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Visual Resources Inventory Report

Harpers Ferry National Historical Park—Chesapeake & Ohio Canal National Historical Park (2020)



View from Split Rock at Loudoun Heights, Harpers Ferry National Historical Park.
NPS

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Science Report NPS/SR—2026/513

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Abstract

Each unit of the National Park System has special visual characteristics that are often a central component to the unit's management and visitor experience. Harpers Ferry and Chesapeake and Ohio Canal National Historical Parks offer visitors a visual experience that is reminiscent of the historical period of the late 19th and early 20th centuries. The scenery is an important way to understand the connection between the natural and historical resources. Visualizing this connection is a critical part of the visitor experience. The two parks initiated a visual resource inventory that focused on the vicinity of the confluence of the Potomac and Shenandoah Rivers to support a study for improving pedestrian access to the Byron Bridge across the Potomac River. The inventory was completed using methodology developed by NPS for assessing and protecting visual resources. The inventory system consists of both fieldwork associated with view description and scenic quality ratings, and an office-based process for assigning importance values to the views. The parks selected 13 views for the initial visual resource inventory to inform the design and development of the planned structure at the bridge. The results of the inventory indicate that all but two views had a "Very High" scenic inventory value.

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1. Introduction

The National Park Service (NPS) Organic Act identifies that the purpose of establishing NPS is to "…conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." With this central mission, NPS has been entrusted with some of the most spectacular and historically significant landscapes throughout the country.

Each unit of the National Park System has special visual characteristics that are often a central component to the unit's management and visitor experience. Visitors typically rank scenic views as one of the top five reasons for visiting a park (Kulesza et al. 2013). Inspiring vistas can lift the human spirit, expand our sense of place, and provide connections to the natural world and our history as a country.

From a cultural and historical perspective, views are about more than just scenery; they are also ways to better understand the connection between natural and cultural/historic resources. This is especially true for Harpers Ferry National Historical Park (HAFE) and the Chesapeake and Ohio Canal National Historical Park (CHOH) because the landscape at the confluence of the Potomac and Shenandoah Rivers retains many of the characteristics of its historic period and helps visitors visualize this connection of history and landscape. The initial inventory for HAFE and CHOH was focused on this area because of a proposal to improve access to the existing pedestrian bridge crossing of the Potomac River. The bridge also serves as the route for the Appalachian National Scenic Trail. The inventory will provide the baseline conditions of the visual landscape for the three NPS units. The inventory effort was planned in two stages, the first to capture "leaf-off" conditions and the second to capture "leaf-on" conditions. The inventory information will support the preparation of cultural landscape documents to be prepared as part of the Section 106 consultation process for the improved access project and for future Confluence area projects as well.

2. Methods

Visual Resource Inventory Overview

In the NPS system the unit of inventory is "a view" consisting of the viewpoint, the viewed landscape, and potential viewers, i.e., park visitors. The inventory consists of both field work associated with view description and scenic quality ratings, and an office-based process for assigning importance values to the views. More information on the rating criteria can be found in Appendix A.

The inventory fieldwork process included the collection of descriptive data concerning each viewpoint and view, assessments of scenic quality and the view's importance to NPS visitors, and photo documentation of existing conditions. Photographs documenting each inventoried view are provided in Appendix B. Scenic quality rating is the value of the viewed landscape based on its perceived visual attractiveness, as determined by the aesthetic composition of the visual elements. The scenic quality assessment for leaf-off conditions was conducted in the field on March 6–8, 2018 and completed on May 2, 2018. For leaf-on conditions the inventory was completed on October 28–30, 2018. The process included photo documentation, written descriptive information about the viewpoint and viewed landscape that helps inform the rating process, and the scenic quality rating for each view. The scenic quality rating process was conducted as a group discussion exercise resulting in a single scenic quality value for the view. The ratings were based on scores from three scenic quality factors: landscape character integrity, vividness, and visual harmony. Scenic quality ratings fall into five classes: from A to E based on how high they score. Class A views have the highest scenic quality and Class E the lowest.

The view importance rating identifies NPS and visitor values for the view and also identifies key descriptive information about the viewpoint and viewed landscape that helps inform the rating process. The Importance evaluation of each viewpoint was conducted by HAFE and CHOH staff on March 6 and 7, 2018 and October 23, 2019. Importance of a view involves assessments of the following factors: view importance, viewed landscape importance, and viewer concern. Each factor was assessed by a multi-disciplinary team of NPS staff and resulted in a single view importance rating for the view. View importance ratings fall into five classes: from 1 to 5 based on how high they score. Class 1 views have the highest view importance and Class 5 the lowest.

The Scenic Inventory Value (SIV) is the combination of the Scenic Quality (SQ) and View Importance Ratings (VIR) and is derived using a matrix (Table 1) to arrive at one of five possible SIVs ranging from Very Low (VL) to Very High (VH).

Table 1. Scenic Inventory Value matrix.

