



State of the Park Report

Martin Van Buren National Historic Site New York



2016

On the cover: Lindenwald in 2000

Disclaimer. This State of the Park report summarizes the current condition of park resources, visitor experience, and park infrastructure as assessed by a combination of available factual information and the expert opinion and professional judgment of park staff and subject matter experts. The [internet version](#) of this report provides the associated workshop summary report and additional details and sources of information about the findings summarized in the report, including references, accounts on the origin and quality of the data, and the methods and analytic approaches used in data collection and assessments of condition. This report provides evaluations of status and trends based on interpretation by NPS scientists and managers of both quantitative and non-quantitative assessments and observations. Future condition ratings may differ from findings in this report as new data and knowledge become available. The park superintendent approved the publication of this report.

Executive Summary

The mission of the National Park Service is to preserve unimpaired the natural and cultural resources and values of national parks for the enjoyment, education, and inspiration of this and future generations. NPS Management Policies (2006) state that “The Service will also strive to ensure that park resources and values are passed on to future generations in a condition that is as good as, or better than, the conditions that exist today.” As part of the stewardship of national parks for the American people, the NPS has begun to develop State of the Park reports to assess the overall status and trends of each park’s resources. The NPS will use this information to improve park priority setting and to synthesize and communicate complex park condition information to the public in a clear and simple way.

The purpose of this State of the Park report is to:

- Provide to visitors and the American public a snapshot of the status and trend in the condition of a park’s priority resources and values;
- Summarize and communicate complex scientific, scholarly, and park operations factual information and expert opinion using non-technical language and a visual format;
- Highlight park stewardship activities and accomplishments to maintain or improve the State of the Park;
- Identify key issues and challenges facing the park to help inform park management planning.

Martin Van Buren National Historic Site (MAVA) was established by an act of Congress (Public Law 93-486) on October 26, 1974, to commemorate the life and work of the eighth president of the United States. After serving one term, Van Buren moved back to his native Kinderhook, New York, where he had purchased the house and farm, Lindenwald. Lindenwald was declared a National Historic Landmark in 1961 and a National Historic Site in 1974 at which time the site was administratively listed in the National Register of Historic Places.

The purpose of Martin Van Buren National Historic Site is to preserve Lindenwald so present and future generations of visitors will have an opportunity to learn about the life and public career of President Martin Van Buren and find meaning in the issues facing America during the formative years of the republic through the turbulent decades leading to the Civil War.

Significance statements express why the park unit’s resources and values are important enough to warrant national park unit designation. Martin Van Buren National Historic Site is significant because:

- Martin Van Buren (1782–1862), eighth president of the United States from 1837 to 1841, was a dominant figure in antebellum politics and a primary architect of the American political party system. He was a contender for the Democratic nomination in 1844 and the presidential candidate in 1848 for the Free Soil Party, the first mass antislavery party in the United States.
- Lindenwald reflected Van Buren’s interest in progressive farming and his political beliefs, which emphasized the value of agriculture and free labor to the future of democracy. Located in Kinderhook, New York, the rural Dutch village where he was born and raised, Lindenwald was the only home Van Buren ever owned. He returned there after his presidential term, becoming a key figure in the reorientation of the national debate around the issue of slavery.

The summary table, below, and the supporting information that follows, provide an overall assessment of the condition of priority resources and values at Martin Van Buren National Historic Site based on scientific and scholarly studies and expert opinion. The internet version of this report, available at <http://www.nps.gov/stateoftheparks/mava/>, provides additional detail and sources of information about the resources summarized in this report, including references, accounts on the origin and quality of the data, and the methods and analytical approaches used in the assessments. Reference conditions that represent “healthy” ecosystem parameters, and regulatory standards (such as those related to air or water quality) provide the rationale to describe current resource status. In coming years, rapidly evolving information regarding climate change and associated effects will inform our goals for managing park resources, and may alter how we measure the trend in condition of park resources. Thus, reference conditions, regulatory standards, and/or our judgment about resource status or trend may evolve as the rate of climate change accelerates and we respond to novel conditions. In this context, the status and trends documented here provide a useful point-in-time baseline to inform our understanding of emerging change, as well as a synthesis to share as we build broader climate change response strategies with partners.

The Status and Trend symbols used in the summary table below and throughout this report are summarized in the following key. The background color represents the current condition status, the direction of the arrow summarizes the trend in condition, and the thickness of the outside line represents the degree of confidence in the assessment. In some cases, the arrow is omitted because data are not sufficient for calculating a trend (e.g., data from a one-time inventory or insufficient sample size).

Condition Status		Trend in Condition		Confidence in Assessment	
	Warrants Significant Concern		Condition is Improving		High
	Warrants Moderate Concern		Condition is Unchanging		Medium
	Resource is in Good Condition		Condition is Deteriorating		Low

State of the Park Summary Table

Priority Resource or Value	Condition Status/Trend	Rationale
Natural Resources web ▶		
Air Quality		Air pollutants may be causing damage to cultural resources at Martin Van Buren National Historic Site (MAVA). Historic vistas are sometimes obscured by pollution-caused haze. Ozone sometimes reaches levels that can make breathing difficult for sensitive groups and may cause injury to ozone-sensitive plants. Some vegetation communities and surface water in the park may be sensitive to excess sulfur and nitrogen deposition. Airborne toxics, including mercury, can deposit with rain and snow and accumulate in birds, mammals, amphibians, and fish, and have been detected in park resources.
Water Quantity and Quality		The park does not have a rich history of surface water quality monitoring data from which to draw a statistically-confident inference of overall aquatic ecosystem health. However, the New York State Department of Environmental Conservation (NYSDEC) and the United States Geological Survey (USGS) have collected discrete data from 1957–1994 for various water quality parameters of interest at a USGS gaging station located along Kinderhook Creek (the principal waterway associated with the park) at the Rossman Road Bridge in Columbia County, NY. Ensuring that park management practices and land stewardship efforts support National Park Service and Department of the Interior strategic goals to protect pristine water quality and improve impaired water quality is an important element of park management. Learn more in this document: http://nature.nps.gov/water/waterquality/index.cfm .
Flora and Fauna		Vegetation data on MAVA's flora and fauna is limited. The primary source of information comes from a series of biological surveys undertaken by Hudsonia, Ltd. in 2002–2003 and summarized in a 2005 report by Dickert et al. No monitoring of flora and fauna has been undertaken by the park, and current information is lacking.

Priority Resource or Value	Condition Status/Trend	Rationale
Dark Night Sky		A photic environment is described as the physical amount and character of light at a particular location, irrespective of human perception. The NPS Night Sky Program characterizes a park's photic environment by measuring both anthropogenic and natural light. Anthropogenic Light Ratio (ALR) is a measure of light pollution calculated as the ratio of median Anthropogenic Sky Glow to average Natural Sky Luminance. ALR for Martin Van Buren NHS is 4.97, which is considered a poor condition. Population growth over the past 5 years has been low for the Albany-Schenectady-Troy, NY metropolitan area (<3%), resulting in a neutral trend (2013 U.S. Census Bureau).
Acoustic Environment		All sound resources, whether audible or not, are referred to as the acoustic environment of a park. The quality of the acoustic environment affects park resources including wildlife, cultural resources, the visitor experience, and landscapes. The condition of the acoustic environment is assessed by determining how much man-made noise sources contribute to the acoustic environment through the use of a national noise pollution model. This measure is referred to as the mean acoustic impact level. Impact is measured in A-weighted decibels (dBA). The mean acoustic impact level at the park is 3.4 dBA, meaning that the condition of the acoustic environment warrants significant concern. Overall, long-term projected increases in ground-based and aircraft traffic indicate a deteriorating trend in the quality of acoustic resources at this location.

Cultural Resources

[web ▶](#)

Archeological Resources		Archeological resources in the historic core area of the park have been inventoried and are well understood. Archeological resources beyond the core of the park require inventory and evaluation. 50% (approximately) of the historic core has been intensively surveyed, which is a relatively high proportion. The lower terrace lands under easement have not been subject to any systematic archeological inventory. Condition assessments that have been entered into the NPS Archeological Sites Management Information System (ASMIS) are incomplete and aging.
Cultural Anthropology		100% of cultural anthropology baseline documents are current and complete. Resources and uses, traditionally associated people, and other affected groups and cultural affiliation have been identified. Ethnographic resource research results are disseminated to park managers, planners, interpreters, and other NPS specialists.
Cultural Landscapes		100% of cultural landscape baseline documentation is complete. Cultural Landscape Reports provide detailed information relevant to the cultural landscape and historic context of the park. The park's cultural landscape documentation is certified as complete, accurate, and reliable in the Cultural Landscape Inventory (CLI) in good condition.
Historic Structures		The relationship of the park's historic structures to the historic context of the park is understood. The List of Classified Structures (LCS) data needs to be entered into the NPS Geographic Information System (GIS). 67% (4/6) historic structures listed in the main LCS database were given "good" conditions during the Fiscal Year 2011 (FY11) assessments.
History		Sufficient research has been conducted to understand the national significance and historical contexts of the park. All baseline documentation has been completed within the past decade. Authors of current documentation are well qualified, meet Secretary of the Interior's Standards, and represent scholars well respected in their field. 100% of historic properties have adequate National Register documentation (amended 2012).

Priority Resource or Value	Condition Status/Trend	Rationale
Museum Collections		Museum collections are addressed in the National Register amendment (2012) and a Historic Resource Study (2006). The 1986 Historic Furnishings Report documenting furnishings in Lindenwald is incomplete and out of date; however an update is planned for 2017. 77% of the park's existing collection is accessioned and cataloged. 67% (2/3) of museum collection storage facilities housing museum collections have a Facility Condition Index (FCI) indicating good condition.

Visitor Experience

[web ▶](#)

Number of Visitors		The park received 19,187 visitors in 2014, which is just below (1.9%) the 5-year average of 19,564 visitors for 2010–2014. The park receives, on average, 20,000 visitors per year, a trend that has remained stable for several years.
Visitor Satisfaction		96% of visitors to the park in 2014 were satisfied with their visit, compared to the 5-year average of 97.6%. This is a 2% increase from 2013.
Interpretive and Education Programs – Talks, Tours, and Special Events		Visitor engagement through interpretive programming remains popular and tours of the Lindenwald mansion remain the cornerstone of the visitor experience. The park continues to work with local school districts to offer curriculum-based programming and the majority of schools in Columbia Country send classes to the park annually. Newly developed techniques, revised programs and a focus on youth engagement will continue to grow the program at the park.
Interpretive Media – Brochures, Exhibits, Signs, and Website		Updated waysides, a new cell phone tour, and an expanded social media program offer visitors multiple options of exploring the park both on and off site.
Accessibility		Physical accessibility to park facilities is well established, while programmatic accessibility still has significant room for improvement. A major barrier to access to the park is the lack of public transportation, limiting access to the park to visitors who own vehicles.
Safety		Attention to safety remains a primary priority in the park. Accidents or injuries have been negligible for several years. Continually mandated and updated training and staff involvement in the safety of the entire park can be credited with maintaining a safe experience.
Partnerships		The park continues to expand the number of partners and cooperators as new opportunities emerge. Existing partnerships have been critical in assisting the park to improve the visitor experience and to preserve the resources.

Priority Resource or Value	Condition Status/Trend	Rationale
Park Infrastructure		web ▶
Overall Facility Condition Index		Average FCI for park assets (Deferred Maintenance / CRV) currently 0.078, which is an improvement over an FCI of 0.236 in 2009. However, several newly-acquired buildings have not been thoroughly assessed for maintenance needs, and deferred maintenance information will be collected in 2015.

Summary of Stewardship Activities and Key Accomplishments to Maintain or Improve Priority Resource Condition

The list below provides examples of stewardship activities and accomplishments by park staff and partners to maintain or improve the condition of priority park resources and values for this and future generations:

Natural Resources

- Historically MAVA did not have a natural resource focus; therefore, there are no current natural resource stewardship activities or accomplishments to report at this time.
- Since 2013 the park's organizational structure has been realigned to merge with Roosevelt-Vanderbilt National Historic Sites and now has a staff with natural resource management responsibilities.
- The park is actively striving to increase natural resources knowledge within the park.

Cultural Resources

- Baseline documentation has been completed for all cultural resources.
- Historical research at the park has been undertaken at a high level of scholarship and by experts in their field. Findings have been applied to park planning and interpretation.
- Construction projects and necessary ground disturbance have had no adverse effect to archeological resources to date, and most impacts have been avoided.
- The Park is leading consolidation of collections within the northeast region.
- The call bell system in the Lindenwald mansion was restored by an exhibits specialist.
- Publication of the 2013 National Council of Public History's Excellence in Consultation Award-winning report: *Plant Yourself in My Neighborhood: An Ethnographic Landscape Study of Farmers and Farming in Columbia County, New York* ([Stanton 2012](#)).

Visitor Experience

- MAVA coordinated a “pop-up museum” in the town square to allow the community to collaborate on an event about history in the era of the park’s establishment. The museum was populated primarily with objects that represented the personal reflections of individuals in the community.
- The park has produced several videos vignettes for use in social media.
- MAVA has expanded social media presence and created mobile web applications. This allows for improved accessibility of information on a variety of platforms.
- MAVA assisted with coordination of teacher workshops for the *Teaching the Hudson Valley Program* in collaboration with the Hudson River Valley National Heritage Area.

Park Infrastructure

- Landscape clearing was accomplished utilizing personnel from the Olmsted Center for Landscape Preservation (OCLP) and the NPS Northeast Regional Wildland Fire Program to remove trees that had become hazardous due to poor growth patterns or decay. Goats were utilized as a green alternative to clear understory vegetation and poison ivy.
- A revised turf management program was implemented based on recommendations of OCLP. New fertilization, over-seeding and mowing procedures were put into place. This new plan provides direction to establish grass patterns more indicative of what Van Buren would have had maintained during his residency.
- During 2014–15 two roofs on park buildings were replaced. The roof of the Open-Front barn at the Roxbury farm was replaced by park staff from Roosevelt-Vanderbilt and Martin Van Buren National Historic Sites. The Park Office Complex roof was replaced under contract using emergency funding.

Key Issues and Challenges for Consideration in Management Planning

Grand symmetrical landscapes, picturesque views of the Catskill Mountains, and elaborate, almost imposing, historic homes are some of the defining features that make the Martin Van Buren National Historic Site (MAVA) a small gem in the upstate New York landscape. The National Register listing for the site identifies the intact historic period views as a contributing feature, describing the historical layout of farms and mixed forest leading all the way west to the mountains. In 2009, MAVA expanded the park boundary exponentially to 295 acres to include much of the historic farm ownership and to work towards preserving this viewshed, providing the full picture of the life of the 8th president.

Key management challenges include:

Restoring and Preserving Historic Viewshed – Balancing the need for park maintenance and visitation buildings with the preservation of the view that visitors to the home would have had if they arrived over 150 years ago. Restoring this setting will provide visitors with a more authentic experience as they explore the life of the president.

Preservation of the Museum Collection – The park is the steward of a significant collection of objects that relate to Martin Van Buren, including furnishings, paintings, paper documents, manuscripts, and textiles. Maintaining proper environmental controls to preserve this collection in a historic structure is an ongoing challenge. MAVA has administratively aligned with the Roosevelt and Vanderbilt National Historic Sites in Hyde Park, NY to share expertise and facilities.

New Facility Needs – The recently completed General Management Plan outlines a plan to replace current administrative facilities and move them away from the historic core of the park. Currently park offices and Visitor Center is housed in a small trailer complex with breezeway, a temporary solution, where a permanent facility is needed. Funding to allow the park to realize this plan may be several years away and alternative methods of improving the visitor experience are continually explored in the meantime.

Expanding Community Engagement and Ensuring Future Relevance – New techniques for engagement and utilization of scarce park resources will be increasingly critical to ensure that the park and the NPS remains connected and relevant to the people living in the local areas and to all visitors. Support from nationwide initiatives, such as the [Urban Agenda](#), has provided models of successful engagement that the park is already involved in.

Natural and Cultural Resources Monitoring – The park expanded its boundary in 2009, and with that came a number of new resources previously not managed by the NPS. Most important is the need to survey these properties to locate archeological sites to better preserve them and their adjacent natural resources. While most of the land has remained in agricultural production since Van Buren's era, numerous species call this area home, including a number of threatened and endangered species; the land also contains critical habitat such as small areas of classified wetlands along the Kinderhook Creek.

Chapter 1. Introduction

The purpose of this State of the Park report for Martin Van Buren National Historic Site is to assess the overall condition of the park's priority resources and values, to communicate complex park condition information to visitors and the American public in a clear and simple way, and to inform visitors and other stakeholders about stewardship actions being taken by park staff to maintain or improve the condition of priority park resources for future generations. The State of the Park report uses a standardized approach to focus attention on the priority resources and values of the park based on the park's purpose and significance, as described in the park's Foundation Document or General Management Plan. The report:

- Provides to visitors and the American public a snapshot of the status and trend in the condition of a park's priority resources and values.
- Summarizes and communicates complex scientific, scholarly, and park operations factual information and expert opinion using non-technical language and a visual format.
- Highlights park stewardship activities and accomplishments to maintain or improve the state of the park.
- Identifies key issues and challenges facing the park to inform park management planning.

