

Montezuma Castle National Monument and Montezuma Well National Monument Accessibility Assessment

Summary Report Findings and Recommendations

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Montezuma Castle National Monument and
Montezuma Well National Monument Accessibility Assessment
Summary Report of Findings and Recommendations
Assessment Date: March 1, 2011

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II. Final Identified Locations in FMSS

58082 MOCA Castle Visitor Center Parking
13296 MOCA Visitor Center
13297 MOCA Restrooms
26606 MOCA Picnic Grounds
13299 MOCA Diorama
13298 MOCA Castle Trail
112977 MOCA Interpretive Circle
13342 MOWE Contact Station
13346 MOWE Vault Toilet
13352 MOWE Well Trail
58047 MOWE Picnic Area Parking
58041 MOWE Well Parking
58044 MOWE Pithouse Parking
26611 MOWE Picnic Grounds
39406 MOWE Pithouse Ruin
59791 MOWE Restroom

III. Park Purpose, History and Themes

Montezuma Castle National Monument

Montezuma Castle is a cliff dwelling located 100 feet above the Beaver Creek floodplain in Verde Valley. Early settlers coming across the dwelling assumed that it was Aztec in origin, hence being named after an Aztec Emperor; however the building of this dwelling actually began early in the 1100s CE. The 20-room dwelling was constructed by Southern Sinagua farmers who were the residents of the Verde Valley at the time. The purpose of Montezuma's Castle is not clear. Was it to give residents the opportunity to keep watch on traders or other visitors entering the area, or was it simply a very nice place to live? There were a series of ladders that were used to access the 5 floors of the dwelling, and were in place allowing visitors to the castle the opportunity to access the castle but the ladders have since been removed restricting access to the castle. The castle is one of the best preserved in the United States, and is 90 percent original.

Montezuma Castle receives approximately 600,000 visitors per year. Visitors come to the park to learn about the Sinagua people and the Castle by stopping in the visitor center to view exhibits and hiking the loop trail. The loop trail contains interpretive waysides, views of Montezuma Castle and ruins of Castle A, overlooks of Beaver Creek, and a diorama that explores the historic uses of the Castle. Visitors may also chose to picnic in the picnic area found near the creek.

Montezuma Well National Monument

Montezuma Well National Monument is a natural, limestone sinkhole. There are two distinct life zones that a visitor experiences along the 1/3 mile trail. Montezuma Well has a story that begins twelve million years ago when that part of the Verde Valley was covered by a large, shallow lake. Floating plants in the body of water caused dissolved calcium carbonate to form minute crystals, which slowly sank to the bottom and accumulated into thick layers of soft limestone rock. About two million years ago the lake waters began disappearing. Underground streams started dissolving softer areas of the underground limestone and a cavern began to form. Over time and with the help of the force of water, the cavern was carved larger and larger until about 11,000 years ago, the roof of one of the caverns gradually crumbled, forming Montezuma Well.

Water enters the well at a mysterious 74 degrees Fahrenheit, with a flow of over 1,400,000 gallons every day. As the water passes through the limestone, it collects large amounts of carbon dioxide-nearly 100 times more than most natural aquatic environments. The high levels of carbon dioxide make Montezuma Well completely inhospitable to fish. In their absence a community of unique species, each dependent on the others, has evolved. Four of these species are found nowhere else on the planet. While NPS dives have been done, and scientists have studied the warm water temperature, the origins of the consistently warm water that feeds Montezuma Well has not been found.

Montezuma Well receives approximately 200,000 visitors per year. Visitors come to Montezuma Well to get an understanding of the history of the well itself – how it was formed, the mysteries that surround the water temperature, the numerous inlets and outlets of water supply, and what role the Sinagua people played in the history of the well. Visitors may also choose to visit the Pithouse Ruin to get a feel for Sinagua lifestyles and/or to picnic at the picnic facility within the park.

IV. The National Center on Accessibility Assessment Approach

The National Center on Accessibility assessment process is designed to identify barriers to participation for people with disabilities, make recommendations for barrier removal and improved access, and develop associated work orders and cost estimates to assist park personnel in long-term planning. The NCA assessment team utilizes the federal standard for program access, Section 504 of the 1973 Rehabilitation Act, as a guiding principle for viewing the programs, activities and services of the National Park or Historic Site, in its entirety, for consideration of barrier removal. The assessment team looks critically at the programs that make up the visitor experience from the point of view of persons who have impairments to vision, hearing, mobility, or cognitive processes. This approach focuses the assessment process and outcomes on the visitor experience and beyond the realm of solely the physical environment. The NCA assessment team views the physical environment as a catalyst for program access and thus forms recommendations for barrier removal with program access at the forefront of the investigative and reporting processes.

At Montezuma Castle National Monument (NM) and Montezuma Well National Monument (NM), the assessment team from the National Center on Accessibility conducted an accessibility assessment of the physical and programmatic elements of the Visitor Center at Montezuma Castle, the surrounding grounds and the Well and surrounding grounds. The team also interviewed key park personnel, collecting information to provide a broad range of recommendations for improving access for visitors with disabilities.

V. Referenced Standards and Guidelines

The National Park Service is legislatively mandated to provide accessible facilities and programs for their visitors with disabilities. Based on these mandates, the National Center on Accessibility utilizes the following accessibility standards and guidelines for their assessment:

Architectural Barriers Act of 1968 as amended (U.S. Access Board, 2004; General Services Administration, effective date May 8, 2006)

This document contains scoping and technical requirements for accessibility to sites, facilities, buildings, and elements by individuals with disabilities. The requirements are to be applied during the design, construction, addition to, alteration, and lease of sites, facilities, buildings, and elements to the extent required by regulations issued by Federal agencies under the Architectural Barriers Act of 1968 (ABA).

Rehabilitation Act of 1973, as amended in 1978, Section 504

Section 504 of the Rehabilitation Act (1973) reads, "No otherwise qualified individual with a disability in the United States shall solely by reason of his disability, be excluded from the participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance, or under any program or activity conducted by an Executive Agency."

Rehabilitation Act of 1973, Section 508

This section, amended in 2000, requires access to electronic and information technology provided by the Federal government. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Federal agencies must ensure that this technology is accessible to employees and members of the public with disabilities to the extent it does not pose an "undue burden."

