

**Division of Operations** 

**Bureau of Recreation** 

# Limekiln Lake Public Campground Draft Unit Management Plan

Town of Inlet Hamilton County, New York Town of Ohio Herkimer County, New York

January 2016

New York State Department of Environmental Conservation Division of Operation 3<sup>rd</sup> Floor 625 Broadway, Albany, NY12233

## LIMEKILN LAKE PUBLIC CAMPGROUND SITE SPECIFIC - VOLUME II DRAFT UNIT MANAGEMENT PLAN

NOTE: Volume I is a generic plan and contains overview, environmental setting, goals, policy, management, and impact assessment criteria which pertains universally and in common to all Adirondack and Catskill Public Campgrounds and Special Day-Use classified Intensive Use Areas. Volume II is a site specific document containing inventories of physical, biological, and manmade features, together with specific management actions for the individual site. Volume III contains support data in the form of an Appendix to Volumes I and II.

Unit Management Plans are prepared by the New York State Department of Environmental Conservation to cover the next five year management period. The Final Unit Management Plan is completed in accordance with guidelines and criteria set forth in the Adirondack Park State Land Master Plan.

This DRAFT UMP has been prepared by Region 5 staff. Any comments and/or information may be forwarded to Brett Blanchard, copy to Tom Folts, Division of Operations, Albany. For information, contact Michael Buzzelli, Campground Program Manager, New York State Department of Environmental Conservation, 625 Broadway, Albany, NY12233, telephone 518-457-2500.

## SUMMARY LIMEKILN LAKE PUBLIC CAMPGROUND UNIT MANAGEMENT PLAN INITIAL DRAFT

In keeping with constitutional provisions criteria referenced in the Adirondack Park State Land Master Plan and Department of Environmental Conservation Management Policy for Forest Preserve state-owned lands the department has established a management plan for the five (5) year operation of the Limekiln Lake Public Campground.

Goals include: management of recreation programs in a manner which ensures protection of the natural resources base in accordance with Environmental Conservation law, offer recreational opportunities for leisure time enjoyment for the people of the state, ensure that revenues equal operating costs for that portion of the program covered by user fees, and manage the program to enhance economic benefits to local communities and the state.

To help meet these goals, contingent upon funding, the following eleven (11) Management Actions are being proposed:

## **Proposed Management Actions\***

- 1. Replace 2 comfort stations #3 and #8
- 2. Construct 2 additional trailer dump stations
- 3. Replace ticket booth
- 4. Convert 8 existing sites to universal campsites
- 5. Rehabilitate water distribution system
- 6. Repair dam at outlet
- 7. Rehabilitate sewage lift station A
- 8. Replace overhead power lines with underground system
- 9. Rehab of campsites
- 10. Planting of shrubs and trees
- 11. Replacement of picnic tables and fireplaces

<sup>\*</sup>Prioritized projects to be completed when funding becomes available.

The beneficial effects of proposed actions include: compliance with state health codes, maintenance of physical plant investment, modernization of facilities which enhances a satisfactory recreational experience by users, upkeep of facilities to contribute to public safety, and providing conditions in a setting and scale that is in harmony with the character of the Adirondack Park.

Determination of conformance to criteria established in the Adirondack Park State Land Master Plan includes: determining whether proposed activities avoid alterations of wetlands and topography; limiting vegetative clearing; preserving the scenic, natural resources of the area; and whether the plan contains an adequate assessment of actual and projected public use.

Mitigation measures to minimize environmental impacts have been considered. All construction projects will minimize tree removal in order to minimize clearing and maintain the wooded appearance of the facility. Architectural designs will be selected to achieve a harmonious blending with the character of the recreation area and surrounding forest. Seeding and mulching of construction sites will reestablish vegetation readily which effectively stabilize soil. Adjacent forest cover will not be altered. Proposals concentrate on improving and updating facilities to accommodate present peak use periods rather than accommodating increased population projections.

Various alternative actions to those favored and selected were considered. Public unrest, adverse effect on local communities, and uncontrolled use of state lands would sharply increase, should recreation planning and management efforts be reduced or dissolved. The care, custody, and control precedent preclude selection of these alternatives at this time.

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#### I. INTRODUCTION

#### A. Overview

Limekiln Lake Campground is located within DEC Region 5 Indian Lake working circle and consists of 175 developed acres. The 312 acre Campground is situated on the northern shore of 461 acre Limekiln Lake. The remote Adirondack setting of this facility offers a relaxing, quiet beauty all its own. The campsites offer privacy and are well-forested. Amenities include 271 tent and trailer sites, flush toilets, hot showers, a sand beach with a swimming area and bathhouse, a picnic area with tables and grills, a nature trail and small boat launch. A pavilion is available for rent. A trailer dump station and recycling center are also available. Canoes, rowboats and motorboats are allowed on the lake, giving access to fishing for a wide variety of fish including yellow perch, bullhead and splake.

Hiking opportunities exist from within the campground and in the local area which include the Old Dam Nature Trail, Rocky Mountain, Blackbear Mountain and Bald Mountain. Access to Moose River Plains Wild Forest is also close by. Area attractions include the Old Forge region with amusements, restaurants and the Adirondack Museum at Blue Mountain Lake.

#### 1. Location

One mile east of Inlet on NYS Route 28, turn right (south) on Limekiln Lake Road, Travel 1 1/2 miles then turn right at campground sign. Then travel 1/2 mile to entrance booth. The property includes portions of Lots 86, 74, 73 and 62 all located in Township 3 of the Moose River Tract.

## 2. History

The lands upon which the campground is situated are a portion of the Moose River Tract, a 207,360 acre wedge shape tract acquired in 1820. The tract was further divided into 10 townships with Township 3 being located in the northeastern corner of the triangle. For many years, the Gould Paper Company conducted lumber operations in this portion of the tract. According to author David Beetle, the Limekiln Hotel and Delmarsh Inn both began operation on the shores of the lake in 1921. At that time the lake was reached by a road leading from Gull Rock Bay on Fourth Lake, further west than today's Limekiln Lake Road. In 1948 the lake was described as having 2 hotels, 45 cottages and miles of wooded Gould Paper Company shoreline. Starting in 1960, New York State purchased over 66,000 acres from Gould Paper Company that would become forest preserve including 263 acres which would be developed as a campground. The park was opened in 1963, and by 1964 all of the present 271 campsites were developed. A purchase of 14 acres near the entrance of the campground was completed

in 1981. In 2003, a land classification revision was made to insure an adequate buffer would exist between the intensive use area and the wild forest bringing the total acreage to 312 acres.

Year	Campground Improvement
1991	Shower building completed
1994	Water system modifications
1997	Electrical utilities rehabilitated
2004	Roads repaved, petroleum tanks removed
2011	Electrical utilities rehabilitated

The origin of the name Limekiln Lake is not clear. At the point where the lake's outlet meets the Moose River there is a limestone outcropping at a spot known as Limekiln Falls. This is the same site where in 1942, 30,000 logs being floated to a mill downstream jammed into a pile 50 feet tall which took lumberjacks a week to clear, reportedly using 600 pounds of dynamite. It is speculated that some of the limestone outcropping at this site may have once have been burned and that the creek was named for this limekiln, prior to the naming of the lake.

## II. INVENTORY OF FACILITIES, SYSTEMS AND RESOURCES

## A. Inventory of Existing Facilities

## 1. Camping and Day-Use (Picnic) Areas

#### **CAMPING AREA**

- 271 campsites
- 271 picnic tables
- 271 fireplaces
- 44 spigots
- Design capacity 1,626 people
   (271 sites x 6 people)

#### DAY USE AREA

- 21 picnic tables
- 4 grills
- 9 fireplaces
- 3 spigots
- Design capacity 126 people (21 tables x 6 people)

## 2. Roads and Parking Areas

Presently there are 4.4 miles of roads maintained by the Department. This includes 1.3 miles of one-way paved road 10' wide, .5 miles of two-way paved road 14' wide and 2.1 miles of two-way paved road 18 feet wide. There are also .5 miles of unpaved roads.

The entrance parking area is  $40^{\circ}$  X  $275^{\circ}$ . The boat launch parking area is  $60^{\circ}$  X  $150^{\circ}$  and there is an overflow lot to the north of the launch  $110^{\circ}$  X  $50^{\circ}$ . The day use parking lot is  $160^{\circ}$  X  $100^{\circ}$ .