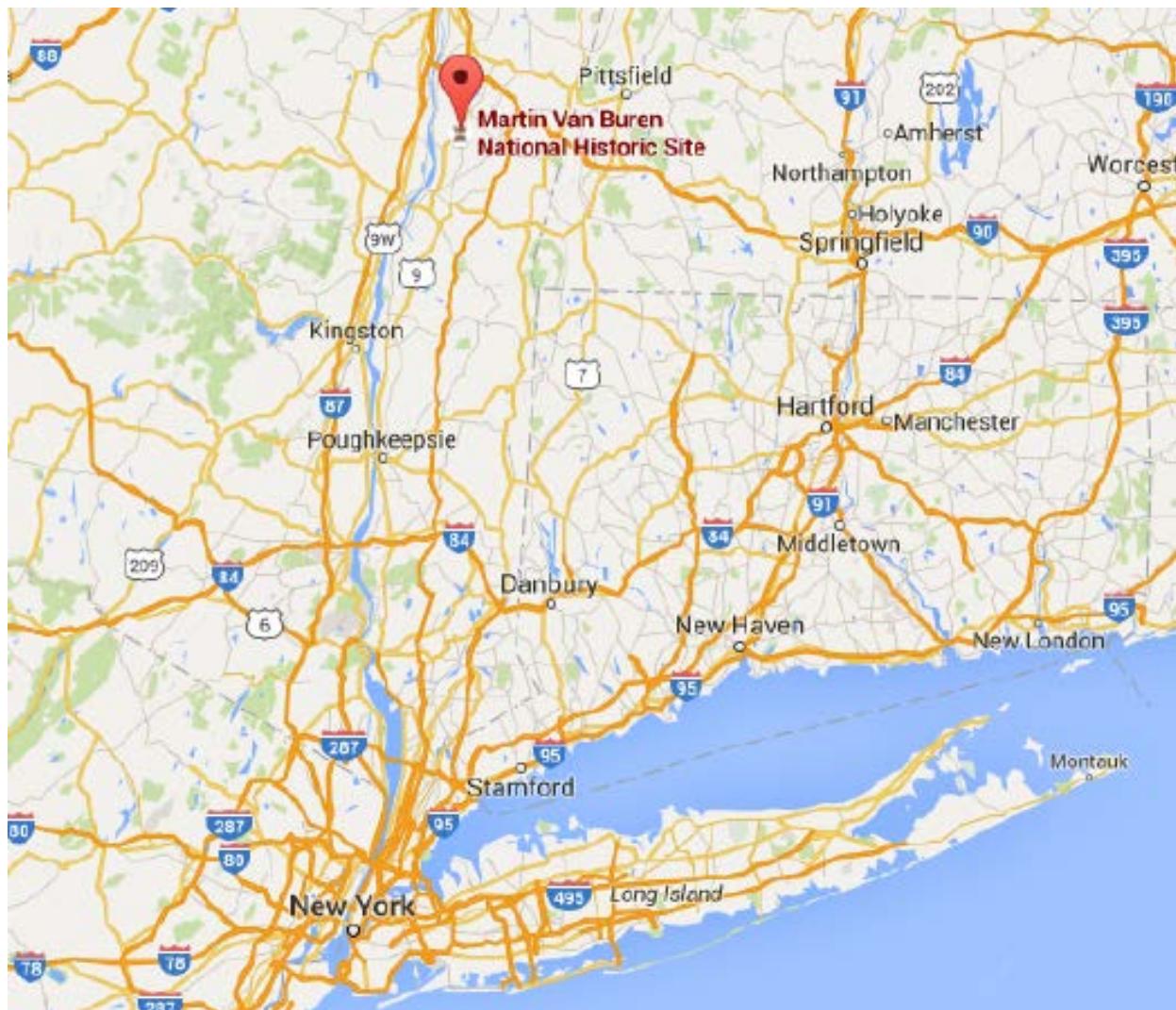
The process of identifying priority park resources by park staff and partners, tracking their condition, organizing and synthesizing data and information, and communicating the results will be closely coordinated with the park planning process, including natural and cultural resource condition assessments and Resource Stewardship Strategy development. The term "priority resources" is used to identify the fundamental and other important resources and values for the park, based on a park's purpose and significance within the National Park System, as documented in the park's foundation document and other planning documents. This report summarizes and communicates the overall condition of priority park resources and values based on the available scientific and scholarly information and expert opinion, irrespective of the ability of the park superintendent or the National Park Service to influence it.

Martin Van Buren National Historic Site was established by an act of Congress (Public Law 93-486) on October 26, 1974, to commemorate the life and work of the eighth president of the United States. After serving one term, Van Buren moved back to his native Kinderhook, New York, where he had purchased Lindenwald. Lindenwald was declared a National Historic Landmark in 1961 and a National Historic Site in 1974 at which time the site was administratively listed in the National Register of Historic Places.

The purpose of Martin Van Buren National Historic Site is to preserve Lindenwald so present and future generations of visitors will have an opportunity to learn about the life and public career of President Martin Van Buren and find meaning in the issues facing America during the formative years of the republic through the turbulent decades leading to the Civil War.



Map of the Park



Location of the Park in New York

Chapter 2. State of the Park

The State of the Park is summarized below for four categories—Natural Resources, Cultural Resources, Visitor Experience, and Park Infrastructure—based on a synthesis of the park’s monitoring, evaluation, management, and information programs, and expert opinion. Brief resource summaries are provided below for a selection of the priority resources and values of the park. Clicking on the web ▶ symbol found in the tables and resource briefs below will take you to the internet site that contains content associated with specific topics in the report.

The scientific and scholarly reports, publications, datasets, methodologies, and other information that were used as the basis for the assessments of resource condition are referenced and linked throughout the report and through the [internet version of this report](#) that is linked to the NPS [IRMA data system](#) (Integrated Resource Management Applications). The internet version of each report, and the associated workshop summary report available from the internet site, provide additional detail and sources of information about the findings summarized in the report, including references, accounts on the origin and quality of the data, and the methods and analytical approaches used in data collection and the assessments of condition. Resource condition assessments reported in this State of the Park report involve expert opinion and the professional judgment of park staff and subject matter experts involved in developing the report. This expert opinion and professional judgment derive from the in-depth knowledge and expertise of park and regional staff gained from their being involved in the day-to-day practice of all aspects of park stewardship and from the professional experience of the participating subject matter experts. This expert opinion and professional judgment utilized available factual information for the analyses and conclusions presented in this report. This State of the Park report was developed in a park-convened workshop.

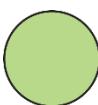
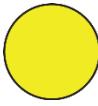
The status and trends documented in Chapter 2 provide a useful point-in-time baseline measured against reference conditions that represent “healthy” ecosystem parameters, or regulatory standards (such as those related to air or water quality). We also note that climate change adaptation requires us to continue to learn from the past, but attempting to manage for conditions based on our understanding of the historical “natural” range of variation will be increasingly futile in many locations. Thus, these reference conditions, and/or our judgment about resource condition or trend may evolve as the rate of climate change accelerates and we respond to novel conditions. Our management must be even more “forward looking,” to anticipate plausible but unprecedented conditions, also recognizing there will be surprises. In this context, we will incorporate climate considerations in our decision processes and management planning as we consider adaptation options that may deviate from traditional practices.

2.1. Natural Resources

Air Quality				 web ▶
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale	
Ozone	Annual 4th-Highest 8-Hour Concentration		Human health risk from ground-level ozone warrants moderate concern. This condition is based on NPS Air Resource Division benchmarks and the 2008–2012 estimated ozone of 70.9 parts per billion (ppb) (NPS-ARD 2015). Ozone is a respiratory irritant, causing coughing, sinus inflammation, chest pains, scratchy throat, lung damage, and reduced immune system functions. Children, the elderly, people with existing health problems, and active adults are most vulnerable. No trend information is available because there are not sufficient on-site or nearby ozone monitoring data. The degree of confidence is medium because estimates are based on interpolated data from more distant ozone monitors.	

Air Quality (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Ozone (continued)	Vegetation Health: 3-month maximum 12-hour W126		<p>Vegetation health risk from ground-level ozone is in good condition. This condition is based on NPS Air Resource Division benchmarks and the 2008–2012 estimated W126 metric of 6.3 parts per million-hours (ppm-hrs) (NPS-ARD 2015). The W126 metric is biologically-relevant and focuses on the plant response to ozone exposure during daylight hours over the growing season. There are at least 15 ozone-sensitive plants in the park (see NPSpecies to search for ozone-sensitive plant species) including <i>Prunus serotina</i> (black cherry) and <i>Platanus occidentalis</i> (American sycamore). No trend information is available because there are not sufficient on-site or nearby ozone monitoring data. The degree of confidence is medium because estimates are based on interpolated data from regional ozone monitors.</p>
Deposition	Sulfur Wet Deposition		<p>Wet sulfur deposition warrants moderate concern. This condition is based on NPS Air Resource Division benchmarks of 2.6 kilograms per hectare per year (kg/ha/yr) (NPS-ARD 2015). Acidification effects can include changes in water and soil chemistry that impact ecosystem health. Some kinds of plants appear to be more sensitive to acidification effects than others. Some lichens are especially sensitive, with documented effects occurring in the deposition range of only a few kilograms of sulfur per hectare per year. Among the vascular plants, sugar maple trees (<i>Acer saccharum</i>) are known to be particularly sensitive, and are found in the park (Sullivan et al. 2011). Acidification can also cause damage to stone, painted, and metal monuments and other cultural resources. Sulfur dioxide from combustion is the main contributor among gaseous pollutants to deterioration of stone and some metals, such as zinc and bronze. The chemical deterioration due to acidic deposition is not limited to one mechanism. Rather, it results from interaction of various mechanism, including ambient humidity, receptivity of the stone (capability of retaining the compound and reacting with it), and frequency and duration of the moisture contact (Charola 1998). No trend information is available because there are not sufficient on-site or nearby wet deposition monitor data. The degree of confidence is medium because estimates are based on interpolated data from more distant deposition monitors.</p>

Air Quality (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Deposition (continued)	Nitrogen Wet Deposition		<p>Wet nitrogen deposition warrants significant concern. This condition is based on NPS Air Resource Division benchmarks and the 2008–2012 estimated wet nitrogen deposition of 3.1 kilograms per hectare per year (kg/ha/yr) (NPS-ARD 2015). Although nitrogen is an essential plant nutrient, surplus levels of atmospheric nitrogen deposition and run-off can stress ecosystems. Excess nitrogen can cause weedy, non-native plant species to grow faster and out-compete native vegetation adapted to low nitrogen conditions; decreasing biodiversity and contributing to loss of ecosystem health and function (Blett & Eckert 2013, Bobbink et al. 2010). No trend information is available because there are not sufficient on-site or nearby wet deposition monitor data. The degree of confidence is medium because estimates are based on interpolated data from more distant deposition monitors.</p>
	Mercury/Toxics Deposition		<p>Mercury/toxics deposition warrants moderate concern. High mercury concentrations in birds, mammals, amphibians, and fish can result in reduced foraging efficiency, survival, and reproductive success. Elevated levels of mercury in humans can affect the brain, kidneys, and reproductive function. Nearby Marsh-Billings-Rockefeller NHP, Saint-Gaudens NHS, and Cape Cod NS are assessing in-park mercury levels in water, sediment, and dragonfly larvae samples via a citizen science project across 40 NPS units (Eagles-Smith et al. 2013). Results from 2013 suggest that parks with the greatest dragonfly larvae mercury concentrations were located in New England, and included sites from both Saint-Gaudens NHS and Cape Cod NS (Nelson and Flanagan Pritz 2014). Dragonfly larvae can serve as indicators of mercury risk to food webs (NPS-ARD 2014).</p> <p>Fish at MAVA are included in fish advisories issued by both New York State and the Hudson Valley Region for elevated mercury, PCB, and certain pesticides (EPA NLFA 2015, NYSDH 2015). No trend information is available because there are not sufficient on-site or nearby mercury wet deposition monitor data. The degree of confidence level in this condition is low given the park has no park-specific studies examining contaminant levels in taxa from park ecosystems.</p>
Visibility	Haze Index		<p>Average visibility warrants moderate concern. This condition is based on NPS Air Resource Division benchmarks and the 2008–2012 estimated average visibility of 5.5 deciviews (dv) above estimated natural conditions of 6.6 dv (NPS-ARD 2015). No trend information is available because there are not sufficient on-site or nearby visibility monitoring data. The degree of confidence is medium because estimates are based on interpolated data from more distant deposition monitors.</p>

Water Quantity and Quality

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Surface Water Resources	Dissolved Oxygen (mg/l)		<p>Kinderhook Creek “NYDEC section” (Mouth to Tributary #9) is the section of the creek that runs adjacent to park lands. This segment is designated a Class C water by New York Department of Environmental Conservation (NYDEC) (Chapter X, Article 2, Part 701 and 702). Class C waters are defined as supporting fisheries and are suitable for non-contact activities.</p> <p>Muddy Brook originates on park lands and drains directly into Kinderhook Creek (NPS NRTR—2005/011)—this site is also classified as Class C water by the NYDEC. The only available water quality data is from USGS discrete water quality sampling collected downstream of the park (Station ID USGS 01361000 KINDERHOOK CREEK AT ROSSMAN NY (1957–1991 and 1991–1994)). Land uses between the park and this downstream sampling point are a mixture of agriculture (row crops) and light residential, and large portions of the stream have an intact forested riparian buffer.</p>
	pH		See Surface Water Resources description above
	Total Dissolved Solids (mg/l)		See Surface Water Resources description above
Groundwater Quality	Water Chemistry: Sodium (mg/l)		<p>This condition status assessment is based on the data and summary results contained in USGS Open File Report 2012-1150 (Eckhardt and Sloto) for two wells drilled and monitored on MAVA park lands (2011). The data are discrete in nature and the specific measures and criteria used to evaluate status are derived from USEPA drinking water health standards and secondary maximum contaminant levels.</p>
	Water Chemistry: Chloride (mg/l)		See Groundwater Quality description above
	Water Chemistry: Fluoride (mg/l)		See Groundwater Quality description above
	Water Chemistry: Sulfate (mg/l)		See Groundwater Quality description above
	Water Chemistry: Totals Dissolved Solids (mg/l)		See Groundwater Quality description above

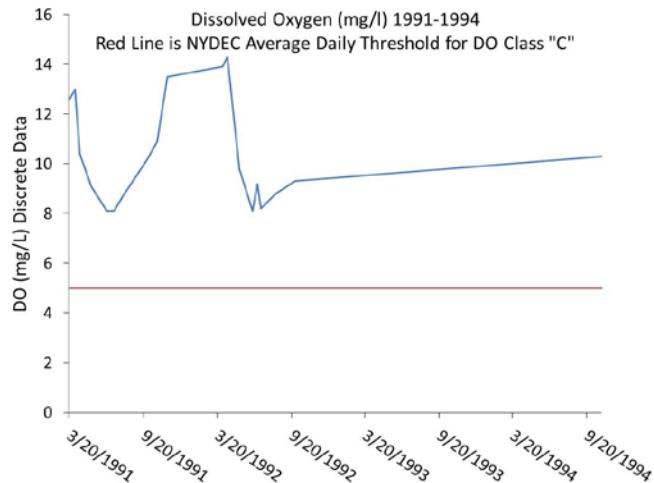
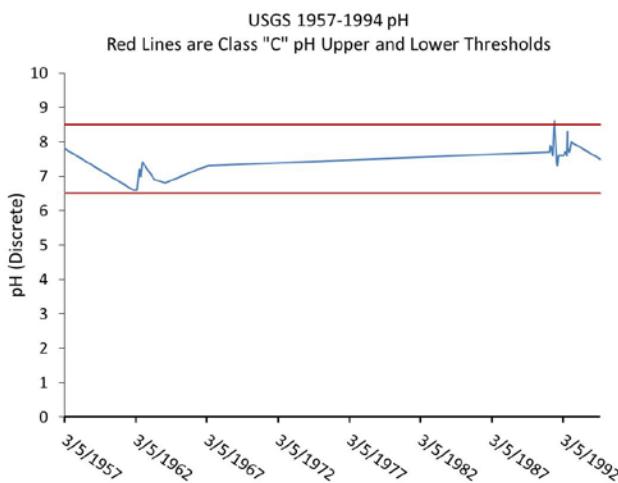
Resource Brief: Surface Water Resources

MAVA does not have a rich history of surface water quality monitoring data from which to draw a statistically-confident inference of overall aquatic ecosystem health. However, the New York State Department of Environmental Conservation (NYSDEC) and the United States Geological Survey (USGS) have collected discrete data from 1957–1994 for various water quality parameters of interest at a USGS gaging station located along Kinderhook Creek (the principal waterway associated with the park) at the Rossman Road Bridge in Columbia County, NY. Ensuring that park management practices and land stewardship efforts support National Park Service and Department of the Interior strategic goals to protect pristine water quality and improve impaired water quality by supporting the Clean Water Act protections and provisions for designated unimpaired and impaired waters is an important element of park management. Learn more from the [NPS Water Quality Program website](#).

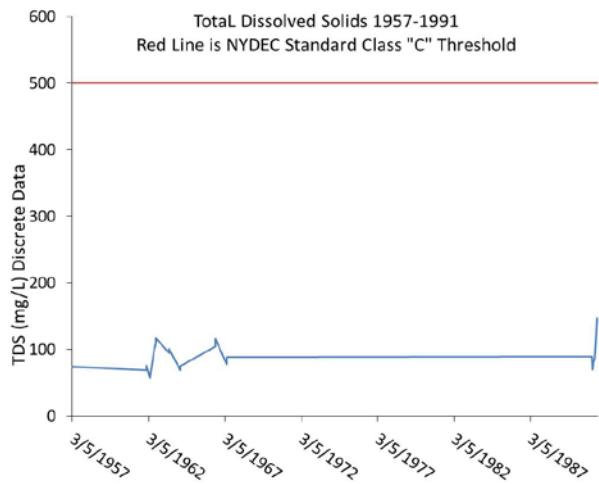
Criteria for Condition Status/Trend

For this report, the condition status/trend for Kinderhook Creek was evaluated based on the USGS data provided by their gaging station ([USGS 01361000](#)) located at the Rossman Road bridge. A suite of three core water quality parameters (pH, Dissolved Oxygen, and Total Dissolved Solids) have been collected on an annual and bi-annual basis between 1957 and 1994. Specific threshold criteria for Kinderhook Creek surface water quality was obtained from: NYDEC (Chapter X, Article 2, Part 701 and 702) which has classified Kinderhook Creek as a Class “C” water. Because the data are not continuous and were last collected in 1994 from a station located approximately 4.22 river miles downstream of the park our overall confidence in this assessment is low.