NPS Director's Order #42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services

This NPS Director's Order reiterates the NPS goal to ensure that all people, including the estimated 54 million citizens with disabilities, have the highest level of accessibility that is reasonable to their programs, facilities and services in conformance with applicable regulations and standards. Five objectives are outlined including: incorporation of the highest level of accessibility as a long range goal; implementation through daily operation, policies, organizational relationships and strategies; provision of guidance and direction regarding the NPS interpretation of laws and policies; establishment of a framework for effective implementation; and ensuring the implementation of "universal design" principles within the National Park system.

Programmatic Accessibility Guidelines for National Park Service Interpretive Media (February 2012)

These NPS Guidelines combine laws, policies, and best practices for interpretive media. The guidelines acknowledge that no interpretive media product works alone. Media products are interdependent and each has inherent strengths and weaknesses. Park visitors sample and benefit from an array of interpretive media. These guidelines describe design and presentation solutions that are acceptable in most interpretive media situations. It should be noted however that these guidelines present highlights only and are not comprehensive.

Draft Final Accessibility Guidelines for Outdoor Developed Areas (U.S. Access Board, October 19, 2009)

Achieving accessibility in outdoor environments has long been a source of inquiry due to challenges and constraints posed by terrain, the degree of development, construction practices and materials, and other factors. These guidelines are proposed by the U.S. Access Board as new scoping and technical requirements for outdoor developed areas covered by the Architectural Barriers Act. The guidelines will cover new and altered trails, beaches, picnic and camping facilities and viewing areas. While these guidelines are not yet enforceable as requirements for Federal entities, they should be integrated into the planning, construction, and renovation of outdoor recreation areas and facilities and in the provision of programs and services provided to the public as best practice guidelines.

In addition to legislative mandates and proposed rule making, the NCA assessment team has made recommendations based on best practices in the field in order to create greater opportunities for participation and benefit among visitors with disabilities.

Principles of Universal Design

Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. The intent of Universal Design is to simplify life for everyone by making products, communications, and the built environment more usable by as many people as possible at little or no extra cost. Universal Design benefits people of all ages and abilities.

There are times when NCA may use the concept of Universal Design for recommendations that are not requirements but are seen as "best practices". An example would be providing recommendations for benches in the outdoor environment, installing power assisted exterior doors, marking parking spaces uniformly at 11 feet wide, and/or utilizing the advisories in ABAAS when appropriate due to accessibility issues that contribute to safety risks.

Smithsonian Guidelines for Accessible Exhibition Design

The Smithsonian Guidelines is one of the very first and most formidable resources addressing exhibit design considerations for museum patrons with disabilities. The Smithsonian Guidelines are referenced as best practice for designing to various learning styles and functional abilities in the interpretive environment and especially in situations where the accessibility standards do not fully transfer to unique exhibition designs.

NPS Audio-Visual Accessibility Initiative for Visitors with Disabilities D24 (2420) (October 20, 2006)

A series of official disability rights complaints and testimony received at a Congressional oversight hearing on disability access revealed that the NPS has many audiovisual programs that are not captioned or audio-described; assembly areas that are not equipped with assistive listening systems; and in some cases, captioning systems that are broken and have not been repaired. This initiative established the fundamental goal that the films and audio-visual programs presented in parks provide three basic services: open captions, audio-description, and assistive listening devices for those with hearing loss.

Architectural and Transportation Barriers Compliance Board Revised Draft Guidelines for Accessible Public Rights-of-Way (November 23, 2005)

Sidewalks, street crossings, and other elements of the public rights-of-ways present unique challenges to accessibility for which specific guidance is considered essential. These proposed guidelines for public rights-of-way address various issues, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. The new guidelines will cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

VI. Key Findings and Recommendations

This section provides an overview of the NCA assessment team's key findings and recommendations. More complete details of findings, recommendations for corrective actions and cost estimates are available through the Facility Management Software System (FMSS) database, and the Cost Estimating Software System (CESS).

The deficiencies are given a priority rating by the assessors. The three accessibility deficiency priorities, as established by the National Park Service within FMSS, are:

Critical - A critical priority would be given to those deficiencies that occur in an asset or facility that is utilized by a significantly high number of people (visitors or employees); or "prohibits" or seriously inhibits people with disabilities from utilizing the facility.

Serious - A serious priority would be given to those deficiencies that occur in an asset or facility but only modestly inhibit an individual with a disability from utilizing the facility.

Minor - A minor priority would be given to those deficiencies that occur in any asset or facility but only slightly inhibit an individual with a disability from utilizing the facility. Minor classifications can also signify that the deficiency can be easily corrected with maintenance and/or minor adjustments or that correction might take more time and money but only needs to be corrected when renovations/replacements are scheduled.

1. Policy Considerations and Best Practices

During the review of assessment data, NCA accessibility specialists identified several barriers to accessibility, unique to Montezuma Castle NM and Montezuma Well NM, that are not explicitly addressed in the above referenced standards. As a result of discussion with Park management, and in collaboration with recommendations from the U.S. Access Board, the Park has decided to adopt the following best practices to maximize accessibility for visitors with disabilities.

Exterior Doors

While there is no identified accessibility standard for the operating force of exterior doors, it is recommended as best practice for the Park to adjust exterior door closers to reduce the operating force to as close to 5 pounds (maximum force requirement for interior doors) as possible. If this is not possible, the Park should investigate the installation of a power assisted or automatic door opener to minimize the potential barrier for an individual with a disability.

Waysides and Interpretive Panels

As new waysides and interpretive panels are installed, or maintenance is conducted to existing routes where waysides and interpretive panels are furnished, clear ground space complying with ABAAS 305 should be provided, positioned for either a forward or parallel approach, centered on the frame.

Benches

All new accessible benches should be installed with clear floor or ground space positioned near the bench for wheelchair seating that does not overlap the accessible route. As benches are repaired or replaced, accessible benches should be provided until a minimum of 20 percent are accessible in each location. Accessible benches should have back support, at least one armrest, a seat height of between 17 inches minimum and 19 inches maximum, and should be installed along an accessible path of travel (i.e. accessible route, outdoor recreation access route, or trail).

