

## CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

### GENERAL METHODOLOGY FOR ESTABLISHING IMPACT THRESHOLDS AND MEASURING EFFECTS

This chapter addresses the potential impacts to each of the resource areas (e.g. impact topics) discussed under the “Affected Environment” chapter for each of the alternatives. Each action alternative is compared to the no action alternative, or baseline conditions to determine resource impacts. In the absence of quantitative data, best professional judgment was used. In general, impacts were determined through consultation and collaboration with a multidisciplinary team of NPS and other professional staff. Regulatory agency consultation with the U.S. Fish and Wildlife Service, Pennsylvania Department of Environmental Protection, and other existing data sources such as park planning documents were also used to assess the potential impact of each alternative.

Potential impacts of all alternatives are described in terms of type (beneficial or adverse); context; duration (short- or long-term); and intensity (negligible, minor, moderate and major). Definitions of these descriptors include:

- *Beneficial*: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.
- *Adverse*: A change that declines, degrades, and/or moves the resource away from a desired condition or detracts from its appearance or condition.
- *Context*: Context is the affected environment within which an impact would occur, such as local, park-wide, regional, global, affected interests, society as whole, or any combination of these. Context is variable and depends on the circumstances involved with each impact topic. As such, the impact analysis determines the context, not vice versa.
- *Duration*: The duration of the impact is described as short-term or long-term. Duration is variable with each impact topic; therefore, definitions related to each impact topic are provided in the specific impact analysis narrative.
- *Intensity*: Because definitions of impact intensity (negligible, minor, moderate, and major) vary by impact topic, intensity definitions are provided separately for each impact topic analyzed.

### CUMULATIVE IMPACTS

NEPA regulations require an assessment of cumulative impacts in the decision-making process for Federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts can result from individually minor, but collectively moderate or major actions that take place over a period of time.

Cumulative impacts are considered for all alternatives, including the No Action alternative. Cumulative impacts were determined by combining the impacts of the alternative being considered with other past, present, and reasonably foreseeable future actions. The following projects were identified as having the potential for impacts to the resources that are evaluated in this environmental assessment. These projects include past, present and reasonably foreseeable future actions within the surrounding area.

## **IMPAIRMENT ANALYSIS**

The NPS *Management Policies 2001* require an analysis of potential effects to determine whether or not actions would impact park resources, but also to determine whether those actions would impair park resources. The fundamental purpose of the national park system, as established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. These laws give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. NPS managers must always seek ways to avoid or minimize, to the greatest degree practicable, adversely impacting park resources and values.

The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts. An impact to any park resource or park value may constitute impairment, but an impact would be more likely to constitute impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park.

An impairment determination is included in the conclusion statement for all impact topics related to natural resources. Impairment determinations are not made for health and safety or park operations and management because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values. Impairment determinations are not made for visitor use and experience because, according to the Organic Act, enjoyment cannot be impaired in the same way an action can impair park resources and values.

## **IMPACTS COMMON TO ALL ALTERNATIVES**

Resources considered, but eliminated from further evaluation, are discussed in Chapter 3. This section identifies and evaluates impacts that are common to all alternatives.

### **Structural Stabilization**

For all alternatives, the timber beams along bearing line #2 supporting the first floor of Moorhead Cottage must be reinforced for any type of re-use. Future investigations into Brown Cottage will be conducted to ensure that termite damage has been properly corrected and that the south bearing line supporting the first floor has been properly reinforced. All structures will be in compliance with the Americans with Disabilities Act and will comply with the respective codes required for their selected use. All debris and any hazardous materials will be removed, carpets

removed, roofs and gutters replaced, and electrical wiring and plumbing re-evaluated. These actions will apply to all alternatives.

### Increased Visitation

Interpretation of the complete Johnstown Flood story and memorializing the events that led up to and occurred after that disaster are the mission of the memorial. Increasing park visitation is an objective of the National Park Service in meeting this mission. However, the introduction of new and more people into the neighborhood will result in one of the greatest changes to the area, both positive and negative, for all alternatives. Increased pedestrian and vehicular activity, increased human and traffic-related noise, competition for on-street parking, and other human disturbances will most likely occur. For some residents, just the presence of unknown persons walking or driving through the neighborhood may be disturbing.

**Table 4-1** shows the historic (2003-2005), the existing (2006) and projected visitation (2007-2013) that may occur as a result of including the Clubhouse, Clubhouse Annex and cottages within the park.

**Table 4-1: Existing and Projected Visitation to Johnstown Flood NMem with NPS Acquisition of the Clubhouse, Annex and Cottages, 2003-2016**

Year	Total Visitation	Increase	Non-Residents
2016	115,895	5,106	3,829
2015	115,895	5,106	3,829
2014	115,895	5,106	3,829
2013	115,895	5,106	3,829
2012	115,895	5,106	3,829
2011	130,349	19,560	14,670
2010	144,804	34,014	25,511
2009	159,258	48,469	36,351
2008	143,102	32,312	24,234
2007	126,946	16,156	12,117
2006	110,789		
2005	111,987		
2004	115,020		
2003	105,361		

Source: Bruce Lord. Ph.D. "Cost/Benefit Analysis Prepared for the Adaptive Re-use of the 1889 South Fork Clubhouse and Associated Structures at the Johnstown Flood Memorial," June 23, 2006.

## HISTORIC AND CULTURAL RESOURCES

### Methodology

The National Environmental Policy Act of 1969 (NEPA), Sections 106 and 110 of the National Historic Preservation Act of 1966 (NHPA), and *Protection of Historic Properties* (36 CFR Part 800) require Federal agencies to preserve and protect historic and archaeological resources and to take into account the effects of their actions on historic properties. Pursuant to §101(b) of NEPA, Federal agencies are responsible for preserving "important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice." As directed by law and policy, Federal agencies must consider the cultural environment, as well as the natural environment when making decisions that might result in any environmental impacts.

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of their actions on historic properties and afford the Advisory Council an opportunity to comment on such undertakings. The procedures set forth in 36 CFR Part 800 define how Federal agencies must meet these statutory responsibilities. Section 110 of the NHPA requires that the National Park Service identify and nominate all eligible resources under its jurisdiction to the National Register of Historic Places.

The Secretary of the Interior's *Standards for Rehabilitation* are 10 basic principles created to help preserve the distinctive character of a historic building and its site, while allowing for reasonable change to meet new needs. These Standards, found at 36 CFR Part 67, apply to the exterior and the interior of historic buildings of all periods, styles, types, materials, and sizes. The Standards also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction.

Based on consultation with the Bureau of Occupational and Industrial Safety, Pennsylvania Department of Labor & Industry, compliance with the energy conservation code requirements found in the *2006 International Energy Conservation Code* is required.

The *Historic Structures Report for the South Fork Fishing and Hunting Club Clubhouse, Brown Cottage, Moorhead Cottage, and Clubhouse Annex*; the *Draft Report Phase I, II, and III Archaeological Investigations of the South Fork Fishing and Hunting Club Clubhouse and Phase I Investigations at the Moorhead Cottage* were reviewed. The Environmental Screening Form for Facility Rehabilitation, Director's Order 48A, *Concession Management*, and Director's Order 17, *Tourism*, were also reviewed.

## Context

The four historic structures under evaluation are situated in a quiet residential neighborhood in the small village of St. Michael. These structures are four of the remaining 10 structures from 14 original summer cottages built in the 19<sup>th</sup> century by wealthy and influential business people. These structures are significant to the establishment and the interpretation of the South Fork Fishing and Hunting Club Historic District, which was listed in the National Register of Historic Places on July 31, 1986.

Both the Brown Cottage and Moorhead Cottage are situated on small parcels with steep inclines, in close proximity to adjacent single-family residences. The Clubhouse sits on a much larger parcel and has a 60- to 100-foot buffer from adjacent residences.

At one time Lake Conemaugh, a reservoir, was across the road toward Locust Street (Route 869). The Clubhouse, Clubhouse Annex and cottages, as well as boat houses, bridges and boat launches were scattered along the shoreline. Today, other than adjacent residences in the immediate neighborhood, the Rose of Sharon, a private personal care home, is located at 135 Main Street across from the Brown and Moorhead Cottages.

On September 29, 2006, the South Fork Fishing and Hunting Club Clubhouse, the Clubhouse Annex, Brown Cottage and Moorhead Cottage were acquired by the NPS from the Friends of the Johnstown Flood National Memorial. As part of its trustee responsibilities, the NPS will administer these structures in conjunction with the Johnstown Flood NMem for all alternatives.

## Impact Thresholds

The following impact thresholds were derived to provide relative levels of impacts on historic and cultural resources by alternative.

*Negligible*-Historic structures would not be impacted or there would be no measurable effect.

*Minor*-Impacts would be detectable, but with minimal change to historic structures. Mitigation would be needed to offset adverse impacts and would be relatively simple to implement and would likely be successful.

*Moderate*-Changes to structures would be readily apparent and result in a change to the character. Mitigation measures would be necessary to offset adverse impacts and would likely be successful.

*Major*-Impacts to historic structures would be readily apparent and would substantially change the character of the structures. Mitigation measures necessary to offset adverse impacts would be needed, extensive, and their success would not be guaranteed.

*Duration*-Short-term impacts occur during all or part of alternative implementation; long-term impacts extend beyond implementation of the alternative.

## Impacts of Alternative 1-No Action

Debris and old carpets in all the buildings will be removed to avoid mildew and mold. When roofs are replaced on any of the structures, historic replicas of the old gutters would be installed where possible. The concrete gutters around the base of the buildings will be removed and electrical wiring will be evaluated in all buildings.

The exteriors of all the buildings may be altered to accommodate future needs. If altered, the architectural elements would emulate the original design/construction features of the building. However, these alterations would be obvious through the use of contemporary construction techniques and materials.

Capital improvement and stabilization costs for Alternative 1 are expected to range between \$500,000 and \$1 million; annual maintenance costs for the four structures under Alternative 1 are estimated to range between \$10,000 and \$15,000.<sup>1</sup>

## South Fork Fishing and Hunting Club Clubhouse

Under Alternative 1, NPS would continue to stabilize the Clubhouse to ensure visitor and park personnel safety and access, to ensure the structural integrity of the buildings and to prevent continued deterioration to historic resources. This alternative considers maintaining the structures as they currently are being used. HVAC, plumbing and rewiring are essential improvements that would be necessary for the Clubhouse to be utilized under any alternative. Installation of air conditioning may not be necessary if insulation is properly installed. Geothermal cooling may be considered desirable to provide adequate climate controls, such as the appropriate level of humidity to maintain much of the cottage's original woodwork.

A Fire Prevention Plan has been prepared and fire detection and intrusion alarm systems will be installed in all structures with minimal impacts to the structure. Funding will be requested to install fire suppression systems in all buildings.

The ground floor of the Clubhouse is currently used for tours, meetings and hosting special events. A gift shop formerly operated by the Friends of Johnstown Flood is now closed. The

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<sup>1</sup> Keith Newlin, Superintendent, Johnstown Flood NMem, email dated Nov. 9, 2006.

Clubhouse would not be rehabilitated and would continue to be used for limited purposes, such as park interpretation and tours, as well as special events permitted by NPS.

With minor modifications, the ground floor could be adapted to accommodate the following uses:

- Visitor information desk and interpretive exhibits
- Gift shop
- Office for the Friends of Johnstown Flood National Memorial
- Conference or meeting room
- Facility support

These uses are compatible with the structure, adjacent land uses and existing zoning, and with the mission of the Johnstown Flood NMem.

The two upper floors of the Clubhouse are currently open for tours and are interpreted, but neither floor is used for any activity or function. With management of the structures by NPS, the Clubhouse will require further modifications to meet the requirements of the *Architectural Barriers Act of 1968* and the *Americans with Disabilities Act of 1990*. The first floor of the Clubhouse is currently wheelchair accessible.<sup>2</sup>

The NPS plans to construct a new drainage system around the foundation of the Clubhouse within the next couple of years. In addition to the general recommendations discussed earlier for removal of debris and old carpeting, roof and gutter repair, and wiring, earth will be removed from around the wood siding and properly graded so that any surface water runoff flows away from the building.

If Alternative 1 is implemented, the potential impacts to the Clubhouse would be **Minor** as impacts would be detectable and with minimal change to the historic structure. However, major benefits would occur to the structure through stabilization and safety improvements and through proper maintenance and preservation of the building.

### **Clubhouse Annex**

With Alternative 1, the Annex would continue to be leased as four residential apartments, and NPS would provide routine maintenance to the units in this structure. Residential use of this structure is compatible with adjacent land uses and with the existing zoning in the neighborhood.

The HSR reported that the exterior of the building has not been restored. Under Alternative 1, a new roof with new gutters and downspouts would be installed on the Annex. Once a new roof is constructed, restoration of the exterior cladding and porches can be completed.

There would be **no impacts** to the Annex for implementation of Alternative 1. However, major benefits would occur to the structure through structural improvements and through proper maintenance and preservation of the building.

### **Brown Cottage**

The Brown Cottage would continue to be leased as a duplex rental property. This use would be compatible with adjacent land uses and with the existing zoning. One unit contains 4 bedrooms and the second unit contains 3 bedrooms. This structure had the highest humidity conditions of all

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<sup>2</sup> National Park Service. Environmental Screening Form. Revised November 2003. "Create Black Box Theater."

the structures surveyed and removal of old carpeting would be important. Earth is also in contact with the siding. Framing would be reworked similar to the recommendations for the Clubhouse.

The potential impacts to Brown Cottage for implementation of Alternative 1 would be **Minor**. However, major benefits would occur to the cottage through removal of carpeting, proper climate control, and preservation of the building.

### **Moorhead Cottage**

With Alternative 1, Moorhead Cottage would continue to be stabilized and rehabilitated for safety, access and interpretive purposes. Stabilization of Moorhead Cottage would continue and safety improvements would be provided. This cottage would be interpreted as part of the story of the Johnstown Flood.

Moorhead Cottage is currently empty and does not have any utilities or facilities. It could be interpreted from the outside during tours as part of the Johnstown Flood story. However, maintaining this structure as an abandoned building is not practicable or safe, as it will only increase the likelihood of vandalism, create a liability issue for NPS, and it would not be an asset to the neighborhood. The least intrusive mode of providing heat to Moorhead Cottage would be electric baseboard heat. However, this form of heat is not the most efficient form of heating in terms of cost and may not be feasible to maintain.

Although this cottage does not contain any debris, the roof has been weatherproofed and temporarily repaired to correct leaks. The roof needs advanced repairs or complete replacement. A property foundation pier or piers should also be installed as soon as possible.