Indicator	NYSDEC Class C water quality criteria
pH	$6.5 \leq \text{Threshold} \leq 8.5$
Dissolved Oxygen (mg/l)	Minimum Daily Average Threshold > 5.0 mg/l No Time < 4.0 mg/l
Dissolved Solids (mg/l)	$500 \text{ mg/l} < \text{Threshold}$



Discrete USGS water quality data for Kinderhook Creek (USGS gaging station USGS 01361000) for period 1957–1994 and 1991–1994. Water quality thresholds were derived from NYDEC (Chapter X, Article 2, Part 701 and 702).



Discrete USGS water quality data for Kinderhook Creek (USGS gaging station USGS 01361000) for period 1957–1994 and 1991–1994. Water quality thresholds were derived from NYDEC (Chapter X, Article 2, Part 701 and 702).

Key points for interpreting available water quality data:

- The Data are limited in their overall ability to reliably evaluate surface water conditions at the park as the most recent data is from 1994 from a site located approximately 4.22 river miles downstream.
- With caveats in mind, it may be inferred that surface water quality at Kinderhook Creek meets or exceeds NYDEC water quality standards for a Class “C” waterbody based on the information provided within the park.
- Past water resource work on Kinderhook Creek not covered in this assessment, but having some relevance to Kinderhook Creek water quality also includes a benthic macroinvertebrate survey for the Lower Hudson River Watershed (Bode et al. 2004). Based on an analysis of benthic macroinvertebrate data for two sites located along Kinderhook Creek (one upstream and one downstream of the park) the NYSDEC assessed the waterway as non-impacted. For the Bode et al. 2004 report please go to: <http://www.dec.ny.gov/chemical/78979.html>.

Flora and Fauna			
Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Plants	Species Occurrence and Diversity		The condition status assessment is based on data summarized in the 2005 report on biological surveys in the park (Dickert et al. 2005 – NRTR 2005/011). There were 440 plant species identified, including three NY state-listed species and a number of species that are rare or scarce in the Hudson Valley region. No monitoring has been undertaken by the park, and current information on plant occurrence and diversity is lacking.
Invasive Plant Species	Number of Species		The condition status assessment is based on data summarized in the 2005 report on biological surveys in the park (Dickert et al. 2005 – NRTR 2005/011). Survey data identified within the report indicated 21 non-native invasive species. Oriental bittersweet, purple loosestrife, phragmites, common buckthorn, and Japanese knotweed were included in this list of 21 invasive species and were considered of highest management concern. The park has not undertaken management actions to control invasive plant species, and current information on the number of species or occurrence is lacking.

Flora and Fauna (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Amphibians and Reptiles	Species Occurrence and Diversity		The condition status assessment is based on data summarized in the 2005 report on biological surveys in the park (Dickert et al. 2005 – NRTR 2005/011). A total of 11 amphibian and 2 reptile species were observed. Most of these are common species of farm ponds and upland habitats within the region. The information on reptiles is particularly limited as no snakes were identified in the report. No monitoring has been undertaken by the park, and current information is lacking.
Fish	Species Occurrence and Diversity		The condition status assessment is based on data collected and summarized in the 2005 report on biological surveys in the park (Dickert et al. 2005 – NRTR 2005/011). A total of 9 species of fish were sampled from Kinderhook Creek, including the American eel. No monitoring has been undertaken by the park, and current information on fish species occurrence and diversity is lacking.
Birds	Species Occurrence and Diversity		The condition assessment is based on data collected and summarized in the 2005 report on biological surveys in the park (Dickert et al. 2005 – NRTR 2005/011). A total of 73 breeding birds, including NY State Special Concern Osprey and NY State Threatened Northern Harrier were observed within park lands. Subsequent to the 2005 report, limited presence data has been available from the Alan Devoe Bird Club in Columbia County. There has been no routine monitoring on park lands.

Dark Night Sky



[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Anthropogenic Light	Specific measure		The NPS Night Sky Program characterizes a park's photic environment by measuring both anthropogenic and natural light. Anthropogenic Light Ratio (ALR) is a measure of light pollution calculated as the ratio of median Anthropogenic Sky Glow to average Natural Sky Luminance. ALR for Martin Van Buren NHS is 4.97, which is considered a poor condition. Population growth over the past 5 years has been low for the Albany-Schenectady-Troy, NY metropolitan area (<3%), resulting in a neutral trend (U.S. Census Bureau 2013).

Resource Brief: Night Sky Resources at MAVA

The night sky has been a source of wonder, inspiration, and knowledge for thousands of years. Unfettered night skies with naturally-occurring cycles of light and dark are integral to ecosystem function as evident by the fact that nearly half the species on earth are nocturnal. The quality of the nighttime environment is relevant to nearly every unit of the NPS system as the nighttime photic environment and its perception of it by humans (the lightscape) are both a natural and a cultural resource and are critical aspects of scenery, visitor enjoyment, and wilderness character.

Condition and Functional Consequences

Night sky quality at Martin Van Buren National Historic Site is poor with a median ALR of 4.97. This is considered a poor condition for non-urban parks. At these light levels the Milky Way has lost most of its detail and is not visible near horizon. Zodiacal light is rarely seen and anthropogenic light dominates natural celestial features. Some shadows from distant lights may be seen, and dark adaption may be possible in at least some directions, though visible shadows are likely present.

Assessment

One way the Natural Sounds & Night Sky Division (NSNSD) scientists measure the quality of the photic environment is by measuring the median sky brightness levels across a park and comparing that value to average natural night sky luminance. This measure, called the Anthropogenic Light Ratio (ALR), can be directly measured with ground based measurements, or when these data are unavailable are modeled. The GIS model, calibrated to ground based measurements in parks, is derived from the 2001 World Atlas of Night Sky Brightness, which depicts zenith sky brightness (the brightness directly above the observer). Anthropogenic light up to 200 kilometers from parks may degrade a park's night sky quality, and is considered in the neighborhood analysis. This impact is illustrated in the corresponding ALR map with a 200km ring around the park center.

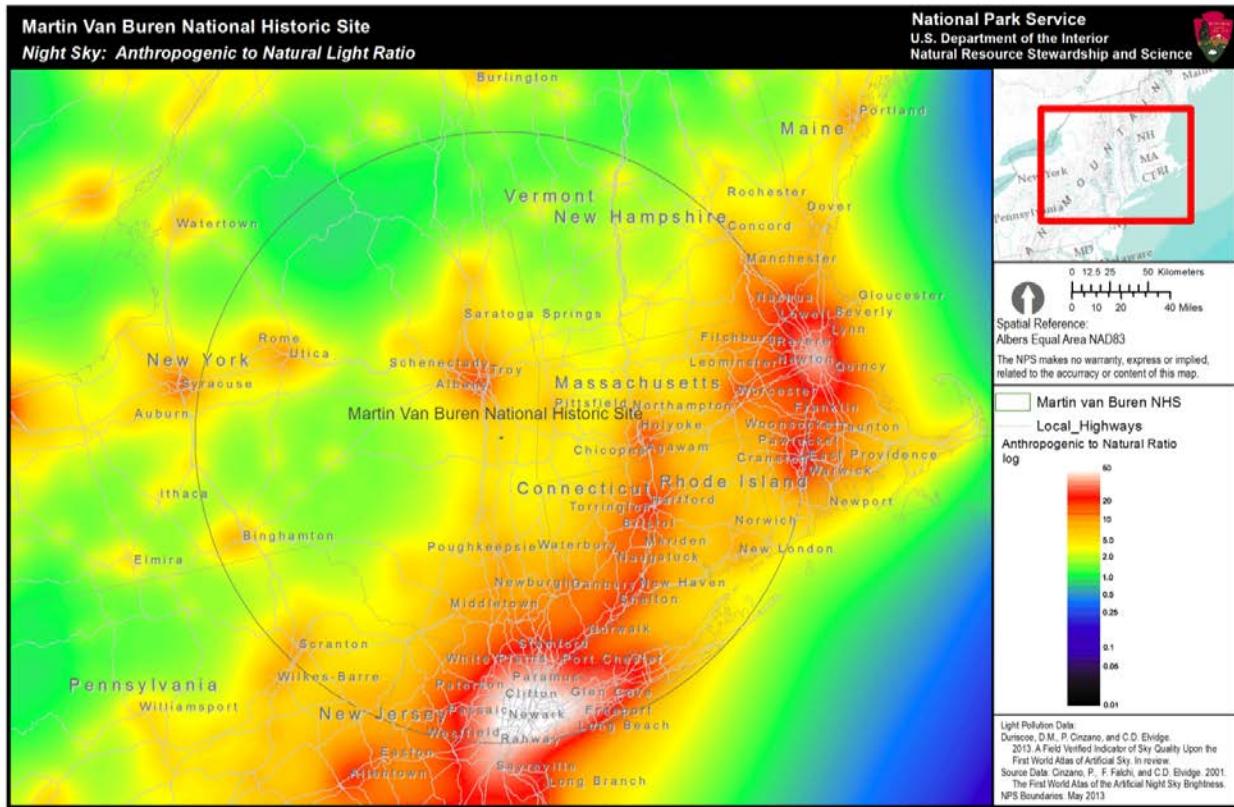
The ALR thresholds are applied spatially to the park. For both urban and non-urban parks, the designated condition (green, amber, red) corresponds to the ALR level that exists in *at least half of* (median condition) the park's landscape. Thus it is probable that a visitor will be able to experience the specified night sky quality. It is also probable that the majority of wildlife and habitats found within the park will exist under the specified night sky quality. For parks with lands managed as wilderness, the designated condition is based on the ALR level that exists in more than 90% of the wilderness area.

Criteria for Impact

Two impact criteria were established to address the issue of urban and non-urban park night sky resources. Parks within urban areas, as designated by the U.S. Census Bureau, are considered less sensitive to the impact of anthropogenic light and are assessed using higher thresholds of impact. Parks outside of designated urban areas are considered more sensitive to the impact of anthropogenic light and are assessed using lower thresholds of impact. According to the U.S. Census Bureau, Martin Van Buren NHS is categorized as non-urban, or more sensitive ([U.S. Census Bureau 2010](#)). Learn more in the document [Recommended Indicators of Night Sky Quality](#), and the NPS Natural Sounds & Night Skies Division [website](#).

Thresholds for Level 1 and 2 Parks

Indicator	Threshold for Level 1 Parks – Non-Urban	Additional Threshold for Areas Managed as Wilderness	Threshold for Level 2 Parks – Urban
Anthropogenic Light Ratio (ALR)— Average Anthropogenic All-Sky Luminance : Average Natural All-Sky Luminance Light flux is totaled above the horizon (the terrain is omitted) and the anthropogenic and natural components are expressed as a unitless ratio The average natural sky luminance is 78 nL	ALR < 0.33 (<26 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>	ALR < 0.33 (<26 nL average anthropogenic light in sky) <i>At least 90% of wilderness area should meet this criteria</i>	ALR < 2.00 (<156 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>
	ALR 0.33–2.00 (26–156 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>	ALR 0.33–2.00 (26–156 nL average anthropogenic light in sky) <i>At least 90% of wilderness area should meet this criteria</i>	ALR 2.00–18.00 (156–1404 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>
	ALR > 2.00 (>156 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>	ALR > 2.00 (>156 nL average anthropogenic light in sky) <i>At least 90% of wilderness area should meet this criteria</i>	ALR > 18.00 (>1404 nL average anthropogenic light in sky) <i>At least half of park area should meet this criteria</i>



Created by NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group on 20150319

Regional view of anthropogenic light near Martin Van Buren NHS. The circle around the park represents the distance at which anthropogenic light influences the night sky quality of the park.

Acoustic Environment



[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Acoustic Impact Level	A modeled measure of the noise (in dBA) contributed to the acoustic environment by man-made sources		The condition of the acoustic environment is assessed by determining how much noise man-made sources contribute to the environment through the use of a national noise pollution model. The mean acoustic impact level at the park is 3.4 dBA, meaning that the condition of the acoustic environment warrants significant concern. Overall, long-term projected increases in ground-based (Federal Highway Administration 2013) and aircraft traffic (Federal Aviation Administration 2010) indicate a deteriorating trend in the quality of acoustic resources at this location.

Resource Brief: Acoustic Environment at MAVA

To characterize the acoustic environment, the National Park Service has developed a national model of noise pollution (Mennitt et al. 2014). This model predicts the increase in sound level due to human activity on an average summer day. The model is based on measured sound levels from hundreds of national park sites and approximately 100 other variables such as location, climate, vegetation, hydrology, wind speed, and proximity to noise sources such as roads, railroads, and airports. The model reveals how much quieter parks would be in the absence of human activities. The quality of the acoustic environment affects visitor experience and ecological health. Acoustic resource condition, both natural and cultural, should be evaluated in relation to visitor enjoyment, wilderness character, ecosystem health, and wildlife interactions. Learn more in the document [Recommended Indicators for Acoustic Resource Quality](#) the [NPS Natural Sounds and Night Skies Division website](#), and the figures below.

Criteria for Condition Status/Trend

For State of the Park Reports, NPS has established acoustic standards (green, amber, red) and two sets of impact criteria for urban parks and non-urban parks. A park's status (urban or non-urban) is based on data from the U.S. Census Bureau ([U.S. Census 2010](#)). Parks outside designated urban areas typically possess lower sound levels, and exhibit less divergence between existing sound levels and predicted natural sound levels. These quiet areas are highly susceptible to subtle noise intrusions. Park units inside designated urban areas typically experience more interference from noise sources. Condition thresholds for non-urban parks are listed in the table below. Just as smog limits one's ability to survey a landscape, noise reduces the area in which important sound cues can be heard. Therefore, thresholds are also explained in terms of listening area.

Condition thresholds for the acoustic environment in non-urban parks

Indicator	Threshold (dBA)
Acoustic Impact Level A modeled measure of the noise (in dBA) contributed to the acoustic environment by man-made sources.	Threshold ≤ 1.5 <i>Listening area reduced by $\leq 30\%$</i>
	1.5 $<$ Threshold ≤ 3.0 <i>Listening area reduced by 30–50%</i>
	3.0 $<$ Threshold <i>Listening area reduced by > 50%</i>

Martin Van Buren National Historic Site

Acoustical Environment: Predicted sound levels (average summer day)

National Park Service

U.S. Department of the Interior
Natural Resource Stewardship and Science



NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group 20150319

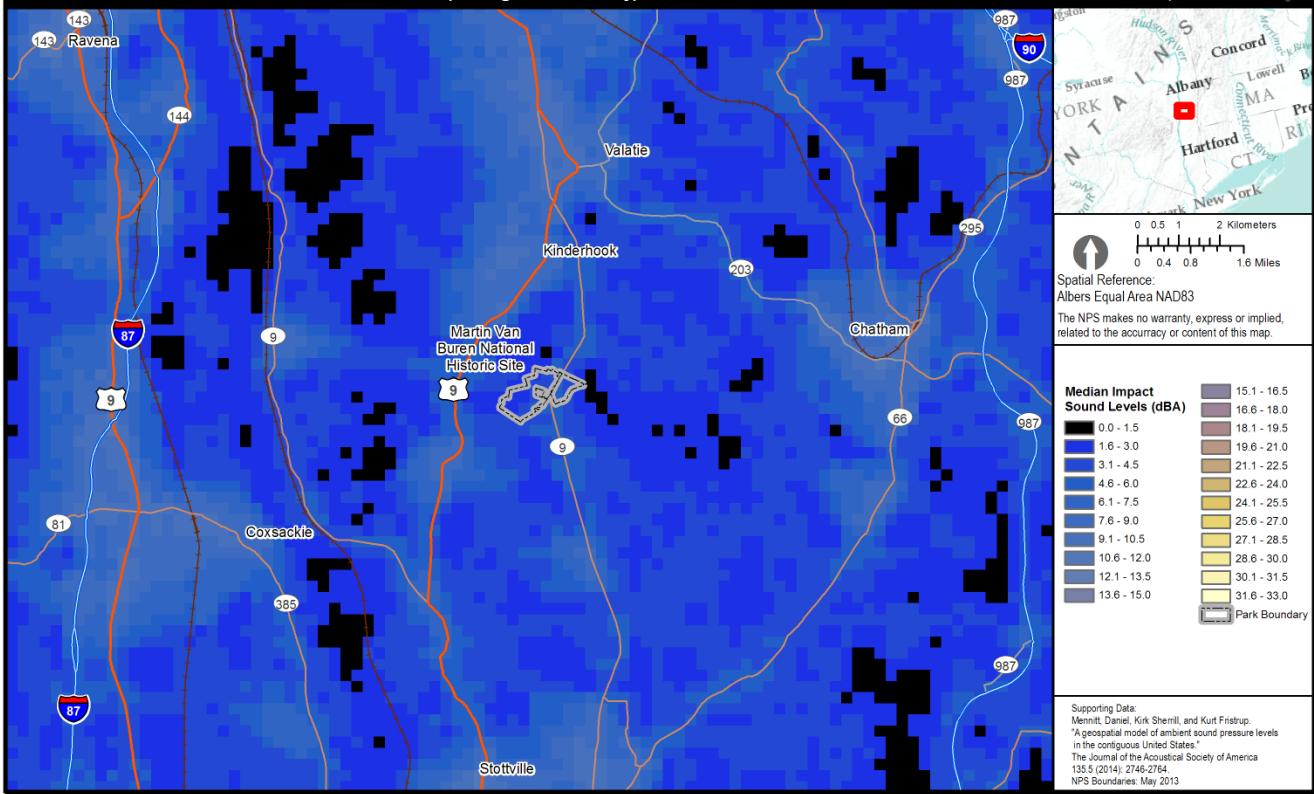
Map of predicted acoustic impact levels in the park for an average summer day. The color scale indicates how much man-made noise increases the sound level (in A-weighted decibels, or dBA), with 270 meter resolution. Black or dark blue colors indicate low impacts while yellow or white colors indicate greater impacts. Note that this graphic may not reflect recent localized changes such as new access roads or development.

