2017 Interim Planning Assessment for Mine Kill State Park, Max V. Shaul State Park and John Burroughs Memorial State Historic Site

July 10, 2017





Parks, Recreation and Historic Preservation

2017 Interim Planning Assessment^{*} for Mine Kill State Park, Max V. Shaul State Park and John Burroughs Memorial State Historic Site

Schoharie and Delaware Counties Towns of Fulton, Blenheim, Gilboa and Roxbury

Prepared by

The New York State Office of Parks, Recreation and Historic Preservation

Completed: July 10, 2017 Contacts:

Alane Ball Chinian, Regional Director	Diana Carter, Director
Saratoga/Capital District Park Region	Resource and Facility Planning
19 Roosevelt Drive	OPRHP
Saratoga Springs, NY 12866	625 Broadway
518-584-2000	Albany, NY 12207
	518-486-2909

^{*} The operating license granted to NYPA is currently under review for renewal by the Federal Energy Regulatory Commission. Some of the proposed action items for Mine Kill State Park in this planning document will be finalized when negotiations for the renewed operating license are complete.

Table of Contents

I.	Introduction	
	A. Background	
	B. Location	
	C. Purpose of the Strategic Plan	
II.	Mission Statement	11
	Agency Mission and Strategic Goals	
	Mission	
	Agency Strategic Goals	
	Park Mission Statements	11
III.	Existing Conditions	13
	Natural Resources	
	Geology	13
	Soils	13
	Topography	
	Flora and Ecological Communities	
	Fauna	
	Rare, Threatened or Endangered Species	
	Invasives	
	Scenic Resources	
	Recreational Resources	
	Cultural Resources	
	Mine Kill State Park	
	Max V. Shaul State Park	
	John Burroughs Memorial State Historic Site	
	Buildings/Facilities and Infrastructure	
IV.	Priorities and Recreation Demand	21
V.	Objectives, Goals and Action Items	23
	Mine Kill State Park	
	Buildings Facilities and Infrastructure	
	Recreation Resources	24
	Boat Access to the Reservoir	25
	Trails	
	Natural, Cultural and Scenic Resources	
	Promoting the Park and Surrounding Area	
	Max V. Shaul State Park	
	Buildings Facilities and Infrastructure	
	Recreation Resources	
	Natural, Cultural and Scenic Resources	
J	John Burroughs Memorial State Historic Site	
	Improve Access Preserve Pastoral Scenic Views from the Lodge and Historic Site	
	J. J	
VI.	Environmental Review	33
VII	Public Involvement	33
VII	References	35
IX.	Large Format Map	37

2017 Interim Planning Assessment for Mine Kill and Max V Shaul State Parks and John Burroughs Memorial State Historic Site: Tables of Contents, Figures and Tables

Figures and Tables

Figure 1 Vicinity Map	9
Figure 2 Park Boundaries and Topography	10
Figure 3 View of Catskills from John Burroughs Memorial	
Figure 4 Pool Complex at Mine Kill State Park	17
Figure 5 Picnic Pavilion at Max V. Shaul State Park	17
Figure 6 Land Cover at Mine Kill and Max V. Shaul State Parks	20
-	
Table 1 Relative Index of Need for plan service area	21

I. Introduction

A. Background

Mine Kill State Park (Mine Kill) is part of the land owned by the New York Power Authority (NYPA) as the Blenheim-Gilboa Pumped Storage Project (the Project). As part of the original licensing of the Project, NYPA made approximately 395 acres in the Towns of Blenheim and Gilboa (Schoharie County) available for the purpose of providing public recreation. The operating license granted to NYPA is currently under review for renewal. Some aspects of the proposed action items for Mine Kill in this planning document will be finalized when negotiations for the renewed operating license are complete.

Mine Kill is operated and managed by New York State Office of Parks, Recreation and Historic Preservation (OPRHP) through an operating agreement with NYPA. The current operating agreement was signed in 1998 for a period of five years. The agreement may be automatically renewed four times each for a term of five years. This agreement will need to be formally renewed in 2023 unless terminated or amended before that date. The complete text of the operating agreement is in **Appendix A**.

Max V. Shaul State Park (MVS) is a 70 acre recreation park established in 1959. New York State made the initial purchase of the land that was to become the park in 1958. Originally named Toepath Mountain Picnic Area and Campsite, the park opened on May 28, 1959 and was renamed in 1980 after one of the former owners of the property.

Today MVS is a quiet camping area with 30 wooded tent and trailer sites. The park has shady picnic grounds, as well as playing fields and a playground. There is a nature and hiking trail, and fishing is allowed in Panther Creek and Schoharie Creek. Winter visitors can hike or snowshoe Also, a car top boat/fishing access trail to the Schoharie Creek was established in 2011.

John Burroughs Memorial State Historic Site, although located in Delaware county and part of the Central State Park Region, is managed as part of the Saratoga/Capital Region by the management of Mine Kill State Park. It is the site of the grave of John Burroughs, a prolific, influential natural history author and native son of the Catskills. The 3 acre site contains his "boyhood rock" as well as his grave, an interpretive kiosk and picnic area. The site affords superb scenic views of the northern Catskill Mountains and is about ¼ mile up the road from Woodchuck Lodge, where he spent summers late in life until his passing.

B. Location

Mine Kill State Park (Mine Kill) is located at the northern reaches of the Catskill Mountains on New York State Route 30 approximately 25 miles south of the intersection with Interstate 88. It is partly in each of the Towns of Gilboa and Blenheim in Schoharie County, State of New York and is approximately 40 miles to the Southwest of Albany, NY.

Max V. Shaul State Park is located approximately 8.5 miles north of Mine Kill on Route 30. It is bisected by Route 30 and has borders that run along the base of Toe Path Mountain and Schoharie Creek.

John Burroughs Memorial State Historic Site is located in the Town of Roxbury, Delaware County on Burroughs Memorial Road. The site is approximately 15 miles south of Mine Kill.

The locations and boundaries of these facilities are illustrated in Figures 1 and 2.

C. Purpose of the Strategic Plan

This plan sets forth strategies for the continued provision of recreational facilities and activities at Mine Kill and Max V. Shaul State Parks for the next 10-15 years. The plan is coordinated with NYPA's relicensing application for the *Blenheim-Gilboa Pumped Storage Power Project* (The Project). The current license expires on April 30, 2019. Information about NYPA's relicensing application can be found on their website. http://www.bg.nypa.gov/pages/home.aspx.

In addition to coordinating with the NYPA relicensing, the plan also seeks to provide approaches to issues of aging infrastructure, deficient facilities, desire for new recreation activities/facilities, patron wishes and expectations, natural resource protection strategies and desired outcomes.