The potential impacts to Moorhead Cottage for implementation of Alternative 1 would be **Moderate**, as changes to existing resource conditions would occur and would be readily apparent. There would be changes to the conditions of the building but not to the character. These changes would be in the form of safety and structural improvements, including new or repaired roofing and structural support of the first floor. Major benefits would occur through stabilization and safety improvements and through proper maintenance and preservation of the cottage.

### **Cumulative Impacts of Alternative 1-No Action**

Overall, selection of Alternative 1 would result in providing structural and safety improvements and retaining existing resource conditions. Existing uses of the structures would continue as they currently exist, though minimal changes and improvement to the structures would be implemented. Therefore, the cumulative impacts associated with Alternative 1 would be **Minor**. Long-term benefits would involve preservation and interpretation of these historic structures as part of the Johnstown Flood story.

### **Conclusion**

Structural stabilization and safety improvements would continue to be implemented over time at the Clubhouse, Clubhouse Annex, Brown Cottage and the Moorhead Cottage. Implementation of Alternative 1 would result in **Minor** impacts to the Clubhouse and Brown Cottage. There would be **no impacts** for residential use to the Clubhouse Annex. Moorhead Cottage would sustain **Moderate** impacts due to the structural improvements needed to enable residential use of this cottage. Long-term positive benefits through the preservation of the resources. The changes would also provide long-term benefits to the community through structural, safety and aesthetic improvements and through use of the buildings.

## Impacts of Alternative 2-Adaptive Re-Use of Structures

Based on the HSR and scoping comments, Alternative 2 addresses a wide range of general adaptive re-uses for the historic structures. These uses are further discussed in Chapter 2-Alternatives. In summary, these categories of general uses include:

- a) Residential
- b) Tourism
- c) Entertainment
- d) Community Uses
- e) Park Orientation, Interpretation and Education Uses
- f) Concessions and Exhibit Space

Potential impacts to the historic structures for which any of these adaptive re-uses may apply are addressed in the following discussion.

### South Fork Fishing and Hunting Club Clubhouse

**Residential:** The upper two floors of the Clubhouse could be adaptively re-used for apartments or boarding rooms. Approximately 18 single rooms with private baths could be accommodated if the structure is adapted for use as a boarding house. Otherwise, approximately 9-10 units could be converted to one or two bedroom apartments. Before the Clubhouse could be restored for residential use, the beams supporting the first floor would need to be reinforced. The second and third floors do not require structural modifications.

The most significant alteration needed to the Clubhouse would be the installation of an elevator to provide access from the first level to the upper floors. If an elevator is installed, the best location for the elevator would be in the area immediately south of the open central stairway, which was previously used for a support room and is of lesser architectural importance. A variance from the Pennsylvania Department of Labor and Industry may be granted if a smoke evacuation fan is installed at the top of the staircase and an additional code-approved means of egress is provided.<sup>3</sup>

HVAC, wiring, plumbing and other improvements would also be needed to make it suitable for full-time residential occupancy. The HSR did not recommend adaptive re-use of the Clubhouse for residential purposes. Conversion of the Clubhouse to residential use would restrict public access to this building. The impact of adapting the Clubhouse to residential use would be **Moderate**.

**Tourism:** The HSR recommended that the Clubhouse be rehabilitated as a hotel and a restaurant. The ground floor would incorporate a visitor information desk and interpretive exhibits, a gift shop, offices for the Friends, a conference room, a restaurant, hotel registration and facility support. The second and third floors could be configured for 18 hotel guest rooms with private baths. There is no commercial lodging in St. Michael. As of December 2006, an estimated 10 B&Bs were locally advertised: one in Cresson, one in Gallitzin, one in Ebensburg, one in Patton, two in Johnstown, two in Davidsville, one in Portage, and one in Dilltown. A number of chain motels are located in Johnstown, Ebensburg, Altoona and Duncansville. St. Michael also does not have a restaurant, although there is a tavern with fast food. A popular family-style restaurant and smaller eateries are located in Sidman.

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<sup>3</sup> National Park Service. *Historic Structures Report, Clubhouse, Brown Cottage, Moorhead Cottage, and Clubhouse Annex South Fork Fishing & Hunting Club, Vol. 1*, pp. 253-254.

Use of the Clubhouse for a hotel and restaurant is consistent with the historic use of this structure, the original architectural plan and the remaining historic fabric. However, if the Clubhouse is adapted for re-use as a hotel or an inn, installation of an elevator would be needed to provide access to the upper floors. The HSR recommended that an elevator be installed immediately south of the open central stairway in an area that was previously used for support rooms and is of lesser architectural importance.

Currently, the Clubhouse parking lot can accommodate about 15-20 vehicles. Additional parking could be made available in the existing vacant field behind the Clubhouse and/or in the vacant lot between the Clubhouse and the Annex. However, an archaeological survey has not been conducted on this area and such a survey would be needed prior to any ground disturbance.

During scoping, the Southern Alleghenies Planning and Development Commission suggested that the Clubhouse be used as an interpretive facility for tourists. The direct connection to the core portion of the Johnstown Flood NMem, as well as NPS interpretation of the structures, would also facilitate increased tourism to the historic district.

Chapter 3, **Table 3-2** identifies many of the region's tourist attractions. Connections to these sites through a trail system, a signed driving tour and through partnerships could be made. A new trail project is proposed for the St. Michael/Cambria County area, and there is potential for a recreation trail to the historic district. Planning for Phase 1 of the Johnstown Flood Trail, sponsored by the Forest Hills Regional Alliance with support from the NPS Rivers, Trails and Conservation Assistance Program, has been initiated. This pedestrian trail is planned to extend from Sidman through the South Fork Fishing and Hunting Club Historic District in St. Michael and eventually link to the Path of the Flood Trail near South Fork.

The impact of tourism on the Clubhouse would be **Moderate** as visitation continues to increase due to the promotion of the structures.

Entertainment: During scoping, support was expressed for adapting the first floor of the Clubhouse to accommodate a "black box" theater. The "black box" theater would serve as an interim or temporary use until a suitable permanent use could be determined. This venue would allow for the production of interpretive programs and performances with minimal impact to the structure. A suggestion was made to include dinner with the theater, as well, and as a result, modifications to the kitchen would need to be made and permits obtained from a number of sources, including health inspection and special permits. Appropriate food storage, and trash containment and removal would need to be accommodated to prevent pest infestation.

A simple, small performance space would be needed for a "black box" theater. The first floor of the Clubhouse would need to be adapted with a new sub-floor, black paint, theatrical lighting, seats and curtains. A portion of the first floor could be modified to accommodate this theater space by installing a new sub-floor over the existing floor, installing new wiring for theater lighting and installing curtain hanger hardware to the ceiling to hang lights and curtains. Under this option, the upper floors would not be rehabilitated.

To create the "black box" theater setting, walls would be painted black and black curtains would be hung. This work would be temporary, removable and reversible. Minor changes to the structure would occur with this option; however, the proposed theater would not diminish the historic fabric of the 1889 Clubhouse. The Historic Architecture Review Committee would review and approve the proposed changes.

Increased visitation to the Clubhouse would be concentrated during performances and there would be some intrusion to the neighborhood, particularly if these performances occurred during the evening. Additional parking would be available in the existing vacant field behind the Clubhouse and/or in the vacant lot between the Clubhouse and the Annex. Lighting in the parking area would be enhanced for visitor safety.

The Clubhouse was stabilized by the NPS and reportedly can support a projected load of 56 visitors plus staff, equipment and sets. NPS regional fire prevention specialists will more accurately estimate the number of occupants to be permitted in the proposed theater, based on room and doorway sizes.<sup>4</sup> A C-2 (commercial) occupancy was recommended in accordance with the Pennsylvania Fire and Panic Code once a sprinkler system was installed and the stairways were fire-rated. A fire prevention plan has been prepared that sets forth the installation of fire detection and intrusion alarms for all alarm systems. NPS is conducting cost estimates for installing fire suppression systems in the structures.

The proposed “black box” theater would be consistent with the interpretive plans for the Clubhouse and would allow for new interpretive programs to be offered to the public. Some existing interpretive programs currently presented to school groups in the Visitor Center would be transferred to the new Clubhouse theatre.<sup>5</sup>

Minor increases in the usage of utilities, particularly electricity, would be expected with this option. The electrical system would be checked to ensure safe capacity of handling the additional theater lighting, as well as the low-level floor walkway lights and seasonal usage of electric space heaters and fans would be utilized as needed. No permanent upgrades to HVAC are proposed for this option. The room in which the theater would be installed currently has a large space heater, which would continue to be used.

Hard-wired smoke detectors and fire extinguishers would be installed, as well as battery-powered emergency lighting and low-level lighting illuminating walkways.

Impacts resulting from adaptively re-using the Clubhouse for entertainment purposes would be **Minor**, as any proposed changes would be temporary and minimal.

Community Uses: During scoping, a number of community-related uses were suggested for the structures. Community uses focused mainly on the Clubhouse and suggested the building be adapted for—

- a senior center or a community center,
- an arts academy for youth,
- a venue for special events

A community center, senior center or youth academy would infuse social benefits into the community. These centers are typically managed and operated by nonprofit organizations, private interest groups or local agencies. Partnerships between such an organization and the NPS would be established. Impacts resulting from the use of the Clubhouse as some type of community center would depend upon interest, services offered, and community participation. If larger scale events are conducted, bringing larger groups or crowds, impacts from visitor noise, including parking and traffic, would be greater than if events or activities were smaller. Use of shuttle vans

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<sup>4</sup> National Park Service. Environmental Screening Form. Dec. 9, 2005. “Create Black Box Theater.”

<sup>5</sup> Ibid.

from the Johnstown Flood NMem visitor center could be employed to minimize parking and traffic conflicts.

The Clubhouse currently hosts special events, such as wedding receptions, parties and meetings. These types of activities would continue, but would receive a higher level of use under this option, if selected. Modifying the interior or exterior of the building to accommodate athletic sports or events is not proposed under this option. More passive community activities are envisioned as community uses rather than more active sports or athletic uses.

The impact for adaptively re-using the Clubhouse for community purposes would be **Negligible** as the activities envisioned are passive activities and not active activities that could stress the structure. Long-term benefits of providing a facility for use by all sectors of the community for a wide range of uses would be facilitated with this option.

Park Orientation, Interpretation and Education Uses: With this option, the NPS proposes to begin the story of the Johnstown Flood at the Clubhouse. To implement this option, NPS would incur major rehabilitation costs and may need additional staffing unless volunteers from the Friends are used. The Visitor Center at the Johnstown Flood National Memorial has several multi-media, interpretive exhibits, as well as a fiber optic map that describes the path of the flood, and a 35-minute video that recreates the Great Flood of 1889. Shifting visitor orientation to the Clubhouse would minimize the opportunities the visitor may have to enjoy and learn from the media available at the Visitor Center as they may not return to the visitor center or they may feel that the stories they receive at the Clubhouse are sufficient.

Connections between the Visitor Center and the Clubhouse and cottages could be made through the use of a park shuttle van. A shuttle van would facilitate greater control over the number and dispersion of visitors, would enable better management of visitor time at the cottages and Clubhouse, and would enable NPS to connect with other Flood-related sites to tell a more complete story. The park's Alternative Transportation study addresses these options.

During scoping, comments were received on returning the Clubhouse and the cottages to their original state. Rehabilitation of the Clubhouse and the cottages to their former appearance in the mid-1800s for interpretive and education purposes would also be based partly on conjecture, as photographs illustrating the interior of these buildings and personal recollections are limited.

Interpretive staffing, whether NPS personnel or the Friends staff, would be needed at the Clubhouse and/or Moorhead Cottage under this option. Photographic exhibits on the first floor of the Clubhouse would also be planned. Connections through the proposed Johnstown Flood Trail to the historic district would also support this option.

The impacts of adaptively re-using the Clubhouse for park orientation, interpretation and educational purposes would be **Minor** in the long term as visitation to the structures increase. The effects of park orientation would also result in positive benefits to preserving and interpreting a more comprehensive story of the 1889 Johnstown Flood, to increasing an understanding and awareness of the Johnstown Flood National Memorial and to increasing support for the preservation of the Clubhouse and the cottages.

Concessions and Exhibit Space: NPS currently leases space to Eastern National, a concessionaire with the NPS, for a bookstore in the park's Visitor Center. Eastern National operates a number of bookstores in national parks throughout the country. Concessions appropriate for the historic

structures may be B&B operators, such as at Antietam National Historic Battlefield and Acadia National Park; gift shop operators; or a tea room, catering service or other food service.

Depending on the type of concession, different approaches would need to be addressed. An upscale restaurant would attract more people into the district, but modifications to the kitchen would need to be made and special permits would be required. Introduction of food services to any of the structures would result in the need to obtain health inspection and permits. Appropriate food storage and trash containment and removal would need to be accommodated to prevent pest infestation. Trash dumpsters would need to be placed and properly maintained in an area that is easily accessible for trash pick up, but not intrusive or offensive to adjacent neighbors.

As with tourism, the Clubhouse could be leased to a concessionaire for a hotel or a large-scale B&B with a restaurant on the first floor. The first floor could incorporate a visitor information desk and/or hotel registration desk, gift shop, conference room and facility support services. The upper floors could be adapted for use as hotel rooms. Approximately 18 rooms with private baths could be accommodated. Exhibits featuring of the Clark photograph collection and other artifacts from the flood could be displayed on the first floor.

During scoping an antique mall was recommended as a possible re-use of the Clubhouse. Like a restaurant, the antique mall is a commercial operation and may require a zoning variance. Depending on the antiques represented and the amount of space needed by the dealers, one of the impacts associated with having such a mall would be loading of heavier furniture, such as beds, armoires, high boys and other heavy pieces, and accessing space on the upper floors. There is no freight elevator and the hallways and stairways may be too narrow. However, an antique mall is a revenue-producing enterprise and would contribute to supporting and sustaining the maintenance and operation of the structure.

Use of the Clubhouse for concessions and exhibit space would be **Minor-Moderate**, depending on the type of concession permitted.

### **Clubhouse Annex**

Residential: The Clubhouse Annex is currently divided into four apartments, three of which were leased to tenants as of December 2006. The two apartments on the lower floor of the Clubhouse Annex could continue to be leased to tenants. Residential use of the Annex would be compatible with adjacent land uses and zoning. Further, residential use of the Annex would result in minimal changes to the resources and would be consistent with the original intended use of the structure. If the Annex is leased to tenants, revenue would be generated to cover operating and maintenance costs. There would be **no impacts** if the Annex is continued to be used for apartments.

