

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 SCHENECTADY)

**REPLY
AFFIDAVIT OF
STEVE SIGNELL**

INDEX NO. 2137-13

RJI NO. 01-13-ST-4541

Steve Signell, being duly sworn, does hereby depose and say that:

1. I make this affidavit in opposition to the Defendants' motion for summary judgment. I have previously submitted two affidavits in support of Plaintiff's motion for summary judgment, one sworn to on August 25, 2016 ("Signell Aff."), and one sworn to on October 26, 2016 ("Signell Ans. Aff.").

2. I have read the memorandum of law and Answering Affidavits supporting the Defendants' motion for summary judgment submitted by Meredith Lee-Clark and Loretta Simon of the NYS Office of the Attorney General and Department of Environmental Conservation ("DEC") staff, including Robb Ripp, Josh Clague, Max Wolckenhaur, Tate Connor

and Timothy Howard. These affidavits question my counts of trees destroyed during construction of new class II community connector snowmobile trails in the Adirondack Forest Preserve and my estimates of trees to be destroyed in planned class II community snowmobile trails. These affidavits also state that class II community connector snowmobile trails are built in the “character of a foot trail,” which is false. These affidavits also state that the negative environmental impacts of these trails have been offset by closure of snowmobile trails in other areas of the Forest Preserve, which is false.

Over 31,000 Trees have been Destroyed or will be Destroyed
to Construct Class II Community Connector Snowmobile Trails

3. Much of the Connor (paras 12,13,15,16,17,19,25) and Rob Ripp (paras 7-14) affidavits discuss discrepancies between our tree counts and the DEC counts of trees destroyed on class II community connector snowmobile trails. In Defendants’ Memorandum of Law it states “Throughout this action, plaintiff has asserted wildly differing numbers of trees it claims were cut, or will be cut, on Forest Preserve land. See Petition/Complaint ¶ 8 (estimating 8,223 trees of 3 inches or greater diameter-at-breast-height [dbh]). Even following extensive discovery, however, plaintiff continues to rely on extrapolations, estimates, and conjecture.” (page 2) Most of this is the simple result of the fact that our tree counts include trees smaller than 3” DBH, which the DEC does not count. In general, we do not dispute DEC’s numbers for trees >3” DBH; in fact, our counts largely corroborate their numbers for trees of this size for the sections of trail that have not yet been cut or where we were able to count stumps before grading and stump removal occurred.

4. Ripp also questioned the fact that my numbers have not remained consistent over the

course of different affidavits. However, this is simply because I, along with Peter Bauer, continued to conduct tree-counts over the course of this process and the numbers changed to reflect this new information. In the case of the southern section of the Newcomb-Minerva trail, we obtained actual field counts that supplanted the preliminary computer-generated estimates. In other cases, e.g. Cooper Kiln Trail, Gilmantown Trail and Seventh Lake Mountain Trail, we counted sections of trail that we had not been able to visit previously. Note that counting stumps is demanding work in difficult conditions as is counting standing trees in the forest on a painted route. A considerable amount of field work, some 40 days, was necessary to count trees already cut down by the DEC on these trails or planned to be cut down. The chart below shows the dates and nature of the field work conducted.

Year	Date	Section	Name	Tree Count	Stump Count	Survey Points	Other
2015	9/21, 9/23, 9/28, 9/29, 10/13, 10/19	Hyslop-RTT	Signell		X	X	
2015	10/16	Lake Harris	Signell				X
2015	10/26	Goodman Mt.	Signell		X		
2015	11/11, 11/16, 11/25, 12/7	Hyslop-Boreas	Signell			X	
2015	11/2, 11/3, 11/9, 11/16	RTT-Boreas	Signell	X			
2016	6/15, 6/21, 6/23	Polaris	Signell	X		X	
2016	6/28	Lake Harris	Bauer		X		
2016	7/11, 7/13, 7/17, 7/21, 7/21, 7/25, 8/5, 8/10, 8/11, 8/15	7th Lake Mt.	Bauer		X		
2016	7/21, 7/22	Hewitt-Stony	Signell		X	X	
2016	8/2	Stony-Minerva	Signell	X		X	
2016	8/3	Boreas-Hewitt	Signell	X		X	
2016	8/9, 8/10	7th Lake Mt.	Signell			X	
2016	8/22	Gilmantown	Bauer		X		
2016	8/28, 8/29	Wilmington	Bauer		X		
2016	9/19	Wilmington	Signell			X	
2016	9/20, 11/16	MRP Road Survey	Signell, Bauer				X