Rating	View Importance 1	View Importance 2	View Importance 3	View Importance 4	View Importance 5
Scenic Quality A	Very High	Very High	Very High	High	Moderate
Scenic Quality B	Very High	Very High	High	Moderate	Low
Scenic Quality C	High	High	Moderate	Low	Low
Scenic Quality D	High	Moderate	Low	Very Low	Very Low
Scenic Quality E	Moderate	Low	Very Low	Very Low	Very Low

Inventory Workshop and Field Teams

The scenic quality fieldwork for the visual resource inventory for Harpers Ferry and Chesapeake and Ohio Canal was conducted by interdisciplinary teams that included park management and staff from both units including natural and cultural resources and interpretation. The inventory teams also included cultural landscape staff from the National Capital Region and the Olmsted Center for Landscape Preservation.

Team members participated in a one-day training workshop including a full group practice session, prior to the leaf-off inventory. The workshop session also included representatives of the Harpers Ferry community, Maryland Department of Transportation and the Potomac Appalachian Trail Club. Poor weather forced the teams out of the field for a half day, but during the field work time available they completed most of the planned inventory for leaf-off conditions. The field work was completed in May. For the leaf-on conditions teams of park staff from both units completed the field inventory process for the same locations in October.

View Selection

Harpers Ferry and Chesapeake and Ohio Canal initially selected 13 views for the initial visual resource inventory to achieve good coverage of the confluence area and railroad bridges where the improved access project is proposed (Table 2, Figure 1). One view along the Appalachian Trail near the Episcopal Church ruins was dropped from the inventory because the view is very similar to the view from Harper Cemetery location. Viewpoints ranged from locations within Harpers Ferry at known high visitor use areas to elevated overlooks from Maryland and Loudoun Heights that are also popular and offer expansive views of the confluence area.

Table 2. Views inventoried at Harpers Ferry and Chesapeake and Ohio Canal.

View-point #	View Name	Coordinates		View Bearings		Approximate Width of View
		Latitude	Longitude	°L	°R	
1	The Point – Lower Town	39.32293	−77.728750	200	350	150°
2	Harper Cemetery	39.323438	−77.73412	110	180	70°
3	Jefferson Rock	39.322633	−77.73323	75	120	45°
5	St. Peter's Church	39.32280	−77.73100	10	135	125°

Table 2 (continued). Views inventoried at Harpers Ferry and Chesapeake and Ohio Canal.

View-point #	View Name	Coordinates		View Bearings		Approximate Width of View
		Latitude	Longitude	°L	°R	
6	Harper House	39.323017	−77.73083	70	210	140°
7	The Point – Confluence	39.32300	−77.72865	20	180	160°
8	The Armory Boat Ramp	39.32401	−77.729316	350	120	130°
9	Towpath Downstream of Lock 33	39.323433	−77.724433	240	330	90°
10	Towpath Upstream of Lock 33	39.326100	−77.727650	100	260	160°
11	Maryland Heights – Cliff Overlook	39.32533	−77.772580	200	318	118°
12	Hilltop House	39.32063	−77.735733	20	135	115°
13	Loudoun Heights – Split Rock	39.324694	−77.720633	290	10	80°



Figure 1. Viewpoints inventoried at Harpers Ferry and Chesapeake and Ohio Canal.
NPS

3. Summary of Findings

Landscape Character at Harpers Ferry and Chesapeake and Ohio Canal

Landscape character is based on the physical objects and patterns in the landscape and represents a distinct, recognizable visual composition that makes one landscape different from another. At the river confluence, HAFE and CHOH are located in the Blue Ridge Level III ecoregion (EPA 2013). The ecoregion varies from narrow ridges to hilly plateaus to mountains reaching over 6,000 feet in height. The Blue Ridge ecoregion is part of one of the richest temperate broadleaf forests in the world with a high diversity of flora including oak, hemlock and pine communities. It lies within the broader Appalachian oak forests that also include tulip poplar, chestnut oak, white oak, red maple, black locust and other canopy trees. The landscape in the vicinity of HAFE and CHOH is dominated by the confluence of the Potomac and Shenandoah Rivers framed by the mountain landforms of Maryland Heights and Loudoun Heights that create a "gap" through which the Potomac River flows through. Rock outcrops and rocky cliff faces are visible on both mountains which are covered primarily with deciduous forest along with limited areas of evergreen forest. The town of Harpers Ferry occupies a small landform on the south side of the confluence. Two railroad bridges spanning the Potomac are prominent features of the rail lines that skirt around the north and east sides of Harpers Ferry.

Scenic Quality, View Importance Ratings

Of the views inventoried, Harpers Ferry and the surrounding Maryland Heights and Loudoun Heights landforms occupy the foreground and middle ground. The views offer a broad overview of the landscape and a sense of connection to the historic and cultural landscapes that are an important part of the visitor experience. For the leaf-off inventory the scenic quality ratings of the views were fairly evenly split between Scenic Quality Ratings A and B, with no views being rated lower than B. (Table 3). For the leaf-on inventory the scenic quality ratings were similar, but four views were lower by one category with one view receiving a scenic quality rating of C. View Importance ratings ranged from "Very High" to "Moderate" with only two views rated below very "High." An overview of the Scenic Quality and View Importance ratings at each location is below. Panoramic photos for each view are in Appendix B.

