¶21 above. We also used the spur trail for the unloading and storage of bridge material and for parking machinery. We installed cross drains and temporary open top box culverts on the spur trail, together with gravel and stone on their approaches, in wet areas to prevent erosion and the creations of muddy conditions. Where cross-drains could not disperse surface water, we use gravel and crushed stone to harden the surface to prevent ruts and extensive erosion. Now that the construction of the snowmobile trail has been completed, the open top box culverts have been removed from the spur trail, the crossings are being raked out, and the spur trail will be seeded to allow it to revegetate. This spur trail is now a "Class 1" trail that allows snowmobilers to access the Seventh Lake Mountain Trail from the Seventh Lake boat Launch and may be groomed as

¹³ We used 6 by 6 ATVs as much as possible to prevent adverse impacts on the trail, especially on steep grades. The six-wheel drive spreads the weight of the load on more tires and decreases the pressure (pounds per square inch) of each wheel on the trail tread. The tandem rear wheels allow the rear end of the ATV to float over rocks, stumps, hummocks, and other obstructions.

authorized in an "adopt a natural resource" agreement (AANR) with DEC, but only up to a width of 8 feet.

42. The hauling of materials from the staging area to the bridge sites on Segment 2 of the trail posed a particular problem because there is a short steep hill where Segment 2 left the intersection with Segment 1. To enable the ATVs to climb the hill without creating ruts and causing erosion, we first used planks, which failed to provide the traction that the ATVs needed. We eventually decided to add stone and gravel to the trail surface to prevent erosion to improve traction and protect the trail surface. Photograph K of the July 15, 2013 affidavit of Peter Bauer affidavit supporting Protect's motion for a preliminary injunction (July 15, 2013 Bauer affidavit) shows the planks that were on this slope on Segment 2. The planks have since been removed.

43. For the delivery of materials for the bridges on Segment 3, we used two access routes. For most of the bridges on Segment 3, we used a spur trail less than 300 feet in length, from Route 28 to a point on Segment 3 near a bridge site where the terrain was conducive to use it as an access point. On this access route, we cleared old rotten logs and brush and cut two trees. This route will be left to become fully revegetated and will not be used for any official trail. For the delivery of material the construction of a 40-foot long bridge over the outlet of the Raquette Lake Reservoir (discussed in ¶ 45 below), we used a Town of Long Lake access road to the Reservoir Dam, on which we added earthen material to protect water supply pipes underneath the access road.

44. The route for Segment 3 crossed the very old and deteriorating Seventh Lake Inlet Bridge on the Old Uncas Road, made with concrete abutments, with steel I-beam stringers and a wooden deck. The wooden deck was found to be rotting, with holes in the deck. Stream flow

underneath the bridge was eroding material from under and behind the abutments. Rather than repair the old bridge, we determined to completely remove it and replace it with a 40-foot long bridge that followed the Master Plan "natural" materials guideline and the 2006 Snowmobile Bridge Guidance and improved the flow of water under the bridge. *See* Exhibit No. 36 (Work Plan for Seg 3, page 9 of 22). During the construction of the bridge, we properly sloped the banks of the stream and placed rocks to prevent erosion and undercutting of the replacement bridge's sills. *Id.* The 40-foot length of the bridge allowed the sills to sit on firm ground with plenty of clearance to the stream and maintained the same heights of the old road bed that the original bridge had. The stringers were set with an excavator and the trail crew added the deck, running boards and rub rails. Since this bridge is greater than six feet above the water line, we will be adding railings for safety reasons during 2013 constructions season. The new bridge, without its railings is depicted as Exhibit L of the July 15, 2013 Bauer affidavit. The old bridge is depicted in Exhibit V of my July 14, 2013 affidavit opposing Protect's motion for a preliminary injunction and responding to the Bauer affidavit (my July 14 affidavit).

45. The route for Segment 3 also crosses the outlet of the Raquette Lake Reservoir just below the spillway of the Reservoir's dam, near the segment's intersection with the Sagamore Road. *See* Exhibit No. 36 (Work Plan for Seg 3, page 5 of 22). In deciding to cross the outlet at this location, we took into account the location's relatively flat topography, the existence of wetlands in other potential routes, and the need to avoid damage to the Town of Long Lake's water supply wellheads and waterlines, located near the Sagamore Road. At the bridge site, there is a Town waterline that follows along the outlet stream. To avoid this waterline, we constructed another 40-foot long bridge, using the same size stringers that we used

to construct the bridge over the Seventh Lake Inlet, and hauling the bridging material over an existing town access road to the dam.

