

# **Wilderness Accessibility for People with Disabilities**

**A Report to the President  
and the Congress of the United States  
on Section 507 (a) of the  
Americans with Disabilities Act of 1990**

**National Council on Disability**

**June 1, 1992**

## **Description of the National Council on Disability**

The National Council on Disability is an independent federal agency composed of 15 members appointed by the President of the United States and confirmed by the U.S. Senate. The National Council initially was established in 1978 as an advisory board within the Department of Education (Public Law 95-602). The Rehabilitation Act Amendments of 1984 (Public Law 98-221) transformed the National Council into an independent agency. The current statutory mandate of the National Council assigns it the following duties:

Establishing general policies for reviewing the operation of the National Institute on Disability and Rehabilitation Research (NIDRR);

Providing advice to the Commissioner of the Rehabilitation Services Administration (RSA) on policies and conduct;

Providing ongoing advice to the President, the Congress, the RSA Commissioner, the Assistant Secretary of the Office of Special Education and Rehabilitative Services (OSERS), and the Director of NIDRR on programs authorized in the Rehabilitation Act;

Reviewing and evaluating on a continuous basis the effectiveness of all policies, programs, and activities concerning individuals with disabilities conducted or assisted by federal departments or agencies, and all statutes pertaining to federal programs, and assessing the extent to which they provide incentives to community-based services, promote full integration, and contribute to the independence and dignity of individuals with disabilities;

Making recommendations of ways to improve research, service, administration, and the collection, dissemination, and implementation of research findings affecting persons with disabilities;

Reviewing and approving standards for Independent Living programs;

Submitting an annual report with appropriate recommendations to the Congress and the President regarding the status of research affecting persons with disabilities and the activities of RSA and NIDRR;

Reviewing and approving standards for Projects with Industry programs;

Providing to the Congress, on a continuous basis, advice, recommendations and any additional information that the Council or the Congress considers appropriate;

Providing guidance for the President's Committee on the Employment of People with Disabilities; and

Issuing an annual report to the President and the Congress on the progress that has been made in implementing the recommendations

contained in the National Council's January 30, 1986, report, *Toward Independence*.

While many government agencies deal with issues and programs affecting people with disabilities, the National Council is the only federal agency charged with addressing, analyzing, and making recommendations on issues of public policy that affect people with disabilities regardless of age, disability type, perceived employment potential, economic need, specific functional ability, status as a veteran, or other individual circumstance. The National Council recognizes its unique opportunity to facilitate independent living, community integration, and employment opportunities for people with disabilities by assuring an informed and coordinated approach to addressing the concerns of persons with disabilities and eliminating barriers to their active participation in community and family life.

**Wilderness Accessibility for People with Disabilities: A Report to the President and the Congress of the United States on Section 507 (a) of the Americans With Disabilities Act**

National Council on Disability  
1331 F Street, N.W., Suite 1050  
Washington, DC 20004  
(202) 272-2004 Voice  
(202) 272-2074 TT  
(202) 272-2022 Fax

The views contained in this report do not necessarily represent those of the Administration as this document has not been subjected to the A-19 Executive Branch review process.

## National Council on Disability

### Members

Sandra Swift Parrino  
Chairperson  
New York

Kent Waldrep, Jr.  
Vice Chairperson  
Texas

Linda W. Allison  
Texas

Ellis B. Bodron  
Mississippi

Larry Brown, Jr.  
Maryland

Mary Ann Mobley Collins  
California

Anthony H. Flack  
Connecticut

John A. Gannon  
Ohio and Washington, D.C.

John Leopold  
Maryland

Robert S. Muller  
Michigan

George H. Oberle, PED  
Oklahoma

Mary Matthews Raether  
Virginia

Anne Crellin Seggerman  
Connecticut

Michael B. Unhjem  
North Dakota

Helen Wilshire Walsh  
Connecticut

### Staff

Ethel D. Briggs  
Executive Director

Harold W. Snider, PhD  
Deputy Director

Billie Jean Hill  
Program Specialist

Mark S. Quigley  
Public Affairs Specialist

Katherine D. Seelman, PhD  
Research Specialist

Brenda Bratton  
Staff Assistant

Stacey S. Brown  
Staff Assistant

Janice Mack  
Administrative Officer

**Consultant**  
Gregory J. Lais

## Letter of Transmittal

December 1, 1992

The President  
The White House  
Washington, DC 20500

Dear Mr. President:

On behalf of the members and staff of the National Council on Disability, I am pleased to provide you with a copy of *Wilderness Accessibility for People with Disabilities*, prepared in accordance with Section 507 (a) of the Americans With Disabilities Act (P.L. 101-336).

Although no monies were appropriated to conduct this study, the National Council was able to produce this preliminary report on the subject. This report is intended to summarize existing federal policies and regulations and identify important issues relevant to wilderness accessibility for people with disabilities.

The National Council will continue to address public policy issues and to ensure that discrimination in all aspects of American society that inhibit the attainment of independence and dignity for people with disabilities is eliminated.

Sincerely,

Sandra Swift Parrino  
Chairperson

## Acknowledgments

The National Council expresses its gratitude to Gregory J. Lais, executive director of Wilderness Inquiry, Inc., Minneapolis, Minnesota, for conducting this study, *Wilderness Accessibility for People with Disabilities: A Report to the President and the Congress of the United States on Section 507 (a) of the Americans With Disabilities Act*. In addition, we wish to recognize Leo McAvoy, PhD, and Laura Fredrickson of Wilderness Inquiry for their assistance.

Section 507 of the Americans With Disabilities Act of 1990:

#### FEDERAL WILDERNESS AREAS

(a) Study.--The National Council on Disability shall conduct a study and report on the effect that wilderness designations and wilderness land management practices have on the ability of individuals with disabilities to use and enjoy the National Wilderness Reservation System as established under the Wilderness Act (16 U.S.C. 1131 et seq.).

(b) Submission of Report.--Not later than 1 year after the enactment of this Act, the National Council on Disability shall submit the report required under subsection (a) to Congress.

(c) Specific Wilderness Access--

(1) In General--Congress reaffirms that nothing in the Wilderness Act is to be construed as prohibiting the use of a wheelchair in a wilderness area by an individual whose disability requires use of a wheelchair, and consistent with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify any conditions of lands within a wilderness area to facilitate such use.

(2) Definition--For the purposes of paragraph (1), the term wheelchair means a device designed solely for use by a mobility-impaired person for locomotion, that is suitable for use in an indoor pedestrian area.

## Table of Contents

Executive Summary .....	1
Introduction .....	5
Background .....	6
Assumptions and Definitions .....	7
Scope of Study .....	8
Limitations of Study .....	9
Methodology .....	11
Findings .....	15
1. Current policies of NWPS managing agencies .....	15
National Park Service .....	15
U.S. Forest Service .....	18
Bureau of Land Management .....	20
Fish and Wildlife Service .....	21
Survey results of field managers of NWPS units .....	23
2. Current NWPS use levels by persons with disabilities .....	26
3. Enjoyment of the NWPS by persons with disabilities .....	28
How do persons with disabilities visit the NWPS? .....	32
Effect of restrictions on mechanized use .....	33
4. Suggestions for increasing enjoyment of the NWPS .....	35
Conclusions .....	44
Recommendations .....	46
Acknowledgments .....	47



References .....	48
Appendices .....	49
Appendix 1. Surveys, Cover Letters, and Attachments Distributed to	
A) Outfitters and Organizations .....	50
B) Persons with Disabilities .....	56
C) NWPS Managers .....	63
Appendix 2. Tabulations of the Responses from Surveys Distributed to	
A) Outfitters and Organizations .....	68
B) Persons with Disabilities .....	76
C) NWPS Managers .....	91
Appendix 3. Outfitters, Organizations, and Wilderness Advocates Contacted for Participation in the Study .....	98
Appendix 4. National Council Member and Staff Biographies .....	101

## **Executive Summary**

*On the surface, the concurrent goals of equal accessibility and preservation of wilderness areas seem to be antithetical. However, at a closer look, we do not believe that is actually the case. It is not, in our estimation, a question of one goal or legal mandate taking precedence over another or superseding another. It is a question of finding effective ways to balance the intent of both and finding ways to provide the highest level access with the lowest level impact on the environment.*

Statement of Mr. David C. Park, Chief, Special Programs and Populations Branch, National Park Service, to the National Council on Disability on August 7, 1991.