Table 3. Scenic Quality, View Importance Ratings and Scenic Inventory Values.

View #	View Name	Scenic Quality Rating—Leaf-off	Scenic Quality Rating—Leaf-on	View Importance Rating	Scenic Inventory Value—Leaf-off	Scenic Inventory Value—Leaf-on
1	The Point – Lower Town	B	A	2	VH	VH
2	Harper Cemetery	B	B	2	VH	VH
3	Jefferson Rock	A	B	1	VH	VH
5	St. Peter's Church	A	B	2	VH	VH
6	Harper House	B	B	2	VH	VH

Table 3 (continued). Scenic Quality, View Importance Ratings and Scenic Inventory Values.

View #	View Name	Scenic Quality Rating— Leaf-off	Scenic Quality Rating— Leaf-on	View Importance Rating	Scenic Inventory Value— Leaf-off	Scenic Inventory Value— Leaf-on
7	The Point – Confluence	A	B	1	VH	VH
8	The Armory Boat Ramp	B	B	4	M	M
9	Towpath Downstream of Lock 33	B	C	3	H	M
10	Towpath Upstream of Lock 33	B	B	2	VH	VH
11	Maryland Heights – Cliff Overlook	A	A	1	VH	VH
12	Hilltop House	A	A	3	VH	VH
13	Loudoun Heights – Split Rock	A	A	2	VH	VH

Viewpoint #1: The Point – Lower Town

- Scenic Quality Rating: Leaf-off conditions: B, Leaf-on conditions: A
- View Importance Rating: 2

Scenic Quality

Leaf-off

The view from the Point looking back toward the lower town of Harpers Ferry received a scenic quality score of 35.5. Most landscape character elements typical of the regional urban landscape are present and in generally good condition except for the unkempt railroad berm in the foreground. Utility poles create a somewhat cluttered look in the foreground (Figure 2). There are few inconsistent elements in the view and there are a variety of focal points, though none strong enough to hold the viewer's attention. Colors are somewhat bold with a variety of building colors and the buildings and railroad bridge create bold forms and lines. The railroad bridge and a transmission pole in the foreground are somewhat out of scale and dominate the view and the spatial arrangement is a little disordered from the variety of structures and forms. Colors are generally a cohesive palette and fit well together and there is a fairly wide range of colors among the buildings and other features in the view.

Leaf-on

The leaf-on view is similar to leaf-off, though much of the town is screened by vegetation in the middle of the view (Figure 3). The scenic quality rating score increased to 40.0. Trees and other vegetation when leafed out somewhat enhance color vividness, and the screening reduces potential focal points. Visual harmony is also somewhat enhanced by the screening of some town elements and focusing the view to the foreground, though the utility poles and variety of other forms are still visible.

View Importance

The viewpoint for the view of Lower Town at the Point is within the Harpers Ferry National Register historic district as well as Lower Town cultural landscapes and received a view importance score of 35.0. The Point is one of the most publicized and visited viewpoints and NPS provides extensive maintenance and facilities to support the visitor experience and the many interpretive programs at the viewpoint. Though highly visited the view of the town is part of the experience, even with a visitor's attention typically focused on the view of the confluence of the rivers in the opposite direction.



Figure 2. View from the Point toward Lower Town—leaf-off conditions.
NPS



Figure 3. View from the Point toward Lower Town—leaf-on conditions.
NPS

Viewpoint #2: Harper Cemetery

- Scenic Quality Rating: Leaf-off conditions: B, Leaf-on conditions: B
- View Importance Rating: 2

Scenic Quality

Leaf-off

The view from Harper Cemetery offers an elevated view focused on the confluence of the rivers (Figure 4) and it received a Scenic Quality rating of 37.5. The view had most of the elements of what was determined to be a rural landscape visible, with few inconsistent elements. Elements were generally in expected condition. The river was a strong focal point as it flows through the gap and a dominant element in the view. The river was surrounded by the bold forms and lines on the Loudoun and Maryland Heights landforms, though they were somewhat imposing on the view from a scale standpoint. Colors were somewhat muted and in a limited range though all the colors work well together. Spatially the view is well composed.

Leaf-on

Similar to leaf-off conditions, the river and landforms are dominant features in the view (Figure 5). The Scenic Quality rating of 37.0 was nearly the same as leaf-off conditions. Trees screen some elements in the view but add to color vividness. The view remains well composed with more of the view focused to the foreground.

View Importance

This view is within the Harpers Ferry National Register historic district and the High Acre House historic property is prominent in the view. The viewpoint is well publicized and there are interpretive tours and brochures for the cemetery. The view from the cemetery is widely publicized and it received a View Importance score of 34.5. The level of visitation is moderate and some visitors may stay longer than simply taking a photo as there is some effort to get to the location.



