ACCESSIBILITY OF THE ST. CROIX NATIONAL SCENIC RIVERWAY

By

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ABSTRACT

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The purpose of this study was to determine the level of accessibility that currently exists within the confines of the St. Croix National Scenic Riverway, the Upper St. Croix River, and specifically the Namekogon district for persons who are physically disabled. This study examined the accessibility of public access facilities, and sites as determined by road access to recreational opportunities. Each predetermine site was accessed using observations and measurement in accordance with the Americans with Disabilities Act checklist for Readily Achievable Barrier Removal dated August 1995. This study was conducted to gain insight as to the current levels of accessibility and develop an awareness of potential issues surrounding accessibility within the St. Croix National Scenic Riverway.

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TABLE OF CONTENTS

CHAPTER 1

Introduction

Accessibility is always an issue for persons with physical disabilities. It is unlikely that we think about our own ability to physically move ourselves from one location to another. Most of the time we take for granted the personal empowerment to make ourselves accessible for work and leisure activities. For persons with physical disabilities, many physical barriers for work and leisure still exist. Most of the common practices of society have a "non-disabled" bias, and the norms by which everyday life is perceived are based on the experience of non-disabled people. This bias has the effect of marginalizing people with disabilities who are prevented from enjoying equal opportunities in health care, education, employment, and recreation. The exclusion of disabled people is not always intentional, but it has a negative impact on their quality of life and that of their families. (Peat, 1997).

With the passing of the Americans with Disabilities Act of 1990, many of the physical barriers for persons with disabilities were addressed and the necessary changes passed into law. Individuals with physical or mobility limitations require special modifications to physical structures and sometimes the alteration of the natural environment.

In enacting the ADA, Congress found that people with disabilities had been systematically denied "the opportunity to compete on an equal basis" by pervasive discrimination, involving not only "outright intentional exclusion," but also "architectural, transportation, and communication barriers," "exclusionary qualification standards and criteria," and the "failure to make modifications to existing facilities and practices" (Silvers & Wasserman, 2000, p2). The ADA thus treats discrimination against people with disabilities as, in part, a sin of commission--the imposition of exclusionary practices and standards--and, in part,

a sin of omission--the failure to remove barriers and to make reasonable modifications. This understanding of discrimination reflects recognition that our society has deliberately or negligently excluded its disabled members from a wide range of activities by structuring those activities in a way that makes them needlessly inaccessible, (Silvers & Wasserman, 2000).

When issues of accessibility and alteration of the natural environment collide, questions of reasonable accommodations are often brought to the forefront. Accessibility to the great outdoors has of late become a public issue, from local city parks and county forests to the nations national parks and forests. Thousands of physically disabled people are participating in recreational opportunities available to them. The convergence of three trends has people with disabilities enjoying more varied recreational opportunities than ever before. First the 1990 Americans with Disabilities Act (ADA) has created a greater awareness of the needs of people with disabilities. Second, more sophisticated technology brings new opportunities to people with disabilities, from battery-powered bicycles to speech recognition software. The Internet also helps spread the word. Third, an aging baby boom and continued refinements in medical care ensure continued growth of the disabled population, Fost (1989).

Travel opportunities among the disabled population have also increased. Accommodations in the travel industry have made traveling much easier for persons who are disabled. With mobility comes the issue of accessibility. Places that were not accessible are now being asked to provide accessibility. One of these places is our great and vast National Parks. Millions of visitors each year pass through the gates to gaze upon the natural wonders that nature provides. Among the millions of visitors are persons with physical disabilities fully expecting to participate in the activities offered to non-disabled visitors. This expectation however is not always realized. Because of remote locations, terrain and environmental

constraints barriers to accessibility continue to exist. In many cases these barriers are near impossible to overcome and reasonable accommodation unrealistic.

It is estimated there are over 54 million persons in our country today who meet the legal definition of a person with a disability. This includes those who have significant degrees of mobility, sensory, or cognitive limitations. Further, when we consider the growing percentage of our population that is age 65 or older; those with invisible disabilities, such as cardiac and respiratory problems; those who have temporary disabilities such as broken arms or legs; parents with strollers, and wheeled devices, and the families and friends who will be traveling with these individuals, a majority of our nation's population can benefit from accessible facilities and programs. (Stanton, 2000).

The National Park Service Director, Robert Stanton, issued Director's Order #42 effective date November 3, 2000 that addressed accessibility for visitors with disabilities. In the Director's orders he stated that there are two primary reasons why the National Park Service (NPS) has initiated its present accessibility efforts: 1) there are various legal mandates that require all government agencies to make facilities and programs accessible; and 2) it simply makes good sense to employ principles of "universal design" in providing facilities for everyone rather than for only a portion of the population. (Stanton, 2000). In keeping with the director's reasons for reviewing accessibility within the National Park Service, it is therefore reasonable to believe that there is a need for an independent study to be performed specifically designed to address whether or not required mandated legislation and standards of accessibility are in compliance.