## 3. Buildings

Bldg#	<b>Building Name/ Function</b>	Location/ Description/Use	Size Sq Ft	Condition	Year Built
(001)	Garage	Near Entrance	1,000	Fair	1962
(002)	Facility Supervisor's Cottage	Near entrance	790	Fair	1962
(003)	Entrance Booth	Near entrance	80	Fair	1963
(004)	Comfort Station #1	Near Boat Launch	391	Fair	1963
(005)	Comfort Station #2	Near site 40	323	Fair	1963
(006)	Park Ranger Cabin	Near Site 20	550	Fair	1963
(007)	Pump House #1	Near Site 20- for storage	70	Fair	1963
(008)	Comfort Station #4	Near site 31	391	Fair	1963
(009)	Vault Toilet #3	Near site 31	247	Fair	1963
(010)	Chlorination (pump) Bldg	Entrance day use area	90	Fair	1963
(011)	Pump House #2	Day Use Area (lift station)	80	Fair	1963
(012)	Bathhouse	Near beach	540	Fair	1963
(013)	Bathhouse	Near beach	540	Fair	1963
(014)	Lifeguard Cabin	Near beach	552	Fair	1963
(015)	Reservoir	West of Site 206	256	Fair	1963
(016)	Comfort Station #10	Near site 207	391	Fair	1963
(017)	Chlorination Bldg	Sand Filter (not in use)	80	Fair	1963
(018)	Comfort Station #7	Near site 86	391	Fair	1963
(019)	Comfort Station #8	Near site 135	391	Fair	1963
(020)	Comfort Station #9	Near site 154	323	Fair	1963
(021)	Comfort Station #6	Near site 195	323	Fair	1963
(022)	Comfort Station #5	Near site 185	323	Fair	1963
(023)	Comfort Station #12	Near site 261	391	Fair	1963
(024)	Comfort Station #11	Near site 269	391	Fair	1963
(025)	Shower Bldg	Near Day Use Area	961	Good	1990
(026)	Recycle Bldg	Near Entrance	320	Good	1993

The building condition rating is from the (MMS) building inspection report conducted Oct 2014.

Comfort stations 1,2,4-12 have 8 flush toilets (4 per sex) 2 lavatories (1 per sex). Comfort station 3 is a vault toilet with 6 toilets (3 per sex) and 2 lavatories (1 per sex). Bathhouses have 4 flush toilets (2 per sex) and 2 lavatories (1 per sex). The shower building has 8 showers (4 per sex) The men's shower has 1 toilet, 1 urinal and 4 sinks; the women's shower has 2 toilets and 4 sinks.

Total for campground 102 toilets, 34 lavatories and 8 shower units.

## 4. Sewage System

All sewage disposal in the campground is by use of septic systems at each building and a centralized sand filtration bed. The collection system carries effluent by gravity to a low point and then

pumped by force main from four locations through a dosing syphon to the filtration bed. It is then alternately dosed into separate sections of the filtration bed. After the effluent passes through the filter it is collected by a series of lateral pipes and discharged into Limekiln Creek. The septic tanks are periodically pumped and the waste transported to a disposal site by a commercial pumper. A NYS-DEC SPDES permit #NY 0034363 was issued in 1993. The application covers the systems noted below: See Exhibit #6.

Bldg#	Building # / Type*	Septic Tank Size(gallons)**	Pumped to Field	Construction Date
#002	Facility Supervisor's Cottage	500	Yes	1963
#004	Comfort Station # 1	2,500	Yes	1963
#005	Comfort Station # 2	2,500	Yes	1963
#006	Park Ranger Cabin	500	Yes	1963
#008	Comfort Station # 4	2,500	Yes	1963
#009	Comfort Station # 3	2,500	Yes	1963
#012&13	Bathhouse	2,500	Yes	1963
#014	Lifeguard Cabin	500	Yes	1963
#016	Comfort Station # 10	2,500	Yes	1963
#018	Comfort Station # 7	2,500	Yes	1963
#019	Comfort Station # 8	2,500	Yes	1963
#020	Comfort Station # 9	2,500	Yes	1963
#021	Comfort Station # 6	2,500	Yes	1975
#022	Comfort Station # 5	2,500	Yes	1971
#023	Comfort Station # 12	2,500	Yes	1971
#024	Comfort Station # 11	2,500	Yes	1963
#025	Shower House	(2) 2,000	Yes	1990
#026	Recycle Building	1,000	Yes	1995
#016	Dumping Station	2,000 gal	Yes	1993

#### 5. Solid Waste

Annual refuse generated is estimated to be 20 tons. At this time solid waste is disposed of by department owned garbage packer to the Indian Lake transfer station. A recycling program is operated at the campground. About 1,000 lbs of recyclables are collected annually. In 2014, \$1,783 was deposited in the campground revenue account from returnable container deposits left at the facility.

This campground has a centralized refuse disposal facility that is managed by a staff person. A brochure is available to instruct campers of its availability and required use. The Recycling Center is tied into the water and sewage systems.

Beginning with the 1992 season all the day-use areas have been under the carry-in, carry-out policy. Appropriate signs have been erected to inform the public and a brochure was produced by the Albany office.

#### 6. Barriers

Barriers are used to control campground use and are periodically opened or closed for this purpose. Department policy provides for the design and safety considerations of in-place barriers. The current inventory is as follows:

Location	Type	Function
Near boat launch	Pipe gate	Control access to campsites
Road to site #221-274	Pipe Gate	Control access to campsites
Road to Sand Filter	Pipe Gate	Control access

## 7. Telephone

The main phone number is (315) 357-4401. When the campground is closed, an answering machine directs callers to either the Recreation office in Indian lake or the Reservation Service call center.

## 8. Signs

The variety of messages that are conveyed to public users by means of standard (yellow on brown) signs, include directions and information for entrance, supervisor's office, bulletin board, traffic control, commemorative, regulations, picnic area, comfort stations, and camping sites.

### 9. Electric System

The main campground has overhead primary electrical distribution and overhead secondary distribution. National Grid provides electricity to the campground's primary service. The DEC owns and maintains all utility lines on the campground. Average yearly electric consumption is 36,500 kwh at a cost of \$4,550. (See Exhibit #7)

#### 10. Potable Water System

There is a 57' deep drilled well located near the entrance to the day-use area that supplies water to the campground. The well yields 45 gallons per minute and has a 3 HP pump with a pumping capacity of 40 gallons per minute. The water is chlorinated at a point near the well and pumped to a 20,945 gallon reservoir. From the reservoir, it is gravity fed through 3.9 miles of waterline to the water spigots, comfort stations, staff housing, bathhouse and recycling center. (See Exhibit 5)

## 11. Trails & Bridges

The Old Dam Nature Trail is a 1.6 mile loop hike starting behind campsite # 87. The trail crosses Limekiln Creek in two places on bridges. At the southernmost point of the loop there is a junction with the Limekiln Creek-Third Lake Trail which continues on for another four miles to South Shore Road. There is also an unmarked snowmobile trail that leaves Loop D near site # 186.

### **12 Fuel Systems**

The following chart displays the permanent fuel system used at the campground:

Tank #	Product Type	Tank Size	Location	Ave Annual Use
1	Propane	2000 gal.	Shower Building	
2	Propane	420 gal.	Caretaker Cabin	
3	Propane	420 gal.	Recycling Building	
4	Propane	420 gal.	Lifeguard Cabin	
5	Propane	420 gal	Park Ranger Cabin	
	Avg gallons		Avg annual Cost	
	used 1,950		\$3,100	

#### 13. Swimming

The swimming area with a beach is located at the northeast shore end of Limekiln Lake.

Swimming Area Capacities			
Location	Size	Capacity	
Swim area < 4' deep	2,040sf	81	
Swim area 4' – 6' deep	6,960 sf	92	
Beach area	6,000 sf	171	

#### 14. Boating

A boat launching site is located between Loops A & E which enhances fishing and other water related recreational opportunities within the Limekiln Lake Campground. The site is listed in the New York State Directory of State Access and Boat Launching Areas as consisting of a hard surface launching ramp (ie. trailer-launch capable) with parking for 15 car and trailer units. Exhibit 11 of

Volume I of the Final Generic Unit Management Plan and Environmental Impact Statement for Campgrounds and Day-Use Areas shows the facility to be a "pre-existing" and "improved" ramp which provides for the only public access for the launching of trailered boats. This launch is currently the only launch located on Limekiln Lake and serves the campers, day user and private camp owners. Discussions are currently underway between the APA and DEC to consider these pre-existing launches on lakes less than 1,000 acres. If the outcome of these discussions revises the criteria for launches in

The existing Limekiln Lake boat launching facility consists of a single-lane paved ramp with an 11' x 20' launch area consisting of cement blocks. There is a dock to assist with the launching of boats. The paved parking area is 11,000 sq feet with a capacity for 15 vehicles. There is also an unpaved lot to the west for storage of boat trailers.