## **Introduction**

The primary goal of this document is to satisfy the requirement of Section 507(a) of the Americans With Disabilities Act (ADA) of 1990.

The National Council on Disability shall conduct a study and report on the effect that wilderness designations and wilderness land management practices have on the ability of individuals with disabilities to use and enjoy the National Wilderness Preservation System (NWPS) as established under the Wilderness Act (16 U.S.C. 1131 et seq.)

The National Council on Disability (NCD) contracted with Wilderness Inquiry, Inc., of Minneapolis, Minnesota, to help conduct this study.

## **Background**

In 1964 Congress passed the Wilderness Act and established the National Wilderness Preservation System. The NWPS is made up of lands managed by federal agencies, including the U.S. Forest Service, the National Park Service, the U.S. Fish and Wildlife Service and, more recently, the Bureau of Land Management. The NWPS is not an independent lands system.

Over the years since its passage, some people have claimed that the Wilderness Act discriminates against the rights of persons with disabilities because it prohibits the use of motorized vehicles, mechanized transport, and other activities within federally designated wilderness areas--the NWPS.

In 1990 Congress passed the Americans With Disabilities Act (ADA). The ADA specifically addresses the issue of wilderness access in Section 507(c):

(1) In General--Congress reaffirms that nothing in the Wilderness Act is to be construed as prohibiting the use of a wheelchair in a wilderness area by an individual whose disability requires use of a wheelchair, and consistent

with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify any conditions of lands within a wilderness area to facilitate such use.

(2) Definition--For the purposes of paragraph (1), the term wheelchair means a device designed solely for use by a mobility-impaired person for locomotion, that is suitable for use in an indoor pedestrian area.

## **Scope of study**

This study is intended to accomplish the following objectives:

1. Review and summarize existing federal policies and regulations relevant to the issue of wilderness access by persons with disabilities.
2. Survey federal unit managers of the NWPS to determine current levels of use by persons with disabilities, identify important issues, and solicit suggestions for ways that persons with disabilities can better utilize the NWPS.
3. Survey programs and outfitters that have provided services to persons with disabilities in units of the NWPS to obtain recommendations and suggestions for improved access.
4. Identify and survey users of the NWPS who have disabilities to document use, obtain measures of the enjoyment of the NWPS by persons with disabilities, and solicit suggestions on ways to improve the level of enjoyment of the NWPS by persons with disabilities.

## **Limitations and methodology**

This study should be considered exploratory in nature. We believe that it fairly and factually represents the issues considered; however, as with any study, it is important to note its limitations in order to establish its validity. Readers are urged to review the sections on limitations and methodology before drawing conclusions on the contents of this report.

## **Federal management policies and practices**

The four federal agencies responsible for wilderness management have different policies and management practices regarding persons with disabilities.

Three of these agencies--the National Park Service, the Forest Service, and the Bureau of Land Management allow the use of wheelchairs within the NWPS. The Fish and Wildlife Service currently does not have any policies regarding this issue; however, the agency has stated its intention to adopt policies similar to those of the other land managing agencies within Department of Interior.

Forest Service policy does not allow the use of electric (motorized) wheelchairs in the NWPS. This policy appears to be in conflict with the definition of a wheelchair in Section 507 (c)(2) of the ADA, which states:

...the term wheelchair means a device designed solely for use by a mobility-impaired person for locomotion, that is suitable for use in an indoor pedestrian area.

This definition is assumed to include all wheelchairs, whether motorized or not, provided that they are suitable for use in an indoor pedestrian area.

Most NWPS managers (74 percent) do not make special provisions for wilderness area use by persons with disabilities. This appears to be consistent with Section 507(c)(1) of the Americans With Disabilities Act, which reads:

...consistent with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify any conditions of lands within a wilderness area to facilitate such use.

However, beyond the question of wheelchair use, there is a lack of specific guidelines on use of the NWPS by persons with disabilities, including issues such as trail width and toilets at established sites.

Finally, there appears to be some confusion among NWPS field managers about policies regarding use by persons with disabilities and considerable differences in opinion about how best to serve persons with disabilities in the NWPS.

### **Use levels of the NWPS by persons with disabilities**

In response to the NCD survey, managers of NWPS units estimated that a total of 16,767 people with disabilities use the NWPS each year. Unfortunately, it is impossible to verify the accuracy of these estimates or to extrapolate from the data collected to other NWPS units that did not respond to the survey or to the question. Therefore, no meaningful estimates about use of the NWPS by persons with disabilities can be given. A number of NWPS units that are used relatively frequently by persons with disabilities have been identified by wilderness managers, outfitters, and users with disabilities.

### **Ability of persons with disabilities to enjoy the NWPS**

A significant majority of persons with disabilities surveyed very much enjoy the NWPS and 76 percent do not believe that the restrictions on mechanized use stated by the Wilderness Act diminish their ability to enjoy the wilderness. People with disabilities appear to visit the NWPS in the same ways and for the same reasons that people without disabilities do.

### **Recommendations**

1. All federal agencies that manage the NWPS should adopt policies consistent with those stated in Section 507(c) of the Americans With Disabilities Act as soon as possible.
2. Federal agencies should bring existing facilities outside of the NWPS up to code for use by persons with disabilities as soon as possible. This upgrade includes trailheads, parking facilities, restrooms, and telecommunications devices for the deaf (TDDs) in ranger stations.

3. NWPS managing agencies should develop guidelines for special permits and modifications regarding use by persons with disabilities that are consistent with the Wilderness Act. Agencies should be encouraged to facilitate NWPS use by persons with disabilities when such use is consistent with the Wilderness Act. Agencies are encouraged to work with persons with disabilities, outfitters, and other programs that use the NWPS to develop these guidelines.
4. NWPS unit managers should receive training to increase general awareness of disability issues and specific awareness of the policies and practices regarding use of the NWPS by persons with disabilities.
5. Each agency should develop better information about what is available to persons with disabilities who want to use the NWPS. This information should be made readily available to the public.

## **Introduction**

The primary goal of this document is to satisfy the following requirement of Section 507(a) of the Americans With Disabilities Act of 1990:

The National Council on Disability shall conduct a study and report on the effect that wilderness designations and wilderness land management practices have on the ability of individuals with disabilities to use and enjoy the NWPS as established under the Wilderness Act (16 U.S.C. 1131 et seq.).

The National Council on Disability (NCD) contracted with Wilderness Inquiry, Inc., of Minneapolis, Minnesota, to help conduct the study requested. A 501(c)(3) organization, Wilderness Inquiry provides activities that integrate people with and without disabilities into outdoor experiences, including many that take place within the National Wilderness Preservation System (NWPS).

Founded in 1978, part of Wilderness Inquiry's mission is to "advance the study of the recreational and educational needs of people with disabilities, with particular emphasis on accessibility to wilderness areas."

## **Background**

In 1964 Congress passed the Wilderness Act and established the National Wilderness Preservation System (NWPS). The NWPS is not an independent lands system; rather, it is made up of lands managed by four federal agencies: the U.S. Forest Service, the National Park Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management.