In a March 13, 2001 telephone conversation with Mr. Bob Anderson, the Regional Accessibility Coordinator for the National Park Service, mid west regional headquarters based in

Omaha Nebraska, Mr. Anderson stated that although park policy on accessibility standards has long since been established, to the best of his knowledge, no formal accessibility study has been conducted by his office on the St. Croix National Scenic Riverway.

I purpose to conduct an independent study of accessibility with in the St Croix National Scenic Riverway for persons with physical disabilities. In addition to setting goals and objectives, the National Park Service Director (Stanton, 2000) established implementation strategies, one of which is "Existing programs, facilities and services will be evaluated by programs and park units to determine the degree to which there are currently accessible to and usable by people with disabilities" (p5).

The purpose of the National Scenic Riverway is to preserve the upper St Croix River and its Namekogon Tributary as a relatively free flowing river in a near primitive condition, and to protect and make it accessible for public recreation use. The St Croix National Scenic Riverway consists of three districts covering over 160 natural miles of wild riverway. The districts include Namekogon, Marshland, and the St. Croix. This study will be confined to the Namekogon District.

Statement of the problem

The purpose of this study is to determine the level of physical accessibility of the Upper St. Croix National Scenic Riverway, specifically the Namekogon District for persons who are disabled. Areas to be assessed within Namekogon District will be public access facilities (i.e. visitor center, canoe landings, camp sites, picnic areas, rest rooms, parking lots, and signage). Data will be collected through observations and measurements during the summer of 2001.

Research Objectives

In accordance with the American with Disabilities Act (ADA) and the ADA accessibilities Guidelines (ADAAG), the following research and objectives will be researched.

1. To determine the level of physical accessibility of public buildings.

2. To determine the level of physical accessibility of canoe landings.

3. To determine the level of physical accessibility of parking lots.

4. To determine the level of physical accessibility of campsites, (road access).

5. To determine the level of physical accessibility of picnic areas.

6. To determine the level of physical accessibility of rest rooms.

7. To determine the level of appropriate informative signage.

Definition of Terms

For clarity of understanding, the following terms need to be defined.

Accessibility- "an accessible design is one that is usable by people with disabilities" (Available http: www.zerrecomn.com.html,1999. p.1). "The most common use of the word is for buildings, where an accessible building will allow people with disabilities to be able to enter all areas and be able to use all features"

Americans with Disabilities Act (ADA)- "the ADA prohibits discrimination on the basis of disability in employment, programs, and services provided by the state and local governments, goods and services provided by private companies, and in commercial facilities". (Available http: www.usdoj.gov/crt/ada/adahom.1.htm, 1999 p1)

Disability- "the inability to do any substantial gainful activity by reason of any medically determined physical or mental impairment which can be expected to last for a continuous period of not less than 12 months" (Available http: www.ssdisability.net/disability.html, 1999 p1).

Limitations-"a restriction; a qualification; a restraining condition; to know one's own Limitations; to know the reach and limits of one's abilities" (Available http: www.Selfknowledge.com/55299.htm, 1999 p1).

CHAPTER 2

Literature Review

The level of accessibility for persons who are physically disabled within the St. Croix National Scenic Riverway, The Upper St. Croix River, and specifically the Namekogon District is in question. A literature review was performed to gather information. This review was completed first in a general search for legislation governing accessibility, then refined to specific areas relating to this topic. These areas were, recreation opportunities, travel and leisure activities for persons who are disabled, and history of the St. Croix National Scenic Riverway.

Accessibility Legislation

The Americans with Disabilities Act (ADA), is a sweeping federal civil rights law. When the law passed Congress in 1990, with more than 80% majority, it had strong bipartisan support. It was the culmination of a decade of efforts to recognize the civil rights of people with disabilities. Both former President Bush and President Clinton have supported the measure because it is right (McGovern, 1996).

