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APPENDIX 1
WILD FOREST GUIDELINES FOR MANAGEMENT AND USE
(APSLMP)

Basic Guidelines

1. The primary wild forest guideline will be to protect the natural wild forest setting and to provide those types of outdoor recreation that will afford public enjoyment without impairing the wild forest atmosphere.
2. In wild forest areas
 - I. No additions or expansions of non-conforming uses will be permitted.
 - II. Any remaining non-conforming uses that were to have been removed by the December 31, 1975 deadline but have not yet been removed will be removed by March 31, 1987.
 - III. Non-conforming uses resulting from newly classified wild forest areas will be removed as rapidly as possible and in any case by the end of the third year following classification.
 - IV. Primitive tent sites that do not conform to the separation distance guidelines will be brought into compliance on a phased basis and in any case by the third year following adoption of the unit management plan for the area.
3. Effective immediately, no new non-conforming uses will be permitted in any designated wild forest area.
4. Public use of motor vehicles will not be encouraged and there will not be any material increase in the mileage of roads and snowmobile trails open to motorized use by the public in wild forest areas that conformed to the master plan at the time of its original adoption in 1972.
5. Care should be taken to designate separate areas for incompatible uses such as snowmobiling and ski touring or horseback riding and hiking.
6. When public access to and enjoyment of the wild forest areas are inadequate, appropriate measures may be undertaken to provide improved access to encourage public use consistent with the wild forest character.
7. No new structures or improvements will be constructed except in conformity with a finally adopted unit management plan. This guideline will not prevent ordinary maintenance, rehabilitation or minor maintenance of conforming structures or improvements, or the removal of non-conforming uses.
8. All conforming structures and improvements will be designed and located so as to blend with the surrounding environment and to require only minimal maintenance.
9. All management and administrative actions and interior facilities in wild forest areas will be designed to emphasize the self-sufficiency of the user to assume a high degree of responsibility for environmentally sound use of such areas and for his or her own health, safety and welfare.
10. Any new, reconstructed or relocated lean-tos, primitive tent sites and other conforming buildings and structures located on shorelines of lakes, ponds, rivers or major streams, other than docks, fishing and waterway access sites and similar water-related facilities, will be located so as to be reasonably screened from the water body to avoid intruding on the natural character of the shoreline and the public enjoyment thereof. Any such lean-tos, ranger stations, storage sheds, horse barns and similar structures will be set back a minimum of 100 feet from the mean high water mark of lakes, ponds, rivers and major streams.
11. All pit privies, seepage pits or leach fields will be located a minimum of 150 feet from any lake, pond, river or stream.

Structures and Improvements

1. All structures and improvements permitted under the guidelines covering wilderness areas will be allowed in wild forest areas. In addition, the structures and improvements listed below will be allowed and their maintenance, rehabilitation and construction permitted:

- small groupings of primitive tent sites below 3,500 feet in elevation, subject to the guidelines set forth below;
- nature and interpretive trails;
- trailheads adjacent to public highways;
- stream improvement structures for fishery management purposes;
- fishing and waterway access sites adjacent to public highways and complying with the criteria set forth below;
- horse trails; and,
- picnic tables.

The maintenance and rehabilitation of the following structures and improvements will be allowed to the extent essential to the administration and/or protection of State lands or to reasonable public use thereof but new construction will not be encouraged:

- horse barns;
- small scale dams, constructed of natural materials wherever possible;
- small fireplaces in fire sensitive areas;
- storage sheds and similar rustic buildings for use of administrative personnel;
- small-scale electronic communication and relay facilities for official communications;
- telephone and electrical lines to service permitted administrative structures;
- buoys;
- small-scale water supply facilities under permit from the Department of Environmental Conservation;
- ranger stations as set forth below;
- roads, and state truck trails as set forth below;
- snowmobile trails as set forth below;
- fire towers and observers cabins as set forth below;
- wildlife management structures.

Ranger stations

Existing ranger stations may be retained and new ranger stations constructed, but only where absolutely essential for administration of the area, no feasible alternative exists, and no deterioration of the wild forest character or natural resource quality of the area will result.

Motor vehicles, motorized equipment and aircraft

1. All uses of motor vehicles, motorized equipment and aircraft permitted under wilderness guidelines will also be permitted in wild forest areas.
2. In addition, the use of motor vehicles, snowmobiles, motorized equipment and aircraft will be allowed as follows:

a)- by administrative personnel where necessary to reach, maintain and construct permitted structures and improvements, for appropriate law enforcement and general supervision of public use, or for appropriate purposes, including research, to preserve and enhance the fish and wildlife or other natural resources of the area;

b)- by the general public, subject to basic guideline 4 set forth above, but only on:

- existing public roads;

- Department of Environmental Conservation roads now or hereafter designated as open for public use by motor vehicles by the department of Environmental Conservation; and

- on rivers, lakes and ponds now or hereafter designated by the Department of Environmental Conservation as suitable for such motorized uses; and,

c) by snowmobiles on snowmobile trails now or hereafter designated by the Department of Environmental Conservation in accordance with basic guideline 4 set forth above, and with special guidelines for such trails specified below.

d) by all terrain vehicles but only on existing public roads or Department of Environmental Conservation roads open to such vehicles, as specified in (b) above.

3. The Department of Environmental Conservation may restrict, under existing law and pursuant to authority provided in this master plan, the use of motor vehicles, motorized equipment and aircraft by the public or administrative personnel where in its judgement the character of the natural resources in a particular area or other factors make such restrictions desirable.

Roads, jeep trails and state truck trails

1. Continued use of existing roads, snowmobile trails and state truck trails by administrative personnel in wild forest areas will be permitted, to the extent necessary, to reach, maintain and construct permitted structures and improvements.
2. Existing roads or snowmobile trails, now open to and used by the public for motor vehicle use in wild forest areas, may continue to be so used at the discretion of the Department of Environmental Conservation, provided such use is compatible with the wild forest character of an area.
3. Established roads or snowmobile trails in newly-acquired state lands classified as wild forest may be kept open to the public, subject to basic guideline 4 set forth above and in the case of snowmobile trails to the special guidelines for such trails set forth below, at the discretion of the Department of Environmental Conservation, provided such use is compatible with the wild forest character of the area.
4. No new roads will be constructed in wild forest areas nor will new state truck trails be constructed unless such construction is absolutely essential to the protection or administration of an area, no feasible alternative exists and no deterioration of the wild forest character or natural resource quality of the area will result.

Snowmobile trails

Snowmobile trails should be designed and located in a manner that will not adversely affect adjoining private landowners or the wild forest environment and in particular:

- the mileage of snowmobile trails lost in the designation of wilderness, primitive or canoe areas may be replaced in wild forest areas with existing roads or abandoned woods roads as the basis of such new snowmobile trail construction, except in rare circumstances requiring the cutting of new trails;
- wherever feasible such replacement mileage should be located in the general area as where mileage is lost due to wilderness, primitive or canoe classification;
- appropriate opportunities to improve the snowmobile trail system may be pursued subject to basic guideline 4 set forth above, where the impact on the wild forest environment will be minimized, such as (i) provision for snowmobile trails adjacent to but screened from certain public highways within the Park to facilitate snowmobile access between communities where alternate routes on either state or private land are not available and topography permits and, (ii) designation of new snowmobile trails on established roads in newly acquired state lands classified as wild forest; and
- deer wintering yards and other important wildlife and resource areas should be avoided by such trails.

All terrain bicycles

All terrain bicycles may be permitted, in the discretion of the Department of Environmental Conservation, on roads legally open to the public and on state truck trails, foot trails, snowmobile trails and horse trails deemed suitable for such use as specified in individual unit management plans.

Fire towers

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

Tent platforms

The Department of Environmental Conservation having removed all tent platforms previously existing under Department permit, erection of new tent platforms will be prohibited.

Small groupings of primitive tent sites designed to accommodate a maximum of 20 people per grouping under group camping conditions may be provided at carefully selected locations in wild forest areas, even though each individual site may be within sight or sound and less than approximately one-quarter mile from any other site within such grouping, subject to the following criteria:

- such groupings will only be established or maintained on a site specific basis in conformity with a duly adopted unit management plan for the wild forest area in question;
- such groupings will be widely dispersed (generally a mile apart) and located in a manner that will blend with the surrounding environment and have a minimum impact on the wild forest character and natural resource quality of the area;

- all new, reconstructed or relocated tent sites in such groupings will be set back a minimum of 100 feet from the mean high water mark of lakes, ponds, rivers and major streams and will be located so as to be reasonably screened from the water body to avoid intruding on the natural character of the shoreline and the public enjoyment and use thereof.

Fishing and waterway access sites

Fishing and waterway access sites may be provided on any body of water irrespective of its size where the current or projected need for access clearly warrants such a site. Such sites will comply with the following management guidelines:

- Adequate public hand launching facilities or private facilities open to the public are not available to meet a demonstrated need
- The physical, biological and social carrying capacity of the water body or other water bodies accessible from the site will not be exceeded.
- The site and attendant water uses will be compatible with the state and private land use classifications and attendant guidelines and land use controls surrounding the water body.
- The site will be located in a manner to avoid adverse impact on adjacent or nearby state and private lands.
- Motor size limitations or the prohibition of motorized use as appropriate to the carrying capacity of the water body are provided for.
- There will be no adverse impacts on the physical, biological or scenic resources of the water body and surrounding land.
- any proposal to create a new fishing or waterway access site will be accompanied by an adequate demonstration that the above guidelines can be complied with.

Flora and fauna

The same guidelines will apply as in wilderness areas, although exceptions may be made by the Department of Environmental Conservation in accordance with sound biological management practices, particularly where such practices will improve the wildlife resources.

Recreational use and overuse

1. All types of recreational uses considered appropriate for wilderness areas are compatible with wild forest and, in addition, snowmobiling, motorboating and travel by jeep or other motor vehicles on a limited and regulated basis that will not materially increase motorized uses that conformed to the Master Plan at the time of its adoption in 1972 and will not adversely affect the essentially wild character of the land are permitted.
2. Certain wild forest areas offer better opportunities for a more extensive horse trail system than in wilderness, primitive or canoe areas and horse trails and associated facilities in these areas should be provided where appropriate.

3. Although the nature of most wild forest areas indicates that potential recreational overuse will not be as serious as in wilderness, primitive or canoe areas, care must nonetheless be taken to avoid overuse, and the basic wilderness guidelines in this respect apply also to wild forest lands. The relatively greater intensity of use allowed by the wild forest guidelines should not be interpreted as permitting or encouraging unlimited or unrestrained use of wild forest areas.

Designation of Wild Forest Areas

The application of the wild forest definition and criteria described above results in the current designation under the master plan of about 1.2 million acres of wild forest land, comprising approximately 53 percent of the forest preserve within the Adirondack Park. A wide variety of terrain and ecosystems is represented in these areas.

All wild forest areas are identified and their boundaries delineated on the map forming part of this master plan.

Chapter III contains a general description of 17 wild forest areas in the Park.

APPENDIX 2

FACILITIES INVENTORY

MOOSE RIVER PLAINS WILD FOREST ROAD INVENTORY

Road Name	Admin use miles	Miles open to public (2003)	Open Public Road description and history	Miles open to public in 1972 or year acquired
Limekiln Lake-Cedar River Road*	NA	18.1	From Limekiln gate to west line of Lot 7 T&C Purchase (old IP line) 4.1 miles to Cedar River Gate is Hamilton County highway	18.1
Rock Dam Road*	NA	4.3	From intersection with LLCRR to Adirondack League Club boundary	4.3
Otter Brook Road*	NA	3.3	Intersection with LLCRR to Otter Brook Bridge	3.3
Indian lake Road*	NA	5.5	Otter Brook Bridge west to Indian lake. Barrier and west canada Lake WA boundary	5.5
Otter brook truck Trail*	4.05	.75	Otter Brook bridge east to gate. 3.3 miles beyond the gate were open to public use until 1980. Road was gated due to lack of maintenance	4.05
Helldiver Pond Road*	NA	.5	LLCRR to parking area	.5
Lost Ponds Road*	1.2	.4	LLCRR to barrier	.4
Beaver Lake Road*	2.3	.2	Otter Brook Road to barrier	.2
Mitchell Ponds Road*	1.8	.1	LLCRR to barrier	.1
Loop Road*	NA	1.0	Loop off from LLCRR	1.0
Sagamore Road	NA	.75	End of Town road to Uncas/Kilkare gates	.75
Sly Pond Road*	NA	.25	LLCRR to S. Br. Moose River	.25
Cellar Mountain Road	1.6	.2	LLCRR to old camp site	1988
Payne Brook Road	NA	.2	LLCRR to 1 st culvert	1988
Wakely Mountain Road	NA	1.0	Cedar River Road to washout	1988
Wakely Pond Road	.05	0	Cedar River Road to old landing	1988
Gould Road	2.1	.9	Cedar River Road to washout	1988
Wilson Ridge Road	4.5	0	LLCRR to Little Moose Lake Outlet	1988

*- indicates roads also open for snowmobiling.

MOOSE RIVER PLAINS WILD FOREST ROAD INVENTORY

Road Name	Admin use miles	Miles open to public (2003)	Open Public Road description and history	Miles open to public in 1972 or year acquired
Raquette Lake Reservoir Road	.25	0	Sagamore Town Road to dam	0
Mohegan Lake Road	2.0	0	Intersection of Sagamore Road to Camp Uncas boundary	0
Bear Pond Road	4.9	0	Intersection of Mohegan Lake Road to Bear Pond Sportsmens Club camp	0
Lake Kora Road	1.6	0	Intersection of Sagamore Road to Kamp Kilkare boundary	0
Shed Road	.1	0	LLCRR to storage shed	0
8 th Lake Campground Reservoir Road	.1	0	Route 28 to reservoir	0
TOTAL	24.2	37.45		38.3

MOOSE RIVER PLAINS WILD FOREST SNOWMOBILE TRAIL INVENTORY

This inventory does not include public or administrative motor vehicle roads which are also used for snowmobiling. The inventory was taken from data from a 1980 inventory and a 2000 inventory. The 2000 inventory included many trails that are not designated snowmobile trails. Those trails have been omitted from this inventory.

Snowmobile Trail Name	Miles open in 2003	Snowmobile Trail description	Miles open in 1972	DEC Trail Class
Sly Pond Trail	5.4	End of Sly Pond Rd. to Sly Pond	5.4	Local
Sly pond Loop Tr.	3.5	Otter Brook Rd. to Sly Pond Tr.	3.5	local
Benedict creek Tr.	2.0	LLCRR to Bear Pond outlet	2.0	local
Bear Pond Trail	3.0	Loop Rd. to Bear Pond	3.0	B
Mitchell Ponds Tr.	1.7	LLCRR to Mitchell Ponds Rd.	1.7	local
Lost Ponds Tr.	1.9	Lost Ponds north	1.9	local
Otter brook Truck Trail	6.1	Otter Brook crossing to Little Moose Lake Club line.	6.1	local
Butter Brook Tr.	3.4	LLCRR to Little Moose Lake Club line	3.4	local
Fawn Lake Trail	1.0	LLCRR to Limekiln Lake	1.0	local
Rock Dam Trail	1.4	Rock Dam Rd. to S. Br. Moose River	1.4	local
7 th -8 th Lake Loop Trail	5.6	7 th Lake to 8 th Lake east of Route 28	5.6	B
Browns Tract Tr.	1.2	North end of 8 th Lake to Browns Tract Inlet	1.2	B
Bug Lake Trail	3.5	8 th Lake Campground to Uncas Road	3.5	B
Mike Norris Trail	2.5	Bug Lake Trail to Browns Tract Trail	2.5	B
Limekiln Loop Trail	1.9	Limekiln Intensive use area to boundary	1.9	B
Upper and Lower Trails	.65	LLCRR north to private land, trail forks partway	.65	B
3 rd Lake Creek Trail	1.6	Limekiln Campground to FCWF boundary	1.6	B
F.X. Matts Trail	1.7	Limekiln Campground to Town of Inlet Trail	1.7	B
Cedar River Trail	2.3	Wakely Dam to boundary	0	B
Total milage	50.35		48.05	

Bridges

Automobile-13
 Snowmobile-10
 Foot-4

Gates-28**Reservoirs-6****Deer Enclosures-1****Monuments - 1****Lean-tos**

8th Lake-3
 7th Lake-3

Dams-2**Fish Barriers-1 Lost Ponds****Unit Signs-3****Trail registers-5**

Parking Areas		Total 21
Name	Location	Capacity
Wakely Mountain trail	Cedar River Rd	20
N-P Trail	Cedar River Rd.	3
Lost Ponds	Lost Ponds Rd.	4
Helldiver Pond	Helldiver Pond Rd.	4
Icehouse Pond	Otterbrook Rd.	2
Beaver Lake	Beaver Lake Rd.	4
Otter Book Truck Trail	Near gate	2
Squaw Lake	Indian Lake Rd.	2
Indian Lake	Indian Lake Rd.	6
Red River	North of Rock Dam Int.	2
7 th Lake boat launch	Route 28	12
7 th -8 th Lake Loop trail	Route 28 7 th Lake end	2
	Route 28 8 th Lake end	6
Cathedral pines	Route 28 (roadside)	2
Sagamore Road	Across from Sagamore	20
West Mountain trail	Uncas Rd.	2
Limekiln Gate	Limekiln entrance	2
Black Bear Mt. Trailhead	Uncas Road	4
Rocky Mt. Trailhead	Route 28	20
Sagamore Lake	Sagamore spur rd.	6
Rock Dam Road	End of road	2
Cellar Mountain Road	At int. with LLCRR	2

Foot Trails

Cathedral Pines	0.1
Wakely Mountain	2.0
5th-6th Lake Canoe Carry	0.5
7 th Lake Trail	2.5
Rocky Mountain Trail	0.5
Northville-Placid Trail	0.8
Black Bear Mt. Trail (from Inlet)	3.0
West Mountain Trail	1.8
Squaw Lake Trail	0.5

Mountain Bike Trails

Limekiln Lake-Cedar River Road	18.1
Indian lake Rd.	5.5
Cellar Mountain Road	1.8
Wakely Mountain Road	1.0
Wilson Ridge Road	4.5
Icehouse Pond Road	0.3
Mohegan Lake Road	4.9
Sagamore Road (from end of Town Rd. to Uncas/Kilkare gates)	0.75
Uncas Road (from gate to Mohegan Lake Rd intersection)	1.4
Wilson Ridge Road	4.5
Rock Dam Road	4.3
Otterbrook Road(T to Otterbrook bridge)	3.3
Payne Brook Road	0.2
Lake Kora Road	1.6
West Mountain	1.8
Sucker Brook Bay	2.2
Limekiln Creek-Third Lake Trail	1.6
Brown's Tract Canoe Carry	1.2
Sly Pond trail	5.4
Lost Ponds Trail	1.9
Mitchell Ponds Trail	1.8
Beaver lake Trail	2.3
Otter Brook Truck Trail	10.1
Bear Pond	3.0
Bug Lake	3.5
7 th Lake Loop from 8 th Lake to Bear Pond Road	3.1
Whites pond	1.9
Mike Norris trail	2.5
Butter Brook Trail.	3.4
Rock Dam	1.4
Northville-Placid Trail	0.8
Gould Road	2.1

Horse Trails

Lost Ponds Trail	2.0
Mitchell Ponds Trail	1.8
Beaver lake Trail	2.3
Sly Pond trail	5.4
Otter Brook Road	10.1

Motor vehicle roads as well as snowmobile trails, when not covered with ice or snow are also open for horse use.

Buildings

Raquette Lake Ranger Headquarters

- house-1
- garage-2
- boathouse-1

Privies-93

Designated Campsites-170 sites

Limekiln Entrance Ranger Headquarters

- house-1
- garage-1
- gas pump-1
- registration board-1

Cedar River Ranger headquarters

- house-1
- gate house-1
- registration board-1

APPENDIX 3

DEFINITIONS

Acronyms

ADA	American with Disabilities Act
ADAAG	American with Disabilities Act Accessibility Guidelines
ADK	Adirondack Mountain Club
AFR	Assistant Forest Ranger
ALSC	Adirondack Lakes Survey Corporation
ANC	Acid neutralizing capacity
APA	Adirondack Park Agency
APLUDP	Adirondack Park Land Use Development Plan
APSLMP	Adirondack Park State Land Master Plan
ARTC	Adirondack Regional Tourism Council
ATV	All Terrain Vehicle
BCA	Bird Conservation Area
BRWA	Blue Ridge Wilderness Area
BP	Before Present
CAC	Citizens' Advisory Committee
CP-3	Commissioner Policy #3- Motor Vehicle Access to State lands under the Jurisdiction of DEC for People with Disabilities
DEC	New York State Department of Environmental Conservation
DMU	Deer Management Unit
DOC	New York State Department of Corrections
DOT	New York State Department of Transportation
ECL	Environmental Conservation Law
EIS	Environmental Impact Statement
EPA	Environmental Protection Act of 1993
EQBA	Environmental Quality Bond Act
FAA	Federal Aviation Administration
FR	Forest Ranger
LAC	Limits of Acceptable Change
LLCRR	Limekiln Lake-Cedar River Road
MOU	Memorandum of Understanding
MRPWF	Moose River Plains Wild Forest
NBWI	Native-But-Widely-Introduced
NHPC	Natural Heritage Plant Community
NPS	National Park Service
NYCRR	New York Code of Rules and Regulations
NYS	New York State
NYSDOT	New York State Department of Transportation
OPRHP	Office of Parks, Recreation and Historical Preservation
OSP	Open Space Plan
SAMP	Special Area Management Plan
SEQRA	State Environmental Quality Review Act
SBMR	South Branch Moose River

SUNY-ESF	State University of New York College of Environmental Science and Forestry
TRP	Temporary Revocable Permit
TNC	The Nature Conservancy
UFAS	Uniform Accessibility Standards
USGS	United States Geologic Survey
UMP	Unit Management Plan
USFS	United States Forest Service
WCLWA	West Canada Lake Wilderness Area
WMPA	Wakely Mountain Primitive Area
WMU	Wildlife Management Unit

Definitions

Adirondack Brook Trout Ponds - Adirondack Zone ponds which support and are managed for populations of brook trout, sometimes in company with other salmonid fish species. These waters generally lack warmwater fishes but frequently support bullheads.

Coldwater Ponds and Lakes - Lakes and ponds which support and are managed for populations of several salmonids. These waters generally lack warmwater fishes but frequently support bullheads.

Other Ponds and Lakes - Waters containing fish communities consisting of native and nonnative fishes which will be managed for their intrinsic ecological value without any new species introductions.

Two-Story Ponds and Lakes - Waters which simultaneously support and are managed for populations of coldwater and warmwater game fishes. The bulk of the lake trout and rainbow trout resource fall within this class of waters.

Unknown Ponds and Lakes - Waters which could not be assigned to the subprogram categories specifically addressed in this document due to a lack of or paucity of survey information. These waters usually contain native and nonnative fishes which will be managed for their intrinsic ecological value without any new species introductions.

Warmwater Ponds and Lakes - Waters which support and are managed for populations of warmwater game fishes and lack significant populations of salmonid fishes.

Reclamation - A management technique involving the application of a fish toxicant called rotenone to eliminate nonnative and/or competing fishes. Upon detoxification these waters are generally restocked with brook trout and or rainbow trout.