In addition, the plan will provide strategies for the continued viability, maintenance and operation of the John Burroughs Memorial State Historic Site. Opportunities for partnering with several non-profit organizations, site improvements and scenic viewshed protection are presented.



Figure 1 Vicinity Map



Figure 2 Park Boundaries and Topography

II. Mission Statement

Agency Mission and Strategic Goals

Mission

The mission of the Office of Parks, Recreation and Historic Preservation is to provide safe and enjoyable recreational and interpretive opportunities for all New York State residents and visitors and to be responsible stewards of our valuable natural, historic and cultural resources.

Agency Strategic Goals

- Keep our parks and historic sites open, safe, affordable, and accessible, in spite of limited staffing and financial resources, by realizing operational efficiencies.
- Increase, deepen, and improve the visitor experience. New York should be the number one most visited and most appreciated state park and historic site system in the country.
- As set forth in our NY Parks 2020 Plan, fix our aging infrastructure and convert and transform New York's parks and historic sites into a welcoming, 21st Century parks system – with facilities that are aesthetically compelling, energy and operationally efficient, and "built to last."
- Celebrate History and Promote Historic Preservation as New York commemorates the 50th anniversary of the National Historic Preservation Act of 1966. Strengthen preservation efforts across the state and strive to instill a "pride of place" among all New Yorkers.

Park Mission Statements

Mine Kill State Park will continue to provide a wide variety of recreation opportunities for the people residing in the surrounding communities as well as visitors from outside the area. The park will also continue to preserve and protect the natural, historic and cultural resources found within.

Max V. Shaul State Park will continue to operate as a small, quiet campground, picnic/day use area, with nature trails and a trail connection to fishing on the Schoharie Creek.

John Burroughs Memorial State Historic Site will keep educating the public of the life and works of John Burroughs. The site will partner with local groups, such as the Woodchuck Lodge, Inc., that also have an interest in promoting learning about John Burroughs. The site will also preserve the gravesite and encourage preservation of the pastoral nature of the surroundings as it was in John Burroughs' times.

III. Existing Conditions

The depiction of existing condition given here is meant to be a general overview rather than an exhaustive inventory. If more information on any resources is needed a reference or citation is provided at the end of each section which will provide an opportunity to get more information.

Natural Resources

Geology

Bedrock Geology

Moscow Formation. Approximately half of Mine Kill is underlain by the Moscow Formation, a middle Devonian sedimentary formation composed of Clastic, Mudstone and Shale. (http://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NYDhmo%3B2)

Panther Mountain Formation. The rest of Mine Kill, and all of Max V. Shaul are underlain by the Panther Mountain Formation, another middle Devonian sedimentary formation composed of shale, siltstone and sandstone. (http://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NYDhpm%3B2)

Lower Walton Formation. All of the John Burroughs Memorial and surrounding lands is underlain by the Lower Walton Formation, a shale and sandstone upper Devonian formation. (http://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NYDsw%3B2).

Surficial Geology

Lacustrine Sand and Clay. The majority of Mine Kill is composed of Lacustrine Sand and Clay which is generally laminated silt and clay, deposited in lakes formed by receding glaciers; they are generally calcareous, with low permeability, and with potential land instability. The thickness is variable (up to 50 meters).

Lacustrine Sand. A small portion of Mine Kill in the Northwest corner and the southeast portion of Max V. Shaul are made up of Lacustrine Sand. This is generally quartz sand, well sorted, stratified, and also usually deposited in proglacial lakes, but may have been deposited on ice that has remained after the glacier receded. They are generally a near-shore deposit or near a sand source, permeable, with variable thickness (2-20 meters).

Till. John Burroughs Memorial is entirely unsorted till deposited beneath glacial ice

Bedrock. The northwest portion of Max V. Shaul is closer to the base of Toe Path Mountain and the bedrock comes to the surface or within 1 meter of the surface.

Other. Small portions of Max V. Shaul near Schoharie Creek are recent alluvium consisting of oxidized fine sand to gravel, 1-10 meters thick.

(http://www.nysm.nysed.gov/research-collections/geology/gis)

Soils

Mine Kill State Park. The Schoharie component makes up a little over 58% percent of the soils in the park. Slopes are 20 to 40 percent. This component is on proglacial lake plains. The parent material consists of reddish clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 16 inches during March, April. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Other major soil components include Schoharie and Hudson Silty Clay Loams, Tunkhannock and Chenango Gravelly Silt Loams and Holly and Papakating Silt Loams.

Max V. Shaul State Park. Schoharie and Hudson soil types along with Tunkhannock and Chenango units predominate at this park. Slopes vary up to 20%. The rest of the description for Schoharie soils is as above. The Tunkhannock and Chenango soils are on slopes up to 5 percent. They are found on valley trains, terraces. The parent material consists of gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, derived mainly

from reddish sandstone, siltstone, and shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent.

Other soil components include Barbour and Tioga gravelly loam, Lordstown and Oquaga associations, and Odessa and Rhinebeck silty clay loams.

John Burroughs Memorial. The Halcott, Mongaup and VIy soil unit predominates (over 59%) at this site. The parent material is a thin mantle of channery, loamy till derived from reddish sandstone, siltstone, and shale. The soil is on 2 to 15 percent slopes and is very rocky. The other major soil (almost 30%) at the site is Elka-VIy channery silt loam. This is a reddish, acid, loamy till derived from sandstone, siltstone, and conglomerate and is found on 15-35 per cent slopes.

Lewbeach channery loam is a minor soil on this site.

Detailed soil descriptions can be found at the National Resources Conservation Service Web Soil Survey. (http://websoilsurvey.nrcs.usda.gov/app/) ((NRCS USDA)

Topography

(Figure 2)

Mine Kill State Park. The park is moderately to steeply sloped. The highest point is approximately 1100' in the west near Route 30 and the low point is approximately 900' in the east near the lower reservoir. The lower reservoir level depends on whether water has been pumped to the upper reservoir or whether it has been released back down. This variation can be as much as \pm 35'.

Max V. Shaul State Park. The park lies between the base of Toe Path Mountain and Schoharie Creek. The topography is variable and generally slopes down west to east towards the creek. Elevations start at 1100'-1150' at the highest points in the northwest and southwest corners, then drop steeply to 850'. From there it slopes more gently to the creek at about 700'. The campground areas are on the gentler shelf.

John Burroughs Memorial. The site slopes moderately steeply from west to east. The high point in the west is at 2160' and slopes down to Burroughs Memorial Road at approximately 2140'. The location, high on the side of "Old Clump," affords a fantastic view of the northern Catskills to the east.