2. Visitor Information / Trip Planning

The Park website is often the first point of contact for people planning their visit to Montezuma Castle NM and Montezuma Well NM. While the website is abundant with general visitor information, details regarding the availability of accessible features and services at the Park are limited. Currently, the Park's website has accessibility information provided, however the information is very brief and does not adequately describe the accessible features and accommodations the Park has available for individuals with disabilities. The Park's website does not contain information regarding the availability of auxiliary aids and services such as audio description, assistive listening systems, and the procedure to request a sign language interpreter. The website states that a portion of the Castle trail and the entire trail at Montezuma Well are too steep for wheelchairs. While it is understood that the intent is to provide cautionary warnings as to the steep grade, the language is restrictive in nature. While there are some elements and/or features that may make the trails inaccessible to some individuals, these areas may not be inaccessible to all individuals using wheelchairs. Recommendations for the creation of signage denoting the grades and therefore difficulty level of the various trails (the overlook trail for Castle A at Montezuma Castle and the Well trail for Montezuma Well) are addressed in FMSS and later in the "Trails & Scenic View Opportunities" section of this report. Upon the creation of the signs, the Park shall ensure the website is updated to reflect the same information which will allow visitors to assess their own abilities in relation to the trails.

The website also states that the picnic area at the Castle is not accessible to wheelchairs. The park should immediately point out picnicking alternatives. The website should state that there is an additional picnic facility with a natural surface (NCA will be recommending solutions to the deficiencies to make this area accessible) that may provide access to a wider variety of visitors at Montezuma Well.

The website also denotes that audio cassettes and Braille text are available for visitors in the Visitor Center, however, there are no longer audio cassettes and Braille text available for visitors to pick up at the Visitor Center at Montezuma Castle.

Update the accessibility portion of the Park's website to provide accurate and comprehensive information regarding accommodations for visitors with disabilities. Provide specific, objective information about accessible routes, accessible features such as viewing opportunities, trails, auxiliary aids (such as the existing assistive listening system available for the audio visual room and movie shown in the garage) and services to enable perspective visitors to plan accordingly. Be sure to include information, not only for people with physical disabilities, but also accessibility information for people with sensory and cognitive disabilities.

3. Visitor Orientation and Way-finding

The layout of the facilities and locations within Montezuma Castle NM and Montezuma Well NM are communicated through signage, maps, and publications designed to welcome and orient the visitor to the Park. The vertical wayside/interpretive panels located throughout the Park provide basic information about the Park, a way finding map (including the trails system) and photographs of different areas of the Park. While accessibility guidelines do not address visitor orientation and way finding, in order to meet program access requirements the Park should provide visitor orientation signage and a topographical/tactile map which will allow individuals with low vision or who are blind to orient themselves to the surroundings in the Park.

There is no topographic map of Montezuma Castle NM or Montezuma Well NM that depicts the size of the two sections of the Park, the varied topography, three-dimensional structures which reference locations of key sites (i.e., mountains, castle, well and river). Therefore, this presents a barrier to effectively communicating critical information to those visitors who are blind, have low vision, or those with cognitive disabilities.

The Park shall work with a consultant to design a topographical map, to be located at each of the two sections of the Park (the castle and the well) containing three-dimensional features of Montezuma Castle NM and Montezuma Well NM for tactual exploration. Consider factors that make tactile maps accessible and functional for people who are blind, including size, depth, location, audio description, texturing, keys, legends, and degree of detail. The overall size of the map shall not exceed the maximum allowed reach ranges under ABAAS 308. Reach range shall be measured to the center, or opposite edge of the model (preferred), depending on its method of installation. Both adult and children forward reach range requirements should be considered. Knee and toe clearances should be provided for a forward approach by someone in a wheelchair. The map material should be able to withstand high visitor use, be comfortable to the touch (i.e. be able to withstand temperature extremes), and be finished with a coating that allows for routine cleaning. Any text used to communicate essential information should incorporate accessible font size and type, should be sans serif or simple serif for essential information and should be large enough to convey the information to the widest range of visitors with and without visual impairments. The variety of landscape features that should be distinguished, such as the water

from the land, should be depicted using a variety of textures. Include the map in the comprehensive audio described tour of Montezuma Castle NM (addressed in section 7 “Talks and Tours” of this report).

Due to the layout of Montezuma Well NM, and the various locations that provide interpretation, consideration should be given to replicating the main topographic tactile map that will be produced as smaller scale tactile maps to be located at various locations throughout the Park. By replicating the tactile maps throughout the Park, visitors with visual impairments, who are blind or who have cognitive impairments will benefit greatly from having a method of gaining perspective in terms of their location at multiple places throughout the Park. Without the introduction of tactile models, to those visitors mentioned above, the Park will remain fragmented and much of the interpretive content will be lost due to the inability to adequately understand the relationship of each portion of the Park to one another.

There is one accessible route from the Visitor Center to the Interpretive Circle but the accessible route is not designated. The park shall provide accessible directional signage denoting the accessible route. The accessible route would be from the Visitor Center around the backside of the loop (the natural progression of the trail is counterclockwise from the Visitor Center but the accessible path of travel is clockwise).

4. Publications

Publications offer a wide range of information. It is critical that people with disabilities receive the same information - of the same quality - as other visitors. Publications that are considered “readily available,” like the official Park brochure, interpretive handouts, news bulletins and others should be available in large print, Braille, audio and electronic format to accommodate visitors who have low vision or are blind. The main Park publications are not provided in alternate formats.

The Montezuma Castle and Montezuma Well combination unigrid brochure and all other readily available publications should be converted to Braille, designed for large print, and formatted for audio and electronic distribution. Utilize the Harpers Ferry Center large print brochure template to adapt all primary standard Park brochures to large print. In addition, translate the content for the primary standard Park brochures to Braille, electronic text file (.txt, .rtf, .doc), and audio (CD, mp3), and maintain the alternate formats in stock for visitor requests. NPS and local resources should be identified to produce secondary publications in alternate formats upon request. Provide signage at the Montezuma Castle information desk and the Montezuma Well Contact Station stating that the publications are available in alternate formats. Develop a procedure for converting content of secondary brochures and insert a statement in those publications indicating, “Alternate formats of this publication are available upon request.”

Add a section to the primary Park brochures explaining the availability of services for visitors with disabilities including information to request a sign language interpreter, availability of an assistive listening system, alternate formats, trail information, accessibility improvements to the Park, and the contact information for the Park’s accessibility coordinator. Ensure that the same information is added to the Park’s website.

5. Exhibits

Visitor Center Exhibits

The Visitor Center at Montezuma Castle contains exhibits that interpret the history of the Park. However, the majority of the interpretive information in the Visitor Center is interpretive panels and

displays in exhibit cases or behind Plexiglas. There is one tactile experience, the “Handprints in Time” exhibit but there is little to no additional opportunity for visitors who have low vision or are blind, or those with cognitive disabilities to participate in or benefit from this interpretation. In addition to the lack of tactile exhibits, there are multiple deficiencies with the exhibit text panels. There are multiple panels that contain text over images (in particular on the map panels), contain serif fonts, and have text that is wearing away and non-legible.