5. The chart above shows that we were conducting fieldwork to gather independent data for tree counts, both by counting stumps of trees that were cut and by counting standing trees that were marked to be cut, until the end of August 2016. Prior to August 29th, we had made estimates of tree cutting using the state's figures where we did not have our own counts, or using estimates for areas with standing trees. I also note that DEC's trail cutting in July-August 2016 allowed me to go into the field and count stumps, which are undisputable as evidence of a cut tree, in sections of the Newcomb-Minerva trail where I previously made estimates based on habitat alone. The count of 31,333 trees in my affidavit of August 25, 2016 (Exhibit D) stands as the best independent analysis of tree cutting to date obtained from 40 days of intensive field work by me and Peter Bauer, both for the 15,667 trees cut down and the 15,666 trees still standing in areas where new trails will be constructed. We have not augmented this tree count with any other additional field work.

6. Connor and Ripp also focused on the fact that my measurements for tree diameter in sections of trail that had already been cut had been taken at stump height (DSH) rather than breast-height (DBH). This was done out of necessity for the obvious reason that the stump was the only thing left to measure. My method of counting all stumps >4" DSH as trees >3" DBH produced numbers very close to the DEC's official tallies. For example, in the Hyslop-Roosevelt section, our estimate of cut trees >3" DBH was 1,021 while the DEC's count was 1,148.

7. Both Connor and Ripp also call into question my methodology of counting stumps. In my view, however, the evidence is irrefutable, given that we have a photograph of every stump with a diameter measurement along with an associated timestamp, latitude and longitude, make/model of camera etc. I trained Peter Bauer to use the Fulcrum field biology

monitoring application to do this work and he photographed over 9,000 pictures of stumps, which have been provided to the state. I have successfully located many stumps in the field and am absolutely confident that all the stumps in the photos do in fact exist within a few meters of the specific geographic coordinates that were recorded when the photograph was taken. Stumps do not lie--every photograph represents a tree that the DEC cut down.

8. In regards to the proposed "Polaris Trail" (Ripp, p. 15-16), I was asked by the Plaintiff to estimate how many trees would have to be cut to construct this section of trail. This trail was approved in the Essex Chain Complex Unit Management Plan and is designed to connect to the Newcomb-Minerva Trail. Contrary to Mr. Ripp's conclusion in that "Mr. Signell's allegations with regard to the Polaris Trail should be disregarded", my estimate should in fact serve as the de facto number because DEC has not produced an estimate or count of its own. The GPS route that I used for the Polaris Trail was obtained from the DEC through a Freedom of Information request by Protect the Adirondacks.

9. Mr. Connor calls into question my conclusions from ring counts of downed, old-growth trees (paras. 23-24). The ring counts were provided as evidence showing the age of the large trees in that ecosystem, irrefutably proving that the trail has been cut through forests containing trees well over 300 years old. A wide snowmobile trail fragments and degrades an old growth forest.

Class II Community Connector Snowmobile Trails are

Not the Character of a Foot Trail

10. In paragraph 7 of Mr. Connor's October 26, 2016 affidavit, he states that the State Land Master Plan "defines a snowmobile trail as a marked trail of essentially the same nature as a foot trail" and then claims that these trails have the character of a foot trail simply

because of having been designated as snowmobile trails. This is an example of circular reasoning and should be disregarded. Whether a transportation corridor has been designated as a snowmobile trail has no bearing on its character. Across the Forest Preserve there are plenty of designated snowmobile trails are full-blown roads, such as the Cedar River Road in the Moose River Plains.

11. In paragraph 7, Mr. Connor also states the methods used in snowmobile trail construction are *“basically the same as those used in laying out and building a foot trail.”* Based upon my experience in all stages of snowmobile trail planning and construction, I strongly disagree with this assertion. As mentioned in Mr. Connor’s affidavit (para 22), during my time working for SUNY-ESF, I consulted with the DEC on several community connector snowmobile trail projects, including the Seventh Lake Mountain Trail (now complete), the Newcomb-Minerva Connector (in construction), and a months-long effort to locate a Newcomb-North Hudson Connector (now proposed). I participated in months of meetings and field work involving many interest groups including the APA, DEC, NY Snowmobile Association, Nature Conservancy and local consultants. I know of no foot trails that have required this level of planning. Through my work on these projects, I also became acutely aware that the monetary costs involved in snowmobile trail construction dwarf that of foot trails, both in terms of materials and labor.