Flora and Ecological Communities

Mine Kill and Max V. Shaul State Parks each support some natural community types, primarily woodland with several small streams. No natural communities of statewide significance are documented in these parks based on surveys by NY Natural Heritage Program. The John Burroughs Memorial State Historic Site is a small site that was historically in agriculture and is now maintained as field, with only cultural communities present. (Feldman, 2003) (NYNHP, 2015)

Comprehensive mapping of the ecological communities (natural and cultural types) of these parks was completed in 2016. (Figure 6)

Mine Kill State Park. The park is highly developed and only about 30 percent of the park is in natural area. The area around the Mine Kill Creek ravine, which runs from Mine Kill Falls to the outflow at Schoharie Creek, is the primary natural feature. It contains a mix of hemlocks and hardwood species. The hemlock-northern hardwood community is severely impacted by deer. A small calcareous cliff community surrounds Mine Kill Falls and extends a short way downstream. This community is too small to be considered significant on a state-wide level. (Feldman, 2003)

Max V. Shaul State Park. The park is mostly wooded and, although the forest was completely logged in the past, it is now a fairly mature second growth forest.

The communities identified were Appalachian oak-hickory forest, limestone ledges (with a diversity of ferns), hemlocknorthern hardwood and maple-basswood rich mesic forest. The small size of these communities precludes their being listed as statewide significant (Feldman, 2003) but some areas have local significance, with some locally uncommon species and potential for rare flora (NYNHP, 2012).

John Burroughs Memorial State Historic Site. This site is almost entirely a cultural landscape because of previous years of agriculture. Currently the fields and small area of trees are being managed for historic interpretation and visitation purposes.

Fauna

Birds

Mine Kill and Max V. Shaul State Parks. The 2000-2005 New York State Breeding Bird Atlas lists 84 species of birds in the block containing Mine Kill State Park. Of those listed, only 25 are confirmed to be breeding in the block. Because of the large area of the breeding bird blocks there is no way to tell if any of the species listed actually occur in the park, except by looking at whether suitable habitat is present. (NYS DEC, 1980-1985)

The park staff have developed a very complete checklist of birds at the parks for use by birders. The checklist is **Appendix C**.

John Burroughs Memorial. The Breeding Bird Atlas (BBA) lists 74 species in the block containing the Memorial. Of those listed 20 are confirmed to be breeding in the block and 54 are either possible or probable breeders. However, due to the limited habitat, only a fraction of these species would be nesting on the site. (NYS DEC, 1980-1985)

Some work on existing bird species was conducted in 2007 when a wind farm application was made to the town of Roxbury. The proposed location was within 5 miles of the Memorial. Data from that study indicated the same or similar bird species as in the Breeding Bird Atlas with the exception of the absence of any listed species. (Moresville Energy, 2007)

Mammals

Mine Kill and Max V. Shaul State Parks. No specific field survey has been done, however it is to be expected that species present would be typical of this area of the northern Catskill Mountains and the habitat types present. These would include Black Bear (*Ursus americanus*, White Tailed Deer (*Odocoileus virginianus*), Coyote (*Canis latrans*), Porcupine (*Erethizon dorsatum*), Eastern Chipmunk (*Tamias striatus*), Grey and Red Squirrel (*Sciurus carolinensis* and *Tamiasciurus hudsonicus*), Fisher (*Martes pennant*), Red Fox (*Vulpes vulpes*), Eastern Cottontail (*Sylvilagus floridanus*) and a variety of small rodents.

John Burroughs Memorial. A field survey of habitats and wildlife was completed in May of 2009 as part of the application for a wind farm in the Town of Roxbury.

The areas adjacent to the Memorial provide habitat for many species of forest dwelling wildlife. A list of the wildlife species observed at a nearby proposed wind farm location is contained in the *Natural Community and Wildlife Habitat Assessment* for that project. (Stantec, Inc, 2009) (Appendix D)

Amphibians and Reptiles

No survey has been done of these species as of the date of this report. Species common to this part of the Catskills would be expected in the habitats at both parks. The memorial, located high on a hill with no real water sources, would likely contain those common species that do not require a large water body.

Fish

The reach of Schoharie Creek that runs to the Lower Reservoir at Mine Kill State Park and then north past Max V. Shaul State Park is considered by DEC to be a warm water habitat. As such it is home to native Walleye (*Sander vitreus*) and bass (*Micropterus sp.*). The lower reservoir is stocked with Rainbow trout (*Oncorhynchus mykiss*) each year.

Rare, Threatened or Endangered Species

Fauna. No rare animal species are currently documented within either of the two state parks, but Mine Kill has three rare species recorded nearby that potentially could use the park. Although one of the three may be extirpated (Lundgren, Personal Communication, 2016). Bald Eagles (*Haliaeetus leucocephalus*) are very active in the area, nesting and roosting at several locations on the water's edge near the park (Lundgren, 2016) and may possibly use trees as roosting spots in the park (Feldman, 2003). One other rare bird species was observed at Max V. Shaul during the surveys for the BBA (NYS DEC, 1980-1985), but not confirmed as nesting in the park. Ospreys (*Pandion haliaetus*), which are on the watch list, were known from Mine Kill State Park in the 1980's (NYS DEC, 1980-1985).

No known records for rare fauna have been documented at the Memorial (Lundgren, 2016). Based on the wind farm study (Stantec, Inc, 2009), the habitats provide potential for about 11 rare species that are currently known in the county. However, due to the small size of the parcel and limited habitats, the parcel itself has low likelihood of

harboring rare species, but surveys have not been done. The site has more potential to support some watch-listed birds or invertebrate species if the fields are managed as meadows through the entire summer (Lundgren, 2016).

Flora. No rare plant populations in the parks have been documented in surveys by NYNHP (Feldman, 2003) and (Lundgren, 2016). This does not mean that rare plants are not located in the parks, only that they are not known by Heritage data. Comprehensive surveys for all rare plant species have not been conducted. At least one watch listed plant is known at Max V. Shaul (Lundgren, 2016).

Invasives

Fauna. Hemlock wooly adelgid (HWA) *(Adelges tsugae),* an aphid-like insect that can kill otherwise healthy hemlock trees is known to occur on hemlocks at Mine Kill and Max V. Shaul. A program of control using systemic insecticides applied to the trunks of trees has been implemented. In addition, OPRHP is working with the US Forest Service and Cornell University researchers to trial biological control of HWA at Mine Kill and Max v. Shaul. To date, *Laricobius nigrinus*, a beetle known to predate HWA in the Pacific Northwest, has been released and is being monitored in the parks.

