

FINDING OF NO SIGNIFICANT IMPACT  
FOR THE  
REHABILITATION AND/OR REPLACEMENT OF THE FITZWATER TRUSS  
BRIDGE AND WASTE WEIR BRIDGE, CONSTRUCTION OF A TRAILHEAD, AND  
MISCELLANEOUS IMPROVEMENTS ON FITZWATER ROAD  
ENVIRONMENTAL ASSESSMENT

CUYAHOGA VALLEY NATIONAL PARK

BACKGROUND

Cuyahoga Valley National Park (the Park), under the administration of the National Park Service (NPS), was originally designated as a National Recreation Area in 1974 to preserve approximately 33,000 acres in the Cuyahoga River Valley. It was designated as a National Park in 2000. The Park has preserved several areas of recreational, cultural, educational, and historic significance, including the Cuyahoga Valley Environmental Education Center, the Blossom Music Center, the Porthouse Theater, Brandywine Golf Course, Shawnee Hills Golf Course, Astorhurst Golf Course, Brandywine Ski Resort, Brecksville Stables, Wetmore Bridle Trails, and the Cuyahoga Valley Scenic Railroad.

At the Cuyahoga Valley National Park, the NPS has proposed to rehabilitate and/or replace the Fitzwater Truss Bridge over Cuyahoga River and the Waste Weir Bridge over the Ohio & Erie Canal, in Cuyahoga County, Ohio. Also addressed is the proposed construction of a public trailhead and other minor roadway improvements. The roadway work would consist of reconstruction of Fitzwater Road with proper bridge approaches.

Fitzwater Road extends from Canal Road west, and ends at the Cuyahoga Valley Scenic Railroad maintenance yard. Along this segment of the road there are two bridges, the Fitzwater Truss Bridge spanning the Cuyahoga River, the Waste Weir Bridge spanning the Waste Weir, and a culvert spanning the Ohio & Erie Canal (Canal). Fitzwater Road is used by Park visitors to access the Towpath Trail, an important historic and recreational feature of the Park. Fitzwater Road is also used by the Cuyahoga Valley Scenic Railroad, a partner of the Park, to access their maintenance yard. The Cuyahoga Valley Scenic Railroad is also an important feature of the Park, as they conduct train rides along the rail corridor throughout the year.

The existing Fitzwater Truss Bridge is critically deficient and presents a safety hazard. Deterioration of the structural steel has made this bridge unsafe for vehicular traffic; therefore the bridge was closed to all vehicular traffic as of November 2007. The Federal Lands Highway Bridge Inspection Program, administered by the Federal Highway Administration (FHWA), last inspected this bridge in October 2007. The main problems include severe widespread rusting of the underside structural steel with severe section loss on the truss lower chord members, gusset plates, floor beams, and stringers, with especially accelerated corrosion noted on the exterior stringers; moderate decay of the timber sleepers; spalling of the west abutment with exposed rebar; severe deterioration of

the southwest wingwall; severe deterioration of the asphalt topping on the timber block wearing surface; and moderate to severe channel bank erosion. In addition, the superstructure deflects significantly under truck loading. The lower chords were retrofitted with post-tensioning rods in 1995. This retrofit has now exceeded its design life, and is of highly questionable effectiveness. The channel meanders in this location, and the inadequate length of the bridge causes hydraulic problems.

The existing Waste Weir Bridge is deficient, functionally obsolete, and requires a high degree of maintenance. The FHWA's Federal Lands Highway Bridge Inspection Program last inspected this bridge in October 2006. The main structural problem is widespread moderate to severe deterioration throughout the structural concrete, with numerous exposed and rusted rebars. In addition, the railing system is functionally obsolete.

The existing Towpath Trail intersects Fitzwater Road between the two bridges and the crossing is approximately thirty feet east of the Truss Bridge. There is no existing paved trailhead for visitor access in this vicinity and there is inadequate width for vehicles to park along the shoulder. All trail users who intend to enter or exit at this site are traveling to and from Canal Road, to the east of the trail.