12. In paragraphs 11 and 26 of his affidavit, Mr. Connor states his opinion that vegetation along the Seventh Mountain Trail is growing and “consistent with the surrounding wild forest.” He provided five photographs to support his case, two of which show large, grassy stretches, supporting Plaintiff’s case that the light-rich environment of the highly disturbed trail clashes strongly with the surrounding forest, presenting an ecological threat from

invasive species. Mr. Connor's limited observations stand in stark contrast to the methodical analysis I did, which I reported in my affidavit (paras 19-21) where I inventoried the condition of the 11.7-mile Seventh Lake Trail every .10th of a mile, a total of 117 points. Fully 56% of the survey points (66 out of 117) exhibited the unwanted pattern of grasses thriving along a trail in sharp contrast to the surrounding forest where grasses are absent. My rigorous analysis showed a highly disturbed and degraded forest trail corridor, which stood out in contrast to the surrounding forest.

Trees of All Sizes should be Counted

13. I largely agree with Howard's discussion of tree size in paragraphs 10-16 of his affidavit. If Defendants were arguing for a 5" cutoff, Howard's statement would lend some support for their case, although five inches is still arbitrary and does little to address all the vagaries associated with using arbitrary cutoffs that Howard discusses in paragraphs 6-15. However, the state is not arguing for a 5" cutoff, but rather for a number (3") that Howard provides absolutely no support for. Howard also does not address the fact that page 12 of the same FIA manual (US Forest Service Northeastern Forest Inventory & Analysis Methodology) he cited clearly defines "tree" to be "Data describing saplings with a diameter 1.0 inch through 4.9 inches, and trees with diameter greater than or equal to 5.0 inches" See Exhibit A. In my previous affidavits, I did not argue for a 1-inch cutoff, but rather for either a 1-inch cutoff or *no cutoff at all*. In my view, Howard's argument lends support for having no cutoff at all.

New Class II Community Connector Trails Fragment the Forest

14. In Defendants' Memorandum of Law, Defendants argue that class II community connector snowmobile trails have provided an environmental benefit to the Forest Preserve because they 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.” (page 1). This is a similar argument that Timothy Howard advanced in his affidavit about how these trail relocations in the Moose River Plains prevented forest fragmentation. In response to the argument that the Seventh Lake Mountain Trail provided an environmental benefit and limited forest fragmentation, I conducted additional field work on 11/16/2016 to assess the effect of snowmobile trail closures in the Moose River Plains Wild Forest area. I assessed 11 trails that were “closed” to snowmobiles by the DEC and found that all of them were either: a) trails that were either entirely overgrown or had not been maintained for snowmobiling for many years prior to “closure; or b) trails that have been closed to snowmobiling, but are still being maintained as wide, road-like, two-track trails. The closure of these trails to snowmobiling has not reduced forest fragmentation, and has certainly not offset the damaging fragmentation caused by the construction of the new 11.7-mile Seventh Lake Mountain Trail through large, intact blocks of forest, much of it old-growth. Summaries and trail pictures are included in Exhibit B.

15. To illustrate the damaging effects of new trail construction on forest fragmentation, I selected an actual road-less area in the Moose River Plains where the Seventh Lake Mountain Trail was constructed. The area in question is bounded by Sagamore Road on the east, Route 28 on the west, and the Old Uncas Road on the south. (See Exhibit C) The 1916 map shows this area to have been a single unfragmented forest block in 1916, and most of this block has been part of the forest preserve for over 120 years, containing many sections of old-growth forest with trees dating back over 300 years. Prior to construction of the snowmobile trail, this intact block comprised some 6,100 acres of uninterrupted forest. The construction of the

new snowmobile trail has divided this large block into four smaller blocks ranging in size from 22 to 4,600 acres in size. (See Exhibit C) This case study provides only one example of how construction of these new trails further fragments an already heavily fragmented landscape. I could produce similar maps for any number of roadless areas where snowmobile construction has occurred or is planned.