Park management shall work with design services to create an exhibit design plan and replacement schedule. When exhibit panels are replaced, ensure that the information is presented in a variety of ways that are accessible to the widest range of visitors. Things to consider in interpretive design include the use of sans serif or simple serif fonts (as opposed to serif fonts), minimal use of italics, size of font, contrast between text and background of 70-95 percent, and the incorporation of audio and tactile elements. Text should not appear over images or in shadow as the stylistic presentation of information can interfere with readability. Items essential to the Park’s main themes must be presented to all of the senses for visitors of all abilities. The Park shall make various items essential to understanding the main Park themes available as tactile reproductions. Items such as weaved baskets and a variety of the tools excavated, would be beneficial for visitors to understand the purpose of preserving Montezuma Castle. These exhibits should be included in the audio described tour recommended for the Park (addressed in section 7 “Talks and Tours” of this report).

There are multiple components to the lighting scheme and exhibit displays in the Visitor Center that provide barriers for individuals with low vision. Overhead track lighting creates glare on the surface of the exhibit panels washing out segments of text and images, and areas of low lighting can obscure text altogether. The position of the track lighting casts shadows over the exhibit text which also obscures the text.

There must be sufficient lighting on objects to make them visible to all visitors unless the light level will do substantial damage to the objects. When not prohibited from doing so by conservation requirements, provide at least 100 – 300 lux of light on an object. Ensure that the track lighting is adjusted to provide an equal amount of diffused light where not restricted by artifact preservation. Replace any missing light bulbs and ensure all existing light bulbs emit 100 – 300 lux of light. Where prohibited from providing the full 100-300 lux of light due to conservation requirements exhibit text should have no less than 10 foot-candles (fc) of illumination, with a working usable range of between 10 and 30 foot-candles.

There is no three-dimensional model of Montezuma Castle. Montezuma Castle is the primary point of interest at the Park, therefore it is critical to effectively communicate the significant architectural features of the castle for visitors who are blind, have low vision, or those with cognitive disabilities.

The Park shall work with a consultant to design a three-dimensional model of Montezuma Castle for tactile exploration by visitors. Consider factors that make tactile models accessible and functional for people who are blind or who have cognitive impairments, including size, depth, location, audio description, texturing, and degree of detail. The overall size of the model shall not exceed the maximum allowed reach ranges under ABAAS 308. Reach range shall be measured to the center, or opposite edge of the model (preferred), depending on the method of installation. Both adult and children forward reach range requirements should be considered. The model material should be able to withstand high visitor use, be comfortable to the touch (i.e. be able to withstand temperature extremes), and be

finished with a coating that allows for routine cleaning. Ensure that the required clear ground space, knee and toe clearance are provided. Any text used to communicate essential information should incorporate accessible font size and type, should be sans serif or simple serif for essential information and should be large enough to convey the information to the widest range of visitors with and without visual impairments. Include the model in the comprehensive audio described tour of Montezuma Castle National Monument (addressed in section 7 “Talks and Tours” of this report).

Interpretive Panels and Waysides

There are a total of ten interpretive panels installed along the accessible route from the parking lot to the Visitor Center. The interpretive panels are each installed on the brick wall at the same height, but due to the sloping walkway, the viewing levels range from 62 inches above the ground surface to 79 inches; the average font size is 1/8 inch (or 12 point font). The font size is too small for the existing view heights of the panels.

The smallest type in a vertical exhibit panel should be placed within a zone containing the range of eye level for a person in a wheelchair to a standing adult for a panel that must be approachable. This eye-level zone is approximately 40 inches to 60 inches from the ground. The Park shall lower all ten interpretive panels to ensure the viewing heights of the panels are within viewing height recommendations. The minimum recommended font size is 24 point, which may vary depending on viewing distances; therefore the Park shall reproduce the content on the ten panels to ensure the font meets recommendations.

There are a number of waysides along the Castle trail at Montezuma Castle and along the Well trail at Montezuma Well. The interpretive information is not provided in a format that is accessible to people who are blind, have low vision or who have cognitive impairments. The text provided does not meet recommended color contrast of 70 percent due to light brown text on a dark brown background. There are no tactile or audio components provided for any of the waysides or plaques. Along the Castle trail, six of the 21 waysides are installed off of the trail tread (out of recommended viewing distance), and do not provide the recommended clear ground space positioned at the wayside for viewing the interpretive content.

The Park shall hire a consultant to implement a comprehensive wayside and interpretive panel design plan that will involve the replacement of 21 waysides with units that incorporate audio and tactile elements, where applicable. Waysides shall incorporate accessible font type, size, and contrast and shall not contain text over images. The information available on the panels should be provided in alternate formats including Contracted Braille (Grade 2), large print, audio and electronic formats. Audio description for waysides and interpretive panels is addressed in section 7 of this report. As panels are replaced, the information should be integrated into the recommended audio described tour originating at the Visitor Center. Where interpretive panels contain maps of the trails inside the Park, ensure that raised lines are used to denote trail routes. The variety of landscape features that should be distinguished, such as the water from the land, should be depicted using a variety of textures. Ensure that the waysides are installed adjacent to the trail tread with the recommended minimum 36x48 inches of clear ground space positioned for a parallel approach to each wayside.

6. Audio/Visual Programs

All new media productions shall be open captioned and audio described per Section 508 and the NPS Audio-Visual Accessibility Initiative. All existing media shall be captioned, audio described and available

for use with an assistive listening system. The accessible features of the audio/visual programs such as assistive listening, audio description and open captioning shall be maintained through periodic testing and staff training. An assistive listening system should also be available upon visitor request for demonstrations, special events and ranger-led tours. Display signage at reception areas indicating that the assistive listening system and audio description is available and market their availability through brochures, program announcements and the Park website.

There are two audio visual programs available at Montezuma Castle and none available at Montezuma Well. The first is the virtual tour of the National Parks computer program and the second is the diorama on the Castle trail.