Figure 4. View from Harper Cemetery—leaf-off conditions.
NPS



Figure 5. View from Harper Cemetery—leaf-on conditions.
NPS

Viewpoint #3: Jefferson Rock

- Scenic Quality Rating: Leaf-off conditions: A, Leaf-on conditions: B
- View Importance Rating: 1

Scenic Quality

Leaf-off

The view from Jefferson Rock is due east down the Shenandoah River (Figure 6). The view received a Scenic Quality rating score of 39.5. Though inconsistent elements of a church, transmission line and bridge are visible, the view is dominated by most all the natural features one expects for this region. With the exception of the chain guard rail in the immediate foreground, elements appear in good condition. The river is a very strong focal point and the church steeple and landforms have strong lines and forms. Though a bit muted because of weather, colors were mostly bold and the rock outcrops in the river and the red and white of the church added good contrast. The view is well balanced in composition and scale with the river as a strong central feature and the church just off center of the view.

Leaf-on

Much of the view from Jefferson Rock is obscured during leaf-on conditions (Figure 7). Visual harmony and vividness are diminished, and the Scenic Quality rating score drops to 32.5. While the river and adjacent landforms remain central features of the view, they are less visible and less dominant. Much of the view is confined to the foreground, and the church is no longer visible.

View Importance

Jefferson Rock is within the Harpers Ferry National Register historic district and also a location on the Appalachian Trail. The view received one of the highest scores of the inventory at 44.0. The viewpoint and the view itself are highly publicized and the viewpoint is estimated to receive one of the highest levels of visitation, behind only the Point at the confluence. The park provides programs at the viewpoint and the view provides visitors a connection to all the park's primary interpretive themes.



Figure 6. View from Jefferson Rock—leaf-off conditions.
NPS



Figure 7. View from Jefferson Rock—leaf-on conditions.
NPS

Viewpoint #5: St. Peter's Church

- Scenic Quality Rating: Leaf-off conditions: A, Leaf-on conditions: B
- View Importance Rating: 2

Scenic Quality

Leaf-off

The view from St. Peter's Church is dominated by urban elements in the foreground (Figure 8) and received a Scenic Quality rating of 39.0. Most elements of an urban landscape are present with few inconsistent elements. All elements appear in good condition. Trees in the foreground are a strong focal element and somewhat obscure views of the river beyond. The landforms of Maryland and Loudoun Heights, as well as the railroad bridges, have strong forms and lines that add interest to the view. Colors, especially the foreground buildings, are bold with good contrast with the surrounding trees and river. The view is well composed with a strong focus created by the landforms framing the river valley. The colors work well together. The colors of the buildings are especially notable because they provide interest in the foreground and fit well with the rocky cliffs of Maryland Heights.

Leaf-on

During leaf-on conditions many of the elements that make up the urban character of the view are obscured by trees (Figure 9). The Scenic Quality rating score drops to 36.5 with slight decreases across all three factors of landscape character integrity, vividness and visual harmony, though color vividness slightly increased due to the greens of the trees. The river downstream of the confluence is almost completely obscured.

View Importance

The view is within the Harpers Ferry National Register historic district as well as the Lower Town cultural landscape. The historic bridges and piers at the confluence are visible as well as much of Lower Town in the foreground and the view received a view importance score of 35.0. The viewpoint is not highly publicized by NPS nor does NPS provide any management since the church is a private inholding. Nevertheless, the site is heavily visited with many people finding it a good place to rest and thus stay longer than at some other viewpoints.



Figure 8. View from St. Peter's Church—leaf-off conditions.
NPS



Figure 9. View from St. Peter's Church—leaf-on conditions.
NPS

Viewpoint #6: Harper House – Second Floor Porch

- Scenic Quality Rating: Leaf-off conditions: B, Leaf-on conditions: B
- View Importance Rating: 2

Scenic Quality

Leaf-off

The view from the second floor porch of Harper House is similar to the view from St. Peter's Church, though it is a wider view with Loudoun Heights a dominant feature (Figure 10). The view received a Scenic Quality rating of 38.0. Most elements of an urban landscape are present with expansive natural areas a bit out of context with the urban foreground. All elements appear in good condition. The wider expanse of the view results in multiple focal points though Loudoun Heights is still strong. There are bold forms and lines from the landforms and buildings with somewhat bold colors and good contrast among the buildings, river and forested areas. The view is well composed; nothing appears out of scale and all the colors work well together with the red, brown and white of the buildings creating a pleasing contrast with the forested areas and rocky cliffs of Loudoun and Maryland Heights.

Leaf-on

Under leaf-on conditions the view from Harper House retains many of the visible features and characteristics as during leaf-off conditions (Figure 11). The Scenic Quality rating score is the same at 38.0. Many of the buildings in the foreground that add interest are still visible and add vivid color. The river downstream of the confluence, while partially obscured, remains a prominent focal point over the tops of buildings.

View Importance

The second-floor porch of the Harper House is not publicized for its view but the house is used extensively for interpretive services, including a museum exhibit and living history programs. The viewpoint on the porch receives steady but not high visitation from the many visitors to Harper House and the view received an importance score of 36.0. The view is a good representation of the interpretive themes of Harpers Ferry and most of the view consists of designated protected areas.