Virile Crayfish (Orconectes virilis) has been recorded in Mine Kill near Route 30. (NatureServe, 2015)

Flora. The iMapinvasives website lists the following invasive plants as having been confirmed in Mine Kill State Park; Creeping Jenny (*Lysimachia nummularia*), Wine Raspberry (*Rubus phoenicolasius*), Japanese Barberry (*Berberis thunbergii*), Dame's Rocket (*Hesperis matronalis*), Creeping Buttercup (*Ranunculus repens*), and Coltsfoot (*Tussilago farfara*). (NatureServe, 2015)

Scenic Resources

All three of these facilities offer opportunities for scenic vistas of the Schoharie Valley and the northern Catskills. These views can be found in the main picnic and

day use areas as well as along the trails.

At the **John Burroughs Memorial** the view of the Catskills predominates the setting. The pastoral character of the surrounding landscape reflects the agricultural heritage that is so much a part of the story of John Burroughs' life. (Figure 3)

At **Mine Kill** there are also visually interesting and beautiful features. These include the Mine Kill Falls and the cliffs and pools in and around Mine Kill. The view of Mine Kill Falls is especially exciting from the observation decks. Also, a short trail to the base of the Falls provides an additional view.



Figure 3 View of Catskills from John Burroughs Memorial

The picnic area north of the Pool Complex provides scenic views of the Schoharie Valley and the Blenheim-Gilboa Reservoir. The Overlook Pavilion is located with a view of the Blenheim-Gilboa Reservoir. The top of the sledding hill provides a sweeping view of Pool Complex, Brown Mountain and the Schoharie Valley. Areas in front of the Park Office and Contact Station provide views of the Northern Catskills, and during leaf-off periods there are views of the Gilboa Dam. Selective pruning could enhance these vistas.

Recreational Resources

Mine Kill State Park. Recreational Resources at the park include the following:

Olympic size pool, diving pool, wading pool, pool complex, (Figure 4) food concession, picnic sites with charcoal grills, reservable pavilion with tables and grills, reservable picnic canopies, mid-level picnic area, lower level picnic area, four playgrounds, baseball field, two soccer fields, boat launch, sledding hill, ice skating rink, bluebird trail, 3 mile portion of the Long Path, 8 miles of hiking, skiing, snowmobile, snowshoeing trails, horseshoe pits, volleyball net, geocaches, half basketball court, 36 hole disc golf course, fishing, hunting and boating.



Max V Shaul State Park is primarily a camping area with 30 wooded tent and trailer sites. The park also has day use facilities such as a picnic grounds, a picnic pavilion, stage, playing fields and a playground. (Figure 5)

Park patrons may also utilize the playing fields, fishing access and nature and hiking trails. In 2011 a cartop boat launch was established.

Figure 4 Pool Complex at Mine Kill State Park

Cultural Resources

Mine Kill State Park

The park and lands of the Blenheim-Gilboa Power Project (the Project) have been studied for historic and cultural resources by the New York State Historic Preservation Office in connection with the New York Power Authority's relicensing application. The Archaeological and Historic Structures study provides good information on these resources as well as recommendations for their preservation and interpretation. (NYPA, 2016)

Archaeology – Precontact and Historical. A definitive study of Archaeological Sensitivity for the Project area was conducted by the New York Power Authority as part of the studies for its re-licensing application. The study can be summarized in the following statement from their study report: "The results of the background



Figure 5 Picnic Pavilion at Max V. Shaul State Park

research, sensitivity model, and field reconnaissance indicate several conclusions. First, only the bottomlands in proximity to the former creek channel of the Schoharie are likely to be sensitive for archaeological cultural resources, and this is true only in areas with little topographic relief. Second, the fluctuation zone, the area where archaeological Precontact sites may have been located and where Euroamerican sites are located (probable house foundations), is regularly subjected to the effects of water erosion. No normal till fabric (i.e., layering of silts, sands, and rocks), however, was observed anywhere; substrates were jumbled throughout. Consequently, any archaeological materials that might be exposed or even buried within the sedimentary deposits in the fluctuation zone would not be in primary archaeological context. Their integrity would be compromised. Third, a Phase IB testing program to locate additional sites is not justified because there are no areas sensitive for testing, except in the fluctuation zone. Shovel test pits in that zone could yield artifacts or uncover foundation stones, but none of these discoveries would produce archaeological materials in primary context because all of the original soils have been reworked." (New York Power Authority, 2016, p. ii)

Historic Structures and National Register Eligibility. All of the original buildings in the park were built in 1971-1973 and share common architectural characteristics, including a late Mid-Century Modern architectural style executed with economical materials such as rough-faced concrete block masonry, and rustic wood framed roofs with vaulted ceilings and wide overhanging eaves. The original buildings and structures in the park include a bathhouse, concession

building, two restroom buildings, a picnic pavilion, a wastewater treatment plant, a contact station, two pump houses, a boat ramp, and three swimming pools.

These buildings are not currently national register eligible as they are not 50 years old and do not possess "exceptional importance" under National Register of Historic Places (NRHP) Criteria Consideration G (National Park Service, 2016). However when they reach 50 years of age (2021-2023) they will be considered eligible for national register listing. (NYPA, 2016, pp. 63-34)

Max V. Shaul State Park

Portions of the park are in archaeological sensitive areas as indicated in the Cultural Resource Information System (CRIS) website accessed in May 2016. (OPRHP, 2016)

Description

The park is tucked into the side of Toepath Mountain and rises gradually up its slope. The circulation system is a series of circular, linked, loop roads. There are also two trails: one long trail that extends around the perimeter of the park and rises across the side of the mountain to a water tower and another that extends north on flat land, paralleling the Schoharie Creek.

The park has six buildings clustered around the lowest loop at the bottom of the hill, which is the flattest portion of the park. These include a park office at roadside, one cabin, a large maintenance garage, a picnic pavilion, a new pavilion (2016), and a latrine. The park office building also houses park interns and a room dedicated to environmental education. Many of the buildings are of wood-frame construction with wide waney-edge siding. Landscape features in this area include the main park sign at the entrance and a boulder with a memorial plaque honoring Max V Shaul.

The main portion of the camping area is divided into thirty campsites laid out around the loop roads. Each campsite is in an individually cleared, private (but not isolated) area and contains a flat surface, a picnic table, and an in-ground fire pit/cooker. There are three additional latrines spaced evenly throughout the site. There is one "newer" campsite for group camping. This is a large flat, grassy clearing surrounded by trees. It features groups of picnic tables.

The landscape in the park consists of fairly young trees, perhaps grown up since Shaul stopped farming or grazing livestock on the land. The site has a nice canopy but is not densely covered, allowing filtered light. Trees include only a few varieties of deciduous trees, a few pines and a few birches. There is not much growth at ground level. Small streams descend from the mountain and there are a number of stone-faced culverts.