The diorama contains audio and does not have an audio description component for those visitors with low vision, who are blind or who have cognitive impairments. There is no assistive listening system installed at the Diorama to assist those visitors with hearing loss in receiving the interpretive information. There is no open captioning provided, and no alternate formats of the text are provided. The Park shall work with a consultant to design an equivalent interpretive experience of the Montezuma Castle diorama for those who are deaf or have hearing loss, who are blind or have vision loss, or who have cognitive disabilities. The new diorama should include an installed assistive listening system compatible with the newly recommended assistive listening receivers available at the Visitor Center, an audio description component, and open captioning.

The computer in the Visitor Center does not comply with the requirements of Section 508 of the Rehabilitation Act. The computer program is only operable with a mouse; there is no option for keyboard operation for a visitor with a disability that affects dexterity. The computer does not have an assistive listening device for visitors with hearing impairments, and there is no screen reader associated with the program to ensure visitors with visual impairments can better navigate the program/screens. Park management shall work with a technology specialist to evaluate the computer systems' ability to provide accessibility requirements per the Rehabilitation Act of 1973, Section 508. Ensure the computer systems used to provide interpretation information, Park information and programs are accessible to visitors with physical, hearing, visual and cognitive impairments. The results of the evaluation of the existing computer station may not allow for compatibility with the required components of Section 508 and may trigger the need for the computer to be replaced with equipment that will allow the use of assistive technology.

7. Talks and Tours

Portable Assistive Listening System

Montezuma Castle

There is no assistive listening system at Montezuma Castle National Monument for both ranger lead talks and tours that originate at the Visitor Center. Scoping for assistive listening systems is derived from the capacity of seating in assembly areas. The maximum capacity of the Interpretive Circle (which is the only assembly area in the Park) is 40 persons. Therefore, a total of two portable multi-channel assistive listening system receivers (both of which shall be hearing-aid compatible) and one portable multi-channel transmitter shall be provided for ranger led walks, talks and tours. Display a sign in the Visitor Center indicating that the portable assistive listening system is available. The park should continue to monitor visitor numbers in the event that additional receivers shall be purchased.

Montezuma Well

At Montezuma Well there is no assistive listening system provided for the ranger lead talks and tours that originate at the parking lot and end at the top of the Well. There is an existing PMIS statement regarding the rehabilitation/upgrade of the area at the Well to include replacing the existing 200 square foot contact station with a new 500 square foot structure and adjacent shade ramada. The shade ramada will accommodate an estimated 30 visitors and will serve as a location for ranger led interpretive presentations. As scoping for assistive listening systems is derived from the capacity of seating in assembly areas, the maximum capacity of the newly recommended shade ramada is 30 persons. Therefore, a total of two portable multi-channel assistive listening system receivers (both of which shall be hearing-aid compatible) and two portable multi-channel transmitters shall be provided for ranger led walks, talks and tours. If additional receivers are purchased, then one portable hearing-aid compatible receiver shall be designated for each type of tour (i.e. walking tour and ranger led talks). Display a sign in the new contact station indicating that the assistive listening system is available. Include a notice on the Park website when the portable assistive listening system is acquired.

Audio Description

There are many visual elements to Montezuma Castle NM such as facilities, the Castle trail exhibits, bulletin boards and exhibits that do not have corresponding audio components or audio description. There are also many visual elements to Montezuma Well NM such as the Well, the Well trail, the Pithouse Ruin, and the picnic facility location that do not have audio description.

The lack of audio description provides a barrier to full participation for visitors who are blind or have low vision. Audio description may also provide an enhanced program opportunity for individuals with cognitive impairments. The Park shall work with a consultant to develop and record a script that will incorporate the visual elements of Montezuma Castle NM and Montezuma Well NM into an audio described tour. Be sure to include the following elements in the development of the script for Montezuma Castle NM: a general orientation of Montezuma Castle, description of the castle, the waysides, bulletin boards, photos and text on interpretive panels, and tactile components throughout exhibit areas. Be sure to include the following elements in the development of the script for Montezuma Well NM: the Well, the Well trail, the Pithouse Ruins, the surrounding landscape, and the waysides found throughout the Park and along the Well trail. Where audio description for specific exhibits is provided, incorporate a 2x2 inch sign alerting visitors to the availability of audio description. In addition, the consultant should assist in determining what equipment would be most appropriate for the site's specific audio description needs. Ensure that the equipment is hands-free or has a hands-free option (so that visitors can explore their surroundings tactilely), is able to be independently operated, and is hearing-aid compatible.

8. Physical Building Elements

This portion of the narrative report addresses different sections of the Park where identified barriers have been found, addressed and the barrier and solution can be entered into FMSS for which a work order can then be generated and cost estimated for the removal of the specific barrier. Below is a summary of the major physical accessibility deficiencies, by area, found at the Park. For further detailed explanation of a specific deficiency and identified solution please refer to the FMSS data and generated work orders.

Parking

Montezuma Castle

The northwest section of the Visitor Center parking lot currently has four spaces designated as accessible parking. The spaces and access aisles exceed maximum slope requirements, and there is no designated van accessible parking space. The four metal signs do not meet minimum height requirements. As per requirements, a minimum of three accessible parking spaces are required; two standard accessible spaces and one van accessible space; and a total of 2 striped access aisles. Ensure the van accessible space and standard spaces meet the minimum width requirements. Ensure that if the access aisle serving the van accessible parking space is provided on the passenger side (if new accessible parking continues to be angled). Ensure the slope does not exceed maximum requirements within either the parking spaces or the access aisles. The Park shall grade the existing parking area and resurface with asphalt. Due to the layout of the parking lot, and the direction of excessive slope, the majority of the parking lot will need to be graded and resurfaced to ensure the requirements for slope are met. There is a concrete and natural ground surface island in the middle of the parking area that will most likely be affected by the grading of the surface. The Park shall purchase three new metal posts and reuse three of the existing signs that contain the International Symbol of Accessibility. Purchase one additional sign that contains the designation "van accessible." Signs shall be installed to ensure minimum height requirements are met.

Montezuma Well

There are no designated accessible parking spaces at the Montezuma Well parking facility. There is no accessible parking signage, nor is there any area that has a surface that does not exceed maximum slope requirements. The Park shall excavate the southwest portion of the parking facility, grade the subgrade and resurface the parking facility to ensure that slope does not exceed maximum requirements. The Park shall ensure that when resurfacing, the asphalt surface meets flush with the concrete accessible route that leads to the vault toilets. The Park shall provide a minimum of one van accessible parking space that meets minimum width requirements and one adjacent striped access aisle. The Park shall purchase and install one post and sign that contains the International Symbol of Accessibility and includes the designation "van accessible." Signs shall be installed to ensure minimum height requirements are met.