The Environmental Assessment for the Rehabilitation and/or Replacement of the Fitzwater Truss Bridge and Waste Weir Bridge, Construction of a Trailhead, and Miscellaneous Improvements on Fitzwater Road (EA) was available for public review from July 28, 2008 through August 28, 2008. The EA analyzed five alternatives: Alternative A - No Action, Alternative B - Rehabilitate Fitzwater Truss and Replace Waste Weir, Alternative C - Replace Both Bridges on the Existing Alignment, Alternative D, Option 1 - Replace Both Bridges on a New Alignment, Fitzwater Road Aligns to a Four-Way Intersection with Canal Road, and Alternative D, Option 2 - Fitzwater Road Aligns to a T-Intersection with Canal Road. Alternative D, Option 1 was determined to be the Preferred Alternative. The NPS is the lead federal agency for the EA, and the FHWA is a cooperating agency. This decision document will serve as a joint decision document and state the decision of both agencies. The EA was prepared pursuant to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) (40 CFR 1500 et seq.), 42 U.S.C. 4332(2)(C), and NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making Handbook (2001) (DO-12).

#### SELECTED ALTERNATIVE

The NPS, in cooperation with the FHWA, has selected Alternative D, Option 1, described as: Replace Both Bridges on a New Alignment; Fitzwater Road Aligns to a Four-Way Intersection with Canal Road. Under this Alternative, the Fitzwater Truss Bridge and the Waste Weir Bridge will be replaced along a new roadway alignment spurring from the existing Fitzwater Road. The existing bridges will be demolished. The asphalt approaches to the old bridges will be obliterated and the area will be regraded and

revegetated. Fitzwater Road will be raised to meet the bridge abutment at west side of the Cuyahoga River, and will transition down to the raised Fitzwater Road at a 5 percent grade. The length of Fitzwater Road will be scarified, fill material will be added to raise the road by approximately three feet, and the road will be paved with asphalt. The Towpath Trail will be raised to cross Fitzwater Road at grade, and the raised crossing will be transitioned to the existing Towpath Trail at a maximum 5 percent grade.

A public trailhead with associated parking will be constructed on the west side of the Cuyahoga River south of Fitzwater Road. A trail will be constructed to connect the parking area to the Towpath Trail, and trail users will be able to utilize a sidewalk on the bridge. The parking area will accommodate approximately 20 vehicles. The configuration and size of the parking area will be finalized during the design process.

In order to provide necessary access to the Cuyahoga Valley Scenic Railroad maintenance yard while the old Fitzwater Truss Bridge is closed to vehicular traffic because of safety concerns, an access road will be constructed following the existing sewer access road from Pleasant Valley Road and running adjacent to the existing rail line, ending at Fitzwater Road. The one lane access road will include several pullouts to allow vehicles to pass. The road will be used only by the Park and Cuyahoga Valley Scenic Railroad, and for construction access; and will be closed to the public. The road will also be removed once the new bridges are constructed and open to vehicular traffic.

#### OTHER ALTERNATIVES CONSIDERED

##### Alternative A

Under Alternative A, the No Action Alternative; no substantial improvements would be performed other than in accordance with routine maintenance operations. The Waste Weir Bridge and Canal Culvert would continue to deteriorate and experience reduced load capacity. The Fitzwater Truss Bridge would continue to be closed to vehicular traffic. The Park would not be able to access their maintenance yard via the Fitzwater Road bridges and visitors would no longer be able to access the Towpath Trail at this location.