Tourism: The Clubhouse Annex could be easily adapted for use as a B&B or used for overflow room if the Clubhouse is established as a hotel. Early use of the Clubhouse Annex was for guest rooms when the Clubhouse was formerly used as a hotel. Use of the Clubhouse Annex as a B&B would be compatible with the historic purpose of the building and with adjacent land uses. The potential impacts of tourism on the Annex would be **Negligible**.

Entertainment: Entertainment use was not considered for the Annex. Therefore, an impact threshold is not applicable.

Community Uses: During scoping, a cultural center was suggested as a use for the Annex. The utilitarian style of the building could lend itself for such a use, but historically, it was used for

lodging. If the Annex is used for community uses such as a cultural center, the impacts would be **Moderate**.

Park Orientation, Interpretation and Education Uses: NPS would interpret the Annex and its relation to the Johnstown Flood and the Club era. This interpretation could be conducted from the outside if tenants are permitted to continue to live in the Annex. If NPS uses the Annex for park purposes, impacts to the Annex for Park Orientation, Interpretation and Education would be **Negligible**.

Concessions and Exhibit Space: If the Clubhouse is adapted for use as a hotel under a concessionaire, the Annex could be used to accommodate overflow when rooms in the hotel are full. A concessionaire could also adapt the Annex as a B&B with minimal intrusion to the structure. Use of the Annex as a concession, such as a B&B, would be **Negligible**.

### **Brown Cottage**

Residential: Brown Cottage is situated on a small lot in close proximity to adjacent single family residences and is currently used for residential purposes. The HSR recommended that Brown Cottage continue to be leased as two rental units: one containing four bedrooms and the other three bedrooms. Brown Cottage has been substantially altered during the mining era to create apartments, and would be suited to continued residential use. If the cottage is leased to tenants, revenue would be generated to cover operating and maintenance costs. Selection of residential use for Brown Cottage would be compatible with a continued residential use, and would have **no impacts** on the resources or adjacent land uses.

Tourism: Adaptive re-use of Brown Cottage to support tourism opportunities could include conversion of Brown Cottage to a B&B. Conversion of Brown Cottage to a B&B would result in minimal rehabilitation or changes to resource conditions.

Access to and parking at Brown Cottage could present issues with neighbors, depending on the traffic generated, the number of guests received during a single time period and the arrival and departure times of the guests. As with any area or site where additional people are introduced, there is the impact of human disturbance and intrusion. These impacts are in the form of increased traffic, parking, noise and the presence of more people visiting the area. However, NPS would work cooperatively with Adams Township and the landowner of the private access road behind the structures to develop that roadway as an alternative access to the cottages. Use of this roadway as the primary access would alleviate traffic from local streets and minimize disturbance to neighbors.

Potential impacts to Brown Cottage resulting from Tourism would be **Negligible** if converted to a B&B. The principal impacts would be people arriving and departing, access and parking.

Entertainment: Use of Brown Cottage for Entertainment purposes was not considered. Therefore, an impact threshold is not applicable.

Community Uses: Use of Brown Cottage for Community Uses was not considered. Therefore, an impact threshold is not applicable.

Park Orientation, Interpretation and Education: Use of Brown Cottage for park orientation, interpretation and education would be limited to interpretation of the cottage as one of the remaining structures from the Johnstown Flood and from the Club era. Leasing of Brown Cottage

for residential purposes would most likely continue and interpretation of the Cottage would be from the exterior. Interpretation would address the historic ownership of the cottage over time and the relationship of the cottage to the various historic eras for this area.

The potential impacts of park orientation, interpretation and education would be **Negligible**.

Concessions and Exhibit Space: The HSR recommended adaptive use of Brown Cottage as a B&B. Brown Cottage is situated on a small lot in close proximity to single family residences; therefore, use of this structure for residential or lodging purposes would be compatible with adjacent land uses and with the historic use of the cottage.

As explained under the Tourism option, access to and parking at Brown Cottage could present issues with neighbors, depending on the traffic generated, the number of guests received during a single time period and the arrival and departure times of the guests. Impacts resulting from human disturbance and intrusion would be in the form of increased traffic, parking, noise and the presence of more people walking or driving in the neighborhood. NPS would work cooperatively with Adams Township and the landowner of the private access road behind the structures to develop that roadway as an alternative access to the cottages. Use of this roadway as the primary access would alleviate traffic from local streets and minimize disturbance to neighbors.

Potential impacts to Brown Cottage resulting from a leasing it to a concessionaire for purposes such as a B&B would be **Negligible**.

### **Moorhead Cottage**

Residential: The HSR suggested that the upper floors of Moorhead Cottage be adapted for re-use as one or two bedroom apartments for tenants, park personnel or for an onsite caretaker's apartment. Major modifications, including HVAC, plumbing, wiring and structural stabilization, would be need to be implemented before Moorhead Cottage could be used for any purpose.

Framing for Moorhead Cottage was typical for a residential use, although the HSR noted some deficiencies. The timber beams along bearing line #2 supporting the first floor of the cottage must be reinforced for any re-use of this cottage. If this beam line is reinforced, the structure could support residential loads of 40 lbs per square foot.

The HSR stated that residential use of the upper floors of Moorhead Cottage is the only acceptable use for these spaces. Residential use of Moorhead Cottage would also be compatible with the adjacent residential uses and would minimize heavy pedestrian traffic and visitor use on the structures. If Moorhead Cottage is adapted for leased apartments, revenue would be generated to cover operating and maintenance costs. However, if Moorhead Cottage is used for residential purposes, the cottage would not be open to the public for interior tours or the restoring this cottage to its original configuration would be minimized. Interpretation of the cottage would be from the outside only.

Potential impacts to Moorhead Cottage if rehabilitated for residential use would be **Moderate**.

Tourism: Moorhead Cottage is more spacious and features more ornamentation than Brown Cottage or the Clubhouse Annex. As a result, the HSR recommended that the first floor be adapted for re-use as a house museum where artifacts from the South Fork Fishing and Hunting Club could be exhibited to illustrate the lifestyles of the Club members at the time they lived in the district. In conjunction with the museum, one room on the first floor could also serve as a

library operated by the Friends. The upper floors of the cottage could be adapted for offices for park staff or for the Friends, or converted to apartments as discussed under the Residential option.

Major modifications, including HVAC, plumbing, wiring and structural stabilization, would need to be implemented before Moorhead Cottage could be used for any purpose. To accommodate a museum or a library for Tourism, the timber beams along bearing line #2 supporting the first floor of the cottage must be reinforced. The only area in the cottage where the structure could be substantially reinforced without dramatically altering historic aspects of the structures is the first floor, where reinforcement can be concealed in the basement. This factor limits public gathering spaces or weight-bearing uses to the first floor.

Potential impacts of Tourism to Moorhead Cottage would be **Major**.

Entertainment: Entertainment was not considered as a re-use of Moorhead Cottage. Therefore, an impact threshold is not applicable.

Community Uses: The potential impacts discussed for Tourism for adaptively re-using the first floor of the cottage as a museum and/or a library can also apply to Community Uses. As stated in Tourism, major modifications, such as installation of new HVAC, plumbing, wiring and structural stabilization, would be need to be implemented before Moorhead Cottage could be used for any purpose. To accommodate a museum or a library, structural reinforcement of the timber beams along bearing line #2 supporting the first floor must be accomplished. The only area in the cottage where the structure could be substantially reinforced without dramatically altering historic aspects of the structures is the first floor, where reinforcement can be concealed in the basement. This factor limits community uses and public gathering spaces or weight-bearing uses to the first floor.

The potential impact of Community Uses for Moorhead Cottage is **Major**.

Park Orientation, Interpretation and Education: Adaptive re-use of Moorhead Cottage for Park Orientation, Interpretation and Education could be accomplished at varying levels.

The HSR documented that the timber beams along bearing line #2 supporting the first floor of the cottage must first be reinforced for any use. The only area in the cottage where the structure could be substantially reinforced without dramatically altering historic aspects of the structures is the first floor, where reinforcement can be concealed in the basement. This factor restricts public gathering spaces and weight-bearing uses to the first floor.

As part of the interpretive programming, a museum displaying artifacts from the South Fork Fishing and Hunting Club could be exhibited to illustrate the lifestyles of the Club members. In conjunction with the museum, one room on the first floor could also serve as a resource library operated and maintained by the Friends. The upper floors of the cottage could be adapted for offices for park staff or for the Friends group, or converted to apartments or a caretaker's apartment, as discussed under the Residential option.

Other modifications, including HVAC, plumbing, wiring, roofing and structural stabilization, would need to be implemented before Moorhead Cottage could be used for any purpose. The potential impact for Park Orientation, Interpretation and Education for Moorhead Cottage is **Major**.

Concessions and Exhibits: Use of Moorhead Cottage by a concession, such as a B&B, a restaurant, or a bookstore would result in the need for structural reinforcement as described for Tourism, Community Uses and Park Orientation. The first floor requires reinforced structural support, particularly for areas where any major weight-bearing uses are proposed. Major improvements, such as new HVAC, plumbing and wiring, as well as structural improvements, must be implemented before the first floor of Moorhead Cottage can be used for any heavy loads. The timber beams along bearing line #2 supporting the first floor of the cottage must be reinforced before any heavy use can occur. The only area in the cottage where the structure could be substantially reinforced without dramatically altering historic aspects of the structures is the first floor, where reinforcement can be concealed in the basement. Roof repairs or replacement would also be conducted on Moorhead Cottage.

Photographic exhibits from the Clark collection and artifacts from the Club era can be exhibited in the Moorhead Cottage. Offices for the concessionaire, NPS and the Friends can be established on the upper floors.

The potential impact to Moorhead Cottage from adaptively re-using the structure for concessions and exhibits is **Major** due to the stabilization and overall improvements that would be necessary.

## **Cumulative Impacts of Alternative 2**

The cumulative effects of adaptively re-using the historic structures will result in long-term benefits to the structures and to the park visitors in more completely understanding the story of the Johnstown Flood. The NPS will be able to more completely interpret the story of the Johnstown Flood. NPS will continue to stabilize the structures and make improvements that enhance the safety, usability and aesthetics of these historic buildings. Although NPS will improve the structures for safety purposes and for public access, any modifications needed to adapt the structures for their selected uses will be made by the concessionaire or lessor(s). This includes adapting the structures for residential use of lodging, a restaurant or catering business, a theater or any other purpose. The overall cumulative impacts are expected to be **Moderate** for any of the adaptive re-uses.

## **Conclusion**

Alternative 2 addresses impacts that could occur from six adaptive re-uses of the Clubhouse, the Clubhouse Annex, Brown Cottage and Moorhead Cottage. The potential impacts to the Clubhouse and to Moorhead Cottage if converted to Residential use would be **Moderate** due to the level of remodeling and structural stabilization that would be required for full-time residential use. There would be **no impacts** as a result of Residential use for the Clubhouse Annex or Brown Cottage as these two structures are currently leased for residential purposes.

Use of the Clubhouse for Tourism purposes would result in **Moderate** impacts, whereas use of Moorhead Cottage for Tourism would result in **Major** impacts due to the extensive stabilization that would be required. Impacts resulting from adaptive re-use of the Clubhouse Annex and Brown Cottage for Tourism purposes would be **Negligible**.

Adapting the Clubhouse for an Entertainment venue, such as a “black box” theater, would result in **Minor** impacts mainly because this use would be temporary and the number of people could be controlled through ticket sales. Entertainment was not considered as an appropriate use for the Clubhouse Annex, Brown Cottage or Moorhead Cottage, and therefore, an impact threshold was not determined.

Use of the Clubhouse for Community Uses was determined to be **Negligible** because passive rather than active community uses were considered for this purpose. If the Clubhouse Annex is re-used for community purposes, the impact threshold would be **Moderate** depending on the type of community use proposed. Brown Cottage was not considered for Community Uses; therefore, an impact threshold is not applicable. Adaptively re-using Moorhead Cottage for community purposes, such as a museum and a library, would result in a **Major** impact mainly because of the extensive structural modifications that would be required to support the first floor.

Re-use of the Clubhouse for Park Orientation, Interpretation and Education purposes would result in **Minor** impacts. The re-use of the Annex and Brown Cottage for Park Orientation purposes would have **Negligible** impacts. However, due to the extensive structural reinforcement needed for the first floor of Moorhead Cottage, plus other major improvements, the potential impacts to Moorhead Cottage would be **Major**.

Potential impacts to any of the structures for a concession and for exhibits depend largely on the type of concessionaire selected and the intended use. For example, adaptive re-use of the Clubhouse for a concession could range from **Minor** to **Moderate** impacts depending on the use. For a hotel or B&B, the impacts would most likely be **Minor**. For a restaurant, the potential impacts could be **Moderate**. Impacts to the Clubhouse Annex and Brown Cottage would be **Negligible**, particularly if the concessionaire provides lodging. Due to the structural stabilization requirements, impacts to Moorhead Cottage could be **Major** for a concession.

## DESIGN OF THE BUILT ENVIRONMENT

### Methodology

The design of the built environment addresses the introduction and application of design, art, and architecture into an area, and may also include actions that cause changes or disruption to the landscape. The HSR was reviewed and proposed changes were considered in terms of the built environment. Coordination with the Park Superintendent also provided insight into potential changes to the exterior of the structures. Chapter 3 describes the architectural design and features of the structures and the modifications that have occurred to them.

The following impact thresholds were derived to provide relative degrees of impact from the built environment on the visual and aesthetic values of the structures:

*Negligible*-No discernible change or effect to the design of the structures or landscape

*Minor*-Discernible effect, but with minimal change to design or landscape

*Moderate*-Changes to design of structures and/or landscape but can be sustained through mitigation. May be positive or negative and resources may or may not be moderately impaired

*Major*-Significant alteration to historic structures and/or landscape even with mitigation. May be positive or negative and resources may or may not be impaired

*Duration*-Short-term impacts occur during all or part of the implementation of the alternative; long-term impacts extend beyond implementation of the alternative.

### Impacts of Alternative 1-No Action

Construction of the Clubhouse, Clubhouse Annex, Brown Cottage and Moorhead Cottage occurred in the early 19<sup>th</sup> century before the surrounding area began to develop. Between the 1920s and 1970s, contemporary residential housing, built by mining companies, began to encroach on the historic structures, particularly on Brown and Moorhead Cottages. These two cottages are situated at the end of a street on a steep slope with very little setback from the

roadway or adjacent houses. There were no covenant restrictions governing the design of housing in the early to mid-20<sup>th</sup> century and, consequently, these newer homes were not required to be congruent with the architectural style of the existing historic structures.