#### **15. Dams**

A dam located on the outlet of Limekiln Lake which can raise the natural level of the lake by up to two feet. The water level is controlled by installing and removing splash boards and is adjusted seasonally as needed. A recent inspection has noted water is leaking under the wing walls on both sides of the spillway.

## **B. Inventory of Systems**

#### 1. Staff

Total	Position Title
1	Conservation Recreation Facilities Supervisor III
1	Maintenance Assistant Parks
6	Park and Recreation Aide II
1	Maintenance Helper
2	Life Guards

these situations, it will be considered in future plans.

#### 2. Fee Schedule 2014

Daily Fees		
2014 Open Dates: May 16-Oct 13		
Camping / night – NYS Residents	\$20.00	
Camping / night – Non Residents	\$25.00	
Day Use - Auto	\$8.00	
Day Use - Walk-In	\$2.00	
Day Use - Bus	\$75.00	

#### II. INVENTORY OF FACILITIES, SYSTEMS AND RESOURCES

Day use - Motorcycle	\$4.00
Picnic Shelter Rental	\$50.00
Ice – per bag	\$2.00
Empire Passport - season	\$65.00

#### 3. Permits

Peddling permits may be issued annually for firewood, boat rentals and camper supplies. A fee of \$2.00 x number of campsites is charged for each vendor. In 2014, permits were issued to vendors for firewood sales and for boat rentals.

#### 4. Off Season Use

After the camping season, gates are locked beyond the boat launch allowing access to the launch and lake. The roads to the boat launch is plowed by the Town of Inlet until a heavy snow prevents further plowing. The roads are then left open to snowmobilers and skiers who use the roads and trails. After Limekiln Lake freezes, the lake is popular for ice fishing.

#### **5. Junior Naturalist Program**

The Junior Naturalist Program is an activity book that gives children the opportunity to test their environmental knowledge while teaching them more about New York State's environment. Children five through twelve years old can request a Junior Naturalist Journal from campground staff. When the journal is completed, children bring it to the appropriate DEC staff person who reviews the journal then gives the child a Junior Naturalist patch. This program is dependent on funding being available and may not be offered every season.

## **C. Inventory of Natural Resources**

### 1. Physical

#### a. Elevation

The average elevation of the Limekiln Lake Campground is 2,000' with a maximum of 2,056'. The elevation of Limekiln Lake is 1,889'. (See Exhibit 2)

#### b. Water

Limekiln Lake is 461 acres in size with 6.2 miles of shoreline and a maximum depth of 72 feet. It has a watershed area of 3,442 acres or 5.4 square miles. The outlet is known as Limekiln Creek which

flows into the south branch of the Moose River and then to the Black River. There are 38 campsites located on the shore of the lake and 6 located on Limekiln Creek. The campground beach is located on the northwest shore.

#### c. Wetlands

Wetlands are inventoried, mapped, and protected under Article 24 of the Environmental Conservation Law, by the Department of Environmental Conservation and the Adirondack Park Agency. There are 14.5 acres of Palustrine wetlands and two streams flowing through the campground totaling .5 miles linear Palustrine wetlands within the boundaries of Limekiln Lake Campground.

Projects that alter or adversely affect the wetlands or any sewage disposal system within 100 feet of the wetland will require a permit from the APA. The APA will be consulted to determine if a permit is needed prior to site disturbance in or adjacent to these designated wetland areas(See Exhibit 8).

#### d. Soils

Soil associations consist of:

Becket Sandy Loam, 3-15% slopes, very bouldery Becket Sandy Loam, 15-35% slopes, very bouldery Becket-Turnbridge Complex, 15-35% slopes, very boulder Turnbridge Lyman Becket Complex Duxbury Colton Adams Complex (See Exhibit 8)

#### 2. Biological

#### a. Forest Type

The forests in the vicinity of Limekiln Lake are located in the southernmost extent of the transitional zone between the boreal forests to the north and the mixed forests of the south although the campground is located in primarily a mixed forest. Past events such as fire, wind and logging have exerted a strong influence on present day conditions. During the early 1900s, this area was affected when great fires swept across most of the Adirondacks. Heavy logging until the 1960's introduced adequate sunlight to the forest floor to allow reproduction of shade intolerant species, such as black cherry, to occur. On November 25, 1950, a severe hurricane laid waste to hundreds of thousands of acres of privately-owned and Forest Preserve lands including in the vicinity of Limekiln Lake.

The shoreline and campsite areas are primarily conifer forest species including white pine, hemlock and red spruce along with a mix of deciduous species which include sugar maple, American beech and yellow birch. There are wetland areas both along the shore and upland.

## b. Unique Vegetation

The New York Natural Heritage Program keeps track of the status of the state's rare flowering plants, conifers, ferns and fern allies, and mosses. No rare plants, or unique natural communities have been documented to exist within Limekiln Lake campground.

### c. Wildlife

Wildlife present within the area are typical of those found in the central Adirondack eco-zone. Common large mammals include white-tailed deer and black bear, and although uncommon, moose are increasingly present. Typical fur-bearing species represented in Department harvest data for the area include beaver, coyote, fisher, otter, pine marten and bobcat. Avian diversity in the unit is representative of northern hardwood and spruce/fir forested habitats. Breeding Bird Atlas data for the unit from the 2000-2002 census identified 119 confirmed, probable and possible breeding bird species in the vicinity of Limekiln Lake and the Moose River Plains Wild Forest. Although no systematic survey of the unit has been conducted for reptiles and amphibians, a volunteer based "Herp Atlas" sponsored by the Department through the 1990s identified 23 species occurring in the vicinity of Limekiln Lake and the Moose River Plains Wild Forest. Loons are seen here and nesting sites have been identified. Annual surveys are taken by the Adirondack Cooperative Loon Program. There are no exotic species of concern known to exist and nuisance wildlife issues are largely limited to bear finding food and causing disruptions in the campground. In an effort to reduce bear-human conflicts, bear proof storage lockers were installed on every campsite in 2004. Visitors to the campground are also advised on how to cook, store, cleanup food and how to dispose of waste while camping. A more comprehensive list of wildlife to be found in the vicinity is available in Appendix 4 of the Moose River Plains Wild Forest Unit Management Plan.

#### d. Fisheries

Aquatic communities in the Adirondacks are a result of geological and human influences. Prior to human influences, relatively simple fish communities were common. Human-caused changes in habitat and introduction of fishes have altered those natural communities. Non-native species were

introduced into the ranges of native species. Habitat changes including sedimentation from logging, fires and other human activities have impacted reproduction especially in species such as brook trout which are very sensitive to impacts from sedimentation. The phenomenon of acid ion deposition, popularly known as acid rain, has had minor impacts on the fisheries resources of the area. Limekiln Lake formally supported a brook trout fishery but introduction of non-native species are most likely responsible for the decline of brook trout in these waters. Lake trout were historically present in Limekiln Lake, but several efforts to restore that species since yellow perch were established in the lake in 1959 have failed. Round whitefish are a native Adirondack species now classified as Endangered within New York State. Historically, this species was present in Limekiln Lake. Non-native species introductions greatly reduced or eliminated them prior to reclamation efforts by DEC. The reclamation effort in Limekiln Lake was a failure and it is doubtful that round whitefish could survive and compete with this water's current fish community. A few round whitefish fry were stocked in Limekiln Lake in 2005. Yellow perch, once found in great abundance, are declining.

Limekiln Lake is being managed as a cold water fishery to preserve its native fishes in the presence of non-native and historically associated species. Limekiln Lake meets Liming FEIS criteria, but recent chemistry work indicates pH levels are improving naturally. If yellow perch numbers continue to decline in Limekiln Lake a reintroduction of the endangered fish species, round whitefish, may be attempted.

Surveys and local anglers report catching a wide variety of fish, including splake, rock bass, creek chub, pumpkinseed sunfish, brown bullhead, yellow perch and golden shiner. While the DEC has stocked splake into Limekiln Lake in the past, they have not reported the stocking of any species in the lake in the past two years.