Martin Van Buren National Historic Site

Acoustical Environment: Predicted sound levels (average summer day)

National Park Service

U.S. Department of the Interior
Natural Resource Stewardship and Science



NPS Natural Sounds & Night Skies Division and NPS Inventory and Monitoring Program MAS Group 20150319

Map of predicted acoustic impact levels in the park and the surrounding area for an average summer day. The color scale indicates how much man-made noise increases the sound level (in A-weighted decibels, or dBA), with 270 meter resolution. Black or dark blue colors indicate low impacts while yellow or white colors indicate greater impacts. Note that this graphic may not reflect recent localized changes such as new access roads or development.

Resource Brief: Climate Change and Forest Responses at MAVA

Climate change is ongoing and past greenhouse gas emissions, long residence times of these gases in the atmosphere, and our current emissions trajectory suggest that future climate change will be substantial (Wigley 2005, Peters et al. 2012). Although the precise magnitude of these changes cannot be predicted, many trends are already detectable and a range of plausible future conditions can be incorporated into planning efforts.

The forests in and around Martin Van Buren National Historic Site are likely to change due to a warming climate in conjunction with other stressors such as tree pests ([Fisichelli et al. 2014](#)). Habitat suitability for various tree species in the region may increase, decrease, or remain unchanged under future conditions. The table below provides tree habitat suitability projections for select species at Martin Van Buren. Projections are for the year 2100 under two climate scenarios (“least change” and “major change”) that bracket a range of plausible future conditions based on greenhouse gas emissions and global climate model projections. Habitat suitability projections for 81 tree species at Martin Van Buren and for trees at 120 other eastern U.S. parks are available at <http://science.nature.nps.gov/climatechange/>.

Potential changes in habitat suitability (2100 compared with 1990) for select tree species in Martin Van Buren National Historic Site (Fisichelli et al. 2014). Habitat change class designations are based on two future climate scenarios (the “least change” scenario represents strong cuts in greenhouse gas emissions and modest climatic changes and the “major change” scenario represents continued increasing greenhouse gas emissions and rapid warming). Change class designations are based on the ratio of future (2100) to baseline (1990) habitat suitability (output from the U.S. Forest Service Climate Change Tree Atlas).

Scientific Name	Common Name	Least Change Scenario	Major Change Scenario
<i>Acer rubrum</i>	red maple	No change	Large decrease
<i>Acer saccharum</i>	sugar maple	Small decrease	Large decrease
<i>Betula lenta</i>	sweet birch	Small increase	Small decrease
<i>Carya glabra</i>	pignut hickory	Small increase	Small increase
<i>Carya tomentosa</i>	mockernut hickory	Small increase	Large increase
<i>Fagus grandifolia</i>	American beech	Small decrease	Large decrease
<i>Ostrya virginiana</i>	eastern hop hornbeam	Small decrease	No change
<i>Pinus strobus</i>	eastern white pine	Small decrease	Large decrease
<i>Prunus serotina</i>	black cherry	No change	Large decrease
<i>Quercus alba</i>	white oak	Large increase	Large increase
<i>Quercus prinus</i>	chestnut oak	Large increase	Large increase
<i>Quercus rubra</i>	northern red oak	No change	No change
<i>Ulmus americana</i>	American elm	Small increase	Small increase

Longer growing seasons will increase the risk of insect outbreaks and expand ranges of some pest species. Near-term (2013–2027) disease and pest risks for the park include Dutch elm disease and emerald ash borer (Krist et al. 2014). Climate change may increase risk from invasive plant species; longer growing seasons and shorter cold snaps may allow invaders to expand into new ranges (Bradley et al. 2010).

Adaptation to ongoing climate change requires revising existing strategies to meet traditional goals and will increasingly require revising goals and developing novel strategies as conditions shift beyond the range of variability experienced in the past. Areas with greater potential change, uncertainty, and stressors may require significant revisions and added flexibility to management goals and strategies. Managers can incorporate adaptation strategies in routine management actions such as fire and nonnative plant management.

Resource Brief: Recent Climate Change Exposure for MAVA

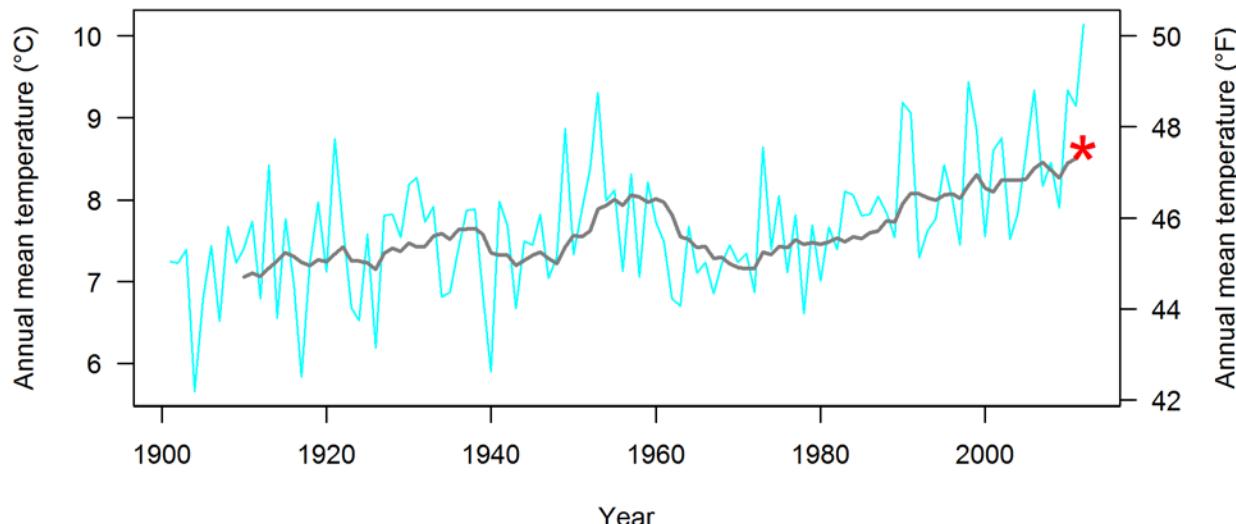
To understand Martin Van Buren National Historic Site recent “climate change exposure”—that is, the magnitude and direction of ongoing changes in climate, we investigated how recent climate in eastern New York State compares to historical conditions (see [Monahan & Fisichelli 2014](#) for updates to the basic climate inventories for 289 national park units). We evaluated climate change exposure by asking which of 14 biologically-relevant climate variables recently (past 10–30 years) experienced “extreme” average values relative to the 1901–2012 historical range of variability. We define “extreme” conditions (e.g., extreme warm, extreme wet) as, on average, exceeding 95% of the historical range of conditions.

Methods

To evaluate recent climate within the context of historical conditions in eastern New York State (analyses were centered over Saratoga National Historical Park), we used the following methods (also illustrated in the figure below):

- For each temperature and precipitation variable, we analyzed data within three progressive time intervals, or “moving windows,” of 10, 20, and 30 years to calculate a series of averages over the entire period of analysis (1901–2012).
- We compared the average temperature and precipitation values for each of the most recent 10, 20, and 30 year intervals (2003–2012; 1993–2012; and 1983–2012) to those of all corresponding intervals across the entire period of 1901–2012. These results (expressed as percentiles) describe “recent” conditions relative to historical conditions. As an example, a temperature percentile of 80% means that recent conditions were warmer than 80% of the historical range of conditions.
- We then averaged the percentiles of the most recent 10, 20, and 30-year time periods and classified variables <5th percentile or >95th percentile as “extreme.”

See [Monahan & Fisichelli \(2014\)](#) for a detailed explanation of methods, and the figure for an example analysis applied to annual mean.

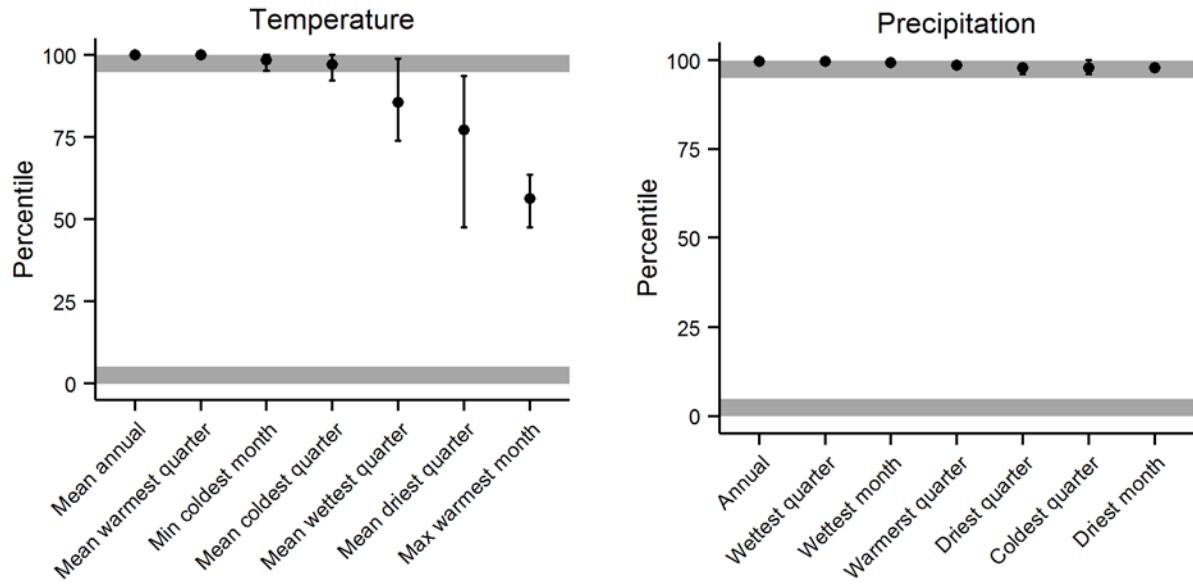


Data used to characterize the historical range of variability and recent annual mean in eastern New York State. The blue line shows temperature for each year, the gray line shows temperature averaged over progressive 10-year intervals (10-year moving windows), and the red asterisk shows the average temperature of the most recent 10-year window (2003–2012). The most recent percentile is calculated as the percentage of values on the gray line that fall below the red asterisk. Here, the most recent 10 years was warmer than 100% of the historical range of conditions (see results of most recent percentiles for all temperature and precipitation variables in the figures below).

Results

Recent percentiles for 14 temperature and precipitation variables appear in the figures below. Results for “extreme” variables at the park were as follows:

- Four temperature variables were “extreme warm” (annual mean temperature, minimum temperature of the coldest month, mean temperature of the warmest quarter, mean temperature of the coldest quarter).
- No temperature variables were “extreme cold.”
- No precipitation variables were “extreme dry.”
- Seven precipitation variables were “extreme wet” (annual precipitation, precipitation of the wettest month, precipitation of the driest month, precipitation of the wettest quarter, precipitation of the driest quarter, precipitation of the warmest quarter, precipitation of the coldest quarter).



Recent temperature and precipitation percentiles in eastern New York State. Black dots indicate average recent percentiles across the 10, 20, and 30-year intervals (moving windows). Variables are considered “extreme” if the average percentiles are <5th percentile or >95th percentile (i.e., the gray zones, where recent climate is pushing the limits of all observed climates since the year 1901). Black bars indicate the range of recent percentiles across 10, 20, and 30-year moving windows.

Key points for interpreting these results:

- Recent climatic conditions are already shifting beyond the historical range of variability.
- Ongoing and future climate change will likely affect all aspects of park management, including natural and cultural resource protection as well as park operations and visitor experience.

2.2. Cultural Resources

Archeological Resources



[web ▶](#)



The Martin Van Buren National Historic Site is most immediately known for architectural and landscape resources that document the tenure of Martin Van Buren, 8th president of the United States. However, numerous archeological sites are also present in the park; these evidence not just Van Buren, but also more than 6,000 years of human occupation on the terraces above Kinderhook Creek. Collectively, these sites are among the most significant and well-preserved in the National Parks of New York and the greater Northeast Region.

Left: MAVA-639, CAT#20604, Token paid to workers for picking fruit, excavated at the North Gatehouse Site (MAVA).

These archeological resources at MAVA have been the subject of more than 20 scientific investigations since the early 1980s. While a relatively low proportion of the park lands have been systematically inventoried, resources dating to the Van Buren period, other historic period sites, and Native American sites of the Late Woodland and Archaic periods have also been identified. While the initial impetus to locate and subsequently manage these sites was the National Historic Preservation Act, they have come to comprise a valuable resource for education and interpretation at the historic site.

MAVA lands can be roughly divided into two areas, the upper and lower terrace. The upper terrace contains Martin Van Buren's house, Lindenwald, and the surrounding formal landscape. The significantly larger lower terrace extends west from the escarpment to the Kinderhook Creek. The upper terrace includes the historic core area of the Van Buren Estate and several archeological sites relating to Van Buren's mid-19th-century development of the farm. Native American and early 20th-century sites are also present in this area. As a result of the 2009 boundary expansion, the lower terrace is now within the park boundary and an easement is expected to transfer to the National Park Service in the near future. The lower terrace contains several Van Buren-related sites, and early Colonial and Native American sites are present immediately above the creek as well. As many as 20 sites have been identified on the lower terrace, and additional deposits and features are most probably present.

Generally, the condition of archeological resources at MAVA warrants moderate concern, although condition is trending upward with high confidence. Further archeological inventory investigations at Martin Van Buren National Historic Site will be necessary to continue the record of effective resources management the park has developed since it was initially designated in 1974. These investigations should focus on the less-well known easement area of the park, and should initially be focused on resources identification rather than management. Any new field investigations should include a Geographical Information Systems component to allow for easy use and dissemination of recovered data. Also vital to continuing successful management of archeological resources are efforts devoted to updating and integrating information into repositories such as the National Park Service Electronic Technical Information Center (E-Tic) and Integrated Resource Management Applications (IRMA).

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Scope of archeological resources in the park is understood and a determination has been made whether or not they are a fundamental or other important resource.		Archeological resources in the historic core area of the park have been inventoried and are well understood. Archeological resources beyond the core of the park require inventory and evaluation. Van Buren-related resources are identified as fundamental in the Foundation Document (2015) and forthcoming General Management Plan (GMP).
Inventory	Percentage of park intensively surveyed.		50% (approximately) of the historic core area of the park has been intensively surveyed, which is a relatively high proportion. The lower terrace lands under easement have not been subject to any systematic archeological inventory. These lands contain Van Buren period, Native American resources, and Other Historic resources.

Archeological Resources (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Certified Condition	Percentage of archeological resources certified as complete, accurate, and reliable in the Archeological Sites Management Information System (ASMIS) in good condition.		Condition assessments for archeological resources entered into Archeological Sites management Information System (ASMIS) are incomplete and aging.

Resource Brief: The North Gatehouse Site

Approximately fifteen archeological sites are known to be present in the historic core area of the park. The North Gatehouse Site is perhaps the most significant of these. The site is comprised of structural features related to use and modification of the gatehouse following its construction in approximately 1850 and high density deposits of artifacts related to the individuals and families that lived in the structure through the 1930s.

The artifact deposits in the rear yard of the gatehouse are extremely dense and date primarily to the early periods of the site when Van Buren's servants lived there. Ceramic, glass, metal tools, and many other types of artifacts were recovered during testing in 2002. Of note is the presence of shards of Van Buren's presidential china. A Van Buren letter dating to the same period complains of the carelessness of his servants, saying "there is not a house in the country where there has been so much destruction of china and glass as in mine" (Historic Furnishings Report, 1957). It is very rare that archeological artifacts can be so closely related to specific people and events, and this makes for a very compelling story that can be shared with park visitors touring Lindenwald.

The North Gatehouse site also presents management challenges for NPS personnel. The interior of the foundation is filled with a very high density of historic bottles that are very attractive to relic collectors. Given the density revealed during testing there are thousands of these artifacts present. There are far too many to integrate into the park's archeological collections, but they are also vulnerable to looters, as is the gatehouse foundation itself.



The North Gatehouse Site, facing south, 2014 (NPS).

At the present time, the North Gatehouse Site is stable and in good condition, with its story described for visitors on wayside signs. The South Gatehouse Site, located at the other end of the historic core, has been subject to low intensity testing, the results of which indicate there may be a site of similar significance in that area. In general, archeological projects in the historic core have yielded information not just significant in interpreting patterns in prehistory and history, but also important in interpreting the National Historic Site to the public.

Resource Brief: The Old Stone House Site

Martin Van Buren National Historic Site recently expanded to include more than 100 acres of land on the terraces above Kinderhook Creek through a boundary adjustment and negotiation of an easement. Like the more established historic core area of the park, these new lands contain numerous archeological sites dating to various Native American and Euro-American periods. Many of the sites are related to Martin Van Buren's development of the land as an estate farm, but others are associated with Native American and earlier colonial occupations. One of these, the Old Stone House Site, dates to the 17th and early 18th centuries, but also contains an extremely rich Native American deposit dating to the Late Archaic through Woodland Periods, between 6,000 and 500 years old.

"Old Stone House" refers to a dwelling probably constructed by the Van Alstyne family, who were farming along Kinderhook Creek by 1670. The house appears on historic maps through the 18th century, and is thought to have been present as late as the Van Buren occupation of Lindenwald. Little is known about the structure, but it was probably built of stone, and archeological artifacts in the area include both red and yellow brick fragments, also known as Dutch brick or fire brick.



View northwest in the approximate area of the Old Stone House site. Today the area is used for active agriculture, 2014 (NPS).

Cultural Anthropology



[web ▶](#)



An effort has been underway in the past decade to understand the ethnographic landscapes and ethnographic resources present at Martin Van Buren National Historic site. The park staff has worked with Native American tribes such as the Delaware tribe and the Stockbridge Munsee to better understand the cares and concerns Native peoples have concerning the numerous sites identified and in guiding interpretation efforts. Park staff maintains open lines of communication and consultation with tribal partners.