Both the natural landscape and the built environment have evolved over the past century. Most of the early landscape features have vanished. What was once a rural setting with expansive Lake Conemaugh situated in front of the cottages has been transformed into roads, utility lines and contemporary mining company housing.

Under Alternative 1, structural stabilization and safety improvements will continue to be made to all the structures. The HSR recommended installation of temporary rain gutters and removal of concrete gutters around the base of all buildings. This method of water removal is detrimental to the stability and health of the buildings and has caused serious deterioration of windows, window sills and siding on the lower three or four feet of the buildings. This has caused wood to rot near the base of the structures. When the structures are re-roofed, historically accurate gutters will be installed.

The exterior of all of the structures may require some minor alteration to accommodate building code requirements. If altered, the architectural features would replicate the original construction, where practicable, but there will be sufficient evidence of any modifications through use of building materials and construction techniques.

Compliance with the ADA and any modifications to accommodate persons with disabilities would be made in accordance with NPS policies.

The impact threshold for Alternative 1 will be **Minor** for the Built Environment.

### **Cumulative Impacts of Alternative 1-No Action**

The exterior of all of the buildings may require alteration to accommodate future leasing needs. If altered, the architectural features would replicate the original construction, but there would be sufficient evidence through building materials and construction techniques to represent contemporary modifications. Routine maintenance would continue as needed.

Major modifications to the exterior of the Clubhouse would not occur and no architectural alterations would occur to any of the cottages under Alternative 1. The cumulative impacts of Alternative 1 would be **Minor**.

### **Conclusion**

Implementation of Alternative 1 would result in **Minor** short-term impacts to the Built Environment. However, long-term positive benefits will occur as NPS continues to stabilize and provide safety improvements to the structures.

### **Impacts of Alternative 2-Adaptive Re-Use of Structures**

For all options under Alternative 2, compliance with the ADA would be carried out in a manner that would ensure access to all persons and would ensure compatibility with the design of the built environment.

Before any of the structures are rehabilitated, the exterior wood surfaces will be tested to determine the original paint colors. Additional physical investigation of the buildings during the clean out and demolition phases would include, but not be limited to the following<sup>6</sup>:

- For the Clubhouse Annex, removal of the existing cladding and porches would provide clues for the original extent and configuration of the front porch, for the connection (if any) of the second floor rear ramp to the possible two-story outhouse, and for any changes in the front and rear second floor windows.
- For Moorhead Cottage, the removal of aluminum siding would expose the original façade and provide evidence of the portion of the south porch that was removed. Removal of the aluminum siding, as well as removal of modern materials from the rear porch, would provide further evidence of the size, detailing and construction of the rear second level deck that connected to the rear access ramp.

Residential: Residential use of the Clubhouse would involve major remodeling to accommodate apartments. Conversion of the structure and modifying the second and third floor rooms to accommodate apartments and remodeling the downstairs would be required. The HSR recommended that a new stairway be added to the west end of the west wing. This is a less significant rear façade of the building where access can be provided to the stairs at the second floor by restoring the openings that originally supported a balcony in this location. An additional door would be needed to access these stairs in the third floor hall. If the stair is well-proportioned and simply detailed, there would be minimal impact to the exterior character of the building. Enclosing the central historic stair and inserting a new stair within the existing stair in the west wing would be more damaging to the historic character of the building than restoring the original openings located at the west end.

Residential use of the Clubhouse Annex, Brown Cottage and Moorhead Cottage would be the least intrusive use to the built environment, although residential use would inhibit full access to the structures. If residents are living in the cottages, visitors would be restricted from touring the inside of the cottages. Interpretation of these structures would be limited to the outside or from the visitor center.

The HSR suggested that the upper floors of the Moorhead Cottage could be converted into two one-bedroom apartments, one of which could serve as a caretaker's apartment to allow for onsite management of the properties. Residential use would be compatible with adjacent land uses and with the residential zoning designation adjacent to the Historic District and was recommended as the only acceptable use for the upper floors of the Moorhead Cottage.<sup>7</sup> To accomplish residential use for Moorhead Cottage, the timber beam members along bearing line #2 supporting the first floor must be reinforced for any re-use of the structure, including residential use. If this beam is reinforced, the structure could support residential loads of 40 pounds per square foot.

If residential use is selected, the exterior of all of the buildings may require some level of alteration to accommodate future leasing needs. NPS would ensure that the structures meet the code for residential use. If alterations occur, the architectural features would replicate the original construction, but there would be sufficient evidence through building materials and construction techniques to represent contemporary modifications. Routine maintenance would continue as needed and compliance with the ADA to accommodate persons with disabilities would be made in accordance with NPS policies.

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<sup>6</sup> National Park Service. *Historic Structures Report*, p. 287.

<sup>7</sup> *Ibid.*

Signage would either not be posted if these structures are used for residential purposes or it would be discreet. The impact to the built environment due to residential use for the Annex and Brown Cottage will be **Negligible**. The impact to the built environment for Moorhead Cottage would be **Moderate**. To accommodate apartments in the Clubhouse, the structure would need to be reconfigured for kitchens and larger size rooms. This interior renovation would have no impact on the Built Environment. As a result, if leased for apartments, the impact of the Clubhouse on the Built Environment would be **Minor**.

Tourism: During scoping, several comments were submitted requesting restoration of the buildings to their original design be considered. Because there is no lodging or restaurant in the immediate area, adaptive re-use of this structure as a form of lodging would be consistent with the structure's historic use as a lodge and would support the remaining historic fabric of the structure. It would also blend with and be compatible with the adjacent land uses.

The HSR suggested that the Clubhouse could be rehabilitated to accommodate a hotel and a restaurant. Rehabilitation to hotel rooms versus apartment rentals would result in a lower intensity of impairment to resources mainly because the rooms could essentially remain configured as they currently exist and would be based on the original architectural plans, with the exception of private bathrooms which would be added for each room.

Rehabilitation would involve restoration of the exterior of the Clubhouse to the late 1880s within the parameters of the existing building footprint. This means that features that were removed would not be replaced, such as the two adjoining structures and wrap-around porch. If a restaurant is selected as part of the adaptive re-use, the parking area would need to be enlarged and screening of trash containers would be needed. Expanded parking could occur either between the Annex and the Clubhouse or behind the Clubhouse.

The Pennsylvania Department of Labor and Industry has classified hotel use as C-2 under its Fire and Panic regulations. C-2 is permitted in a three-story wood frame building when the building is entirely protected by an automatic fire suppression system. Such a system can be installed with minimal impact to the structure. The first floor has a double ceiling which was intended for sound insulation. It provides a convenient hidden space for the fire suppression system for the first floor, and on the upper floors, side-throw sprinklers can be provided in bathrooms and closets. Pennsylvania Code Section 50.92 and BOCA Code Section 513.1 allow for innovative solutions for code issues in historic buildings.

The existing wooden ramp leading to the front porch not only provides accessibility to the first floor, but it also meets the ADA requirements. Most of the first floor doors are of sufficient width to meet the minimal ADA requirements. With some minor doorway modifications involving proper door swing, these doorways can become fully ADA compliant. On the upper floor, one renovated room can be brought up to code with a minimum of changes to the existing historic fabric.<sup>8</sup>

For Moorhead Cottage, restoration of the first floor of this structure to the late 1880s and establishment of a museum and a library on the first floor were recommended in the HSR. To accomplish these uses, Moorhead Cottage would require substantial structural modification to support heavy weight uses for a museum or a library. The first floor is the only area in this cottage where the structure could be substantially reinforced without dramatically altering historically significant aspects of the building. Structural reinforcement could be concealed from

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<sup>8</sup> Ibid.

the basement. The kitchen addition in the rear of the building could be rehabilitated back to an active kitchen to accommodate a limited catering operation for social functions and special events.

Restoration of a room on the southeast corner of the ground floor could be accomplished as a library and archival storage for the park. The second floor could be restored and refurbished to the historic period and be adaptively re-used for offices for the Friends of the Johnstown Flood National Memorial or park offices.

Re-use of Brown Cottage as a B&B could be easily accomplished by using the existing seven bedrooms. Improved parking would need to be provided to accommodate guests, and any repairs required to bring the cottage up to code for use as a B&B could be made. If adapted for re-use as a B&B, Brown Cottage's connection with the Johnstown Flood NMem could promote and support tourism in the area, as well as provide a need for lodging that is currently not met in St. Michael.

Discreet and tasteful signage for a restaurant, museum, B&B or other tourism purpose would be installed. The NPS would erect a sign showing its affiliations with the site.

The impact to the design of the built environment from tourism would be **Moderate**.

Entertainment: Conversion of the Clubhouse into a dinner theater or a "black box" theater was addressed in the HSR and was suggested during scoping. This proposed use would focus on the first floor of the Clubhouse and involve temporary and removable alterations. It would not involve modifications to the upper floors of the Clubhouse. Other than potential parking improvements, impacts to the built environment are not expected to the Clubhouse.

As previously mentioned, if food preparation is introduced through establishment of a restaurant or dinner theater, proper screening of trash receptacles would be needed. Parking may need to be expanded, depending on the attendance at performances. No major changes to the built environment are expected under this use.

Signage for an entertainment venue, such as a theater or restaurant, would be installed. NPS would also install a sign showing its affiliation with the site.

The impact on the built environment from entertainment use of the Clubhouse would be **Minor**. The Clubhouse Annex, Brown Cottage and Moorhead Cottage were not evaluated for Entertainment purposes.

Community Use: Impacts to the built environment from adaptive re-use of these structures for passive community activities would be similar to impacts described for tourism. These uses could range from a senior or youth center, a civic center, a temporary shelter or a cultural and arts center. It was determined by the park that community uses would be passive. No structural changes would be proposed to the exterior of the buildings other than signage.

The impact to the built environment as a result of adaptive re-using the structures for passive community use would be **Negligible** for the Clubhouse, **Moderate** for the Clubhouse Annex and **Major** for Moorhead Cottage. Community use was not considered for Brown Cottage.

Park Orientation, Interpretation and Education: Use of the four structures for park orientation, interpretive and educational purposes would result in rehabilitation of the structures to the period

of historic significance. With this option, information and orientation activities, as well as historical exhibits, would be displayed in the Clubhouse.

The first floor of the Clubhouse could be restored to more closely adapt to the original floor plan and room finishes. The upper floors, including the stairways, hallways and all or some of the bedrooms could be restored to their historic appearance. Through this approach, the Clubhouse could become the orientation point and focus for visitor of the site. Visitors could walk along a reconstructed boardwalk interpreted as once extending in front of the cottages. This boardwalk could extend passed the Brown Cottage and terminate at Moorhead Cottage.

Brown and Moorhead Cottages offer a partial framework for understanding the district and offer insights into the architectural styles of the period. Further, views to the northeast along existing street corridors would provide for a sighting of the opposite ridge that once surrounded Lake Conemaugh. This viewshed could be interpreted through the use of waysides.

As mentioned for the tourism option, the ground floor of Moorhead Cottage could be adapted for re-use as a museum, featuring furnishings and other artifacts from the Clubhouse period. Moorhead Cottage still retains many original architectural features, whereas Brown Cottage has very little of its original historic fabric remaining. The impact to the built environment for Park Orientation, Interpretation and Education uses would be **Negligible**. Long-term, NPS would work toward restoring these resources to their original state.

Concessions and Exhibits: The information presented under Tourism also applies to the Concessions and Exhibits uses for the built environment. Rehabilitation of the Clubhouse to accommodate a range in food service concessionaires could occur, thus requiring maintenance and screening of trash dumpsters and receptacles in the back or side of the building. Exhibits would focus mainly on historic photographs that could be displayed on the first floor of the Clubhouse.

Other concessions in the Clubhouse could include a gift shop, an antique gallery or a series of shops. Moorhead Cottage could be converted to house a small museum on the first floor and possibly a library.

The impact of adaptively re-using the structures for concessions and exhibits on the built environment would be **Negligible**.

## **Cumulative Impacts of Alternative 2-Adaptive Re-Use of Structures**

The cumulative impacts of Alternative 2 on the built environment would result in long-term benefits to the neighborhood, as the NPS would improve the exterior condition of the structures and the property. NPS would maintain and improve the landscaping of the properties, as well.

## **Conclusion**

For all structures, installation of temporary rain gutters and removal of concrete gutters around the base of the buildings are proposed. When the structures are re-roofed, historically accurate gutters will be installed. Modifications may occur to accommodate future leasing needs; however, the architectural features will replicate the original construction and design where practicable.

For both alternatives and options, compliance with the ADA will be met for the Clubhouse. If residential use is selected for Brown Cottage and the Clubhouse Annex, modifications necessary to accommodate ADA requirements would be made on an as needed basis and building code

standards for residential use would be met. If the structures are open to the public under any of the suboptions, appropriate modifications to these structures will be made to provide accessibility for all persons. Installation of an elevator for the Clubhouse was proposed to provide access to the upper floors for all options under Alternative 2.

If commercial use or a concessionaire for a restaurant is selected, appropriate signs advertising this use will be installed. Appropriate signage showing NPS affiliation with the Clubhouse or cottage will also be installed on the site.

For residential uses, impacts of the Clubhouse on the Built Environment would be **Minor**. Impacts of the Clubhouse Annex and Brown Cottage on the Built Environment would be **Negligible** for residential use. The impacts of re-using Moorhead Cottage for residential purposes on the Built Environment would be **Moderate**, mainly because of the extensive improvements needed before full-time occupancy could occur and before building codes could be met.

For all structures, the impacts on the Built Environment for Tourism would be **Moderate**. The design of the Built Environment on the Clubhouse for Entertainment would be **Minor**; no other structures were evaluated for Entertainment. For Community Uses, the impact of the Clubhouse on the Built Environment would be **Negligible**, the impact threshold for the Annex would be **Moderate** and the impact threshold for Moorhead Cottage would be **Major** due to the extensive rehabilitation that necessary to re-use Moorhead Cottage for community purposes. The effects of park orientation, interpretation and education, and concessions and exhibits, on the Built Environment would be **Negligible**.

## SOCIOECONOMIC IMPACTS

### Methodology

An economic impact analysis of adaptive re-use was conducted of the NPS acquiring the historic structures. The assumptions and information presented in this section were extracted from this study.

The costs generated for each alternative will depend upon the modifications needed to stabilize and bring the structures to code and support their intended use. The NPS *Draft Boundary Environmental Assessment* for the acquisition of the structures provides a range of cost estimates for each structure, depending upon whether minimal stabilization or complete restoration and re-use of each structure occur.