Trail Hardening and Other Trail Manipulation of the Seventh Lake Mountain Trail

46. During the construction of the Seventh Lake Mountain Trail, we found it necessary to temporarily "harden" the trail route to make durable surfaces that could withstand sustained heavy loads of bridge materials and avoid creating ruts in muddy areas along the trail. In many of the muddy areas, we placed logs perpendicular to the direction of travel, a process known as "corduroy," to avoid the mud and prevent ruts in the trail tread. In the process of finishing the trail, we will be removing the corduroy in areas where the wet muddy areas do not occupy the entire width of the trail tread; in other muddy areas, we will be installing cross-drains and stepping stones for hikers and mountain bikers. In natural depressions along the trail, we temporarily placed pieces of logs or branches crossways in the depressions over which wheeled vehicles could travel. This process prevented the creation of more muddy areas and reduced the need to reduce high spots along the trail route. The logs and branches will be removed as we finish the trail. Also, as discussed in ¶ 42 above, we nailed planks together in the direction of travel to protect the trail tread and create a temporarily means for wheeled vehicles to cross wet areas or proceed up slopes as trail construction progressed.

47. As we encountered rocks during the construction, we either sought to avoid them or, if that was not possible, to move or bury them, as set forth in the work plan modifications. *See, e.g.*, Exhibit No. 36 (Work Plan for Seg 1, mod 1, pages 2-4, 7 of 19, and mod 3, page 4 of 13; plan for Seg 3, pages 6-7 of 22).

48. A bedrock ledge at the western end of Segment 2 of the Seventh Lake Mountain Trail posed a unique problem in the construction of the segment. The ledge was located about 20 feet from the approach to a proposed bridge site over a stream. Its surface was 4-5 feet long and about 2 feet wide, and jutted up into the proposed trail route and presented a significant hazard to all users of the trail. We initially intended to armor the ledge to provide a smooth transition from the ledge to the bridge but there was not a sufficient amount of material on site to do so. To avoid having to haul in a large amount of stone to armor the ledge or construct a wooden deck around it, which would have detracted from the character of the trail and would require continual maintenance, we determined through a work plan modification to reduce the height of the ledge by approximately one foot and reshaping its pointed surface. This work was done by using a portable drill to fracture the ledge and using wedges and other hand tools to chip off layers from it, a process referred to as "feathering." This process avoided the creation of an unsightly mound across the trail tread, protects the natural character of the area, and requires no maintenance. *See* Exhibit No. 36 (Seg 2, mod 3, page 3 of 10, and November 2, 2012 DEC letter to the Agency).

Present Status of the Seventh Lake Mountain Trail

49. Major construction of the Seventh Lake Mountain Trail has been completed. Only one full bridge span remains to be constructed, as stated in ¶ 38 above. Further, sections of the trail have already begun to revegetate. *See* Exhibit No. 39 (photographs I took on July 2, 2013 showing vegetative growth along a bench cut and other portions of the trail, submitted with my July 14, 2013 affidavit). As the vegetation continues to grow, the trail will blend with the wild forest nature of the adjoining lands.

Response to Allegations Raised in the Complaint

50. Protect alleges that the amount of tree cutting for the construction of the Seventh Lake Mountain Trail is substantial and violates State Constitution, Article XIV, § 1. Complaint, ¶¶ 83-97. However, as explained in ¶ 31 above, the revised tally of live trees cut over the 11.9 miles of trail was only 1,924 trees, less than originally estimated, and averages one live tree per 32.7 feet, or an average of 162 live trees per mile. The final number of trees cut was even less because some of the trees marked for cutting in the work plan modifications were not cut. Whenever possible, we determined that it was better to protect the wild forest character of the trail by going around a tree if possible rather than cutting it down.

51. Protect also alleges that the bench cutting, bridge building, and terrain manipulation undertaken in the construction of the Seventh Lake Mountain Trail, and ruts created by the machines was "inconsistent" with preserving the wild forest character of the Forest Preserve lands that the trail crosses. Complaint, ¶¶ 98-111. These allegations are misleading because they give an incomplete description of the trail. It is my understanding that the allegations were drafted when the trail appeared as an unfinished construction site, before further work on the trail was undertaken to complete the trail. This further work includes the improvement of drainage of water from the trail; removal of tree stumps that pose a hazard to hikers, piles of fresh blowdown, debris at bridge sites, and other older piles of wood along the trail; seeding sections of bench cuts and other portions of the trail where natural revegetation may not quickly occur; and elimination of ruts created by machines that were missed during the last year. *See* my July 14, 2013 affidavit opposing Protect's motion for a preliminary injunction, ¶ 10. As stated above, the trail will blend with the wild forest nature of the adjacent lands as it continues to revegetate.

52. Protect also alleges that the Seventh Lake Mountain Trail is "20 feet wide or more in spots." Complaint, ¶¶ 71(footnote 18), 105. There is no place on the trail where the developed trail tread is greater than 12 feet in width. Protect's "20-foot wide" allegations might be referring to the section of Segment 1 of the trail on an old road bed along a bench cut where we shifted the trail tread to the outer shoulder of the roadbed. As explained in ¶ 24 above, the shifting of the trail to the outer shoulder of the roadbed was necessary to avoid water that had ponded inside the roadbed adjacent to the bench cut and which could not be drained away. The shifting made the trail to appear wider than 9 feet even though the tread conforms to the 9-foot width called for in the 2009 Snowmobile Trail Guidance.