In the Pithouse Ruin parking facility, there is no designated van accessible space, no access aisle and no signage designating van accessible parking. The Park shall stripe one van accessible parking space that meets minimum width requirements and one adjacent access aisle. The Park shall purchase and install one post and sign that contains the International Symbol of Accessibility and includes the designation "van accessible." Signs shall be installed to ensure minimum height requirements are met.

The current picnic parking facility has no designated accessible parking. There is no striping for a van accessible parking space, a designated access aisle and there is no accessible parking signage. The parking space directly to the East of the foot bridge shall be striped to create a van accessible parking space that meets minimum width requirements. To the West of the accessible parking space there shall be a striped access aisle that meets minimum width requirements. The Park shall purchase and install one post and sign that contains the International Symbol of Accessibility and includes the designation "van accessible." Signs shall be installed to ensure minimum height requirements are met.

Accessible Routes

Montezuma Well

The accessible route that connects the Pithouse Ruin parking to the Pithouse Ruin has changes in level that exceed maximum requirements. The aggregate surface that is between the parking facility and the accessible route is not firm and stable. The existing accessible route can be repaired in sections to ensure that changes in level do not exceed maximum requirements; however, portions of the route will need to be removed, formed and re-poured.

In the Montezuma Well parking facility, there is not an accessible route connecting the accessible parking and vault toilet to the ranger station or Well trail. The Park shall construct an accessible route that follows along the south and east perimeter of the parking facility beginning at the accessible parking and ending at the ranger station. Ensure that when constructing the accessible route that changes in level, running slope, and cross slope do not exceed maximum requirements. Ensure the width of the accessible route is a minimum of 36 inches.

Picnic Facilities

Montezuma Castle

The picnic facility at Montezuma Castle contains numerous deficiencies that may create physical barriers to participation. The existing outdoor recreation access route from the parking area to the picnic facility exceeds maximum allowed running slope and cross slope requirements. The surface of the picnic area is sand which is not firm or stable. The existing picnic tables provide only 9 inches of knee clearance and do not have clear ground space provided that is firm and stable. Due to the existing terrain, it would not be feasible to alter the outdoor recreation access route to ensure maximum allowed running and cross slope are met. The area that contains the picnic tables is sand and floods frequently throughout the season as a result of being directly adjacent to the river. The area provides the experience of being near the water (which is a point of interpretation identified on the Castle Trail) and provides shade from the extreme temperatures experienced at the Park. The Park shall consult with design services to provide either an alternative route into the existing picnic facility, or design and construct a new picnic facility that meets the recommendations found in the Draft Final Outdoor Developed Areas guidelines for accessible picnic facilities. If the existing picnic facility is used, a total of three picnic tables will need to be replaced with tables that meet requirements for wheelchair seating spaces, knee and toe clearance and clear ground space. If a new picnic facility is designed, ensure the outdoor recreation access route to the picnic facility meets specifications for running and cross slope, in addition to being firm and stable. Ensure a total of 20 percent but no less than two picnic tables are accessible. If trash receptacles are provided, ensure they meet accessibility recommendations. Provide an outdoor recreation access route connecting all accessible elements, spaces and facilities within the new picnic facility.

Montezuma Well

At the Montezuma Well picnic facility, there is no outdoor recreation access route connecting the parking lot to the recommended number of three accessible picnic units, the water hydrant, and accessible trash receptacles. There are no accessible trash receptacles that can be operated with a closed fist. The Park shall construct an outdoor recreation access route that begins at the newly recommended accessible parking space; continue over the bridge and along the irrigation ditch that follow the tree line through the middle of the picnic area. This will allow the picnic units to be within shaded areas during parts of the day while still being separated by at least twenty feet. The Park shall also construct three concrete pads onto which three accessible picnic tables will be installed. Ensure that when installing the picnic tables, the recommended clear ground space is provided around the table

measured from the back edge of the benches. The Park shall also install a concrete surface at the water hydrant that will allow for a clear ground space that meets requirements. The Park shall purchase and install one new trash receptacle that can be operated with a closed fist. The trash receptacle shall be placed adjacent to the new outdoor recreation access route and be accessible to all three recommended accessible picnic tables. Ensure when installing the trash receptacle that the recommended clear ground space is positioned in front of the receptacle for a parallel approach. Ensure the trash receptacle contains operable parts that meet requirements and are located within minimum and maximum reach ranges. Ensure the outdoor recreation access route meets minimum requirements for changes in level, width, running and cross slope and firmness and stability.

Restrooms

Montezuma Castle

The women's Visitor Center restroom has multiple deficiencies: the existing restroom signage is mounted on the door and does not contain the required raised characters and Braille; the apron of the lavatory counter exceeds the maximum height requirements and the pipes underneath the lavatory are not insulated; the accessible stall door does not meet the required minimum clear width between the latch and the frame; the coat hook exceeds maximum reach range requirements; the flush controls for the water closet are installed on the closed side of the unit; the toilet paper dispenser is installed too closely above the side grab bar; the height of the rim of the wall-hung water closet in the wheelchair accessible stall exceeds maximum height requirements; the clearance inside the accessible stall does not meet minimum width and length requirements; the baby changing station exceeds maximum reach range requirements in the closed position, and when lowered does not allow for the required minimum clear ground space within the accessible stall; the mirrors are mounted too high to the bottom edge of the reflective surface; the control for the hand dryer exceeds maximum reach range requirements. There are a total of six stall compartments provided in the restroom, but there is no ambulatory accessible water closet.

Where six or more toilet compartments are provided, at least one accessible ambulatory stall shall be provided in addition to one wheelchair accessible stall. It is not possible to address the deficiencies in the women's restroom with its existing layout as the dimensions and design are not conducive to providing the required size and types of stalls. The Park shall consult with design services to design a women's restroom that includes a total of four standard stalls, one ambulatory accessible stall and one wheelchair accessible stall. Accessible lavatories, mirrors, hand dryers and coat hooks shall be provided along with any other accessible conveniences provided within the women's restroom upon completion.