Economic benefits are measured as employment and in terms of value-added gains to the region. The Money Generation Model (MGM2), an accepted economic model, was used to estimate the impacts. MGM2 is an enhancement of the NPS Money Generation Model (MGM) (Stynes et al. 2000). The multipliers in the MGM2 model are derived from the IMPLAN input/output model. A standardized multiplier representative of a small metropolitan area between 30,000 and 500,000 residents was used for this analysis. Estimates for average tourism expenditures are provided for a variety of types of visitation. The benefits would be based upon the nature of the proposed alternative uses:

- The regional impacts of stabilizing and rehabilitating the buildings were calculated and counted as a benefit of the project.
- If used for interpretative or educational purposes, an increase in visitation to the park would be assumed. Past visitation patterns at NPS sites in the region suggest that there

will be a large initial increase that will ebb and then stabilize to a higher level than previous averages. This increase was modeled on the visitation patterns observed at Allegheny Portage Railroad NHS during the period surrounding the establishment of the new Visitor Center and the rehabilitation of the Lemon House.<sup>9</sup>

- If any structures are used for commercial operations, the economic impacts will depend upon the type of commercial use. For instance--
  - If used as a dining, lodging, or entertainment venue, there may be some economic impact associated with attracting additional visitors from outside the region. The exact size of this impact is hard to estimate and will depend upon the exact nature and success of the commercial operation.
  - If rented for office space, the money would accrue to the NPS but there would not be any local economic benefit.
- The structures that remain residential rentals would provide an income stream to the NPS. However, there would be no net economic benefit to the region, because they are currently employed in that use.
- If the buildings are used for park administrative purposes, there would be an opportunity cost associated with not having to purchase or build comparable facilities elsewhere. This benefit would also accrue to the NPS, and not to the local economy.

### Impacts of Alternative 1-No Action

The No Action alternative is predicated on the NPS undertaking only minimal stabilization activities to prevent further deterioration of the historic structures. At a minimum, NPS will undertake a stabilization program to ensure that the Clubhouse, the Clubhouse Annex and the Brown and Moorhead Cottages are protected from further deterioration. This alternative is estimated to cost more than \$1.3 million and will generate regional value-added benefits of almost \$900,000. An estimated 29 jobs would be associated with rehabilitation and stabilization of the structures.<sup>10</sup>

If a total rehabilitation project is undertaken, the cost of the project would increase to \$3.4 million. This would range from a low of about \$300,000 on the two unimproved properties to \$1.5 million at the Clubhouse. The economic impact of this combined activity is anticipated to be almost \$2.3 million of value-added and would support an estimated 81 jobs. These are total impacts over the duration of the work and would be pro-rated over that time period. If only some of the buildings are selected for rehabilitation, then the costs and benefits would be commensurately reduced. **Table 4-2** estimates the costs and benefits associated with the annual maintenance and management of the structures under the No Action Alternative.<sup>11</sup>

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<sup>9</sup> The Johnstown Flood NMem underwent extensive development in conjunction with the 1989 anniversary of the flood. The pattern of increasing visitation, followed by ebb to a steady state, was observed then. However, the anniversary was felt to contribute substantially to the visitation increases. Without the impacts of the anniversary, it is felt that the pattern of visitation surrounding the Allegheny Portage project would be more representative of the current situation.

<sup>10</sup> Job impacts from the stabilization and rehabilitation phase are the sum of the annual job impacts during the period of construction activity. Jobs are expressed as the annual equivalent of full and part time positions. Note that job impacts are spread throughout the regional economy, with some industries only receiving the equivalent of a fraction of a position.

<sup>11</sup> Lord, Bruce E., Ph.D. "Johnstown Flood National Memorial Economic Cost/Benefit Analysis Prepared for the Adaptive Re-use of the 1889 South Fork Clubhouse and Associated Structures." July 31, 2006.

**Table 4-2: Costs and Benefits Resulting from Stabilization/Rehabilitation of the 1889 Clubhouse and Associated Structures, Alternative 1-No Action**

Structure	Alternative 1-No Action	
	Costs	Benefits
1889 Clubhouse	\$995,000	\$672,825
Clubhouse Annex	\$0	\$0
Brown Cottage	\$0	\$0
Moorhead Cottage	\$325,000	\$219,767
Clubhouse Side-yard	\$0	\$0
<b>Total</b>	<b>\$1,320,000</b>	<b>\$892,592</b>

Source: Bruce E. Lord, Ph.D. The Pennsylvania State University, July 2006.

Note: Figures are estimates for planning purposes only and do not constitute actual costs or benefits.

An estimated \$73,000 of additional annual expenses would be required to manage the properties long-term under Alternative 1. This is expected to generate an estimated \$81,000 of local value-added benefits annually and support an average of 1.4 jobs annually. **Table 4-3** shows the costs and benefits associated with annual management and maintenance of the Clubhouse and structures.

**Table 4-3: Costs and Benefits Resulting from Annual Management and Maintenance of the 1889 Clubhouse and Associated Structures, Alternative 1-No Action**

Structure	Alternative 1-No Action	
	Costs	Benefits
1889 Clubhouse	\$4,000	\$566
Clubhouse Annex	\$0	\$0
Brown Cottage	\$0	\$0
Moorhead Cottage	\$0	\$0
Clubhouse Side-yard	\$0	\$0
Added Park Costs <sup>a</sup>	\$69,000	\$80,340
<b>Total</b>	<b>\$73,000</b>	<b>\$80,907</b>

Source: Bruce E. Lord, Ph.D. The Pennsylvania State University, July 2006.

<sup>a</sup>Added park costs include interpretive, administrative, preservation, and maintenance staff as well as vehicle rentals.

Note: Figures are estimates for planning purposes only and do not constitute actual costs or benefits.

**Table 4-1** shows the historic and current visitation (2003-2006) to Johnstown Flood NMem the Clubhouse and the Cottages. Visitation to the Johnstown Flood NMem for 2002 to 2005 averaged nearly 111,000 visitors a year. This average was used as a starting point to estimate visitation for 2006. The economic impact study estimated that the per visitor expenditure to be about \$35/person (2006). At this expenditure level, the MGM2 model, which is used to estimate the economic impact of a park to a community, projected a regional economic impact of \$22.19 per visitor.

### Cumulative Impacts of Alternative 1-No Action

Under Alternative 1, visitation to Johnstown Flood NMem is expected to remain relatively steady at about 111,000 visitors per year. Further, under Alternative 1, not all of these visitors would be expected to visit the four structures or St. Michael. Depending on the adaptive re-use of the structures and under NPS management, as described for Alternative 2, visitation is expected to increase and peak at about 159,258 annual visitors by the year 2009. This peak represents an increase of 48,469 visitors over existing visitation, of which 36,351 visitors are expected to come from outside the area.

Over a 10-year planning horizon (2006-2016), the NPS would spend about \$2 million under Alternative 1 on stabilizing, operating and managing the structures and could spend up to \$6.6 million over the 10-year period to adaptively re-use the structures. In turn, this cost is expected to generate an estimated \$5 million of value-added impact to the region. If these structures are open for visitors, rather than leasing to tenants, the economic impacts associated with tourism would add an additional \$2.9 million of value-added to the region's economy over the 10-year period. Hence, the total benefits from Alternative 2 could reach \$8 million. After this period, annual costs are expected to be about \$326,000 and the annual benefits could be about \$363,000 of value-added. Eight estimated annual jobs could be expected from Alternative 1.

## Conclusion

With Alternative 1, NPS would incur a one-time cost of \$1.3 million and an additional annual cost of \$73,000. Revenue from the residential leasing of the Brown Cottage and the Clubhouse Annex would continue. As of December 2006, the Clubhouse Annex generated \$1,275/month and the Brown Cottage generated \$1,050/month from rental units. With Alternative 1, these leases would assume to continue, totaling about \$27,900 a year. The cost to maintain and operate these structures is around \$10,000-15,000 a year. Impacts on the social and economic infrastructure for Alternative 1 are expected to be **Negligible**.

## Impacts of Alternative 2-Adaptive Re-Use of Structures

The costs and benefits are separated into the one-time effects stemming from the stabilization and rehabilitation of the properties, the short-term visitor impacts associated with the initial boost in visitation that generally accompanies a new project at the park, and the long-term annual impacts associated with the continuing operation of the new acquisitions.

At a minimum, NPS would stabilize the structures for safety purposes and to ensure that these buildings are protected from further deterioration. Alternative 2 could range from minimal stabilization, similar to Alternative 1, and would be estimated to cost more than \$1.3 million and generate regional value-added benefits of almost \$900,000. An estimated 29 jobs would be associated with rehabilitation and stabilization of the structures.<sup>12</sup>

If a total rehabilitation project is undertaken for any of the options presented for Alternative 2, the cost of the project would increase to \$3.4 million. This would range from a low of about \$300,000 on the two unimproved properties to \$1.5 million at the Clubhouse. The economic impact of this combined activity would be almost \$2.3 million of value-added and would support an estimated 81 jobs. These are total impacts over the duration of the work and would be prorated over that time period. If only some of the buildings are selected for rehabilitation, then the costs and benefits would be commensurately reduced.

**Table 4-4** estimates the costs and benefits associated with the annual maintenance and management of the structures under Alternative 2-Adaptive Re-Use of Structures.<sup>13</sup>

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<sup>12</sup> Job impacts from the stabilization and rehabilitation phase are the sum of the annual job impacts during the period of construction activity. Jobs are expressed as the annual equivalent of full and part time positions. Note that job impacts are spread throughout the regional economy, with some industries only receiving the equivalent of a fraction of a position.

<sup>13</sup> Lord, Bruce E., Ph.D. "Johnstown Flood National Memorial Economic Cost/Benefit Analysis Prepared for the Adaptive Re-use of the 1889 South Fork Clubhouse and Associated Structures." July 31, 2006.

**Table 4-4: Costs and Benefits Associated with Stabilization/Rehabilitation of the Clubhouse and Associated Structures, Alternative 2-Adaptive Re-Use**

Structure	Alternative 2-Adaptive Re-Use	
	Costs	Benefits
1889 Clubhouse	\$1,500,000	\$1,014,309
Clubhouse Annex	\$600,000	\$405,723
Brown Cottage	\$470,000	\$317,817
Moorhead Cottage	\$489,000	\$330,665
Clubhouse Side-yard	\$300,000	\$202,862
<b>Total</b>	<b>\$3,059,000</b>	<b>\$2,271,375</b>

Source: Bruce E. Lord, Ph.D. The Pennsylvania State University, July 2006.

Under Alternative 2, NPS would spend an estimated \$326,000 per year for property management, which is expected to generate almost \$278,000 of value-added impacts and the equivalent of 4.8 jobs annually (see **Table 4-5**). Again, if only some of the properties are rehabilitated for adaptive re-use, then the park's operational costs and benefits will decrease accordingly.

**Table 4-5: Costs and Benefits Associated with Annual Management and Maintenance of the Clubhouse and Structures, Alternative 2-Adaptive Re-Use**

Structure	Alternative 2-Adaptive Re-Use	
	Costs	Benefits
1889 Clubhouse	\$60,000	\$19,203
Clubhouse Annex	\$16,000	\$4,942
Brown Cottage	\$16,000	\$4,942
Moorhead Cottage	\$16,000	\$4,942
Clubhouse Side-yard	\$8,000	\$1,133
Added Park Costs <sup>a</sup>	\$210,000	\$242,499
<b>Total</b>	<b>\$326,000</b>	<b>\$277,661</b>

Source: Bruce E. Lord, Ph.D. The Pennsylvania State University, July 2006.

<sup>a</sup>The added park costs include interpretive, administrative, preservation, and maintenance staff as well as vehicle rentals.

**Residential:** The economic impacts to the community from leasing the structures for residential purposes would be **Negligible**. As stated under Alternative 1, revenue generated from the residential leasing of the Clubhouse Annex is about \$1,275/month and Brown Cottage generates \$1,050/month from two rental units. These residential leases combined total about \$27,900 a year. The cost to maintain and operate these structures is around \$10,000-15,000 a year. The cost to modify the Clubhouse to accommodate residential units would be significant and would take years to recover in rentals. The cost to rehabilitate Moorhead Cottage to residential units would be more feasible. Leasing these structures for rental units may be a social benefit, but would not be a major economic benefit.

**Tourism:** As discussed under Alternative 1, visitation at the Johnstown Flood NMem for 2002-2005 averaged nearly 111,000 visitors. This average was used as a starting point to estimate visitation for 2006 and is expected to increase while construction activities are ongoing until it reaches a peak of 159,000 visitors in 2009.<sup>14</sup> Following completion of the adaptive re-uses of the structures, visitation is expected to decline to just less than 116,000 by 2012 for a long-term net gain of 5,000 additional visitors annually (**Table 4-6**).

<sup>14</sup> For the purposes of these estimates, it has been assumed that rehabilitation of the structures would be completed in 2009.

**Table 4-6: Potential Tourism Impacts from NPS Acquiring the Clubhouse and Cottages at Johnstown Flood NMem, 2006-2016**

Year	Total Visitation	Increase	Non-Residents	Value-Added Impacts	Job Impacts
2006	110,789				
2007	126,946	16,156	12,117	\$268,909	10.3
2008	143,102	32,312	24,234	\$537,817	20.6
2009	159,258	48,469	36,351	\$806,726	31.0
2010	144,804	34,014	25,511	\$566,145	21.7
2011	130,349	19,560	14,670	\$325,565	12.5
2012	115,895	5,106	3,829	\$84,984	3.3
2013	115,895	5,106	3,829	\$84,984	3.3
2014	115,895	5,106	3,829	\$84,984	3.3
2015	115,895	5,106	3,829	\$84,984	3.3
2016	115,895	5,106	3,829	\$84,984	3.3

Source: Bruce E. Lord, Ph.D. The Pennsylvania State University, July 2006.

The 2005 visitor use survey estimated per-person expenditures to the park were about \$78, which is much higher than the estimated \$33 per visitor provided by Strauss et al., and the MGM model’s average expenditure estimate of \$73 per party (~3-3.4 people per party). A more realistic estimate of \$35 per visitor was used to derive the following estimates. At this expenditure level, the MGM2 model projects a regional impact of \$22.19 per visitor. Between 2007 and 2016, an additional 132,000 non-resident visitors are expected to generate more than \$2.9 million of value-added impacts to the local economy.

During the first five years, \$2.5 million of tourism impacts are projected. After the initial interest of the newly remodeled buildings weakens, the increased tourism should provide \$85,000 of value-added impacts annually to the regional economy. Job benefits during this time are expected to peak to 31 positions in 2009, and then steadily decline to an estimated 3.3 annual positions supported by the added tourism activity.