#### III. INVENTORY OF ISSUES AND CONSTRAINTS

## A. Article XIV, New York State Constitution

Article XIV of the State Constitution provides in part that "The lands of the state, now owned or hereafter acquired, constituting the Forest Preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or taken by any corporation, public or private, nor shall the timber thereon be sold, removed, or destroyed".

#### B. Adirondack State Land Master Plan

The APSLMP requires that all campgrounds and day use areas will be of a rustic nature. Natural materials will be used to the fullest extent possible in the construction so as to blend with the Adirondack environment. These constraints are further described in Volume I of the generic plan.

#### C. Environmental Conservation Laws

The management plan has been developed within the constraints set forth by the Environmental Conservation Law (ECL), Rules and Regulations of the State of New York, and established Policies and Procedures for the administration of the lands involved.

## **D. Recreation Program Goals**

- Management of recreation programs in a manner which ensures protection of the natural resources base in accordance with the Environmental Conservation Law, Article XIV of the New York State Constitution and Adirondack and Catskill State Land Master Plans.
- Offer recreational opportunities for leisure time enjoyment for the people of the state.
- Ensure that revenues equal operating costs for that portion of the program covered by user fees.
- Manage the program to enhance economic benefits to local communities and the state.

## E. Campground generic plan/ EIS

The management plan has been developed within the constraints set forth by the GUMP/EIS and contains overview, environmental setting, goals, policy, management, and impact assessment criteria which pertain universally and in common to all Adirondack and Catskill Public Campgrounds and Special Day-Use classified Intensive Use Areas.

#### F. Public Use

## 1. Inventory of Public Use

#### a. Attendance Trends

Attendance numbers are a combination of camper days (the number of campers X the number of nights spent) and day use (the number of people using the beach, day use areas or visiting campers) but not staying overnight. The 5 year trend in camping attendance indicates fairly static visitation with fluctuations due to economic and weather conditions. The average attendance for the most recent 5 years is about 2% lower than the previous 5 year average. Day use attendance for the most recent 5 years is showing a downward trend also.

Most Limekiln Lake campers are from New York State (95%) with strong representation from the Utica area, Syracuse and Rochester. Relatively few New York campers visit Limekiln Lake from south and east of the New York State Thruway (See Exhibit 9). The average night stay for campers is 3.3 nights and overall campground occupancy for the season is 33%.

Limekiln Lake Attendance			
Year	Camping	Day Use	Total
2014	33,532	785	34,317
2013	35,352	944	36,296
2012	36,947	973	37,920
2011	37,024	997	38,021
2010	37,791	1,494	39,285
Average	36,129	1,039	37,168

Campground use during winter months occurs from use of snowmobile trails, cross-country skiing, and ice fishing. Currently, there is no way of accurately tracking usage as there are no permits required, or issued for offseason use, or staff on site to monitor use.

#### b. Revenue Trends

Revenues are important because they are used to offset annual operating costs of the campground. Operating costs for Limekiln Lake average \$140,000 annually. The operating budget allocation is based on revenues generated from camping, and other service fees. Camping Revenue is derived by the rental of the 271 campsites. The camping revenue has little variability which is tied to the attendance which is usually affected by weather events.

Day use revenue constitutes park entrance fees and pavilion rental. Total day use revenue at Limekiln Lake is small in comparison to the overall campground revenue which may be due to the remote location and competition from other facilities. There has been a downward

Limekiln Lake Revenue				
Year	Camping	Day Use	Misc	Total
2014	\$194,925	\$1,792	\$9,239	\$205,956
2013	\$196,025	\$2,472	\$10,063	\$208,561
2012	\$204,940	\$2,594	\$10,653	\$218,187
2011	\$205,780	\$2,602	\$10,616	\$218,998
2010	\$206,929	\$3,474	\$2,919	\$213,322
Average	\$201,720	\$2,587	\$8,698	\$213,005

trend in day use attendance which is consistent with other DEC campgrounds. While a drop in day use attendance has contributed to lowering revenue, this has been somewhat offset by fee increases. Misc revenue is a combination of ice sales, peddler permits and returnable container deposits. Ice sales were introduced in 2011 and have contributed nearly \$8,000 per season in revenue.

#### 2. Carrying Capacity

Limekiln Lake Campground facilities should be operated within the physical, biological and social carrying capacity of the site. Operation within these limits will grant continued character and integrity to intensive recreational use at this location and will assure that the public use is conditioned within the capacity of the physical, biological and social resources to withstand such use.

#### a. Physical Design

The following is an analysis of existing design capacities as compared to NYS Department of Health codes and NYS Department of Environmental Conservation design standards. The existing design capacity based on the 271 campsites is 6 persons per site or 1,626 persons. The day use design capacity is 6 persons per picnic table X 21tables or 126 persons.

The table below compares the calculated capacity needs with the currently available capacity and the following deficiencies are noted. Utility sinks are needed in each camping loop to provide a sanitary and convenient location for cleaning and disposing of waste water. Additional showers are needed and should be located conveniently throughout the facility. There is a deficiency in the number of trailer dumping stations. While there is excess capacity of toilets and sinks, none of the comfort stations provide facilities meeting current accessibility standards.

	Facility Infrastructure C	apacity Analysis		
Facility Description	Design Standard *	Calculated Need	Currently Available	Deficiency
Campsites	1,250 sf/ site	1,250 sf/ site	1,250 sf/ site	None
Trailer dumping station	1 for every 100 sites*	3	1	2
Potable water supply	55 gal/day/site	14,905 gpd	64,800 gpd	None
	5 gal /day/ picnicker	630 gal		None
Water spigots	1/10 campsites	27	44	None
	1/60 picnickers	2	3	None
Lavatories(within 500')	1 for every 15 campsites	18	30	None
	1 for every 60 picnickers	2	2	None
Toilets/ Urinals	2 for every 10 sites	54	98	None
(within 500')	2 for every 60 picnickers	4	4	None
Utility sinks	Conveniently located	12	0	12
Showers	2 for every 25 sites	22	8	14
* DEC design standards meet or exceeds NYS Health Department codes				

## b. Biological Carrying Capacity

Many of the campsites have been in continuous use since the campgrounds opened, and depending on site design and level of occupancy, are showing their age in terms of loss of vegetation screening, soil compaction, drainage issues and site amenity needs. In an effort to address these concerns, a campsite restoration project is underway to evaluate the condition and needs of each facility, including the 6,000 campsites system wide. Restoration work will include tree and shrub plantings, replacement of lost soils, regrading of sites, drainage improvements, evaluating the design and size of campsites and replacement of deteriorated tables and fireplaces. In most cases, sites that require restoration work will be removed from use for two camping seasons. Sites 21, 94, 111, 125, 154, 162 and 204 have been selected for restoration work and for closure in 2016 and 2017. Signs have been posted at the campground and no reservations are being taken. Additional sites for restoration, approximately 7 per season, will be selected each year. In some cases, sites will be considered for permanent closure or reconstruction. Sites permanently closed may be evaluated for relocation to another facility in future unit management plans

During the winter, these campgrounds are closed and use for ice fishing, snowmobiling, and skiing, is primarily on the campground roads.

Hazardous trees are removed on a regular basis, (in accordance with established policy), and in addition to natural regeneration, growth of residual trees, plantings as noted above compensate for any losses.

## c. Social Carrying Capacity

Annual camper surveys have been conducted since 1996. Campers have been asked to rate their camping experience on a scale from unacceptable to excellent. At current attendance levels, this campground is operating within an acceptable social carrying capacity based on the expectations of our visitors.

Additional impacts associated with planned campground objectives and actions are identified and discussed in the Generic Unit Management Plan Volume I. The following table summarizes survey statistics over the past five years.

Limekiln Lake Camper Survey			
Year	Number of Respondents	Good or Excellent Rating	
2014	316	91%	
2013	495	92%	
2012	185	95%	
2011	164	96%	
2010	189	91%	

#### D. Unique Ecosystems, Historical

No significant unique ecosystems have been identified, or are known to exist at this campground. The New York State Archaeological Site Locations Map does not indicate that archaeological resources are present in the Limekiln Lake Campground area. However, prior to site disturbance for construction of any facility affiliated with this management plan, the nature and extent of archaeological resources in the project area, if any, will be investigated. If it appears that any aspect of the project will cause any change, beneficial or adverse in the quality of any historic or archaeological property, all feasible and prudent alternatives will be considered together with feasible plans to avoid and/or mitigate adverse impact on the property. The Agency Preservation Officer has been so informed in keeping with the New York State Historic Preservation Act of 1980.