Congress has sole authority to designate wilderness areas, but the four federal agencies must manage these lands within the parameters specified by the Wilderness Act. As stated in Section 2(a), the purpose of the Wilderness Act is

...to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to ...secure for the American people of present and future generations the benefits of an enduring resource of wilderness....

Over the years since its passage, some people have claimed that the Wilderness Act discriminates against the rights of persons with disabilities because it prohibits the use of motorized vehicles, mechanized transport, and other activities within federally designated wilderness areas. Section 4(c) of the Wilderness Act states

Except as specifically provided for in this Act...there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

The Wilderness Act was written before the rights of people with disabilities were part of the national debate. Not surprisingly, there is no mention of people with disabilities in the Act. Over time, as people with disabilities began to use the wilderness, the question was raised whether a wheelchair is a mechanical device and therefore prohibited from the NWPS. The four federal agencies responsible for managing the NWPS have responded differently to this question.

In 1990 Congress passed the Americans With Disabilities Act (ADA). The ADA gives civil rights protection to individuals with disabilities similar to those provided to individuals on the basis of race, sex, national origin, and religion. Among other issues, the ADA addresses specific wilderness access in Section 507(c):

(1) In General--Congress reaffirms that nothing in the Wilderness Act is to be construed as prohibiting the use of a wheelchair in a wilderness area by an individual whose disability requires use of a wheelchair, and consistent with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify any conditions of lands within a wilderness area to facilitate such use.

(2) Definition--For the purposes of paragraph (1), the term wheelchair means a device designed solely for use by a mobility-impaired person for locomotion, that is suitable for use in an indoor pedestrian area.

The primary purpose of this study is to review the management practices of the four federal agencies that manage the NWPS and to determine whether people with disabilities are able to use and enjoy the NWPS.

### **Assumptions and Definitions**

The following key concepts must be considered and defined:

*Wilderness designations.* This term refers to the 546 units (94,972,412 federal acres as of June 5, 1991) that have been included by Congress as part of the National Wilderness Preservation System. This term does not include many wild lands commonly thought of as "wilderness," such as Yellowstone National Park. Yellowstone, although it has many natural characteristics similar to units of the NWPS, is not part of the NWPS. This term also does not include state-designated wilderness areas, such as Maine's Allagash Wilderness Waterway. The Allagash Wilderness Waterway is managed by Maine's Department of Conservation.

*Wilderness land management practices.* This term refers to the management practices and policies of the four federal agencies that manage the units of the NWPS: the United States Forest Service (USFS), the National Park Service (NPS), the Bureau of Land Management (BLM), and the United States Fish and Wildlife Service (FWS). Each of these agencies is responsible for managing the NWPS units under its jurisdiction according to the practices set forth in the Wilderness Act of 1964.

*Individuals with disabilities.* The ADA defines individuals with disabilities as those who

- (a) have a physical or mental impairment that substantially limits one or more of the major life activities of such individual;
- (b) have a record of such impairment; or
- (c) can be regarded as having such an impairment.

For the purpose of this study, this definition has been qualified to focus on individuals whose disability is likely to have a more significant impact on their ability to use and enjoy the NWPS. Wilderness designations are generally considered to have a greater effect on persons with mobility and sensory impairments than on persons with cognitive disabilities. Although 10 percent of study respondents do have cognitive disabilities, persons with mobility and sensory impairments received priority in participant selection for this study (see methodology section on sampling methods).

*Use and enjoyment.* This term is interpreted to refer to the physical ability of persons with disabilities to visit units of the NWPS and their ability to get pleasure from these visits as persons without disabilities do.

### **Scope of Study**

The study is intended to accomplish the following objectives:

1. Review and summarize existing federal policies and regulations relevant to the issue of wilderness access by persons with disabilities.



2. Survey the federal unit managers of the NWPS to determine current levels of use by persons with disabilities, identify important issues, and solicit suggestions for ways that persons with disabilities can better utilize the NWPS.
3. Survey programs and outfitters that have provided services to persons with disabilities in units of the NWPS to obtain recommendations and suggestions for improved access.
4. Identify and survey a minimum of 75 users of the NWPS who have disabilities to obtain measures of their enjoyment of the NWPS and solicit suggestions on ways to improve the level of enjoyment of the NWPS by persons with disabilities.

### **Limitations of Study**

We believe that this report fairly and factually represents the issues considered. However, as with any study, it is important to note its limitations in order to establish its validity. Several limitations must be considered when interpreting this report.

1. The study is exploratory in nature. Many of the questions were designed to obtain qualitative information so that important issues could be identified.
2. People with disabilities surveyed represent a nonprobability judgment sample. Persons with disabilities who have visited the NWPS are considered the most appropriate individuals to evaluate their ability to use and enjoy the NWPS. Finding people who fit this criterion was a challenge and required the use of a nonprobability sampling method (see section on methodology). The limited scope and resources dedicated to this study precluded using a large, random sampling method. While we believe that the persons with disabilities surveyed are the most appropriate for the purposes of this study, no claim can be made that they are a representative sample of all persons with disabilities in this country. Our priorities in selecting the sample included the following criteria:

- a. That the person have a disability as recognized by the ADA. We further qualified this criterion to select people who have disabilities that are most likely to affect their ability to use and enjoy the NWPS. In this context we gave priority to people who use wheelchairs, those who have other significant mobility impairments, and those with significant sensory impairments.
- b. That the person had visited a unit of the NWPS. People who are active in the outdoors but who had not visited an actual unit of the NWPS were not included.
- c. That the persons were as representative of a national sample as possible. We made a significant effort to survey individuals who live throughout the United States.
- d. That the persons were referred by a variety of sources. Most of those who participated in the survey were referred by outfitters and programs that serve people with disabilities on outdoor adventures.

In interpreting study findings it is important to remember that the persons with disabilities surveyed had already visited the NWPS. Although this may suggest that these people are more likely to take risks and accept physical challenges, we cannot make a precise determination about how these people may differ from the general public or, more specifically, from persons with disabilities who have not visited the NWPS.

3. Some respondents in all categories misunderstood some of the questions, including the following:
  - a. Several people with disabilities and some of the outfitters misunderstood what the NWPS is. The most frequent misunderstanding was to consider other wild lands as part of the NWPS when they are not. Defacto wilderness outside the NWPS was not included in any of the tabulations; however, it is possible that comments from some study subjects may refer to areas outside of the NWPS. We consider this possible influence small and of minimal importance.
  - b. Some of the wilderness unit managers in the study did not distinguish between questions about agency policies and what they personally thought was physically possible. For example, when asked whether their NWPS unit permitted the use of wheelchairs, some responded no, but went on to comment that while wheelchairs are legally allowed, the terrain does not accommodate them. The intent of this question was to determine agency policy, not a manager's perception of what is physically possible. Therefore, this question is not a precise indicator of how well the managers understand agency policy and should not be interpreted as such. However, in comparing the comments with responses, it is clear that some confusion about agency policy does exist among wilderness managers.
4. Another limitation concerns the experience of the NWPS unit managers who responded. The titles of the 304 respondents ranged from recreation planner to wildlife biologist, and their experience on the job ranged from more than 20 years to only 1 month. Although we may assume that a recreation planner with more than 20 years' experience is more knowledgeable about agency policies and practices than one with 1 month, we have no way to verify this. Consequently, we have ignored the question of credentials and experience in reviewing the data.
5. Finally, as with any human endeavor, there is the possibility of entry errors. Some editing was done by the researchers while they recorded and summarized qualitative comments. In every case an effort was made to portray accurately the true meaning of the statement. In some instances words have been added for clarification. In such cases, brackets [] have been placed around the added words. After extensive checking we believe any other entry errors do not materially affect the results of this study.