53. Protect's "20-foot wide" allegations might also be confusing the tapering of the uphill sides of bench cuts discussed in ¶ 35 above with the construction of the trail tread. The allegations might further be referring to sections of the trail where only trees were cut on old roadbeds and, because of the random location of other trees, the trail tread in these sections appears to be wider than 9 feet.

54. Protect's allegations that "large amounts of crushed gravel" was used (complaint, \P 106) is also misleading. During construction, we placed gravel only on the access spur trail used to bring in material for bridges on Segments 1 and 2 and on the hill at the beginning of Segment 2, as explained in $\P\P$ 41 and 42 above. We did not dig the gravel out because the gravel was imbedded in the earth and removal would have resulted in degradation to the trail. The gravel will not visible as this portion of the trail revegetates. We did not place gravel in any other locations on the trail.

55. Protect alleges that the bridges were "built oversized to support multi-ton snow grooming vehicles" (complaint, ¶ 108). The allegation is not correct because, as stated above, the bridges were built in conformance with the 2006 Snowmobile Bridge Guidance. The Bridge Guidance is to be used on all bridges on all snowmobile trails, regardless of whether the trail is groomed or not, and regardless of the type of grooming equipment used. There is no apparent difference in appearance between bridges 10 to 34 feet in length built to handle a moderate or maximum loading; stringers for longer spans would be hidden by the decking constructed on top of them.

56. Protect also alleges that installed plastic reflectors were installed on bridges for night-time "driving" (complaint, \P 108). However, trail markers in Wilderness areas are also made of reflective material so that hiker can find the trail in the dark and not become lost.

57. Accordingly, Protect's allegations that the construction of the Seventh Lake Mountain Trail violated State Constitution, Article XIV, § 1, should be rejected.

Tate M. Connor

Sworn to before me this \mathcal{B} day of September, 2013

Notary Public

Notary Public

Carol A. Houle Notary Public, State of New York No. 01H06175812 Qualified in Franklin County Commission Expires October 15, 2015

APPENDIX A

Tate M. Connor's Experience in Constructing Trails on Forested Lands

During the summers of 2000-2002, I was a laborer in a DEC trail crew that constructed and maintained hiking trails and bridges in and around the southern High Peaks and Hoffman Notch Wilderness areas, and hiking and snowmobile trails in the Vanderwhacker Wild Forest, each in Essex County. Between May 2003 and April 2004, and again between January and May 2005, I was employed by Upland Forestry, for whom I marked timber for harvesting and laid out stream buffers and main skid trails in sensitive areas pursuant to a contract with International Paper Company. Between June 2005 and September 2006, I was employed by the Long View Forest Contracting Company in Vermont and New Hampshire as part of crew responsible for laying out logging trails and haul roads. This work included the cutting of bench cuts along and/or across hillsides so that steep slopes could be continuously and safely logged and wellplanned travel corridors that allowed machines to cross the forest floor from tree stump to log landing areas with up to 14 tons of logs balanced on them.

After I began employment with DEC, between 2007 and 2010, I supervised several projects in the Wilcox Lake Wild Forest. These projects included the repair and improvement of existing hiking and snowmobile trails, particularly to control drainage in wet areas, rerouting of portions of trails to remove them from wetlands, replacement of existing bridges and construction of new bridges, and the development of a proposed reroute of the hiking trail up. Hadley Mountain. In addition, in 2007 and 2008, I laid out proposed routes for two community connector snowmobile trails in the Wilcox Lake Wild Forest, which followed basic trail development concepts that were later made part of the 2009 Snowmobile Trail Guidance.

In 2009, 1 re-routed a large snowmobile trail on conservation easement lands under DEC's management in Saratoga County.

Between 2010 and 2012, I supervised a number of projects in the Pharaoh Lake Wilderness. These projects included the replacement of two hundred feet of bridging on a hiking/horse trail over an extensive bog, trail hardening and control of drainage on a horse trail, and the replacement of a hiking trail bridge and reroute of approximately 500 feet of the trail to the new bridge. In addition, I laid out and supervised the rerouting of about 700 feet of the Treadway Mountain hiking trail away from severally eroded and gullied sections of the trail. This project required trail clearing and bench cutting of side slopes with hand tools, in conformance with the Master Plan's Wilderness guidelines. After Hurricane Irene in 2011, I supervised the reconstruction of bridges on horse and hiking trails and a walkway over a bog.

Also in 2012, after Hurricane Irene destroyed the Indian Pass Brook Bridge in the High Peaks Wilderness, I oversaw the replacement of that bridge, using hand tools to construct a 34foot long span on new abutments.

I have become experienced in riding snowmobiles in connection with my prior employment described above and while working for DEC since 2006. During the winter months, I regularly use snowmobiles to inspect the trails that are my responsibility to manage, and to transport materials for trail repairs to be undertaken in the summer and fall months.

End of Appendix A



EXHIBIT B