APPENDIX 4
MAMMALS, REPTILES, BIRDS, AND AMPHIBIANS

Appendix 4 – Mammalian Inventory

MAMMALS OF THE MOOSE RIVER PLAINS WILD FOREST

SCIENTIFIC NAME	COMMON NAME	HABITAT TYPES	PROTECTED STATUS (NYS)	NATURAL HERITAGE PROGRAM RANK
<i>Alces alces</i>	Moose	DF, MF, CF, wetlands	game species	S1
<i>Blarina brevicauda</i>	Northern Short Tailed Shrew	all habitats	unprotected	S5
<i>Canis latrans</i>	Coyote	all habitats	game species	S5
<i>Castor canadensis</i>	Beaver	MF, adjacent to water	game species	S5
<i>Clethrionomys gapperi</i>	Southern Red-Backed Vole	DF, CF, boreal forest	unprotected	S5
<i>Condylura cristata</i>	Star-nosed Mole	DF, wetlands	unprotected	S5
<i>Didelphis virginian</i>	Virginia Opossum	villages, roadsides	games species	S5
<i>Eptesicus fuscus</i>	Big Brown Bat	wooded, semi-wooded area	unprotected	S5
<i>Erethizon dorsatum</i>	Porcupine	DF, MF, CF	unprotected	S5
<i>Glaucomys sabrinus</i>	Northern Flying Squirrel	CF, MF	unprotected	S5
<i>Glaucomys volans</i>	Southern Flying Squirrel	DF, MF	unprotected	S5
<i>Lasioncteris noctivagans</i>	Silver-Haired Bat	forests adj. lakes, ponds	unprotected	S4
<i>Lasiurus cinereus</i>	Hoary Bat	DF, MF	unprotected	S4
<i>Lasiurus borealis</i>	Red Bat	all, forested areas	unprotected	S5
<i>Lepus americanus</i>	Varying Hare	CF, MF, alder swamps	game species	S5
<i>Lutra canadensis</i>	River Otter	lakes, ponds, streams	game species	S5
<i>Lynx rufus</i>	Bobcat	DF, MF, CF	game species	S4
<i>Marmota monax</i>	Woodchuck	open areas, DF, roadsides	unprotected	S5
<i>Martes americana</i>	Marten	DF, MF, CF	game species	S3
<i>Martes pennanti</i>	Fisher	DF, MF, CF	game species	S3
<i>Mephitis mephitis</i>	Striped Skunk	open Forests, fields, villages	game species	S5
<i>Microtus pennsylvanicus</i>	Meadow Vole	old fields, bogs, marshes	unprotected	S5
<i>Microtus chrotorrhinus</i>	Rock Vole	moist talus slopes	unprotected	S4
<i>Microtus pinetorum</i>	Woodland Vole	DF, meadows	unprotected	S5
<i>Mus musculus</i>	House Mouse	buildings	unprotected	SE
<i>Mustela erminea</i>	Ermine	DF, MF, CF, old fields	game species	S5
<i>Mustela vison</i>	Mink	forested wetlands	game species	S5
<i>Mustelas frenata</i>	Long-tailed Weasel	old fields, DF	game species	S5
<i>Myotis leibii</i>	Small-footed Bat	unknown/caves	special concern	S1
<i>Myotis keea</i>	Keenes Myotis	woodlands buildings	protected	S5
<i>Myotis sodalis</i>	Indiana Bat (Indiana Myotis)	caves (winter) summer (unk.)	endangered	S1
<i>Myotis lucifugus</i>	Little Brown Bat	buildings, caves	unprotected	S5

MAMMALS OF THE MOOSE RIVER PLAINS WILD FOREST

SCIENTIFIC NAME	COMMON NAME	HABITAT TYPES	PROTECTED STATUS (NYS)	NATURAL HERITAGE PROGRAM RANK
<i>Odocoileus virginianus</i>	White-tailed Deer	DF, MF, CF	game species	S5
<i>Ondatra zibethicus</i>	Muskrat	marshes, rivers w/cattail	game species	S5
<i>Parascalops breweri</i>	Hairy-tailed mole	DF	unprotected	S5
<i>Peromyscus leucopus</i>	White-footed Mouse	woodland edges, DF, CF, MF	unprotected	S5
<i>Peromyscus maniculatus</i>	Deer Mouse	DF, CF, MF, open areas	unprotected	S5
<i>Pipistrellus subflavus</i>	Eastern Pipistrelle	open areas, woodland edges	unprotected	S5
<i>Procyon lotor</i>	Raccoon	DF, MF, CF, adjacent to water	game species	S5
<i>Rattus norvegicus</i>	Norway Rat	buildings	unprotected	SE
<i>Sciurus carolinensis</i>	Gray Squirrel	mature DF, villages, towns	game species	S5
<i>Sorex palustris</i>	Water Shrew	high elevation, woodlands	unprotected	S4
<i>Sorex dispar</i>	Longtailed or Rock Shrew	talus slopes	unprotected	S4
<i>Sorex hoyi</i>	Pygmy Shrew	woodland edges	unprotected	S4
<i>Sorex fumeus</i>	Smokey Shrew	DF, MF	unprotected	S5
<i>Sorex cinereus</i>	Masked Shrew	all habitat with ground cover	unprotected	S5
<i>Sylvigaus transitionalis</i>	New England Cottontail	forests edges, brushy areas	game species	S3
<i>Sylvilagus floridanus</i>	Eastern Cottontail	fields, bogs, brushy areas	game species	S5
<i>Synaptomys cooperi</i>	Southern Bog Lemming	DF, bogs	unprotected	S4
<i>Tamias striatus</i>	Eastern Chipmunk	DF, MF, hedgerows	unprotected	S5
<i>Tamiasciurus hudsonicus</i>	Red Squirrel	CF, MF	unprotected	S5
<i>Urocyon cinereoargenteus</i>	Gray Fox	lightly wooded, brushy areas	game species	S5
<i>Ursus americanus</i>	Black Bear	DF, CF, MF	game species	S5
<i>Vulpes vulpes</i>	Red Fox	woodland edges, DF, open areas	game species	S5
<i>Zapus hudsonius</i>	Meadow Jumping Mouse	open and brush areas in swamp	unprotected	S5

Habitat Keys:

CF – Coniferous Forests

DF – Deciduous Forests

MF – Mixed Forests

Brush – Brushy areas, usually abandoned farmlands

* Based on NYSDEC Vertebrate Abstract Data; Significant Habitat Unit, Delmar, New York

Appendix 4 -- Amphibian Inventory

AMPHIBIANS OF THE MOOSE RIVER PLAINS WILD FOREST

SCIENTIFIC NAME	COMMON NAME	HABITAT TYPES	PROTECTED STATUS (NYS)	NATURAL HERITAGE PROGRAM RANK
<i>Ambystoma maculatum</i>	Spotted Salamander	DW, pools	special concern	S5
<i>Ambystoma laterale</i>	Blue-spotted Salamander	DW, MF, pools	special concern	S4
<i>Bufo americanus</i>	American Toad	all areas	unprotected	S5
<i>Desmognathus ochrophaeus</i>	Mountain Dusky Salamander	logs adjacent to streams	unprotected	S5
<i>Desmognathus fuscus</i>	Dusky Salamander	streams	unprotected	S5
<i>Eurycea bislineata</i>	Two-lined Salamander	streams	unprotected	S5
<i>Gyrinophilus porhyriticus</i>	Spring Salamander	streams, wetlands	unprotected	S5
<i>Hyla versicolor</i>	Gray Treefrog	forests near streams, pools	unprotected	S5
<i>Notophthalmus viridescens</i>	Red-Spotted Newt	DF, MF, lakes, ponds	unprotected	S5
<i>Plethodon cinereus</i>	Redback Salamander	all woodlands	unprotected	S5
<i>Rana clamitans</i>	Green Frog	swamps, lakes, ponds, pools	game species	S5
<i>Rana catesbeiana</i>	Bullfrog	swamps, lakes, ponds, pools	game species	S5

Habitat Keys:

CF - Coniferous Forests Pools - Vernal pools or quiet water needed for breeding

DF - Deciduous Forests Streams - Lives in, or adjacent to streams, or springs, wetlands

MF - Mixed Forests

* Based on NYSDEC Vertebrate Abstract Data; Significant Habitat Unit, Delmar, New York

Appendix 4 – Reptile Inventory

REPTILES OF THE MOOSE RIVER PLAINS WILD FOREST

SCIENTIFIC NAME	COMMON NAME	HABITAT TYPES	PROTECTED STATUS (NYS)	NATURAL HERITAGE PROGRAM RANK
<i>Caelydra serpentina</i>	snapping turtle	marshes, rivers, bogs, lakes	unprotected	S5
<i>Chrysemys picta</i>	painted turtle	marshes, rivers, bogs, lakes	unprotected	S5
<i>Clemmys insculpta</i>	wood turtle	woodlands adj. to ponds, brooks	special concern	S4
<i>Diaophis punctatus</i>	ringneck snake	moist woodlands	unprotected	S5
<i>Lampropeltis triagulum</i>	milk snake	DF, CF, MF, brush	unprotected	S5
<i>Nerodia sipedon</i>	northern water snake	Lakes, ponds, rivers, bogs	unprotected	S5
<i>Orpheodryx vernalis</i>	smooth green snake	meadows, grassy marshes	unprotected	S5
<i>Storeria occipitomaculata</i>	redbelly snake	moist woodlands, bogs	unprotected	S5
<i>Storeria dekayi</i>	brown snake	all, esp. old growth forests	unprotected	S5
<i>Thamnophis sauritus</i>	eastern ribbon snake	adj. to streams, swamps	unprotected	S5
<i>Thamnophis sirtalis</i>	common garter snake	All	unprotected	S5

Habitat Keys:

CF - Coniferous Forests

DF - Deciduous Forests

MF - Mixed Forests

Brush - Brushy areas, usually abandoned farmlands

* Based on NYSDEC Vertebrate Abstract Data; Significant Habitat Unit, Delmar, New York

**New York State Breeding Bird Atlas
MOOSE RIVER PLAINS WILD FOREST
2000-2002**

Common Name	Scientific Name	Breeding Code & Category	NY Legal Status
Common Loon	<i>Gavia immer</i>	NE-Confirmed	Protected-Special Concern
Pied-billed Grebe	<i>Podilymbus podiceps</i>	FL-Confirmed	Threatened
American Bittern	<i>Botaurus lentiginosus</i>	S2-Prob.	Protected-Special Concern
Great Blue Heron	<i>Ardea herodias</i>	P2-Prob.	Protected
Canada Goose	<i>Branta canadensis</i>	FL-Conf.	Game Species
Wood Duck	<i>Aix sponsa</i>	FL-Conf.	Game Species
American Black Duck	<i>Anas rubripes</i>	FL-Conf.	Game Species
Mallard	<i>Anas platyrhynchos</i>	FL-Conf.	Game Species
Ring-necked Duck	<i>Aythya collaris</i>	FL-Conf.	Game Species
Hooded Merganser	<i>Lophodytes cucullatus</i>	FL-Conf.	Game Species
Common Merganser	<i>Mergus merganser</i>	FY-Conf.	Game Species
Turkey Vulture	<i>Cathartes aura</i>	P2-Probable	Protected
Osprey	<i>Pandion haliaetus</i>	FY-Conf.	Protected-Special Concern
Bald Eagle	<i>Haliaeetus leucocephalus</i>	X1-Poss.	Threatened
Sharp-shinned Hawk	<i>Accipiter striatus</i>	X1-Poss.	Protected-Special Concern
Broad-winged Hawk	<i>Buteo platypterus</i>	FY-Conf.	Protected
Merlin	<i>Falco columbarius</i>	FY-Conf.	Protected
Ruffed Grouse	<i>Bonasa umbellus</i>	FL-Conf.	Game Species
Wild Turkey	<i>Meleagris gallopavo</i>	FL-Conf.	Game Species
Killdeer	<i>Charadrius vociferus</i>	FL-Conf.	Protected
American Crow	<i>Corvus brachyrhynchos</i>	FY-Conf.	Game Species
Common Name	Scientific Name	Breeding Code & Category	NY Legal Status

Spotted Sandpiper	<i>Actitis macularia</i>	P2-Prob.	Protected
Common Snipe	<i>Gallinago gallinago</i>	S2-Prob.	Games Species
American Woodcock	<i>Scolopax minor</i>	FL-Conf.	Game Species
Herring Gull	<i>Larus argentatus</i>	NE-Conf.	Protected
Mourning Dove	<i>Zenaida macroura</i>	ON-Conf.	Protected
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	S2-Prob.	Protected
Barred Owl	<i>Strix varia</i>	FL-Conf.	Protected
Northern Saw-whet Owl	<i>Aegolius acadicus</i>	FL-Conf.	Protected
Whip-poor-will	<i>Caprimulgus vociferus</i>	S2-Prob.	Protected-Special Concern
Chimney Swift	<i>Chaetura pelagica</i>	P2-Prob.	Protected
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	FL-Conf.	Protected
Belted Kingfisher	<i>Ceryle alcyon</i>	FY-Conf.	Protected
Yellowed-bellied Sapsucker	<i>Sphyrapicus varius</i>	FY-Conf.	Protected
Downy Woodpecker	<i>Picoides pubescens</i>	ON-Conf.	Protected
Hairy Woodpecker	<i>Picoides villosus</i>	FY-Conf.	Protected
Three-toed Woodpecker	<i>Picoides tridactylus</i>	X1-Poss.	Protected
Black-backed Woodpecker	<i>Picoides arcticus</i>	FY-Conf.	Protected
Northern Flicker	<i>Colaptes auratus</i>	ON-Conf.	Protected
Pileated Woodpecker	<i>Dryocopus pileatus</i>	NY-Conf.	Protected
Olive-sided Flycatcher	<i>Contopus cooperi</i>	S2-Prob.	Protected
Eastern Wood-Pewee	<i>Contopus virens</i>	ON-Conf.	Protected
Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>	S2-Prob.	Protected
Alder Flycatcher	<i>Empidonax alnorum</i>	FY-Conf.	Protected
Least Flycatcher	<i>Empidonax minimus</i>	NY-Conf.	Protected
Eastern Phoebe	<i>Sayornis phoebe</i>	NY-Conf.	Protected
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	S2-Prob.	Protected
Eastern Kingbird	<i>Tyrannus tyrannus</i>	NY-Conf.	Protected
Common Name	Scientific Name	Breeding Code & Category	NY Legal Status

Blue-headed Vireo	<i>Vireo solitarius</i>	FY-Conf.	Protected
Red-eyed Vireo	<i>Vireo olivaceus</i>	NE-Conf.	Protected
Tree Swallow	<i>Tachycineta bicolor</i>	NY-Conf.	Protected
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	FL-Conf.	Protected
Bank Swallow	<i>Riparia riparia</i>	ON-Conf.	Protected
Barn Swallow	<i>Hirundo rustica</i>	NY-Conf.	Protected
Gray Jay	<i>Perisoreus canadensis</i>	FL-Conf.	Protected
Blue Jay	<i>Cyanocitta cristata</i>	FY-Conf.	Protected
Common Raven	<i>Corvus corax</i>	FL-Conf.	Protected
Black-capped Chickadee	<i>Poecile atricapillus</i>	NE-Conf.	Protected
Boreal Chickadee	<i>Poecile hudsonicus</i>	FY-Conf.	Protected
Red-breasted Nuthatch	<i>Sitta canadensis</i>	FY-Conf.	Protected
White-breasted Nuthatch	<i>Sitta carolinensis</i>	FY-Conf.	Protected
Brown Creeper	<i>Certhia americana</i>	DD-Conf.	Protected
House Wren	<i>Troglodytes aedon</i>	ON-Conf.	Protected
Winter Wren	<i>Troglodytes troglodytes</i>	FL-Conf.	Protected
Golden-crowned Kinglet	<i>Regulus satrapa</i>	FY-Conf.	Protected
Ruby-crowned Kinglet	<i>Regulus calendula</i>	S2-Prob.	Protected
Eastern Bluebird	<i>Sialia sialis</i>	ON-Conf.	Protected
Veery	<i>Catharus fuscescens</i>	S2-Prob.	Protected
Bicknell's Thrush	<i>Catharus bicknelli</i>	X1-Poss.	Protected-Special Concern
Swainson's Thrush	<i>Catharus ustulatus</i>	FY-Conf.	Protected
Hermit Thrush	<i>Catharus guttatus</i>	FY-Conf.	Protected
Wood Thrush	<i>Hylocichla mustelina</i>	S2-Prob.	Protected
American Robin	<i>Turdus migratorius</i>	FY-Conf.	Protected
Gray Catbird	<i>Dumetella carolinensis</i>	DD-Conf.	Protected
Northern Mockingbird	<i>Mimus polyglottos</i>	X1-Poss.	Protected
Common Name	Scientific Name	Breeding Code & Category	NY Legal Status

Brown Thrasher	<i>Toxostoma rufum</i>	2-Prob.	Protected
European Starling	<i>Sturnus vulgaris</i>	FY-Conf.	Unprotected
Cedar Waxwing	<i>Bombycilla cedrorum</i>	FY-Conf.	Protected
Blue-headed Vireo	<i>Vireo solitarius</i>	FY-Conf.	Protected
Red-eyed Vireo	<i>Vireo olivaceus</i>	NE-Conf.	Protected
Nashville Warbler	<i>Vermivora ruficapilla</i>	S2-Prob.	Protected
Northern Parula	<i>Parula americana</i>	S2-Prob.	Protected
Yellow Warbler	<i>Dendroica petechia</i>	S2-Prob.	Protected
Chestnut-sided Warbler	<i>Denroica pensylvanica</i>	NE-Conf.	Protected
Magnolia Warbler	<i>Denroica magnolia</i>	NE-Conf.	Protected
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	DD-Conf.	Protected
Yellow-rumped Warbler	<i>Dendroica coronata</i>	FY-Conf.	Protected
Black-throated Green Warbler	<i>Denroica virens</i>	FY-Conf.	Protected
Blackburnian Warbler	<i>Dendroica fusca</i>	S2-Prob.	Protected
Blackpoll Warbler	<i>Dendroica striata</i>	S2-Prob.	Protected
Black-and-white Warbler	<i>Mniotilta varia</i>	FY-Conf.	Protected
American Redstart	<i>Setophaga ruticilla</i>	FY-Conf.	Protected
Ovenbird	<i>Seiurus aurocapillus</i>	FY-Conf.	Protected
Northern Waterthrush	<i>Seiurus noveboracensis</i>	S2-Prob.	Protected
Mourning Warbler	<i>Oporornis philadelphia</i>	S2-Prob.	Protected
Common Yellowthroat	<i>Geothlypis trichas</i>	FY-Conf.	Protected
Canada Warbler	<i>Wilsonia canadensis</i>	DD-Conf.	Protected
Scarlet Tanager	<i>Piranga olivacea</i>	S2-Prob.	Protected
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	FY-Conf.	Protected
Chipping Sparrow	<i>Spizella passerina</i>	NY-Conf.	Protected
Lincoln's Sparrow	<i>Melospiza lincolni</i>	FY-Conf.	Protected
Swamp Sparrow	<i>Melospiza georgiana</i>	FY-Conf.	Protected
White-throated Sparrow	<i>Zonotrichia albicollis</i>	FY-Conf.	Protected
Common Name	Scientific Name	Breeding Code & Category	NY Legal Status

Dark-eyed Junco	<i>Junco hyemalis</i>	NE-Conf.	Protected
Northern Cardinal	<i>Cardinalis cardinalis</i>	FY-Conf.	Protected
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	S2-Prob.	Protected
Indigo Bunting	<i>Passerina cyanea</i>	S2-Prob.	Protected
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	NE-Conf.	Protected
Eastern Meadowlark	<i>Sturnella magna</i>	S2-Prob.	Protected
Rusty Blackbird	<i>Euphagus carolinus</i>	FY-Conf.	Protected
Common Grackle	<i>Quiscalus quiscula</i>	NE-Conf.	Protected
Brown-headed Cowbird	<i>Molothrus ater</i>	P2-Prob.	Protected
Purple Finch	<i>Carpodacus purpureus</i>	P2-Prob.	Protected
House Finch	<i>Carpodacus mexicanus</i>	S2-Prob.	Protected
White-winged Crossbill	<i>Loxia leucoptera</i>	Fy-Conf.	Protected
Pine Siskin	<i>Carduelis pinus</i>	Fy-Conf.	Protected
American Goldfinch	<i>Carduelis tristis</i>	P2-Prob.	Protected
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	S2-Prob.	Protected
House Sparrow	<i>Passer domesticus</i>	ON-Conf.	Unprotected

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APPENDIX 5
INDIVIDUAL POND DESCRIPTIONS

Bear Pond (B-P880)

Until very recently, Bear Pond (27 acres) was a private in-holding within the Moose River Plains. Now public access is possible, but this water offers nothing of angling interest. The ALSC did the first study of this shallow pond in 1984. They caught no fish. A 1998 DEC netting effort had the same result. Most of Bear Pond is under three feet deep, but one deep hole reaches 11 feet. Muck comprises much of its substrate. The dark, sterile water of this pond had a pH of 5.1 and an ANC of 12 $\mu\text{eq/l}$ in 1998. Bog vegetation and wetlands surround half the shoreline. The lack of fish life in this relatively low elevation pond suggests it either winter kills or may experience episodically high acid pulses. Bear Pond has a flushing rate of 11 times/year making it ineligible for liming. A former logging road, now heavily overgrown, provides hiking access. This 4.5 mile trail begins off the main road to the west of Mount Tom, wraps around the north end of the mountain (where the pond is located) then follows Benedict Brook downstream back to the main road near Sumner Stream.

Bear Pond will be managed to preserve its fishless aquatic community for its intrinsic value.

Management Class: Other

Beaver Lake (B-P849)

Beaver Lake (136 acres) reportedly resembles a beaver in shape, hence its name. Certainly, there is no shortage of that aquatic mammal on the tributaries and outlet of this lake. Biologists who first visited the pond in 1954 lamented that beaver had apparently ruined many spring holes at tributary mouths via their dam building efforts. Beaver Lake had an excellent brook trout fishery until nonnative yellow perch invaded the pond in 1949. By 1954, it was evident that a reclamation would be necessary to restore good trout fishing. A pioneering reclamation methodology was attempted in 1966 when a helicopter was used to treat the lake and bordering wetlands with rotenone in under 2 hours. This effort succeeded in eliminating yellow perch, but not other species. A 1967 netting survey caught brown bullhead, white sucker, pumpkinseed, nonnative golden shiner and recently stocked brook trout and rainbow trout. Further netting done in 1968 added creek chub to the known fish community. No new species were caught in a 1973 effort, but the brook trout catch was disappointing and a switch was made to brown trout stocking in 1977. Surveys done in 1980 and 1984 caught both brook trout and brown trout, but browns were reaching larger sizes by the latter survey. Beaver Lake has a maximum depth of 16 feet, mean depth of 6 feet and flushing rate of 6.5 times/year. The 1984 ALSC survey measured a pH of 6.4 and an ANC of 36 $\mu\text{eq/l}$. The lake has a variety of substrates ranging from silt to bedrock and its shoreline is a mix of hardwoods, softwoods, wetland, sand beach and rock ledges. Several long tributaries (including the outlet of Squaw Lake) and at least three large wetlands adjoin the lake, short circuiting any thoughts of a repeat reclamation effort. Beaver Lake outlets to the Indian River. Access is provided by a 2.3 mile snowmobile trail, formerly a road, beginning just south of the bridge crossing the South Branch Moose River.

Beaver Lake will be managed as a coldwater fishery to preserve its native fishes in the presence of nonnative and historically associated species. Serious consideration should be given to

improving and maintaining the former road into this water to permit general public and handicapped motor vehicle access. This management plan recommends improving and maintaining the road into Beaver Lake for access for persons with disabilities under CP-3. An accessible fishing platform will also be constructed.

Management Class: Coldwater

Beaverdam Pond (B-P824)

Only the very northern tip of this 9.5 acre pond borders on the Moose River Plains, the rest of the pond is privately owned. Beaverdam Pond has never been surveyed. A 2.6 mile trail network from the Limekiln Lake campground provides access. Beaverdam Pond drains to Limekiln Creek and is located on the western boundary of the Plains.

Beaverdam Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

Bug Lake (B-P789)

Bug Lake (80 acres) is a scenic, coldwater lake located about one mile northwest of the Eighth Lake Campground. A section of the old Uncas Road, beginning at the back end of the campground provides good hiking access. The regular trail is 1.25 miles long, but a shortcut, spur trail towards Eagles Nest Lake can cut 0.4 mile of walking. The shortcut does include a very steep embankment however, so those portaging canoes may prefer the longer route. Bug Lake has several primitive campsites on its shores. A few virgin white pines of colossal size bordered the pond until the blow down of 1995 claimed those ancients. Bug Lake is a popular fishery and day use destination for campers at Eighth Lake and with local anglers.

Records dating back to the 1889 indicate round whitefish, brook trout, lake trout and brown trout stocking has been tried in Bug Lake. Biological survey staff studied this lake for the first time in 1931 and reported brook trout were present. They observed an abundance of minnows, but were unable to capture specimens. Their report recommended stocking brook trout and lake trout...which commenced in 1932.. Bug Lake was next surveyed in 1954 after reports of a declining brook trout fishery. Netting efforts found that nonnative yellow perch had established. No brook trout were caught, but lake trout were common, as were round whitefish.

Both species had natural spawning populations, but because they were once stocked historically it is not certain whether they are truly native to the lake. A netting survey done in May 1957 had the same results as 1954. Bug Lake was reclaimed with rotenone in autumn 1957 to eliminate yellow perch. A 1959 survey captured only stocked brook trout and rainbow trout, indicating the reclamation was successful. Nettings done in 1960, 1965-68 found good trout growth rates.

In 1966, kokanee salmon were stocked in Bug Lake and large numbers of this species were captured in 1968. Unfortunately, a single yellow perch turned up in a 1969 netting effort. By

1973, that nonnative competitive species dominated the fish community spurring a second reclamation in 1974. Kokanee and brook trout stocking was resumed after the reclamation and good fisheries for both species continued through the mid-1980's. A 1985 ALSC netting effort documented the presence of nonnative golden shiner and rainbow smelt in Bug Lake - probable bait pail introductions. Kokanee salmon growth rates decreased after the smelt established and stocking ceased after 1987. Lake trout were subsequently stocked in an effort to reduce the smelt population and to reestablish a naturally spawning lake trout population. A 1995 DEC netting found that lake trout were growing well, captured no rainbow smelt and found kokanee salmon stocked in 1992 had improved growth rates. Cornell University researchers netting Bug Lake in 2005 to ascertain its suitability for round whitefish confirmed that kokanee salmon are still present along with lake trout and brook trout.

Bug Lake has a maximum depth of 80 feet and a mean depth of 20 feet. Water quality is excellent with a pH of 7.59 and an ANC of 302 µeq/l. The clear waters of this lake have adequate dissolved oxygen levels throughout the water column. Much of the inshore substrate is bedrock or boulder with some areas of sand and limited silt. Fallen trees line the shores of the northern basin. The outlet of Bug Lake drains to Seventh Lake, but merges with the outlet of Eagles Nest Lake within 300 feet of the smaller pond. There is no barrier between the two waters, so they have always been managed jointly.

Bug Lake will be managed as a coldwater lake to enhance and restore native fishes in the presence of nonnative and historically associated species. Reclamation of Bug Lake does not appear necessary within the five year scope of this plan. However, if nonnative or other fish species accrue to this lake to the detriment of the brook trout population and similar impacts are evident in Eagles Nest Lake, a reclamation will be conducted after the Schedule of Implementation and pond narrative information in this plan is amended. Bug Lake is a candidate for round whitefish restoration efforts since the species once naturally reproduced in the lake. Round whitefish will be introduced into the current fish community, but would be more likely to thrive after a reclamation effort.