Steve Signell

Sworn to before me this 18

day of November, 2016.



NOTARY PUBLIC

MICHELLE MANERI
Notary Public, State of New York
Schenectady Co. #01MA6229687
Commission Expires Oct. 18, 2018

EXHIBIT "A"

Data are collected on field plots at the following levels:

Plot	Data that describe the entire cluster of four subplots.
Subplot	Data that describe a single subplot of a cluster.
Condition Class	A discrete combination of landscape attributes that describe the environment on all or part of the plot. These attributes include CONDITION CLASS STATUS, RESERVED STATUS, OWNER GROUP, FOREST TYPE, STAND SIZE CLASS, REGENERATION STATUS, and TREE DENSITY.

5

National Core Field Guide, Version 7.0, October, 2015
Section 6.0. General Description


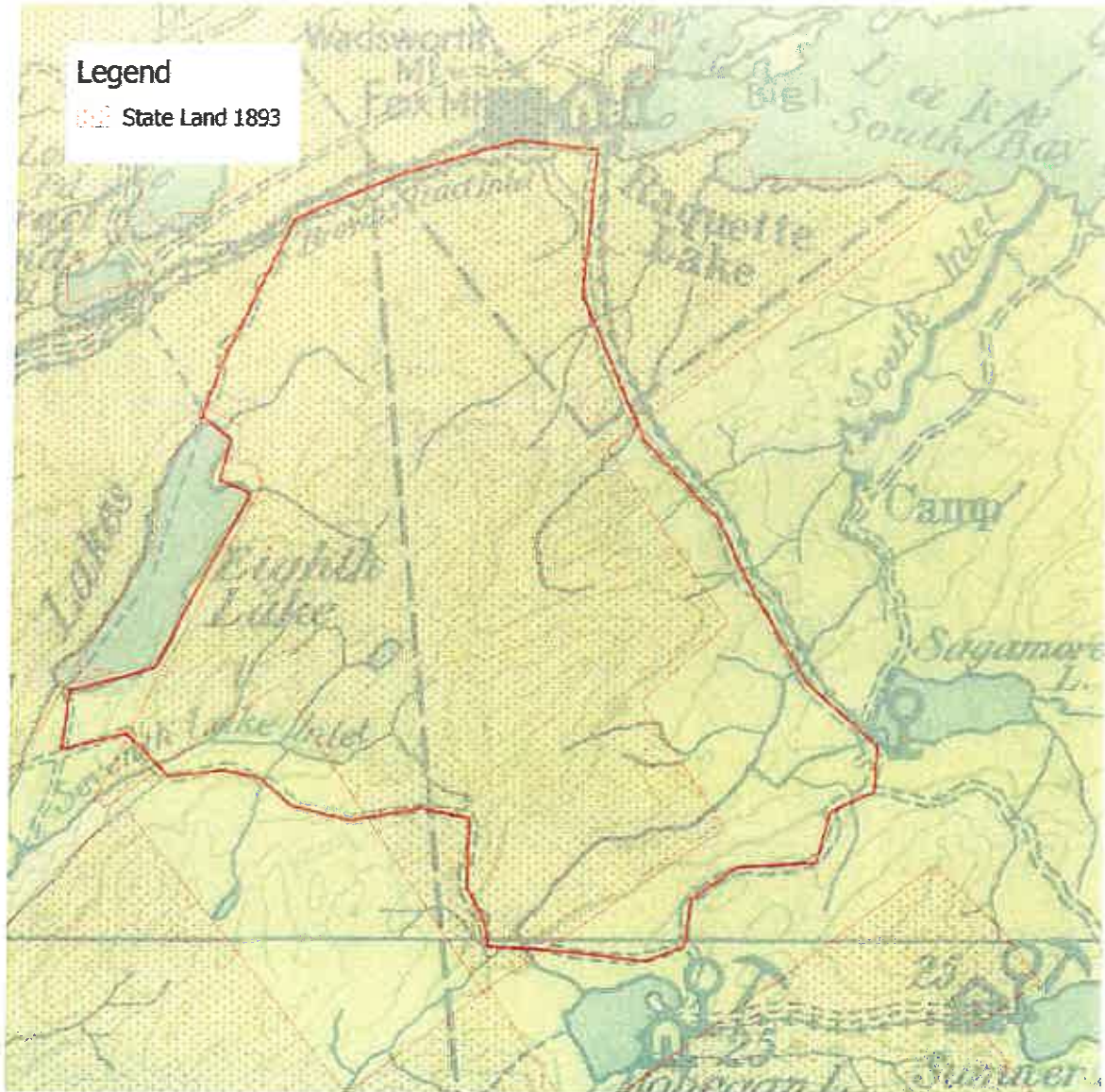
Boundary	An approximate description of the demarcation line between two condition classes that occur on a single subplot, microplot, or macroplot. There is no boundary recorded when the demarcation occurs beyond the fixed-radius plots.
 Tree	Data describing saplings with a diameter 1.0 inch through 4.9 inches, and trees with diameter greater than or equal to 5.0 inches.
Seedling	Data describing trees with a diameter less than 1.0 inch and greater than or equal to 0.5 foot in length (conifers) or greater than or equal to 1.0 foot in length (hardwoods).
Site Tree	Data describing site index trees.