## **Methodology**

Information for this survey was gathered through two primary means. First, personnel from the four federal agencies responsible for managing the NWPS were asked to send pertinent information regarding their wilderness management practices and policies toward people with disabilities. Second, surveys were developed and distributed to

Outfitters and programs serving people with disabilities in the NWPS.

Field managers from the four federal agencies that manage NWPS units.

Persons with disabilities who have used the NWPS.

Copies of the surveys and cover letters used are found in Appendix 1. Tabulations of the responses from each survey are found in Appendix 2. Each of the information gathering methods is described in more detail below.

## **Review of existing policies and regulations**

The national wilderness managers of the four federal agencies were asked to provide the policies and procedures in place regarding use of the NWPS by persons with disabilities. The managers included Wesley Henry from the National Park Service, Ann Fege from the U.S. Forest Service, Keith Corrigan from the Bureau of Land Management, and David Heffernan from the U.S. Fish and Wildlife Service.

In addition to these wilderness managers, we contacted David C. Park, Chief of the Special Programs and Populations Branch of the National Park Service, and Joe Meade, National Access Program Manager for Recreation, Cultural Resources, and Wilderness Management for the U.S. Forest Service. All of these people were very helpful in promptly providing the information we needed to summarize and review the policies, regulations, and management practices regarding use of the NWPS by persons with disabilities.

## **Survey of unit managers of the NWPS**

The managers mentioned above all helped to develop a survey to distribute to NWPS unit managers. Significant assistance was also provided by Alan Watson and Liz Close of the U.S. Forest Service, and by Kay Ellis of the National Park Service. The sample included the managers of all 546 units of the NWPS; however, the total number of possible responses is different than 546 for the following reasons:

1. Some units of the NWPS are managed jointly by different agencies. For example, the Frank Church/River of No Return Wilderness in Idaho is managed jointly by the USFS and the BLM.
2. Some units are managed by multiple managers within the same agency. For example, the Frank Church/River of No Return Wilderness spans six different national forests managed by the USFS, each of which has a person who is responsible for managing its portion of the Frank Church Wilderness. Consequently, up to seven responses from two different agencies are possible for that wilderness.
3. Some managers are responsible for more than one unit. For example, Prescott National Forest (USFS) in Arizona is responsible for seven different units of the NWPS-- Apache Creek, Castle Creek, Cedar Bench, Granite Mountain, Juniper Mesa, Pine Mountain, and Woodchute. Consequently, one response may encompass seven or more units of the NWPS.

We originally intended to isolate responses by individual units of the NWPS. This was possible for some units, but in many cases was not possible because it could not be determined whether a respondent was answering in the context of one segment, or in the name of the entire NWPS unit. Also, if a manager was responsible for more than one unit, it usually could not be determined whether he or she was answering in response to all of the units or only part of them.

This section of the report is a compilation of the views and opinions of the people who manage units of the NWPS.

Surveys were distributed to NWPS unit managers in several ways. Wilderness Inquiry sent surveys directly to BLM and FWS unit managers. The NPS and the USFS distributed their surveys internally. NPS managers responded directly to Wilderness Inquiry. USFS responses were collected by Liz Close, USFS, and forwarded to Wilderness Inquiry. Response rates for the surveys are indicated below.

Federal Agency Responses to Surveys

<u>Agency</u>	<u>sent</u>	<u>Number Number returned</u>	<u>Percent of response</u>	
USFS	365	210	58	
NPS		42	39	93
BLM		17	13	76
FWS		55	42	76
TOTAL	479	304	63	

**Survey of programs and outfitters serving persons with disabilities**

Programs and outfitters that provide services to persons with disabilities in units of the NWPS also were contacted. Although our list of service providers is not exhaustive, we are confident that it represents an appropriate level of the programs and outfitters that provide these services. A total of 22 outfitters, organizations, and wilderness advocates were contacted, and 15 responded to the survey. Of the 15 that responded, 11 conduct activities in the NWPS involving persons with disabilities. The names and addresses of the organizations contacted are included in Appendix 3.

In addition to answering survey questions, outfitters and organizations were asked to provide the names and addresses of persons with disabilities who have used the NWPS. A total of 208 people were identified through this effort.

**Survey of users of the NWPS who have disabilities**

Surveys, including a cover letter from the National Council on Disability and a map showing most of the units of the NWPS, were sent to the 208 persons identified by the outfitters and organizations. A total of 89 people responded--a 43 percent response rate. Of these responses, 3 were not included because the respondent did not have a disability, 5 because the respondent had not used or attempted to use the NWPS, and 1 because the response did not contain enough information to make it meaningful. A total of 80 completed surveys from persons with disabilities who have visited the NWPS remained.

The following demographic characteristics of these 80 respondents:

<u>Type of disability</u>	<u>Percent of respondents</u>
Cognitive impairment	10
Sensory impairment	9
Mobility impairment, non-wheelchair user	31
Mobility impairment, wheelchair user	50

State of Residence

Alaska	6
California	2
Colorado	5
Florida	4
Georgia	1
Idaho	5
Illinois	4
Indiana	7
Maine	1
Michigan	2
Minnesota	22
Montana	1
New Jersey	2
New Mexico	1
New York	2
North Dakota	1
Ohio	2
Rhode Island	1
Tennessee	1
Texas	2
Vermont	1
Washington	1
Wisconsin	5
Unknown	1

Gender                      Percent of respondents

Male	55
Female	43
Not indicated	2

Age                              Percent of respondents

18-29	24
30-39	35
40-49	28
50-59	6
60-69	3
70-79	3
Not Indicated	1

### **Analysis methods**

The study used both quantitative and qualitative methods of analysis. Quantitative analysis is limited to tabulation of categorical responses and is presented as frequencies of response. A significant amount of qualitative data was collected. When appropriate, these data have been grouped and categorized according to the type of response.

## Findings

### 1. Current policies of NWPS managing agencies

The following is an agency-by-agency summary of policies and management practices regarding wilderness access by disabled persons. Three of the agencies responsible for NWPS management are part of the U.S. Department of Interior; one agency, the Forest Service, is part of the U.S. Department of Agriculture.

*National Park Service (USDI)*

Total NWPS units: 42

Total NWPS acres: 39,075,415

The National Park Service (NPS) established a Special Programs and Populations Branch on January 2, 1980, to oversee use of NPS lands and facilities by persons with disabilities. Although the primary emphasis of this branch has been to ensure accessibility compliance in historic structures, battlefields, and so on, it is also charged with overseeing accessibility compliance within the NPS units of the NWPS.

*NPS policies on use of wheelchairs in the NWPS.* In *Management Policies Regarding Accessibility for Disabled Persons* (January 1990), under the section on Wilderness Preservation and Management (chapter 6, page 8), the NPS states,

As a general rule, public use of motorized equipment or any form of mechanical transport will be prohibited in wilderness.... Mobility impaired persons may use wheelchairs (as defined in 36 CFR 1.4) in wilderness.

The NPS goes on to define a manual wheelchair as "a device that is propelled by human power, designed for and used by a mobility impaired person." A motorized wheelchair is defined as "a self-propelled wheelchair device, designed solely for and used by a mobility impaired person for locomotion that is capable of and suitable for use in indoor pedestrian areas." [emphasis added]

The NPS does allow the use of manual and motorized wheelchairs in the NWPS. An important criterion in determining whether a manual or motorized wheelchair is allowed in the NWPS is that it must be suitable for indoor use. If a device is not suitable for indoor use it is considered a motor vehicle and excluded from use in the NWPS.