##### Alternative B

Alternative B, Rehabilitate Fitzwater Truss Bridge and Replace Waste Weir Bridge; would consist of leaving the existing structure of the Fitzwater Truss Bridge in place and replacing individual structural members and hardware that have deteriorated such as beams, truss chords, concrete deck, cover plates, railing, joints, and bearings. The abutments and wingwalls would be either replaced or repaired. The abutments would be protected from scour caused by the forces of flowing river water by the placement of rip rap around the base of each abutment. The box culvert in the Canal would be replaced with a similar structure. The existing Fitzwater Truss Bridge structure may have problems that are difficult to correct with rehabilitation. This Alternative would also

include the demolition of the existing structure over the Waste Weir and the construction of a new approximately 70-foot long bridge.

#### Alternative C

Alternative C, Replace Both Bridges on the Existing Alignment; would consist of removing the entire existing structure of the Fitzwater Truss Bridge and constructing a new bridge, approximately 270 feet in length, in its place. The Replacement Alternative would also include the construction of a new approximately 70-foot long bridge over the Waste Weir. The box culvert in the Canal would be replaced with a similar structure. Fitzwater Road would be raised to meet the bridge abutment at west side of the Cuyahoga River, and would transition down to the raised Fitzwater Road at a 5% grade (American Disability Act requirements allow a maximum grade of 5%). The length of Fitzwater Road would be scarified, fill material would be added to raise the road by approximately three feet, and the road would be paved with asphalt. The Towpath Trail would be raised to cross Fitzwater Road at grade and the raised crossing would be transitioned to the existing Towpath Trail at a maximum 5 % grade.

#### Alternative D, Option 2

Alternative D, Replace Both Bridges on a New Alignment; would consist of the replacement of the Fitzwater Truss Bridge and the Waste Weir Bridge along a new roadway alignment spurring from the existing Fitzwater Road. The existing bridges would be demolished. The asphalt approaches to the bridges would be obliterated and the area regraded and revegetated. Fitzwater Road would be raised to meet the bridge abutment at west side of the Cuyahoga River, and would transition down to the raised Fitzwater Road at a 5% grade. The length of Fitzwater Road would be scarified, fill material would be added to raise the road by approximately three feet, and the road would be paved with asphalt. The Towpath Trail would be raised to cross Fitzwater Road at grade and the raised crossing would be transitioned to the existing Towpath Trail at a maximum 5 % grade. The Fitzwater Truss Bridge would be replaced with an approximately 175-foot long bridge approximately 350 feet downstream (north) from its existing location. A concrete slab bridge, approximately 60 feet in length, would be constructed to span the Canal. The new alignment would tie into Canal Road at a stop sign to create a T-intersection. The existing Fitzwater Truss Bridge and Waste Weir Bridge would be removed; however the existing culvert spanning the Canal would be left in place and rehabilitated to avoid impacting the Canal.

## ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative is the alternative that will promote the national environmental policy expressed in NEPA (Sec. 101 (b)). This includes alternatives that:

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
- attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Simply put, "this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources" (Q6a).

Alternative D-1, Replace Both Bridges on a New Alignment, Fitzwater Road Aligns to a Four-Way Intersection with Canal Road, is the Environmentally Preferred Alternative. There is not one alternative that has the least impact to all of the historic, cultural, and natural resources; however, Alternative D-1 is the alternative that best balances those impacts. Alternative A would have the least impact on vegetation, because there would be no action. However, the temporary impact to vegetation from the clearing needed to construct the access road and the new bridge alignment of Alternative D-1 will be compensated by revegetation of the existing road and bridge alignments and the revegetation of the access road after construction is completed. Alternative B would have the least impact to the cultural landscape because there would be no impact to the Towpath Trail from raising the bridge over the Cuyahoga River and the river crossing would remain in its original location. However, Alternative D-1 moves the road alignment only slightly north and minimizes impacts to the Towpath Trail. The existing Canal culvert will also remain in place to allow visitors to interpret the original road crossing location. Alternative C would have the least impact to the floodplains; however the short-term impacts from Alternative D-1 will end after the abutments of the existing Fitzwater Truss Bridge are removed from the Cuyahoga River. Alternatives C and D-1 will have the least impact to streamflow characteristics because the additional bridge length will minimize channel constriction and reduce flow velocities through the bridge.

## WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined at 40 CFR §1508.27, from the regulations of the Council on Environmental Quality that implement the provisions of NEPA, significance is determined by examining the following criteria:

*Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.*

The Selected Alternative will include ground disturbance and the placement of fill material to construct the bridges on a new alignment. These activities will have a long-term minor adverse impact to vegetation. The new alignment of Fitzwater Road and raising the profile of the Towpath Trail will have a long-term minor adverse impact to cultural landscape.

The bridge over the Cuyahoga River will be lengthened and raised to better accommodate debris movement and flood waters during storm events, which will have a long-term minor beneficial impact to floodplains and streamflow characteristics.

Fill material will be placed to construct the access road to the maintenance yard, and to construct the new alignment of Fitzwater Road, which will have short-term minor adverse impacts to floodplains, until the existing bridges and the access road are removed after construction of the new bridges is complete. The Towpath Trail will be impacted while the new bridges are constructed, and may include detours and temporary closures. This will have a short-term minor adverse impact to visitor use and experience.

The re-alignment of Fitzwater Road to a four-way signalized intersection and the construction of a new parking area and trailhead will have a long-term moderate beneficial impact to visitor use and experience, health and safety, and park operations. Short-term negligible adverse impacts to health and safety will occur during construction due to the presence of construction equipment which increases the potential for conflicts.

*The degree to which the action affects public health or safety*

The Selected Alternative will have a long-term moderate beneficial impact to health and safety. The re-alignment of Fitzwater Road to a four-way signalized intersection will improve turning movements for vehicles traveling on Fitzwater Road to the newly constructed trailhead and parking area. Short-term minor adverse impacts will occur during construction because of the possible conflicts between construction equipment and motorists. [Issue of pedestrians in the roadway?]

*Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas*

A National Historic Landmark is located within the study area, and is comprised of the Canal, Alexander Mill, the Lock Tender's House, Locks 37 and 38, and the Tinkers Creek Aqueduct. No contributing components of the National Historic Landmark will be impacted by the Selected Alternative. Wetland complexes are located within the Cuyahoga Valley floodplain and were delineated in the vicinity of the proposed action. The new alignment of Fitzwater Road will not impact wetlands, and the alignment of the temporary access road was modified to avoid impacting wetlands to the extent possible. The access road will impact approximately 0.093 acres of wetlands. The study area is within the range of the Federally endangered Indiana bat. A mist net survey was completed in 2005, and a site visit to identify potential roost trees was completed in 2008. No Indiana bats were found, and potential roost trees along the maintenance yard access road will not be removed. Therefore the Selected Alternative is not likely to adversely affect these endangered and threatened species or critical habitat. There are no prime farmlands or wild and scenic rivers within the study area.

*The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

Implementation of the project will not result in controversial effects on the human environment. Most of the comments received during the public comment period indicated a preference for the Selected Alternative.

*Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.*

There are no identified risks associated with the selected alternative that are unique or unknown, and there are no effects associated with the selected alternative that are highly uncertain that were identified during the analysis for the EA or during the public review of the EA.

*The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

The Selected Alternative does not establish a precedent for any future actions that may have significant effects, nor does it represent decisions about future considerations. The purpose of this action is to address safety concerns associated with the deterioration of the Fitzwater Truss Bridge and Waste Weir Bridge.

*Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

Related present and future actions include the expansion and improvement of the Cuyahoga Valley Scenic Railroad boarding area at Old Rockside Road in conjunction with the extension of passenger rail service to downtown Cleveland, extension of the Towpath Trail into downtown Cleveland, continued growth of Independence and Valley View. The Selected Alternative, along with the known impacts from other actions in the past, will not cause a significant cumulative impact.