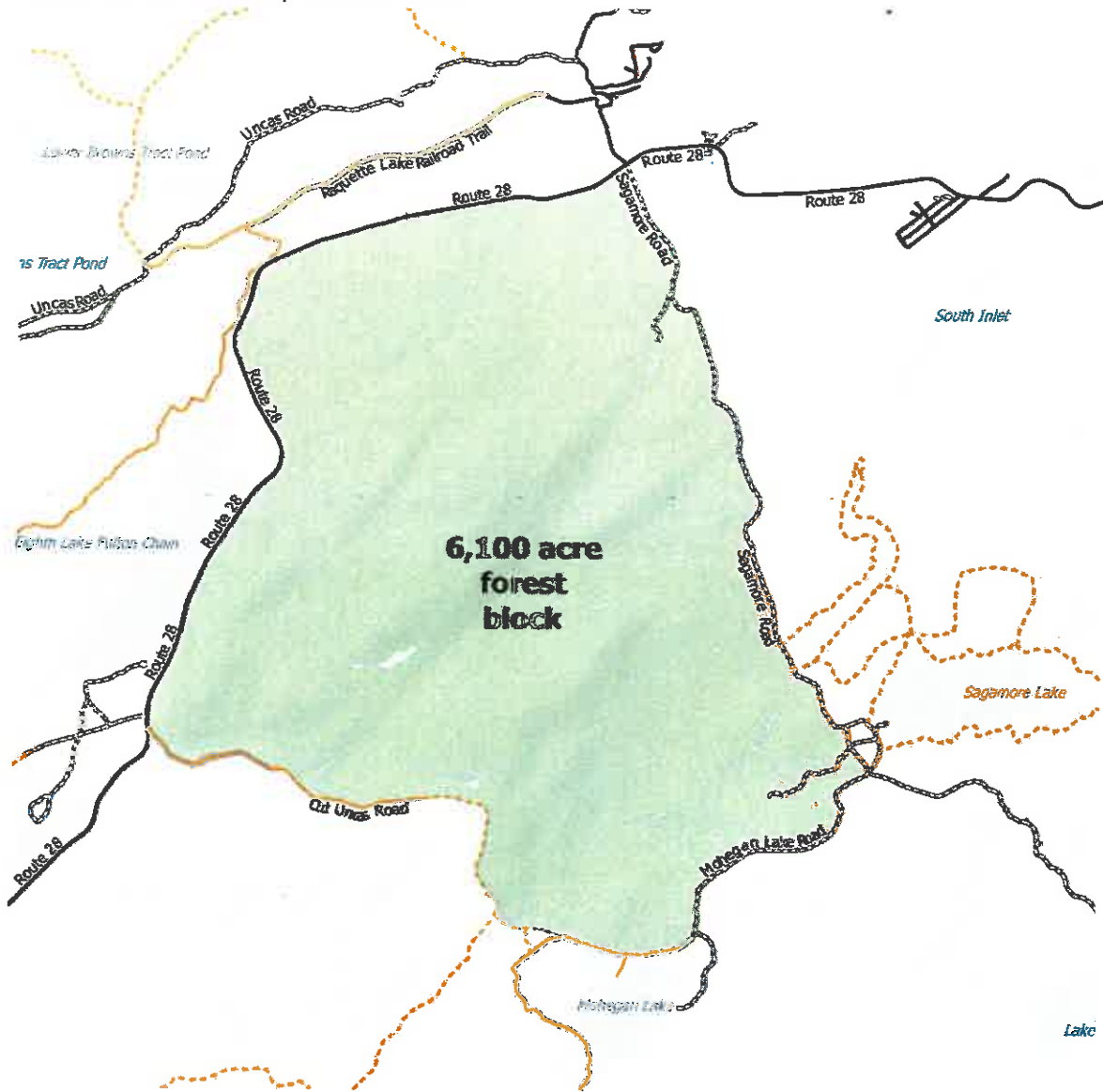
EXHIBIT "B"