The men's Visitor Center restroom has multiple deficiencies: the existing restroom signage is mounted on the door and does not contain the required raised characters and Braille; the pipes underneath the lavatory are not insulated; the accessible stall door does not meet the required minimum clear width between the latch and the frame; the coat hook exceeds maximum reach range requirements; the toilet paper dispenser in the accessible stall is installed too closely above the side grab bar; the baby changing station exceeds maximum reach range requirements in the closed position and when lowered does not allow for the required minimum clear ground space within the accessible stall; the mirrors are mounted too high to the bottom edge of the reflective surface. There are a total of four stall compartments and two urinals in the restroom, but there is no ambulatory accessible stall.

Where the combination of urinals and water closets total six or more fixtures, at least one accessible ambulatory stall shall be provided in addition to one wheelchair accessible stall. Where more than one urinal is provided, at least one shall be accessible. It is not possible to address the deficiencies in the

men's restroom with its existing layout as the dimensions and design are not conducive to providing the required size and types of stalls and urinals. The Park shall consult with design services to design a men's restroom that includes a total of two standard stalls, one ambulatory accessible stall, one wheelchair accessible stall, one standard urinal and one accessible urinal. Accessible lavatories, mirrors, hand dryers and coat hooks shall be provided along with any other accessible conveniences provided within the men's restroom upon completion.

Montezuma Well

The women's and men's pre-fabricated restroom building at the picnic facility have the exact same reoccurring deficiencies: the accessible stall door hardware is not operable with a closed fist. The side wall grab bars are mounted too close to the rear wall not allowing the grab bars to extend the required distance from the rear wall. The rear grab bars are installed such that they do not extend the minimum required distance past the centerline of the water closet.

The Park shall remove and replace the existing door hardware on the accessible stalls with door pulls that can be operated with a closed fist. The new door hardware shall be installed to meet minimum and maximum height requirements. Reinstall side grab bars to ensure they extend the minimum distance as required from the rear wall, and the rear grab bar to ensure they extend the minimum distance as required from the center line of the toilet.

The women's and men's vault toilet restrooms have the exact same reoccurring deficiencies: the existing signage is mounted in three locations which include on the door, on the wall adjacent to the hinge side of the door and on the latch side of the door. The existing signage on the latch side of the door does not have the required Braille and raised letters and characters. The coat hooks installed in the units exceed maximum reach range requirements. The space between the wraparound grab bars and the wall is not consistent and exceeds requirements.

Purchase and install new accessible signage. The signage shall include Grade 2 Braille, raised tactile characters, pictograms and the international symbol of accessibility. Install signage to ensure that the tactile characters are located within minimum and maximum height requirements. Purchase two new coat hooks and install them onto the interior wall within reach range requirements. Remove the existing wraparound grab bars in the unit and replace them with two separate grab bars in each unit (four total – two rear and two side). Ensure that the grab bars meet the minimum length requirements, are installed to within minimum and maximum height requirements, and have a space of exactly 1 ½ inches between the wall and inside of the bar. Ensure the grab bars extend the required length from the centerline of the water closet and the back wall.

Drinking Fountains

Montezuma Castle

The existing water fountain located furthest from the Visitor Center doors was not operable at the time of the assessment. The drinking fountain closest to the Visitor Center doors does not provide the minimum knee and toe clearance under the unit as required for a low unit. The leading edge of the water fountain protrudes into the accessible route and is therefore not cane detectable. The Park shall replace the two water fountains with one high-low water fountain installed in the same area as the existing water fountain closest to the Visitor Center doors. Ensure required knee and toe clearance is provided under the low unit, the spout height and location meet requirements for the high and low units respectively. To ensure this unit does not become a protruding object, the Park should consider

the purchase of the full base wall mount unit. If this is not possible, the Park shall install panels alongside the units to ensure they are cane detectable.

Montezuma Well

The only drinking fountain located within Montezuma Well is installed at the pre-fabricated restroom building picnic facility. Where drinking fountains are provided, there must be one unit available for those visitors who are seated and one unit available for those who may have trouble bending and/or stooping, or for those of short stature. The Park has one existing unit which does not meet the requirements for either a low or high unit. The current drinking fountain does not provide the minimum knee and toe clearance under the unit as required for a low unit. The spout outlet exceeds the maximum height requirements and the operable part requires tight grasping and twisting which cannot be done with a closed fist. The drinking fountain shall be replaced with a new combination high-low drinking fountain. The Park shall ensure that upon installation, required knee and toe clearance is provided under the low unit, spout height and location requirements are met for the high and low unit respectively, and the operable parts meet minimum requirements.

9. Trails & Scenic Viewing Opportunities

The Montezuma Castle trail is a 1/3 mile long, concrete loop trail, and is the only method by which visitors physically access the cliff dwellings at Montezuma Castle. The trail also provides access to the diorama, and the outdoor amphitheater in addition to interpretation provided on wayside exhibits. The Montezuma Well trail is a ½ mile long, mostly paved loop trail, and is the only method by which visitors physically access the primary interpretive focus of the Park, the Well. The trail also provides access down into the basin of the Well and provides access to the outlet of the Well. There are interpretive waysides found along the trail and at the overlook at the top of the Well.

The Draft Final Accessibility Guidelines for Outdoor Developed Areas (Draft Final – Outdoor) apply to Federal land management agencies, including the National Park Service. The guidelines also apply to non-federal entities that construct or alter facilities on Federal lands on behalf of the Federal government. According to the Draft Final – Outdoor, a trail is defined as, “A pedestrian route developed primarily for outdoor recreational purposes. A pedestrian route developed primarily to connect elements, spaces, or facilities within a site is not a trail.”

Where the Park determines that a specific portion of a trail does not permit full compliance with the trail guidelines set forth in the Draft Final Guidelines for Outdoor Developed Areas, the Park should ensure that the trail complies with the guidelines to the maximum extent feasible. The Park should document the basis for the determination, and should maintain the documentation with the records for the construction or alteration project.

Program Access on Trails

A common misconception among park and recreation practitioners is that the “program access” standard under Section 504 of the Rehabilitation Act only applies to staffed, structured, traditional programs, such as specially scheduled interpretive tours. The program access standard applies to every good, service or activity provided by the Park to the public, including trails. In addition to assessing the trails for physical access, the programmatic elements offered on each individual trail should also be assessed. Program access on trails encompasses more than just information provided on waysides along the trail; it includes the entire experience that the trail offers to a visitor. The experience could include prominent features found along a trail, facilities and/or amenities along the trail, or a type of

environment provided on a trail that may not be found elsewhere within the park. Therefore, it will be necessary to first look at Montezuma Castle and Montezuma Well's *entire* trail system, and then each individual trail, to adequately determine if visitors with disabilities are being offered equal programmatic experiences on the trails at both units of the Park.