The Americans with Disabilities Act of 1990, the Architectural Barriers Act of 1968 (PL.90-480), and Section 504 of the Rehabilitation Act of 1973 (PL.93-112), all provided specific guidance regarding physical accessibility for persons who are disabled. This included accessibility to the National Park system, which is funded with federal tax dollars and is under federal mandates to comply with building standards concerned with accessibility. Under the Americans with Disabilities Act of 1990, protection against both intentional and unintentional discrimination is addressed and the federal government is responsible for enforcing the standards outlined by law. Much more than that, the federal government is to provide specific guidance on

required levels of accessibility of public buildings, parking lots, signage, and other areas of accessibility. The Architectural Barriers Act of 1968 (PL.90-480) required all buildings and facilities built or renovated in whole or in part with federal funds to be accessible to and usable by physically disabled persons. Section 504 of the Rehabilitation Act of 1973 (PL.93-112), as amended required program accessibility in all services provided with federal dollars. The National Park Service therefore must provide reasonable access to its facilities, services, programs, and outdoor activities for persons with disabilities. Under the Uniform Accessibility Standards (UFAS), published in 1984, the Department of Interior and the General Administration adopted standards by which accessibility would be standardized. Along with the Americans with Disability Act Accessibility Guidelines (ADAAG), the Uniform Federal Accessibility Standards (UFAS) are the current corner stones by which the Department of the Interior and the National Park Services develop future construction plans.

Recreation, Travel and Leisure

One major reason for the increase in recreational travel and leisure activities for persons who are disabled are the advances in assistive technology. Technology advances have allowed many persons physically disabled to expand their daily and leisure activities. This empowerment to move about without assistance has created an independence and awareness that accessibility and mobility are attainable.

By definition leisure means free time during which one may indulge in rest or recreation. After a day or week of work, most people look forward to the opportunity to relax and enjoy activities that leave one feeling refreshed and renewed. Recreation and leisure allows us to build friendships, develop social relationships, and promotes a sense of the community in which we live (Wilson et al., 1997).

For persons with disabilities the same rewards of leisure time activities accomplished through careful planning and the use of modern adaptive technology are available. Adaptive mobility for leisure pursuits begins by considering the person, his or her abilities, and the environment he or she chooses for play. Adaptive recreational mobility promotes fitness. Many people with quadriplegia or paraplegia can propel hand cycles, increasing their heart rate for excellent aerobic conditioning. Aside from physical conditioning, self-esteem and socialization needs are met by an active life style. Adaptive recreational equipment brings people outside and leads them to many places that present environmental changes (Stiens, 1998).

Environmental changes for the purpose of accessibility and making the outdoors accessible to persons with disabilities is a controversial issue. Special interest groups and lawmakers often disagree on the level of accessibility and the practicality of accessibility. Some of the main issues of accessibility are the cost, enforcement of current laws, and interpretation of legislation.

In the best of all possible worlds, individuals with disabilities would be able to board a plane or a cruise ship, or make reservations at a hotel or a resort without the slightest worry, knowing that all accommodations would be fully accessible. At some point in the future, perhaps that may become a reality. In the meantime, however, families that include children or adults with disabilities need to make careful plans and preparation well in advance of traveling or going on vacation. Part of the difficultly in making such plans is that there are no clear cut, universally accepted standards for defining accessibility. In many countries, there are no official standards of any kind. Even in the United States, where the Americans with Disabilities Act, and a variety of other state and federal laws set specific, detailed rules for accessibility, there is confusion and a lack of accessibility (Epstein, 1998).

When traveling in the United States, one might find the accessibility for persons with physical disabilities to be outstanding at one location and very poor at another. This inconsistency in accessibility raises the anxiety levels for persons with special needs.

Recent research has presented the first empirical quantitative research investigating the constraints and barriers that people with physical disabilities experience when traveling. The research shows the many constraints and barriers that exist, and general physical access is still the major constraint encountered by people with a physical disability (Darcy & Darvwalla, 1999).

With the recently cited research mentioned above, it is apparent that accessibility issues continue to exist. Therefore it is safe to assume that levels of accessibility in both the private and public sectors require a continual need for assessment of accessibility. As a nation, the United States enjoys its recreational leisure and travel activities. Billions of dollars are spent each year on travel and tourism. The National Park Service System receives thousands of visitors who travel from all over the world to experience what these special places have to offer. Many of these visitors are persons with physical disabilities. Accessibility to visitor centers, programs, and activities require continual assessments to ensure all visitors are afforded equal access.

History of St. Croix National Scenic Riverway

The St. Croix River and its Namekogon Tributary located in North Central Wisconsin and parts of Minnesota, provide thousands of visitors with the opportunity to experience nature in its most primitive form. Remote camping, canoeing, and beautiful scenery are in great supply along the vast stretches of wild riverway. It is home to hundreds of species of fish and wild life.

Before the establishment of the St. Croix National Scenic Riverway under the 1968 Wild and Scenic Rivers Act, (PL 90-542), the St. Croix River was a major highway for the transportation of the logging industry. Logging was the area's primary industry in the early 1900's. After logging dwindled out, there were concerns over the use of the riverway. There were many economic and environmental issues to be discussed. Special interest groups such as Save Our St. Croix (SOS), and St. Croix River Association provided controversial arguments over the use of the Upper and Lower St. Croix Riverway.