A key concept here is that the NPS treats people who use wheelchairs as pedestrians, not as operators of motor vehicles. As stated in 36 CFR 1.2 (3)(e), "The regulations in this chapter are intended to treat a mobility-impaired person using a manual or motorized wheelchair as a pedestrian, and are not intended to restrict the activities of such a person beyond the degree that the activities of a pedestrian are restricted by the same regulations." All-terrain vehicles (ATVs) and other devices that would not be allowed in elevators, public buildings, and private homes are not allowed in the NWPS. Various entities have recognized that persons using motorized wheelchairs should be afforded the same rights and duties as pedestrians in general, including the right to use a sidewalk, elevator, and indoor facilities.

This concept of indoor pedestrian use is used in Section 507 (c)(2) of the ADA in reference to the use of wheelchairs in the NWPS:

For the purposes of paragraph (1), the term "wheelchair" means a device designed solely for use by a mobility impaired persons for locomotion, that is suitable for use in an indoor pedestrian area.

*NPS policies on alteration of terrain and facilities.* In *Policies on Accessibility to Specific National Park Functions*, the NPS comments on accessibility for disabled persons in park facilities:

In accordance with the mandates of the Architectural Barriers Acts of 1968 and section 504 of the Rehabilitation Act of 1973 as amended in 1978, it is the policy of the National Park Service to provide the highest level of accessibility in all visitor and management buildings and facilities as is possible and feasible, consistent with the nature of the area and facility. The degree of accessibility provided will be proportionately related to the degree of man-made modifications made to the area or facility and to the significance of the facility.

This policy divides park areas into three types: developed areas, undeveloped areas, and threshold areas. The comments relevant to the NWPS pertain to the section on undeveloped areas:

The **undeveloped areas**, such as the part of the park that is outside the immediate influence of buildings, roads, and cars, will not **normally** be modified nor will special facilities be provided for the sole purpose of providing access to disabled people.

Although this statement does not specifically address the NWPS, it is interpreted to mean that the NPS does not seek to make alterations in trails, footbridges, established campsites, and other accommodations within the wilderness units it manages. In a statement to the National Council on Disability on August 7, 1991, David C. Park, chief of the Special Programs and Populations Branch of the NPS, said,

We believe this policy is consistent with the effective management of the resources we control and is consistent with our attempt to balance access with conservation. We also believe it is consistent with the intent of, and regulations for, Section 504 of the Rehabilitation Act. One major section of all Federal regulations for Section 504 states that agencies are not required to take any actions that would result in a "fundamental alteration in the nature of a program or activity." It is our belief that altering wilderness areas for the sake of providing access would definitely change the fundamental nature of that activity. In our discussions with people who are disabled and the agencies and organizations that represent them, we have found overwhelming agreement with this position.

This position is consistent with Section 507(c)(1) of the ADA, which reads,

Congress reaffirms that nothing in the Wilderness Act is to be construed as prohibiting the use of a wheelchair in a wilderness area by an individual whose disability requires use of a wheelchair, and consistent with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify any conditions of lands within a wilderness area in order to facilitate such use.

Park also commented in his statement of August 7, 1991,

On the surface, the concurrent goals of equal accessibility and preservation of wilderness areas seem to be antithetical. However, at a closer look, we do not believe that is actually the case. It is not, in our estimation, a question of one goal or legal mandate taking precedence over another or superseding another. It is a question of



finding effective ways to balance the intent of both and finding ways to provide the highest level access with the lowest level impact on the environment.

More information about NPS policies regarding persons with disabilities in the NWPS can be obtained by contacting

David Park  
Chief, Special Programs and Populations Branch  
National Park Service  
P.O. Box 37127  
Washington, DC 20013-7127  
(202) 343-3674  
(202) 343-3679 (TDD)  
(202) 523-0162 (FAX)

*U.S. Forest Service (USDA)*

Total NWPS units: 365

Total NWPS acres: 33,609,661

Although the NPS manages more total acreage of the NWPS (much of it in Alaska), the U.S. Forest Service (USFS) manages the great majority of units of the NWPS (365 out of 546 total NWPS units). As an agency, the USFS is more decentralized than the NPS, an important point when considering its management practices and how they are implemented.

Even before the ADA was signed, the chief of the Forest Service had established an agency goal of "becoming the leading provider of accessible outdoor recreation opportunities in America." Toward that end, the Forest Service established a new program in 1990, "Access: America's Great Outdoors," to formulate and implement agency policy and direction regarding access for all components of outdoor recreation, including wilderness. One of the functions of the program is to help establish clear direction for the USFS on the issue of access.

USFS policy seeks to maximize wilderness values while providing opportunities for persons with disabilities to enjoy wilderness on its own terms. As stated in the "Accessibility of Wilderness to Persons With Disabilities" draft policy statement prepared October 12, 1990, by Ann S. Fege, National Leader for Wilderness Management,

Wilderness values must dominate over all other considerations in wilderness resource management. There are many opportunities for persons with sight, mobility, hearing, and developmental disabilities to obtain wilderness experiences on the same terms as the rest of the recreating public....

...There is no correlation between the physical, sensory, or cognitive abilities of an individual and the need for solitude, beauty, challenge, risk, discovery or adventure.

...Our attention should be focused on providing opportunities to enhance the understanding, enjoyment, and use of wilderness by all the public, including persons with disabilities.

...We can enhance [use of the NWPS] for hearing, mobility, sight, and developmentally impaired persons through interpretive services and greater attention to providing recreation access information in usable forms. ([] added for clarification)

...Access can frequently be expanded with very little effort. Involving persons with disabilities and/or persons with appropriate technical expertise to help identify opportunities could greatly increase access to wilderness experiences to meet varied skills and interests of persons with disabilities.

Current USFS policy regarding the use of wheelchairs in the NWPS reads as follows:

Mechanical apparatus that is medically necessary for the basic mobility of any individual is considered to be part of that person and not subject to restrictions on mechanical use. (Forest Service Manual, 2326.03 no. 4)

This policy on wheelchair use does not allow the use of motorized wheelchairs within NWPS units managed by the USFS. As noted in the policy statement by Ann Fege:

Some have advocated the use of electric wheelchairs in order to allow wheelchair-mobile persons lacking upper body strength to enter wilderness and make our policies consistent with the National Park Service. This change is not being proposed at this time.

Fege goes on to comment on trails management regarding access:

Trails management handbook direction limits trail width in wilderness areas to 24". Standard wheelchairs require a minimum width of 32" tread width to navigate. Consequently, although wheelchair use is allowed in Forest Service wilderness areas, tread width restrictions prevent access except in the most unusual of circumstances. We [the USFS] are exploring the idea of allowing tread widths in excess of 24 inches where the impact to the natural environment is minimal and there is an opportunity for wheelchair users to achieve a quality wilderness experience.

According to Joe Meade, USFS National Access Program Manager, the Forest Service wants to leave some latitude for local managers to make decisions on a case-by-case basis, depending on environmental conditions. The Forest Service can issue special permits to authorize otherwise prohibited activities. A memo from Meade, dated August 9, 1991, illustrates the point:

Our policy is not to hinder a person with a disability from using a non-motorized mechanical device different than just a wheelchair in order to access the wilderness. Units have the authority and indeed are encouraged to prudently issue permits to individuals who need such an exception. The person may need to offer proof of the disability, such as a note from a medical authority or some other method of verification...i.e. a person with a chronic back disability which does not permit them to carry weight on their back may be issued a permit to use a wheeled primitive cart... remember, wheelchairs are not the only devices serving the disabled. We draw the line with motorized devices....

Meade further noted:

The Forest Service recognizes its strict adherence to the 1964 Wilderness Act prohibits use of electric wheelchairs. However, millions of acres of near wilderness experiences are available for this use. If Congress feels this should be evaluated in order to comply with the ADA, the Forest Service is very willing to do so.