#### E. Adjacent Lands

The campground is surrounded on the north and west by the Moose River Plains Wild Forest. To the south lies Limekiln Lake. On the east side of the property is a 2.1 acre parcel of state land roughly 900' long X 100' wide containing an access road connecting the entrance to the campground with Limekiln Road. To the north and south of this access road are four private parcels ranging in size from 1.9 to 4.5 acres. The access to these parcels is through state property. The southeast corner of the campground borders 3 private parcels which have frontage on Limekiln Lake. Of the approximate 5.5 miles of shoreline on Limekiln Lake, 1.6 miles of shoreline borders Limekiln Lake Campground, 3.0 miles borders Moose River Plains Wild Forest and .9 miles borders 59 private parcels along the east shore.

The adjacent Moose River Plains Wild Forest offers many recreational opportunities, including hiking, skiing, mountain biking, snowmobiling, canoeing, hunting, fishing, horseback riding, and primitive camping. Miles of marked trails and numerous lakes and ponds make this unit an ideal destination for recreationists looking for options in addition to what's available at the campground. As stated above, there is access to trails directly from the campground. For more information on these areas refer to the Moose River Plains web page located at <a href="http://www.dec.ny.gov/lands/53596.html">http://www.dec.ny.gov/lands/53596.html</a>.

While Limekiln Lake Campground is not open for camping during the winter months, the campground is used extensively in the off season for snowmobiling, cross-country skiing, hiking and fishing.

#### F. Invasive Species

The threat of invasive species at Limekiln Lake is of concern to the Department, both for its destructive effect on our environment and its associated financial drain on revenue and resources.

One common way many other insect pests are moved around the country - beyond their natural rate of spread based on biology and flight potential - is on firewood carried by campers, hunters and other users of our forests. This firewood may come from trees killed by insect pests and taken down wherever the visitors came from. A regulation is in effect that prohibits the import of firewood into New York unless it has been heat treated to kill pests. The regulation also limits the transportation of untreated firewood to less than 50 miles from its source.

It is the Departments goal, in collaboration with other agencies and interested groups to work to establish a documented inventory of species by location within the campground and to implement an active invasive species management program to help contain, and possibly eradicate, further growth of

these species. It is through these continued efforts that a collaborative initiative among the New York State Department of Environmental Conservation, Adirondack Park Invasive Plant Program and the State University of New York College of Environmental Science and Forestry developed the Adirondack Park State Campground Terrestrial Invasive Plant Management 2014 Program Report. The report finds the following for Limekiln Lake Campground:

#### Invasive Plant Species: garlic mustard, bush honeysuckle

#### Locations:

Garlic mustard is spread throughout the campground, and has densely infested some areas. It was found at sites: 7, 9, 11, 14, 16, 26, 36, 52, 64, 67, 82, 93, 94, 113, 115, 129-131, 140-142, 147, 149, 164, 166-169, 185, 186, 190, 192-194, 202, 203, 210, and 214. The worst infestation was found on site 16. Honeysuckle bushes were found sporadically throughout the campground.

#### **Management Totals:**

A total of 1414 second year garlic mustard plants were pulled from the campground. A couple honeysuckle bushes were pulled and hung upside down in nearby trees to dry and decompose. Honeysuckle bushes at other sites were left to be pulled in the future.

#### **Recommendations:**

This campground should be monitored annually in order to combat the garlic mustard infestation present. Management was completed with the aid of a crew from the SCA. If this resource is available in the future, it would be advisable to use a crew again to reduce the number of days needed to complete management. Many garlic mustard rosettes were observed, but not all were pulled; these plants will need to be removed next summer before they go to seed.

Offering an invasive species identification and management seminar (focused on garlic mustard and bush honeysuckle) for the staff here would be useful if time and resources are available. This would increase awareness among the staff about invasive plants, and their help could contribute to the success of future management efforts at this campground.

Due to the relatively widespread honeysuckle infestation, large honeysuckle bushes should be removed only if extra time and resources remain after the higher priority invasive species at this and other campgrounds (such as garlic mustard) have been removed. Small, easily removed bushes should be removed before they get a chance to mature and fruit.

#### G. General Operations

Limekiln Lake Campground is a popular facility used by visitors during the summer season (mid-May through Labor Day) for camping, swimming, boating and hiking. The rest of the year, this campground is used for such recreational activities as snowmobile riding, ice fishing and cross country skiing. The continued maintenance and upkeep of this facility helps ensure safe operation of the campground for both visitors and employees use. A well maintained facility promotes an increased interest in camper's use of this campground and it's amenities for continued recreational use. Day-to-day operations of this campground are guided by policy set forth in the DEC Campground Guidance Manual. The subject index of the Handbook is referenced in Volume III, Appendix D, of the 1990 Generic Unit Management Plan.

## H. ADA Accessibility Guidelines

The Americans with Disabilities Act Accessibility Guidelines (ADAAG) will be used in assessing existing facilities or assets to determine compliance with accessibility standards. Management recommendations will be proposed in accordance with the proposed ADAAG for outdoor developed areas and other appropriate guiding documents. Until such time as the proposed ADAAG becomes an adopted rule of the Department of Justice, the Department will use the best information available to comply with the ADA - including the current and proposed guidelines. Current ADA standards and guidelines will be considered in the design of all new projects and will be implemented where feasible.

In 2014, an accessibility assessment was conducted at Limekiln Lake Campground by the Inclusive Recreation Resource Center at SUNY Cortland. Assessments were conducted at comfort station #10 and parking area, beach area, boat launch, pavillion and at campsite # 10. The following deficiencies were noted. Restroom # 10 did not comply with the 60" wheelchair maneuvering radius or have grasping faucet controls. The parking area at the comfort station did not meet the 8' width requirement for accessible spaces or meet lighting requirement. Access to the beach area does not meet firmness or stability standards. The boat launch access does not meet 36" width requirement and the ramp and pier do not contain handrails or edge protection. The pavilion meets all ADA guidelines but there is no marked accessible parking in the nearby lot. The Campsite # 209 parking space does not meet minimum 16 ' width, the space around the camping pad is not firm and stable, the grill exceeds the 34" maximum height and the fireplace base does not meet the 9" minimum height.

#### IV. PROPOSED MANAGEMENT ACTIONS

The following management actions are being proposed for the ensuing five year period and will be completed as staff and funding allow.

	Proposed Management Actions		
	Management Actions	Cost	Priority
A	Replace 2 comfort stations #3 and #8	\$250,000 ea	1
В	Construct 2 additional trailer dump stations	\$75,000 ea	2
C	Replace ticket booth	\$50,000	1
D	Convert 8 existing sites to universal campsites	\$10,000 ea	4
Е	Rehabilitate water distribution system	\$75,000	2
F	Repair dam at outlet	\$50,000	3
G	Rehabilitate sewage lift station A	\$25,000	3
Н	Replace overhead power lines with underground system	\$900,000	4
I	Rehab of campsites	\$1,000 ea	5
J	Planting of shrubs and trees	\$50,000	5
K	Replacement of picnic tables and fireplaces	\$350 ea	5

These actions reflect the need to modernize facilities, comply with health, safety codes, and user needs. They will also provide universal access and to increase the efficiency of the campground management. Implementation of the proposed actions will reduce operating costs and generate revenues for the Department. Prioritization of management actions are based on the availability of funding, health, and safety concerns.

## A. Replace comfort stations #3 and #4

There are currently 8 showers available to campers which is 14 showers deficient of meeting DEC design standards. In addition, in 2014 the existing shower building was noted to lack required accessibility design standards. Comfort Station #3 is currently a vault style toilet building and not in use. It is located to the east of the existing shower building. Comfort station #8 is located in an area south of the existing shower building. Replacement of both of these buildings will remedy deficiencies noted above. The new buildings will also be adjacent to universal campsites proposed in management action D.

## B. Construct 2 additional trailer dump stations

This plan noted a deficiency of 2 trailer dumping stations. Campers and staff have commented that this deficiency is often a problem with campers having to wait in long lines to dispose of sewage. This management action proposes to construct an additional trailer dump station in the vicinity of the existing trailer station and a second facility near the gate leading to the sewage filtration bed.