Management Class: Coldwater

Cedar River Flow (UH-P667)

Cedar River Flow (658 acres) is a large, shallow impoundment formed by the 15 foot Wakely Dam. The Cedar River entrance to the Moose River Plains is located a stone throw away from the Flow. Easy access to the pond, plus the availability of campsites makes this a popular water. Motorized boating is allowed, since the Flow borders on both wild forest and wilderness lands. However, with an average depth of 3.6 feet and poor launching facilities larger motor boats are rarely observed. The Flow was first netted in 1932 resulting in a native species list of brook trout, brown bullhead, northern redbelly dace, common shiner, creek chub and white sucker. A 1956 netting had similar results but did add nonnative golden shiner. Brook trout fishing was reported as good. The private owners of the Flow at that time reportedly drained the lake each fall to avoid spring runoff damage to their poorly maintained dam. Surveys done in 1962 and 1972 found no species changes. The 1972 survey did establish, however, that rainbow trout

stocking was not suitable for this pond. Rumors of northern pike being observed prompted a 1998 survey of Cedar River Flow. Fortunately, no pike were captured - in fact there was no change in the fish community from the 1956 survey. However, brook trout growth is slow in Cedar River Flow, probably due to the abundance of competing minnows and suckers. Thus, brown trout have been stocked jointly with brook trout in Cedar River Flow since 2000. A netting survey done during the 2005 drought captured brown trout, but no brook trout. Water temperature was near 80 degrees in that survey. It is likely that brook trout retreat to tributaries and spring holes during such hot spells in this shallow lake. The Flow has a maximum depth of nine feet. Its stained waters had a pH of 7.21 and an ANC of 116 $\mu\text{eq/l}$ in 1998. Due to its sheer size and the fact it is an impoundment within the Cedar River stream course, reclamation of Cedar River Flow is not possible.

Cedar River Flow will be managed as an Adirondack brook trout pond to preserve its native fish community in the presence of nonnative and historically associated species.

Management Class: Adirondack Brook Trout

Cellar Pond (B-P889)

Cellar Pond (10 acres) is a remote, acidified pond located between Cellar and Wakely Mountains on the eastern border of the MRPWF. Surveys done in 1979 and 1984 caught no fish.

A former four wheel drive road provides hiking access (1.7 miles), but there is some steep terrain to negotiate. Cellar Pond is completely fringed with bog vegetation. It has a maximum depth of 5 feet, mean depth of 3 feet and a flushing rate of 56 times/year. Most of the bottom is muck, but there is some rock ledge. The pond has never been stocked. It is the headwater for Cellar Brook. ALSC data indicates this is one of the most acidic waters in the unit with a pH of 4.4, and an ANC of -42 $\mu\text{eq/l}$.

Cellar Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Other

Eagles Nest Lake (B-P788)

Eagles Nest Lake (12 acres) is easily accessed via a 0.7 mile trail starting at the DEC campground on Eighth Lake. This pond resembles a glacial cirque carved into the hillside after the last Ice Age. Steep cliffs line the northern shoreline while its clear water drops off just as precipitously near shore. An abundance of fallen trees line the shoreline. Eagles Nest Lake harbored brook trout when first studied in 1931. Its outlet to Seventh Lake was reportedly clogged with brook trout fingerlings, although most of those may have been stocked. Pumpkinseed and an unidentified minnow species were also reported present. Eagles Nest Lake and Bug Lake (B-P789) share the same outlet stream to Seventh Lake. The establishment of nonnative yellow perch in Bug Lake resulted in their subsequent appearance in Eagles Nest. A 1954 survey of Eagles Nest Lake found a quality brook trout fishery but the biologists noted that

young of the year yellow perch were present in the stomachs of the larger brook trout captured. In May 1957 a gill netting and angling survey resulted in catching no trout, although some small yellow perch were observed. Both Eagles Nest Lake and Bug Lake were reclaimed with rotenone later in 1957 to eliminate yellow perch and other nonnative species. Surveys done in 1965, 66 and 67 caught only brook trout, indicating the reclamation was a success. However, Eagles Nest Lake was reclaimed for a second time in 1974 after a 1973 survey of Bug Lake indicated that yellow perch had reestablished. A 1975 post-reclamation netting effort in Eagles Nest captured no fish, indicating the second reclamation was successful. Brook trout stocking was resumed after the reclamation. In 1984, the ALSC captured no fish in Eagles Nest Lake, but regional fisheries staff quickly repeated the effort and captured brook trout, lake trout and creek chub (NBWI) in 1985. Angler reports of large schools of minnows in the late 1990's prompted a targeted netting survey in 2001. Minnow nets set in shallow water captured nonnative golden shiner, fathead minnow and spottail shiner. It is likely that all three species were introduced via the bait pail - although fishing with bait fish in Eagles Nest Pond is prohibited. Spottail shiner are rarely caught in the Adirondacks, but are frequently sold as bait near Lake Ontario and the St. Lawrence River. Eagle Nest Lake has a maximum depth of 56 feet and a mean depth of slightly over 30 feet. Its clear water had a pH of 7.33 and an ANC of 164 $\mu\text{eq/l}$ in 1984. However, dissolved oxygen levels were limiting below 30 feet. Eagles Nest Lake continues to support a good brook trout fishery despite the recent spate of nonnative introductions. As evidenced by its past history, Eagles Nest is an excellent reclamation candidate....if it is reclaimed jointly with Bug Lake. The lake has a hard rocky shoreline. Eagles Nest has above average fishing pressure due to its proximity to the DEC campground and to its scenic character.

Eagles Nest Lake will be managed as an Adirondack brook trout pond. If nonnative or other fish species accrue to this pond to the detriment of the brook trout population and similar problems would justify including Bug Lake, this entire system will be reclaimed to enhance and restore a native species. The Schedule of Implementation and pond narratives in this UMP would be amended prior to any reclamation effort.

Management Class: Adirondack Brook Trout

Eighth Lake of the Fulton Chain (B-P790)

Eighth Lake (302 acres) is the headwater for the Fulton Chain of Lakes. Much of the shoreline lies in the MRPWF, but the southern end of the lake is classified as Intensive Use due to the presence of a DEC campground and boat launch. Route 28 parallels the eastern shore of the lake. Some car top boat and canoe access occurs at pull offs adjoining the lake from Route 28. When first studied in 1931, biologists reported the fish community was identical to other Fulton Chain Lakes. Lake trout and brook trout were the native gamefish species. The nonnative lake whitefish was also present along with unidentified minnow species. Historical stocking records show all three species mentioned above had been planted at some time, along with landlocked Atlantic salmon. The first comprehensive netting effort occurred in 1954. Native species captured or reported present in 1954 were lake trout, brook trout, brown bullhead (NBWI), longnose sucker and white sucker. Nonnative species caught or reported present were smallmouth bass, rainbow smelt, and lake whitefish. Biologists noted that nonnative yellow

perch were not yet present in the lake, but were expected to establish soon due to their known appearance in Bug Lake (which drains to the outlet of Eighth Lake). Limited netting done in early May 1958 captured only brook trout, all of which were hatchery yearlings. A major trapnetting effort done in October 1960 confirmed the presence of yellow perch, plus the addition of nonnative golden shiner and native pumpkinseed. Brook trout stocking ended in 1963 and a rainbow trout stocking policy was initiated that continues to this date. In the 1960's Eighth Lake was stocked with Saranac and Seneca strains of lake trout as part of a larger statewide lake trout study. Netting efforts to assess lake trout and rainbow trout were conducted in 1964, 1965, and 1969. As in other waters, the survival of the Saranac (Adirondack) strain of trout was better than the Finger Lake (Seneca) strain. The 1969 monitoring effort caught an unusual species for the Adirondacks, the stonecat, which is an unlikely bait pail introduction and may have been a misidentification of a more common species called margined madtom. Landlocked salmon stocking began in 1975 to take advantage of a now abundant rainbow smelt population. Netting conducted by the ALSC in 1984 documented the addition of nonnative rock bass to the fish community. The most recent survey data available (1988) indicates a modest lake trout population with some individual lake trout reaching impressive size. A creel survey conducted in the 1960's documented an annual angling effort of about 7,000 hours - a figure which has probably grown over the years. Round whitefish fingerlings were stocked in Eighth Lake in 2005 by the Endangered Fish Species Unit. Cornell University researchers will track this population in subsequent years to see if they can survive and reproduce.

Eighth Lake has a maximum depth of 81 feet, mean depth of 39 feet and a flushing rate of 0.4 times/year. The lake's clear water has a pH of 7.4 and specific conductivity of 64. Dissolved oxygen levels are good throughout the water column. Much of the lake shoreline is wooded and there is one island around 1.4 acres in size in the central part of the lake. Inshore substrate is mostly sand, but there are several rocky points and boulder patches. The lake has no tributaries, but does outlet to Seventh Lake of the Fulton Chain. In recent years, beaver activity on the outlet has generally prevented fish from ascending to Eighth Lake from Seventh Lake. Motorboat access to Eighth Lake is possible using the campground ramp, but a day use fee is charged to non-campers from Memorial Day through Labor Day. Eighth Lake campground was built in 1935 and has 121 sites.

Eighth Lake will be managed as a two story fishery to preserve its native fishes in the presence of nonnative and historically associated species.

Management Class: Two Story

Fawn Lake (B-P827)

Fawn Lake (19 acres) is the headwater for a small tributary to Limekiln Lake. The two lakes lie less than 1,500 feet apart, but they are totally different in character. Fawn Lake is swampy, shallow and warm. Its outlet to Limekiln Lake is low gradient and frequented by beaver. No prior survey data are available before 1961 when it was reclaimed with rotenone as part of the larger effort directed at reclaiming Limekiln Lake. Brook trout stocking was tried after the reclamation, but that effort was a failure. Netting done in 1963 found that small brown

bullheads were extremely abundant and no trout were present. The policy was canceled. Fawn Lake was revisited by the ALSC in 1985. They reported catching golden shiner (nonnative) and brown bullhead. Maximum depth of Fawn Lake is slightly over 2 feet and the average depth is one foot. It has a pH of 6.2 and an ANC of 30 $\mu\text{eq/l}$. Emergent vegetation fills half the pond during the summer months.

Fawn Lake will be managed to preserve its native fishes in the presence of nonnative species.

Management Class: Other

Fox Pond (R-P318)

A four acre, acidic bog pond located just west of the village of Raquette Lake along the road to the Browns Tract ponds. Fox Pond's shoreline is composed of sphagnum and leatherleaf. Like most kettle hole bog ponds, it is surprisingly deep - reaching 34 feet and averaging 11 feet. No fish were captured when this pond was first surveyed in 1955 and biologists reported that no fish had ever been reported. Nevertheless, some experimental brook trout stocking was done in 1957 and 1959. A survey in the latter year confirmed the chemical unsuitability of this water for most species, but staff did report seeing one dead central mudminnow. The ALSC revisited Fox Pond in 1985 and caught 25 live central mudminnows. This species must be acid tolerant because the ALSC found a pH of 4.38 with an ANC of -37 $\mu\text{eq/l}$. ALSC records indicate Fox Pond may have been limed in 1950, but there is no other information available for that project. Since Fox Pond has a flushing rate of 7.7 times/year, it is ineligible for liming under current FEIS criteria.

Fox Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Other

Helldiver Pond ((B-P877)

Helldiver Pond (15 acres) lies just south of the main road and east of the junction with the Otter Brook Road. A 1,000 foot trail provides access beginning near some campsites off the main road. Helldiver Pond was not visited in 1931 by the Biological Survey. A 1954 note just says the pond was warm and recommended against trout stocking. A 1963 netting effort found that brown bullheads were abundant. Helldiver Pond was reclaimed in September 1967 with 25 gallons of rotenone at a target concentration of 0.5 parts per million. It was afterwards stocked with brook trout. Netting done in 1968 primarily caught stocked brook trout, but did catch one bullhead - indicating the reclamation effort was incomplete. By the time of a 1981 survey, brown bullheads and nonnative golden shiner were abundant, creek chub were common and only a single brook trout was caught. That survey also recorded pH levels of 5.0. A 1984 ALSC survey added white sucker to the known fish community. Trout stocking was switched from brook trout to brown trout in 1996. A 1998 survey caught several yearling brown trout. Helldiver Pond has very dark, brown water. Its pH in 1998 was 6.4 and its ANC was 56 $\mu\text{eq/l}$. This pond is shallow with a maximum depth of 11 feet and mean depth of 5.6 feet. Helldiver Pond outlets to a large wetland and has one small inlet. It is not a reclamation candidate and its

flushing rate of 5.6 times/year exceeds criteria specified in the Liming FEIS. Most chemical survey work indicates low dissolved oxygen levels below five feet. Sand and muck comprise most of the bottom substrate. Lily pads can cover a fair portion of the pond in summer.

Helldiver Pond will be managed to preserve its native fishes in the presence of historically associated and nonnative species. The pond will be netted during the five year scope of this plan to determine whether long term survival of brown trout is occurring. If brown trout are not creating a fishery in Helldiver Pond, stocking efforts will cease. Largemouth bass stocking is not recommended due to the pond's low ph. This management plan recommends modifying the trail to Helldiver Pond to accessible standards and constructing an accessible fishing platform.

Management Class: Coldwater/Other

Hess Pond (B-P5337)

Hess Pond (5 acres) lies primarily on private lands, but a small portion of the pond's northern shore borders on the MRPWF. It is located about 0.4 miles due north of the dam on Sixth Lake. Hess Pond has never been surveyed. Older maps indicate the pond was once larger, but wetlands surround it now, suggesting its acreage is controlled by beaver activity.

Hess Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

High Rock Pond (B-P791)

High Rock Pond (11 acres) is the headwater for tributary 3 of Seventh Lake Inlet. A 2.5 mile hike/bushwhack along parts of the old Uncas Road is necessary to reach this water from Route 28 starting directly across from the Eighth Lake campground. High Rock Pond was not visited during the 1931 Biological Survey. Brook trout were apparently diverted to this pond at times between 1931 and 1955 when a regular stocking policy was instituted based upon a recommendation made by the local game warden. A netting evaluation done in 1965 captured no fish and the policy was terminated. In 1983, Dan Josephson of Cornell University, studied High Rock Pond and recommended it for experimental liming. Josephson's pre-liming water chemistry work found temperature and oxygen levels throughout the water column were adequate to support trout survival and he did recommend stocking. However, those readings were taken in October during fall turnover. Josephson also recorded a pre-liming pH of 5.07. The pond was treated with 7.3 tons of agricultural lime in November 1983 using fixed wing aircraft. Brook trout were stocked at least once after the liming. This was not a DEC project and there are no stocking records that indicate trout were planted after the liming nor are there post-liming chemistry data available. Apparently, the pond quickly reacidified after the liming and no further work was done. An experimental brook trout stocking policy was initiated by DEC in 2000 and evaluation of this policy will take place within the five year scope of this unit management plan. Anglers fishing the pond in 2005 have reported brook trout are present and of catchable size. High Rock Pond has a maximum depth of 26 feet, mean depth of 11.5 feet,

flushing rate of 1.0 times/year and no inlets. It has yellow/green clear water. A tall rock face along the north shore probably inspired the name of this pond. Much of the inshore substrate is muck and an unusually high number of fallen trees clog the shoreline.

High Rock Pond will be managed as an Adirondack brook trout pond to preserve, enhance and restore a native fish community. Further information on the 1983 liming must be obtained from Cornell University to judge whether this water qualifies for liming under criteria of the DEC FEIS on Liming. If it does, High Rock Pond will be relimed and monitored as part of DEC's liming program.

Management Class: Adirondack Brook Trout

Icehouse Pond (B-P876)

Icehouse Pond (6 acres) is an intensively managed Adirondack brook trout pond that has relatively easy access. A flat, overgrown truck trail about 700 yards long provides access from the Otter Brook Road just to north of the S. Br. Moose River bridge crossing. Biologists noted the pond's reputation for producing large brook trout in a 1953 survey, but saw no signs of natural reproduction and judged the trout fishery to be stocking dependent. Surveys done in 1960, 1963 and 1966 caught only brook trout and described fishing pressure as being moderately heavy. A 1978 survey and chemistry check caught no fish and found pH's ranging from 4.1 to 5.1 with no dissolved oxygen below 20 feet. Those findings prompted liming of the pond in the fall of 1978 with 6.2 tons of agricultural limestone. Follow up monitoring in 1979 found that pH levels were boosted up to 6.6. A 1980 survey established that stocked brook trout were now surviving and growing well in the pond, although dissolved oxygen levels were still limiting in deeper strata. A 1984 ALSC survey found similar conditions, but pH had declined to 6.4. Chemistry monitoring done in 1990 and 1991 found that pH levels were consistently below 6.0. Icehouse Pond was limed for the second time in the winter of 1996 with 7 tons of agricultural limestone. This had the desired effect of boosting pH levels up to 7.6. In 1998 a pre-reclamation survey noted hundreds of nonnative golden shiners in the shallows of the pond. Not surprisingly, anglers began reporting poor brook trout fishing. Icehouse Pond was reclaimed with rotenone in August 1999. Post-reclamation netting in 2004 showed golden shiners were eliminated. Brook trout and brown trout were the only species caught in 2004, the browns apparently resulting from stocking error. and brook trout stocking has been resumed. Icehouse Pond has a maximum depth of 44 feet, mean depth of 22 feet and flushing rate of 1.0 times/year. Its substrate is entirely muck and pine trees border most of the pond. The pond can drain to a wetland when its water level is high, but no inlets or outlets are present at normal or low water levels. A 2000 water chemistry check found pH was still good at 7.2. The trail to Icehouse Pond ends at a nice primitive campsite.

Icehouse Pond will be managed as an Adirondack brook trout pond to enhance and restore a native fish community. Within the five year scope of this plan, reclamation and liming appear unnecessary. Water chemistry will be monitored annually and at least one netting survey will be conducted to check on brook trout survival and growth rates. Should nonnative fishes establish that are detrimental to brook trout or if pH levels decrease below 6.0, Icehouse Pond

will be scheduled for reclamation or liming as needed. In that event, the UMP Schedule of Implementation will be amended to reflect the needed management actions. This management plan recommends modifying the trail to Icehouse Pond to accessible standards and constructing an accessible fishing platform.

Management Class: Adirondack Brook Trout

Indian Lake (B-P852)

Indian Lake (82 acres) lies on the southwestern boundary of the MRPWF. Half of its shoreline borders the West Canada Wilderness. The Indian Lake road terminates at the pond, so access is easy when that seasonal road is open for cars. Indian Lake was not studied during the 1931 Biological Survey of the Black River watershed. Brook trout stocking began in this water in 1942, but survey work was not done until 1954. That survey caught brook trout and white sucker. Survey staff commented on the excellent quality and abundance of the brook trout, but remarked that the suckers were small and that the lake had very low pH of 4.9. A 1963 netting captured only a few brook trout. An intensive netting effort in 1975 again caught only brook trout and measured midsummer pH values of 5.5 to 6. In 1981, mostly yearling brook trout were caught and a pH of 4.9 was recorded. A 1984 ALSC survey caught no fish and found a pH of 4.9 and an ANC of $-6 \mu\text{eq/l}$. The brook trout stocking policy was deleted in 1985. Indian Lake has a maximum depth of 35 feet, mean depth of 10 feet and a flushing rate of 9.6 times/year. Muck comprises much of the substrate. The outlet of Indian Lake joins with the Indian River. Several long term study projects monitor the chemical and biological conditions in Indian Lake. Despite the lake's fishless state loons are known to frequent its shores. Indian Lake is one of the few acidified lakes in the MRPWF, but it lies at the same latitude and general altitude as several acidified lakes in the nearby West Canada Wilderness (Brooktrout Lake, Falls Pond, Wolf Lake, Deep Lake and Jimmy Pond).

Indian Lake will be managed as an Adirondack brook trout water to preserve and restore a native fish community. Brook trout stocking will be resumed if chemical conditions in the lake moderate to levels judged capable of supporting trout survival. This management plan recommends building an accessible canoe launch on the lake in anticipation of future stocking.

Management Class: Adirondack Brook Trout

Limekiln Lake (B-P826)

Limekiln Lake (462 acres) is the most accessible and familiar waterbody to users of the Moose River Plains Wild Forest. It adjoins the western entrance to the Plains near Inlet and has a popular DEC campground along its shoreline. Limekiln Lake is also one of the most studied Adirondack waters by DEC and a host of other state, federal or academic projects. The Biological Survey of 1931 reported that a native fish community consisting of lake trout, brook trout, round whitefish, pumpkinseed and unspecified sucker and minnow species was present. They recommended stocking lake trout, brook trout and the nonnative lake whitefish. The next survey done on the lake, in 1949, found that nonnative yellow perch had now entered the lake. That survey also caught lake whitefish, lake trout, brook trout, round whitefish, brown bullhead

and white sucker. A 1957 netting effort failed to capture lake trout and noted that very few lakers had been caught in recent years. A repeat effort made in 1959 caught only one lake trout, no brook trout and only one round whitefish, but over 1,200 yellow perch. Nonnative golden shiner were noted for the first time in the 1959 effort. The collapsed salmonid fishery prompted a reclamation of Limekiln Lake in 1961 utilizing 7.5 parts per billion of toxaphene in the main lake and rotenone in the tributaries and adjoining Fawn Lake. Post-reclamation netting done in 1962 captured no fish, but brown bullhead 4-8 inches long were caught in 1963 - indicating that this species survived the 1961 treatment. Nettings done from 1964-1966 provide data on rainbow trout, brook trout and brown trout stocked after the reclamation. In 1966, small pumpkinseed reappeared in the lake. Sometime between 1966 and 1972, yellow perch reestablished in the lake and dominated the fish community by 1973. Rainbow trout and kokanee salmon stocking was deleted in favor of stocking lake trout and splake. Attempts were made to introduce nonnative rainbow smelt as forage in 1973 and 1974 - but these attempts were unsuccessful. Surveys done in 1975 and 1978 determined that splake were doing well in the lake, but lake trout were rare. A nonnative sunfish species, the bluegill, was reported in 1978- but that identification is likely an error since no subsequent surveys have caught that species. Limekiln Lake was repeatedly sampled for studying the impacts of acid rain in the late 1970's and early 80's - field pH's recorded in that interval varied between 4.9 and 5.9. A 1981 survey caught the nonnative rock bass for the first time and by the time of a 1985 ALSC survey this species was quite common. Brown trout fingerlings and 2-year-olds were stocked in the 1990's in Limekiln Lake, but a 1997 DEC survey found poor survival for this species as compared to splake. The 1997 survey also indicated that yellow perch numbers were quite reduced and recorded a record high pH of 6.7. The possible decline of yellow perch prompted a recommendation to again try stocking kokanee salmon in 1999, but as of this writing, the species has not been stocked due to insufficient numbers in the hatchery system. To date, splake are the only salmonid species that has thrived in Limekiln Lake since the introduction of yellow perch.

Limekiln Lake has exceptionally clear water. Swimmers appreciate that 80% of the lake bottom is sand. Rocky substrate comprises much of the remaining 20% of the bottom. The lake has a mean depth of 20 feet, but reaches 72 feet in one deep hole. Dissolved oxygen levels are generally good at all depths. Water chemistry values in 1997 were pH of 6.6 and an ANC of 30 $\mu\text{eq/l}$. The lake has a flushing rate of 0.7 times/year. Due to the sand substrate and low productivity of this lake, aquatic vegetation is notably scarce. Trailered boats can be launched at the DEC campground. Limekiln Lake is open to ice fishing and splake are readily caught during the winter. The eastern shore of Limekiln Lake is lined with private residences.

Limekiln Lake will be managed as a coldwater fishery to preserve its native fishes in the presence of nonnative and historically associated species. Limekiln Lake meets Liming FEIS criteria, but recent chemistry work indicates pH levels are improving naturally. Another reclamation attempt is inadvisable due to the sheer size of this lake, its extensive tributary system and the necessity for also reclaiming Fawn Lake. If yellow perch numbers continue to decline in Limekiln Lake a reintroduction of the endangered fish species, round whitefish, should be attempted.

Management Class: Coldwater

Little Moose Lake (B-P890)

Little Moose Lake (99 acres) is a productive Adirondack brook trout pond that also serves as the headwater for the South Branch Moose River. It lies in the valley south of Wilson Ridge and north of Little Moose Mountain. The pond was leased to a hunting club for many years. A network of logging roads connects Little Moose to the main road and to the Silver Run road. There is a two foot manmade dam on the outlet. Netting surveys done in 1969 and 1985 found mostly native species (brook trout, white sucker, brown bullhead, pumpkinseed, common shiner, creek chub, northern redbelly dace) and the nonnative golden shiner. Biologists studying the pond in 1969 noted that it could produce outstanding brook trout fishing if competing fishes were reduced or eliminated. Much of Little Moose Pond is shallow and weed choked in summer. A narrow band of deep water along the eastern shoreline can reach 16 deep, but the mean depth of the pond is just under 3 feet. The ALSC measured a pH of 7.5 and an ANC of 237 $\mu\text{eq/l}$. Deciduous woods and shrubs make up most of the shoreline. Muck dominates the substrate. ALSC staff noted good spawning habitat for brook trout in the outlet of Little Moose Lake.

Little Moose Lake will be managed as an Adirondack brook trout pond to preserve its native species in the presence of nonnative fishes. Public access to Little Moose Pond is not currently allowed, but CP-3 access is proposed in this plan and would be permitted as of 2007. Little Moose Lake will be surveyed and assessed for future management options when it becomes publicly accessible.

Management Class: Adirondack Brook Trout

Lost Pond (B-P887)

Getting lost must have been a frequent occurrence in the Moose River Plains, because there are three ponds with that name in the unit. Lost Pond P887 (11 acres) truly deserves its moniker for it lies 6.9 miles east of the Otter Brook bridge crossing south of Icehouse Pond. A former road paralleling Otter Brook and the boundary of the West Canada Wilderness can be followed almost to P887. Lost Pond is the headwater to Otter Brook and is located within wetlands south of Manbury Mountain. The only existing survey data for the pond was collected by the ALSC in 1984. Their netting found a brook trout monoculture. Hatchery records show that brook trout were stocked from 1956 to 1969 in Lost Pond, so although the fish caught in 1984 were wild, they cannot be considered heritage strain brook trout. P887 is shallow, averaging only two feet deep with a maximum depth of four feet. Much of its shoreline is wetland or low shrub. Muck comprises the entire substrate. The pond had a pH of 5.15 in August 1984 with an ANC of 4 $\mu\text{eq/l}$. The darkly stained waters of Lost Pond have a flushing rate of 38 times/year.

Lost Pond P887 will be managed as an Adirondack brook trout pond to preserve its native fish community. Due to surrounding wetlands it appears doubtful that Lost Pond can be reclaimed. The pond's high flushing rate disqualifies it for liming under FEIS criteria.