In 1964, Northern States Power Company announced plans to build a steam plant on the shores of the St. Croix at Oak Park Heights, just south of Stillwater, MN (Nunnally, 1989). More controversy grew over the proper use of the St, Croix as business and industry collided with environmentalists. The power plant was eventually built, but the protection of the Upper St. Croix and Namekogon Rivers were assured with the passing of the Wild and Scenic River Act of 1968. This law provided federal protection for seven other rivers across the nation. It called for federal purchase or acquisition of land along the river to be managed by the National Park Service as a wild area and to be used mainly for activities such as canoeing and fishing. Soon after the National Park Service, through legislation passed in 1972, acquired the Lower St. Croix River under its protection and management.

Twenty plus years have passed and the St. Croix Scenic River continues to attract a wide variety of visitors, canoeists, hikers and outdoor enthusiasts to its shores. Today 252 miles of riverway are provided protection and management thanks to concerned citizens and the vision of the 89th and 90th United States Congresses.

Accessibility to the St. Croix National Scenic Riverway for persons who are physically disabled is a question of reasonable levels of physical accommodations and implementation of mandated guidelines. Keeping in mind environmental issues and wild life management, accessibility is and will remain an issue of continual concern.

CHAPTER 3

Methodology

Sites

There are approximately 30 sites for this study. They are: public buildings and physical locations (i.e. canoe landings, parking lots, campsites, (with road access), picnic areas and restrooms). Also the level of appropriate information signage will be assessed. The sites are located within the confines of the St. Croix National Scenic Riverway boundaries, specifically the Namekogon District.

Instrumentation

For this study an instrument will be specifically developed and tailored for the detailed examination of the sights being studied. A checklist will be developed using the ADA Accessibility Guidelines (ADAAG). The checklist will include specific areas that are related to the study and ADA standards of accessibility as set forth by law.

Procedure

Sites are identified by their physical location within the confines of this study. National Park Service maps will be used to locate sites and an accessibility checklist will be used to collect data. Data will be collected by use of observation and physical measurement by persons trained in the use of the ADAAG standards.

Data Analysis

Data will be analyzed qualitatively through observation and measurement. Analysis will include assessment of the accessibility/non accessibility of specific sites with the project boundaries. A detailed report with recommendations will be generated that identifies specific areas that can be made accessible for use by persons with disabilities.

CHAPTER 4

Results

An independent research study was conducted to determine levels of accessibility for persons with disabilities within the confines of the Namekagon District of the St. Croix National Scenic Riverway. The areas selected for this study were determined by public accessibility via road access to the river way, facilities, and programs.

In conducting this research study 28 individual sites were evaluated on location using observations and measurements. The standards for the observations and measurements were taken from the Americans with Disabilities Act checklist, provided by the National Institute on Disability and Rehabilitation Research (NIDRR).

The check list is divided into sections by priority labels; priority one (1) Accessible Approach/Entrance, priority two (2) Access to Goods and Services, priority three (3) Usability of Restrooms, and priority four (4) Additional Access. Some of the sections were not used and deemed non applicable to the given physical nature of the site being evaluated. The following is lists of sites were surveyed within the Namekagon District of the St. Croix National Riverway.

Sites Surveyed

1. Namekagon Dam
2. County “M”
3. Cap Creek
4. Phillipi
5. Thompson Bridge
6. Pacwawong
7. Stinnett
8. Groat
9. North Springbrook
10. Springbrook
11. Earl
12. Namekagon Visitor Center
13. Gordon Dam
14. County “T”
15. CCC Bridge
16. Namekagon Trail Bridge
17. Mc Dowell
18. West Howell
19. East Howell
20. Fritz
21. Whispering Pines
22. County “K”

23. Riverside
24. Trego Trail/Ski
25. Schoem Park
26. Louise Park
27. Dry Landing
28. Visitor Center Landing

Priority 1-Accessible Approach/Entrance

Route of travel at many sites is designed to be a rustic experience and does not necessarily meet the criteria for evaluation. The parking lots in most cases were black top with no curbs and were level with the terrain, at least the immediate terrain.

Route of Travel (ADAGG 4.3, 4.4, 4.5, 4.7)

1. Is there a route of travel that does not require the use of stairs? 21 of 27 sites met standards (78%). Remarks: 1 site did not meet the criteria for evaluation.
2. Is the route of travel stable, firm and slip-resistant? 1 of 21 sites met standards (5%). Remarks: 7 sites did not meet the criteria for evaluation.
3. Is the route at least 36 inches wide? 17 of 20 sites met standards (85%). Remarks: 8 sites did not meet the criteria for evaluation.
4. Can all objects protruding into the circulation paths be detected by a person with a visual disability using a cane? 13 of 17 sites met standards (76%). Remarks: 11 sites did not meet the criteria for evaluation.
5. Do curbs on the route have curb cuts at drives, parking, and drop-offs? 2 of 2 sites met standards (100%). Remarks: 26 sites did not meet the criteria for evaluation.