Figure 10. View from the second-floor porch of the Harper House—leaf-off conditions.
NPS



Figure 11. View from the second-floor porch of the Harper House—leaf-on conditions.
NPS

Viewpoint #7: The Point – Confluence

- Scenic Quality Rating: Leaf-off conditions: A, Leaf-on conditions: B
- View Importance Rating: 1

Scenic Quality

Leaf-off

This view is east toward the confluence of the Potomac and Shenandoah Rivers and received a Scenic Quality rating score of 39.5. Most elements of a natural landscape are present though inconsistent elements include railroad bridges, old stone bridge piers, a transmission line and a highway bridge (Figure 12). All elements appear in good or expected condition. The rivers are strong focal points and the bold forms and lines of Maryland and Loudoun Heights and their rock outcrops provide strong framing of the river. Although the colors of the deciduous forest, river and rock outcrops are not especially bold, they complement each other. The texture of the rock outcrops and rocky shoals in the river add interest. The view is well balanced as the viewer's eye is drawn down the river to the gap between the landforms. The railroad bridges and old piers are a bit out of scale due to their proximity to the viewpoint, but they are not a major distraction.

Leaf-on

The view from the confluence under leaf-on conditions is very similar to the leaf-off conditions (Figure 13). The Scenic Quality rating was 35.5 with some change in rating across all factors. The forms and lines are more distinct and rock outcrops that add interest to the view are more visible under leaf-off conditions. The river remains a strong focal point under leaf-on conditions but other focal points such as the bridge components are more visible and draw attention because of the increased contrast with the vegetation.

View Importance

The view of the confluence of the Potomac and Shenandoah Rivers is likely the most well-known view at Harpers Ferry and it received a View Importance score of 45.0. As for the view of Lower Town in the same vicinity, the viewpoint is heavily visited, receives extensive management by the park and provides a wide variety of interpretive services. The view encompasses/contains all of Harpers Ferry's interpretive themes and much of the view is comprised of designated protected areas.



Figure 12. View from the Point toward the confluence—leaf-off conditions.
NPS



Figure 13. View from the Point toward the confluence—leaf-on conditions.
NPS

Viewpoint #8: The Armory Boat Ramp

- Scenic Quality Rating: Leaf-off conditions: B, Leaf-on conditions: B
- View Importance Rating: 4

Scenic Quality

Leaf-off

The view from the Armory Boat Ramp is mostly a natural one, though the railroad bridges are prominent inconsistent elements in the natural landscape (Figure 14). The Scenic Quality rating was 31.5. The bridges create competing focal points with the river and the rugged cliffs on the opposite bank. There is a limited palette of colors though they generally fit together well and are somewhat bold. The bridges are dominant features in the view and spatially occupy the whole center of the view. The movement of the river and the texture of the cliff face and bridge structures add interest to the view.

Leaf-on

Since the bridges are the dominant features, leaf-on conditions are very similar to leaf-off conditions (Figure 15). The Scenic Quality rating increases to 36.5 with the bridges considered more prominent. Trees somewhat diminish the detail of the cliff face, but the composition seems stronger with the trees and vegetation along the riverbank balancing with the river and the bridges.

View Importance

The Armory Boat Ramp is within the Harpers Ferry National Register historic district, the United States Armory and Potomac Riverfront cultural landscape, and most of the view includes designated protected areas. However, the site is not promoted as a viewpoint and is very lightly visited. Visitors who do make their way to the location tend not to stay long (except for the occasional fisherman) as there is no real development for a visitor experience. There are no interpretive services at the viewpoint but the view does display several of the park's interpretive themes with the towpath of the Chesapeake and Ohio Canal on the opposite riverbank. The viewed landscape itself is also fairly well publicized because of the view of Maryland Heights.



Figure 14. View from the Armory Boat Ramp—leaf-off conditions.
NPS



Figure 15. View from the Armory Boat Ramp—leaf-on conditions.
NPS

Viewpoint #9: Towpath Downstream of Lock 33

- Scenic Quality Rating: Leaf-off conditions: B, Leaf-on conditions: C
- View Importance Rating: 3

Scenic Quality

Leaf-off

This view from the towpath looks west toward Harpers Ferry and the railroad bridges where the new access project is proposed (Figure 16). Most all the elements of a natural landscape are present with the railroad bridges and transmission lines being prominent inconsistent elements. Most elements appear in good condition though the railroad bridge does have components that look to be in poor condition. The river is a strong focal point as is the towpath as one's eye is drawn along the path and canal. The rock outcrops and landform of Maryland Heights along with the bridges have strong forms and lines, though colors were not especially bold partially due to weather conditions. The view is well balanced and has good natural flow along the towpath toward the bridges and edge of the gap at Maryland Heights. All colors seem to fit well together including the colors visible in Harpers Ferry in the background through the trees along the river.

Leaf-on

The leaf-on view along the towpath is similar to the leaf-off conditions (Figure 17), although some rock features along the path are not visible because of vegetation growth. The Scenic Quality rating was 29.0. Visual harmony and the vividness of forms and lines are somewhat reduced because vegetation blocks some features including the bridges.