## C. Replace ticket booth

The existing ticket booth was constructed in 1963, prior to the need for computers, printers, and ADA design requirements. Backups of day users entering the facility while campers are checking in are common. The building is undersized for today's needs and having the ability to check in campers and day users separately will improve customer service. This management action proposes to construct a new ticket booth in the same location that will meet the needs of today's operations.

## D. Convert 8 existing sites to universal campsites

The design of campsites to accommodate campers with disabilities has changed since the earliest ADA sites were constructed. The current site design will meet the needs of all campers and therefore is described as Universal. The management action proposes to build 8 Universal campsites in the vicinity of toilet building #3 and #8 which will permit user to also have access to an ADA compliant toilet building.

## E. Rehabilitate water distribution system

The water distribution line runs from a point near campsite #206 approx 2,400' to the reservoir via a two directional waterline. To maintain the water level in the reservoir the pressure in the line must be balanced at the pump house which is problematic. This plan proposes a second one directional line running from the pump house to the reservoir will allow the water to flow under pressure to the reservoir and then by gravity to campground facilities.

## F. Repair dam at outlet

Inspection of the dam at the outlet has noted seepage under both wing walls. While this is not a high hazard dam, continued deterioration could lead to the inability to maintain desired water levels, especially during dry periods. This management action proposes to have and evaluation done to determine what repairs are needed or if a replacement is required to remedy the current situation.

## G. Rehabilitate sewage lift station A

Inspections of this lift station located near the boat launch has noted that there is some surface water infiltration into the lift station resulting in an added volume of water into the disposal process. Components of the lift station have deteriorated and need replacement. This management action proposes to have the lift station replaced with a more modern and efficient style unit.

## H. Replace overhead power lines with underground system

Limekiln Lake is a large campground with over 9,000' of primary overhead and 8,400' of secondary overhead power lines running through a facility that is heavily wooded in many locations. There is currently about 2,000' of buried electrical service. Like all campgrounds in the area, it is subject to heavy storms with strong winds and lightning strikes. The overhead lines are in constant need of maintenance and have required emergency repairs several times resulting in the power being off in the facility for extended periods. Over time the lines have had many splice repairs that further weaken the durability of the lines. This management action proposes to have the overhead power lines buried and the 6 pole transformers moved to a ground pad location.

## I. Rehab of campsites

The concentrated use of campsites over time results in the need for rehabilitation. An annual survey of each campsite is conducted and site conditions including camping pad, screening, fireplace and table are evaluated. In addition, the larger camping vehicles used today require some sites to be enlarged. From this survey, a list of campsite improvements is produced that will identify sites that need additional gravel and camping pad hardening, removal of any hazardous trees and stumps, new plantings for screening, relocation or replacement of fireplaces, repair or replacement of picnic tables and improvements to drainage. When it is determined that taking a site out of use for a period of time to reestablish the vegetation is necessary, up to six sites will be closed for camping for this purpose for up to two years. This management action is an ongoing process and the work identified will be conducted over the life of the plan.

## J. Planting of shrub and trees

New trees and shrubs are required to replace those lost to hazardous tree removal and to establish trees in high traffic areas where natural regeneration is unlikely to occur. Species will be selected that are both natural to the area and will provide the needed shading and screening. In addition to plantings needed for Actions D & I, other areas will be identified through the annual campsite survey. This

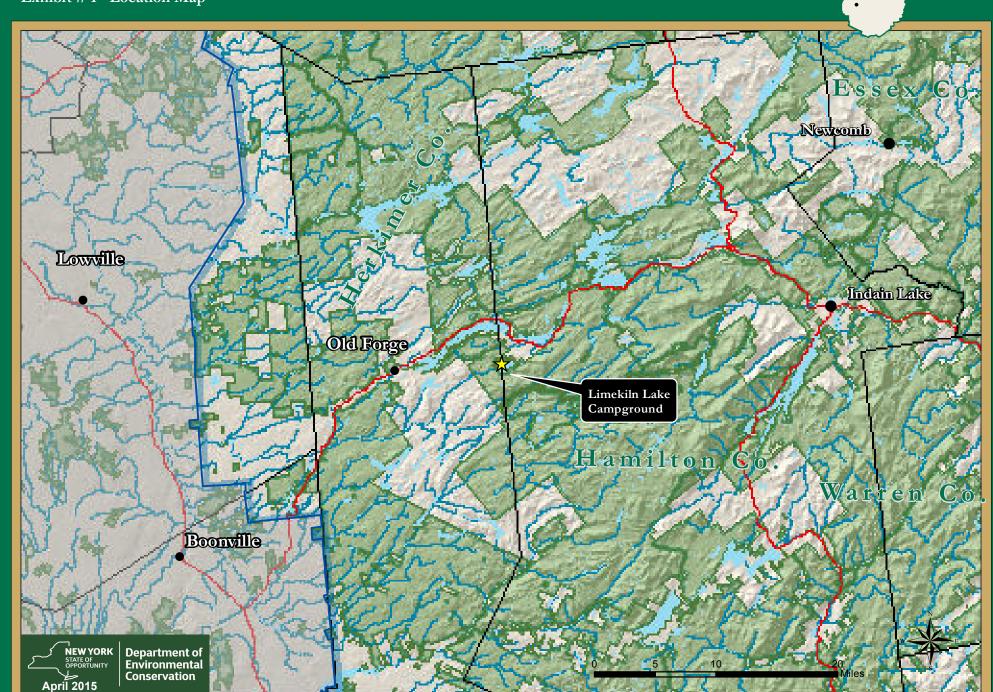
management action is an ongoing process and the work identified will be conducted over the life of the plan.

## K. Replacement of picnic tables and fireplaces

Limekiln Lake campground has in excess of 292 picnic tables that over time and through normal use require maintenance or replacement. In addition to the needs identified in Management Action I, replacement tables are needed for the day use area. New tables will also be needed for the Universal sites that are ADA compliant. This management action is an ongoing process and the work identified will be conducted over the life of the plan.

## **V. EXHIBIT INDEX**

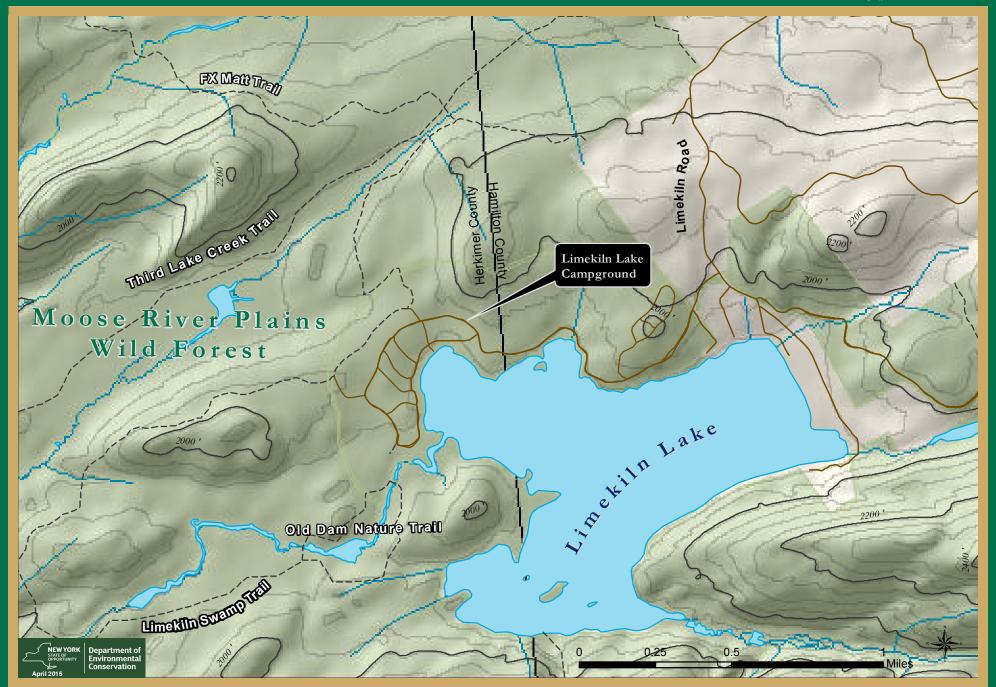
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Exhibit #2 – Limekiln Lake Campground Contour Map
Exhibit #3 - Limekiln Lake Campground Orthoimagery Map
Exhibit #4 – Limekiln Lake Facility Map
Exhibit #4a – Limekiln Lake Entrance and Sites 221 – 274 Facility Map
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Exhibit #12 - Campground Photos