Significance

The following account was written by staff members of the State Historic Preservation Office at Peebles Island.

Max V. Shaul State Park is eligible for the National Register under Criterion A in the area of recreation and Criterion C (National Park Service, 2016) in the area of park design as an intact example of a Department of Conservation camping park from the late 1950s-early 1960s. The park has a naturalistic landscape that takes advantage of the adjacent mountain and creek, and individual campsites were created to afford a private sheltered setting. Buildings were designed with the rustic waney-edge siding that was typical for park buildings in that era and the park office and picnic pavilion, in particular, are excellent examples of the type. The park retains an excellent level of integrity.

The park is named after Max V. Shaul who was a very prominent local farmer who rose to distinction in the state. He was descended from the region's first settlers (Vroomans) and he served as president of the state agriculture society. One account states that Mr. Shaul donated the site to the state for public use.

The park opened to the public on May 28, 1959, with picnic tables, benches, charcoal burners and parking space. The park has proven popular to this date.

After Shaul's death in 1980, the park was renamed in his honor; there is a boulder commemorating his contributions." (Howe, 2016)

John Burroughs Memorial State Historic Site

The Memorial is the location of John Burroughs' grave site and is on the same road as his boyhood home and Woodchuck Lodge where he spent the last years of his life. The entire area was his family farm at one time.

Nearby Woodchuck Lodge is on the National Register of Historic Places and is managed by the Woodchuck Lodge, Inc., a nonprofit whose mission is to educate about the life and work of John Burroughs and develop the site for this purpose. (www.woodchucklodge.org)

The online Cultural Resource Information System indicates that the site is not in any area of archaeological sensitivity although close to such areas surrounding the population center of Roxbury. (OPRHP, 2016)

Description

The John Burroughs Home, historically known as Woodchuck Lodge, is a National Historic Landmark and listed on the State and National Registers of Historic Places. Woodchuck Lodge is located on a southern slope of Old Clump Mountain in the Northern Catskills, approximately two miles northwest of the village of Roxbury. With its surrounding land it occupies a portion of the eastern part of the Burroughs' ancestral farm. The family homestead, where John Burroughs was born, lies approximately 3,000 feet to the west along Burroughs Road.

Woodchuck Lodge was built as a small farmhouse by John Burroughs' brother Curtis. It was designed as a variant of an L-shaped plan, with vernacular late Greek Revival and Italianate detailing. John Burroughs first stayed at the house in the summer of 1908, purchasing it in 1913, and in 1910 and 1911 made several improvements. Most conspicuous of these was the addition of a front verandah. It was executed in a rustic style.

Significance

Woodchuck Lodge and the land surrounding it derive significance from their association with John Burroughs, a naturalist and prolific and influential author. Both, especially the land, became frequent subjects in his later work. Burroughs spent his summers at Woodchuck Lodge from 1910 until his death in 1921. His writings on the out-of-doors were highly popular in the late 19th and early 20th centuries. They helped arouse public interest in nature and the out-of-doors, and thus were an important influence in the growth of the conservation movement.

Although part of his work was literary criticism, Burroughs gained his greatest fame writing about nature. Influenced by Thorough and Emerson, he translated their view of a still-rural America into essays that appealed to such early industrialists as Thomas Edison and Henry Ford. Burroughs also became acquainted with such well-known figures in the conservation movement as John Muir and Theodore Roosevelt. His writing was direct, straightforward, and readily comprehensible, which contributed to its broad popular appeal.

Buildings/Facilities and Infrastructure

Mine Kill State Park. The majority of the buildings at the park were built in the early 1970's. All of the original buildings at the park share common architectural characteristics, including a late Mid-Century Modern architectural style executed with economical materials such as rough-faced concrete block masonry, and rustic wood framed roofs with vaulted ceilings and wide overhanging eaves. (NYPA, 2016) A complete list of the buildings and information about them can be found in **Appendix B**.

Max V. Shaul State Park. Most of the buildings were built in the 1960's. The stage and playground were installed in 2015 and 2012 respectively. An addition to the pump house was made in 2013 to serve as a concession stand for open mic nights on the stage. More information about the buildings can be found in **Appendix B**.

John Burroughs Memorial State Historic Site. There are no buildings at the Memorial. There is a fairly recently built kiosk which exhibits information about John Burroughs, the Memorial and the surrounding landscape. There are a few picnic tables near the kiosk. All the picnic tables need to be replaced due to lichen and moss growth as well as deteriorating structure.

The only other "structure" at the Memorial is the actual grave. The grave is surrounded on all four sides with a low (10") dry-stacked rock wall built of native stone². This configuration at the base of the "Boyhood Rock" is according to Burroughs's wishes.

 $^{^{2}}$ In previous years the stone wall was higher with four stone "pillars" at each corner. These pillars were connected with tree limb rails. It is uncertain when these pillars and rails were removed. (Galusha, 2016)



Figure 6 Ecological Communities at Mine Kill and Max V. Shaul State Parks

IV. Priorities and Recreation Demand

Action items for carrying out the strategy of the plan are presented in the next section. In order to be successful in recreation, natural and historic resource conservation efforts the plan first has to

- ensure value and longevity of park buildings and infrastructure and
- provide protection of sensitive park resources.

To meet these two goals, organizationally, the plan must align its resources focusing on areas where the need in terms of user demand or physical conditions is the greatest and where long-term, positive changes across the landscape can be effected.

This prioritization ensures the alignment of infrastructure context with recreational and environmental context within fiscal constraints. Focus will be where the historic usage indicates the highest recreation benefit. The development of the plan uses information gathered by a statewide user survey as analyzed on the county level and published the *Statewide Comprehensive Outdoor Recreation Plan 2014-2019*. (SCORP). (OPRHP, 2014, pp. 20-32)

Recreational Needs Assessment

<u>Definition of Facility Service Area</u>. The master plan identifies several counties in the capital district and downstate as the combined service area of these parks. It is common practice in recreation planning to identify a service area from which the facility draws approximately 75% of its users (Haas, 2007). The parks are popular with patrons in the region as well as visitors to the Catskills.

<u>Determining the Relative Index of Needs</u>. The Relative Index of Needs (RIN) is a method for comparing the demand for a particular recreation activity in the service area with the statewide demand for that activity. RIN is expressed with a numerical scale, 10 being the highest relative level of need and 1 the least. Five is considered the statewide average in the current year (in this case the most recent numbers available are for 2014). (OPRHP, 2014)

The RIN for each New York State county was determined using a statewide survey. The index of need over the entire service area was calculated using a weighted average of the service area counties based on population. The results, shown in Table 1, express demand for a particular activity within the service area.

Only those activities which are available at these parks and which score a weighted average of five (the statewide average RIN) or more are included in the table.