Management Class: Adirondack Brook Trout

Lost Ponds (B-P878 and P879)

The two other Lost Ponds in the MRPWF (total 18 acres) are numbered separately, but every survey of these waters acknowledges that these should be regarded as one lake. When first surveyed in 1960, biologists found a native fish community consisting of brook trout, brown bullhead, white sucker, pumpkinseed and redbelly dace. The last species rarely occurs in Adirondack waters and may have been a misidentification. The Lost Ponds had a reputation for producing large brook trout and surveying staff noted that fishing pressure was heavy. At least one local outfitter specializes in bringing groups of anglers to the Lost Ponds via horse drawn cart before the Limekiln gate opens around Memorial Day. A 1963 netting captured brook trout and white sucker and noted that the trout had been feeding on blacknose dace. The Lost Ponds were reclaimed with rotenone in 1965. A six foot log and rock cribbing barrier dam was constructed on the outlet to prevent reinfestation of undesirable fish species after the reclamation. The reclamation was successful in eliminating all competing fish species, subsequent growth of stocked brook trout was excellent. Surveys done in 1966, 1967 and 1968 and caught only brook trout. A single brown trout amidst many brook trout showed up during 1984 ALSC netting, probably due to stocking error. Fisheries crews netting both waters in 1991 observed large schools of northern redbelly dace in shallow water, but netted only brook trout. Staff noted that the barrier dam was in poor repair and that structure was subsequently rebuilt in 1996. A large hole that developed on one side of the dam, perhaps due to an animal burrow, was repaired in 2005. Survey netting done after the dam repair found that creek chub (NBWI) were now common in the pond along with northern redbelly dace. Fair numbers of brook trout were caught, but most were small. In recent years, there have been complaints that the quality of brook trout fishing is declining in these waters. but most anglers attribute the decline to over fishing. The 2005 survey suggests creek chub are now slowing the growth rate of brook trout.

P878, sometimes called Lost Pond West, is 9 acres in size with a maximum depth of 7 feet, mean depth of 3 feet and a flushing rate of 13.4 times/year. Lost Pond East (P879) is 8 acres in area, with a maximum depth of 24 feet, mean depth of 13 feet and flushes 1.7 times/year. Water chemistry work done in 1991 on Lost Pond East found a pH of 7.4 and an ANC of 17 $\mu\text{eq/l}$. A one mile trail from the main road provides access. This trail is a former logging road and consideration should be given to opening much of this road to handicapped access. This plan recommends improving the road for disabled access to the fish barrier dam location.

The Lost Ponds will be managed as Adirondack brook trout ponds to enhance and restore native fish species. Special regulations may be needed to reduce fishing harvest in these waters. The ponds will be reclaimed Reclamation does not appear necessary within the five year scope of this plan., but if additional fish species accrue to this water to the detriment of the trout population a reclamation will be undertaken. In that event, the Schedule of Implementation in this UMP would be amended.

Management Class: Adirondack Brook Trout

Lower Browns Tract Pond (R-P316)

Lower Browns Tract Pond (164 acres) suffers the dubious distinction of being the first place nonnative smallmouth bass were stocked in the Adirondacks. Biologists studying the pond in 1933 mention that hotel records dating back to 1872 indicate Seth Green (founder of the state hatchery system) stayed in the vicinity while stocking smallmouth bass in Browns Tract Inlet. That historical stocking incident eventually contributed to the demise of many good brook trout fisheries in downstream lakes. Perhaps because of its past history, the pond was intensively studied in 1933. Netting and seining efforts captured nonnative smallmouth bass, yellow perch and banded killifish. Native species caught were pumpkinseed, white sucker, creek chub and cutlips minnow. They noted poor oxygen conditions in the deeper portions of the pond that might otherwise have supported trout based on water temperature. It is interesting to note that they did not capture brown bullhead which were a common species in other large watersheds. By the time of a 1957 survey, however, bullhead were present along with a new nonnative species, the golden shiner. A single brook trout was also captured, along with most of the species listed in 1933. In 1967, a short angling and seining effort added common shiner and tessellated darter to the fish community list. A 1985 ALSC netting effort added nonnative largemouth bass to the known mix amalgam. Angler reports received in the late 1990's indicate that largemouth bass are now the dominant gamefish in the pond. There have been complaints that since the bass have established the once good brown bullhead fishery has vanished. Lower Browns Tract Pond has a maximum depth of 33 feet and a mean depth of 14 feet. Much of the inshore habitat is sand, but about 30% of the shoreline is rock or bedrock. A three acre island adds scenic value to this popular waterbody. A DEC campground with 90 tent/trailer sites is located on the eastern shoreline. The campground has a boat launch, but motors are not allowed on the lake. The water quality of this pond is good with a pH of 7.09 and ANC of 106 µeq/l. Lower Browns Tract Pond lies between Upper Browns Tract Pond and Raquette Lake with no barriers between any of those waters. Accordingly, it is not possible to reclaim this lake.

Lower Browns Tract Pond will be managed as a warmwater fishery to preserve its native fishes in the presence of nonnative species.

Management Class: Warmwater

Lower Mitchell Pond (B-P847) and Upper Mitchell Pond (B-P848)

Lower Mitchell Pond (24 acres) is connected via a short, navigable channel to Upper Mitchell Pond (13 acres). Together, the two waters make an interesting coldwater fishery and managers have generally managed them jointly. They are located about two miles west of the main MRPWF road where it crosses Sumner Brook. A 2-mile, old logging road provides hiking or biking access. File records indicate lake trout were stocked in the Mitchell Ponds from 1900-1910, and Lower Mitchell Pond had a reputation for fair brook trout fishing when first studied in 1954. Biologists found a native fish community consisting of brook trout, white sucker, pumpkinseed and common shiner. Brook trout stocking was recommended. A 1963 survey found the same species and said reclaiming the pond would be easy. Both surveys noted that

crayfish were very numerous in the nets - an unusual occurrence in the Adirondacks. The ponds were reclaimed in September 1966 with a total of 190 gallons of 5% emulsifiable rotenone at a target concentration of 0.5 parts per million. Kokanee salmon and brown trout stocking began in 1967. Post-reclamation nettings done in 1967, 1968 and 1969 caught both species, but also caught white sucker, creek chub and common shiner - indicating that the 1966 treatment was unsuccessful in killing all fish. A 1984 ALSC survey caught both stocked species along with lake trout, creek chub and white sucker in Lower Mitchell Pond. Netting Upper Mitchell Pond revealed northern redbelly dace were part of the fish community. The lake trout caught in 1984 probably originated from a single stocking of that species done in 1976 with the goal of producing fish that could be sampled for DDT levels in future surveys. In 1987, splake stocking was initiated to see how they fared with the kokanee. A 1994 survey caught all three stocked species, but water chemistry work indicated low dissolved oxygen levels below 30 feet. Splake stocking ended in 1996 due to reduced availability of this hybrid species from the hatchery system and relatively few kokanee salmon have been stocked in recent years for the same reason. Staff scouting the pond in 1998 found untreatable wetlands on the outlet of Lower Mitchell Pond, so it is fortunate that nonnative species have not invaded these waters.

Lower Mitchell Pond has a maximum depth of 73 feet and mean depth of 16 feet with a flushing rate of 2.7 times/year. Its counterpart has a maximum depth of 18 feet, mean depth of 7 feet and a flushing rate of 8 times/year. Water chemistry is excellent for ponds in this area of the Adirondacks, their pH ranges from 7.0 to 7.3 and ANC from 108 to 172 $\mu\text{eq/l}$. About 60% of the shoreline of Lower Mitchell Pond is rock ledge with the remainder being sand and muck. Upper Mitchell is mostly muck with some sand and rock habitat.

The Mitchell Ponds will be managed as coldwater fisheries to preserve their native fishes in the presence of historically associated species. This plan proposes to improve the road to Mitchell Ponds for CP-3 access and to construct an accessible water access site.

Management Class: Coldwater

Mohegan Lake (R-P312)

Mohegan Lake (116 acres), with a name inspired by the writings of James Fenimore Cooper, has an interesting local history. An Adirondack great camp, Camp Uncas, borders on the pond. Camp Uncas was constructed by J.P. Morgan and , thus, has undoubtedly been visited by many influential people. The eastern shore of Mohegan Lake is still privately-owned, but the remaining shoreline is in the MRPWF. During the long years of exclusive private ownership, it is known that Mohegan Lake was stocked with a variety of species. When first surveyed in 1933, Mohegan Lake had a mixed community of native and nonnative species. Natives included brook trout, lake trout, longnose sucker, white sucker, blacknose dace and common shiner. The nonnative species captured were smallmouth bass, landlocked Atlantic salmon, and rainbow smelt. A 1984 ALSC survey added brown bullhead and pumpkinseed (both NBWI) and nonnative yellow perch to the fish community list. An experimental landlocked salmon policy began in 1997, but was cancelled in 2001 after netting failed to capture any salmon. That 1991

netting did establish that lake trout now dominate the fish community. White sucker and yellow perch were the only other species caught in 2001, but there are anecdotal reports that smallmouth bass fishing is still adequate. Mohegan Lake has a maximum depth of 58 feet and mean depth of 23 feet. Dissolved oxygen levels are generally good throughout the water column. Lake pH was 6.0, and its ANC was 31 μ eq/l. About 65% of the near shore substrate is sand with the remaining habitat ranging from gravel to bedrock. Vegetation is scarce in the pond. Much of the surrounding shoreline is comprised of deciduous trees with some pines. Public access to Mohegan Lake has been possible, but difficult, for over twenty years. The lake is located 1.7 miles southwest of Sagamore Lake. A dirt road network maintained by DEC leads close to the lake. But, two gates on the road meant to block the public from driving to Lake Kora (private) and to Camp Uncas are sometimes closed and their presence misleads the public into thinking the entire road is privately-owned. This UMP will address these issues. Section IV.D.2.A.6 provides details on proposed ADA and public trail improvements to Mohegan Lake.

Mohegan Lake will be managed as a two story lake to preserve its native species in the presence of nonnative and historically associated species. Since Mohegan Lake is downstream of Lake Kora and a long stream network it cannot be reclaimed.

Management Class: Two Story

Raquette Lake Reservoir (R-P5207 formerly P315A)

An unusual situation exists for Raquette Lake Reservoir. This six acre impoundment lies of state land, but served as the water supply for the village of Raquette Lake until 2005. The village has posted the property in the past to help preserve the pond's water quality. Since P5207 supports a wild brook trout population, some anglers and other potential users of the pond routinely objected to the posting. The reservoir is formed by a 13 foot concrete dam in the course of an unnamed tributary to Raquette Lake. It is located about 0.8 miles down the Sagamore Lodge Road to the south of Rt. 28. When first surveyed in 1955, biologists captured brook trout and brown bullhead. The trout fishing was reported to be good. Brook trout were stocked from 1957-1963., but file notes do not indicate why the stocking was ended. A 1985 ALSC netting found the fish community unchanged from 1995. Raquette Lake Reservoir has a variety of substrates ranging from muck to gravel to bedrock. The pond has a maximum depth of ten feet with a mean depth of 5 feet. P5207 has a pH of 6.61 and an ANC of 67 μ eq/l.

NYS Department of Health regulations forced the Town of Long Lake to abandon the use of Raquette Lake Reservoir as a municipal water supply in 2005. The town has now dug wells close to the reservoir and will continue to use the existing pipelines to the village. Past objections to angling and other day uses are now moot. This plan identifies the availability of public fishing on this pond, however boats will not be permitted as they are really unnecessary due to the small size of the pond and its narrowness. Baitfish use will also be prohibited. It is hoped that such low use standard will help preserve the naturally reproducing brook trout population in the pond.

Vandalism of posting signs at the reservoir is a recurring problem. Some locals have made allegations that “favored” individuals are allowed access for fishing or picnicking while others are chased away. Fisheries recommends that angling be allowed only by permit to be issued by the Town of Raquette Lake. This process would increase public awareness of the need to maintain water quality in the reservoir while responding to the desire by some to have fair access for recreational use to a water on state lands. Boats should not be permitted on this pond, with all angling restricted to shore. Other regulations may be proposed by the Town.

Raquette Lake Reservoir will be managed as an Adirondack brook trout pond to preserve its native fish community.

Management Class: Adirondack Brook Trout

Seventh Lake of the Fulton Chain (B-P787B)

Scenic Seventh Lake (822 acres) is bordered by the village of Inlet and Route 28, but a considerable portion of its northern and eastern shoreline lies in the MRPWF. Private camps abound on the other shores and summer boating use can be heavy. Water levels of the Fulton Chain of Lakes are controlled by the Hudson River-Black River Water Regulating District to help prevent flooding of the Black River in the Tug Hill Plateau area. Biological Survey staff noted in 1931 that thousands of fish were killed in Seventh Lake in 1930 due to stranding after a significant draw down. However, no similar reports were mentioned in a 1954 survey when the average fall draw down was estimated to be 5.5 feet. Survey notes from 1931 indicate nonnative smallmouth bass and lake whitefish were present in the lake along with brook trout, lake trout and unspecified minnow species. Historical stockings of the two salmonids, plus lake whitefish and landlocked Atlantic salmon were reported. Fair fishing for lake trout and brook trout was reported in 1954. Brown bullhead (NBWI), white sucker and longnose sucker were new species netted in 1954, but all three native species were likely present earlier. Biologists noted that nonnative yellow perch were not yet present in Seventh Lake, despite being common in Fifth through First Lake of the Fulton Chain. Their absence was assumed to be due to the large dam on the outlet of contiguous Sixth Lake. Unfortunately, a 1958 survey established that yellow perch had somehow reached the lake and also added pumpkinseed, common shiner, landlocked salmon, nonnative golden shiner and rainbow smelt (nonnative) to the fish community list. Experimental stocking policies for rainbow trout, splake and Seneca strain lake trout were started in the 1960's in an effort to revive the fishery. Surveys done in 1964-1966, 1968-1970, and 1972 established that rainbow trout and splake performed very well, but Seneca strain lake trout were not as successful as Adirondack strain lake trout. These multiple efforts caught only one lake whitefish, which were formerly common in the lake and no longnose sucker. New species found were creek chub (NBWI) and nonnative fallfish. An exhaustive netting effort in 1984 established that lake trout growth rates were slow, leading to dramatic reductions in stocking rates for lake trout and discontinuation of the splake stocking policy. The lake trout minimum size limit was also reduced to 18 inches. Nonnative rock bass was the only new species captured. Despite the 1984 management changes, lake trout growth rates still seem to be poor. and there is rising evidence to suggest that lake trout natural reproduction has

compensated for stocking reductions. A 2003 netting survey confirmed continued slow growth of lake trout and found that 90% of the lake trout caught were of wild origin. Rainbow trout and landlocked salmon growth rates were typical for Adirondack waters. Sportsmen have also complained that rainbow smelt spawning runs have nearly vanished and limited water chemistry work done in lake tributaries in 1998 suggests that springtime acid pulses may be impacting spawning success for this species in some streams. In recent years, sportsmen have been permitted to transfer smelt eggs from other waters to the few streams with adequate pH in an effort to bolster the lake's smelt population. A 2004 review of the Hudson River/Black River Regulating District's rule curve for drawing down Seventh Lake suggests that recent changes requested by the Seventh Lake Association are aggravating survival conditions for spawning smelt. Spring refill times are now later than in the past, meaning smelt have to negotiate shallow sandbars to reach spawning streams. A later fall drawdown start may have negative impacts on lake trout reproduction in the future. The lake association, HRBRRD, and the Town of Inlet have been informed of DEC concerns. Sportsmen have requested DEC Fisheries to consider stocking cisco as a forage fish for lake trout in lieu of the faltering smelt population and this may be done within the five year scope of this plan

Seventh Lake has several large islands and is accessible via a DEC boat launch site on its south shore. The launch site was mistakenly depicted as being on wild forest lands in recent APA State Land Maps. However, APA staff have acknowledged that the site should be classified as Intensive Use. Accordingly, Fisheries is proposing improvements that will include a new concrete launch ramp, parking lot paving, rehabilitation of the public restrooms, and dredging off the ramp. Cost estimates and official plans for this site were not available at the time of this writing. Seventh Lake has a maximum depth of 85 feet and mean depth of 39 feet with good dissolved oxygen conditions throughout the water column. Its pH in 1984 was 7.3 with an ANC of 158 $\mu\text{eq/l}$.

Seventh Lake will be managed as a two story fishery to preserve its native fishes in the presence of nonnative and historically associated species. A comprehensive management survey will be conducted during the five year scope of this plan.

Management Class: Two Story

Sixth Lake of the Fulton Chain (B-P787A)

Sixth Lake (108 acres) of the Fulton Chain is contiguous with Seventh Lake; a wide navigable channel connects the two waters. Most of this lake is surrounded by private camps, but there is a limited section of state land on the north shore. The fish community history of Sixth Lake is identical to Seventh Lake, except that Sixth Lake has slightly more recent data. A 1986 ALSC survey captured the following native species: lake trout, bluntnose minnow, white sucker, brown bullhead and pumpkinseed. Nonnative species were: splake, golden shiner, fallfish, rock bass, smallmouth bass and yellow perch. Rainbow trout stocking has occurred for years in the lake and recent stockings of landlocked Atlantic salmon and brown trout in Seventh Lake doubtless frequent Sixth's waters. Sixth Lake had a pH of 7.2 and an ANC of 167 $\mu\text{eq/l}$ in 1986 with adequate dissolved oxygen levels at all depths. The lake has a maximum depth of 38 feet and

mean depth near 13 feet. Sand comprises about 50% of the inshore habitat, with gravel, boulder and bedrock common in some areas. A large concrete dam on the outlet of Sixth Lake is controlled by the Hudson River/Black River Water Regulating District. The district normally releases water in the fall, lowering lake levels about six feet.

Sixth Lake will be managed as a two story fishery to preserve its native fishes in the presence of nonnative and historically associated species. A comprehensive management survey will be conducted during the five year scope of this plan.

Management Class: Two Story

Sly Pond (B-P888)

Visitors who make the steep climb to Sly Pond (21 acres) often comment on its scenic qualities, but anglers will be disappointed to find the fishing does not match the view. Sly Pond lies on the western flank of Little Moose Mountain and is accessible via a marked, 5.4 mile trail. The last mile of trail is challenging, adding 800 feet to the total climb. This high elevation water (2871 feet) was stocked with brook trout from 1950-1965 and the species reportedly survived to produce good fishing. However, when Sly Pond was first surveyed in 1965 no fish were caught and the policy was canceled. Surveys done in 1979 and 1984 had the same fishless result. Sly Pond has clear water and a variety of substrate types ranging from muck to boulder. Maximum depth of the pond is 28 feet, but the mean depth is only 4 feet. A heavy vegetative mat can cover the pond bottom during the summer. Sly Pond has a flushing rate of 9.8 times/year, making it ineligible for liming. Pond pH was 4.4 and ANC was -40 µeq/l in 1984.

Sly Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Other

Squaw Lake (B-P850)

Squaw Lake (97 acres) is a pristine Adirondack brook trout lake with an entirely native fish community despite relatively easy public access. A short, 1,300 foot trail from the Indian Lake road (south of S. Br. Moose River) provides access. Squaw Lake is a popular float plane destination for anglers prior to the traditional Memorial Day opening of the MRPWF gates at Limekiln/Inlet. The lake was first surveyed in 1954, although brook trout stocking began in 1942. Biologists noted the lakes reputation for producing large brook trout. They captured only brookies and white sucker. A 1963 effort caught the same species. Nettings done in 1975 by DEC and in 1984 by ALSC added creek chub, a native minnow, to the species list. The white suckers in Squaw Lake are of the "dwarf" variety. They seldom exceed 12 inches in length and spawn in late June or early July. At one time, researchers felt these characteristics were sufficient to label dwarf suckers as a subspecies. However, when dwarf suckers are transplanted to other waters they can reach larger sizes and will spawn in the spring. The small size of suckers in Squaw Lake is probably due to the lake's sterility combined with a high density sucker population - they are stunted in growth. A 1998 pre-reclamation survey of Squaw Lake

found a natural barrier on its outlet to Beaver Lake and determined that the lakes wetlands and tributaries were treatable. Squaw Lake has relatively sterile water, the ALSC found a pH of 6.0 and an ANC of 14 $\mu\text{eq/l}$. The lake has a maximum depth of 22 feet, mean depth of 11 feet, and flushing rate of 1.3 times/year. Squaw Lake is a scenic pond with several small cliffs and ledges, rocky islands and shoals on the south end, and a small sandy beach.

Squaw Lake will be managed as an Adirondack brook trout pond to enhance and restore its native fish community. Reclamation and liming do not appear necessary within the five year scope of this unit management plan. However, if nonnative fishes or deteriorating water quality threaten the native fish community, the Schedule of Implementation in this UMP will be amended and the pond will be limed or reclaimed as necessary.

Management Class: Adirondack Brook Trout

Trout Pond (B-P793)

Trout Pond (9 acres) is an auspicious name for a remote Adirondack pond, but this is one water that has never lived up to its moniker. It can be reached by hiking about 1.0 miles down the old Uncas Road opposite the Eighth Lake campground to a point where the outlet of the pond crosses the trail. A 0.6 mile bushwhack south from that crossing that then follows the outlet stream leads you to the pond. Trout Pond was not studied in 1931. Biologists surveying the pond in 1965 caught no fish, but thought the pond's pH (5.5) and other water quality characteristics could support trout. Brook trout were stocked from 1966 to 1981, when a netting evaluation again caught no fish. Dan Josephson of Cornell University studied the pond in 1983 and found a pH of 4.4. He recommended liming the pond, which was done later that same year using 5 tons of agricultural limestone. Trout Pond quickly reacidified after the liming and trout survival was poor. Trout Pond has a maximum depth of 24 feet and mean depth of 4 feet. The pond has no inlets, but does have an outlet that eventually connects to Seventh Lake Inlet. Muck comprises much of the substrate and there are extensive beds of emergent aquatic vegetation along the shoreline.

Trout Pond will be managed to preserve its aquatic community for its intrinsic value. The ponds high flushing rate exceeds criteria specified in the Liming FEIS.

Management Class: Other

Unnamed Pond (B-P5525)

A 1.5 acre pond located less than 50 feet downstream of High Rock Pond (B-P791). P5525 is probably a beaver impoundment. The pond has never been surveyed., but it is likely to be acidic and fishless like High Rock Pond just upstream. A 2 mile hike and bushwhack along the old Uncas Road starting just opposite the Eighth Lake campground entrance is necessary to reach this pond. Recent brook trout stocking efforts in High Rock Pond may have established that species in this unnamed water.

Unnamed Pond B-P5525 will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

Unnamed Pond (B-P792)

Unnamed Pond B-P792 seems to fluctuate considerably in size depending upon beaver activity and recent meteorological conditions. Older maps show a pond of around two acres in size, while the newer metric maps indicate a pond of nine acres. P792 is located 1.9 miles down the old Uncas Road (now a snowmobile trail) to the east of the Eighth Lake campground entrance. The pond was not visited during the 1931 Biological Survey. Biologists netting the pond in 1965 declared it to be too shallow and warm to support trout. They did not capture or observe any fish during that effort. ALSC records indicate this pond was treated with 4.6 tons of agricultural limestone by Cornell University in 1983, but no other records are available regarding this project. The pond was studied by ALSC in 1985. They captured no fish and noted a pH of 5.2 and an ANC of 7 $\mu\text{eq/l}$. No thermocline was present during the July 1985 ALSC sampling. Unnamed Pond P792 has a maximum depth of 5 feet, mean depth of 3 feet and flushing rate of 22 times/year. With such a high flushing rate, it is not surprising that ALSC data indicates the pond reacidified quickly after the 1983 liming. Wetland comprises much of the shoreline. P792 is the headwater for Seventh Lake Inlet.

Unnamed Pond B-P792 will be managed to preserve the aquatic community present for its intrinsic value.

Management Class: Other

Unnamed Pond (B-P851)

This small, 1.7 acre, pond is located in the midst of a large wetland about 0.4 miles south of Squaw Lake. The pond was ignored until 1985 when the ALSC found good water chemistry conditions, but caught no fish. Although sphagnum surrounds this pond, its pH was 6.7 and its ANC was 48 $\mu\text{eq/l}$. Maximum depth of the pond is 14 feet with a mean depth of 3 feet and flushing rate of 43.6 times/year. Favorable chemical conditions prompted an experimental brook trout stocking policy beginning in 1991. Evaluation of that policy done in 1995 indicated good brook trout survival and growth. The large wetland surrounding this pond precludes reclamation or liming. As of this writing, this pond remains a brook trout monoculture. Local anglers have begun to call this waterbody Oil Slick Pond after its exceptionally dark water.

Unnamed Pond B-P851 will be managed as an Adirondack brook trout pond to preserve its native fish community for its intrinsic value.

Management Class: Adirondack Brook Trout

Unnamed Pond (B-P5526)

A 2 acre beaver impoundment in the course of Third Lake Creek. The pond is located about 0.4 miles southeast of the road terminus at Third Lake Swamp. P5526 has never been surveyed.

P5526 will be managed to preserve the aquatic community present for its intrinsic value.

Management Class: Unknown

Unnamed Ponds (B-P5529, P5530, P5531)

These three waters all lie in the course of Limekiln Creek in the first mile downstream of the outlet of Limekiln Lake. P5529 (2.9 acres), P5530 (2.3 acres) and P5531 (5 acres) have never been surveyed. They are best accessed by hiking down the outlet from the lake. All three are likely beaver impoundments that vary in size and depth depending upon recent dam building endeavors. Nonnative yellow perch from Limekiln Lake may be present.

These three ponds will be managed to preserve their aquatic communities for their intrinsic value.

Management Class: Unknown

Unnamed Ponds (B-P5532, P5533)

P5532 (0.7 acres) and P5533 (1.5 acres) are headwaters for tributary 7 of Limekiln Lake. As the crow flies, they lie 0.7 miles southwest of Limekiln Lake. Both are beaver ponds that appeared larger on old maps. Recent metric maps show smaller surface areas. A 2.5 mile trail from the road into Beaverdam Pond provides access. Neither water has ever been surveyed.