# Limekiln Lake Campground

Exhibit # 2 - Topography & Trail Map

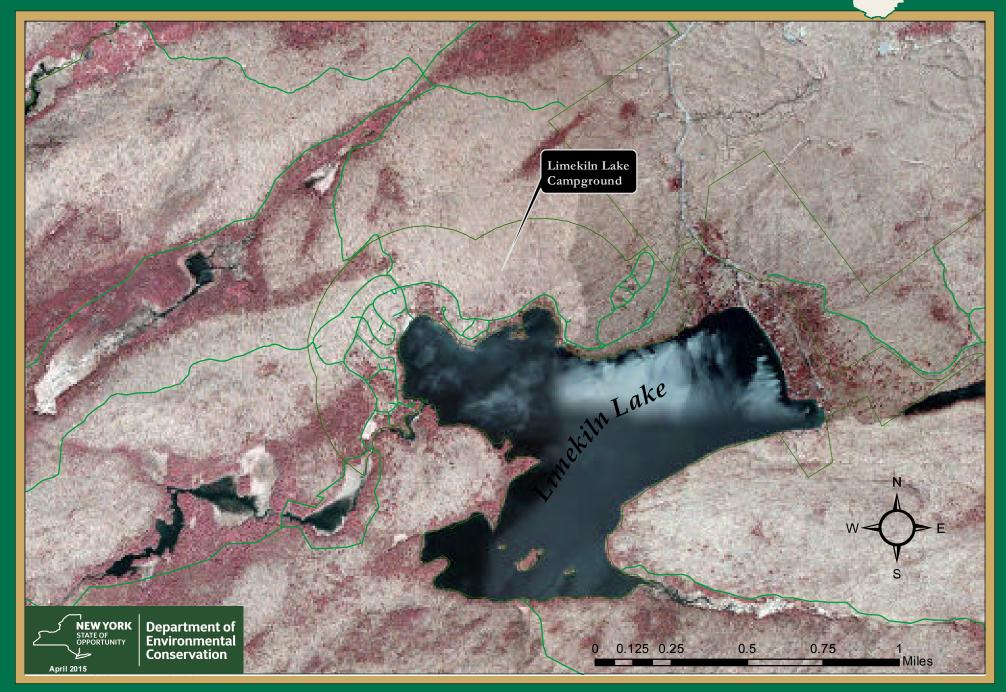




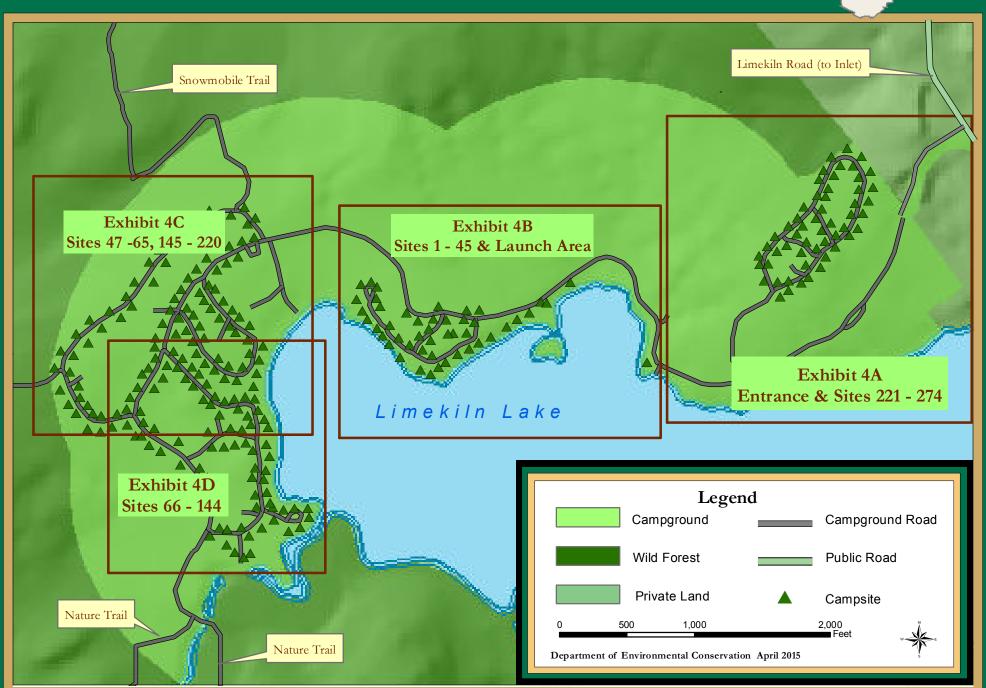
# Limekiln Lake Campground

Exhibit # 3 - Orthoimagery Map









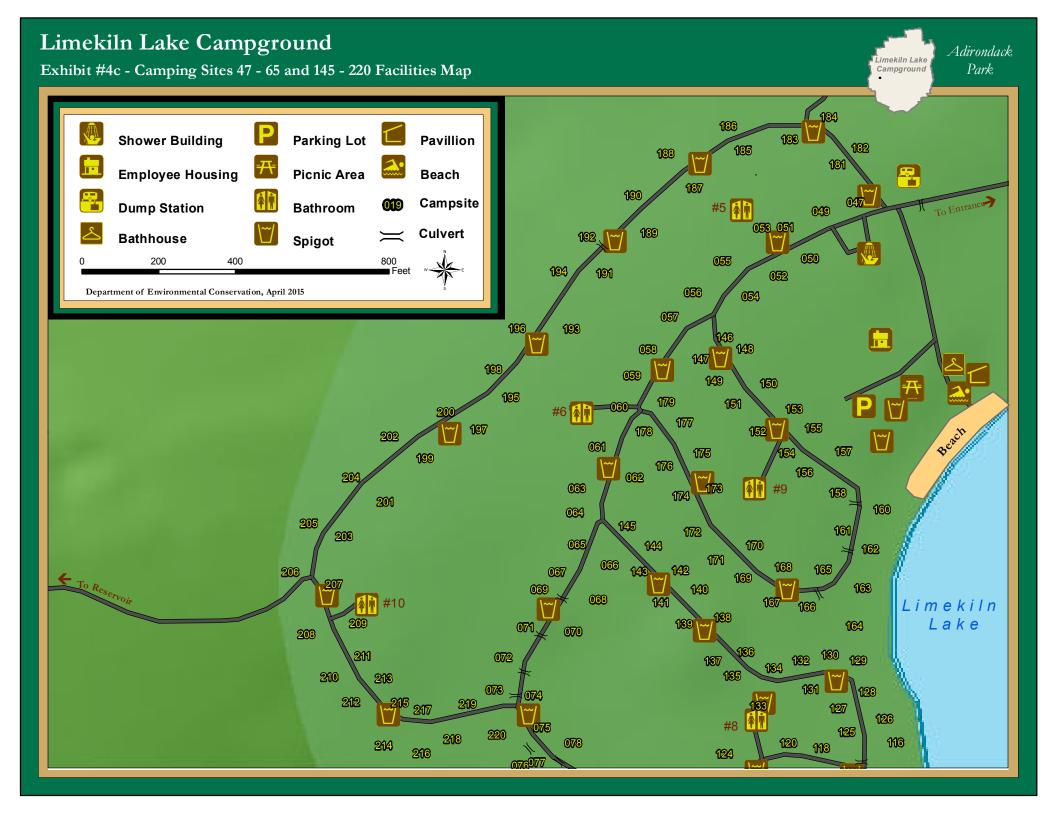
Gate

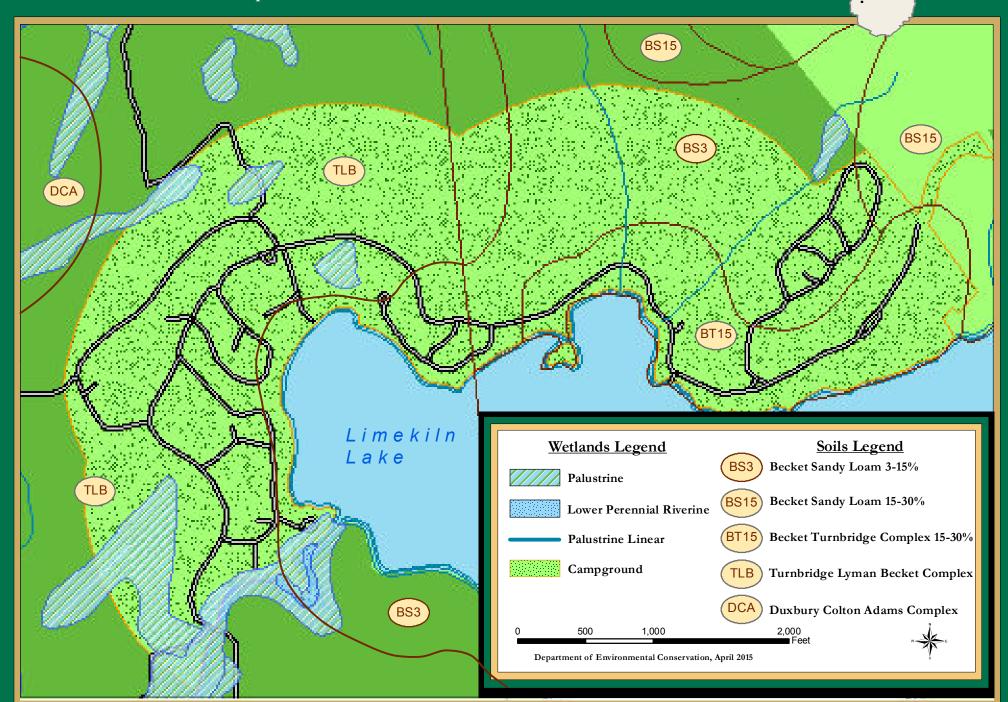
## Limekiln Lake Campground

Exhibit #4b - Sites 1 - 45 and Boat Launch Facilities Map



Adirondack

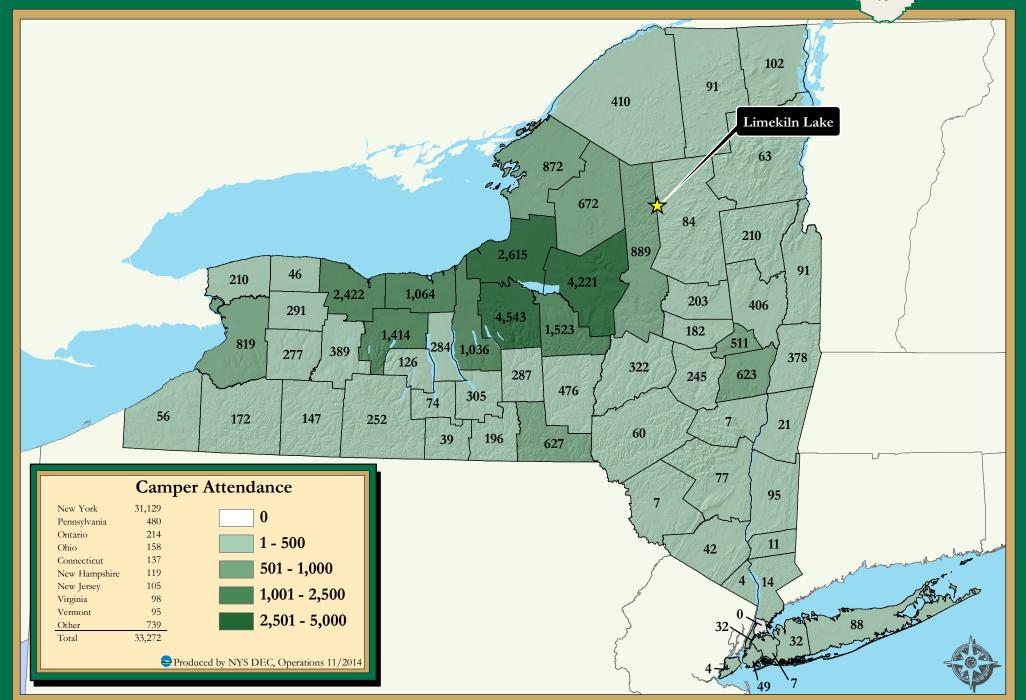




## Limekiln Lake Campground

Exhibit # 9 - Camper Demographics 2014



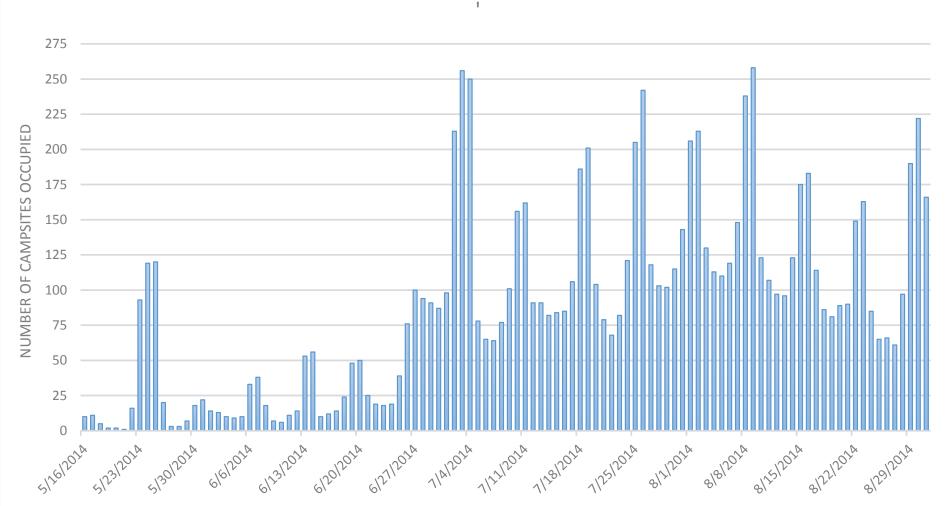


## Limekiln Lake Campground

Exhibit # 10 - Campsite Occupancy 2014









## Limekiln Lake Photos





Caretaker Cabin





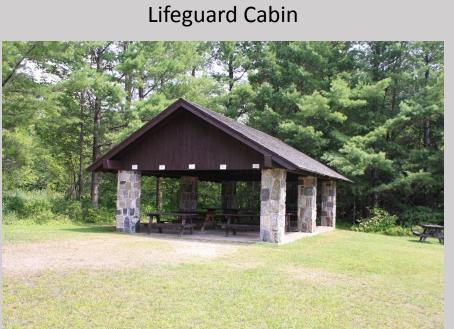