Left: Stockbridge-Munsee Community of the Mohican Nation visit to Lindenwald, 2008 (MAVA).

Recent ethnographic landscape level study sought to understand the development of farms and farming in the immediate neighborhood, the county, and the region ([Stanton 2012](#)). The study highlighted the park's present role in interpreting and presenting the history of local farming. For more than a decade, MAVA has been actively incorporating farming activities into its teaching and special events (most notably in its wayside markers and ranger led farm tours). Increasingly, the Park has emerged as an interpreter and participant in the county's working agricultural landscape. The Stanton study provides a clear vision for the park's role(s) in relation to the history and present-day practice of farming at Lindenwald and the surrounding county. Generally, cultural anthropology and ethnography at MAVA is considered to be in good condition.

Cultural Anthropology (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Percentage of cultural anthropology baseline documents with current and complete information.		100% of cultural anthropology baseline documents contain current and complete information including the Ethnographic Landscape Study (2012) and Ethnohistory/NAGPRA Study (2011).
Inventory	Appropriate studies and consultations document resources and uses, traditionally associated people, and other affected groups, and cultural affiliations.		Resources and uses, traditionally associated people, and other affected groups and cultural groups with affiliation have been identified through the Ethnohistory/NAGPRA Study (2011) and Ethnographic Landscape Study (2012).
Documentation	Research results are disseminated to park managers, planners, interpreters, and other NPS specialists and incorporated into appropriate park planning documents.		Ethnographic research results are disseminated to park managers, planners, interpreters, and other NPS specialists. Resources are considered during planning efforts and are included in the park's Foundation Document (2015) and forthcoming General Management Plan.

Resource Brief: Ethnohistory of Farming

In 2013, the National Council on Public History gave its prestigious award for excellence in consulting to Dr. Cathy Stanton for ["Plant Yourself in My Neighborhood: An Ethnographic Study of Farming and Farmers in Columbia County, New York."](#) The report was developed by the Northeast Ethnography Program of the National Park Service for Martin Van Buren National Historic Site through a Cooperative Agreement with the History Department of the University of Massachusetts, Amherst. This cutting-edge study provides the park with information about farming as a way of life in the Lindenwald neighborhood and its environs over time. In addition to creating an ethnohistorical context for understanding the mid-19th-century farming activities of Martin Van Buren, the study provides insight into contemporary Columbia County agriculture, as a way of supporting the park's expanded management focus on farming. Building on previous scholarship that examines Martin Van Buren's post-Presidential farming activities in relation to his political life and beliefs, the study extends existing knowledge in innovative ways.

The park's 2009 boundary expansion was prompted by a range of preservationist and interpretive concerns, and in turn, it raised new questions for management and interpretation. The park has been addressing these questions through its General Management Plan process and a series of commissioned studies designed to help reevaluate its role in both the historical and contemporary landscapes of the area. Additionally, park staff has been working to shift the conception of the estate as the post-Presidential home of a great man, and to re-envision it as a working farm within a larger agricultural landscape and to introduce the themes of ongoing civic debates concerning subsistence, markets, labor, rights and freedoms, land ownership and



First-person interpretation of the history of farming at Lindenwald at the 2010 Martin Van Buren National Historic Site Harvest Day: Cathy Stanton, Conrad Vispo, and Otter Vispo, 2010 (MAVA).

stewardship. This expanded vision and understanding of the park re-frames Martin Van Buren's farming activities as part of not only his political life but also of the complex and changing political, economic, and social character of antebellum America.

As important as the broader interpretation facilitated by the boundary expansion is, equally important is the way it re-locates the park within the *contemporary* working agricultural landscape of Kinderhook and Columbia County. The study explores the fact that this shift is happening at a time when food production and consumption have become topics of considerable public attention, and when farmers have become increasingly involved in debates over the preservation of open space and rural character, the display and marketing of local and regional heritage, and questions about the “sustainability” of modern American life on many levels. The conventional logic of historic places is that they preserve and interpret ways of life that are past or obsolete—their very obsolescence is frequently what creates a need to protect them. But that logic is challenged by the ideas that many historic sites are discovering common connections between their missions and the current efforts of farms and organizations—like Roxbury Farm—involved in the “re-localizing” of agriculture and the rebuilding of networks and of the relationship between farmers and their markets.

Martin Van Buren National Historic Site is crafting a role for itself within a patchwork of agricultural and land-holding practices that remain as varied—and sometimes as contentious—as they were in the 19th century. Within these kinds of new and dynamic partnerships, historic sites must reconsider how their own missions of preservation and interpretation can intersect productively with present-day agriculture in a way that is informed by a careful study of farming over time in a particular place.

Cultural Landscapes



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View southwest across the upper terrace field toward Kinderhook Creek and the Catskill mountains, 2014 (NPS).

Martin Van Buren National Historic Site is located 20 miles south of Albany and two miles east of the Hudson River in Kinderhook, Columbia County, New York. The Hudson Valley property known as “Lindenwald” was the home of Martin Van Buren (1782–1862), the nation’s eighth President. Upon acquiring the property in 1839, Van Buren managed it as an experimental and working farm, and resided there from the end of his presidential term in 1841 until his death. The landscape of Lindenwald is defined by its rural agricultural setting and formal mansion grounds on the upper river terrace that give way to agricultural fields, a wooded escarpment, and the lower terrace fields. Kinderhook Creek forms the western boundary of the park, and the Catskill Mountains form the backdrop for the park’s western viewshed. The surrounding woodland and farmland within the park’s 295-acre authorized boundary

remains undeveloped and actively farmed. Many of the landscape’s historic characteristics and features are still intact. The spatial organization of the formal mansion grounds, including the stately home, semi-circular lawn, and graceful curved entry drive, is still distinct from the open farmland west of the mansion. Vegetation patterns remain similar to the Van Buren era, including the restored black locust allée, mowed-turf lawn dotted with specimen trees, and cultivated agricultural fields.

The Italianate-style mansion has been restored and remains the focus of the historic core. The Van Ness monument is still visible in the field to the west of the mansion, and one of Van Buren’s fishing ponds remains. The retention of views west to the Catskill Mountains and preservation of actively-farmed land in the park’s viewshed has allowed the historic setting to remain largely intact. However, some landscape conditions and spatial organization have changed since Van Buren’s death in 1862. Notably, many of the historic structures known to Van Buren are no longer extant, including the barns, the carriage house, the Farm Office, and the North Gatehouse. This alters the spatial arrangement of the area behind the mansion that was once the center of the working farm. Other key features such as the orchards and formal garden are gone, further altering the character around the mansion. The current park maintenance garage and the museum storage facility immediately west of the mansion obstruct views to agricultural fields and detract from the historic character. Additionally, the dense north wooded lot, once the site of Van Buren’s north orchard, encroaches on the formerly open yet organized landscape. The configuration of farm fields on the lower terrace has changed, and 20th-century agricultural practices have altered the topography and patterns of some fields.

Generally, the condition of the cultural landscape is good, trending upward with high confidence owing to substantial documentation through cultural landscape reports and inventories documenting significance, condition, and treatment, and several ongoing planning documents, which provide additional guidance for landscape treatment and agricultural management. The draft General Management

Plan (2015) identifies the cultural landscape and scenic viewsheds as fundamental resources, and agricultural soils as an important cultural resource. [Plant Yourself in My Neighborhood: An Ethnographic Landscape Study of Farming and Farmers in Columbia County, New York](#) (2012) provides historic and contemporary regional context.

Cultural Landscapes (continued)

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research exists to understand the relationship of the park's cultural landscapes to the historic context(s) for the park.		Detailed information relevant to the cultural landscape and historic context of the historic core and farmland is provided in park Cultural Landscape Reports (1995 , 2004). Completed cultural landscape reports for the property include: <u>Cultural Landscape Report for Martin Van Buren National Historic Site, Volume I: Site History, Existing Conditions, Analysis and Evaluation</u> (1995), <u>Volume II: Treatment</u> (1997), and <u>A Farmer in his Native Town: Cultural Landscape for the Martin Van Buren Farmland</u> (2004). An updated cultural landscape treatment plan and agricultural management guidelines are currently underway. The <u>Martin Van Buren NHS Landscape: Cultural Landscape Inventory</u> , completed in 2013, listed the landscape in "good" condition.
	Percentage of cultural landscape baseline documents with current and complete information.		100% of cultural landscape baseline documentation completed: Historic Resources Study (2006), Cultural Landscape Reports (1995 , 1997, 2004), Cultural Landscape Inventory (2013).
Inventory	Percentage of landscapes eligible for the National Register in the Cultural Landscapes Inventory (CLI) with certified complete, accurate, and reliable data.		100% (1/1) of cultural landscapes eligible for the National Registered captured in the Cultural Landscape Inventory (2013) with certified complete, accurate, and reliable data.
Certified Condition	Percentage of cultural landscapes certified as complete, accurate, and reliable in the Cultural Landscapes Inventory (CLI) in good condition.		100% (1/1) of the park's cultural landscapes is certified as complete, accurate, and reliable in the Cultural Landscape Inventory (2013) in good condition.

Resource Brief: Van Buren's Experimental Farming and Parallels to Sustainable Agriculture Today – “*...a farmer in my native town*”



Left: View west across the upper terrace field, 2014 (NPS); **Right:** Aerial view of Martin Van Buren National Historic Site, c. 2010 (MAVA).

Tilling the same fertile land that our nation’s eighth President Martin Van Buren farmed from 1839 to 1862, Roxbury Farm is cultivating more than sustainably-grown vegetables, herbs, and grass-fed pork, lamb, and beef on their community-supported farm. Roxbury Farm is also cultivating stewardship of the land and promoting organic practices similar to the methods Van Buren utilized in his successful agricultural operations. Like Van Buren, Roxbury Farm places emphasis on soil health, does not use synthetic pesticides, and fertilizes with aged compost and manure.

When Van Buren purchased the farm that he renamed “Lindenwald,” he followed in the “honest and virtuous” footsteps of the seven presidents before him who had become statesmen farmers after their presidential terms. Stewarding a landscape that links the history of Van Buren and progressive agriculture with today’s growing conversation concerning sustainable agriculture and local food sources, Roxbury Farm produces vegetables that feed over 1,000 families from New York City to Albany.

The park General Management Plan identifies the cultural landscape as a fundamental resource and the Lindenwald agricultural soils as an important cultural resource. Lindenwald’s soil today reflects over 300 years of continuous agricultural use and modification. The park is developing Agricultural Management Guidelines to facilitate management of the historic character of the formal landscape and farmlands in concert with active agricultural use, resource preservation, and visitor experience. The guidelines will articulate best practices for partnering sustainable agriculture with historic properties. For example, the proposed replanting of hedgerows removed in the 1950s will evoke the patterns of vegetation present during Van Buren’s time while providing agricultural benefits, including pollinator habitat and windbreaks. The relationship between MAVA and Roxbury Farm provides context, continuity, and relevance for the interpretation and active management of Van Buren’s farm, where the retired President described spending, “the last and happiest years of my life, a farmer in my native town.”

Historic Structures



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Left: View west toward the Lindenwald Mansion. The circular front garden and urn are in the foreground, 2009 (MAVA). **Right:** View south toward the South Gatehouse near the intersection of the entry drive and Old Post Road, 2014 (NPS).

The primary historic structures at MAVA are all antebellum buildings and structures: Lindenwald mansion house (1797 with significant mid-19th-century additions and alterations), the South Gatehouse (ca. 1847) and North Gatehouse ruin, the Entry Drive (ca. 1797, altered 1845), the Farm Cottage (1844), the Old Post Road section (1700), and the Albany Post Road Mile Marker (ca. 1800).

All of these structures are directly associated with the farm collectively known as Lindenwald, which Van Buren purchased during his presidency in 1841 and continued to build upon and transform through 1851 into a grand country estate prominently located on the Old Post Road, the primary road between New York State's political capital of Albany and its financial capital of New York City. Lindenwald is a National Historic Landmark, significant because of its association with eighth President of the United States, Martin Van Buren. The Lindenwald house also is nationally significant under National Register of Historic Places Criterion for architecture and its association with historical events.

The condition of the house is generally good. Issues include the rapidly deteriorating, highly stylized front porch and structural issues in the main hall caused in part by the new HVAC system. Condition of the Lindenwald Mansion is generally improving because of the recent restoration of the Servants' Call Bell System. The general state of the park's historic structures is good, with 48 out of 60 projects on historic structures funded. Documentation of historic structures is thorough and up to date through 2011, with ongoing work to revise three List of Classified Structures records based upon the 2012 update to the National Register of Historic Places nomination and the ongoing Historic Structures Report for the Farm Cottage.

Historic Structures (continued)

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research is conducted to understand the relationship of the park's historic structures to the historic context(s) for the park.		The relationship of the park's historic structures to the historic context of the park is articulated in the recent Foundation Document (2015), and the forthcoming General Management Plan (GMP). Completed Historic Structure Reports: Gatelodges (2001), Lindenwald (1985), provide detailed historical context.
Inventory	Percentage of List of Classified Structures (LCS) data included in the Geographic Information System (GIS) meeting current cultural resource standards.		0% of List of Classified Structures (LCS) data included in the Geographic Information System (GIS) meets current cultural resource standards. No geographic information has been created for the six structures listed on the main LCS database.
Certified Condition	Percentage of historic structures certified as complete, accurate, and reliable in the List of Classified Structures (LCS) in good condition.		67% (4/6) historic structures listed in the main List of Classified Structures (LCS) database were given "good" conditions during the Fiscal Year 2011 (FY11) assessments. The remaining two structures were listed in "fair" condition. Though condition assessments have not been formally updated since then, visual inspection for this report indicates the mansion's condition may be slipping from "good" to "fair" and the South Gatehouse in borderline "fair" to "poor" condition.

Resource Brief: Lindenwald Servants' Call Bell System Restoration

The working lives of the domestic servants at Lindenwald were busy, to say the least. They worked at least ten hours a day, usually more, and rarely had an entire day to spend off the property. When they were in the home, servants were literally on call 24 hours a day, seven days a week, as attested to by an elaborate system of call bells throughout Lindenwald.

Over time, the impressive call bell system fell into disrepair, with many of its parts disappearing altogether. Thanks to the proactive efforts of Patricia West, Curator of MAVA, the park received \$40,000 in funding through the Recreational Fee Demonstration 20% Program to recreate the bell system. To complete the project, the park enlisted the services of the NPS Northeast

Regional Office's Historic Architecture, Conservation & Engineering Center (HACE). Due to the unique nature of the bell system and the relative lack of specific information regarding it, NPS assigned Jeff Finch, Exhibits Specialist, to oversee and perform the work, and he began his initial research on January 27, 2010.

Limited physical evidence remaining at Lindenwald, combined with historic photographs of the system at the mansion and examination of similar systems still existing in other historic structures, allowed for a detailed understanding of the complicated system to be restored. However, there was only one bell and one lever in existence at Lindenwald and an insufficient number of pivots. Many other parts were required to accurately recreate the entire bell system. An international search and acquisition program brought many refurbished pieces to Lindenwald, and the park also contracted the reproduction of other missing parts unavailable in the marketplace. The finishing touches of the tricky installation were completed on March 3, 2011, when call bells once again rang throughout the historic mansion.

Restoration of the call bell system is documented in a fascinating 15 minute [video](#).



National Park Service craftsman Jeff Finch puts the finishing touches on servants' call bells inside Martin Van Buren's mansion, Lindenwald (MAVA).

Resource Brief: The Farm Cottage

In 2011, Martin Van Buren National Historic Site acquired the historic Farm Cottage (1844) as part of the 2009 boundary expansion that restored a portion of the Lindenwald farm lands to National Park Service ownership. Listed in the National Register of Historic Places in 2012, the one-and-a-half story wood-framed, gabled cottage has remnants of Gothic- and Greek Revival architectural details, including decorative open-work barge boards at the gable-ends, wide overhanging eaves, elongated first story windows, and a one-and-a-half story side addition also retaining Gothic-Revival details. The cottage currently serves as seasonal housing for Roxbury Farm, which leases land and greenhouses for active farming within the NPS boundary. The cottage is located on the edge of the escarpment between Lindenwald's south orchard and its lower fields, with views over the surrounding farmland.



View looking northwest at the east façade of the Farm Cottage, 2015 (NPS).

Although significantly altered from its 1844 appearance via a non-historic front stoop and overhang, the addition of slate roofing, three dormers, and a modern chimney, MAVA is considering the future “restoration” of the Farm Cottage exterior to its appearance during Martin Van Buren’s tenure at Lindenwald. The restoration plan proposes adapting the Farm Cottage interior for reuse as park offices. The NPS Northeast Regional Office Historic Architecture Conservation & Engineering Center (HACE) Historic Structure Research and Documentation staff members are currently completing a Historic Structure Report for the cottage to guide the exterior treatment and interior rehabilitation.

It remains to be seen if enough physical evidence will be uncovered by the historic structure report investigation to allow an exterior “restoration” under the Secretary of the Interior’s Standards for the Treatment of Historic Properties, since no plans or photographs of its original or earlier appearance have been uncovered to date. Yet even a historically sympathetic, altered exterior appearance that serves the proposed office use will help the park achieve the greater aim of enhancing the appearance and interpretation of Lindenwald’s agricultural context.

History



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Martin Van Buren National Historic Site in Kinderhook, Columbia County, New York, preserves the home of the eighth president of the United States and is associated with his political career during his residence there (1841–1848). During that period, Van Buren, who moved to Lindenwald—the two-and-one half-story mansion on the property—after his single term as president of the United States (1837–1841), launched two unsuccessful, but historically-important campaigns to regain the presidency in 1844 and 1848. The only home that he ever owned, Lindenwald represents the culmination of a remarkable political career that saw Van Buren rise from meager beginnings as a Kinderhook tavern-keeper’s son to become the nation’s highest elected official. Van Buren’s subsequent development of Lindenwald into a country estate and working farm reflected his Jeffersonian beliefs in the value and virtue of agriculture to a democratic society.