Montezuma Castle Trail

There are 12 fixed metal benches along the Castle Trail. The depth of the seats on all 12 benches does not meet the minimum recommendations for seat depth. The seat height of three of the benches varies due to the contour of the ground surface. Seat heights range from 14 ½ inches above the ground surface (which does not meet minimum recommendations) to 18 ½ inches on the same bench. None of the existing benches have the recommended at least one arm rest. Where benches are provided on trails, at least 20 percent but not less than one bench at each location shall be accessible. The Park should purchase and install three accessible benches in place of three existing benches. The Park should use their discretion in placement of the three accessible benches to ensure they are provided at high visitor use locations along the trail and dispersed amongst shade and sun options. Upon installation, ensure the benches provide a firm and stable clear ground space positioned near the bench with one side of the space adjoining the trail. Ensure that the slope of the clear ground space does not exceed maximum recommendations. Consistent with best practices for accessibility, park management has decided to provide accessible benches that also provide back support, at least one armrest, and a seat height of 17-19 inches above the ground surface.

Where the Castle Trail splits to provide access to Castle A, there is a sign installed into the ground surface that reads, "Too steep for wheeled vehicles." While we recognize the intent is to provide cautionary warnings as to the steep grade and non-slip resistant surface (during some instances), the language is restrictive in nature. The Park should remove the existing sign stating "Too steep for wheeled vehicles" and design, produce and install informational signage where the existing sign is located. The trail sign should include the maximum and minimum running slope (grade) of the trail segment and any additional safety related comments (i.e. slippery when wet).

The expansion joints in the concrete Castle Trail tread measure 1 inch in width which creates openings in the trail tread that exceed maximum recommendations. The expansion joints that exceed the maximum requirements are located 384 feet and 520 feet from the Visitor Center. The Park should fill the expansion joints to ensure that openings do not exceed maximum requirements.

Montezuma Well Trail

There are two directions a visitor can take to access the Well and both are via the Well trail: one direction involves multiple sets of stairs, and the other involves a narrow trail with excessive running slope up to 24 percent. Neither of these directions provides an accessible path of travel to the Well. Much of the content and importance of Montezuma Well is portrayed through interpretive waysides that are provided along the Well trail, all of which are not placed on an accessible route. The Well is the main program in which a visitor comes to the Park to see and is not physically accessible to a portion of the Parks' visitors. The recommendation is for the Park to investigate alternative routes up to the rim of the Well to provide visitors with an accessible path of travel to the Well. While there are currently no videos available for viewing at Montezuma Well, NCA has recommended the acquisition of audio visual components to provide programmatic alternatives to the physical barriers within the Park (as addressed in the "Talks and Tours" portion of this report).

The Draft Final – Outdoor guidelines for trails state that no more than 30 percent of the total length of a trail should have a running slope steeper than 8.33 percent (1:12). The running slope of any segment of trail should not be steeper than 12.5 percent. A total of 85 percent of the Well trail contains a running slope greater than 8.33 percent. The average running slope of the trail is approximately 18.5 percent, with a maximum slope of up to 22 percent near the intersection of the Well trail and the portion of trail that leads to the outlet. Due to the terrain of the Well, it has been determined that it is impracticable for the entire Well trail to comply with the technical recommendations in the Draft Final – Outdoor guidelines. Montezuma Well should keep this documentation as the basis for determination, and should maintain the document with the records for any future construction and/or alteration projects.

10. Concessions

Western National Parks Association is Montezuma Castle’s operating concessionaire, managing the Park bookstore, and providing educational items for visitors. Concessions for the Park are provided with a portion of the Visitor Center. There were no deficiencies noted at the time of the assessment. Montezuma Well does not have a dedicated area for concessionaire sales, but items available at Montezuma Castle include items pertinent to Montezuma Well.

Provision of accessible goods, activities and services by the concessionaire should be reviewed as part of the annual NPS evaluation. At a minimum, the concessionaire should strive to achieve the same level of program access as is expected of the programs or services offered by the National Park Service. As such, taking action on the recommendations to improve program access as outlined in this report would also be prescribed for the concessionaire. For example, when new inventory is selected, buyers are encouraged to seek video/DVD programs with captions and audio description and make those titles known to customers. If videos or DVDs are shown in retail spaces, versions with open-captions and audio descriptions are recommended for viewing.

11. Planning and Maintenance

At the time of the assessment, replacement interpretive waysides had been purchased for both Montezuma Castle and Montezuma Well. The waysides were not installed at the time of the assessment and NCA staff did not provide a review of either the interpretive content of physical structure of the waysides. The Park should consult with the NPS Wayside Exhibit guidelines that are available upon installation of the waysides.

VII. Action Planning

Upon receipt of the assessment data, it will be critical for Park personnel to review and embark on a series of actions to continue planning for improved access to the programs and facilities at Montezuma Castle and Montezuma Well.

Park senior management is encouraged to establish a core accessibility management team with representation from various divisions including interpretation, maintenance, administration, concessions and senior management. Representation should include individuals with decision-making authority in order to appropriately prioritize funds while assuming responsibilities for compliance oversight in those key areas.

A process to review and prioritize corrective actions to improve Park access for visitors with disabilities should be developed. In addition, a strategy and timeline should be outlined to conduct accessibility

assessments of facilities and programs as they are changed or updated so that any deficiencies may be entered into FMSS, and proposed corrective actions can be cost estimated to serve future planning and budget requests.

A process to review all new construction and renovation plans or designs should be implemented to ensure the minimum accessibility standards and guidelines are appropriately applied and opportunities for the application of universal design are seized. In addition, a process to inspect all construction projects for compliance with the minimum accessibility standards and guidelines should be established.

Provide staff training for full-time staff, seasonal staff and volunteers on select topics including the application of the accessibility standards and guidelines for Park maintenance; the principles of universal design; program access; methods for developing accessible interpretive programs; the accommodation process; techniques for interacting with people with disabilities and the use of people first language. Interpretive staff should receive more specific training on the provision of audio description for people with visual impairments and tailoring talks for people with cognitive impairments. Frontline customer service staff should also receive a seasonal update on accessibility improvements in order to field and/or refer questions on accessibility from the public.

An ongoing evaluation of programs, services and activities should be instituted to ensure the Park is meeting the needs of visitors with disabilities.