Forest Fragmentation Example

1916 map of the area showing a single intact forest block surrounded by roads (red line). Red dotted area have been protected for over 120 years and contain many areas of old-growth forest.



Map of the area immediately preceding snowmobile trail construction. Note that the forest block shown on the 1916 map remains intact.



Map of the area following snowmobile trail construction. The previously intact forest that had existed since the retreat of the glaciers has now been fragmented into four forest blocks ranging in size from 22 to 4,700 acres.

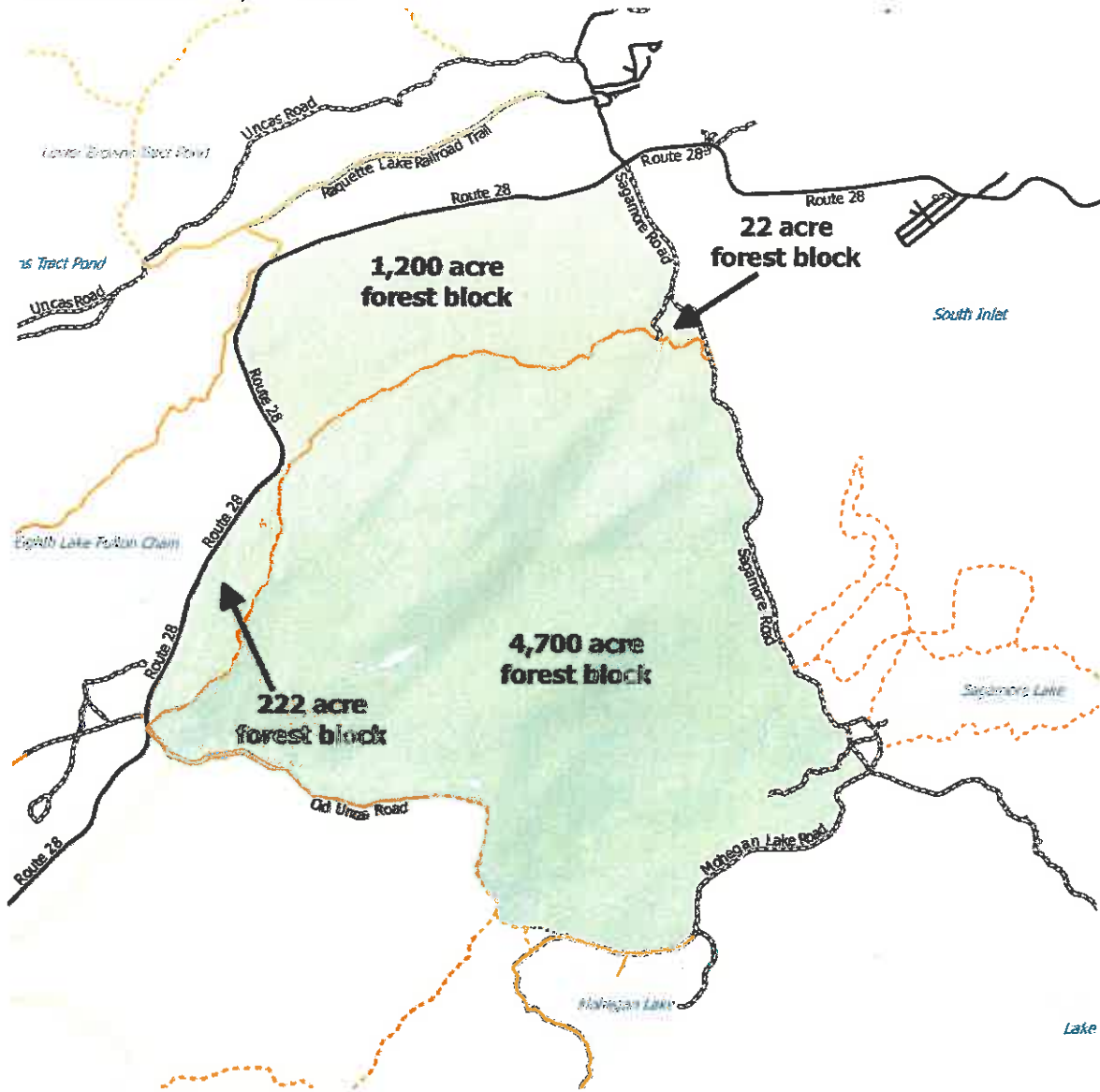


EXHIBIT "C"

Trails that had not been maintained for snowmobiling for many years prior to "closure." The closure of these trails to snowmobiling has had no effect on forest fragmentation.

Spy Lake Cut-off (eastern terminus): This trail is overgrown and has not been maintained as a snowmobile trail for decades. The bridge across S. Branch Moose River washed out many years ago, rendering the trail unusable for snowmobiling.

Butter Brook Trail: This trail is overgrown and has not been maintained for decades. The bridge across Silver Run washed out many years ago, rendering the trail unusable for snowmobiling. (Addl. resource: <http://www.adirondackexperience.com/recreation/butter-brook-trail>)

Lost Ponds Extension: This trail heading north from Lost Ponds is completely overgrown and has not been maintained for decades. Many small trees growing in the trail are 20 years old or older, judging by branch whorl counts.

Helldiver Pond: This trail is narrow and winds through the trees. If this trail was ever used as a snowmobile trail it was a long time ago. This trail is currently being maintained as an accessible trail and will persist into the foreseeable future.

Ice House Pond: This trail is being maintained as an accessible trail and will persist into the foreseeable future.

Rock Dam: Basically a foot trail, this trail is narrow and winds through the trees and is nothing like a class II community connector snowmobile trail. If this trail was ever used as a snowmobile trail it was a long time ago.

Squaw Lake: Basically a foot trail. If this trail was ever used as a snowmobile trail it was long ago. This trail is narrow and winds through the trees. Its bridges are narrow.