Lindenwald was designated a National Historic Landmark in 1961 and was administratively listed in the National Register in 1966. In 1974, the house and about 39 acres of surrounding land were established as Martin Van Buren National Historic Site by Public Law 93-486 and placed under the administration of the National Park Service. National Register documentation prepared in 1980 established the National Register boundaries to include Lindenwald and its immediate setting comprising 12.8 acres of land. In 2009, Congress approved the expansion of the boundary to include an additional 261 acres of land encompassing all of Van Buren’s farmland northwest of New York State Highway Route 9H and Albany Avenue (County Road 25) and some additional property intended to provide protection for its setting. Updated National Register documentation, completed in 2012, expanded the historic district boundary to conform to the park’s legislated boundary and evaluated all resources within the district. The district encompasses 176.95 acres and contains a total of 14 contributing resources, including three buildings, five anthropological sites, five structures, and one object that are associated with Martin Van Buren, the eighth president of the United States, during his ownership of the property between 1839 and 1862.

The primary resource on the property is Lindenwald, Van Buren’s two-and-one-half-story mansion. Built in 1797 as a Federal-style mansion, the house was remodeled and enlarged in 1849–1850 by nationally-prominent architect Richard Upjohn to reflect the then popular Italian Villa-style. The grounds immediately surrounding the house and the open agricultural fields beyond contribute to an understanding of how Van Buren developed the estate to reflect his wealth and Jeffersonian agrarian beliefs. Among the other significant resources that were built during Van Buren’s tenure and contribute to the district are the South Gatehouse, Farm Cottage, and Upper Pond. Archeological sites include the Lindenwald South and North Field Native American sites and the historic period Lindenwald Estate and North Gatehouse and Dump sites.



Portrait of Martin Van Buren by Henry Inman, 1837–1838 (MAVA).

In general, historic resources and documentation at MAVA are considered to be in good condition. In addition to the 2012 National Register documentation, the site has completed baseline documentation studies that inform resource management and operational needs, including a Historic Resource Study (2006), an Administrative History (2011), and an Ethnographic Landscape Study (2012). Consultations with pre-eminent scholars of 19th-century U.S. history produced a Statement of Significance (2006) that continues to inform planning and interpretation and a series of more focused analyses, such as an essay on the history of soil by Steven Stoll and targeted research conducted by graduate students from the Public History program at the University at Albany.

History (continued)

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research is conducted to understand the national significance and historical contexts for the park.		Sufficient research has been conducted to understand the national significance and historical contexts of the park. All baseline documentation (Historic Resources Study (2006), Administrative History (2011), and National Register Documentation (amended 2012)) has been completed within the past decade.
	Research supports cultural resource management.		Baseline documentation, together with research and scholarly consultations, informs inventory, evaluation, and management plans, including Foundation Document (2015), the forthcoming General Management Plan, and management decisions effecting the cultural landscape, historic structures, collections, and archeology.
	Research is conducted by qualified scholars.		Authors of current documentation meet Secretary of the Interior's Standards and represent scholars well respected in their field.
Documentation	Percentage of historic properties with adequate National Register documentation.		100% of historic properties have adequate National Register documentation (amended 2012). The update includes boundary expansion and data sheet that includes all known cultural resources.

Resource Brief: Public History at Work – Collaborating Across Institutional Boundaries



Historians Visit MAVA. Left to right, historians Sean Wilentz, Jonathan Earle, Reeve Huston, and Paul Weinbaum, making the number 8 with their hands (for the 8th President), the “gang sign” of the fictitious “Van Buren Boys” from the TV show *Seinfeld* (Episode 148, 2006).

Civil War—including his candidacy for the president under the banner of the Free Soil Party. The park’s acquisition of Van Buren’s bible, a gift from his niece, Christina Cantine, set the ball in motion in 1998. Since then, the site has worked with scholars to produce studies that round out our knowledge of the property. When, in 2006, the OAH helped assemble a team of noted specialists in antebellum politics and society—including Sean Wilentz, Jonathan Earle, and Reeve Huston—the park was already bridging the gap between nature and culture, and history and interpretation. That event both affirmed and catalyzed new directions in the site’s stewardship and interpretive themes that continue to draw upon the expertise of park and regional staff and collaborations with specialists across institutional boundaries.

When the Organization of American Historians (OAH) called attention to the gap between “history” and “interpretation” in *Imperiled Promise: The State of History in the National Park Service* (2011), representatives from this premier professional historians’ organization cited MAVA as a notable exception. For decades, the park has been bridging NPS history work, in both interpretation and cultural resource management, with the best professional, scholarly practices in history at colleges and universities.

The shift in NPS’s understanding and interpretation of the site began more than twenty years ago, when the park developed an increased understanding of the importance of Lindenwald to the antebellum political scene. Far from merely the setting for an elder statesman and gentleman farmer’s retirement, Lindenwald served as a physical expression of Van Buren’s political and personal values and a vital link between his single presidential term and his leadership in the tumultuous years leading up to the

Museum Collections



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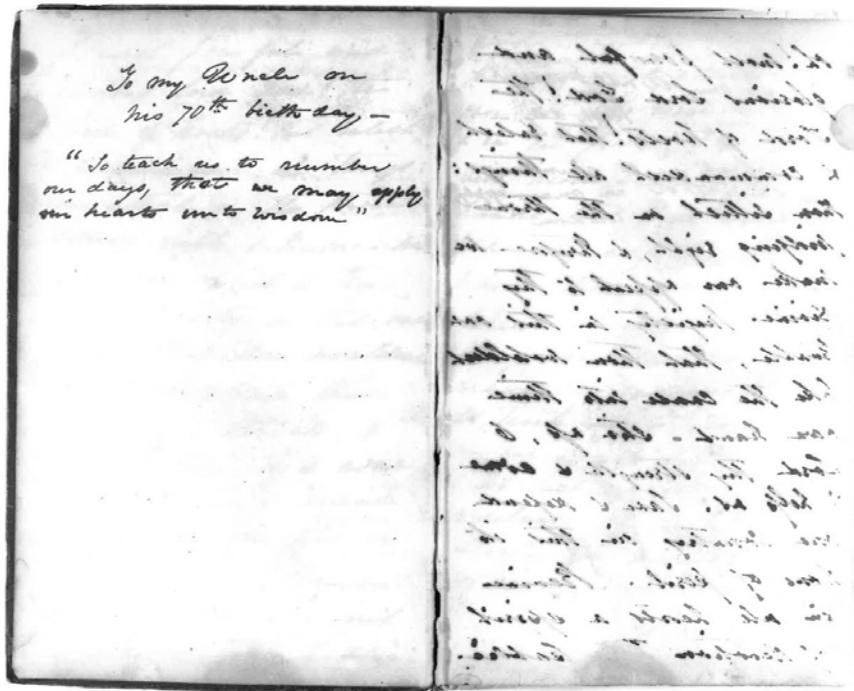
Martin Van Buren National Historic Site's collection contains more than 230,000 items including furnishings original to Van Buren's time at Lindenwald (1839–1862), artifacts relating to the life of Van Buren and his family, architectural materials, archival collections including documents relating to Van Buren, as well as National Park Service resource management records, and an extensive archeological collection. In general, the museum collection at MAVA is considered to be in good condition.

Left: Angelica Singleton Van Buren's dress rehoused by Gwen Spicer, (MAVA).

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Knowledge	Sufficient research and analysis exists to understand the relationship of the park's museum collection to the historic context(s) for the park.		National Register amendment (2012) addresses museum collections, and identifies them as contributing features to the site. The Historic Resource Study (2006) provides context for the collection. A Historic Furnishings Report is formulated for 2017.
Inventory	Percentage of existing collection that is accessioned and cataloged.		77% of the park's existing collection is accessioned and cataloged, according to the Collection Management Report (2014). One archive-cataloging project is needed to complete the process.
Documentation	Furnishings in historic structures are documented in a historic furnishings report.		The 1986 Historic Furnishings Report documenting furnishings in Lindenwald is incomplete and out of date. An update is anticipated in 2017.
Certified Condition	Percentage of museum collection storage facilities in the Facility Management Software System (FMSS) with a Facility Condition Index (FCI) indicating good condition.		67% (2/3) of museum collection storage facilities housing museum collections have a Facility Condition Index (FCI) indicating good condition.

Resource Brief: MAVA Museum Collections and Lindenwald

Approximately 1,000 objects furnish the Lindenwald period rooms. Evidence cited in the Historic Furnishings Report ([Kohan 1986](#)) supporting the period room installations is extensive, documenting furnishings for a large formal dining room, two parlors, an ample library, numerous bedrooms, domestic workspaces, and a nursery. While Lindenwald was the rural household to which Van Buren retreated after his loss of the 1840 election, it immediately became the base from which he maintained his power as a leading figure in national politics in the 1840s.



The prayers inscribed in this Bible, given to Van Buren as a gift, illustrate the family's deep immersion in politics. The above inscription reads, "To my Uncle on his 70th birthday – "To teach us to number our days, that we may apply our hearts unto wisdom." (MAVA).

Throughout Van Buren's residence at Lindenwald, but heightening after his retirement from formal political life, the museum collection reflects a household that was always full of family and friends. A Gothic revival card table and chairs complement written descriptions of family games, and the sheer number of bedsteads suggests a robust household sometimes so full of guests that, as Angelica Singleton Van Buren commented, family sometimes had to resort to the sofas, some of which are now in the collection.

One of the site's most compelling artifacts is a Bible given to Van Buren as a gift by Hannah Hoes's niece Christina Cantine. That this was a family deeply immersed in politics is made apparent by the prayers she inscribed inside the Bible, appealing to God to "defend our country in its hour of peril." By 1852, it was becoming clear even to less politically-astute Americans that peaceful solutions to the slavery question were failing.

From Henry Clay's stay in the "Best Bedroom" in 1849 shortly before his Compromise of 1850 was promulgated, to the discussion of Van Buren's nomination as the Free Soil presidential candidate after "a delightful dinner," MAVA's collection contributes a unique way of understanding Van Buren's social and political life at Lindenwald in the period of significance through material culture. Two floor-to-ceiling gilt pier mirrors in Lindenwald's parlors are appropriate next to the fine wallpaper and carpets reproduced from the originals in the park's collection. Mahogany chairs and beds original to Lindenwald, side and armchairs from Meeks and Roux, a sleigh bed made by cabinetmaker William Shipman of New York City, and a classical-styled sideboard, established Van Buren as a man of taste and wealth.

The steady stream of house guests and formal dinners described in visitors' accounts and correspondence make clear that Van Buren had a large staff of domestic servants. The museum collection contains evocative artifacts representing this dimension of life at Lindenwald: checks from the Bank of Kinderhook written to Catherine Kelly, fragments of the original call bell system, and a ceramic dog that descended in the family of one of the Lindenwald servants.

Resource Brief: Challenges and Opportunities Interpreting MAVA's Museum Collection



Henry Clay's 1849 visit displayed in Lindenwald's "Best Bedroom" (MAVA).

Curator of Clay's home, Ashland, MAVA staff selected to display an object set that mimics the possessions Clay traveled with, including Levi, an enslaved man. This introduces actual historical figures exemplifying the antebellum crisis around the slavery question, in which Van Buren's career became increasingly enmeshed while at Lindenwald. A new Historic Furnishings Report planned for 2017 is anticipated to continue such innovative approaches to the historic house, taking advantage of a generation of historical and museological scholarship while embracing nationally-accepted house museum standards that allow for the inclusion of period and functionally appropriate objects.

The park's 1986 Historic Furnishings Report (HFR) was written at a time when the National Park Service was constraining HFRs to an extremely narrow definition of "minimal conjecture," such that the document, while well researched, made limited recommendations for furnishing Lindenwald (see the park's Administrative History pp. 60–64 for a full account). In the years to follow, the sparsely furnished rooms made it difficult to interpret mid-19th-century life, and subsequent staff struggled to augment the installation, with mixed results. Further, the park's interpretive themes evolved substantially since the 1980s, recasting Lindenwald from "retirement home" to a vivid scene of pre-Civil War political activity and an active progressive farm.

Recent efforts have focused on altering the furnishings to support interpretation of these dimensions of Lindenwald's history. For example, the "Best Bedroom" currently features an installation suggesting the 1849 visit from Henry Clay. Working with the

Resource Brief: Museum Collection Storage at Martin Van Buren NHS

The primary storage space for the park's historical items is the 1,900 square-foot pole barn located near Lindenwald. It was built as a temporary structure in 1983 to store the MAVA collection while restoration took place at the house. It has been actively deteriorating for years.

Over the past several years, park staff has made several major upgrades to the pole barn including upgrading the electrical system and installing fire detection and security protection. They also have prepared a room for recently-cataloged archives.

Park staff is also working diligently to move stored collection objects to neighboring park facilities that meet museum standards. MAVA's archeology collection is stored at Fort Stanwix's Willett Center in Rome, New York, which was designed to house collections from other parks. MAVA staff is in the process of transferring larger three-dimensional objects such as furniture to the relatively new Rath Center at Roosevelt-Vanderbilt Sites in Hyde Park, New York.



Examples of museum collection objects: arrowhead and sewing box associated with Van Buren family (MAVA).

2.3. Visitor Experience

Visitor Numbers and Visitor Satisfaction

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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Number of Visitors	Number of visitors per year		The park received 19,187 visitors in 2014, which is just below (1.9%) the 5-year average of 19,564 visitors for 2010–2014. The park receives, on average, 20,000 visitors per year, a trend that has remained stable for several years.
Visitor Satisfaction	Percent of visitors who were satisfied with their visit		96% of visitors to the park in 2014 were satisfied with their visit, compared to the 5-year average of 97.6%. This is a 2% increase from 2013. Source: 2014 Visitor Survey Card Data Report

Interpretive and Education Programs – Talks, Tours, and Special Events



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Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Education Programs	Number and quality of programs and participants, and alignment with local school districts' strategic plans		<p>The total of education participants in 2014 was 270, which is below our five year average of approximately 350 students. The government shutdown during fall 2013 reduced the number of school groups attending programs, and the number of participants has stayed lower since. All of MAVA's education programs are arranged in partnership with the Columbia County Historical Society. Visits to their 1737 Dutch farmhouse and c.1850 one-room schoolhouse are coordinated to take place the same day as a visit to Lindenwald.</p> <p>The education program at the park is currently focused on the 4th grade curriculum. No current plans exist to develop programs for additional grade levels or expand program offerings.</p>
Ranger Programs	Number and quality of programs and attendance		In 2014, rangers conducted 949 programs to contact 22,818 visitors. Averages from the five prior years are 851 programs with 22,838 visitors. Almost 95% of the programming at MAVA is tours of President Van Buren's home.

Interpretive and Education Programs – Talks, Tours, and Special Events (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Junior Ranger Programs	Number of programs and attendance		<p>Junior Ranger workbooks are offered to each child who enters the Visitor Center. Two versions are available, one for beginning readers (grades 1–2) and one for advanced readers (grades 3+). In addition, each fourth grade student receives a Junior Ranger workbook during their classroom field trip. In 2014, a total of 160 workbooks were distributed.</p> <p>MAVA hopes to update the workbook to utilize more effective questioning techniques. Funding available in 2016 may be used to revise the booklet.</p>
Special Events	Variety and longevity of events, community involvement		<p>In 2013, MAVA management chose to move away from large, single day, blockbuster events. Although the park has hosted successful large events such as Harvest Day at Lindenwald and the Winter Celebration for as many as 15 years, lack of necessary facilities, and the high cost and difficulty staffing events made it impossible for the park to ensure visitor safety and prevent damage to resources. Event planning has successfully shifted to programs on a smaller scale, or hosted off site.</p> <p>In 2014, the park celebrated its 40th anniversary by creating a “pop-up museum” at the Kinderhook Village Farmer’s Market. The event attracted nearly 500 visitors. MAVA also offered a popular series of night time “lantern tours” in September 2014 and hosted a Winter Celebration on a Saturday afternoon in December.</p> <p>This change in format and focus allowed greater involvement directly with the community and provided a platform where the public could participate in crafting the experience related to the history of Van Buren.</p>

Resource Brief: POP-UP Museum at the Farmer's Market

What do Post-it Notes, the Rubik's cube, Hank Aaron's record-breaking home run, and Martin Van Buren National Historic Site have in common? All date from 1974. In 2014 the NPS and the Friends of Lindenwald observed the 40th anniversary of the establishment of MAVA by inviting the community to participate in some 70s nostalgia and reflect on the fact that the park was "Forty and Fabulous."

The event included light-hearted components such as Martin Van Buren in disco attire, but it was also an opportunity to explore the meaning the park holds for the entire community, reflected in sentiments expressed on Post-its and in conversation with park staff. It was remarkable how many of the 1970s local high school yearbooks contributed to the pop-up museum featured a senior class photo in front of Lindenwald.

The movement to preserve Lindenwald began just over 100 years ago, and the persistent attention of local citizens finally resulted in the establishment of MAVA in October of 1974. Yet the grassroots effort to create the historic site did not assure its full development. The park has functioned with temporary and inadequate trailer facilities since 1974, fostering a hallmark of the Martin Van Buren National Historic Site visitor services program, a creative approach that the "Forty and Fabulous" pop up museum illustrates. Yet full development of the park is at last in the offing, as concerted work by park management and partners to complete the long-awaited General Management Plan will help to resolve the lack of a permanent visitor facility. The creative approach, however, will be "Stayin' Alive."



Park volunteer Tom Fraser poses as a 1970s disco version of Van Buren next to a cut out of the President.