Ramps (ADAAG 4.8)

1. Are the slopes of ramps no greater than 1:12? 1 of 2 sites met standards (50%). Remarks: 16 sites did not meet the criteria for evaluation.
2. Slope is given as a ratio of the height to the length. 1:10, 1 of 2 sites met standards (50%). Remarks: 26 sites did not meet the criteria for evaluation.
3. Do all ramps longer than 6 feet have railings on both sides? N/A. Remarks: 0 sites meet the criteria for evaluation.
4. Are railings sturdy, and between 34 and 38 inches high? N/A. Remarks: 0 sites meet the criteria for evaluation.
5. Is the width between railings or curbs at least 36 inches? N/A. Remarks: 0 sites meet the criteria for evaluation.
6. Are ramps non-slip? 1 of 2 sites met standards (50%). Remarks: 26 sites did not meet the criteria for evaluation.
7. Is there a 5-foot-long level landing at every 30-foot horizontal length of ramp, at the top and bottom of ramps and at switchbacks? 1 of 2 sites met standards (50%). Remarks: 26 sites did not meet the criteria for evaluation.
8. Does the ramp rise no more than 30 inches between landings? 1 site 0 met standard (0%). Remarks: 26 sites did not meet the criteria for evaluation.

Parking and Drop-Off Areas (ADAAG 4.6)

1. Are adequate number of accessible parking spaces available (8 feet wide for car plus 5-foot access aisle)? 3 of 10 sites met standards (30%). Remarks:18 sites did not meet the criteria for evaluation.

2. Are 8-foot-wide spaces, with minimum 8-foot-wide access aisles, and 98 inches of vertical clearance, available for lift equipped vans? 1 of 9 sites met standards (11%). Remarks: 19 sites did not meet the criteria for evaluation.
3. At least one of every 8 accessible spaces must be van-accessible (with a minimum of one van-accessible space in all cases). 1 of 9 sites met standard (11%). Remarks: 19 sites did not meet the criteria for evaluation.
4. Are the access aisles part of the accessible route to the accessible entrance? 1 of 9 sites met standards (11%). Remarks: 19 sites did not meet the criteria for evaluation.
5. Are the accessible spaces closet to the accessible entrance? 1 of 10 sites met standard (10%). Remarks: 18 sites did not meet the criteria for evaluation.
6. Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessibility" at van spaces? 1 of 10 sites met standards (10%). Remarks: 18 sites did not meet the criteria for evaluation.

Entrance (ADAAG 4.13, 4.14, 4.5)

1. If there are stairs at the main entrance, is there also a ramp or lift, or is there an alternative accessible entrance? 1 of 4 sites met the standards (25%). Remarks: 24 sites did not meet the criteria for evaluation.
2. Do all inaccessible entrances have signs indication the location of the nearest accessible entrance? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
3. Can the alternate accessible entrance be used independently? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.

4. Does the entrance door have at least 32 inches clear opening (for a double door, at least one 32-inch leaf)? 1 of 2 sites met standard (50%). Remarks: 26 sites did not meet the criteria for evaluation.
5. Is there at least 18 inches of clear wall space on the pull side of the door, next to the handle? 1 of 2 sites met standard (50%). Remarks: 26 sites did not meet the criteria for evaluation.
6. Is there a threshold ¼-inch high or less, or if beveled edge, no more than ¾-inch high? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
7. If provided, are carpeting or mats a maximum of ½-inch high? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
8. Are edges securely installed to minimize tripping hazards? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
9. Is the door handle no higher than 48 inches and operable with a closed fist? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.
10. Can doors be opened without too much force (exterior doors reserved: maximum is 5 lbf for interior doors)? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.
11. If the door has a closer, does it take at least 3 seconds to close? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.

Priority 2-Access to Goods and Services

Access to goods and services at many sites is designed to be a rustic experience and does not necessarily meet the criteria for evaluation. However one public building was evaluated during the study and was found to meet the criteria for evaluation (Namekagon Visitor Center).

Horizontal Circulation (ADAAG 4.3)

1. Does the accessible entrance provide direct access to the main floor, lobby, or elevator? 2 of 2 sites met standard (100%). Remarks: 26 sites did not meet the criteria for evaluation.
2. Are all public spaces on an accessible route of travel? 3 of 3 sites met standard (100%). Remarks: 25 sites did not meet the criteria for evaluation.
3. Is the accessible route to all public spaces at least 35 inches wide? 2 of 2 sites met standard (100%). Remarks: 26 sites did not meet the criteria for evaluation
4. Is there a 5-foot-circle or a T-shaped space for a person using a wheelchair to reverse direction? 2 of 2 sites met standard (100%). Remarks: 26 sites did not meet the criteria for evaluation.