Activity	RIN
Relaxing in the Park	8.1
Swimming	5.7
Biking (all types)	8.7
Walking for Enjoyment	7.9
Court Games	5.7
Field Games	5.9
Camping	6.4
Boating (all types)	6.4
Fishing	5.5
Local Winter Activities	5.9
Snow Mobiling	7.3

Table 1 Relative Index of Need for plan service area

V. Objectives, Goals and Action Items

Mine Kill State Park³

Buildings Facilities and Infrastructure

Objective Buildings, facilities and infrastructure at the park will serve the needs of the park patrons, the park staff and provide safe and enjoyable participation in recreation activities.

Park Office

- Increase the space at the park office to better accommodate administrative functions as well as separate service areas and provide new space for meetings, environmental education and support services for recreation.
- The plans for an addition to the existing office building are already in the final design stages and construction is expected to be completed in 2017.

Sewage Treatment and Water Supply

- Sewage lines at the park should be inspected by camera to assess infiltration and other problems repairs or maintenance needed should be prioritized and scheduled
- Drill a secondary well closer to the concrete storage tank with better accessibility as a secondary source of water for the park because the primary well may not be accessible in the winter if it fails

Improve access and circulation to all areas in the park

This includes vehicles, pedestrians and bicycles.

- Road to boat launch can be repaved as well as other park roads that have not already been re-paved
- Consider doing this at the same time as the renovation of the boat launch
- Include mid-level road and parking lot
- This will also improve bicycle circulation in the park
- Improved signage indicating shared roadways should be installed
- Walkways in and around all areas should be assessed for:
 - o Condition
 - ADA accessibility
 - o Safety
 - Encroachment of plantings
- Repairs should be prioritized and scheduled

Provide Adequate Equipment Storage

• Build new pole barn to increase storage capacity for equipment, supplies etc.

Increase Sustainability at the Park

Energy

• Conduct an energy audit to assess building energy usage and make changes where possible

³ Some of the following items for improvements at Mine Kill State Park will be finalized when negotiations for NYPA's new operating license is complete.

- Switch to LED lighting as per agency procedures
- Assess the park and park buildings for installation of solar power generation

Water

- Where new fixtures are installed use low water or no water type
- Use no water urinals and low flush toilets where feasible

Reduced Mowing

- Current reduced mowing areas will be maintained and increased where feasible
- Consider grazing as an alternative method

Develop green infrastructure elements

- Assess the current stormwater infrastructure of the park
- Where feasible install green infrastructure stormwater controls
 - o Rain Gardens
 - Permeable Paving (especially where replacing walkways and parking spaces)
 - o Vegetative swales

Improve Signage

- Signs at the park should be assessed for condition
- Signs should conform to the statewide signage plan
- Consider improvements to wayfinding signage on park roads and walkways
- Consider improvements to information signs in areas of high use such as the pool complex and boat launch.

Recreation Resources

Objective Provide Facilities and Support for a Variety of Recreation Resources

Picnic Facilities

- Add a new picnic pavilion with a seating capacity of 60-80 below the south soccer field with bathrooms (nonattached), electricity and grills.
- Inspect existing tents and replace if necessary
- All picnic tables and grills will be inspected and replaced or repaired as necessary.
- Replace comfort station at lower picnic area

Pool Complex

- Inspect all structures and pools and make repairs as needed to assure viability on a long term basis.
- Provide ADA access to the Kiddie Pool.
- Long term assess life expectancy of pool complex and plan for future replacement
- Install water slide when dive tank needs to be replaced
- Add outdoor showers to pool area

Playgrounds

- Playgrounds for at least two age ranges will be available in the park
- The preferred location for toddler areas will be near family style picnic areas

- Accessible play equipment will be present in each playground to encourage integrated play
- All playgrounds in the park will comply with existing ASTM standards⁴ and CPSC guidelines (CPSC, 2015) for playground design.
- All the current playgrounds will be assessed to confirm that different age ranges and accessibility are provided for at the park.

Camping

- Develop camping loop or loops to accommodate 30 camp sites.
 - Phase in over several years
 - Accommodate tents, pop-up trailers and small RV's
 - Location to be determined
- Develop a few primitive camp sites which will relate to the Long Path

Field and Court Sports

- The sports fields will primarily serve the soccer clubs and organizations currently using them; additional uses, such as an Ultimate tournament will be explored
- Storage for the soccer clubs will be provided in a new shed structure.
- Leave existing baseball/softball backstop in place to provide an opportunity unavailable elsewhere in the park.
- The existing horseshoe pitches and volleyball courts will be retained in place.
- Expand the existing basketball court to a ¹/₂ court.

Disc Golf

- Where possible eliminate drainage issues at some holes, if not possible consider moving hole to improve drainage and fit with rest of the facilities
- Offer opportunity for beginners and families by creating beginner disc golf holes in existing holes near the pool complex

Boat Access to the Reservoir

Boat Launch

- The current boat launch is at the end of its useful life and will be replaced.
- Consideration will be given to developing two launch lanes.
- Second alternative would be to develop one new launch lane and one take out lane.

Car Top Boat Launch

- Canoes, kayaks and other human powered craft that can be launched by hand will have a launch area close to the existing parking lot and boat launch
- This increases the variety of opportunities for recreation use of the reservoir.

Consider canoe and kayak rentals

- Study the feasibility and popularity of this idea
- Can be done with moveable racks with kayaks by the car top boat launch

⁴ The American Society for Testing and Materials publishes several documents relating to standards of public playground equipment. Their publications are for sale on their website http://www.astm.org.

• Racks can be provided for users to rent to store personal canoes or kayaks

Sledding and Ice Skating

• Both activities will continue

Trails

Improve visitor orientation

- Install trail map kiosks at critical locations in the park and on the trails
- Produce a trail map that can be given to visitors and available on the web page and available at the park office and contact points

Trail improvements

- Assess all trails for drainage, erosion, repair, and improvements.
- Close, re-route, or improve existing trails where necessary.
 - o For example to avoid wet prone areas or clay soils
- Keep use designations as is: Hiking, Snowshoe, XC Ski, Mountain Biking and some snowmobile use.
- Install outdoor fitness equipment on a trail
 - o Phased implementation to assess level of users

New and expanded trails

- Explore additional single-track trail opportunities to create loops in main section of park.
- Explore opportunities for trail access to reservoir/water.

Connect to trails at NYPA visitor center

• Explore additional trail opportunities near the NYPA visitor center/Lansing Manor off of Yellow trail or northern Long Path.