The USFS and the NPS have been working cooperatively on the issue of access for a number of years. They have produced a publication, Universal Design Guide for Accessible Outdoor Recreation, to be released in 1993. The guide provides comprehensive standards and guidelines for accessible outdoor recreation facilities, programs, and services--including those in wilderness areas--and is intended for planners and designers. For more information about the design guide or about Forest Service policies regarding use of the NWPS by persons with disabilities, contact

Joe Meade  
USFS-USDA Recreation Staff  
14th and Independence Ave., SW  
P.O. Box 96090  
Washington, DC 20090-6090  
(202) 205-1129  
(202) 205-1739 (Text Telephone)  
(202) 205-1145 (FAX)

*Bureau of Land Management (USDI)*

Total NWPS units: 66

Total NWPS acres: 1,610,995

In a letter to Representative John Rhodes of the House Committee on Interior and Insular Affairs, dated October 13, 1989, BLM Director Cy Jamison wrote,

As a policy exception, the BLM does not prohibit the use of wheelchairs by persons with mobility impairments in the wilderness.

The BLM is in the process of clarifying its policies toward use of the NWPS by persons with disabilities. In an information bulletin to all BLM state directors dated August 10, 1990, Keith Corrigall, chief, Branch of Wilderness Resources, stated that the BLM's clarifications regarding wheelchair use in wilderness areas will be available in the revision of the 43 CFR 8560 regulations and Manual 8560.

In a memo dated October 25, 1991, Michael J. Penfold, assistant director, Land and Renewable Resources, outlined the BLM's accessibility initiative; "Access Means Freedom." This initiative makes a number of recommendations, such as establishing training groups, developing a field guide, and producing an awareness video. It also recommends establishing a fully coordinated BLM policy to incorporate accessibility and reduce conflicts in and among resource programs, and to define a policy similar to that of the National Park Service, stating that the BLM will maximize the effort to make all areas and operations accessible.

For more information about BLM policies regarding use of the NWPS by persons with disabilities, contact

Keith Corrigall  
Chief, Branch of Wilderness Resources  
Bureau of Land Management  
Room 3360, Main Interior Building

1849 C Street, NW  
 Washington, DC 20240  
 (202) 208-6064  
 (202) 208-4819 (FAX)

*Fish and Wildlife Service (USDI)* Total NWPS units: 75  
 Total NWPS acres: 20,676,341

According to wilderness manager Dave Heffernan, the FWS does not currently have any policies regarding persons with disabilities in the NWPS. However, the FWS intends to adopt policies similar to those of the other land managing agencies within the Department of Interior.

For more information about Fish and Wildlife Service policies regarding use of the NWPS by persons with disabilities, contact

Dave Heffernan  
 Division of Refuges  
 U.S. Fish and Wildlife  
 Department of the Interior  
 Mail Stop 670-ARLSQ  
 18th and C Street, NW  
 Washington, DC 20240  
 (703) 358-2043  
 (703) 358-2248 (FAX)

*Survey results of field managers of NWPS units.* Federal managers of individual NWPS units were surveyed to determine their familiarity with the policies of their agencies and with the general issues involved in providing opportunities for persons with disabilities. The table below provides a breakdown of the response frequencies from each agency.

Federal Agency Responses to Surveys

<u>Agency</u>	<u>sent</u>	<u>Number returned</u>	<u>Percent of response</u>
USFS		365	58
NPS		42	93
FWS		55	76
BLM		17	76
TOTAL	479	304	63

In the following tables, all responses were converted to a percentage of responses for the agency in question. For example, a response of 62 percent for the USFS means that 62 percent of the USFS managers responded in the manner indicated. Some columns may not add up to 100 percent due to rounding.

**Responses to question: Does your unit allow for the use of wheelchairs by persons with disabilities?**

	Yes	No	Do not know	No response
USFS	62%	30%	6%	2%
NPS	69%	26%	5%	0%
FWS	40%	55%	5%	0%
BLM	62%	38%	0%	0%
TOTALS (n=304)	60%	33%	6%	>1%

Comments: The intent of the question was to determine the respondent's familiarity with agency policy; however, some respondents answered "NO," then went on to comment that, although wheelchairs were legally allowed, the terrain was too rough for wheelchair use. Others, however, clearly indicated they thought that wheelchairs were illegal. Despite this limitation, the responses to this question suggest that NWPS wilderness field managers from all managing agencies could benefit from additional training on agency policies regarding wheelchair use by persons with disabilities--especially in consideration of Section 507(c) of the ADA.

**Responses to question: Does your unit make special provisions for use by persons with disabilities?**

	Yes	No	Do not know	No response
USFS	16%	79%	3%	2%
NPS	49%	51%	0%	0%
FWS	12%	69%	0%	19%
BLM	15%	77%	8%	0%
TOTAL (n=304)	19%	74%	3%	4%

If special provisions were offered, respondents were asked to indicate the kinds of special provisions as presented below:

Special permits	15/304	5%
Use of motors	11/304	4%
Special areas	11/304	4%
Accessibility information	14/304	5%

Only 10 out of 304 respondents provided comments on special provisions. Examples of comments follow:

**Special permits:** *We allow seeing eye dogs in wilderness.*

--Joshua Tree National Monument

**Use of motors:** *We allow the use of motors as well as accessibility information.* -- Pinnacles Wilderness

**Special areas:** *We provide accessible facilities--restrooms, campsites, telephones--in areas surrounding wilderness.*

--Lassen Volcanic Wilderness

**Accessibility information:** *We offer personal assistance if requested.* -- Katmai Wilderness

**Response to question: In your opinion, do the management policies of your agency for NWPS units inhibit the enjoyment of persons with disabilities?**

	Yes	No	Do not know	No response
USFS	25%	74%	0%	1%
NPS	10%	87%	0%	0%
FWS	12%	86%	2%	0%
BLM	38%	62%	0%	0%
TOTAL (n=304)	22%	77%	>1%	>1%

Respondents were then asked to comment on why they believe their agency policies do or do not inhibit enjoyment by persons with disabilities. A total of 99 comments were offered. Analysis of these comments was difficult because of the broad range of responses. A representative sample of responses is provided here.

*Management policies do not inhibit use, however the nature of the terrain does.*

*It is not the policy of my own agency, but the wording of the Wilderness Act itself.*

*Policies do not prohibit; however, our actions have not encouraged the disabled to seek out these areas. The wilderness designation simply forces the individual, handicapped or not, to venture into the wilderness on its own terms.*

*Our policies provide for the protection of wilderness values and are enforced equally among all visitors; the policies do not inhibit the enjoyment of any persons with a good wilderness ethic.*

*Wheelchairs are prohibited.*

*We don't have information on other options, the Wilderness Act prohibits the use of wheelchairs.*

*The people we talk to don't want special treatment, they want the challenge wilderness has to offer. They do however, want more accessible facilities outside of wilderness boundaries.*

*Nearby wilderness-like area provides access and assistance for persons with disabilities.*

*I don't think it has anything to do with policy, but rather a lack of time and funding.*

*With adequate funding our agency appears to be ready to develop opportunities for persons with disabilities.*

*Wilderness should be managed to the purest level of preservation. Visitor convenience should not influence development or increase maintenance levels.*

*Once a wilderness is modified for people to use mechanical means of transport, it ceases to be a wilderness and the recreational experience for all is diminished.*

*The main premise of wilderness is protection of the resource and not recreation.*

*Tendency is to do highly developed projects outside the wilderness. We need to do this within the boundaries of wilderness.*

*Too strict an interpretation of not using mechanized equipment. Permit use of pullcarts on wheels for transport of baggage.*

Perhaps the best interpretation of these comments is that wilderness managers have varied opinions on whether their policies inhibit enjoyment of the NWPS by persons with disabilities.