Doors (ADAAG 4.13)

1. Do doors into public spaces have at least a 32-inch clear opening? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
2. On the pull side of doors, next to the handle, is there at least 18 inches of clear wall space so that a person using a wheelchair or crutches can get near to open the door? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
3. Can doors be opened without too much force (5 lbf maximum for interior doors)? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
4. Are door handles 48 inches high or less and operable with a closed fist? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
5. Are all threshold edges ¼-inch high or less, or if beveled edge, no more than ¾-inch high? 1 of 1 site met standard (100%). Remarks: 27 sites did not the meet criteria for evaluation.

Rooms and Spaces (ADAAG4.2, 4.4, 4.5)

1. Are all aisles and pathways to materials and services at least 36 inches wide? 3 of 3 sites met standard (100%). Remarks: 25 sites did not meet the criteria for evaluation.
6. Is there a 5-foot circle or T-shaped space for turning a wheelchair completely? 2 of 2 sites met standard (100%). Remarks: 28 sites did not meet the criteria for evaluation.
7. Is carpeting low-pile, tightly woven, and securely attached along edges? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
8. In circulation paths through public areas, are all obstacles cane-detectable (located within 27 inches of the floor or higher than 80 inches, or protruding less than 4 inches from the

wall)? 2 of 2 sites met standard (100%). Remarks: 26 sites did not meet the criteria for evaluation.

Emergency Egress (ADAAG 4.28)

1. If emergency systems are provided, do they have both flashing lights and audible signals? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.

Signage for Goods and Services (ADAAG 4.30)

1. If provided, do signs and room numbers designating permanent rooms and spaces where goods and services are provided comply with the appropriate requirements for such signage? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
2. Signs mounted with centerline 60 inches from floor. 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
3. Mounted on wall adjacent to latch side of door, or as close as possible. 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
4. Raised characters, sized between 5/8 and 2 inches high, with high contrast (for room numbers, rest rooms, exits). 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
5. Brailed text of the same information. 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
6. If pictogram is used, raised characters and Braille must accompany it. 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.

Directional and Informational Signage

1. If mounted above 80 inches, do they have letters at least 3 inches high, with high contrast, and non-glare finish? 2 of 19 sites met standard (11%). Remarks: 9 sites did not meet the criteria for evaluation.
2. Do directional and informational signs comply with legibility requirements? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.

Controls (ADAAG 4.27)

1. Are all controls that are available for use by the public (including electrical, mechanical, cabinet, game, and self-service controls) located at an accessible height? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
2. Reach Ranges: The maximum height for a side reach is 54 inches; for a forward reach, 48 inches. The minimum reachable height is 15 inches for a front approach and 9 inches for a side approach. 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
3. Are they operable with a closed fist? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.

Seats, Tables, and Counters (ADAAG 4.2,4.32, 7,2)

1. Are the aisles between fixed seating (other than assembly area seating) at least 36 inches wide? 9 of 15 sites met standard (60%). Remarks: 13 sites did not meet the criteria for evaluation.
2. Are the spaces for wheelchair seating distributed throughout? 8 of 17 sites met standard (47%). Remarks: 11 sites did not meet the criteria for evaluation.
3. Are the tops of tables or counters between 28 and 34 inches high? 12 of 17 sites met standard (71%). Remarks: 11 sites did not meet the criteria for evaluation.

4. Are knee spaces at accessible tables at least 27 inches high, 30 inches wide, and 19 inches deep? 8 of 15 sites met standard (53%). Remarks: 13 sites did not meet the criteria for evaluation.
5. At each type of cashier counter, is there a portion of the main counter that is no more than 36 inches high? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
3. Is there a portion of food-ordering counters that is no more than 36 inches high, or is there space at the side for passing items to customers who have difficulty reaching over a high counter? O sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.

Stairs (ADAAG 4.9)

1. Do treads have a non-slip surface? O sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
2. Do stairs have continuous rails on both sides, with extensions beyond the top and bottom stairs? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.

Priority 3-Usability of Rest Rooms

Usability of restrooms at many sites is designed to be a rustic experience and does not necessarily meet the criteria for evaluation. During the study it was found that most of the restrooms were portable toilets mounted on concrete holding tanks. Among the remaining restrooms evaluated, four sites did meet the criteria for evaluation.

Getting to the Rest Rooms (ADAAG 4.1)

1. If rest rooms are available to the public, is at least one rest room (either one for each sex, or unisex) fully accessible? 6 of 15 sites met standard (40%). Remarks: 13 sites did not meet the criteria for evaluation.
2. Are there signs at inaccessible rest rooms that give directions to accessible ones? 0 sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.