These two ponds will be managed to preserve their aquatic communities for their intrinsic value.

Management Class: Unknown

Unnamed Pond (B-P5548, P5551)

P5548 (4.2 acres) is a beaver impoundment within the Red River located about 1.1 miles west of the Mitchell Ponds. The pond has never been surveyed. A 0.8 mile bushwhack southeast of the Rockdam Road is required to access the pond. P5551 is a rather large impoundment (8.2 acres) on the Mitchell Ponds outlet (trib 6 of Red River). P5551 has also never been surveyed. A 0.8 mile bushwhack from Lower Mitchell Pond would be required to reach this pond. Extensive wetlands surround much of the pond's shore.

P5548 and P5551 will be managed to preserve their aquatic communities for their intrinsic value.

Management Class: Unknown

Unnamed Ponds (B-P5549, P5550, P5552, P5553, P5555, P5652)

All of these waters were numbered ponds appearing on the Biological Survey maps, but no longer appear on more recent metric maps. Most were ephemeral beaver impoundments on various streams. In some cases, helicopter overflights have confirmed the disappearance of these waters. It is likely that beavers may resurrect these ponds in the future. None were ever surveyed.

Management Class: Unknown

Unnamed Pond (B-P5554)

P5554 (2.2 acres), unlike most of the unnamed ponds in this unit, may have some trout management potential. It is located halfway up the south slope of Fawn Lake Mountain and is the headwater for a small tributary to Limekiln Lake. A bushwhack of 0.6 miles from the Limekiln Road would be required to reach the pond. Inspection of the metric map indicates a potential natural barrier on the outlet and no evidence of wetlands surrounding the pond. P5554 has never been surveyed, but does appear on older maps.

P5554 will be surveyed during the five year course of this UMP. If water conditions merit a trial, an experimental brook trout policy may be initiated in this pond.

Management Class: Unknown

Unnamed Pond (B-P5559)

P5559 appears as a 0.5 acre pond on recent metric maps. It lies in the course of a tributary to the Red River about 0.7 mile north of the Limekiln/Cedar Road intersection. Older maps indicate a larger pond of around 2.2 acres was formerly present. It is likely that P5559 is an old beaver impoundment. The pond has never been surveyed.

P5559 will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

Unnamed Ponds (B-P5560 and P5561)

P5560 (1.6 acres) is located on a tributary of the Red River about 0.8 miles northeast of the intersection of the Limekiln and Cedar River roads. This unnamed water has never been surveyed and is likely an old beaver impoundment. Access is possible by hiking 0.9 miles up the old Bear Pond Road followed by a 0.2 mile bushwhack to the west. More recent metric maps indicate the pond is half the size indicated on the BioSurvey overlay.

P5561 (3.9 acres) lies about 0.3 miles upstream of P5560. It also has never been surveyed. The old Bear Pond Road approaches within 300 feet of the pond about 1.3 miles north of the Cedar River Road.

These two ponds will be managed to preserve their aquatic communities for their intrinsic value.

Management Class: Unknown

Unnamed Pond (B-P5562)

P5562 is a 2-acre impoundment in the course of a tributary to the Red River. It is located about 0.8 miles north of the Mitchell Ponds and is only 200 feet south of the Limekiln Road. Metric maps show it to be half the size indicated on the Biosurvey map. Beaver activity explains the change in area. This pond has not been surveyed.

P5562 will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

Unnamed Ponds (B-P825, P5555)

P825 (6.2 acres) lies at the head of a huge wetland complex called Limekiln Swamp. It is located about 0.3 miles west of the Limekiln DEC campgrounds. Trails circle around the wetlands surrounding this pond. No survey work has been done on this water. The complex drains eventually to Limekiln Brook.

P5555 (0.6 acres) is located about 0.75 miles downstream of P825. This pond is likely a beaver impoundment and has never been surveyed. P5555 is accessible by hiking 1.7 miles west of the campgrounds along the trail system leading eventually to Third Lake.

P825 will receive a chemical survey and be netted if water depths are sufficient to assess its aquatic community. If pH levels are above 6.0 and weedy habitat is available, stocking of largemouth bass may be considered for this pond.

Management Class: Unknown

Unnamed Pond (P5565)

Now only 0.2 acres in size, P5565 was once about an acre larger. It is located just north of the Otter Brook Road about 2000 feet east of the bridge over the South Branch Moose River. No survey work has been done on this water. Wetlands now surround this former beaver pond.

P5565 will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

Unnamed Pond (B-P5613)

P5613 (5.5 acres) is the headwater for a tributary to the South Branch Moose River. The pond is located about 0.8 miles west of Sly Pond as the crow flies. A 0.2 mile bushwhack south of the trail to Sly is necessary to reach the pond. The pond appears nearly twice as large on recent

metric maps as compared to the Biosurvey map. Plus, an unnumbered pond roughly three acres in size is just downstream. Nearly a dozen smaller ponds appear further down on this stream. Beaver activity likely accounts for all the new water. None of the ponds have been surveyed.

P5613 and other ponds in this complex will be managed to preserve their aquatic communities for their intrinsic value.

Management Class: Unknown

Unnamed Pond (R-P5206)

A 1.2-acre, former backwater of Raquette Lake. This small wetland/pond is now cutoff from Raquette Lake by Route 28. It is located near Otter Bay, just east and south of the village of Raquette Lake. The pond has never been surveyed. It is readily visible from Route 28. Bog mats and wetland vegetation comprise the shoreline and the pond appears to be shallow. If its water interchanges with Raquette Lake under Route 28, P5206 may serve as an spawning/nursery area for some fish species.

P5206 will be managed to preserve the aquatic community present for its intrinsic value.

Management Class: Unknown

Unnamed Pond (R-P5208)

P5208 (1.7 acres) is a side channel of South Inlet. It is located about 0.8 miles downstream of the Sagamore Road bridge crossing near the outlet of Sagamore Lake. The pond has never been surveyed. Its fish community likely resembles the South Inlet, so brook trout may be present along with a variety of native and nonnative fish species.

This unnamed pond will be managed to preserve the aquatic community present for its intrinsic value.

Management Class: Unknown

Unnamed Pond (R-P5215)

A small pond of 1.4 acres located on a tributary to Mohegan Lake. This pond has never been surveyed. It is located only 700 feet from the larger lake in a low gradient area. A slightly longer hike of 800 feet is necessary to reach the pond from the Bear Pond road.

P5215 will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

Unnamed Pond (UH-P668A)

UH-P668A (2.3 acres) is located near the headwaters of Wilson Brook which feeds into the

south end of Cedar River Flow. Older maps do not show a pond in this vicinity, the Biosurvey topographic map has only P668A, while modern metric maps indicate three ponds in the area, one of which is 7.5 acres in size. Clearly, beavers are at work in this system and all these ponds are ephemeral in nature. No survey work has been done in this area. The ponds are located about 1.0 mile upstream from Cedar River Flow.

P668A and its neighbors (none with P numbers), will be managed to preserve their aquatic communities for their intrinsic value.

Management Class: Unknown

Wakely Pond (UH-P666)

Wakely Pond (37 acres) lies on the far eastern edge of the Moose River Plains. It abuts the Cedar River Road and thus is one of the most accessible ponds in the unit. This Adirondack brook trout water was first surveyed in 1956 when it was still privately owned. However, comments appearing on the old survey forms indicate trout had been diverted there from time to time in the past. The 1956 survey caught brook trout, white sucker and brown bullhead (NBWI). Biologists noted spring holes and recommended brook trout stocking if posting problems ended. By 1970, the pond was opened to public fishing and was reassessed for stocking. Netting efforts caught the three former native species, plus creek chub, common shiner and nonnative golden shiner. Only a few brook trout were captured, while white sucker proved to be abundant. Complaints of poor trout fishing spurred a 1998 survey of Wakely Pond. That effort added fathead minnow and nonnative banded killifish to the fish community list. Golden shiner dominated the netting catch. Other minnow species were also common and brook trout averaged less than nine inches in size. In an effort to reduce interspecific competition from the various minnow species, brown trout and brook trout have been jointly stocked since 2000. A 2005 survey captured brown trout, brown bullhead and white sucker. This survey was done during a severe hot spell. Water temperature as 75 degrees even in the deepest water. Any brook trout were likely at spring holes or in tributaries. Wakely Pond has a maximum depth of nine feet and an estimated mean depth of five feet. Much of the pond bottom is muck with some sand and limited areas of bedrock. Its water quality is good with a pH of 6.93 and ANC of 81 µeq/l in 1998. Dissolved oxygen levels were good throughout the water column. Wakely Pond's 900 foot outlet drains directly to the Cedar River. Fisheries staff walking the outlet in 1998 could find no suitable location for a fish barrier dam. Thus, Wakely Pond cannot be reclaimed to stave off the encroaching impacts of nonnative fish species introductions.

Wakely Pond will be managed as an Adirondack brook trout pond to preserve its native species in the presence of nonnative and historically associated species. This management plan proposes constructing an accessible trail and fishing platform as well as an accessible canoe launch on Wakely Pond.

Management Class: Adirondack Brook Trout

White Pond (B-P5543), Kettle Pond (B-P841), Unnamed Ponds (B-P846,P842, P840, P5540, P5541, P5538)

White Pond (21 acres) is the headwater for this complex of small ponds ranging from Kettle Pond (7 acres) to 0.5 acre B-P842. All of these waters are in the Lost Brook drainage and none have ever been surveyed. White Pond is accessible via a 1.5 mile trail beginning on the south shore of Limekiln Lake. The various waters are spread out within the southwestern corner of the Moose River Plains in an extensive area of low wetlands. More recent metric maps show many other unnumbered, small beaver ponds in the vicinity.

White Pond and Kettle Pond will be surveyed within the five year context of this plan to assess their fish management potential. The other seven waters in this complex will be managed to preserve their aquatic communities for their intrinsic value.

Management Class: Unknown

APPENDIX 6

CLASSIFICATION OF COMMON ADIRONDACK UPLAND FISH FAUNA

Appendix 6 – Classification of Common Adirondack Upland Fish Fauna

Classification of Common Adirondack Upland Fish Fauna Into Native, Nonnative, and Native But Widely Introduced
Adapted from George, 1980

Native To Adirondack Upland		
blacknose dace	redbreast sunfish	slimy sculpin
white sucker	finescale dace	lake chub
longnose sucker	creek chubsucker	common shiner
northern redbelly dace	longnose dace	round whitefish
Native Species Widely Introduced within the Adirondack Upland ⁴		
brook trout	pumpkinseed	lake trout
brown bullhead	cisco	creek chub
Nonnative to Adirondack Upland		
golden shiner	northern pike	Atlantic salmon
chain pickerel	rock bass	walleye
largemouth bass	bluntnose minnow ⁵	central mudminnow
brown trout	pearl dace	redhorse suckers (spp.)
Splake	smallmouth bass	black crappie
rainbow smelt	fathead minnow	banded killifish ⁶
bluegill	rainbow trout	Johnny darter

⁴ These native fishes are known to have been widely distributed throughout Adirondack uplands by DEC, bait bucket introduction, and unauthorized stocking. This means that their presence does not necessarily indicate endemism. Other species listed above as native have been moved from water to water in the Adirondack Upland, but the historical record is less distinct.

⁵ Not mentioned by Mather (1884) from Adirondack collections, widely used as bait.

⁶ Early collections strongly suggest dispersal as a bait form.

APPENDIX 7

CAMPSITE ASSESSMENT AND MONITORING FORMS AND PROCEDURES

CAMPSITE MONITORING FORM A

1)Old Site Number:_____ 1a) New Site Number_____

2) Inventoried By:_____ 3)Date:____/____/____

INVENTORY PARAMETERS

4) Substrate of site area: (B=bedrock C=cobble S=sand O=soil) _____

5) Number of Other Recreational Sites Visible: _____

6) Fire Ring Present: (y or n) _____

Construction:(stone or metal) _____

Condition: (1=good, 2=poor, 3=replace) _____

7) Privy Present:(y or n) _____

Condition: (1= good, 2=poor, 3=replace) _____

8) Picnic Table Present: (y or n) _____

Condition: (1=good, 2=poor, 3=replace) _____

9) Tree Canopy Cover:(1=0-25%,2=26-50%,3=51-75%,4=76-100%) _____

IMPACT PARAMETERS (Begin with Site Boundary Determination)

10) Condition Class: (3,4 or 5) _____

11) Vegetative Ground Cover Onsite:(Use categories below) _____
(1=0-5%, 2=6-25%, 4=51-75% 5=76-95%, 6=96-100%)

12) Vegetative Ground Cover Offsite:(Use categories above) _____

13) Soil exposure: (use categories above) _____

14) Tree Damage: None/Slight____, Moderate____, Severe_____

15) Root Exposure: None/Slight____, Moderate____, Severe_____

16) Number of Tree Stumps: _____

17) Number of Trails: _____

18) Number of Fire Sites: _____

19) Litter/Trash: (N=None, S=Some, M=Much) _____

20) Human Waste: (N=none, S=Some, M=Much) _____

21)Comments/Recommendations:_____

22) Take Center point and Site Photographs:

Site Center point References

- 1)
- 2)
- 3)
- 4)

Satellite Site Dimensions

Transect Data

Azimuth Distance (ft)

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)
- 7)
- 8)
- 9)
- 10)
- 11)
- 12)
- 13)
- 14)
- 15)
- 16)
- 17)
- 18)
- 19)
- 20)
- 21)
- 22)
- 23)
- 24)
- 25)

Island Site Dimensions

Site area from Program: _____
+Satellite Area _____
-Island Area _____ =
Total Site Area _____ (sq ft)

MONITORING FORM B

1) Old Site Number: _____ 1a) New Site Number: _____

2) Fire Ring Present: _____ Condition: _____.

3) Privy Present: _____ Condition: _____

4) Picnic Table Present: _____ Condition: _____

5) Condition Class (1 or 2) _____ Site Size: _____ (ft²)

DESIGNATED CAMPSITE MONITORING MANUAL

DESCRIPTION OF PROCEDURES

FEBRUARY 2001

For the purpose of this manual, designated campsites are defined as those areas either designated by the Department with a yellow DEC designated campsite marker, or shown on an area brochure. In areas with multiple sites there may not always be undisturbed areas separating sites, and an arbitrary decision may be necessary to define separate sites. For each site, monitoring begins with an assessment of Condition Class:

CONDITION CLASS DEFINITIONS

Class 1: Recreation site barely distinguishable; slight loss of vegetation cover and/ or minimal disturbance of organic litter.

Class 2: Recreation site obvious; vegetation cover lost and/ or organic litter pulverized in primary use area.

Class 3: Vegetation cover lost and/ or organic litter pulverized on much of the site, some bare soil exposed in primary use areas.

Class 4: Nearly complete or total loss of vegetation cover and organic litter, bare soil widespread.

Class 5: Soil erosion obvious, as indicated by exposed tree roots and rocks and/or gullying.

For sites rated Condition Class 1 or 2, complete Form B; for sites rated Class 3, 4 or 5, complete Form A. Form B is an abbreviated version of Form A and greatly reduces the amount of field time. The rationale for this approach is that detailed information on lightly impacted sites is not as critical to management.

During subsequent surveys an attempt should be made to relocate and reassess all sites from the proceeding survey. Former designated sites that have been closed, and are still being used, should be noted as illegal sites. Always note information regarding the history of site use under the comment parameter.

Materials: Compass, peephole or mirror type(not corrected for declination)
GPS data recorder (GPS point will be taken at each sites center point)
Tape measure, 100-foot (marked in tenths)
Flagged wire pins (25 min), one large steel center point stake.
Digital camera
Clipboard, pencil, field forms, field procedures
Steel nails (5 inch)

Form A Procedures

Inventory Parameters

1. Site Number: All sites will be assigned an old site number as well as a new site number. Old site numbers will use the existing site numbering system, while new site numbers will be assigned following completion of the mapping of all sites.
2. Inventoried By: List the names of field personnel involved in data collection.
3. Date: Month, day and year the site was evaluated (e.g., June 12, 1999 = 06/12/99)
4. Substrate of site area: Record the predominant substrate for the area of human disturbance for each site using the coded categories below.
B=bedrock - shelf bedrock
C=cobble - includes gravel size stone and up
S=sand - includes sandy soils that do not form a surface crust in trampled areas
O=soil - includes clays to loamy sands
5. Number of other sites visible: Record the number of other campsites, which if occupied, would be visible from this site.
6. Fire ring : if present or not (y or n)
 - a. Construction: stone/ masonry or metal
 - b. Condition: good=intact, functional for cooking
Poor= missing stones, broken , not functional for cooking but will contain open fire.
7. Privy: if present or not (y or n)
 - a. Condition: good= functional, has door, wood not deteriorated(would you use it?)
Poor= nonfunctional, door missing, wood rotten,
8. Picnic table: if present or not (y or n)
 - a. Condition: good= usable, no broken boards, table is solid
Poor=not usable, broken/rotten boards, not sturdy
9. Tree canopy cover: Estimate the percentage of tree canopy cover directly over the campsite.
1=0-25%, 2=26-50%, 3=51-75%, 4=76-100%

Impact Parameters

The first step is to establish the sites boundaries and measure its size. The following procedures describe use of the variable radial transect method for determining the sizes of recreational sites. This is accomplished by measuring the lengths of linear transects from a permanently defined center point to the recreation site boundary.

Step 1. Identify Recreation Site Boundaries and Flag Transect Endpoints. Walk the recreation site boundary and place flagged wire pins at locations which, when connected with straight lines, will define a polygon whose area approximates the recreation site area. Use as few pins as necessary, typical sites can be adequately flagged with 10-15 pins. Look both directions along site boundaries as you place the flags and try to balance areas of the site that fall outside the lines with offsite(undisturbed) areas that fall inside the lines. Pins do not have to be placed on the site boundaries, as demonstrated in the diagram following these procedures. Project site boundaries straight across areas where trails enter the site. Identify site boundaries by pronounced changes in vegetation cover, vegetation height/disturbance, vegetation composition, surface organic litter, and topography. Many sites with dense forest over stories will have very little vegetation and it will be necessary to identify boundaries by examining changes in organic litter, i.e. leaves that are untrampled and intact versus leaves that are pulverized or absent. In defining the site

boundaries, be careful to include only those areas that appear to have been disturbed from human trampling. Natural factors such as dense shade and flooding can create areas lacking vegetative cover. Do not include these areas if they appear “natural” to you. When in doubt, it may also be helpful to speculate on which areas typical visitors might use based on factors such as slope or rockiness.

Step 2. Select and Reference Site Center point. Select a site center point that is preferably a) visible from all site boundary pins, b) easily referenced by distinctive permanent features such as larger trees or boulders, and c) approximately 5 feet from a steel fire ring if present. Embed a 5 inch nail in the soil at the center point location so that the head is 3-4 inches below the surface. During future sight assessments a magnetic pin locator can be used to locate the center point. Next, insert a large steel stake at the center point and reference it to at least three features. Try to select reference features in three opposing directions, as this will enable future workers to triangulate the center point location. For each feature, take a compass azimuth reading and measure the distance (nearest 1/10 foot) from the center point to the center of trees or the highest point of boulders. Also measure the approximate diameter of reference trees at 4.5 feet above ground (dbh). Be extremely careful in taking these azimuths and measurements, as they are critical to relocating the center point in the future. Record this information on the back of the form.

Take a digital photograph that clearly shows the center point location in relation to nearby trees or other reference features, such as the fire ring, trees or boulders. Record a photo description, such as” center point location site 23 “, in the photo log.

Options: Some sites may lack the necessary permanent reference features enabling the center point to be accurately relocated. If only one or two permanent reference features are available, use these and take additional photographs from several angles. If permanent features are unavailable, simply proceed with the remaining steps without permanently referencing the center point. This option will introduce more error in comparisons with future measurements, particularly if the site boundaries are not pronounced. Note your actions regarding use of these options in the comment section.

Step 3. Record Transect Azimuths and Lengths. Standing directly over the center point, identify and record the compass bearing(azimuth) of each site boundary pin working in a clockwise direction, starting with the first pin clockwise of north. Be careful not to miss any pins hidden behind vegetation or trees. Be extremely careful in identifying the correct compass bearings to these pins as error in these bearings will bias current and future measurements of site size. Next, anchor the end of your tape to the center point stake, measure and record the length of each transect(nearest 1/10 foot), starting with the same boundary pin and in the same clockwise direction as before. Be absolutely certain that the appropriate pin distances are recorded adjacent to their respective compass bearing.

Step 4. Measure island and satellite areas. Identify any undisturbed islands of vegetation inside the site boundaries (often due to the clumping of trees and shrubs) and disturbed satellite use areas outside the site boundaries (often due to tent sites or cooking sites). Use site boundary

definitions for determining the boundaries of these areas. Use the geographic figure method to determine the areas of these islands and satellites (refer to the diagrams following these procedures). This method involves superimposing one or more imaginary geometric figures (rectangles, circles or right triangles) on island or satellite boundaries and measuring appropriate dimensions to calculate their areas. Record the types of figures used and their dimensions on the back of the form; the size of these areas should be computed in the office using a calculator.

Site Remeasurement: During site remeasurement use the data from the last monitoring period to reestablish the center point and all site boundary pins. If steel nails were embedded in the ground, a magnetic pin locator can assist in this process. Place flagged wire pins at each transect boundary point. Boundary locations based on the following procedures:

1. Keep the same transect length if that length still seems appropriate, i.e., there is no compelling reason to alter the initial boundary determination.
2. Record a new transect length if the prior length is inappropriate ,i.e., there is compelling evidence that the present boundary does not coincide with the pin and the pin should be relocated either closer to or further away from the center point along the prescribed compass bearing. Use different colored flags to distinguish these current boundary points from the former boundaries.
3. Repeat steps 1 and 3 from above to establish additional transects where necessary to accommodate any changes in the shape of recreation site boundaries (diagram below). Also repeat step 4.
4. Leave all pins in place until all procedures are completed. Pins identifying the former site boundaries are necessary for tree damage and root exposure assessments.

These additional procedures are designed to eliminate much of the measurement error associated with different individuals making subjective judgements on those sites or portions of sites where boundaries are not pronounced. These procedures may only be used for sites whose center points can be relocated.

Site Number / Site Name		_____ / _____														
Compass Bearing:																
<input checked="" type="checkbox"/>	0	22	45	67	90	112	135	157	180	202	225	247	270	292	315	337
X																
O																
Campsite Map:																

10. Condition class: Record the condition class you assessed for the site using the categories described earlier.

11. Vegetative ground cover on site: An estimate of the percentage of **live non-woody** vegetative ground cover (including herbs, grasses, and mosses and excluding tree seedlings, saplings, and shrubs) within the flagged campsite boundary using the coded categories listed next. Include any disturbed satellite use areas and exclude any undisturbed Island areas of vegetation. For this and the following two parameters, it is often helpful to narrow your decision to two categories and concentrate on the boundary that separates them. For example, if the vegetation cover is either category 2 (6-25%) or category 3 (26-50%), you can simplify your decision by focusing on whether vegetative cover is greater than 25%.

1=0-5%, 2=6-25%, 3=26-50%, 4=51-75%, 5=76-95%, 6=96-100%

12. Vegetative ground cover offsite: An estimate of the percentage of vegetative ground cover in an adjacent but largely undisturbed “control” area. Use the codes and categories listed earlier. The control site should be similar to the campsite in slope, tree canopy cover (amount of sunlight penetrating to the forest floor), and other environmental conditions. The intent is to locate an area that would closely resemble the campsite area had the site never been used. In instances where you cannot decide between two categories, select the category with less vegetative cover. The rationale for this is simply that, all other factors being equal, the first campers would have selected a site with the least amount of vegetation cover.

13. Soil exposure: An estimate of the percentage of soil exposure, defined as ground with very little or no organic litter (partially decomposed leaf, needle, or twig litter) or vegetation cover, within the campsite boundaries and satellite areas. Dark organic soil, which typically covers lighter colored mineral soil, should be assessed as bare soil. Assessments of soil exposure may be difficult when organic litter becomes highly decomposed and forms a patchwork with areas of bare soil. If patches of organic material are relatively thin and few in number, the entire area should be assessed as bare soil. Otherwise, the patches of organic litter should be mentally combined and excluded from assessments. Code as for vegetative cover.

14. Tree damage: Tally the number of live trees (> 1 in, diameter at 4.5 ft.) Within the campsite boundaries, including trees in undisturbed islands and excluding trees in satellite areas, into one of the rating classes described below. Assessments are restricted to trees within the flagged campsite boundaries in order to ensure consistency with future measurements. Multiple tree stems from the same species that are joined at or above ground level should be counted as one tree when assessing damage to any of its stems. Assess a cut stem on a multiple-stemmed tree as tree damage, not as a stump. Do not count tree stumps as tree damage. Take into account tree size. For example, damage for a small tree would be considerably less in size than damage for a large tree. Omit scars that are clearly not human-caused (e.g., lightning strikes). During site remeasurement, begin by assessing tree damage on all trees within the site boundaries identified in the last measurement period. Tally the number of trees in areas where the boundary has moved closer to the center point, i.e., former site areas that are not currently judged to be part of the site separately. Place a box around this number. Next, assess tree damage in areas where boundaries have moved further from the center point, i.e. expanded site areas that are newly impacted since the last measurement period. Circle these tallies. These additional procedures are necessary in order to accurately analyze changes in tree damage over time.

None/Slight- No or slight damage such as broken or cut smaller branches, one nail, or a few superficial trunk scars.

Moderate- Numerous small trunk scars and/or nails or one moderate-sized scar.

Severe- Trunk scars numerous with many that are large and have penetrated to the inner wood; any complete girdling of trees (cut through tree bark all the way around tree).