From 2006 to 2016, more than 112 jobs are projected. These projections are based upon patterns observed at other National Park units in the region. The increase in visitation could rise to a degree of **Moderate** impacts in the short-term, depending on the exact nature of the adaptive re-use, but for the long-term, the impacts are expected to dip to **Minor** levels. Obviously, some re-uses will generate more visitation than others, and much depends on how the National Park Service, the Friends of the Johnstown Flood National Memorial and the local tourism office promote the structures along with the park. The expenditure levels will also be influenced by the nature of the selected use for these structures.

The impact for the local economy for tourism would be **Moderate** in the short-term, but **Minor** in the long-term. The level of impact will depend on the park’s and the Friends’ ability to promote and market the site, as well as the community’s ability to generate other attractions in the area.

Entertainment: If an entertainment venue, such as a restaurant or a theater, is established in the Clubhouse, the contribution to the local economy would be **Minor**. The “black box” theater was proposed as a temporary venue. As the seating capacity for the theater would be small, depending on the size of the stage and production needs, perhaps up to 50 persons might be seated. If ticket

prices ranged from \$15-20 per person, a full audience might generate \$750-1,000 per performance.

Currently, there is no dining establishment in St. Michael, but there are small eateries and a popular family restaurant in Sidman, which would benefit from persons desiring dinner before the performance. However, if an upscale restaurant can be attracted to open in the Clubhouse, it would serve a need that currently is not being met in the area.

Community Uses: Conversion of the Clubhouse to a community center or a building for community use would not generate additional money into the local economy. As a result, the economic impact for conversion of the Clubhouse to community uses would be **Negligible**.

Park Orientation, Interpretation and Education Uses: The economic effects of connecting the historic district and the structures to Johnstown Flood National Memorial will result in the same impacts as those described for Tourism—**Moderate** in the short-term and **Minor** for long-term. As discussed, much of the influence from the park on the local economy depends on how well the park is marketed to non-residents. These structures will enable the NPS to more fully interpret the lifestyles of those who were engaged in the events leading up to the flood disaster of 1889. NPS will also be able to interpret the chronology of events after the flood.

Concessions and Exhibits: A wide range of opportunities exist for use of the Clubhouse and Moorhead Cottage for a concessionaire and for exhibit space. The HSR considered adapting the first floor of Moorhead Cottage for use as a museum displaying artifacts from the Club. Concession uses proposed for the Clubhouse included a gift shop, a restaurant and photographic exhibits. A wide range of concessions and exhibitors could utilize space in the Clubhouse, as well as in the other structures. However, the economic impacts to the community of a concessionaire would be difficult to project. A gift shop that had formerly operated in the Clubhouse closed in 2006.

The critical elements for the success of any concessionaire are 1) the effectiveness of marketing and promoting the concession, 2) the support in terms of vendors, buyers and repeat clientele, and the ability to attract new money to the area. The potential impact for adaptively re-using the Clubhouse and/or Moorhead Cottage for Concessions and Exhibits is expected to be **Minor**.

## **Cumulative Impacts of Alternative 2-Adaptive Re-Use of Structures**

Most of the economic benefits associated with tourism and inclusion of the historic structures into the national park system will depend upon the increased number of visitors that visit the park from outside the area. Increased visitation to the park will depend upon the selected adaptive re-use of the structures and the successful marketing of the park by the Friends of the Johnstown Flood NMem and the NPS.

Other factors that will influence the cumulative economic impact of these structures are other local tourist attractions, services and amenities in the immediate area, and the overall regional economy. The inherent cumulative socioeconomic effect of these structures is the preservation and protection of the historic structures remaining from the 1889 Johnstown Flood and the interpretation and education of these structures for future use, education and enjoyment by the American public.

## Conclusion

The effects of new people coming into the neighborhood will be one of the more long-term impacts directly resulting from this proposed action. The intensity of these impacts will depend upon which of the adaptive use alternatives is selected and how visitors are transported and managed while visiting the Clubhouse and cottages.

The total costs and benefits associated with the four historic properties will depend upon the use chosen for each property. If each of the historic structures is selected for adaptive re-use, then NPS will need to spend \$6.6 million over the 10-year planning horizon. This will generate an estimated \$5.0 million value-added impact. In addition, if these facilities are made available for visitors, economic impacts associated with tourism gains will add an additional \$2.9 million of value-added to the region's economy over 10 years. Hence, the total 10-year benefits from Alternative 2 may approach \$8 million. After this time, the annual costs are expected to be \$326,000 and annual benefits should amount to almost \$363,000 of value-added and support eight annual jobs.

If the final decision includes adaptive re-use for only some of the structures, then the costs and benefits may be reduced. The degree of the cost reduction would include projected construction cost and annual operation costs for each property as shown in **Tables 4-5** and **4-6**. The benefits associated with these expenditures would similarly be reduced.<sup>15</sup> However if the Clubhouse is not renovated and utilized, tourism impacts would all but be eliminated.

For Alternative 2, Residential and Community Uses are expected to have **Negligible** impacts, but impacts resulting from Tourism and Park Orientation, Interpretation and Education could be **Moderate** in the short-term and **Minor** in the long-term. The potential impacts from Entertainment and Concessions and Exhibit are expected to be **Minor**.

## LAND USE IMPACTS

### Methodology

A review of the Cambria County Comprehensive Plan Update, the Adams Township Comprehensive Plan, as well as the *Draft Boundary Study and Environmental Assessment* for Johnstown Flood National Memorial, provided information on the existing and future land use plans for the area. Coordination with the Adams Township Zoning Board was conducted in 2006 to determine zoning designations within the affected area.

Cambria County's future land use plan addresses changes to the county's land use through the year 2010. By the year 2010, the predominant land use in the region of the county in which St. Michael and Johnstown Flood National Memorial are located, would still predominantly (60 percent) be undeveloped. The predominant developed land use would be residential, representing 14 percent of the land area. **Table 4-7** compares the land uses that occurred in 2000 with the projected land uses for 2010 by acreage and compares the percentages for these periods as well.

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<sup>15</sup> For example, if the Moorhead Cottage were just stabilized and not rehabilitated for re-use, then construction costs would decrease by \$164,000 and annual costs over the ten year period by \$160,000. This \$324,000 cost savings (5% of the project) would reduce benefits by \$160,000 (3%). The impact on general park costs or tourism benefits would be small and difficult to estimate.

**Table 4-7: Future Land Uses for Region 1<sup>a</sup>, 2000 and 2010**

Land Use	2000	2010	Percent of Region	Percent of County
Agricultural	6,929 acres	5,949 acres	6.6%	1.3%
Commercial	1,161 acres	1,571 acres	1.7%	0.4%
Industrial	1,391 acres	1,701 acres	1.9%	0.4%
Residential	10,621 acres	12,661 acres	14.0%	2.9%
Public/Semi-Public <sup>b</sup>	7,230 acres	7,230 acres	8.0%	1.6%
Transportation	6,338 acres	6,968 acres	7.7%	1.6%

Source: Cambria County Planning Commission; 2000 Comprehensive Plan Update.

<sup>a</sup> Planning Region 1 includes Adams Township, the City of Johnstown and 20 other municipalities that comprise the southern portion of Cambria County.

<sup>b</sup>No change was forecast for Public/Semi-Public land use because of the addition of State Game Lands in the 2000 Land Use figures which inflated the annual change increments.

### Impacts of Alternative 1-No Action

The total land area for Region 1, which is the southern portion of Cambria County that includes the historic district and Johnstown Flood NM, is composed of 90,388 acres, or 20.6 percent of the County’s land area. In this region, the greatest change expected to land use are projected increases in the residential acreage and decreases in agricultural land.

Based on coordination with the Adams Township Zoning Board, the clubhouse and surrounding historical properties are zoned as "historic district." The outside perimeter or outside the historic district is currently zoned “A/R-1” or Agriculture/Residential. For Alternative 1, the existing land uses would not change and zoning around the structures would remain Historic District, with Agricultural/Residential (A/R1) zoning surrounding the Historic District. No changes are expected; therefore, there would be **no impact** to land use from Alternative 1.

### Cumulative Impacts of Alternative 1-No Action

Alternative 1 proposes to maintain the structures in a safe condition and retain current usage of the structures. This alternative would have no impact on land use; therefore, there would be no cumulative impacts as a result of implementing Alternative 1.

### Conclusion

For Alternative 1, the existing land use would not change and zoning around the structures would remain Historic District, with Agricultural/Residential (A/R1) zoning surrounding the Historic District. There would be no impact to land use from selecting Alternative 1.

### Impacts of Alternative 2-Adaptive Re-Use of Structures

Residential: Residential use of the Clubhouse, Clubhouse Annex, Brown Cottage and Moorhead Cottage would be compatible with adjacent land uses, as well as the existing zoning designation is Historic District and Residential/Agricultural. There would be **no impact** to land use if residential use is selected.

Tourism: Re-use of Brown Cottage as a B&B, Moorhead Cottage as a museum and the Clubhouse for tourism purposes would not affect land use or the Historic District zoning designation. There would be **no impact** to land use if Tourism use is selected.

Entertainment: Depending on the entertainment venue selected, there would be no change in land use if the Clubhouse is re-used for entertainment purposes, such as a “black box” theater. There would be **no impact** to land use if the Clubhouse is used for entertainment purposes.

Community Uses: The land use designation for the Clubhouse should remain as it currently exists. There would be **no impact** to land use if the Clubhouse or other structures are used for community purposes.

Park Orientation, Interpretation and Education Uses: There would be no changes in land use if the Clubhouse is used for park orientation, interpretation and education purposes. There would be **no impacts** to land use if park orientation is selected.

Concessions and Exhibit Space: There would be **no impacts** to land use if these structures are used for concessions, such as lodging, a restaurant or exhibit space.

## **Cumulative Impacts of Alternative 2-Adaptive Re-Use of Structures**

The existing zoning for the area in which the historic structures are located is Historic District, with Residential and Agriculture as adjacent zoning. Overall, selection of any of the uses described for Alternative 2 would have no cumulative impacts on land use.

## **Conclusion**

The rural character of Adams Township is expected to change over time as residential, industrial and commercial land uses attempt to keep pace with population growth in the county and township. Most of this projected growth is expected to occur around the more urbanized areas, such as Johnstown, and along major transportation corridors in the county. As public water and sewerage services extend into rural areas serviced by septic tanks and wells, growth will follow. For Alternative 2, no changes to existing land use or zoning is anticipated under any of the options considered. There would be no impacts to land use with the proposed uses.

## **COMMUNITY SERVICES AND UTILITIES**

### **Methodology**

A review of emergency response services listed on the county website and in the St. Michael-Sidman yellow pages, as well as review of the County and Adams Township Comprehensive Plan, provided insights into the location and level of community services, emergency response services and utilities serving the area. A description of these services is provided in Chapter 3.

### **Impacts of Alternative 1-No Action**

Selection of Alternative 1 would not impact or strain any of the existing community services or utilities. Therefore, there would be **no direct or indirect impacts** to community services or utilities with Alternative 1.

### **Cumulative Impacts of Alternative 1-No Action**

There would be no cumulative impacts as a result of Alternative 1-No Action.

## **Conclusion**

Alternative 1 would not increase the demand on community services or utilities. There would be no direct or indirect impacts as a result of Alternative 1.

### **Impacts of Alternative 2-Adaptive Re-Use of Structures**

Residential: If the Clubhouse is adapted for residential purposes, new plumbing, wiring and a heating system would be required for this structure. If the Moorhead Cottage is adapted for

residential purposes, it would also require new plumbing, heating and wiring. The Brown Cottage and the Clubhouse Annex would not be affected. The least intrusive form of heating would be electric baseboard heat, but the overall efficiency is not optimum, particularly for residential use during cold climate conditions. Forced-air heating systems would require a major reworking of ducts throughout the structures. There would be no additional stresses on community services or utilities. Therefore, there would be **no direct or indirect impacts** to community services and utilities.

Tourism: Tourism considers establishment of lodging, such as a B&B or a hotel; a museum; or a restaurant as a range of adaptive re-uses of the structures. If re-use of the Clubhouse and Moorhead Cottage would involve overnight stays by visitors, heating, plumbing and wiring upgrades for these structures will be needed. The least intrusive form of heating would be baseboard heat, but the overall efficiency is not optimum, particularly for residential use during cold climate conditions. Forced-air heating systems would require a major reworking of ducts throughout the structures. With the influx of additional visitors into the area, police and rescue services may be needed. The direct impacts to existing utilities and community services would be **Negligible**.

Entertainment: If the first floor of the Clubhouse is used for a theater and if this theater is temporary, the existing heater on the first floor may be sufficient during winter months. Much will depend on whether dining is a component of the theater and when (seasons) the theater would be open to the public. **No impacts** to utilities or communities would occur for entertainment.

Community Uses: If the first floor of the Clubhouse is adapted for community uses, the existing utilities would most likely be sufficient to accommodate these uses. There would be no direct or indirect impacts to utilities and community services.

Park Orientation, Interpretation and Education Uses: NPS may begin the story of the Johnstown Flood at the Clubhouse. Interpretive use and park orientation would not be expected to stress local community services or involve major changes in the utilities. The first floor restrooms of the Clubhouse would probably be expanded or upgraded to accommodate increased visitation and public restrooms. Improvements to the heating, plumbing and wiring at Moorhead Cottage would also be made. The impacts to utilities for park orientation and education uses would be **Negligible**. There would be no impacts to community services.

Concessions and Exhibit Space: Use of the Clubhouse by a concessionaire, such as a restaurant, catering service, or a venue such as an antique mall, would require upgrades to the existing utilities, particularly if the upper floors of the Clubhouse are utilized and if a museum is established in Moorhead Cottage. The least intrusive form of heating would be baseboard heat, but the overall efficiency is not optimum, particularly for residential use during cold climate conditions. Forced-air heating systems would require a major reworking of ducts throughout the structures. There would be no impacts to utilities or community services.

## Cumulative Impacts of Alternative 2-Adaptive Re-Use of Structures

For Alternative 2, short-term impacts to utilities are expected as a result of rehabilitating the Clubhouse and the cottages to accommodate a range of different uses. However, no cumulative impacts are expected to community services and utilities for any of the options.

## Conclusion

Although visitation to the park is projected to peak by 2009 with an increase of about 48,000 visitors, none of the options addressed under Alternative 2 is expected to create a strain on existing utilities or community services that serve the area. Emergency response services are sufficient to meet the existing and projected needs of the park.

For Alternative 2, there would be **no direct or indirect impacts** to utilities or community services for Residential, Entertainment, Community Uses or Concessions and Exhibits. For Tourism and Park Orientation, the impacts would be **Negligible**.