**Ticket Booth** 



Garage

Recycle Center





Day Use Area Pavilion



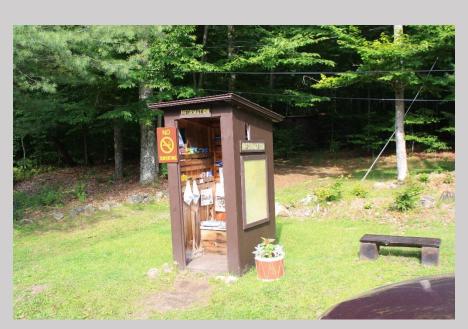
Day Use Area Beach



Day Use Picnic Area



**Assistant Caretaker Cabin** 



**Information Booth** 

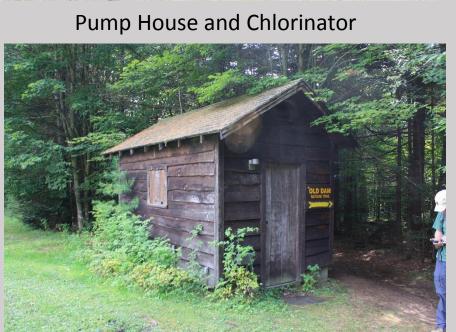


**Boat Launch Ramp** 



**Shower Building** 





Sewage Chlorinator Building (not in use)



Water Reservoir



Bearproof Food Storage Box



Comfort Station # 1



Comfort Station # 3 (Vault)



Comfort Station #2



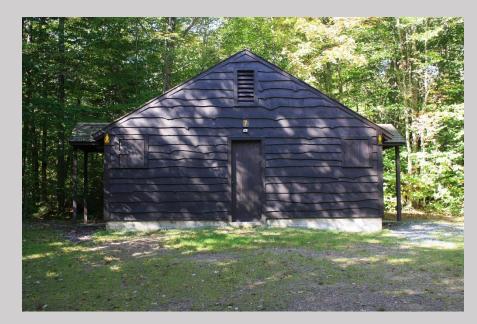
Comfort Station # 4



Comfort Station # 5



Comfort Station # 6



Comfort Station # 7



Comfort Station #8



Comfort Station # 9



Comfort Station # 10



Comfort Station # 11

Comfort Station # 12



Limekiln Lake Chlorination Bldg