**Response to question: Does your wilderness unit have any information available that specifically addresses wilderness use by persons with disabilities?**

	Yes	No	Do not know	No response
USFS	1%	96%	0%	3%
NPS	10%	90%	0%	0%
FWS	0%	100%	0%	0%
BLM	0%	100%	0%	0%
TOTALS (n=304)	2%	96%	0%	2%

**2. Current NWPS use levels by persons with disabilities**

Managers of NWPS units were asked to estimate how many people with disabilities used their unit of the NWPS each year. Out of 304 surveys, 262 provided estimates ranging from 0 to 2,500 per unit. The total annual estimated use by persons with disabilities was 16,767. Unfortunately, it is impossible to verify the accuracy of these estimates, as managers typically do not differentiate between persons with or without disabilities in permit reservations or any other use-tracking measures.

It is also difficult to extrapolate from the data collected to other NWPS units that did not respond to the survey or to the question. Therefore, no meaningful estimates about use of the NWPS by persons with disabilities can be made. Despite these limitations, it is reasonable to assume that per capita use of the NWPS by persons with disabilities is less than per capita use by persons without disabilities.

The highest estimates of use by persons with disabilities came from the following units:

Unit name	Estimated annual use	Managing agency
Phillip Burton	2,500	National Park Service
Boundary Waters	2,000	Forest Service
Glacier Bay	1,000	National Park Service
Cabinet Mountains	1,000	Forest Service
Sycamore Canyon, Munds Mountain, Red Rock-Secret Mountain	850	Forest Service
St. Marks	500	Fish and Wildlife Service
Great Swamp	500	Fish and Wildlife Service
Olympic	500	National Park Service
Joshua Tree	500	National Park Service

Carson-Iceberg, Emigrant, Mokelumne	500	Forest Service
Black Elk	460	Forest Service
Ellicott Rock	300	Forest Service
Shining Rock, Middle Prong	300	Forest Service

Organizations and outfitters that provide services for persons with disabilities were also asked to indicate which NWPS units they use.

NWPS units used by outfitters surveyed include the following:

Black Canyon of the Gunnison  
Boundary Waters Canoe Area  
Chama River Canyon  
Chugach  
Collegiate Peaks  
Craters of the Moon  
Denali  
Desolation Canyon  
Eagles Nest  
Everglades National Park  
Frank Church/River of No Return  
Glacier Bay  
Hells Canyon  
Jedediah Smith  
Kenai  
Lost Creek  
Mesa Verde  
Mt. Rainier  
Sawtooth  
Teton  
Three Sisters  
Trinity Alps  
Yosemite

No information was provided on frequency of use of these areas.

Information about use from the 80 persons with disabilities is included in section 3.

Use of these areas raises the question of what characteristics, if any, these NWPS units might have in common. These units may receive more use by persons with disabilities because of

More accessible terrain, including more opportunities for water-based travel (canoe, kayak, raft).

Proximity to urban centers. Boundary Waters, for example, is one of the most visited units of the entire NWPS, partly because it is within a day's drive of millions of people.

Higher level of utilization by organizations and outfitters serving people with disabilities.

Currently available information on access and travel within the unit.

These and other possible characteristics are issues for further study.

### 3. Enjoyment of the NWPS by persons with disabilities

Completed surveys were received from 80 persons with disabilities who had experienced the NWPS. Respondents were asked to name as many as five units of the NWPS they had visited since having a disability. A total of 207 responses were given, representing 77 units of the NWPS. Respondents were asked to rate their enjoyment level of these areas as stated below:

Please circle the number that best rates your level of overall enjoyment of the NWPS areas you listed in question 1. The letter in front of each response corresponds to the Wilderness you listed in question 1.

	Did not enjoy	Enjoyed very little	Enjoyed somewhat amount	Enjoyed very much	Enjoyed a tremendous
a)	1	2	3	4	5
b)	1	2	3	4	5
c)	1	2	3	4	5
d)	1	2	3	4	5
e)	1	2	3	4	5

The range of responses was 2 to 5. The average rating of all 207 responses was 4.42, indicating a very high level of enjoyment.

The distribution of responses was as follows:

#### NWPS Enjoyment Ratings by Persons with Disabilities

Rating	Number of	Percent
--------	-----------	---------

	responses	response
1 Did not enjoy	0	0
2 Enjoyed very little	3	2
3 Enjoyed somewhat	19	9
4 Enjoyed very much	72	35
5 Enjoyed a tremendous amount	113	55

Average Enjoyment Rating: 4.42

Below is a list of the NWPS units visited by the respondents with disabilities and the enjoyment rating these people gave to each unit.

NWPS unit name	Number of respondents with disabilities	Average enjoyment rating	Range high/low
Boundary Waters	44	4.61	5/3
Teton	13	4.77	5/4
Denali	10	4.60	5/3
Everglades	10	4.3	5/3
Badlands	9	4	4/4
Frank Church/ River of No Return	6	4.66	5/4
Kenai	5	4.4	5/4
Lake Chelan-Sawtooth	5	4.8	5/4
Craters of the Moon	4	4	5/2
Hawaii Volcanoes	4	4.75	5/4
Hells Canyon	4	4.75	5/4
Yosemite	4	4.25	5/3
Bob Marshall	3	3.33	4/3
Isle Royale	3	4	5/3
Joshua Tree	3	4	5/3
Mt. Rainier	3	4.33	5/4
Arctic Wildlife Refuge	2	5	5/5
Bandelier	2	4.5	5/4
Cedar Keys	2	4	5/3
Crab Orchard	2	3.5	4/3
Florida Keys	2	5	5/5
Haleakala	2	4	5/3

J.N."Ding" Darling	2	4.5	5/4
Joyce Kilmer-Slickrock	2	5	5/5
Olympic	2	5	5/5
Petrified Forest	2	4	4/4
Presidential Range	2	4.5	5/4
Selway-Bitterroot	2	4.5	5/4
Twin Peaks	2	4	4/4
Wrangell-St. Elias	2	5	5/5
Alexander Springs	1	5	
Alpine Lakes	1	4	
Ansel Adams	1	5	
Black Canyon/Gunnison	1	4	
Bosque del Apache	1	3	
Cache La Poudre	1	5	
Castle Crag	1	3	
Chama River Canyon	1	5	
Charles C. Deam	1	2	
Citico Creek	1	5	
Columbia	1	3	
Gates of the Arctic	1	5	
Gates of the Mountains	1	5	
Glacier Bay	1	5	
Glacier Peak	1	5	
Golden Trout	1	5	
Great Swamp	1	3	
Gros Ventre	1	4	
Guadalupe Mtns.	1	2	
Jarbidge	1	5	
John Muir	1	5	
Lacassine	1	5	
Lake Clark	1	5	
Lizard Head	1	4	
Mesa Verde	1	4	
Moosehorn	1	5	
Mt. Evans	1	4	
Never Summer	1	4	
Noatak	1	4	
Okefenokee	1	5	
Pecos	1	5	
Pinnacles	1	3	
Rainbow Lake	1	5	
Rattlesnake	1	5	
Russel Fjord	1	5	
San Juan Islands	1	4	

San Pedro Parks	1	5
Saguaro	1	4
Seney	1	4
South San Juan	1	4
St. Marks	1	4
Theodore Roosevelt	1	4
Three Sisters	1	4
Upper Buffalo	1	4
Upper Kiamichi River	1	3
Washakie	1	5
Weminuche	1	4

To determine their motivation for visiting wilderness, persons with disabilities were asked why they chose to visit the NWPS. Their priorities for visiting the wilderness include the following:

Reason for visiting	Percent of responses
To experience scenery/natural beauty	93
To experience nature on its own terms	81
To experience a personal challenge	78
To share the experience with family/friends	70
To experience solitude	53
To enjoy fishing or hunting	20

Study participants were also asked about the high points and low points of their wilderness experience(s).