15. Root exposure: Tally the number of live trees (> 1 in, diameter at 4.5 ft.) Within the

campsite boundaries, including trees in undisturbed islands and excluding trees in satellite areas, into one of the rating classes described below. Assessments are restricted to trees within the flagged campsite boundaries in order to ensure consistency with future measurements. Where obvious, omit exposed roots that are clearly not human-caused (e.g., stream/river flooding). During site remeasurement, begin by assessing root exposure on all trees within the site boundaries identified in the last measurement period. Tally the number of trees in areas where the boundary has moved closer to the center point, i.e., former site areas that are not currently judged to be part of the site separately. Place a box around this number. Next, assess root exposure in areas where boundaries have moved further from the center point, i.e. expanded site areas that are newly impacted since the last measurement period. Circle these tallies. These additional procedures are necessary in order to accurately analyze changes in root exposure over time.

None/Slight- No or slight root exposure such as is typical in adjacent offsite areas.

Moderate- Top half of many major roots exposed more than one foot from base of tree.

Severe- Three-quarters or more of major roots exposed more than one foot from base of tree; soil erosion obvious.

16. Number of tree stumps: A count of the number of tree stumps (> 1 in. Diameter) within the campsite boundaries. Include trees within undisturbed islands and exclude trees in disturbed satellite areas. Do not include cut stems from a multiple-stemmed tree.

During site remeasurement, begin by assessing stumps on all trees within the site boundaries identified in the last measurement period. Tally the number of trees in areas where the boundary has moved closer to the center point, i.e., former site areas that are not currently judged to be part of the site separately. Place a box around this number. Next, assess stumps in areas where boundaries have moved further from the center point, i.e. expanded site areas that are newly impacted since the last measurement period. Circle these tallies. These additional procedures are necessary in order to accurately analyze changes in stumps over time.

17 Number of trails: A count of all trails leading away from the outer campsite boundaries. Do not count extremely faint trails that have untrampled tall herbs present in their tread or trails leading out to any satellite sites.

18. Number of fire sites: A count of each fire site within campsite boundaries, including satellite areas. Include old inactive fire sites as exhibited by blackened rocks, charcoal, or ashes. Do not include areas where ashes or charcoal have been dumped. However, if it is not clear whether or not a fire was built on the site, always count questionable sites that are within site boundaries and exclude those that are outside site boundaries.

19. Litter/trash: Evaluate the amount of litter/trash on the site: n=None or less than a handful, S=some-a handful up to enough to fill a 2-1/2-gallon bucket, M=Much- more than a 2-1/2-gallon bucket.

20. Human waste: Follow all trails connected to the site to conduct a quick search of likely

“toilet” areas, typically areas just out of sight of the campsite. Count the number of individual human waste sites, defined as separate locations exhibiting toilet paper and/or human feces. The intent is to identify the extent to which improperly disposed human feces is a problem. Use the following code categories: N=None, S=Some-1-3 sites, M=Much-4 or more sites evident.

21. Comments/Recommendations: An informal list of comments concerning the site: note any assessments you felt were particularly difficult or subjective, problems with monitoring procedures or their application to this particular campsite, or any other comment.

22. Campsite photograph: Select a good vantage point for viewing the entire campsite, preferably one of the site boundary pins, and take a digital picture of the campsite. Note the azimuth and distance from the center point to the photo point and record on the form. The intent is to obtain a photograph that includes as much of the site as possible to provide a photographic record of site condition. The photo will also allow future workers to make a positive identification of the site. Label disks with date, and site number.

23. Total campsite area: Calculate the campsite area based on the recorded transect measurements. Add the area of any satellite sites and subtract the area of any undisturbed islands to obtain the Total Campsite Area. Record campsite area to nearest square foot (ft²).

Form B Procedures

Refer to the procedures described earlier, all procedures are the same with the exception of campsite size. Measure campsite size using the geometric figure method. Typically, class 1 and 2 campsites are quite small in size and this method should be both efficient and accurate. Be sure to record on form B the types of figures used (rectangle, square, triangles...etc.) And all necessary dimensions. Record campsite area to nearest square foot (ft²).

APPENDIX 8

CAMPSITE SUMMARY, CLOSURES AND GROUP DESIGNATION

**MOOSE RIVER PLAINS WILD FOREST CAMPSITE ASSESSMENT SUMMARY,
CLOSURE AND GROUP DESIGNATION**

A detailed campsite assessment and inventory was completed for 169 sites during the summer of 2002. This summary provides a portion of the data collected during the assessment and inventory. The data shown here will be the most useful in the day to day management of designated sites on this unit.

CONDITION CLASS DEFINITIONS

Class 1: Recreation site barely distinguishable; slight loss of vegetation cover and/ or minimal disturbance of organic litter.

Class 2: Recreation site obvious; vegetation cover lost and/ or organic litter pulverized in primary use area.

Class 3: Vegetation cover lost and/ or organic litter pulverized on much of the site, some bare soil exposed in primary use areas.

Class 4: Nearly complete or total loss of vegetation cover and organic litter, bare soil widespread.

Class 5: Soil erosion obvious, as indicated by exposed tree roots and rocks and/or gullyng.

Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
1	943	4	Y	Y	8	O
2	2505	4	Y	N	--	C
3	962	3	Y	Y	--	C
4	1654	4	Y	Y	--	C
5	—	1	Y	N	--	C
6	—	1	N	N	--	C
7*	—	2	Y	Y	8	O
8	—	2	Y	N	--	C
9	917	3	Y	N	8	O
10	814	3	Y	Y	--	C
11	—	2	Y	N	--	C
12	1322	4	Y	Y	8	O

13	1017	4	Y	Y	--	C
14	—	1	Y	N	--	C
15	—	2	Y	N	--	C
16	—	2	Y	Y	6	O
17	—	2	Y	N	8	C
18	2634	3	Y	Y	6	C
19	1667	3	Y	Y	8	O
Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
20	1401	4	Y	Y	8	O
21	—	1	Y	N	--	C
22	1899	4	Y	Y	20	O*
23	—	1	Y	N	--	C
24	1772	4	Y	Y	--	C
25	—	2	Y	N	--	C
26	1362	4	Y	Y	--	C
27	—	1	N	N	--	C
28	—	1	N	N	--	C
29	—	2	Y	Y	8	O
30	3932	4	Y	Y	--	C
31	910	4	Y	Y	8	O
32	—	2	Y	N	--	C
33	—	2	Y	N	--	C
34*	3612	4	Y	Y	8	O
35	1224	4	Y	Y	8	O
36	1596	4	Y	Y	8	O
37	—	2	Y	N	--	C

38	—	1	Y	Y	--	C
38a	3172	4	Y	Y	--	C
39	1460	4	Y	Y	20	O
40	1715	4	Y	Y	8	O
41	—	1	Y	N	8	O
42	746	4	Y	Y	8	O
Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
43	1166	3	Y	Y	--	C
44	—	1	Y	N	8	O
45	—	1	N	N	--	C
46	—	2	Y	N	--	C
47	—	2	Y	Y	8	O
48	1464	3	Y	Y	8	O
49	1464	4	Y	Y	--	C
50	1172	4	Y	Y	--	C
51	990	4	Y	Y	8	O
52	—	2	Y	Y	--	C
53	—	1	N	N	--	C
54	1742	3	Y	N	--	C
55	—	2	Y	N	8	O
56	1232	3	Y	N	--	C
57	—	1	Y	Y	--	C
58	—	2	Y	N	8	O
59	—	2	Y	N	--	C
60	—	2	Y	Y	--	C
61	1013	4	Y	Y	--	O

62	—	2	Y	Y	--	C
63	1738	4	Y	Y	8	C
64	903	4	Y	Y	6	O
65	—	2	N	N	--	C
66	1132	4	Y	Y	6	O
Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
67	1046	4	Y	Y	8	O
68	—	2	N	N	--	C
69	—	2	N	N	8	O
70	2103	5	Y	Y	8	O
71	1631	4	Y	Y	8	O
72	—	1	Y	N	--	C
72a	1086	3	Y	Y	8	O
73*	1724	4	Y	Y	8	O
73a	757	3	Y	Y	8	O
74	872	5	Y	Y	--	C
75	724	4	Y	Y	--	C
76	1271	3	Y	Y	--	C
76a	1054	4	Y	Y	20	O*
77	1664	5	Y	Y	8	O
78	—	2	Y	Y	--	C
79	1195	5	Y	Y	--	C
80	—	2	Y	Y	8	O
81	—	2	Y	N	--	O
82	—	1	Y	N	--	C
83	—	2	Y	N	--	C

84	3246	4	Y	Y	8	O
85	—	2	Y	Y	--	C
86	1856	3	Y	Y	--	C
87	2824	4	Y	Y	8	O
Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
88	1045	5	Y	Y	--	C
89	1273	4	Y	Y	6	C
90*	2412	4	Y	Y	8	O
91	—	2	Y	Y	--	C
92	1359	4	Y	Y	--	C
93	1290	4	Y	Y	8	O
94	—	2	Y	N	--	C
95	—	1	Y	N	--	C
96	—	2	Y	N	--	C
97	—	2	N	N	--	C
98	1256	4	Y	Y	--	C
99	—	2	Y	N	8	O
100	—	1	Y	N	--	C
101	1802	5	Y	Y	8	O
102	—	2	Y	Y	--	C
103	1298	3	Y	Y	8	O
104	—	1	Y	N	--	C
105	—	1	Y	N	--	C
106	—	1	Y	Y	--	C
107	—	2	Y	Y	8	O
108	—	1	Y	N	--	C

109	1516	4	Y	Y	--	C
110	1091	4	Y	Y	--	C
111	1732	5	Y	Y	8	O
Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
112	—	1	N	Y	--	C
113	812	4	Y	Y	--	C
114	851	4	Y	Y	--	C
115	—	2	N	N	--	C
116	1161	4	Y	N	--	C
116A	300	2	Y	N	8	O
117	862	4	Y	Y	--	C
118	3680	5	Y	Y	8	O
119	5180	5	Y	Y	8	O
119a*	996	3	Y	N	8	O
119b	—	2	N	N	--	C
119c	928	3	Y	N	8	O
120	—	2	Y	N	--	C
121	1441	4	Y	Y	6	O
122	1289	4	Y	N	6	O*
122a	—	1	Y	N	8	O
123	1790	4	Y	Y	--	C
123a	852	4	Y	Y	8	O
124	1557	5	Y	Y	--	C
124a	—	2	Y	N	--	C
125	—	1	Y	N	--	C
125a	—	1	Y	N	--	C

126	—	1	Y	N	8	O
126a	—	1	Y	N	--	C
Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
127	1492	4	Y	Y	--	C
128	543	3	Y	Y	--	C
129	1298	4	Y	Y	8	O
129a	—	1	Y	Y	--	C
129aa	----	1	Y	N	--	C
130*	—	2	Y	Y	8	O
130a	—	1	Y	N	--	C
130aa	—	1	Y	N	C	C
131	2545	4	Y	Y	8	O
132	—	2	Y	N	--	C
133	—	2	Y	N	--	C
134	1761	5	Y	Y	8	O
135	—	1	y	N	8	O
135A	—	1	N	N	--	C
137b*	350	2	Y	N	8	O
138a	—	1	Y	N	--	C
139a	—	1	Y	N	8	O
140a*	1250	4	Y	Y	--	C
141*	1447	4	Y	Y	8	O
142*	—	2	Y	Y	8	O
143*	2138	4	Y	N	8	O
CR1 ADA	3204	4	Y	Y	8	O
CR2	4884	3	Y	Y	--	C

Site #	Area ft ²	Cond Class	Fire Ring	Pit Privy	Max occ	Open/ Close
CR3	1044	4	Y	N	--	C
CR4	1953	4	Y	Y	--	C
CR5	1260	5	Y	Y	6	O
CR6	1930	5	Y	Y	6	O
CR7	1173	4	Y	Y	--	C
CR8	2526	3	Y	N	6	O
CR9	1985	3	Y	N	--	C
CR10	2927	4	Y	Y	8	O

The following sites are located along the Indian Lake Road but are within the WCLWA. Future management decisions for these sites will be addressed in the WCLWA UMP.

136	1491	5	Y	Y	8	O
137	832	4	Y	Y	8	O
137a	—	2	Y	N	8	O
138	—	1	Y	Y	8	O
139	—	1	Y	Y	8	O
140	2282	4	Y	Y	8	O

Sites designated as open (O*) will be designated as group sites.

137b-Squaw Lake

140a*- Indian Lake

141*- Beaver Lake

142*- Mitchell Ponds

143*- Northville-Placid Trail

APPENDIX 9

TRAIL CLASSIFICATIONS

TRAIL CLASSIFICATION SYSTEM - Moose River Plains Wild Forest

CLASS	MARKING	TREAD	BARRIERS	USE LEVEL	ACCEPTABLE MAINTENANCE
I Unmarked Route	None	Intermittently apparent, relatively undisturbed organic soil horizon	Natural obstructions present, logs and water courses	Occasional	None
II Path	Intermittent	Intermittently apparent, compaction of duff, mineral soils occasionally exposed	Same as unmarked route	Low, varies by location	Intermittent marking with consideration given to appropriate layout based on drainage, occasional barrier removal only to define appropriate route.
III Primitive	Trail markers, sign at junction with secondary or other upper level trail	Apparent, soil compaction evident	Limited natural obstructions (logs and river fords)	Low	Drainage (native materials) where necessary to minimize erosion, blowdown removed 2-3 years, brushing as necessary to define trail (every 5-10 years). Bridges only to protect resource (max - 2 log width). Ladders only to protect exceptionally steep sections. Tread 14"-18", clear: 3' wide, 3' high.
IV Secondary	Markers, signs with basic information	Likely worn and possibly quite eroded. Rocks exposed, little or no duff remaining	Up to one year's accumulated blowdown, small streams.	Moderate	Drainage where needed to halt erosion and limit potential erosion (using native materials), tread hardening with native materials where drainage proves to be insufficient to control erosion. Remove blowdown annually. Brush to maintain trail corridor. Higher use may warrant greater use of bridges (2-3 logs wide) for resource protection. Ladders on exceptionally steep rock faces. Tread 18"-24". Clear 4' wide, 3' High.
V Trunk or Primary Trail	Markers, signed with more information and warnings.	Wider tread, worn and very evident. Rock exposed, possibly very eroded.	Obstructions only rarely, small streams	High	Same as above; Plus: regular blowdown removal on designated ski trails, non-native materials as last resort, Extensive tread hardening when needed, bridge streams (2-4 logs wide) difficult to cross during high water, priority given to stream crossings below concentrations of designated camping. Tread 18"-26", clear 6' wide, 8' high, actual turn piking limited to 2% of trail length.
VI Front Country	Heavily marked, detailed interpretive signing	Groomed	None	Very High	Extensive grooming, some paving, bark chips, handicapped accessible. This is to be implemented within 500' of wilderness boundary.
VII Horse Trail	Marked as Trunk or Secondary	Wide tread, must be rather smooth.	Same as Trunk Trail.	Moderate to High	Same as trunk trail, except use techniques appropriate for horses. Bridges: 6' minimum width with kick rails, nonnative dimensional materials preferred. Tread: 2'-4' wide, clear 8' wide, 10' high.
VIII. Ski Trail	Marked High. Special markers, sign at all junctions with hiking trails.	Duff remains. Discourage summer use	Practically none due to hazards.	High	Focus on removal of obstructions, maintenance should be low profile, tread determined by clearing 6' (Should be slightly wider at turns and steep sections. Provide drainage using native materials to protect resource.
IX. Mountain Bike Trails (according to International Mountain Biking Standards)	Marked frequently and No Biking signs posted on adjoining trails not specified for bike use	New trails to maximum of 4 feet. Tread width less than 18 inches on a rolling grade	None	Moderate	Remove vegetation at root level Texture the tread Keep trails below 2000 feet Use existing roads or trails that do not exceed 10 % Blowdown removal(annual) Trail brushing

TRAIL CLASSIFICATION SYSTEM - Snowmobile

CLASS	MARKING	TREAD	BARRIERS	USE LEVEL	ACCEPTABLE MAINTENANCE
Snowmobile Trails- Class A	Marked high	Groomed(width-8 feet, 12 feet on corners)	None	Moderate to High	Blowdown removal(annual) Trail brushing Erosion control structures(Box culverts,etc.) Trail Hardening(corduroy) Bridges Trail Rehabilitation
Snowmobile Trails- Class B	Marked high	Groomed(width-8 feet)	None	Low, varies by location	Blowdown removal(annual) Trail brushing Erosion control structures(Box culverts,etc.) Trail Hardening(corduroy) Bridges Trail Rehabilitation
Snowmobile Trails- Local	Marked high		None	Variable	

APPENDIX 10

BEST MANAGEMENT PRACTICES FOR STATE LANDS-INVASIVE SPECIES

BEST MANAGEMENT PRACTICES FOR STATE LANDS UNDER MANAGEMENT OF THE DEC IN THE ADIRONDACK PARK

Applicability

These Best Management Practices (BMP's) are intended for use by those applying for and implementing terrestrial invasive plant species management activities on State Lands under an Adopt-A-Natural-Resource Agreement (AANR). The following document contains acceptable practices for control of the following four terrestrial invasive species: Purple loosestrife (*Lythrum salicaria*), Japanese knotweed (*Polygonum cuspidatum*), Common reed (*Phragmites australis*), Garlic mustard (*Alliaria petiolata*).

The following management options, should be selected with consideration for the location and size of the stands, the age of the plants, past methods used at the site, time of year, sensitive native flora within or adjacent to the target infestation, and adjoining and nearby land uses.

Other management approaches not identified here may be appropriate but must be approved by the Regional Land Manager of the NYS Department of Environmental Conservation in the region where the proposed invasive plant control activity will take place in consultation with the Adirondack Park Agency's Director of Planning.

Within the Park there are several geographic settings (at the location of the target plant(s)) that need to be considered when determining appropriate BMP's and the regulatory instruments needed prior to their implementation. These settings and relevant action are:

1. In or within 100' of a wetland on private or public lands -- requires a general permit from the Adirondack Park Agency.
2. Forest Preserve lands -- requires an AANR from the Department of Environmental Conservation and, if wetlands are involved, an Adirondack Park Agency permit.
3. If the standing water is greater than one acre in size and/or has an outlet to surface waters, an aquatic pesticides permit is required pursuant to ECL 15-0313(4) and 6 NYCRR 327.1 in which case application can only be made by a Certified Applicator or Technician or supervised Apprentice licensed in "Category 5 – Aquatic Vegetation Control".

GENERAL PRACTICES

1. **Minimum Tools Approach** – State land stewardship involving invasive plant species management practices should always incorporate the principles of the Minimum Tools Approach. Any group or individual implementing such practices on State land should only use the minimum tools, equipment, devices, force, actions or practices that will effectively reach the desired management goals. Implicit in this document is the stricture to implement a hierarchy of management practices based upon the target species and site conditions starting with the least intrusive and disruptive methods.

2. **Notification** - The following best management practices are intended to be used only when invasive terrestrial plant species are identified on Forest Preserve lands. These management techniques are temporary activities and are implemented with the ultimate goal being protection and restoration of native plant communities. Appropriate signage should be employed to explain the project. It may also be appropriate to issue press releases to explain the goals and techniques of the management activities.

3. **Motorized Equipment** – All use of motorized equipment on State lands under the jurisdiction of the DEC within the Adirondack Park shall be in compliance with Commissioner’s Policy Number 17 (CP17), and other pertinent DEC policy regarding the use of motorized equipment on Forest Preserve Lands.

4. **Erosion Control** - Some of the methods described below require actual digging or pulling of plants from the soil. In all cases they require removal of vegetation whether or not there is actual soil disturbance. Each situation must be studied to determine if the proposed control method and extent of the action will destabilize soils to the point where erosion is threatened. Generally if more than 25 square feet of soil surface is cleared or plant removal occurs on steep slopes silt fence should be installed and maintained.

5. **Revegetation** - All of the control methods below are aimed at reducing or eliminating invasive species so that natives are encouraged to grow and re-establish stable conditions that are not conducive to invasive colonization. In most cases removal or reduction of invasive populations will be enough to release native species and re-establish their dominance on a site. However, replanting or reseeding with native species may be required.

6. **Herbicide Treatments** - The only herbicide application allowed is spot treatment to individual plants using a back pack or hand sprayer, wick applicator, cloth glove applicator, stem injection or herbicide clippers. **No broadcast herbicide applications using, for example a truck mounted sprayer, are allowed.** The only herbicides contemplated and approved for use are glyphosate and triclopyr. Glyphosate, in the correct formulation, may be used in situations where there is standing water including wetlands. Trichlopyr is to be used only in upland situations. **In all cases all label restrictions must and shall be followed by a certified applicator in an appropriate category.** The certified applicator or technician must have copies of the appropriate labels at the treatment site. Glyphosate and triclopyr are non-selective herbicides that are applied to plant foliage or cut stems and are then translocated to the roots. The application methods described and allowed are designed to reduce or eliminate the possibility that non-target species will be impacted by the herbicide use. All herbicide spot treatments require follow-up inspection later in the growing season or the following year to re-treat any individuals that were missed. Stem injections may be implemented using a large gauge needle or a specialized injection tool such as the JK Injection System (www.jkinjectiontools.com).

All herbicide mixing will be done in accordance with the label precautions and take place at a staging area (typically at a marshalling yard or a vehicle). No mixing shall take place on State

lands unless at an approved location constructed for such use. Unused chemical and mixes shall be disposed of in a legal manner. No chemical or mix shall be disposed of on State lands unless at an approved location constructed for such use.

7. **Sanitation** - Management personnel must attempt to prevent invasive plant propagules from entering a treatment site or from being exported from it. Therefore, personnel must insure that their clothing including boots do not carry seeds or other propagules or weed seed infected soil clods. At the beginning of the field day personnel should inspect their clothing and boots at the staging area. Prior to leaving the treatment site personnel should conduct another inspection and remove any propagules or soil clods from their clothing or boots. Personnel must insure that all equipment used for invasive species control whether it be hand or power driven is cleaned prior to entering onto a control site and prior to leaving the treatment site. Vehicles and equipment can be cleaned at a staging area that is distant from the control site after management activities if precautions are taken during transport to contain any propagules. This is an effort to reduce transport of plant propagules and reduce the potential for new invasive introductions. Use steam or hot water to clean equipment.

8. **Material Collection and Transportation** – While on the treatment site bag all cut material in heavy duty, 3 mil or thicker, black contractor quality plastic clean-up bags. Securely tie the bags and transport from the site in a truck with a topper or cap to securely fasten the load, in order to prevent spread of the plant material from the project work site. Transport the material to a legal disposal location.

9. **Composting** - Because of the extremely robust nature of invasive species, composting in a typical backyard compost pile or composting bin is not appropriate. However, methods can be used whereby sun-generated heat can be used to destroy the harvested plant materials. For instance, storage in a sealed 3 mil thickness (minimum) black plastic garbage bags on blacktop in the sun until the plant materials liquefy is effective. If a larger section of blacktop is available, make a black plastic (4 mil thickness minimum) envelope sealed on the edges with sand bags. The plant material left exposed to the sun will liquefy in the sealed envelope without danger of dispersal by wind. The bags or envelopes must be monitored to make sure the plants do not escape through rips, tears or seams in the plastic. **When composting is suggested later in the text it is understood that liquefying the plant material in or under plastic is the desired action; not disposal in backyard composters or open landfill composting piles.**

CONTROL METHODS FOR PURPLE LOOSESTRIFE (*Lythrum salicaria*)

PLANT DESCRIPTION

Purple loosestrife is a wetland perennial native to Eurasia that forms large, monotypic stands throughout the temperate regions of the U.S. and Canada. It has a vigorous rootstock that serves as a storage organ, providing resources for growth in spring and regrowth if the plant has been damaged from cuttings. New stems emerge from the perennial roots enabling the plant to establish dense stands within a few years. Seedling densities can approach 10,000-20,000 plants/m² with growth rates exceeding 1 cm/day. A single, mature plant can produce more than 2.5 million seeds annually which can remain viable after 20 months of submergence in water. In addition, plant fragments produced by animals and mechanical clipping can contribute to the spread of purple loosestrife through rivers and lakes.

MANAGEMENT OPTIONS

1. Digging/pulling

Effectiveness:

Can be effective in small stands i.e.: <100 plants, low-med density (1-75% area), & <3 acres, especially on younger plants in unconsolidated soils.

Methods:

Hand-pull plants <2 years old. Use mini-tiller for plants >2 years - gets most of roots w/minimum soil disturbance, has 3 heavy duty prongs on 1 side that are pushed under base of plant, then pry back on handle to leverage plant out of ground. Use weed wrench for plants > 2 years old - good w/minimal soil disturbance. In mucky conditions, put base of wrench on small piece of wood (e.g.: piece of 2x4) to keep wrench from sinking into mud. Use shovel for plants > 2 years old - dig up plant, tamp down disturbed area and/or then replace soil and any existing cover.

Cautions:

May increase habitat disturbance & increase spread of loosestrife. Requires follow-up treatments of sites for 3 years to eliminate re-sprouting from fragments left behind. Must pull/dig ENTIRE rootstock or resprouting will likely occur. Must pull/dig before the plants begin setting seed or must remove flower/seed heads first (cut into bags) to prevent spread of seeds. Also remove previous year's dry seed heads. Erosion control may be necessary.

Disposal:

Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits)..

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

2. Cutting

Effectiveness:

Can be effective in small stands i.e.<100 plants, low-med density (1-75% area), & <3 acres, especially on younger plants.

Methods:

Remove flower heads before they go to seed, so seed isn't spread when cutting or mowing. Must do repeated cutting & mulching to permit growth of grasses.

Cautions:

Need to repeat for several years to reduce spread of plants. Doesn't affect rootstalk & thus, cut pieces can be spread that will resprout. Once severed, stems are buoyant and may disperse to other areas and re-sprout. Removal of seed heads should be done as late in the growing season as possible yet before seed set. Early cutting without additional seed head harvest could allow resprouting with greater subsequent seed production.

Disposal:

Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

3. Herbicide

Effectiveness:

Use when >100 plants & <3-4 acres in size.

Methods:

Use glyphosate formulations only. If possible treat seedlings before they reach 12" in height. Cut and bag flower heads before applying herbicide. Apply prior to or when in flower (late July/Aug) so plants are actively growing.