Promote integration with larger trail networks

- Signage, maps and information packets available about Long Path Trail, Schoharie Creek Trail (when developed)
- Consider kiosk maps showing connection from Mine Kill and Max V Shaul to points north and south on Long Path.
- Consider maps showing connection to John B. Thacher State Park on Long Path
- Engage Long Path North Hiking Club for volunteer opportunities and trail input.

Consider feasibility of constructing a trail bridge over Mine Kill Creek

- Bridge would be at the level of the existing overlook and would connect to Long Path which eliminates the need to cross Mine Kill on Route 30 bridge
- Conduct feasibility study, cost estimates

Re-locate stage below athletic fields

- Provides for large or small audience events
- Construct small gravel drive and loading area off of main park road

Natural, Cultural and Scenic Resources

Objective Preserve and Protect Natural, Cultural and Scenic Resources

Invasive Species

- Develop and implement an invasive species plan for the park
- Continue use of OPRHP strike force to remove invasives

Hemlock wooly adelgid (HWA)

- Analyze effectiveness of current control protocols and adjust if necessary
- Partner with other agencies and institutions for best practices for HWA control

Continue Bluebird nest box program

- Existing bluebird nest boxes will be maintained on a long term basis
- Nest boxes will be monitored for occupancy and free from pests
- Locations for new next boxes will be explored

Biodiversity

- Install interpretive signage along Mine Kill, on overlook and creek
- Conduct environmental education tours in Mine Kill gorge area
- Trees and habitat along reservoir shoreline should remain intact where feasible and where they exist.
- Presence of Bald Eagles should be interpreted and patrons referred to BG visitor center for more information
- Allow fields at north end of the park to revert to shrubby woodlands and eventually forest
- Consider grazing around red junipers and other places as a replacement for mowing where it is undesirable to allow reversion

Scenic Resources

- Continue to maintain existing vistas from the park and from trails.
- As scenic opportunities diminish due to vegetative growth they need to be cleared and maintained
- Undertake an assessment of scenic opportunities in the park and develop points of interest
- Points along the Mine Kill may provide interesting observation opportunities for Geology and plant communities

Promoting the Park and Surrounding Area

Objective Promote the Park to Increase Attendance

Develop Relationships with Outside Entities

Wide focus

- Work with agency contacts and tourism organizations to develop a mailing list for continued exchange of ideas
- Publish quarterly newsletter about the park and events at the park
- Study feasibility of partnering with NYPA on communications
- Partner with I Love NY for tourist information

Local focus

• Work with and through the Friends' group and invite continuing dialogue with volunteer groups, user groups, town councils, sporting groups and other interest groups

Events and Other Promotional Opportunities

Park rentals for events

- Provide a promotional flyer describing the park's amenities
- Speak with service groups and others to increase awareness of park availability

Internally develop events and park activities

- Continue Sno Fest
- Other types of activities appropriate to the park such as festivals, sporting events, fairs, farmer's market.

Max V. Shaul State Park

Buildings Facilities and Infrastructure

Objective Buildings, facilities and infrastructure at the park will serve the needs of the park patrons, the park staff and provide safe and enjoyable participation in recreation activities.

Provide vehicular, pedestrian and bicycle access to all areas in the park

- Complete re-paving of main park road and camping loop roads
 - o Consideration should be made that the main park road is also used for parking during high use events
- Install shared roadway signage
 - o Park roads are shared roadways with motor vehicles and bicycles

Provide adequate parking for high use special events

- Add overflow parking area in the activity field, 25-30 cars
- Can be low impact surfacing such as gravel or grass pavers

Improve drainage at throughout the park

- Inspect all park culverts and repair or replace where necessary
- Where replacement is necessary consider open bottom culverts to improve wildlife access
- Inspect drainage patterns around campsites and regrade where necessary to provide positive drainage away from camping areas
- Where feasible install rain gardens and vegetated swales to retain/recharge stormwater

Improve reliability of potable water system

Currently the system is manually operated.

• Install automatic pressure switch to operate pump so that pump turns on and off automatically when needed

Recreation Resources

Objective Provide Facilities and Support for a Variety of Recreation Resources. Camping is the main recreational resource at Max V. Shaul State Park. Improvements to the camping experience may attract more campers and result in higher occupancy rates.

Improve camping experience in the park

- Install a new comfort station with showers in each camping loop
- Consider installing electric service at all sites in one loop
 - Expand this program if popularity indicates

- Consider increasing the number of campsite in the lower loop
- Consider constructing some cabins where feasible
- Consider lowering camping fees to increase occupancy
 - Trial basis, maybe only on weekdays
- Consider installing a dump station to increase service to RV campers
- Continue group camping

Enhance and expand day use recreation opportunities

- Continue and expand events at the new pavilion and stage
- Consider if new stage is best located and designated for existing and future programming at the park
- New uses for pavilion and stage such as theatre groups, environmental education, movie nights
- Develop new fire ring/amphitheater in wooded area near group camping
- Continue current picnic facilities
 - o Consider lowering fee for renting the picnic pavilion to mirror charge at Mine Kill
 - Replace worn out picnic tables and grills
- Re-purpose open field area
 - Parking for 25-30 cars (as above)
 - Space for group camping (as above)
 - Playground is recent and should remain and consider expanding the playground with a tot lot area and accessible area
 - Consider tennis and/or basketball courts
 - o Ball field will remain as part of the open field
- Trail access to Schoharie creek should be improved
 - Wayfinding to be improved
 - Drainage to be improved

Improve and maintain trail system

- Install trail map kiosk near the park office and parking area
- Assess all trails for drainage, erosion, repair, and improvements.
- Close, re-route, or improve existing trails where necessary.
 - For example to avoid wet prone areas or eroded sections
- Create short loop nature trail near park entrance and field
 - o Provides additional activity for campers and park visitors
 - Provides opportunity for nature interpretation
- Install outdoor fitness equipment on a trail
 - o Phased implementation to assess level of users

Natural, Cultural and Scenic Resources

Develop and implement an invasive species plan for the park

• Consider doing this in conjunction with developing an invasive species plan for Mine Kill State Park

- Continue use of OPRHP strike force to remove invasives
 - o Also in conjunction with strike force at Mine Kill State Park

Implement an environmental education program at the park

- Develop lecture and demonstration opportunities
- Install interpretive signage about local plants and wildlife, Schoharie Creek, Geology
- Refer park patrons to the BG Power Project visitor center

John Burroughs Memorial State Historic Site

In addition to the action items listed below, the OPRHP Field Services Bureau (FSB) has begun to design several interpretive signs to be placed at the memorial. At the time of writing this plan the designs have not been completed. The interpretive signs would be used at the site to more fully explain the importance and historical context of the site and to provide some wayfinding. Further discussions between the FSB, the region and the planning bureau will take place concerning content and placement of the new interpretive signs.