## TRANSPORTATION IMPACTS

### Methodology

Reference to the following documents was made in assessing transportation-related impacts to the South Fork Fishing and Hunting Club Clubhouse, the Clubhouse Annex, Brown Cottage and Moorhead Cottage:

- *Future Transportation Plan* for Adams Township
- *Johnstown Flood National Memorial Alternative Transportation Study*, Final Report
- *Johnstown Flood National Memorial Draft Boundary Study and Environmental Assessment*
- Adams Township Comprehensive Plan

### Impacts of Alternative 1-No Action

**Figure 3-13** in Chapter 3 illustrates the existing transportation network in Adams Township and shows that the primary access to the Clubhouse, Annex and Cottages is via Route 869 (Locust Street) and Main Street. Although this route would continue to serve the Historic District, NPS would work with Adams Township and the private landowner of the right-of-way for the historic carriage road that extends behind the cottages to re-establish this roadway as the primary access to the cottages. Cottage Street, a spur off Main Street that leads to the cottages, cannot accommodate increased vehicular traffic or coach buses due to the narrow, steep winding slope and the lack of parking. Parking for the cottages would be provided on a cleared plateau to the rear of these structures adjacent to the historic coal company road. Four parking spaces would be provided for the Brown Cottage and six spaces for Moorhead Cottage.

The parking area at the Clubhouse currently has space sufficient to accommodate about 15-20 vehicles. Overflow parking can be accommodated in the open area between the Clubhouse and the Annex or behind the Clubhouse. Motorcoaches and school buses present the biggest issue for parking. These buses can park in the unpaved off-street parking lot to the east side of the Clubhouse, if there are few vehicles using the lot. Otherwise, buses can offload passengers in the Clubhouse parking lot and wait to pick up passengers after tours have been completed.

Signage would be installed guiding visitors to the historic district and the Clubhouse. NPS would work with Adams Township and the owner of the historic carriage road behind the Clubhouse to develop it as an alternate access to the Clubhouse and cottages, though access from Main Street

would most likely remain the primary access. For Alternative 1, impacts to transportation systems would be **Negligible**.

### **Cumulative Impacts of Alternative 1-No Action**

Alternative 1 would have no impact on transportation systems; therefore, there would be no cumulative impacts as a result of implementing Alternative 1.

### **Conclusion**

For Alternative 1, the existing parking and access via Main Street would most likely be retained as the primary access. NPS would work with Adams Township and the landowner of the historic carriage road to develop it as an alternate access for visitors, residents and service vehicles. Signage would be installed directing visitors to the Historic District and the Clubhouse. The impact to the local transportation system would be **Negligible**.

### **Impacts of Alternative 2-Adaptive Re-Use of Structures**

Residential: If residential use is selected for the cottages, access via Main Street and Cottage Street would be discouraged. Cottage Street, the spur from Main Street where the cottages are located, is narrow, steep and winding and cannot accommodate additional vehicular traffic. Increased traffic on Main Street and Cottage Street would conflict with plans to develop an interpretive pedestrian path for visitors through the Historic District and would prevent the development of pedestrian walkways and connections among other historic structures.

Only a small amount of parking would be needed by residents in both Brown and Moorhead Cottages. The HSR recommended that four parking spaces be provided for Brown Cottage and six for Moorhead Cottage. Parking at the Clubhouse Annex would be maintained in the lot on the north side of the building.

The HSR also recommended that vehicle access be developed along the historic carriage road from Franklin Street behind the line of structures to the south and west of Main Street to Brown and Moorhead Cottages. Development and use of the carriageway would also enable limited relocation of driveways and parking areas from the southwest curb of Main Street to locations behind the buildings along this street. The potential impacts to transportation systems for this option would be **Negligible**.

Tourism: If use of the structures focuses on tourism, visitors would be directed to the South Fork Fishing and Hunting Club Clubhouse as the initial stop. Signage to the Historic District and the Clubhouse would be essential at the fork of Route 869 and Main Street to the north and at Route 869 and Lincoln Street on the south. Because the structures are not visible from Route 869, this signage would be critical to directing visitors to the Clubhouse.

All visitors to the South Fork Fishing and Hunting Club Clubhouse would be directed to park in the designated lot behind the Clubhouse on the west side of the building. Parking on the site adjacent to the Clubhouse can be located so as to have a minimal visual impact on the principal building porch and entrance that were originally designed to face Lake Conemaugh. The HSR recommended that all parking be located in a continuous bay adjacent to the service alley on the building's southwest side. Access to a kitchen/storage platform can also be provided from the southwest side of the building.

Parking at the Clubhouse can currently accommodate 15 to 20 vehicles. Additional parking either on the side between the Clubhouse and the Annex or behind the Clubhouse can be

accommodated. Given the access constraints, poor sight distance visibility and the size of the parcels, the HSR recommended that all visitors to the site be directed to park in the designated lot behind the Clubhouse to the west. Parking configuration should be in a continuous bay adjacent to the service alley on the southwest side of the Clubhouse. As the Clubhouse is the focal point of the district, as well as the most visible of all the structures from Main Street, parking at this site would be the most logical location.

In addition, the open area between the Clubhouse and the Clubhouse Annex would provide space for overflow parking, if needed. Access to a kitchen and storage platform can also be provided from this lot. Only a small amount of parking would be needed by residents in both Brown and Moorhead Cottages. This parking could be developed on a cleared plateau to the rear of the cottages adjacent to the historic carriage road. The HSR recommended that four parking spaces be provided for Brown Cottage and six for Moorhead Cottage.

Tour buses could present a problem in terms of parking if the visitor lot is full. Buses may be parked at the back of the Clubhouse lot or in the open space area between the Clubhouse and the Annex. Buses can not access Brown Cottage and Moorhead Cottage from the spur off Main Street, or Cottage Street. Cottage Street is a steep, narrow and winding dead-ended street with no turnaround for vehicles.

The visitor experience is expected to begin with the visitor orientation facilities provided at the Clubhouse. From this site, visitors will be encouraged to walk to the other wayside and exhibits along Main Street using portions of the historic boardwalk which may be reconstructed. This boardwalk would connect the Clubhouse and the Annex with Brown Cottage, Moorhead Cottage and three other more modest cottages along the route. The pedestrian walkway could substitute for an existing gravel roadside parking area on the southwest side of Main Street and would terminate at Moorhead Cottage.

The potential impact to transportation systems for the Tourism use would be **Moderate**.

Entertainment: If the Clubhouse is used for an entertainment venue such as a dinner theater or a “black box” theater, concentrated traffic to the site would most likely occur during the evening. Lighting of the parking area at the Clubhouse is recommended. Parking at the Clubhouse would be located in a continuous bay adjacent to the service alley on the southwest side of the building.

Signage would be provided to guide visitors to the Historic District and the Clubhouse. As with the preceding options, development of the historic carriage road to alleviate traffic on Main Street and to provide access to the rear of the building would be conducted. The development of the historic carriageway route behind the structures would also improve the context for historic interpretation of the Club site.

The potential impact to parking and transportation resulting from the entertainment option would be **Negligible** mainly because of limited space within the Clubhouse for theater seating.

Community Uses: If the Clubhouse is used for a community center, traffic coming to the site would most likely be concentrated during the day or commensurate with scheduled meetings, events or classes. Access and signage to the site would be similar to the description for the previous uses. Parking would be located in a continuous bay adjacent to the service alley on the southwest side of the Clubhouse.

As with the other options, NPS would work closely with Adams Township and the private landowner of the historic carriage road to develop this roadway as an access for visitors, services and residents to the site.

The potential impact to the transportation system from community uses of the structures would be **Negligible**.

Park Orientation, Interpretation and Education Uses: The visitor experience would begin with the visitor orientation facilities provided at the Clubhouse. From this site, visitors would be encouraged to walk to the other waysides along Main Street using portions of a reconstructed historic boardwalk. This boardwalk, if reconstructed, would connect the Clubhouse and the Annex with Brown Cottage, Moorhead Cottage and three other more modest cottages along the route. The pedestrian walkway could substitute for an existing gravel roadside parking area on the southwest side of Main Street and would terminate at Moorhead Cottage.

Re-directing traffic from Main Street as a vehicular connector to the structures and developing the former carriageway as a primary access to these structures would improve the context in which the structures can be interpreted. NPS would work closely with Adams Township and the private landowner of the historic carriage road to re-establish the roadway as access for visitors, residents and services. The development of this roadway as an alternative access would also allow for the limited relocation of driveways and parking areas from the southwest curb of Main Street to locations behind the buildings along this street.

Motorcoaches and school buses could create parking issues if the visitor lot is full. Buses may be parked at the back of the Clubhouse lot or in the open space area between the Clubhouse and the Annex. Buses can not access Brown Cottage and Moorhead Cottage from the spur off Main Street or from Cottage Street. Cottage Street is a dead end street that is steep, narrow and windy and would not be easily used by buses.

Parking for Brown and Moorhead Cottages could be developed on a cleared plateau to the rear of the cottages adjacent to the historic carriage road. The HSR recommended that four parking spaces be provided for Brown Cottage and six for Moorhead Cottage.

Staging of motorcoaches while visitors tour the site is an important consideration. Idling buses generate noxious exhaust fumes and generate noise, both of which are nuisances to adjacent neighbors. It is recommended that buses either be staged at an area away from residences while waiting for passengers to return or bus drivers be required to shut down their engines while waiting.

As part of this option, NPS could continue interpretive van tours and facilitate a self-guided auto tour connecting the many different related interpretive sites. Both of these tours could begin at the South Fork Fishing and Hunting Club Clubhouse and end at the Visitor Center at the park. Bicycle tours would also be an alternative mode of visiting the Historic District and associated interpretive sites.

Reconstruction of the former boardwalk in front of the cottages to the Clubhouse would add to the historic context and would provide an excellent and accessible way for visitor to see the

district through a walking tour. Recommendations for visits to the area via alternative modes of transportation included<sup>16</sup>—

- Van Tours
- Motorcoach Tours
- Self-Guided Auto Tours
- Lakebed and Path of the Flood Trail Bicycle Routes
- Cycling the Southern Alleghenies Bicycle Route
- Construct an Internal Pedestrian Connection

The potential impact to the transportation system if park orientation and interpretation is selected would be **Minor**.

Concessions and Exhibit Space: If a concessionaire, such as a restaurant, caterer, bed and breakfast or hotel is selected for any of the structures, consideration must be given for access to accommodate service vehicles. As with the other options, NPS would work closely with Adams Township and the private landowner of the historic carriage road to re-establish this roadway as an access for service vehicles, as well as for visitors and residents. The development of this roadway as an alternative access would also allow for the limited relocation of driveways and parking areas from the southwest curb of Main Street to locations behind the buildings along this street. Re-directing traffic from Main Street as a vehicular connector to the structures and developing the former carriage road as a primary access to these structures would improve the context in which the structures can be interpreted.

The potential impact to the transportation system if a concession is permitted use of the structures would be **Negligible**.

### **Cumulative Impacts of Alternative 2-Adaptive Re-Use of Structures**

Increased visitation to the Historic District would be accompanied by increased traffic, noise and parking in the neighborhood. These impacts could be mitigated through a range of transportation options, including NPS-operated van tours, expanded parking at the Clubhouse and walking or bicycle tours.

In 2006, the Forest Hills Regional Alliance initiated planning for Phase 1 of the Johnstown Flood Trail, which will be a pedestrian trail extending from Sidman through the South Fork Fishing and Hunting Club Historic District in St. Michael and will eventually link to the Path of the Flood Trail near South Fork. This trail will attract bicyclists and other recreational users from around the area to the South Fork Fishing and Hunting Club Historic District and may open opportunities for overnight visits.

The use of the historic carriage road behind the structures will also be an important cumulative effect. Use of this road will help remove visitor traffic from Main Street and provide access to the Clubhouse and cottages with minimal intrusion to the neighborhood.

Within a 10-year planning horizon, Alternative 2 could potentially have **Minor** cumulative impacts associated with the local transportation system, particularly in relation to parking and to access. However, with the development of the former carriage road, increased traffic within the historic district would be minimized.

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<sup>16</sup> Clough, Harbour & Associates, LLP. September 2004. *Johnstown Flood National Memorial Alternative Transportation Study, Final Report*. Contract Order No.: T4180030001.

## Conclusion

For all options evaluated for Alternative 2, NPS would work with Adams Township and the private landowner of the historic carriage road, which extends behind the Clubhouse and cottages, to establish this roadway as the primary access to the structures for services, visitors and residents. Use of this roadway to access the Clubhouse would alleviate visitor traffic and potential congestion from local streets, would minimize traffic noise and would enable easier access to the cottages and the Clubhouse for service vehicles. Signage would be installed directing visitors to the historic district and the Clubhouse for all options under Alternative 2.

Re-use of the Clubhouse and associated structures associated with Residential, Entertainment, Community Uses and Concession and Exhibits would result in **Negligible** impacts to local transportation systems. Promotion of the site for Tourism opportunities would result in **Moderate** impacts due to the increased bus and vehicular traffic, although NPS would work with Adams Township and the owner of the private historic carriage road behind the Clubhouse for use of this road as an alternate access to the structures. Use of the structures for Park Orientation, Interpretation and Education purposes would induce a **Minor** impact to transportation systems, as NPS could exercise more control over visitor transportation through the use shuttle vans or it could re-route bus traffic and provide a staging area for these vehicles.

## HEALTH AND SAFETY IMPACTS

### Methodology

Review of the *Level I Pre-Acquisition Environmental Site Assessment Survey for Johnstown Flood National Memorial* and the Historic Structures Report was conducted to determine the presence of contaminants onsite. Documentation of the contaminants and hazardous materials was made in the NPS Level Survey Checklist for Proposed Real Estate Acquisitions, which can be found in the appendix to the Level I survey.

For both alternatives, lead-based paint, asbestos, and all hazardous materials either have been or will be removed.

### Impacts of Alternative 1-No Action

Structural stabilization of the Clubhouse and Moorhead Cottage is very important to ensuring the safety of visitors and park personnel. Recommendations for building stabilization include—

- Cleaning out all debris from structures that could result in fire hazards and remove all carpets
- Disconnect electrical services and evaluate wiring needs
- Shore up the eastern beam under Room 102 in the Clubhouse
- Repair roofs, gutters and downspouts, and replace concrete base gutters and reinstall hanging gutters
- Abate mold and mildew

Lead-based paint was found in the Clubhouse and in the Clubhouse Annex. This material was found on doors, windows, wood baseboards, plaster walls, floors and wood walls inside the Clubhouse, and on the windows, doors, wood siding, trim and porch on the exterior of the building. Lead paint was also found on the interior windows casings and basement concrete columns and on the doors and transoms on the exterior of the Annex. Remediation of this material through wet scraping the painted surfaces and applying a protective coating of lead block

to prevent exposure to residual lead-based paint was recommended in the Level I survey. Otherwise, the surfaces coated with lead-based paint could be removed and replaced.