For spot application use:

- sponge tip applicator w/wick.
- stem injection

Cautions:

This herbicide is not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants. Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act. Choose Glyphosate formulation for applications in standing water or along a shoreline.

4. Biocontrol

Two species of leaf-feeding beetle, *Galerucella californiensis* and *G. pusilla*, have been shown to be effective in controlling purple loosestrife. Over 5 million of these beetles have been released in 30 states including New York, the northeastern and midwestern states as well as all of the Canadian Provinces. The beetles have shown dramatic decreases in purple loosestrife populations with subsequent increases in populations of native species. The scientific literature indicates that the beetles are very specific to purple loosestrife with only minor “spillover” effects that do not compromise non-target plant populations.

Effectiveness:

Use if site has at least a half acre of purple loosestrife of medium to thick density.
Best type of control for large patches of loosestrife >3-4 acres.

Methods:

The number of beetles released per site should be based on the size of the site, the density of loosestrife and the economics of purchase. More beetles are generally better than fewer.

Cautions:

Use only if mowing, pesticide and herbicide use are not active practices on the site. The site must not be permanently flooded and should be sunny. Use only if winged loosestrife, (*Lythrum alatum*) and waterwillow (*Decodon verticillatus*) are not major components of the plant community on the release site. **Please note that identification of winged loosestrife and waterwillow should be done by a professional botanist prior to treatment to determine if this biocontrol method is appropriate.**

CONTROL METHODS FOR COMMON REED (*Phragmites australis*)

PLANT DESCRIPTION

Phragmites is a perennial grass that can grow to 14 feet in height. Flowering and seed set occur between July and September, resulting in a large feathery inflorescence, purple-hued turning to tan. Phragmites is capable of vigorous vegetative reproduction and often forms dense, virtually monospecific stands. It is unclear what proportion of the many seeds that Phragmites produces are viable. **Please note that identification of phragmites should be done by a professional botanist prior to treatment to distinguish the invasive non-native race from the non-invasive native.**

MANAGEMENT OPTIONS

1. Cutting and Pulling

Effectiveness:

Need to repeat annually for several years to reduce spread of plants. Hand-pulling, though labor intensive, is an effective technique for controlling phragmites in small areas with unconsolidated soils or sediments.

Methods:

The best time to cut phragmites is when most of food reserves are in aerial portion of plant (when close to tassel stage-e.g.: at end of July/early August to decrease plant's vigor. Some patches may be too large to cut by hand, but repeated cutting of the perimeter of a stand can prevent vegetative expansion. Phragmites stems should be cut below the lowest leaf, leaving a 6" or shorter stump.

Hand-held cutters and gas-powered hedge trimmers work well. Weed whackers with a circular blade were found to be particularly efficient, though dangerous.

Cautions:

If cut before in tassel stage or at wrong time, stand density may increase because Phragmites is a grass. Remove cut shoots to prevent re-sprouting and forming stolons.

Disposal:

Cut or pulled material should be removed from the site and composted, land-filled or incinerated. The harvested biomass can be disposed of onsite if the seed heads are removed and the cut stems are dispersed in an upland area.

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

2. Herbicide

Effectiveness:

Herbicide use is a 2 year, 2 step process because the plants may need “touch-up” application, especially in dense stands since subdominant plants are protected by thick canopy & may not receive adequate herbicide in the first application.

Methods:

Use glyphosate formulations only. Cut Phragmites at waist-height just before onset of tassel stage. Immediately squeeze/inject 5 mil of 50% solution of glyphosate into each individual, freshly-cut stem. Secure all cut plant material, remove from site and dispose of at approved landfill or incinerator. 50% solution of glyphosate equates to a one to one mix with distilled water. After 2 to 3 weeks following application of glyphosate, cut or mow down the stalks to stimulate the emergence and growth of other plants previously suppressed. Use spray bottle for individual foliar spot treatments or use swab or syringe w/large gauge needle or Nalgene® Unitary® wash bottle (or equivalent) to apply 1-2 drops directly to cut stems if cutting done first, or cloth glove applicator.

Cautions:

This herbicide is not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants. Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast w/in 12 hours because herbicide will be washed away before it can act. Choose appropriate glyphosate formulation for applications in standing water or along a shoreline.

3. Plastic*

* This is a temporary use of plastic sheeting on Forest Preserve lands and should be used only if other non-herbicide approaches are considered less effective. In any case where plastic sheeting is used on Forest Preserve lands signing should be employed to explain the project should be provided.

Effectiveness:

Tarping can be effective in small stands i.e.:<100 plants, low-med density(1-75%area). Plants die off w/in 3-10 days, depending on sun exposure.

Methods:

Cut plants first to 6-8" (hand clippers or loppers, hand-pushed bush hog or weed whacker w/blade). After cutting a stand of phragmites, anchor a sheet of plastic over the cut area using sand bags or rocks. High temperatures under the plastic will eventually kill off the plants. This technique works best when the treated area is in direct sunlight. Black plastic is desirable, but clear plastic also works. Plastic should be at least 6 millimeters thick. Hold plastic in place with sandbags, rocks, etc.

Can treat runners along edge w/spot application of glyphosate. Cut holes in plastic in Oct.- Nov. to promote germination of cattail shoots. The plastic can be removed the following year when the covered plants have been killed. A few phragmites shoots may return. These can be cut or hand-pulled.

Cautions:

Must monitor to determine if shoots are extending out from under the plastic.

Disposal:

Can leave cut material under plastic or bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits. All plastic sheeting must be removed from State lands.

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

4. Cutting

Effectiveness:

Can be effective in small stands i.e.<100 plants, low-med density (1-75% area) & <3 acres.

Methods:

Cut just before the end of July, most of the food reserves produced that season are removed with the aerial portion of the plant reducing the plant's vigor. This regime may eliminate a colony if carried out annually for several years. Can do after herbicides.

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

5. Pulling

Effectiveness:

Can be effective in small stands i.e.<100 plants. Very labor intensive. Best with sandy soils.

Methods:

Hand-pull plants<2 years old. Use shovel for plants>2 years old-dig up plant, then replace soil and any existing cover.

Disposal:

Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

6. Excavation

Effectiveness:

Can be effective for patches up to ½ acre. Cost is the limiting factor.

Methods:

When working in wetlands only tracked equipment shall be used. Rubber-tired excavators can operate from adjacent pavement or upland areas. All use of motorized equipment on State lands under the jurisdiction of the DEC within the Adirondack Park shall be in compliance with Commissioner's Policy Number 17 (CP17), and other pertinent DEC policy regarding the use of motorized equipment on Forest Preserve Lands.

Cautions:

The patch should be excavated to below the depth of rhizome development. Follow-ups later in the season or the following year must be conducted to verify that all the plants have been removed.

Disposal:

Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

CONTROL METHODS FOR GARLIC MUSTARD (*Alliaria petiolata*)

PLANT DESCRIPTION

Garlic mustard is a naturalized European biennial herb that typically invades partially shaded forested and roadside areas. It is capable of dominating the ground layer and excluding other herbaceous species. Its seeds germinate in early spring and develops a basal rosette of leaves during the first year. Garlic mustard produces white flowers between late April and June of the following spring. Plants die after producing seeds, which typically mature and disperse in August. Normally its seeds are dormant for 20 months and germinate the second spring after being formed. Seeds remain viable for up to 5 years.

MANAGEMENT OPTIONS

1. Pulling.

Effectiveness:

Hand pulling is an effective method for removing small populations of garlic mustard, since plants pull up easily in most forested habitats. Plants can be pulled during most of the year. However, pulling also disturbs the soil and can increase rates of germination of buried seeds. In most cases cutting is the preferred hand control option.

Methods:

Soil should be tamped down firmly after removing the plant. Soil disturbance can bring garlic mustard seeds to the surface, thus creating a favorable environment for their germination.

Cautions:

Care should be taken to minimize soil disturbance but to remove all root tissues. Re-sprouting is uncommon but may occur from mature plants not entirely removed. Cutting is preferred to pulling due to potential for soil disturbance.

Disposal:

If plants have capsules present, they should be bagged and disposed of to prevent seed dispersal. Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

2. Cutting

Effectiveness:

Cutting is effective for medium-to large-sized populations depending on available time and labor resources. Dormant seeds in the soil seed bank are unaffected by this technique due to minimal disturbance of the soil.

Methods:

Cut stems when in flower (late spring/early summer) at ground level either manually (with clippers or a scythe) or with a motorized string trimmer. This technique will result in almost total mortality of existing plants and will minimize re-sprouting.

Cautions:

Cuttings should be conducted annually until the seedbank is depleted.

Disposal:

Cut stems should be removed from the site when possible since they may produce viable seed even when cut. Bag all plant parts & remove from site (compost at DOT Residency, dispose in approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

3. Herbicide

Effectiveness:

Glyphosate will not affect subsequent seedling emergence of garlic mustard or other plants.

Methods:

Use glyphosate formulations only. Should be applied after seedlings have emerged, but prior to flowering of second-year plants. Application should be by wick applicator or spray bottle for individual spot treatments.

Cautions:

This herbicide is not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants. Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast w/in 12 hours because herbicide will be washed away before it can act. Choose appropriate glyphosate formulation for applications in standing water or along a shoreline.

CONTROL METHODS FOR JAPANESE KNOTWEED (*Polygonum cuspidatum*)

PLANT DESCRIPTION

Japanese knotweed is an herbaceous perennial which forms dense clumps 1-3 meters (3-10 feet) high. Its broad leaves are somewhat triangular and pointed at the tip. Clusters of tiny greenish-white flowers are borne in upper leaf axils during August and September. The fruit is a small, brown triangular achene. Knotweed reproduces via seed and by vegetative growth through stout, aggressive rhizomes. It spreads rapidly to form dense thickets that can alter natural ecosystems. Japanese knotweed can tolerate a variety of adverse conditions including full shade, high temperatures, high salinity, and drought. It is found near water sources, in low-lying areas, waste places, and utility rights of way. It poses a significant threat to riparian areas, where it can survive severe floods.

MANAGEMENT OPTIONS

1. Digging

Effectiveness:

This method is appropriate for very small populations.

Methods:

Remove the entire plant including all roots and runners using a digging tool. Juvenile plants can be hand-pulled depending on soil conditions and root development.

Cautions:

Care must be taken not to spread rhizome or stem fragments. Any portions of the root system or the plant stem not removed will potentially re-sprout.

Disposal:

All plant parts, including mature fruit, should be bagged and disposed of in the trash to prevent re-establishment (i.e. stockpile at DOT Residency with prior approval, dispose of in an approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

2. Cutting

Effectiveness:

Repeated cutting may be effective in eliminating Japanese knotweed. Manual control is labor intensive, but is a good option where populations are small and isolated or in environmentally sensitive areas.

Methods:

Cut the knotweed close to the ground at least 3 times a year. Plant locally prevalent native species as competitors as an alternative to continued treatment.

Cautions:

This strategy must be carried out for several years to obtain success. Both mechanical and herbicidal control methods require continued treatment to prevent reestablishment of knotweed.

Disposal:

Bag all plant parts & remove from site (i.e. stockpile at DOT Residency with prior approval, dispose of in an approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed. See #4 under General Practices.

3. Herbicide

Effectiveness:

Glyphosate or trichlopyr treatments in late summer or early fall are much more effective in preventing regrowth of Japanese knotweed the following year.

Methods:

Use glyphosate or trichlopyr formulations only.

Strategy:

- 1) Late June - Cut down stalks. If stem injection is used stalks do not have to be cut.
- 2) Allow knotweed to regrow.
- 3) After August 1, implement foliar spray, cut stem swab or stem injection of knotweed with glyphosate or trichlopyr. Stem injection should be below the 2nd node above the ground level.

Cautions:

Established stands of Japanese knotweed are difficult to eradicate even with repeated herbicide treatments. However, herbicide treatments will greatly weaken the plant and prevent it from dominating a site. Adequate control is usually not possible unless the entire stand of knotweed is treated (otherwise, it will re-invade via creeping rootstocks from untreated areas). Empirical evidence is that trichlopyr is more effective than glyphosate in causing Japanese knotweed mortality.

These herbicides are not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean

(ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants.

Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast w/in 12 hours because herbicide will be washed away before it can act. Choose appropriate glyphosate formulation for applications in standing water or along a shoreline.

APPENDIX 11

MOUNTAIN BIKE TRAILSTANDARDS AND GUIDELINES

Mountain Bike Trail Standards and General Guidelines According to the International Mountain Biking Association

- Look for and identify control points (i.e. wetlands, rock outcrops, scenic vistas).
- Avoid sensitive areas; wetlands and wherever water collects.
- Keep trails below 2,000 ft.
- Use existing roadways where possible that do not exceed grades of 10%.
- Clear new trails to a maximum width of four feet to establish a single track route.
- Keep tread width less than 18" along a rolling grade.
- Texture the tread- this is the act of placing natural features, such as small rocks or logs in the trail to help control speed.
- Remove vegetation at the root level- not at ground level.
- Keep routes close to the contour and avoid fall lines where water is likely to flow downhill.
- On side slopes, following the contour, cut full benches to construct the tread. Outsloping in this manner helps to remove water from the trail. Vegetate backslopes.
- Build flow into the trail with open and flowing designs with broad sweeping turns.
- Streams should be crossed at ninety-degree angles preferably across rock or gravel.
- Bridges may be used where steep banks prevent normal stream crossings. The latter may require an APA Wetlands Permit.
- Do not construct skid berms or extensive banked turns that may accelerate erosion.
- Avoid acute, sharp angle turns.
- Plan trails for beginners to intermediate levels of riders.
- Maintain an overall grade of 10% or less.
- Allow short changes in grade to avoid obstacles.
- Design grade dips to break up long, straight linear sections, and to help divert runoff from the tread.
- Monitor and inspect all trails semi-annually. Address water problems immediately.

Appendix 12

SOUTH BRANCH MOOSE RIVER SETTLEMENT

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF HAMILTON

----- X
THE ADIRONDACK LEAGUE CLUB, INC., :
 :
 : Plaintiff, : STIPULATION AND ORDER
 : - against - : OF DISCONTINUANCE
 : AND AMENDMENT
 : SIERRA CLUB, THE SIERRA CLUB :
 : (ATLANTIC CHAPTER), THOMAS KLIGERMAN, : INDEX No. 4071/91
 : JEFF JONES, CARL ANDERSON, LORRAINE :
 : VAN HATTEN, AND ROBERT WOLFE, : Hon. Joseph M. Siss (JSC)
 :
 : Defendants, :
 : - and - :
 :
 : THE STATE OF NEW YORK AND THE :
 : ADIRONDACK MOUNTAIN CLUB, INC. :
 :
 : Defendants - Intervenors, :
 : ----- X

IT IS HEREBY STIPULATED AND AGREED, by and among the attorneys
for the Plaintiff, the attorneys for the Defendants, and the attorneys for the Defendants-
Intervenors, as follows:

1. This action, including counterclaims, is hereby discontinued, with prejudice, and without costs. subject only to the terms set forth herein.
2. Subject to the approval of the Court, any and all prior stipulations in this action are hereby superseded and shall be of no further force and effect.
3. Nothing contained herein shall constitute an admission or finding that the portion of the South Branch of the Moose River (SBMR) that traverses the property of the Adirondack League Club, Inc. (ALC), hereinafter referred to as "SBMR-ALC" , is or is not navigable or that a traverse of SBMR-ALC would or would not constitute a trespass. It is the intent of the parties

that no activity engaged in as permitted by the terms of this Stipulation, and no records of any such activity by any party or any person or entity whatsoever, shall be evidence of navigability in any action or proceeding. It is also specifically intended that no person or party shall gain or lose any property or other right by reason of this Stipulation or activity undertaken pursuant to its terms.

4. The original parties defendant and intervenors, covenant not to commence a new lawsuit, or intervene in, or file an amicus brief in any third party litigation concerning navigability of SBMR-ALC or the issue of trespass along SBMR-ALC. This undertaking shall not apply to any litigation concerning the enforcement or interpretation of the terms of this Stipulation.

5. The parties to this Stipulation agree to adhere to the level of access permitted by paragraph 6 hereof, notwithstanding any future court determination or governmental administrative rules or regulations regarding access to or navigability of, SBMR-ALC. The parties also agree that there might be a material change in circumstances pertaining to such access or navigability, such as, for example, a New York State legislative enactment applicable to SBMR-ALC. Any party may make an application to the Court for a judicial determination of whether an alleged material change of circumstances has occurred that should warrant any amendment or termination, as may be the case, of the Stipulation.

6. ALC shall permit traverse of the SBMR-ALC by Defendants, Intervenors-Defendants and the general public, provided that:

a. Each person who shall traverse the SBMR-ALC shall have signed a registration statement in the form attached to this Stipulation as Exhibit A.

- b. The traverse occurs during the period May 1st to October 15th or such later date as marks the start of the muzzleloading season for big game (deer and bear) in the Northern Zone as prescribed by the New York State Department of Environmental Conservation (DEC) provided (i) the staff gauge on the Moose River at McKeever has registered 2.65 feet or greater at any time during the 24 hour period prior to the commencement of such traverse or (ii) the reading on the "Replacement Gauge" exceeds the "Threshold Reading" during such period. For the purposes of this subparagraph, the "Replacement Gauge" shall be a gauge to be located on the SBMR-ALC at Kornmeyer Camp, Bisby Bridge or such other location as may be agreed upon by the parties, at ALC's expense (installation, calibration, and maintenance), accessible by telephone, and capable of continuously recording either the level or flow of the SBMR; and the "Threshold Reading" shall be the level or flow that the parties mutually agree in the future shall allow traverse. In the event the staff gauge at McKeever is taken out of service, the ALC shall use its best efforts in good faith promptly to install a replacement Gauge, but not later than nine months after the staff gauge at McKeever is taken out of service. Upon the installation of a fully operable Replacement Gauge and the determination by mutual agreement of a Threshold Reading equivalent to the 2.65 foot reading at McKeever, the use of the staff gauge at McKeever for any purpose under the Stipulation shall cease. If the parties are unable to reach mutual agreement on the Threshold Reading, any party may make an application to the Court for a judicial determination.
- c. A good faith effort shall be made to traverse the SBMR-ALC within one day and to complete the traverse during daylight hours.

- d. There shall be no entry on the beds or banks of the SBMR-ALC except that the bed and banks may be used, when as absolutely necessary, to circumvent occasional obstacles, riffles and shallows in SBHR-ALC, including the right to portage on riparian lands, when such use is strictly incidental to the navigation of SBMR-ALC.
- e. There shall be no anchoring or tying up on the SBMR- ALC, except as may be incidental to avoidance of obstacles or impassable or unsafe conditions.
- f. No trip shall be permitted on days when ALC is engaged in fish stocking activities or during other days or periods of scientific study of which ALC will give reasonable notice to the general public. The parties agree that such activities or study will not occur on a weekend or holiday or exceed four days during the period from May 1st through October 15th each year.
- g. There shall be no swimming, fishing or hunting and no collecting of flora or fauna from the SBMR-ALC.
- h. Only non-motorized canoes, kayaks or similar one or two person craft may be utilized on the SBMR-ALC; tubes, rafts and similar devices are not permitted.
- i. No party to this Stipulation makes any claim or warranty concerning the safety of passage of SBMR-ALC and each such party disclaims any liability or responsibility for personal injury or property damage to persons who attempt a traverse. who do so at their own risk. Nothing in this stipulation shall be construed to require any of the parties hereto to provide assistance to anyone by reason of a traverse. Nevertheless, ALC reserves the right to recover reasonable expenses for any assistance rendered to any person (including recovery of personal property) in need by reason of the traverse of the SBMR-ALC pursuant to this Stipulation from the person so assisted.

7. The ALC may, at its own expense, install and maintain a sign where the SBMR enters ALC property, setting forth the conditions described above in Paragraph 6 and stating that any failure to adhere to such conditions may be viewed by the ALC as a trespass that may result in prosecution.

8. The State of New York, by the New York State Department of Environmental Conservation (DEC), shall use reasonable efforts to maintain and safeguard at each of the Limekiln Lake and Cedar River Road gates, and any other entry points now existing or hereinafter established, in the Moose River Plains Recreation Area a conspicuous register which shall include copies of the terms of access prescribed by this Stipulation and the registration form annexed to this Stipulation as Exhibit A. No party to this Stipulation shall be liable for the failure of any individual traversing the SBMR-ALC to sign the register or otherwise comply with any of the requirements contained in Paragraph 6 of this Stipulation. The register shall be accessible for inspection by the parties to this Stipulation, and a copy of the completed registration form(s) shall be provided to any party upon request. The State of New York, by the offices of the Attorney General and the DEC, agree that

a. No rules or regulations which may hereafter be published involving access to State lands abutting the South Branch of the Moose River, or of specific applicability to the public's access or use of SBMR-ALC, shall be inconsistent with the terms of access contained in paragraph 6 of this Stipulation.

b. Instructions regarding the provisions of this Stipulation shall be given to all Regional Directors and Supervisory Staff of the State of New York and DEC having jurisdiction over State land abutting Adirondack League Club property or over which there is access to SBMR-ALC.

9. In the event that the Sierra Club (Atlantic Chapter) or the Adirondack Mountain Club, Inc., publish information regarding canoeing or kayaking that refers to the SEMR, such organization shall include a notice setting forth the basic terms of Paragraph 6 of this Stipulation.

Dated: May _____, 2000

So Ordered:

JSC

The Adirondack League Club, Inc.,
Plaintiff

Sierra Club, The Sierra Club
(Atlantic Chapter), Defendant

By: _____
president

By: _____

Shamberg Marwell Hoehersmn
Davis & Hollis, P.C.

Whiteman, Osterman & Hanna

By: _____
Attorneys for Plaintiff

By: _____
Attorneys for Defendant
Sierra Club and Sierra Club
(Atlantic Chapter)

Bertine, Hufnagel, Headley, Zeltner,
Drummond & Dohn, LLP

Thomas Kligerman, Defendant

By: _____
Attorneys or Plaintiff

Jeff Jones.. Defendant

Carl Anderson, Defendant

Lorraine Van Hatten, Defendant

Bartle, McGrane, Duffy & Jones

By: _____
Attorneys for Defendants,
Thomas Kligerman, Jeff Jones,

Carl Anderson & Lorraine
Van Hatten

Robert Wolfe, Defendant

Proskauer, Rose, Goetz, Mendelsohn

By: _____
Attorney for Defendant,
Robert Wolfe

The Adirondack Mountain Club, Inc.
Defendant-Intervenor

By: _____

John W. Caffry, Esq., Attorney for
Defendant-Intervenor (ADK)

Neil F. Woodworth, Esq., Corporation
Counsel Defendant-Intervenor (ADK)

New York State Department of
Environmental Conservation

By: _____

The State of New York,
Hon. Eliot L. Spitzer, Attorney
General, Defendant-Intervenor

By: _____
of Counsel

REGISTRATION STATEMENT

This Registration Statement is required to be completed and signed by each person who shall traverse the South Branch of the Moose River thru Adirondack League Club property, pursuant to the Order of the Supreme Court, Hamilton County, dated May _____, 2000, Case Index No. 4071/91.

The undersigned acknowledges the hazardous nature of the trip due to the characteristics of the river, length of the traverse and unpredictability of river flow. The undersigned to the extent permitted by law assumes all risk of the trip and releases and holds harmless the Adirondack League Club (ALC), its directors, officers, employees and members from and against any liability, costs, or expense whatsoever, including reasonable legal fees, arising by reason of the trip.

The undersigned further represents that he/she acknowledges the limitations governing the trip as set forth in the Stipulation and Court Order. Such limitations are also conspicuously posted at the entrance to ALC property.

NAME: _____
(Please Print)

RESIDENCE ADDRESS: _____

DATE: _____

In the event of emergency, please contact:

(Please Print)

Telephone No.: _____

CANOEISTS AND KAYAKERS:

READ THE FOLLOWING IMPORTANT INFORMATION

A stretch of the South Branch of the Moose River passes through private land owned by the Adirondack League Club ("ALC"). This stretch of the River is open for public traverse pursuant to the following terms of a court order signed by Supreme Court Justice Joseph Size on June 23, 2000:

1. You must sign the attached registration statement and leave it at this register.
2. Your trip must occur during the period May 1 to October 15, or such later date as marks the start of the muzzleloading season for big game in the Northern Zone as prescribed by DEC regulations.
3. You may begin your trip during this time frame only if the United States Geological Service staff gauge at the Mckeever Station on the Moose River has registered 2.65 feet or greater at any time during the 24 hour period prior to the start of your traverse. Staff gauge readings are available on the Web at:

http://ny.usqs.gov/rt-cqi/gen_stn_pq?station=04254500
4. You must make a good faith effort to traverse the stretch of the South Branch which flows through the ALC property in one day.
5. You may not enter the bed or banks of the River as it flows through ALC property except when absolutely necessary to avoid obstacles, riffles, or shallows in the river, when strictly incidental to navigation. When strictly incidental to navigation and when absolutely necessary to avoid obstacles, riffles, or shallows in the river, a paddler has the right to portage.
6. You may not anchor or tie up on ALC property except when it is incidental to the avoidance of obstacles or impassable or unsafe conditions.
7. If ALC has given reasonable notice to the general public that it will be engaged in fish stocking or scientific study on the South Branch of the Moose River, on a specific day, you may not use the River on that day. No fish stocking or scientific study will occur on a weekend or holiday. In addition, ALC may not designate more than four days each year for such fish stocking or scientific study.
8. You may not swim, fish, hunt, or collect any flora or fauna on ALC property.

9. You may use only non-motorized canoes, kayaks or similar one or two person craft. Tubes, rafts and similar devices are not permitted on the South Branch of the Moose as it passes through ALC property .
10. WARNING: The opening of this River does not mean that passage of the River is safe. Traversing the River is a dangerous activity. Should you traverse the River, you will be traversing the River at your own risk. The ALC, the Sierra Club, the Adirondack Mountain Club, and the State of New York disclaim any liability or responsibility for any personal injury or property to persons who attempt to traverse the River. No one is required to provide any assistance to you by reason of your traverse or the conditions of the river. ALC may attempt to recover reasonable expenses from you should ALC decide to render any such assistance to you.