View Importance

Viewpoints along the towpath are within the C&O Canal National Historical Park National Register historic district and Lock 33 is located just upstream of the railroad bridges that cross the Potomac River at the confluence. The towpath receives a moderate level of visitation with the area downstream of the lock slightly less than the upstream section. The view from this location received a View Importance score of 28.5. The towpath receives extensive publicity and management by NPS but specific viewpoints in this area are not publicized. The view from the towpath encompasses many of the interpretive themes of Harpers Ferry and Chesapeake and Ohio Canal and much of the landscape consists of designated protected areas. Most visitors use the towpath for hiking and riding and the length of visitation at any specific location is usually brief, though the canal prism is interpreted at this location, extending the time for some visitors to take in the landscape.



Figure 16. View from the towpath downstream of Lock 33—leaf-off conditions.
NPS



Figure 17. View from the towpath downstream of Lock 33—leaf-on conditions.
NPS

Viewpoint #10: Towpath Upstream of Lock 33

- Scenic Quality Rating: Leaf-off conditions: B, Leaf-on conditions: B
- View Importance Rating: 2

Scenic Quality

Leaf-off

This view from the towpath is downstream toward the railroad bridges with Harpers Ferry across the river to the west (Figure 18). The Scenic Quality rating score was 35.0. The view is dominated by the natural elements expected for the region but there are substantial inconsistent elements of the town and bridges along with the towpath, canal, road and local powerline. Most elements appear in good condition though the wall along the canal and roadway is showing some signs of failure in some locations. There are multiple focal points with the town, canal and towpath. The canal, cliffs, river and bridges have bold forms and lines. Colors were not especially bold, but the flow of the river added interest to the view. The view is somewhat well-composed though the town is a dominant element across the river. Most elements are in scale though foreground trees and cliff faces seem to dominate and most colors work well together with a few colors of the town that pop out from the rest of the color palette.

Leaf-on

Under leaf-on conditions (Figure 19) the view retains many qualities identified during leaf-off conditions and the Scenic Quality rating was 31.5. Strong lines of the towpath and road are still visible, and the rugged landforms of the Maryland Heights cliffs are a dominant element. A landslide that occurred after the leaf-off inventory has been covered to stabilize it and adds a new visual intrusion to the view. The bridges that cross the river and the town on the opposite side are less visible because of the tree foliage.

View Importance

Visitation along this portion of the towpath is higher than the downstream section because of Harpers Ferry visitors crossing the river and heading to the trail to Maryland Heights. The view received a View Importance score of 32.5. As with the downstream section, the towpath receives extensive maintenance and, similar to Viewpoint #9, other visitors using the towpath tend not to linger at a specific location. The view comprises multiple designated protected areas and the interpretive themes of both parks are well represented.



Figure 18. View from the towpath upstream of Lock 33—leaf-off conditions.
NPS



Figure 19. View from the towpath upstream of Lock 33—leaf-on conditions.
NPS

Viewpoint #11: Maryland Heights – Cliff Overlook

- Scenic Quality Rating: Leaf-off conditions: A, Leaf-on conditions: A
- View Importance Rating: 1

Scenic Quality

Leaf-off

The view from Maryland Heights (Figure 20) was considered an urban view because of the prominence of Harpers Ferry and the elements of an urban landscape are present. There are extensive natural areas one may not associate with an urban landscape and most natural and urban elements appear in good condition. The Scenic Quality rating was 43.5. The town is a strong focal point from the overlook. There is a wide variety of strong forms, lines and colors among the buildings of the town, the railroad bridges, the rivers, and the cliffs and rock outcrops of the Maryland and Loudoun Heights landforms. The view has excellent composition, and everything is in scale. A wide range of colors all work well together, including many of the town buildings that add interest to the view.

Leaf-on

The leaf-on view from Maryland Heights (Figure 21) is very similar to the leaf-off view and the Scenic Quality rating was a nearly identical 44.0. All elements retain strongly positive ratings and the addition of the multiple colors of green throughout the view provide additional interest.

View Importance

Maryland Heights is a designated location for its view overlooking Harpers Ferry and is highly visited. Visitation is also increasing despite the fact it is somewhat difficult to get to. The View Importance score was 41.0. The viewpoint and the viewed landscape are highly publicized and the view comprises multiple designated protected areas. Visitors to the viewpoint tend to stay for longer periods of time, sometimes picnicking or just relaxing after the hike up.



Figure 20. View from Maryland Heights Cliff Overlook—leaf-off conditions.
NPS



Figure 21. View from Maryland Heights Cliff Overlook—leaf-on conditions.
NPS

Viewpoint #12: Hilltop House

- Scenic Quality Rating: Leaf-off conditions: A, Leaf-on conditions: A
- View Importance Rating: 3

Scenic Quality

Leaf-off

As shown in Figure 22, all elements of what was considered a natural appearing landscape are readily visible with the railroad bridges the only prominent inconsistent element. The Scenic Quality rating was 41.0. The river is a strong focal point and the cliffs of Maryland Heights are also a dominant feature. The view is well balanced with landforms adjacent to the river and the eye is drawn downstream. All colors seem to work well together with some elements exhibiting bold colors. The whitewater created by the river shoals add interest through movement and texture.