Trails that have been "closed" to snowmobiling but had not actually been managed for snowmobiles for decades.

Rock Dam Trail



Butter Brook Trail



Squaw Lake Trail



Sly Pond Cutoff (East Side)



Ice House Pond



Helldiver Pond



Trails that have been closed to snowmobiling but are still being maintained as wide, two-track trails, similar in character to Class I or II snowmobile trails. The closure of these trails to snowmobiling has had little to no effect on forest fragmentation.

Indian Lake: This trail runs along a former road and is being actively maintained as a two track trail to accommodate hikers and bicycles. It retains many road-like attributes, with an open canopy, grass cover and long stretches where the width is over 12 feet. This former road will remain an open thoroughfare for the foreseeable future.

Spy Lake Trail: This trail runs along a former road and is being actively maintained as a two track trail to accommodate hikers and bicycles. It retains many of road-like attributes for width, grassy, and open. This former road will remain an open thoroughfare through the forest for some time.

Limekiln Lake Cut-off: This trail wide and resembles a class II community connector trail in many places. This former snowmobile trail will remain an open thoroughfare for the foreseeable future. This trail had also been widened in recent years as there are hundreds of stumps of small trees on the trail side.

Otter Brook Truck Trail: This trail runs along a former road. It retains many road-like attributes, with an open canopy, grass cover and long stretches where the width is over 20 feet. This former road will remain an open thoroughfare for the foreseeable future.

Beaver Lake Trail: The first part of this 'closed trail' is actually a wide, well-maintained gravel road. After the gate, the trail is a wide two-track and largely resembles a road, not a foot trail. Narrow, aged bridges indicate this trail was not being managed for snowmobiles prior to 2011. This corridor will persist for the foreseeable future.

Trails that have been closed to snowmobiling but continue to be maintained as wide, two track trails, similar to Class I or II snowmobile trails.

Indian Lake Trail



Sly Pond Trail



Limekiln Cut-off



Beaver Lake Trail



Beaver Lake Road



Otter Brook Truck Trail