Doorways and Passages (ADAAG 4.2, 4.13, 4.30)

1. Is there tactile signage identifying rest rooms? O sites met standard (0%). Remarks: 0 sites met the criteria for evaluation.
2. Mount signs on the wall, on the latch side of the door, complying with the requirements for permanent signage. Avoid using ambiguous symbols in place of text to identify rest rooms. 0 sites met standards (0%). Remarks: 0 sites met the criteria for evaluation.
3. Are pictograms or symbols used to identify rest rooms, and if used, are raised characters and Braille included below them? 1 of 11 sites met standard (11%). Remarks: 17 sites did not meet the criteria for evaluation.
4. Is the doorway at least 32 inches clear? 4 of 11 sites met standard (36%). Remarks: 17 sites did not meet the criteria for evaluation.
5. Are doors equipped with accessible handles (operable with a closed fist), 48 inches high or less? 2 of 11 sites met standard (18%). Remarks: 17 sites did not meet the criteria for evaluation.
6. Can doors be opened easily (5 lbf maximum force)? 3 of 11 sites met standard (27%). Remarks: 17 sites did not meet the criteria for evaluation.

7. Does the entry configuration provide adequate maneuvering space for a person using a wheelchair? 5 of 10 sites met standard (50%). Remarks: 18 sites did not meet the criteria for evaluation.
8. Is there a 36-inch-wide path to all fixtures? 5 of 10 sites met standard (50%). Remarks: 18 sites did not meet the criteria for evaluation.

Stalls (ADAAG 4.17)

1. Is the stall door operable with a closed fist, inside and out? 2 of 5 sites met standard (40%). Remarks: 23 sites did not meet the criteria for evaluation.
2. Is there a wheelchair-accessible stall that has an area of at least 5 feet by 5 feet, clear of the door swing, OR is there a stall that is less accessible but that provides greater access than a typical stall (either 36 by 69 inches or 48 by 69 inches)? 3 of 4 sites met standard (75%). Remarks: 24 sites did not meet the criteria for evaluation.
3. In the accessible stall, are there grab bars behind and on the side wall nearest to the toilet? 3 of 4 sites met standard (75%). Remarks: 24 sites did not meet the criteria for evaluation.
4. Is the toilet seat 17 to 19 inches high? 3 of 4 sites met standard (75%). Remarks: 24 sites did not meet the criteria for evaluation.

Lavatories (ADAAG 4.19, 4.24)

1. Does one lavatory have a 30-inch wide by 48-inch-deep clear space in front? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
2. A maximum of 19 inches of the required depth may be under the lavatory. 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.

3. Is the lavatory rim no higher than 34 inches? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
4. Is there at least 29 inches from the floor to the bottom of the lavatory apron (excluding pipes)? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
5. Can the faucet be operated with one closed fist? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
6. Are soap and other dispensers and hand dryers within reach ranges and usable with one closed fist? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
7. Is the mirror mounted with the bottom edge of the reflecting surface 40 inches high or lower? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.

Priority 4-Additional Access

Additional Access covers drinking fountains and telephone accessibility. With exception of the Namekagon Visitors Center most of the drinking fountains are primitive and the terrain leading to them uneven. One telephone site met the criteria for further evaluation during the study.

Drinking Fountains (ADAAG 4.15)

1. Is there at least one fountain with clear floor space of at least 30 by 40 inches in front? 7 of 8 sites met standard (88%). Remarks: 20 sites did not meet the criteria for evaluation.
2. Is there one fountain with its spout no higher than 36 inches from the ground, and another with a standard height spout (or a single "hi-lo" fountain)? 5 of 8 sites met standard (63%). Remarks: 20 sites did not meet the criteria for evaluation.

3. Are controls mounted on the front or on the side near the front edge, and operable with one closed fist? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.
4. Is each water fountain cane-detectable (located within 27 inches of the floor or protruding into the circulation space less than 4 inches from the wall)? 3 of 6 sites met standard (50%). Remarks: 22 sites did not meet the criteria for evaluation.

Telephone (ADAAG 4.31)

1. If pay or public use phones are provided, is there clear floor space of at least 30 inches by 48 inches in front of at least one? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
2. Is the highest operable part of the phone no higher than 48 inches (up to 54 inches if a side approach is possible)? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
3. Does the phone protrude no more than 4 inches into the circulation space? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
4. Does the phone have push-button controls? 1 of 1 site met standard (100%). Remarks: 27 sites did not meet the criteria for evaluation.
5. Is the phone hearing-aid compatible? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.
6. Is the phone adapted with volume control? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.
7. Is the phone with volume control identified with appropriate signage? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.

8. If there are four or more public phones in the building, is one of the phones equipped with a text telephone (TT or TDD)? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.
9. Is the location of the text telephone identified by accessible signage bearing the International TDD Symbol? 0 site met standard (0%). Remarks: 0 sites met the criteria for evaluation.