Leaf-on

Similar to other elevated locations, the leaf-on view from Hilltop House retains most all the compositional aspects of the leaf-off view (Figure 23). The Scenic Quality rating score was 40.5. The eye is drawn downriver where the view is framed by the Maryland Heights and Loudoun Heights landforms. The tree cover obscures small areas of the cliff but adds color and texture to the view.

View Importance

Hilltop House is a private property within the Harpers Ferry National Register historic district and the viewpoint is promoted by outside entities as a location to view the confluence of the rivers and especially the "gap" downstream of the confluence. The view includes multiple designated protected areas. Visitors to this location are coming strictly for the view and most stay for a relatively short time as there are minimal facilities at the viewpoint.



Figure 22. View from the Hilltop House—leaf-off conditions.
NPS



Figure 23. View from the Hilltop House—leaf-on conditions.
NPS

Viewpoint #13: Loudoun Heights – Split Rock

- Scenic Quality Rating: Leaf-off conditions: A, Leaf-on conditions: A
- View Importance Rating: 2

Scenic Quality

Leaf-off

The view from Loudoun Heights is another elevated viewpoint though more distant from Harpers Ferry than Maryland Heights (Figure 24). From this location the view takes on the characteristics of a rural landscape and most all elements are visible including fields and what appear to be farm buildings, scattered low density residential dwellings and the small town of Harpers Ferry. A transmission line in the foreground is the primary inconsistent element and all features in the view appear to be in good condition. There are multiple focal points with the town and the rivers and Maryland Heights, with a variety of strong forms and lines. Colors are also bold with good contrast among the town buildings and the river. The spatial and scale relationships of the view are good with the town and river creating a good composition. There are a wide range of colors in the view that work well together with good contrasts that blend with the extensive natural areas.

Leaf-on

As shown in Figure 25, much like the view from Maryland Heights, the leaf-on view from Loudoun Heights retains many of the features that resulted in the high Scenic Quality. The rating for the view was 40.5 with only minor differences among several elements. The town, along with the river confluence, creates a strong focal point and the multiple colors of green from the trees provide additional interest.

View Importance

The viewpoint at Split Rock is well publicized and, like Maryland Heights, visitors must make an effort to get there. Visitation is relatively low since it is not as accessible as Maryland Heights, but visitors are coming for the view of the confluence and Harpers Ferry and tend to stay for a longer period. The view itself is highly publicized and contains good representation of the interpretive themes of Harpers Ferry and Chesapeake and Ohio Canal.



Figure 24. View from Loudoun Heights at Split Rock—leaf-off conditions.
NPS



Figure 25. View from Loudoun Heights at Split Rock—leaf-on conditions.
NPS

4. Conclusions

Harpers Ferry and Chesapeake and Ohio Canal National Historical Parks offer visitors a unique visual and historic resource experience. The distinct landscape at the confluence of the Potomac and Shenandoah Rivers retains many of the characteristics associated with the history of the area. The views overall rated high for scenic quality with only the view from the towpath downstream of the bridges rating as moderate primarily due to the lack of visible features beyond the towpath and canal from this location. Among the scenic quality factors, landscape character integrity tended to score high indicating that from many locations visitors are afforded views of relatively intact landscapes. Viewpoints received view importance ratings that were also high as these represent the locations that attract most visitors through park programs and publicity. Other view importance factors that rated high for many locations were the interpretive themes represented in most all of the views. The railroad bridges crossing at the confluence are important components of the interpretive themes of the parks and are visible from multiple locations in both units—those identified in this inventory and throughout the parks from other locations.

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Appendix A: Scenic Quality and View Importance Rating Methods

Scenic Quality

Assessing scenic quality involves field-based assessments of: Landscape Character Integrity, Vividness and Visual Harmony.

Each component is assessed in the field while viewing the landscape from the viewpoint, and the assessment requires that the group evaluate three factors for each component. All factors are equally weighted.

Landscape Character Integrity

Scenic integrity indicates the degree of intactness and wholeness of the landscape character identified in the landscape description section. The highest scenic integrity ratings are given to those landscapes which have little or no deviation from the character valued for its aesthetic appeal.

The rating process assumes that in order to have the highest degree of integrity, i.e., a high quality example of the identified landscape character the view must:

- Have most or all of the key elements of landscape character present;
- Have elements that are of high quality and in the appropriate condition for the landscape character, i.e., well built, well cared for, or, for historic/rustic landscapes, appropriately worn/aged; and
- Be relatively free of elements that are inconsistent with the landscape character.

Vividness

Vividness is the degree to which landscape elements are distinctive or striking enough to make a view memorable. The rating assumes that to have a high degree of vividness, the view must:

- Contain one or more dominant visual features or focal points;
- Contain striking forms and/or lines; and
- Contain striking colors, textures, or visible motion.