Interpretive Media – Brochures, Exhibits, Signs, and Website



[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Wayside Exhibits	Condition and currency of exhibits		Wayside exhibits reflect current themes and are in good condition. Twelve exhibits have been installed between 2006 and 2015. A handout is available, guiding visitors along the three quarter mile loop trail. A cell phone tour of the wayside loop trail to be completed in 2015 will further enhance the quality of interpretation provided by the site's wayside exhibits.
Wayfinding and Directional Signs (off-site)	Usefulness, quantity, and placement		Directional signs are clear on Interstate 90 both eastbound and westbound leading onto NY route 9H south to the park. They are non-existent on the Berkshire Spur of the New York State Thruway (confusingly also designated I-90). Additional signs are desired by the NPS south of the park on NY route 9H. Signs on U.S. Route 9 in Kinderhook and on local roads in Kinderhook Village are in declining condition due to weathering and should be renewed and/or replaced.
Exhibits	Permanent Exhibit		Due to the lack of a visitor center or other permanent exhibit facility there are no permanent museum-style exhibits available to the public.

Interpretive Media – Brochures, Exhibits, Signs, and Website (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Print Media	Accuracy and availability of primary park publications		The park brochure was recently revised in 2013 and an additional rack card informational flyer was created and printed in 2012. An event site bulletin is printed annually. Several other site bulletins on a variety of topics are maintained and distributed. The NPS has enabled mobile web applications, which may reduce the need for printed format and increase the adaptability of media to emerging trends.
Audio-visual Media	Orientation Film		The orientation film reflects current themes and scholarship of the antebellum period. The current film was produced by Harpers Ferry Center in 2006.
	Other AV material		A cell phone tour of the wayside loop trail is currently in production. Initial testing is planned for August 2015.
Websites	Currency and scope of website; number of website visitors		Many excellent resources are available on the park's website, including the virtual tour. Additional time must be devoted to keep the site in conformance with the 2016 Centennial format. Based on a comparison of analytics of website visitors to total park visitors, we can estimate that seventy percent of park visitors access our website before their visit.
	Social media: Facebook updates and "likes," overall activity		MAVA's Social Media Plan was approved, and Facebook page launched in May 2012. In 2015 we devoted more staff time and better annual planning. We plan to post at least twice weekly in the off-season and at least three times weekly during the visitor season. Our page has a total of over 900 likes. Two hundred fifty of those likes are from the past eight months (January to August).

Resource Brief: Wayside Exhibits

Prior to the recent creation and installation of the park's dozen wayside exhibits there was no non-personal interpretation available to visitors who arrived after tours of Lindenwald had ended for the day. The waysides have improved the availability of well-researched and creative interpretation of Lindenwald, encouraging visitors to follow a three-quarter-mile loop from the park entrance around historic grounds, structures, and features. The exhibits have been placed to afford views that highlight the bustling nature of Lindenwald, which was Van Buren's farm and the base of his political activities. Wayside panels also direct visitors to the dramatic vistas of the farmland and Catskill Mountains that make Martin Van Buren National Historic Site both esthetically pleasing and a welcoming place to learn about American history.

Soil Improvers



"The Whigs would hardly believe that a much larger portion of my time is taken up with devising ways & means to multiply the quantity & improve the quality of manure than in forming political plans or any such Matter."
Martin Van Buren, 1843

As an astute politician Martin Van Buren recognized the connection between farm practices and political power. In the early years of the republic Van Buren and others constituted a group known as "soil improvers," who hoped to reverse the common practice of exhausting the soil and moving west to new lands. Their goal was to create a more sustainable agricultural system while also preventing the loss of political power that would result from the depopulation of the northeast.

Martin Van Buren's land is now farmed by Rosbury Farm, a Community Supported Agriculture (CSA) operation using sustainable methods that would be recognized by the 19th century soil improvers. Guided by principles developed by Austrian thinker Rudolf Steiner in the 1920's that saw the farm as an organism, Rosbury's farmers compost manure and use cover crops (such as the clover seen here), crop rotation, and sophisticated plowing techniques. In doing so they sustain and improve the "living tissue" of soil on which we all depend for healthful food.



Elihu Root (1837-1909) was editor of the Alibi, the official newspaper of Van Buren's political machine, the "Albion Regency." Later he devoted himself to agricultural reforms, helping to found the New York State Agricultural Society and serving as director of the Cornell University Agricultural Experiment Station. He later referenced as the editor of *Albion*, America's most widely read farm journal, *The Cultivator*, whose motto read "improve the soil and the soil will improve the men and the men."

The soils of Lindenwald are far more than simple "soil." They are the result of centuries of complex energy bearing natural forces and human endeavor. Elihu Root well explained that the soil improvements at Van Buren's farm continued the long field of a different system of agriculture in the soil and managed by individuals who care as in the history of farming through their hands."

Fertile Political Ground



"Martin Van Buren and the Lincolns in 1860. This painting depicts the election of Abraham Lincoln as president. The painting shows the two families in the same room, with Lincoln's wife Mary and son Tad seated at the left end of the large oval table, and Van Buren's wife and son seated at the right end of the table."



Van Buren's dry pantheon of the five eighteenth-century houses he once farmed included the one built in 1804 from which Lincoln's era as presidential grandmothers. While the brick and earthen walls of Lindenwald proved to be insufficient, Van Buren's elegant house provided uniquely fertile ground upon which he cultivated valuable political relationships. Throughout his life as a man of means and many other interests, politicians, journalists and historians have greatly memorialized Van Buren, some calling the "Great Compromiser," "Father of Honest Henry," or "Big."

Van Buren's most remarkable feature was the grand lower dining room. He reportedly regarded the Dining Room as his favorite room in the house. In the alcove before the stairs E. Park - originally Josephine Van Buren - was seated the momentous anniversary of 1860. This disrupted moment turned Van Buren to not a third party campaign in 1864 for the Free Soil Party. His political career was summarized in this large split-level room. The vast hall was the center of many political discussions.

Van Buren's fine hall ceiling was part of the original political statement made by the architect in the 1840's and 1850's. The slogan "Free Soil, Free Labor, Free speech, free men" represented a desire to unite different groups of citizens who opposed the institution of slavery without settling the issue of Civil War. Instead, Van Buren did what may have been a wise choice of action in that he used the hall as a broader political statement about the future of the nation.

Wayside exhibits from 2015 (top) and 2006

Resource Brief: Video Vignettes and Virtual Tour

The Visitor Services Division has experimented with several different media to expand access to interpretive offerings. The Lindenwald virtual tour is available to those not able to come to Kinderhook and it is also frequently used by visitors on the house tour with mobility issues, enabling them to have an interpretive experience analogous to the others on the tour. The project was accomplished using park recreational fee funds. Park staff did the writing and editing, and the photography and programming were completed through the NPS Harpers Ferry Audio Visual Center.

Over the years it has become clear that there are particular topics and projects at Lindenwald in which visitors have an interest that do not lend themselves to lengthy discussion on the house tour. The park has endeavored to deliver interpretation of these topics to a wide audience through the production of videos available on the park's website and the NPS [YouTube channel](#).

Particularly popular is a production also funded by park recreational fee funds featuring National Park Service craftsman Jeff Finch as he progresses through the work of restoring the Lindenwald Servants' Call Bell System. The [video](#) has been viewed over three-thousand times. In a highly entertaining fashion, it demonstrates the research and care the NPS has taken to restore Lindenwald and the intimate connection between the work of historic preservation craftsmen and accurate interpretation of the past.

Another video features the reproduction of President Van Buren's unique center hall table. Since the reproduction table was installed in Lindenwald in 2002, park rangers have fielded thousands of questions about the appearance and functioning of the table, a central feature of Lindenwald. Indeed, careful research by park staff revealed that the Free Soil Party was founded by Van Buren and his associates while gathered around the original table in 1848. In the [video](#), park staff and the table's builder, John Kovacik, are shown disassembling then reassembling the complex extension table. The demonstration is augmented by an interview of Kovacik explaining the challenges of recreating such a singular piece of furniture. The video is fun and engaging, filling an interpretive need that could not be met within current park facilities. Based on the success of these videos and the virtual tour, the park is exploring the creation of several other videos to enhance the understanding of how the site's resources are cared for and to reach diverse audiences far and wide.

Multimedia Presentations



A Table Fit for a President

A video celebrating and explaining the remarkable reproduction table adorning the dining hall in Van Buren's home, Lindenwald, in Kinderhook, NY.

A screen shot illustrating one of the interpretive videos available on the park website.

Accessibility



[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Mobility	ADA compliance		Visitor Center and grounds are handicapped accessible. A wheelchair lift provides access to the first floor of the Lindenwald Mansion, but there is no access to the second floor for mobility-impaired visitors. The virtual tour of the mansion is available through the website for visitors.
Visual Accommodation	ADA compliance		The park brochure is available in Braille and large type versions. The park film is not audio described. The park does not have audio components for the few small exhibits or waysides.
Auditory Accommodation	ADA compliance		The park orientation film is closed-captioned. The park does not have audio devices to provide hearing assistance.

Accessibility (continued)

[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Public Transportation	Access to park via public transportation		There is no public transportation available in Columbia County that leads to the park, nor any likelihood of a system being developed.
Multi-lingual Resources	Audio and print materials in multiple languages Bi-lingual staff		The park brochure is available in German. The greatest shares of international visitors are Dutch speakers. However, the Spanish speaking population countywide has grown in the last ten years. The population of Bengali speakers has increased over the same period in the City of Hudson. Dutch, Spanish, and Bengali translations of media should be acquired.

Safety



[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Visitor Safety	Recordable incidents		The safety of visitors is a park priority. The park works to quickly identify and mitigate potential hazards, and the number of accidents is very low.
Staff Safety and Training	Number of staff trained		Operational Leadership Training has been completed by park staff, and CPR, First Aid, and AED training are offered to staff on a space-available basis. Job Hazard Analysis is conducted before jobs throughout the park. Regular safety messages are given and distributed to staff members.

Partnerships



[web ▶](#)

Indicators of Condition	Specific Measures	Condition Status/Trend	Rationale
Volunteers	Number and hours contributed		Volunteers provide crucial support as interpreters for house tours and at special events. Park volunteers assist with maintenance and work on curatorial projects. In 2014, 30 volunteers contributed 1,312 hours to the park. This is consistent with our five-year averages of 25.6 volunteers and 1,165 hours contributed. Volunteers conduct interpretive tours and catalog library resources.
Partnerships	Number of official and unofficial partnerships		The Park works with a wide variety of partners and continues to seek opportunities to develop new partnerships. See Chapter 3 for examples of a number of successful partnerships with different agencies, organizations, and universities that contribute to the stewardship of natural and cultural resources and the visitor experience.
Cooperating Association (Eastern National)	Maintain positive working relationships with cooperating associations		Park staff works closely with Eastern National to improve selections available in park store. The improvement to the selection of merchandise available has led to an increase in sales. A percentage of these sales support educational programming at the site.
Civic Engagement	Programs and events that the park hosts or participates in that foster civic engagement		The park is involved with town and county government and numerous community organizations. The park has been a stalwart member of the Landmarks Collaborative, an organization of national, state, and private historic sites in Columbia County. The park has been actively involved with the Kinderhook Trail Committee, which combines the efforts of the government of three towns and private organizations to promote development of recreational trails. The park has worked hand-in-glove over the past three years with the privately-funded Columbia County Historical Society in order to coordinate each organizations' educational program for local school districts.
Trails	Recreational Trail		The park is an active member of the Town of Kinderhook Trails Committee as well as the Friends of Kinderhook Trails. In cooperation with the both groups, the Columbia County Historical Society (CCHS) and Roxbury Farm the Kinderhook Dutch Farming Heritage Trail was completed in 2012. The mile-and-a-half trail connects two National Historic Landmarks: Lindenwald and CCHS's Luykas Van Alen House. A ¼-mile connector trail is scheduled to be completed in 2015.

Resource Brief: Facing the Tough Issues in Antebellum Politics

The ability to bring the political history of 1840s and 1850s America to life presents a challenge to park interpretive staff. Yet achieving that goal is essential to offering visitors the opportunity to contemplate the struggles of the past and to reflect on their meanings for today. Over the past ten years, park staff has worked to revise interpretive themes and to use the artifacts inside Martin Van Buren's home to vivify the period just prior to the Civil War when Van Buren resided there after his presidency. The objective has been to create compelling and poignant installations that enable interpreters to more readily conjure relevant connections for visitors to the meanings intrinsic to Martin Van Buren and Lindenwald.

Initially this involved revising the park's primary interpretive themes to focus on the dynamic period when Van Buren lived at Lindenwald, when Van Buren saw the nation he had been so instrumental in building careen toward war over slavery. A rigorous program of research was undertaken to uncover hidden stories, such as the fact that Van Buren's run as the Free Soil presidential candidate was first proposed around the Lindenwald dining table.

The issue of slavery was so central to this era that park staff dug deep to discover ways to bring this topic alive for visitors. Research uncovered that in September of 1849 Senator Henry Clay of Kentucky visited his old friend and political rival Martin Van Buren. The timing and details of the visit are a microcosm of the issues that wracked the country throughout the antebellum period finally leading to civil war. Working together, the curatorial and interpretive staff consulted with the curator of Henry Clay's Ashland to assemble a constellation of artifacts to illuminate the issues that Clay and Van Buren undoubtedly pondered during the Senator's visit.

The Mexican War had ended a year-and-a-half before, and issues surrounding the acquisition of the enormous territory captured by the United States from Mexico had paralyzed American politics. Would the new territory be free or slave? Six months after Clay's visit to Lindenwald he cobbled together the Compromise of 1850, delaying the Civil War for ten years while convincing many in the North that the Southern "slave power" would not be satisfied until the whole nation was a slave empire. The exhibit created in Lindenwald's guest bedroom captures the essence and the humanity of these large issues by bringing attention to Levi, Clay's slave who accompanied him on his travels. Making the most of the medium of the historic period room, the new installation helps interpreters to highlight the real human cost of antebellum political issues through the simple bedroll on the floor on which the enslaved man would have slept while Senator Clay rested in a comfortable bed.



Senator Henry Clay's slave Levi would have slept on the floor on a simple bedroll like this while Clay visited Lindenwald in September of 1849.

2.4. Park Infrastructure

Overall Facility Condition Index



[web ▶](#)

The National Park Service uses a facility condition index (FCI) to indicate the condition of its facilities and infrastructure. FCI is the cost of repairing an asset, such as a building, road, trail, or water system, divided by the cost of replacing it. The lower the FCI number, the better the condition of the asset. The condition of the buildings and other infrastructure assets at each park is determined by regular facility inspections, or “condition assessments,” including daily informal inspections and formal yearly inspections. Deficiencies identified from these assessments are documented in the NPS Facility Management Software System and the cost for each repair determined. Repairs that cannot be completed within the year count against the condition of a structure. The total cost of these deferred repairs divided by the total cost to replace the structure results in the FCI, with values between 0 and 1 (the lower the decimal number, the better the condition). The FCI is assigned a condition category of Good, Fair, Poor, or Serious based on industry and NPS standards. Deferred maintenance projects that require additional funding are identified based on FCI. Planned preventive maintenance on critical components occurs during the year, using a park’s base budget. For additional information about how park managers use information about the condition of facilities and infrastructure to make decisions about the efficient use of funding for maintenance and restoration activities at the park, [Click Here](#).

Asset Category	Number of Assets 2010 / 2015	FCI 2010 / 2015	Condition Status/Trend	Rationale
Buildings	10 / 17	0.066 / 0.068		Assessment of maintenance needs at MAVA is ongoing. The HVAC system in Lindenwald has been identified as needing corrective maintenance.
Water Systems	3 / 3	0.000 / 0.000		The 3 water systems have no deferred maintenance work orders. The water system in South Gatehouse mothballed in 2014.
Unpaved Roads	2 / 2	0.000 / 0.000		The 2 unpaved roads (Old Post Road and Entry Circle Drive) have no deferred maintenance work orders identified. However a project funding request from 2005 will be updated to reflect current maintenance needs.
Paved Roads, Parking Areas, Bridges, Tunnels	1 / 3	0.323 / 0.282		This FCI refers to the visitor parking lot and adjacent entryways. Sealing and striping work is scheduled to be completed in 2015.
All Others	2 / 2	0.016 / 0.280		This category contains the FCI to the site's Maintained Landscape and also the North Gatehouse Foundation. New deferred maintenance work orders for overhead power line relocation and pasture rehabilitation have been created based on the recommendations of the Cultural Landscape Treatment Plan. This large effort caused the FCI increase shown.

Resource Brief: Vegetation Management with Goats



In 2014 the park began working toward a key cultural landscape management goal—restoration of the north woodlot, which historically was an orchard. In order to reduce the vegetation density and open up the understory, the park rented a small herd of goats from a local farmer. Contained by an electric fence, the goats spent the summer eating their way through the area and the results were dramatic. The dense tangle of poison-ivy and oriental bittersweet were greatly reduced.

Using livestock for vegetation management is an ancient practice that can be a valuable tool in the park manager's tool kit. While grazing livestock have the potential to cause negative impacts such as erosion, trampling, and damage to non-target plants, in general, the experience at

Martin Van Buren National Historic Site was positive. To ensure visitor safety a secondary wire mesh fence had to be installed on the perimeter of the electric fence. Other than fencing and daily watering, the herd required minimal staff time and were a definite hit with visitors.