Objective To increase the public's awareness of the historic site and to provide education and interpretation of the life of John Burroughs.

Develop working relationships with outside organizations

- Work with Woodchuck Lodge and other interest groups to advance priorities for the historic site and surrounding area
 - o Establish informal agreements with them for mutual benefit
- Identify other interested organization
 - o Groups with trail expertise
 - o Groups with interest in north Catskill matters
 - o Groups with historic interests
 - o Open Space Institute
 - New York Audubon
 - o Nature Conservancy
- Partner with organizations for specific tasks
 - o Trail development and maintenance
 - Interpretation of historic and natural features
 - o Event planning

Develop a marketing plan

- Work with a variety of groups to promote the historic site to the public
 - Local and state tourism agencies
 - o Woodchuck Lodge
 - o OPRHP public affairs

Improve Access

Develop a trail system

- Develop a trail connecting Woodchuck Lodge and the historic site
- OPRHP and Woodchuck Lodge, Inc will work together on this with OPRHP statewide trails coordinator

o Involve trail users with the natural surroundings which were also enjoyed by John Burroughs

Improve walkway at the historic site

- Rebuild the walkway from the entrance of the site to the grave
 - Walkway is very uneven and stones have lifted and shifted
 - New walkway using gravel surface with stability for ADA requirements

Preserve Pastoral Scenic Views from the Lodge and Historic Site

Develop a scenic preservation plan

- Identify viewshed from the lodge and memorial
 - Include both near and far views
- Identify parcels for possible acquisition giving priority to key parcels in the short range viewshed with willing landowners
- This area falls within a priority area for open space protection (NYS DEC, 2016, p. 110)

Improve near views

- Remove invasive plants in field below the gravesite
- Strike team and volunteers can work in this area
- Field should be brush hogged at appropriate times of the year to discourage woody plants
- Grazing by goats or other livestock may be appropriate
- Assess site for invasive insects and plan for their removal
- Work with regional biologist for identification and plans for removal
 - This is a scenic issue as well as a natural resource issue
- Remove moss and lichens from site furniture to improve appearance at the site entrance
 - o Replace picnic tables that are not fixable due to damp conditions and moss growth
 - o Consider replacement with composite or other materials beside wood

VI. Environmental Review

Although this planning assessment suggests improvements and additions to facilities at all three locations it does not include proposals for development projects such as might be suggested in a master plan or a design plan. The process of environmental review under the State Environmental Quality Review Act will proceed on a case by case basis as individual projects are designed and planned for implementation.

VII. Public Involvement

The public has been given several opportunities to be included in the development of this plan. In the early part of 2016 a user survey and a camper survey were distributed to appropriate populations. The results of these surveys is available in Appendix E. Additionally a meeting with the Woodchuck Lodge Ltd. organization took place to garner input and suggestions on various aspects of the John Burroughs Memorial State Historic Site.

Lastly OPRHP conducted an open house at the office of Mine Kill State Park in order to further gather public input and suggestions on the planning assessment and all three included facilities. After the open house a comment period of 30 days commenced to give further opportunity for written comment. The comments and responses to the comments are included in Appendix G.

The final planning assessment will be posted on the agency's public website along with the appendices and all maps. The address of that website is www.nysparks.com/inside-our-agency/master-plans.aspx.

VIII. References

CPSC. (2015). Public Playground Safety Handbook. Bethesda, MD: US Consumer Product Safety Commission. Feldman, E. N. (2003). Rare Species and Ecological Communities of Bennington Battlefield State Historic Site, Max

V. Shaul State Park, Mine Kill State Park and Schoharie Crossing Historic Site. Albany: New York Natural Heritage Program.

Galusha, D. (2016, July 9). Personal Communication.

Haas. (2007). Estimating Future Recreation Demand: A Decision Guide for the Practitioner. In G. W. Haas. Denver, CO: US Department of the Interior, Bureau of Reclamation, Office of Program and Policy Services.

Howe, K. (2016, 05 02). Personal Communication. Albany, NY: unpublished.

- Lundgren, J. (2016). Personal Communication. Unpublished. Retrieved 2016
- Lundgren, J. (2016). Personal Communication.

Moresville Energy. (2007). 2005 BREEDING SEASON BIRD SURVEY REPORT Moresville Energy Center. Rockville, MD: Moresville Energy.

National Park Service. (2016). *Frequently Asked Questions*. Retrieved June 2016, from National Register of Historic Places: http://www.nationalregisterofhistoricplaces.com/faq.html

NatureServe. (2015). *http://www.imapinvasives.org*. Retrieved April 2016, from iMapInviasives.org: http://www.imapinvasives.org

New York Power Authority. (2016). *Phase 1A Archaeological Survey.* Blenheim-Gilboa Pumped Storage Power Project Relicensing. NYPA.

New York State Department of Environmental Conservation. (1980-1985). New York State Breeding Bird Atlas [Internet], Release 1.0. Retrieved May 2016, from http://www.dec.ny.gov/animals/7312.html

NRCS USDA. (n.d.). Retrieved April 2016, from Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/

NYNHP. (2012). Field Forms Database. Electronic field data storage and access for New York Heritage ecology, botany, and zoology. Albany, New York: New York Natural Heritage Program.

NYNHP. (2015). Biotics Database. Albany, New York: New York Natural Heritage Program. Retrieved July 2015 NYPA. (2016). *Historic Structures Survey.* New York Power Authority.

NYPA. (2016). Land Cover Map - Mine Kill State Park. New York Power Authority. Retrieved 2016

NYPA. (2016a). Land Cover Map - Mine Kill State Park. New York Power Authority. Retrieved 2016

NYPA. (2016b, April). NYPA Survey of Visitors to Mine Kill State Park and Mine Kill Falls Overlook, March 2015-February 2016. Unpublished raw data.

NYS DEC. (1980-1985). New York State Breeding Bird Atlas [Internet], Release 1.0. Retrieved May 2016, from http://www.dec.ny.gov/animals/7312.html

NYS DEC. (2016). 2016 New York State Open Space Conservation Plan. Albany: New York State.

OPRHP. (2014). Statewide Comprehensive Outdoor Recreation Plan 2014-2019. Albany: OPRHP.

OPRHP. (2016, May). Cultural Resource Information System. Retrieved May 2016, from https://cris.parks.ny.gov/Default.aspx

Stantec, Inc. (2009). Moresville Energy Center Natural Community and Wildlife Habitat Assessment. Rockville, MD: Invenergy Wind Development.

IX. Large Format Maps

Planning Assessment Map	DS
In print version	In Rear Pocket
In CD version	separate file
In online version	separate file at https://parks.ny.gov/inside-our-agency/master-plans.aspx