Visual Harmony

Visual harmony is the extent to which there is a pleasing array of visual elements in a landscape, usually as a result of a sense of visual order, compatibility, and completeness between and among the landforms, water forms, vegetation, or built elements visible in the landscape. The approach assumes that a high degree of visual harmony is achieved when:

- There is a clearly recognizable structure, pattern, or order to the spatial relationships of the landscape elements;
- The landscape elements display pleasing scale relationships; and

- The landscape displays pleasing color relationships.

Scenic quality ratings fall into five classes from A to E. Class A views have the highest scenic quality and Class E the lowest.

Importance Values

The view importance rating identifies NPS and visitor values for the viewpoint, the viewed landscape and the viewers. The view importance rating is an office-based exercise. Each component is assessed by a team of NPS staff. In the same manner as Scenic Quality, the process requires that the group evaluate three factors for each component and all factors are equally weighted.

Viewpoint Importance

Viewpoint importance assesses the extent to which the viewpoint is publicized and managed for visitors. The rating system assumes that to have the highest importance rating the viewpoint must:

- Be extensively publicized, especially for its scenic views, in NPS or external communications and media (e.g., hiking guides, websites, movies).
- Have facilities that have been added or are planned for the viewpoint area to enhance the visitor experience; and
- Have a high level of interpretive services that contribute to the visitors' enjoyment of scenic, historical, cultural, scientific or other NPS values of the unit.

Viewed Landscape Importance

Viewed landscape importance assesses the extent to which the elements in the viewed landscape are publicized and used for interpretation. The assessment also evaluates how important special designations such as Wilderness or historic sites are within the view. The viewed rating system assumes that to have the highest level of importance the viewed landscape must:

- Be extensively publicized, especially for its scenic views, in NPS or in external communications or media (e.g., hiking guides, websites).
- Consist of all or mostly specially designated areas, or nationally/regionally significant scenic, historic, cultural, or scientific features or landmarks (e.g., wilderness areas, cultural landscapes).
- Strongly illustrate the NPS unit's scenic character or important interpretive themes and/or be connected to the unit's goal for visitor experience.

Viewer Concern

The evaluation of viewer concern relies primarily on the knowledge and professional judgment of NPS staff, and the rating system assumes that to have the highest level of viewer concern:

- The viewpoint must have a high level of visitation in relation to other viewpoints in the park;
- Viewers generally spend an extended period of time at the viewpoint; and

- Most visitors would be unusually sensitive to potential changes in a view because they are seeking views of natural character or historic significance.

View importance ratings fall into five classes from 1 to 5. Class 1 views have the highest view importance and Class 5 the lowest.

Appendix B: Viewpoint Photographs

Appendix B presents the photo documentation of each inventoried viewpoint, illustrating the conditions evaluated during the fieldwork (Figures 26 through 49).



Figure 26. Viewpoint 1: The Point—Lower Town, leaf-off conditions.
NPS



Figure 27. Viewpoint 1: The Point—Lower Town, leaf-on conditions.
NPS



Figure 28. Viewpoint 2: Harper Cemetery, leaf-off conditions.
NPS



Figure 29. Viewpoint 2: Harper Cemetery, leaf-on conditions.
NPS



Figure 30. Viewpoint 3: Jefferson Rock, leaf-off conditions.
NPS



Figure 31. Viewpoint 3: Jefferson Rock, leaf-on conditions.
NPS



Figure 32. Viewpoint 5: St. Peter's Church, leaf-off conditions.
NPS



Figure 33. Viewpoint 5: St. Peter's Church, leaf-on conditions.
NPS



Figure 34. Viewpoint 6: Harper House, leaf-off conditions.
NPS



Figure 35. Viewpoint 6: Harper House, leaf-on conditions.
NPS



Figure 36. Viewpoint 7: The Point—confluence, leaf-off conditions.
NPS



Figure 37. Viewpoint 7: The Point—confluence, leaf-on conditions.
NPS



Figure 38. Viewpoint 8: Armory Boat Ramp, leaf-off conditions.
NPS



Figure 39. Viewpoint 8: Armory Boat Ramp, leaf-on conditions.
NPS



Figure 40. Viewpoint 9: Towpath—downstream of Lock 33, leaf-off conditions.
NPS



Figure 41. Viewpoint 9: Towpath—downstream of Lock 33, leaf-on conditions.
NPS



Figure 42. Viewpoint 10: Towpath—upstream of Lock 33, leaf-off conditions.
NPS



Figure 43. Viewpoint 10: Towpath—upstream of Lock 33, leaf-on conditions.
NPS



Figure 44. Viewpoint 11: Maryland Heights, leaf-off conditions.
NPS



Figure 45. Viewpoint 11: Maryland Heights, leaf-on conditions.
NPS



Figure 46. Viewpoint 12: Hilltop House, leaf-off conditions.
NPS



Figure 47. Viewpoint 12: Hilltop House, leaf-on conditions.
NPS



Figure 48. Viewpoint 13: View from Split Rock at Loudoun Heights, leaf-off conditions.
NPS



Figure 49. Viewpoint 13: View from Split Rock at Loudoun Heights, leaf-on conditions.
NPS

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