*The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources.*

The Fitzwater Truss Bridge and Waste Weir Bridge are not eligible for listing in the National Register. Impacts to the Ohio & Erie Canal, and Lock 37, listed in the National Register, will be avoided. No contributing components of the National Historic Landmark will be impacted by the Selected Alternative. The proposed project will not adversely impact resources listed or eligible for listing in the National Register. The State Historic Preservation Office concurred with this finding on June 12, 2008.

*The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

After initial coordination with the FWS, a Biological Assessment was completed to determine the presence of any federally listed or candidate species, and the impacts of the project on the species. The Biological Assessment found that although potential habitat exists in the study area, there were no federally-listed species present. Two potential roost trees for the Indiana bat were identified along the proposed access road alignment; and will be noted in the project plans to not be removed. Also, no tree clearing will occur between April 1<sup>st</sup> and September 30<sup>th</sup>. The FWS concurred that the proposed project, including the construction of the access road, is not likely to adversely affect the Indiana bat or the eastern massasauga rattlesnake. The Selected Alternative will not adversely affect any federally listed species.

*Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

This action violates no Federal, State, or local environmental protection laws.

#### MITIGATION

In order to minimize the environmental impacts associated with the selected alternative, the following measures will be taken:



- Access to the maintenance yard will be maintained at all times.
- All staging will occur within previously disturbed areas of the Park. The maintenance area and Fitzwater Road could both be used for staging.
- Closures and detours of the Towpath Trail will be limited to the extent possible.
- An erosion and sediment control plan will be prepared to meet Ohio and NPS standards and guidelines. All Best Management Practices to limit erosion and sedimentation will be incorporated to the extent possible.
- In order to reduce the impact of adding asphalt (impervious surface) to the area, options to make the parking area less impervious will be evaluated during the design process and implemented if feasible.
- If any archeological resources are discovered during the construction of the project, all work will stop, and the appropriate agency personnel would be notified.
- In the unlikely event that human remains or cultural items subject to the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered, all work would stop, and the appropriate provisions of NAGPRA would be followed.

## PUBLIC INVOLVEMENT

A scoping letter advising the public of the proposed action and seeking comments regarding potential alternatives was distributed to the Park's mailing list in November 1, 2006. A public notice was placed in the Akron Beacon Journal and the Plain Dealer on October 31, 2006, announcing the start of the 45-day public scoping comment period. Approximately six comments were received from the public. A press release was also issued through the NPS. Comments included concern with the impacts caused by construction, including soil compaction, erosion of disturbed soils and contaminants from the project site, and disruption of wildlife movements. Incorporating canoe access into the project was suggested, and one commenter expressed that they would like to see rehabilitation of the existing truss bridge.

The EA was made available for public review and comment from July 28, 2008 through August 28, 2008. A notice of availability was published in the Akron Beacon Journal and the Plain Dealer. Copies of the EA were made available at the Headquarters of the Cuyahoga Valley National Park, the Canal Visitor Center, and the Brecksville Branch of the Cuyahoga County Public Library. Approximately 5 comments were received from the public. Comments indicated a preference for the Preferred Alternative, proposed the reuse of the Fitzwater Truss Bridge as a pedestrian bridge at an alternate location, requested replacing the bridge as soon as possible, and proposed constructing a permanent roadway along the access road alignment. The Statement of Findings for Floodplain Management was released for public review and comment as part of the EA.

## IMPAIRMENT STATEMENT

In addition to reviewing the list of significance criteria, the National Park Service has determined that implementation of the proposal will not constitute an impairment to the critical resources and values of the Park. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, public comments, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in National Park Service Management Policies 2006. The plan under the selected alternative will not result in any adverse impacts to Park resources. Overall, the plan results in benefits to Park resources and values, opportunities for their enjoyment, and it does not result in their impairment.

## CONCLUSIONS

The Selected Alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The selected alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible or minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:

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John P. Debo  
Superintendent  
Cuyahoga Valley National Park  
National Park Service

\_\_\_\_\_  
Date

Recommended:

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