APPENDIX 13
DRAFT COMPREHENSIVE
SNOWMOBILE TRAIL BRIEFING DOCUMENT

**DRAFT VISION AND GOALS STATEMENTS: DRAFT COMPREHENSIVE
SNOWMOBILE PLAN FOR THE ADIRONDACK PARK**

Vision

To develop and maintain an integrated snowmobile trail system on public and increasingly on private land in the Adirondack Park that will provide snowmobilers with an experience that is consistent with the spirit and letter of Article XIV of the State Constitution while also striving to enhance the vitality of the Park's citizens by providing trail linkages between local communities within the Park.

Goals

- 1. Protect natural and cultural resources and the wild forest character of public lands in the Park (as envisioned by the Constitution, SLMP and appropriate laws, rules, regulations) by:**
 - considering underutilized trails for abandonment
 - utilizing to the maximum extent possible routes parallel and near to travel/transportation corridors for new trail development
 - encouraging long-term commitment of corridor trail systems on private lands
 - establishing a clear set of standards for snowmobile trails and snowmobile related activities on public lands

- 2. Providing a safe, enjoyable snowmobile experience by:**
 - minimizing dependency on lake and road crossings
 - avoiding unsafe trail conditions
 - encouraging partnerships with the private sector, state and local governments that will provide, maintain and operate snowmobile trails
 - establishing a clear set of standards for snowmobile trails and snowmobile related activities on public lands

- 3. Promoting tourism and economic opportunities for local communities by:**
 - connecting communities and major points of interest
 - connecting trail systems from outside of the Park
 - connecting to necessary support services (gas, food, lodging, etc.)
 - identifying important snowmobile trail connections

APPENDIX 14
State Environmental Quality Review Act Requirements
(SEQR)

617.21
Appendix F
State Environmental Quality Review
NEGATIVE DECLARATION
Notice of Determination of Non-Significance
 Identifying # _____

Project Number _____

Date February 21, 2006

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

The NYS Department of Environmental Conservation as lead agency, has determined that the proposed action described below will not have a significant effect on the environment and a Draft Environmental Impact Statement will not be prepared.

Name of Action: Adoption and Implementation of the Moose River Plains Wild Forest Unit Management Plan, Seventh Lake Boat Launch Intensive Use Area and River Area Plans for the South Branch Moose River, Red River and Otter Brook

SEQR Status: **Type 1** X
 Unlisted _____

Conditioned Negative Declaration: _____ **Yes**
 X **No**

Description of Action:

The Moose River Plains Wild Forest Unit, Unit Management Plan, sets forth the proposed goals, objectives, management actions and costs for the management of 85,673 acres of Forest Preserve lands and the 29.6 acre Seventh lake boat Launch site. The plan will detail all proposed management activities for a 5 year period, dating from the time of approval and adoption. A review and update will occur every five years.

The primary goal of management for Forest Preserve lands will be to protect the natural wild forest character and to provide a variety of compatible outdoor recreational activities. These activities must be consistent with the APSLMP and Department policies and must not degrade the wild forest character.

Management actions proposed in the plan include: maintenance and rehabilitation of existing facilities,(including brushing, raking and grading of roads), The designation of five administrative motor vehicle roads as open for disabled access under CP-3 permit, closure or

relocation of campsites which do not comply with the guidelines of the APSLMP, construction of two bridges and replacing all snowmobile bridges with 8 foot wide bridges, construction of four accessible water access sites, modification of several existing trails to make accessible, construction of 8 parking areas (6-2car,1-10 car, 1-6 car), construction of 3 accessible fishing piers, modification, designation or construction of 12 campsites to make ADA compliant and reclamation, liming and fish stocking activities, designation of mountain bike and horse trails, construction of new fish barrier dams and construction of a trail from Cellar Pond to the summit of Wakely Mountain.

Location: (Include street address and the name of the municipality/county. A location map of appropriate scale is also recommended.)

Moose River Plains Wild Forest is located in the Towns of Webb and Ohio in Herkimer County and the Towns of Arietta, Inlet, Long Lake, Lake Pleasant and Morehouse in Hamilton County. The Seventh Lake boat launch is located in the Town of Inlet, Hamilton County.

Reasons Supporting This Determination:

(See 617.7(c) for requirements of this determination; see 617.7(d) for Conditioned Negative Declaration)

A full Environmental Assessment Form has been completed and it has been determined that no proposed action will have an adverse environmental impact. All management activities will comply with the APSLMP, Department Policies, Rules and Regulations, Guidelines and will be consistent with Article XIV of the New York State Constitution.

All construction projects will incorporate the use of Best Management Practices, including but not limited to the following:

- Locating improvements to minimize necessary cut and fill;
- Locating improvements away from streams, wetlands, and unstable slopes;
- Use of proper drainage devices such as water bars and broad-based dips;
- Locating trails to minimize grade;
- Using stream crossings with low, stable banks, firm stream bottom and gentle approach slopes;
- Constructing stream crossings at right angles to the stream;
- Limiting stream crossing construction to periods of low or normal flow;
- Avoiding areas where habitats of threatened and endangered species are known to exist;
- Using natural materials to blend the structure into the natural surroundings

Rehabilitation of existing administrative roads for their use by holders of CP-3 permits will be completed following detailed work plans developed in consultation with the APA. Tree cutting will be limited to trees less than 3" DBH. Work will include resurfacing the existing roadway and the replacement of existing, or installation of new culverts where necessary. Any work conducted within wetlands will be done under permit from the APA. Any areas disturbed outside of the road bed will be reseeded and mulched.

Any impacts that might be associated with the construction of the bridges over Otter Brook and the South Branch of the Moose River will be minimized by incorporating BMP's for bridge construction, installation of temporary coffer dams to direct stream flow away from abutment work and the installation of siltation and erosion control devices. Construction will be limited to periods of dry weather and low water flow.

All parking areas proposed in this plan will utilize existing open areas. No tree cutting will be required. Minor graveling and leveling may be necessary to provide proper drainage of parking areas.

The proposed location for construction of a water access sites on Cedar River Flow and Wakely Pond will require minor site work away from the water and the construction of a small accessible dock, neither of which will cause any environmental impacts.

The proposed fishing piers will be constructed of wood and no permanent disturbance of the shoreline will result.

The construction of a new concrete ramp at the Seventh lake Boat Launch will be completed during periods when the lake is drawn down to reduce any impacts on water quality.

All tree cutting activities will be in compliance with the Policy LF-91-2, Cutting, Removal or Destruction of Trees on Forest Preserve Lands and the Commissioner's Delegation Memorandum #84-06 on Tree Cutting in the Forest Preserve.

No historic or archeological sites are known to exist near any proposed sites.

There is no impact associated with the construction of fish barrier dams. They do not affect water flow. They are primarily designed to prevent fish from moving upstream into reclaimed ponds. Barrier dams will be sited at unobtrusive locations to minimize visual impacts. Construction of fish barrier dams will be in compliance with the "*Final Programmatic Environmental Impact Statement on Habitat Management Activities of the Department of Environmental Conservation, Division of Fish and Wildlife,*" December 1979.

During wet periods in the spring mountain bike trails may be closed to protect resources from degradation.

No impacts are anticipated from horse trail use since the routes will follow old gravel roads with hardened surfaces and proper drainage.

All fish stocking projects will be in compliance with the "*Programmatic Environmental Impact Statement on Fish Species Management Activities of the Department of Environmental Conservation, Division of Fish and Wildlife,*" dated June 1980.

All liming projects will be in compliance with the “*Final Generic Environmental Impact Statement on the New York State Department of Environmental Conservation Program of Liming Selected Acidified Waters,*” dated October 1990, as well as the Division of Fish, Wildlife and Marine Resources liming policy.

All pond reclamation projects will be in compliance with the “Programmatic Environmental Impact Statement on Fish Species Management Activities of the Department of Environmental Conservation” and “*Programmatic Environmental Impact Statement on Undesirable Fish Removal by the Use of Pesticides Under Permit Issued by the Department of Environmental Conservation, Division of Lands and Forests, Bureau of Pesticide Management.*”

The fish barrier dam will not alter the flow of water through the outlet. The barrier dam will prevent the non-native fish from entering Ledge Pond. The barrier dam will be sited at an unobtrusive location to minimize visual impacts. This project will be in compliance with the “*Final Programmatic Environmental Impact Statement on Habitat Management Activities of the Department of Environmental Conservation, Division of Fish and Wildlife,*” December 1979.

New trail construction will adhere to the following best management practices:
locating trails to minimize necessary cut and fill;
locating trails away from streams, wetlands, and unstable slopes wherever possible;
use of proper drainage devices such as water bars and broad-based dips;
locating trails to minimize grade;
using stream crossings with low, stable banks, firm stream bottoms and gentle approach slopes;
limiting stream crossing construction to periods of low or normal flow and;
locating trails on existing disturbed areas such as old roads

If Conditioned Negative Declaration, provide on attachment the specific mitigation measures imposed.

For Further Information:

Contact Person: David Smith

Address: NYSDEC
317 Washington St.
Watertown, NY 13601

Telephone Number:(315) 785-2238

For Type 1 Actions and Conditioned Negative Declarations, a Copy of this Notice Sent to:

Commissioner, Department of Environmental Conservation, 50 Wolf Road, Albany, New York
12233-0001

Appropriate Regional Office of the Department of Environmental Conservation

Office of the Chief Executive Officer of the political subdivision in which the action will be
principally located.

Applicant (if any)

Other involved agencies (if any)

617.20
Appendix A
State Environmental Quality Review
FULL ENVIRONMENTAL ASSESSMENT FORM

Purpose: The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

Full EAF Components: The full EAF is comprised of three parts:

- Part 1:** Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.
- Part 2:** Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.
- Part 3:** If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions

Identify the Portions of EAF completed for this project: Part 1 Part 2 Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

- A. The project will not result in any large and important impact(s) and, therefore, is one which **will not** have a significant impact on the environment, therefore **a negative declaration will be prepared.**
- B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore **a CONDITIONED negative declaration will be prepared.***
- C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore **a positive declaration will be prepared.**

*A Conditioned Negative Declaration is only valid for Unlisted Actions

Adoption and Implementation of the Moose River Plains Wild Forest/Seventh Lake Boat Launch Unit Management Plan (see attached for projects list)

Name of Action

New York State Department of Environmental Conservation

Name of Lead Agency

David S. Smith

Regional forester

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (If different from responsible officer)

February 21, 2006

Date

PART 1--PROJECT INFORMATION
Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

NAME OF ACTION Adoption and Implementation of Moose River Plains Wild forest/Seventh Lake boat Launch Unit Management Plan (see attached projects list)		
LOCATION OF ACTION (INCLUDE STREET ADDRESS, MUNICIPALITY AND COUNTY) Towns of Webb and Ohio, herkimer County, Towns of Arietta, Inlet, Long Lake, Lake Pleasant and Morehouse, Hamilton county.		
NAME OF APPLICANT/SPONSOR NYSDEC	BUSINESS TELEPHONE (315) 376-3521	
ADDRESS 7327 State Route 812		
CITY/PO Lowville	STATE NY	ZIP CODE 13367
NAME OF OWNER (IF DIFFERENT)	BUSINESS TELEPHONE ()	
ADDRESS		
CITY/PO	STATE	ZIP CODE
DESCRIPTION OF ACTION see attached		

Please Complete Each Question--Indicate N.A. if not applicable

A. Site Description

Physical setting of overall project, both developed and undeveloped areas.

1. Present Land Use: Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Other highway

2. Total acreage of project area:	<u>85,702.6</u> acres.		
APPROXIMATE ACREAGE		PRESENTLY	AFTER COMPLETION
Meadow or Brushland (Non-agricultural)		<u>85,702.6</u> acres	<u>85,697.6</u> acres
Forested		<u>390</u> acres	<u>390</u> acres
Agricultural (Includes orchards, cropland, pasture, etc.)		<u>72,195.6</u> acres	<u>72,190.6</u> acres
Wetland(Freshwater or tidal as per Articles 24,25 of ECL)		<u>12,448</u> acres	<u>12,448</u> acres
Water Surface Area		<u>547</u> acres	<u>547</u> acres
Unvegetated (Rock, earth or fill)		<u> </u> acres	<u> </u> acres
Roads, buildings and other paved surfaces		<u>90</u> acres	<u>90</u> acres
Other (Indicate type) <u>residential/mixed urban</u>		<u>32</u> acres	<u>32</u> acres

3. What is predominant soil type(s) on project site? Becket
- a. Soil drainage: Well drained 40 % of site Moderately well drained 45 % of site.
 Poorly drained 15 % of site
- b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? _____ Acres (see 1NYCRR 370).
4. Are there bedrock outcroppings on project site? YES NO
- a. What is depth to bedrock? (in feet) varies
5. Approximate percentage of proposed project site with slopes: 0-10% 25 % 10-15% 75 %
 15% or greater 0 %
6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or National Registers of Historic Places? YES NO
7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? YES NO
8. What is the depth of the water table? Varies (in feet)
9. Is site located over a primary, principal, or sole source aquifer? YES NO
10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? YES NO
11. Does project site contain any species of plant or animal life that is identified as threatened or endangered? YES NO
- According to: MHDB, NYS breeding bird atlas
- Identify each species: Bicknell's thrush, spruce grouse
12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations)? YES NO
- Describe: cliffs occur on some mountain tops
13. Is the project site presently used by the community or neighborhood as an open space or recreation area? YES NO
- If yes, explain: part of New York State Forest preserve
14. Does the present site include scenic views known to be important to the community? YES NO
15. Streams within or contiguous to project area: numerous
- a. Name of Stream and name of River to which it is tributary Main streams: S. Br. Moose river, Red River, Otter Brook, Cedar River
16. Lakes, ponds, wetland areas within or contiguous to project area:
- a. Name: numerous
- b. Size (in acres): total-547 acres
17. Is the site served by existing public utilities? YES NO
- a. If YES, does sufficient capacity exist to allow connection? YES NO
- b. If YES, will improvements be necessary to allow connection? YES NO
18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? YES NO
19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617? YES NO
20. Has the site ever been used for the disposal of solid or hazardous wastes? YES NO

B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate).

- a. Total contiguous acreage owned or controlled by project sponsor >1,000,000 acres.
- b. Project acreage to be developed: <5 acres initially; <5 acres ultimately.
- c. Project acreage to remain undeveloped 85,697.6+/- acres.
- d. Length of project, in miles: NA (if appropriate)
- e. If the project is an expansion, indicate percent of expansion proposed NA %
- f. Number of off-street parking spaces existing 88; proposed 30
- g. Maximum vehicular trips generated per hour NA (upon completion of project)?
- h. If residential: Number and type of housing units:
- | | One Family | Two Family | Multiple Family | Condominium |
|------------|------------|------------|-----------------|-------------|
| Initially | <u>NA</u> | | | |
| Ultimately | | | | |
- I. Dimensions (in feet) of largest proposed structure 6 height; 8 width; 60 length.
- J. Linear feet of frontage along a public thoroughfare project will occupy is? NA ft.
2. How much natural material (i.e. rock, earth, etc.) will be removed from the site? 0 tons/cubic yards.
3. Will disturbed areas be reclaimed? N/A YES NO
- a. If yes, for what intended purpose is the site being reclaimed? Restore natural condition
- b. Will topsoil be stockpiled for reclamation? YES NO
- c. Will upper subsoil be stockpiled for reclamation? YES NO
4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 0 acres.
5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project? YES NO
6. If single phase project: Anticipated period of construction NA months, (including demolition)
7. If multi-phased:
- a. Total number of phases anticipated 5 (number)
- b. Anticipated date of commencement phase 1 September month 2003 year, (including demolition)
- c. Approximate completion date of final phase December month 2008 year.
- d. Is phase 1 functionally dependent on subsequent phases? YES NO
8. Will blasting occur during construction YES NO
9. Number of jobs generated: during construction 0; after project is complete 0
10. Number of jobs eliminated by this project 0
11. Will project require relocation of any projects or facilities? YES NO
- If yes, explain: possible relocation of existing campsites and hiking trail
12. Is surface liquid waste disposal involved? YES NO
- a. If yes, indicate type of waste (sewage, industrial, etc) and amount _____
- b. Name of water body into which effluent will be discharged _____
13. Is subsurface liquid waste disposal involved? Type _____ YES NO
14. Will surface area of an existing water body increase or decrease by proposal? YES NO
- If yes, explain: _____
15. Is project or any portion of project located in a 100 year flood plain? YES NO
16. Will the project generate solid waste? YES NO
- a. If yes, what is the amount per month _____ tons
- b. If yes, will an existing solid waste facility be used? YES NO
- c. If yes, give name _____; location _____

- d. Will any wastes not go into a sewage disposal system or into a sanitary landfill? YES NO
- e. If yes, explain: _____
17. Will the project involve the disposal of solid waste? YES NO
- a. If yes, what is the anticipated rate of disposal? _____ tons/month.
- b. If yes, what is the anticipated site life? _____ years.
18. Will project use herbicides or pesticides? YES NO
19. Will project routinely produce odors (more than one hour per day)? YES NO
20. Will project produce operating noise exceeding the local ambient noise levels? YES NO
21. Will project result in an increase in energy use? YES NO
- If yes, indicate type(s) _____
22. If water supply is from wells, indicate pumping capacity NA gallons/minute.
23. Total anticipated water usage per day NA gallons/day.
24. Does project involve Local, State or Federal funding? YES NO
- If yes, explain: State Stewardship funding, EQBA funding, EPF funding

25. Approvals Required:

	YES	NO	TYPE	SUBMITTAL DATE
City, Town, Village Board	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
City, Town, Village Planning Board	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
City, Town Zoning Board	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
City, County Health Department	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
Other Local Agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
Other Regional Agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____
State Agencies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Adirondack Park Agency</u>	<u>1/03</u>
Federal Agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____

C. Zoning and Planning Information

1. Does proposed action involve a planning or zoning decision? YES NO
- If Yes, indicate decision required:
- Zoning amendment Zoning variance New/revision of master plan Subdivision
- Site plan Special use permit Resource management plan Other _____
2. What is the zoning classification(s) of the site? NYS Forest Preserve, Wild Forest
3. What is the maximum potential development of the site if developed as permitted by the present zoning?
- No development
4. What is the proposed zoning of the site? Same
5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?
- same
6. Is the proposed action consistent with the recommended uses in adopted local land use plans? YES NO
7. What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?
- Forest Preserve, private forest, residential
8. Is the proposed action compatible with adjoining/surrounding land uses with a ¼ mile? YES NO
9. If the proposed action is the subdivision of land, how many lots are proposed? NA

- a. What is the minimum lot size proposed? _____
10. Will proposed action require any authorization(s) for the formation of sewer or water districts? YES NO
11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)? YES NO
- a. If yes, is existing capacity sufficient to handle projected demand? YES NO
12. Will the proposed action result in the generation of traffic significantly above present levels? YES NO
- a. If yes, is the existing road network adequate to handle the additional traffic. YES NO

D. Informational Details

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

E. Verification

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name David S. Smith Date February 21, 2006

Signature _____ Title Regional Forester

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

PART 2 - PROJECT IMPACTS AND THEIR MAGNITUDE

Responsibility of Lead Agency

General Information (Read Carefully)

- In completing the form the reviewer should be guided by the question: Have my responses and determinations been **reasonable**? The reviewer is not expected to be an expert environmental analyst.
- The **Examples** provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.
- The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.
- The number of examples per question does not indicate the importance of each question.
- In identifying impacts, consider long term, short term and cumulative effects.

Instructions (Read carefully)

a. Answer each of the 20 questions in PART 2. Answer **Yes** if there will be **any** impact.

b. **Maybe** answers should be considered as **Yes** answers.

c. If answering **Yes** to a question then check the appropriate box(column 1 or 2)to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.

d. Identifying that an Impact will be potentially large (column 2) does not mean that it is also necessarily **significant**. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.

e. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.

f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in Part 3.

IMPACT ON LAND

1. Will the Proposed Action result in a physical change to the project site? NO YES

Examples that would apply to column 2

- Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%.
- Construction on land where the depth to the water table is less than 3 feet.
- Construction of paved parking area for 1,000 or more vehicles.
- Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface.
- Construction that will continue for more than 1 year or involve more than one phase or stage.
- Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year.
- Construction or expansion of a sanitary landfill.

	1	2	3	
	Small to Moderate Impact	Potential Large Impact	Can Impact be Mitigated by Project Change	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change	
• Construction or operation causing any contamination of a water supply system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will adversely affect groundwater.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action would use water in excess of 20,000 gallons per day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will allow residential uses in areas without water and/or sewer services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6. Will Proposed Action alter drainage flow or patterns, or surface water runoff?				
			<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
Examples that would apply to column 2				
• Proposed Action would change flood water flows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action may cause substantial erosion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action is incompatible with existing drainage patterns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will allow development in a designated floodway.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
IMPACT ON AIR				
7. Will Proposed Action affect air quality?				
			<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
Examples that would apply to column 2				
• Proposed Action will induce 1,000 or more vehicle trips in any given hour.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will result in the incineration of more than 1 ton of refuse per hour.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Emission rate of total contaminants will exceed 5 lbs. per hour or a heat source producing more than 10 million BTU's per hour.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will allow an increase in the amount of land committed to industrial use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will allow an increase in the density of industrial development within existing industrial areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change	
IMPACT ON PLANTS AND ANIMALS			
8. Will Proposed Action affect any threatened or endangered species? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
Examples that would apply to column 2			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Reduction of one or more species listed on the New York or Federal list, using the site, over or near the site, or found on the site.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Removal of any portion of a critical or significant wildlife habitat.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Application of pesticide or herbicide more than twice a year, other than for agricultural purposes.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts _____	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9. Will Proposed Action substantially affect non-threatened or non-endangered species? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
Examples that would apply to column 2			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action would substantially interfere with any resident or migratory fish, shellfish or wildlife species.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action requires the removal of more than 10 acres of mature forest (over 100 years of age) or other locally important vegetation.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
IMPACT ON AGRICULTURAL LAND RESOURCES			
10. Will Proposed Action affect agricultural land resources? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
Examples that would apply to column 2			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• The Proposed Action would sever, cross or limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.)	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Construction activity would excavate or compact the soil profile of agricultural land.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• The Proposed Action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultural District, more than 2.5 acres of agricultural land.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• The Proposed Action would disrupt or prevent installation of agricultural land management systems (e.g., subsurface drain lines, outlet ditches, strip cropping); or create a need for such measures (e.g. cause a farm field to drain poorly due to increased runoff).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Other impacts _____	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
IMPACT ON AESTHETIC RESOURCES			
11. Will Proposed Action affect aesthetic resources? (If necessary, use the Visual EAF Addendum in Section 617.20, Appendix B.) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
Examples that would apply to column 2			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed land uses, or project components obviously different from or in sharp contrast to current surrounding land use patterns, whether man-made or natural.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed land uses, or project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource.	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

- Project components that will result in the elimination or significant screening of scenic views known to be important to the area.
- Other impacts _____

IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES

12. Will Proposed Action impact any site or structure of historic, prehistoric or paleontological importance?
 NO YES

Examples that would apply to column 2

- Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places.
- Any impact to an archaeological site or fossil bed located within the project site.
- Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory.
- Other impacts _____

IMPACT ON OPEN SPACE AND RECREATION

13. Will Proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?
 NO YES

Examples that would apply to column 2

- The permanent foreclosure of a future recreational opportunity.
- A major reduction of an open space important to the community.
- Other impacts _____

IMPACT ON CRITICAL ENVIRONMENTAL AREAS

14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)?
 NO YES

Examples that would apply to column 2

- Proposed Action to locate within the CEA?
- Proposed Action will result in a reduction in the quantity of the resource?
- Proposed Action will result in a reduction in the quality of the resource?

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change	
<ul style="list-style-type: none"> Proposed Action will impact the use, function or enjoyment of the resource? Other impacts _____ 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
IMPACT ON TRANSPORTATION				
15. Will there be an effect to existing transportation systems? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Examples that would apply to column 2				
<ul style="list-style-type: none"> Alteration of present patterns of movement of people and/or goods. Proposed Action will result in major traffic problems. Other impacts The proposed action will improve traffic flow and reduce backups which will result in less air emissions and less oil and grease discharges onto <u>the pavement.</u> 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
IMPACT ON ENERGY				
16. Will Proposed Action affect the community's sources of fuel or energy supply? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Examples that would apply to column 2				
<ul style="list-style-type: none"> Proposed Action will cause a greater than 5% increase in the use of any form of energy in the municipality. Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use. Other impacts _____ 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
NOISE AND ODOR IMPACT				
17. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Examples that would apply to column 2				
<ul style="list-style-type: none"> Blasting within 1,500 feet of a hospital, school or other sensitive facility. Odors will occur routinely (more than one hour per day). Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures. Proposed Action will remove natural barriers that would act as a noise screen. Other impacts _____ 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
IMPACT ON PUBLIC HEALTH				
18. Will Proposed Action affect public health and safety? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Examples that would apply to column 2				

- Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission.
- Proposed Action may result in the burial of “hazardous wastes” in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.)
- Storage facilities for one million or more gallons of liquefied natural gas or other flammable liquids.
- Proposed Action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.
- Other impacts _____

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD

19. Will Proposed Action affect the character of the existing community?
 NO YES

Examples that would apply to column 2

- The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%.
- The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project.
- Proposed Action will conflict with officially adopted plans or goals.
- Proposed Action will cause a change in the density of land use.
- Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.
- Development will create a demand for additional community services (e.g. schools, police and fire, etc.)
- Proposed Action will set an important precedent for future projects.
- Proposed Action will create or eliminate employment.
- Other impacts _____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

20. Is there, or is there likely to be, public controversy related to potential adverse environment impacts?
 NO YES

If Any Action in Part 2 Is Identified as a Potential Large Impact or If you Cannot Determine the Magnitude of Impact, Proceed to Part 3