CHAPTER 5

The literature review and survey information support the findings that accessibility within the confines of the St. Croix National Scenic Riverway is limited. However this limited accessibility is in some cases by design. Also nature provides barriers which were not meant to be removed. The St. Croix National Scenic Riverway was developed with intention of providing its visitors with a wild river experience. This experience comes with remoteness and an almost non-human impact on the environment. In most cases every attempt is made to ensure that visitors experience a near wild wilderness adventure.

In keeping with this theme the survey conducted provided many insights into the actual accessibility of the Namekogon District of the St. Croix National Scenic Riverway. Results of the survey determined that many attempts have been made to make the Riverway accessible, however many barriers still exist. Road access, campsites, and picnic areas were determined to be accessible only to the parking lot. Access to picnic tables, canoe landings, and restrooms were not found to meet standards of full accessibility. In most cases access to the river was non-existent for wheel chair users with out assistance. Ramps and stairways leading to the river provided little accessibility. Stairways were found to be very steep and did not have a non-slip surface.

The vast majority of restroom facilities were in the form of portable toilets. These toilets were found to be inaccessible to wheelchair users and physically disabled persons in general. There was however some recently built restrooms, which did provide full accessibility for its users.

Picnic areas were found to be accessible with wheelchair accessible tables distributed throughout the district. The surface leading to these tables however was rough and uneven. It was questionable as to whether the natural landscape provided appropriate levels of accessibility.

Throughout the Namekogon District appropriate levels of signage for accessibility was not in place. Brailed text, raised characters were not available on any of the signs providing information or services.

Again, keeping in mind the spirit and intent of the wild river experience it can be determined that although discrepancies were found and room for improvement apparent, the St. Croix and Namekogon Rivers provide thousands of visitors each year both disabled and non-disabled with rewarding experiences and fond memories.

Accessibility to our national parks is of great importance to all who share the great outdoors. It is therefore recommended that these accessibility issues be brought to the forefront. Also that action may be taken to address these issues keeping in mind the needs of the visitors and the responsibility to preserve our natural resources.

Further study and research is needed to provide additional insight for the next generation of visitors and the inclusion of full accessibility.

Specific finding and recommendations in these three major areas: Picnic and camping areas, landings, and the Visitor Center accessibility are as follows.

Findings:

Picnic and camping areas: Picnic and camping areas that are road accessible were found to be for the most part inaccessible for wheelchair users. Wheelchair accessible picnic tables were found throughout the areas observed. This created the perception or visual invitation to potential disabled patrons that these areas are accessible to them. Access to these

areas had major barriers. The rough surface of the parking lots and the uneven terrain made accessibility to picnic tables and camping areas extremely difficult.

Recommendation: If the park service provides picnic tables that are designed to be accessible to wheelchair users, care should be taken to provide full access to that picnic table or camping area. Full access would include a designated pathway on a surface that is even with no more than a 1 in 12 slope from the parking lot to the table. Additionally, restrooms facilities should also be accessible in the same manner that the picnic table is accessible. If accessibility changes cannot be made to accommodate disabled patrons the tables should be removed until full accessibility has been achieved.

Landings: Canoe landings within the areas observed were found to be for the most part inaccessible for wheelchair use. Slope and rough surfaces create major barriers for full accessibility. Two of the landings that were observed provided surfaces that would be considered compact and wheelchair accessible. However, in both locations the slope to the river is to great and raises safety concerns for disabled patrons.

Recommendations: The park service should provide switch back paths to the river landings that are properly sloped and surfaced. This would allow accessibility and provide a safe usable access for the walking impaired and wheelchair users. When road access restrooms and facilities open to the public are provided they should have doorways that are at 32 inches clear, have door handle that can be operated with closed fist and be 48 inches in height or less. Restroom doors should be able to be opened easily (5 lbf maximum force) to wheelchair accessible. The vast majority of restrooms in the park are in the form of portable toilets. These toilets do not meet any of the above mentioned requirements. Every attempt should be made to replace the toilets with fully accessible ones.

Visitor Center: The Namekagon Visitor Center is a focal point for this section of the park. It is visited by hundreds of people each year. The visitor center has recently received a much-needed face-lift and a new parking lot. Every reasonable attempt was made to make the parking lot and outside the Visitor Center fully accessible. However, several signage issues were noted and are listed as follows. The information display located outside the Visitor Center is without raised characters and Braille. Also inside the Visitor Center the information and restroom signs are without raised characters and Braille. Although these are subtle discrepancies they are very important to the visually impaired.

Recommendation: Provide signs that have raised letters, Grade II Braille for restrooms and other services that are accessible to the public.

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