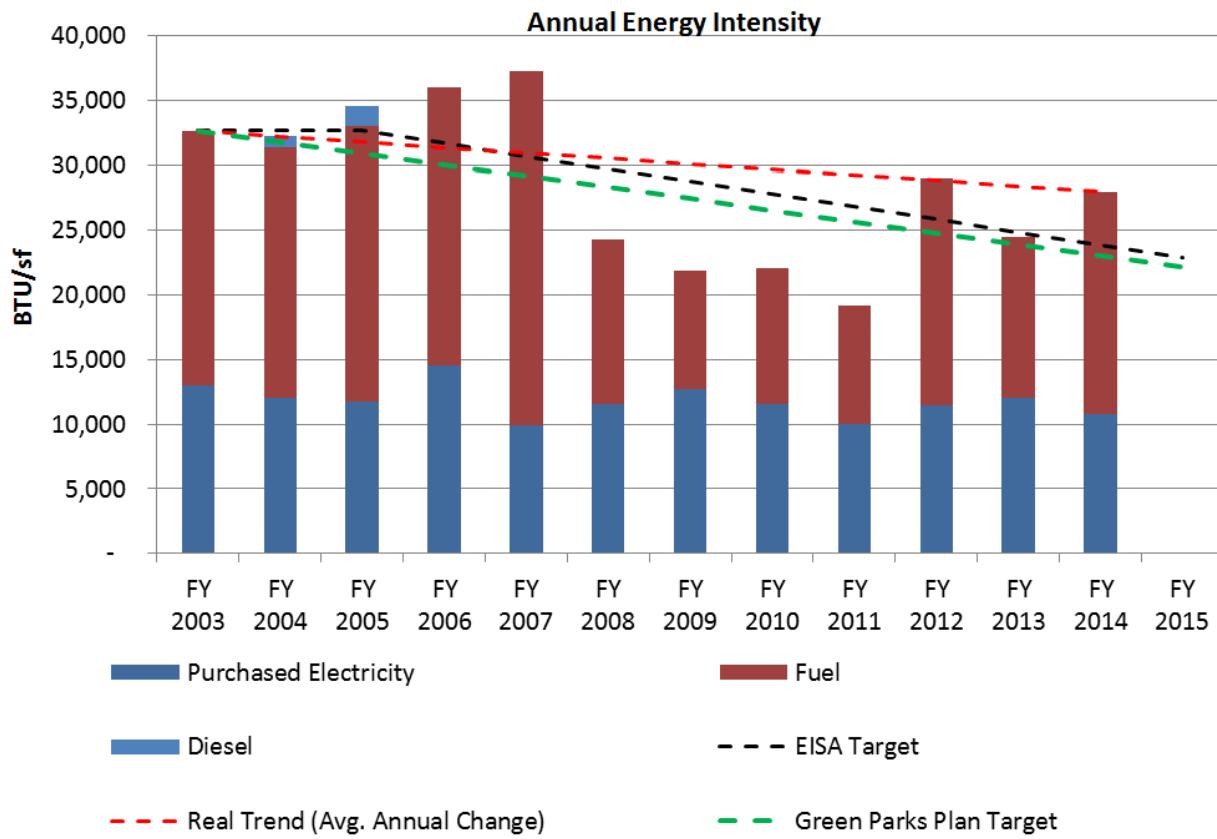
Resource Brief: Green Parks Plan

The NPS manages the largest number of constructed assets of any civilian agency in the Federal Government. It operates more than 67,000 structures that account for more than 50 million square feet of constructed space such as visitor centers and historic structures. The [Green Parks Plan](#) (GPP) defines a collective vision and a long-term strategic plan for sustainable management of NPS operations. A critical component of the implementation of the GPP will be informing and engaging parks' staff, visitors, and community partners about climate change and sustainability to broaden opportunities to foster change.

The Vision defined in the GPP plan is, “The NPS will preserve park resources unimpaired for the enjoyment of current and future generations by reducing its environmental impact through sustainable operations, design, decisions, and management at every level of the organization.” The plan is based on nine strategic goals that focus on the impact of facilities on the environment and human welfare. Two of those goals are closely aligned with Park Infrastructure as defined in this State of the Park report. Those are:

- Be Energy Smart: The NPS will improve facility energy performance and increase reliance on renewable energy; and
- Be Water Wise: The NPS will improve facility water use efficiency. Water use at MAVA is not metered.

For Energy, one of the performance objectives is to reduce Servicewide building energy intensity by 35 percent by 2016 from the 2003 baseline, where energy intensity is energy consumption per square foot of building space. Historical data for energy consumption reported by Martin Van Buren National Historic Site and available in the Energy Data Reporting Tool (EDRT) is shown below.



Highlights for Martin Van Buren National Historic Site include:

- HVAC system improvements are in the planning stage.
- While fuel use has been trending downward, this must be weighed against overall increased heating and cooling loads based on annual degree day data. The total heating and cooling Degree Days saw a strong upswing over normal annual totals in 2013 and 2014—up 5% and 6%, respectively.
- Water consumption is not currently metered. Until metering equipment is installed, the park has no way to track this.

Chapter 3. Summary of Key Stewardship Activities and Accomplishments

Activities and Accomplishments

The list below provides examples of stewardship activities and accomplishments by park staff and partners to maintain or improve the condition of priority park resources and values for this and future generations:

Natural Resources

- Natural Resources (Historically MAVA did not have a natural resource focus, therefore, there are no current natural resource stewardship activities or accomplishments to report at this time).
- Since 2013 the park's organizational structure has been realigned to merge with Roosevelt-Vanderbilt National Historic Sites and as such now has a staff with natural resource management responsibilities.
- The park is actively striving to increase natural resources knowledge within the park.

Cultural Resources

- Baseline documentation has been completed for all cultural resources.
- Historical research at the park has been undertaken at a high level of scholarship and by experts in their field. Findings have been applied to park planning and interpretation.
- Construction projects and necessary ground disturbance have had no adverse effect to archeological resources to date, and most impacts have been avoided.
- The Park is leading consolidation of collections within the northeast region.
- The call bell system in the Lindenwald mansion was restored by an exhibits specialist.
- Publication of the 2013 National Council of Public History's Excellence in Consultation Award-winning report, *Plant Yourself in My Neighborhood: An Ethnographic Landscape Study of Farmers and Farming in Columbia County, New York* ([Stanton 2012](#)).
- Initiation of Agricultural Management Guidelines to serve as a platform for communication between park and partners within the expanded boundary.
- Initiation of the Farm Cottage Historic Structures Report.

Visitor Experience

- Pop-up museum
- Video vignettes
- Teaching the Hudson Valley
- Installations in house aligned with historic themes—Henry Clay visit/slavery
- Van Buren activities in 1840s highlighted with house installations
- New waysides

Park Infrastructure

- Landscape clearing was accomplished utilizing personnel from the Olmsted Center for Landscape Preservation (OCLP) and the NPS Northeast Regional Wildland Fire Program to remove hazard trees. Goats were utilized to clear understory vegetation and poison-ivy.
- Turf management program implemented on recommendations of OCLP. New fertilization, over-seeding and mowing procedures were put into place.
- During 2014–15 two park roofs were replaced. The roof of the Open-Front barn at the Roxbury farm was replaced by park staff from Roosevelt-Vanderbilt and Martin Van Buren National Historic Sites. The Park Office Complex roof was replaced under contract using emergency funding.
- Exterior site lighting was upgraded in 2014 with LED and solar light fixtures.
- A new park identity sign on Route 9H was installed.
- The park installed a new site-wide security alarm system, which is in the final stages of completion.

Chapter 4. Key Issues and Challenges for Consideration in Management Planning

Grand symmetrical landscapes, picturesque views of the Catskill Mountains and elaborate, almost imposing, historic homes are some of the defining features that make the Martin Van Buren National Historic Site (MAVA) a small gem in the upstate NY landscape. The National Register listing for the site identifies the intact historic period views as a contributing feature, describing the historical layout of farms and mixed forest leading all the way west to the mountains. In 2009, MAVA expanded the park boundary exponentially to 295 acres to include much of the historic farm ownership and to work towards preserving this viewshed, providing the full picture of the life of the 8th president.

Restoring and preserving historic viewshed

While much of the setting remains intact, there have been several modern additions to the landscape that are not optimally placed nor built for the purpose that the NPS currently utilizes them for. A concrete block structure as well as a number of smaller storage buildings are used for maintenance of the site, but are within feet of the Lindenwald Mansion and impede the view that visitors to the home would have had if they arrived over 150 years ago. Restoring this setting will provide visitors with a more authentic experience as they explore the life of the president.

Preservation of the museum collection and artifacts

The park is the steward of a significant collection of objects that relate to Martin Van Buren. A portion of these, such as furnishings, paintings and other domestic items, are displayed in the home and provide the setting for tours of the mansion. The remainder of this collection, which includes numerous paper documents, manuscripts and textiles, is currently housed in a pole barn that has been modified to provide some storage space. This structure is also in close vicinity to the Lindenwald Mansion. The nature of this building makes it almost impossible to maintain proper environmental controls for the preservation of the collection.

In 2013, the Martin Van Buren NHS administratively aligned with the Roosevelt and Vanderbilt National Historic Sites in Hyde Park, New York. While this alignment has provided the park with the necessary technical expertise to meet numerous program needs, we have also examined our approach to museum collection storage and have centralized several storage locations. Shortly after the alignment, we began to move the majority of our collection to newer and purpose-built facilities at our southern partner site. The new storage location will better preserve our collection for the future. This approach is not necessarily a new one. MAVA has worked with Fort Stanwix National Historic Site to share storage facilities for our collection. The entirety of the archeological portion of the collection has been stored at Fort Stanwix for decades.

Construct new facilities – right place and purpose-built

We strive to provide opportunities to understand the historical setting and prerequisite knowledge base to ensure that visitors have the most productive and engaging experience that we can offer; however, the space available for this is very limited. A 600 sq. ft. addition to a trailer complex provides the space for initial visitor interactions and orientation to the site. This limited space also restricts our ability to hold special programs or host school groups. The entire administrative space is comprised of two trailers connected by a breezeway. These trailers have a limited life span and are far from energy efficient. Maintenance of this complex is not sustainable and permanent facilities, built to meet the support needs of the staff and to provide sufficient space to engage visitors, is needed.

The recently completed General Management Plan outlines a plan to replace these facilities and move them away from the historic core of the park. Funding to allow the park to realize this plan may be several years away and alternative methods of improving the visitor experience are continually explored in the meantime.

Expanding the Engagement of surrounding communities and ensuring relevance in the future

While the Martin Van Buren NHS is situated in the beautiful agricultural landscape that lies between two mountain ranges, two growing urban centers, Hudson and Albany, NY, exist south and north of the park respectively. The exploration of new techniques for engagement and strategic utilization of scarce park resources will be increasingly critical to ensure that the park and the National Park Service remains connected and relevant to the people living in these areas and to all visitors. Support from nationwide initiatives, such as the [Urban Agenda](#), has provided models of successful engagement that the park is already involved in. With a focus on youth employment and development programs, the community in these cities will continue to shape the role of the National Park Service in our next century.

Data Resources, surveys and filling in the gaps

As mentioned before, the park expanded its boundary in 2009, and with that came a number of new resources previously not managed by the National Park Service. Most of the land within the boundary is still within private ownership, but with various agreements and easements, the NPS is able to provide advisement for future actions on all land within the boundary. Most important is the need to survey these properties to locate archeological sites and define their boundaries to better preserve them and their adjacent natural resources. While most of the land has remained in agricultural production since Van Buren's era, numerous species call this area home, including a number of threatened and endangered species; the land also contains critical habitat such as small areas of classified wetlands along the Kinderhook Creek.

References

See the [State of the Park Report for the Park website](#) for a more complete list of references to documents and data sets upon which the assessments in this State of the Park report are based. References for several of the key documents cited in this report are as follows:

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See Also:

[Collection of Natural Resource-Related References](#)

[Collection of Cultural Resource-Related References](#)

[Collection of Visitor Experience-Related References](#)

Glossary

See the [State of the Parks home page](#) for a link to a complete glossary of terms used in State of the Park reports. Definitions of key terms used in this report are as follows:

Americans with Disabilities Act (ADA)	Law enacted by the federal government that includes provisions to remove barriers that limit a disabled person's ability to engage in normal daily activity in the physical, public environment.
Archeological Sites Management Information System (ASMIS)	The National Park Service's standardized database for the basic registration and management of park prehistoric and historical archeological resources. ASMIS site records contain data on condition, threats and disturbances, site location, date of site discovery and documentation, description, proposed treatments, and management actions for known park archeological sites. It serves as a tool to support improved archeological resources preservation, protection, planning, and decision-making by parks, centers, regional offices, and the national program offices.
Baseline Documentation	Baseline documentation records the physical condition of a structure, object, or landscape at a specific point in time. A baseline provides a starting point against which future changes can be measured.
Cultural Landscapes Inventory (CLI)	A Cultural Landscapes Inventory describes historically significant landscapes within a park. The inventory identifies and documents each landscape's location, size, physical development, condition, characteristics, and features, as well as other information useful to park management.
Cultural Landscape Report (CLR)	A Cultural Landscape Report is the principal treatment document for cultural landscapes and the primary tool for long-term management of those landscapes. It guides management and treatment decisions about a landscape's physical attributes, biotic systems, and use when that use contributes to historical significance.
Curation	National parks are the stewards of numerous types of objects, field notes, publications, maps, artifacts, photographs, and more. The assemblage of these materials comprises a museum collection. Curation is the process of managing, preserving, and safeguarding a collection according to professional museum and archival practices.
Facility Condition Index (FCI)	FCI is the cost of repairing an asset (e.g., a building, road, bridge, or trail) divided by the cost of replacing it. The lower the FCI number, the better the condition of the resource.
Foundation Document	A park Foundation Document summarizes a park's purpose, significance, resources and values, primary interpretive themes, and special mandates. The document identifies a park's unique characteristics and what is most important about a park. The Foundation Document is fundamental to guiding park management and is an important component of a park's General Management Plan.
Fundamental and Other Important Resources and Values	Fundamental resources and values are the particular systems, processes, experiences, scenery, sounds, and other features that are key to achieving the park's purposes and maintaining its significance. Other important resources and values are those attributes that are determined to be particularly important to park management and planning, although they are not central to the park's purpose and significance. These priority resources are identified in the Park Foundation Document and/or General Management Plan. The short-cut name that will be used for this will be Priority Resources.
General Management Plan (GMP)	A General Management Plan is a strategic planning document that outlines the future management of a National Park Service site for the next 15 to 20 years. The plan will set the basic philosophy and broad guidance for management decisions that affect the park's resources and the visitor's experience.

Green Parks Plan (GPP)	The Green Parks Plan defines a collective vision and a long-term strategic plan for sustainable management of NPS operations. A critical component of the implementation of the GPP will be informing and engaging park staff, visitors, and community partners about climate change and sustainability to broaden opportunities to foster change.
Historic Integrity	Historic Integrity is the assemblage of physical values of a site, building, structure, or object and is a key element in assessing historical value and significance. The assessment of integrity is required to determine the eligibility of a property for listing in the National Register.
Historic Resource Study (HRS)	The historic resource study is the primary document used to identify and manage the historic resources in a park. It is the basis for understanding their significance and interrelationships, a point of departure for development of interpretive plans, and the framework within which additional research should be initiated.
Historic Structures Report (HSR)	The historic structure report is the primary guide to treatment and use of a historic structure and may also be used in managing a prehistoric structure.
Indicator of Condition	A selected subset of components or elements of a Priority Resource that are particularly “information rich” and that represent or “indicate” the overall condition of the Priority Resource. There may be one or several Indicators of Condition for a particular Priority Resource.
Integrated Resource Management Applications (IRMA)	The NPS-wide repository for documents, publications, and data sets that are related to NPS natural and cultural resources.
Interpretation	Interpretation is the explanation of the major features and significance of a park to visitors. Interpretation can include field trips, presentations, exhibits, and publications, as well as informal conversations with park visitors. A key feature of successful interpretation is allowing a person to form his or her own personal connection with the meaning and significance inherent in a resource.
Invasive Species	Invasive species are non-indigenous (or non-native) plants or animals that can spread widely and cause harm to an area, habitat, or bioregion. Invasive species can dominate a region or habitat, out-compete native or beneficial species, and threaten biological diversity.
List of Classified Structures (LCS)	LCS is an inventory system that records and tracks the condition of the approximately 27,000 historic structures listed in the National Register of Historic Places that are the responsibility of NPS.
Museum Collection	NPS is the steward of the largest network of museums in the United States. NPS museum collections document American, tribal, and ethnic histories; park cultural and natural resources; park histories; and other aspects of human experience. Collections are managed by professionally-trained NPS staff, who ensure long-term maintenance of collections in specialized facilities.
Native American Graves Protection and Repatriation Act (NAGPRA)	A federal law passed in 1990. NAGPRA provides a process for museums and federal agencies to return certain Native American cultural items (e.g., human remains, funerary objects, sacred objects, objects of cultural patrimony) to lineal descendants and culturally-affiliated Indian tribes and Native Hawaiian organizations.
Natural Resource Condition Assessment (NRCA)	A synthesis of existing scientific data and knowledge, from multiple sources, that helps answer the question: what are current conditions of important park natural resources? NRCAAs provide a mix of new insights and useful scientific data about current park resource conditions and factors influencing those conditions. NRCAAs have practical value to park managers and help them conduct formal planning and develop strategies on how to best protect or restore park resources.

Priority Resource or Value	This term refers to the Fundamental and Other Important Resources and Values of a park. These can include natural, cultural, and historic resources as well as opportunities for learning, discovery, and enjoyment. Priority Resources or Values include features that have been identified in park Foundation Documents, as well as other park assets or values that have been developed or recognized over the course of park operations. Priority Resources or Values warrant primary consideration during park planning and management because they are critical to a park's purpose and significance.
Project Management Information System (PMIS)	A servicewide intranet application within the National Park Service to manage information about requests for project funding. It enables parks and NPS offices to submit project proposals to be reviewed, approved, and prioritized at park units, regional directorates, and the Washington Office.
Resource Management	The term “resources” in NPS encompasses the many natural, cultural, historical, or sociological features and assets associated with parks. Resource management includes the knowledge, understanding, and long-term stewardship and preservation of these resources.
Specific Measure of Condition	One or more specific measurements used to quantify or qualitatively evaluate the condition of an Indicator at a particular place and time. There may be one or more Specific Measures of Condition for each Indicator of Condition.
Volunteers In Parks Program (VIP)	The Volunteers In Parks Program was authorized by Public Law 91–357 enacted 1970. The primary purpose of the VIP program is to provide a vehicle through which the National Park Service can accept and utilize voluntary help and services from the public. The major objective of the program is to utilize this voluntary help in such a way that is mutually beneficial to the National Park Service and the volunteer. Volunteers are accepted from the public without regard to race, creed, religion, age, sex, sexual orientation, national origin, or disability.