Friable and nonfriable asbestos was found in the Clubhouse around radiator steam pipes, in linoleum, floor tiles and cove base at various locations within the building. Removal of this material by a licensed asbestos abatement contractor was recommended.

Removal and disposal of hazardous materials found in the basement of the Clubhouse Annex was recommended. Long-term water leakage in the basements, as well as through roof leaks, has resulted in the accumulation of mold in both the Clubhouse and the Annex. The Level I Survey recommended that the Clubhouse roof be repaired to stop water damage and that mold be removed from the surfaces in accordance with USEPA guidelines.

During the Level I site assessment, floor drains were observed in the basement of the Clubhouse and the Annex. These drains should be either connected to the town's public wastewater system or permanently sealed to avoid accidental releases of substances into the environment.

The short-term impacts related to safety and public health issues are expected to be **Minor** for Alternative 1.

### **Cumulative Impacts of Alternative 1-No Action**

Short-term impacts will occur as hazardous substances and other safety issues are removed and abated. After abatement, long-term benefits to the community will occur from stabilizing and improving the Clubhouse and cottages, as well as remediating health and safety issues, such as lead-based paint and asbestos.

### **Conclusion**

In addition to removal of hazardous materials from the basement of the Clubhouse and Clubhouse Annex, the Level 1 site assessment recommended removal of materials containing mold and mildew in accordance with the procedures outlined in "Mold Remediation in Schools and Commercial Buildings," published by USEPA. The site assessment further recommended roof and structural repairs to prevent additional water leakage. Floor drains in the structures should be permanently sealed or connected to the town's public wastewater system. A Level III survey was recommended to properly abate lead-based paint and asbestos. **Minor** impacts are expected with Alternative 1.

### **Impacts of Alternative 2-Adaptive Re-Use of Structures**

The recommendations for the abatement of lead-based paint, asbestos and other hazardous materials outlined for Alternative 1 also apply to Alternative 2. In addition, the NPS would investigate and ensure that supports for the first floor of Brown Cottage are reinforced and that any termite damage is remediated. Both Brown Cottage and Moorhead Cottage would be repaired to meet the code for residential or B&B use, if that use is selected. An environmental site assessment will also be conducted for Moorhead Cottage in the future, as well as a Level II survey to properly abate lead-based paint and asbestos in the structures.

As with Alternative 1, positive impacts will occur as hazardous substances are removed and stabilization is completed. The impacts resulting from stabilization and remediation would be short-term and would result in long-term benefits. The impacts resulting from addressing health and safety issues would be **Moderate** for all options for Alternative 2.

## **Cumulative Impacts of Alternative 2-Adaptive Re-Use of Structures**

Short-term impacts will occur as hazardous substances and other safety issues are removed and abated. After abatement, long-term benefits to the community would occur from stabilizing and improving the Clubhouse and cottages, as well as remediating health and safety issues, such as lead-based paint and asbestos.

Under any of the options addressed in Alternative 2, these structures will be interpreted to the public once they are improved for safety and stabilized. None of the options would adversely affect the public's health and safety. However, implementation of any of the adaptive re-uses evaluated under Alternative 2 will enable the NPS to expedite abatement measures for future enjoyment and use by the public.

## **Conclusion**

Structural stabilization of the Clubhouse and Moorhead Cottage is very important to ensuring the safety of visitors and park personnel. Recommendations for stabilizing the buildings include—

- Removing all debris that could result in fire hazards and remove all carpets
- Disconnect electrical services and evaluate wiring needs
- Shore up the eastern beam under Room 102 in the Clubhouse
- Repair roofs, gutters and downspouts, and replace concrete base gutters and reinstall hanging gutters

A Level I Environmental Site Assessment was conducted of the Clubhouse and the Clubhouse Annex in 2005. Lead-based paint was found on interior and exterior surfaces, asbestos was found around radiator pipes and floor tiles and other hazardous materials were found in the basements of these buildings. Abatement of these materials by licensed asbestos abatement contractors was recommended for both alternatives.

Investigation into the adequacy and safety of the supports for the first floor of Brown Cottage would be conducted and any termite damage that previously occurred would be remediated. The cottage would be repaired to meet the code for its selected use. An environmental site assessment would be conducted of Moorhead Cottage. Repairs to roofs and to basements to prevent further water infiltration were recommended. Sealing of basement floor drains or connecting to public wastewater systems were also recommended for these structures.

The impacts for health and safety for all uses discussed for Alternative 2 would be **Moderate**.

## **ENERGY REQUIREMENTS IMPACTS**

### **Methodology**

A review of the energy conservation issues provided in the HSR was conducted.

### **Impacts of Alternative 1-No Action**

Maintenance and safety improvements, including improvements that help conserve energy costs and resources, would occur with Alternative 1. For the Clubhouse, installation of insulation would be a key element in conserving energy. Insulation in the attic, as well as in the exterior walls, would be needed. Insulation of the exterior walls represents a significant area that needs to be addressed for energy conservation purposes. The preferred method for insulating the exterior walls is to remove the siding from the building and install fiberglass batt insulation from the exterior. This method has the advantage of allowing full inspection of the wood frame

construction of the building and should result in minimal damage to the exterior. If batt insulation is infeasible, blowing insulation into the wall cavity with the proper attention paid to venting air spaces, spaces in the siding, and installing a vapor barrier by the proper treatment of the interior surfaces can be conducted.

The preceding recommendations for insulation and windows discussed for the Clubhouse also apply to Brown Cottage and Moorhead Cottage. Coupled with the significant degree of deterioration of interior plaster, the preferred method for insulating the walls to Brown Cottage is to install insulation in the walls from the interior. If Moorhead Cottage is rehabilitated for interpretive purposes, the level of insulation may not be as high.

The impacts of Alternative 1-No Action for energy requirements are **Negligible**.

### **Cumulative Impacts of Alternative 1-No Action**

Alternative 1 would have no additional impact on energy requirements; therefore, there would be no cumulative impacts associated with implementing Alternative 1.

### **Conclusion**

Maintenance and safety improvements, including improvements that help conserve energy costs and resources, would occur with all structures under Alternative 1. Existing heating and cooling systems would continue to be used. For Alternative 1, the impact to resources for energy conservation purposes would be **Negligible**.

### **Impacts of Alternative 2-Adaptive Re-Use of Structures**

Residential Use: If residential use is proposed for the structures, energy conservation measures would be increased, particularly in Brown and Moorhead Cottages and the Annex. For Moorhead Cottage, if residential use is selected, roof and exterior wall insulation would be installed. Since most of the plaster on the interior is in poor condition and requires replacement, the recommended method of insulating the exterior walls would be from the interior.

Thermopane window replacement for Moorhead Cottage and for the Clubhouse, if used for residential purposes, would be required. Also, installation of window shutters on the Clubhouse to provide shade during the summer would be recommended.

The impacts for energy requirements for residential use would be **Minor**.

Tourism: Depending on which direction adapting the structures toward tourism would take, whether through development as a museum and exhibit area, a restaurant, or a hotel or a B&B, will determine the level and intensity of the energy conservation measures. The level of insulation, for example, would depend on whether all floors of the Clubhouse are used for a hotel or if only the first floor is used for a restaurant.

Insulation in the roof and exterior walls would be the most important means of conserving energy. Installation of new thermopane windows may also be required. Other recommendations to help conserve energy at the Clubhouse include reinstallation of outside shutters to provide shading from the summer sun.

If a museum and exhibit area is developed in Moorhead Cottage, the energy requirements would not be as great as if the building is used as a residence or a bed and breakfast. If either Moorhead Cottage or Brown Cottage is used for a bed and breakfast, exterior insulation and thermopane

windows should be installed. Since most of the interior plaster is in poor condition and will require replacement, the preferred method is insulation of the exterior walls from the inside.

Moorhead Cottage would also require installation of a new heating system. The least intrusive system to the historic structure would be baseboard heat. However, this form of heat is neither energy-efficient nor cost effective. Baseboard heat may be suitable for uses such as a museum or exhibit area rather than a residential use.

The impacts on energy conservation for tourism would be **Minor**.

Entertainment: Energy conservation measures would not be as extensive for this option as they would be for hotel use, bed and breakfast use or residential use. The first floor of the Clubhouse may only require window replacement for this option, particularly if the upper floors are not used.

The existing heater located on the first floor of the Clubhouse may be sufficient for short-term visitors and for entertainment purposes. The impairment threshold to resources for energy conservation requirements would be **Negligible**.

Community Uses: Energy conservation measures would most likely be minimal with this option, as the need for full insulation and window replacement would not be as great as they would be for residential or hotel use.

The existing heater located on the first floor of the Clubhouse may be sufficient for short-term visitors and for community uses. The impairment threshold to resources for energy conservation requirements would be **Negligible**.

Park Orientation, Interpretation and Education Uses: If the Clubhouse and Moorhead Cottage are used principally for park orientation and interpretation purposes, energy conservation measure would be similar to those described for community uses.

The existing heater located on the first floor of the Clubhouse may be sufficient for short-term visitors and for park orientation and interpretive purposes. The impairment threshold to resources for energy conservation requirements would be **Negligible**.

Concessions and Exhibits: The energy conservation requirements may vary depending on the type of concessionaire that NPS attracts for this option. If a restaurant opens in the Clubhouse, electric baseboard heat may be sufficient. However, if a hotel concession or a B&B is established, more extensive insulation, window replacement and heating would be required.

The impairment threshold to resources for energy conservation requirement would be **Minor**, assuming the Clubhouse is adapted for a hotel, overnight visits and a restaurant.

## **Cumulative Impacts of Alternative 2-Adaptive Re-Use of Structures**

The cumulative impacts of energy use for the proposed adaptive re-uses under Alternative 2 would vary by intensity. For example, if an adaptive re-use is selected that involves temporary or part-time use of the structures, such as offices, exhibit space, park orientation and community uses, the energy use expended and required over time would be less than if the structure is adapted for full-time or overnight use as a residence, a hotel or a B&B. Insulation, thermopane windows, insulation and upgraded HVAC systems would be needed for residential and overnight

uses as opposed to short-term day uses. As a result, the cumulative impact of energy use for the options described for Alternative 2 would be **Moderate** depending on the use selected.

## **Conclusion**

For Alternative 2, the determination for the impairment to resources for energy needs would depend on whether the structure would be used by visitors as a residence or for overnight sleeping purposes or whether it would be used for short-term, temporary visits where heating requirements may not be as intense. The impact on energy requirements for Residential use, Tourism and Concessions and Exhibits is **Minor**. The impact for Entertainment, Community Uses and Park Orientation is **Negligible**.

**Table 4-8** summarizes the potential impacts by alternative and by impact topic.

**Table 4-8: Comparison of Adaptive Use Alternatives and Potential Impacts for Johnstown Flood NMem Historic Structures**

Impact Category	Alternative 1 No Action	Alternative 2					
		Residential	Tourism	Entertainment	Community Uses	Park Orientation, Interpretation, & Education	Concessions & Exhibits
Historic and Cultural Resources	Clubhouse- <b>Minor</b> ; Annex- <b>No Impact</b> ; Brown- <b>Minor</b> ; Moorhead- <b>Moderate</b>	Clubhouse- <b>Moderate</b> ; Annex- <b>No Impact</b> ; Brown- <b>No Impact</b> ; Moorhead- <b>Moderate</b>	Clubhouse- <b>Moderate</b> ; Annex- <b>Negligible</b> ; Brown- <b>Negligible</b> ; Moorhead- <b>Major</b>	Clubhouse- <b>Minor</b> ; Annex- <b>N/A</b> ; Brown- <b>N/A</b> ; Moorhead- <b>N/A</b>	Clubhouse- <b>Negligible</b> ; Annex- <b>Moderate</b> ; Brown- <b>N/A</b> ; Moorhead- <b>Major</b>	Clubhouse- <b>Minor</b> ; Annex- <b>Negligible</b> ; Brown- <b>Negligible</b> ; Moorhead- <b>Major</b>	Clubhouse- <b>Minor-Moderate</b> ; Annex- <b>Negligible</b> ; Brown- <b>Negligible</b> ; Moorhead- <b>Major</b>
Design of the Built Environment	<b>Minor</b>	Annex & Brown Cottage- <b>Negligible</b> ; Moorhead Cottage- <b>Moderate</b> ; Clubhouse- <b>Minor</b>	<b>Moderate</b>	Clubhouse- <b>Minor</b> ; Annex- <b>N/A</b> ; Brown- <b>N/A</b> ; Moorhead- <b>N/A</b>	Clubhouse- <b>Negligible</b> ; Annex- <b>Moderate</b> ; Brown- <b>N/A</b> ; Moorhead- <b>Major</b>	<b>Negligible</b>	<b>Negligible</b>
Socioeconomic Impacts	<b>Negligible</b>	<b>Negligible</b>	<b>Moderate (short-term); Minor (long-term)</b>	<b>Minor</b>	<b>Negligible</b>	<b>Moderate (short-term); Minor (long-term)</b>	<b>Minor</b>
Land Use	<b>No Impact</b>	<b>No Impact</b>	<b>No Impact</b>	<b>No Impact</b>	<b>No Impact</b>	<b>No Impact</b>	<b>No Impact</b>
Community Services & Utilities	<b>No Impact</b>	<b>No Impact</b>	<b>Negligible</b>	<b>No Impact</b>	<b>No Impact</b>	<b>Negligible</b>	<b>No Impact</b>
Transportation	<b>Negligible</b>	<b>Negligible</b>	<b>Moderate</b>	<b>Negligible</b>	<b>Negligible</b>	<b>Minor</b>	<b>Negligible</b>
Health & Safety	<b>Minor</b>	<b>Moderate</b>	<b>Moderate</b>	<b>Moderate</b>	<b>Moderate</b>	<b>Moderate</b>	<b>Moderate</b>
Energy Requirements	<b>Negligible</b>	<b>Minor</b>	<b>Minor</b>	<b>Negligible</b>	<b>Negligible</b>	<b>Negligible</b>	<b>Minor</b>

N/A=Not Applicable; Negligible=No measurable effect; **Minor**=Measurable effect, but with minimal change to resource conditions; **Moderate**=Changes to resource conditions but not irreversible or irretrievable damage, or resource values can be sustained through mitigation; **Major**=Resource conditions are significantly altered even with mitigation. These changes could be positive or negative and could modify existing resource values and their conditions.