High points include:	Percent responses
Scenery or location	94
Personal achievement/ feelings of accomplishment	83
People or relationships	76
Personal growth	64
Solitude/peace	61
No high points	1
Other	1

Low points include:	Percent responses
No low points	58
Trails/terrain too rugged	24
Physical discomfort	13
Undeveloped/primitive campsites	13
Uncooperative group members	13
Poor access at entry point (parking,etc)	13
Lack of information about area	5

Many studies have been conducted to determine the reasons people without disabilities visit the NWPS (Driver et al. 1987). In comparing previous studies with the responses of the 80 persons with disabilities, it appears that the latter visit the NWPS for the same reasons as people without disabilities (Roggenbuck and Lucas 1987).

*How do persons with disabilities visit the NWPS?*

Most of the people with disabilities surveyed have visited the NWPS multiple times. A total of 47 percent have taken five trips or more, 39 percent have taken between two and four trips, and 14 percent have only taken one trip.

The majority of respondents, 85 percent, have spent four or more consecutive days on their longest wilderness experience. Only 8 percent never experienced more than one day in the wilderness, while another 8 percent have experienced between two and three days as their longest wilderness experience.

The majority of respondents, 75 percent, had not visited the NWPS prior to becoming disabled. Of these people, 35 percent were born with their disability, and 40 percent had never visited wilderness before becoming disabled. A total of 25 percent respondents with disabilities had visited the NWPS prior to becoming disabled.

Respondents with disabilities used the following means of transport within the wilderness:

Type	Percent of responses
Canoe	71
Hike	39
Kayak	29
Raft	29
Horse	21
Dogsled	19
Motorized	5
Other	5

Respondents used the following assistive devices on their wilderness trips:

Type	Percent of responses
Manual wheelchair	50
Crutches/cane	33
No devices used	16
Electric wheelchair	5
Prostheses	5
White cane	4
Amigo	1
Walker	0
Guide dog	0



Finally, 73 percent of the respondents utilized the services of a professional guide or outfitter to gain access to the wilderness, 51 percent visited the NWPS with family or friends, and only 9 percent visited the NWPS alone. (Readers are reminded that the high proportion of respondents who have utilized the services of a guide or outfitter may be due to the fact that most of these people were identified with the assistance of outfitters and organizations serving people with disabilities in the NWPS.)

A variety of studies has been conducted on the use patterns of nondisabled users of the NWPS. With the exception of assistive devices, people with disabilities appear to visit the NWPS in the same ways that people without disabilities do (Lucas and Krumpe, 1986).

### *Effect of restrictions on mechanized use*

When asked whether the restrictions on mechanized use within the NWPS diminishes their ability to enjoy the wilderness, 76 percent of the respondents with disabilities said no, 21 percent said yes, and 3 percent did not answer the question.

Responses indicated that many of the respondents think wheelchairs are allowed in the NWPS; thus, we believe they considered other mechanical devices, such as ATVs, in answering this question.

Typical comments from persons who do not believe that restrictions on mechanized use inhibit their opportunities to enjoy wilderness include the following:

*[There are] many alternatives such as dogs, horses and people power. The sense of personal achievement is greatly enhanced by overcoming the emotional, physical and psychological barriers and achieving a significant undertaking in the wilderness without relying on mechanized use.*

*There are enough areas on the planet that allow machines.... By adaptation persons with disabilities can access the total wilderness areas.*

*Mechanized use would undermine the concept of wilderness...keep them out.*

*Enjoy the wilderness in its natural state...it just requires some assistance from other people to help me adapt.*

*Mechanized use is incompatible with the wilderness experience....There are many places to go that are like wilderness that allow motors.*

*Loopholes shouldn't be created for persons with disabilities; other groups will seek to alter wilderness to accommodate them also.*

*Individuals with disabilities should rely on family and friends to help them out in wilderness. Do not allow motors or mechanical devices.*

*Allowing mechanized use in the wilderness would make it noisy and polluting, precisely what persons with or without disabilities are trying to escape.*

*Wilderness is wilderness...it won't be the same if mechanized use is allowed. People with disabilities can access the wilderness if they only put their minds to it.*

Typical comments from persons who do believe that restrictions on mechanized use inhibit their opportunities to enjoy wilderness include the following:

*Disability or age should not stop people from going to wilderness. Managers of the units should rent motorized equipment...government should not limit people from using motors.*

*[I] can't use an ATV in all areas. I need to use this due to paralysis.*

*How do I get out in case an emergency arises? [I] need mechanized usage.*

*Trails [in wilderness] are difficult for manual chairs. It could be helpful to use an ATV.*

*Would like to be able to use a three-wheeler--it would allow me to get into areas I wouldn't otherwise be able to.*

*I would like to be able to use an ATV for increased access.*

*If I were allowed to ride an off-road vehicle it would allow me to see a lot of areas I otherwise wouldn't be able to.*

*I want to be able to travel by boat and have a close toilet facility.*

*It limits my independence in the wilderness but I don't want them to change the restrictions.*

*ATV is a way to see wilderness I could never reach on foot.*

Persons with disabilities were also asked whether their disability itself enhanced or inhibited their enjoyment of the NWPS. A total of 64 percent responded that their disability either enhanced or had no effect on their ability to enjoy wilderness, while 36 percent responded that their disability did inhibit the opportunity for them to enjoy the wilderness.

#### **4. Suggestions for increasing enjoyment of the NWPS**

All three surveys asked respondents to make additional comments and recommendations regarding access and wilderness. A number of recurrent issues emerged from NWPS users who have disabilities, NWPS unit managers, and outfitters that serve persons with disabilities in the NWPS.

*The purpose of this section is to identify issues for further discussion--it is not meant to imply a recommendation.*

Recurrent issues are categorized below. In every case, the percentage of responses from each of the three groups surveyed (users, managers, outfitters) is provided with the statement. In considering these percentages the reader is reminded that the total number of respondents for each category was

Managers	304
Users	80
Outfitters	15

Therefore, one user equals 1.25 percent of all users (1/80), one manager equals .32 percent of all NWPS managers (1/304), and one outfitter equals 6.6 percent of all outfitters (1/15). In considering these issues it is also important to remember the following:

1. Data for these suggestions are qualitative, derived in response to open-ended questions asking for suggestions and comments. In some cases, the decision to categorize a response in a certain manner was obvious; in other cases, categorization required more judgment and interpretation. Every effort was made to categorize the responses consistently and fairly; however, by its very nature this process is likely to have more errors than a simple yes or no response.
2. It is important to consider the source of each suggestion. For example, the suggestion to increase access inside the wilderness is the response of 3 outfitters, 8 users, and 30 NWPS managers. In interpreting these suggestions, we advise the reader to note the number of responses from each category.
3. Typical comments representing each suggestion category have been included for each of the three types of respondents.

**Suggestion 1: Develop materials that provide information on access; provide a clearinghouse for information.**

Users	15%	
Managers		15.5%
Outfitters	33%	

Comments from users with disabilities:

*What is needed is a central clearinghouse for information on what areas in the U.S. have to offer a person with a disability.*

*Lack of information is the biggest obstacle. Write a guidebook of all the programs available and the levels of accessibility to certain units of the NWPS so people can choose where to go according to their comfort level.*

*More publicity letting people know what areas are available and what programs can take them there.*

Comments from NWPS managers:

*Publicize what is currently available to persons with disabilities via publications and literature.*

*Create a brochure listing trails easily accessed; rate trails.*

*Inventory and classify trails according to accessibility levels.*

*In [our] wilderness education package we need to include special populations.*

*Concerted effort is needed by the four federal agencies to convey that the wilderness is not just for young supermen.*

Comments from outfitters:

*Provide the information, let participants make the call.*

*Develop a board made up of individuals with disabilities to rate the levels of ease according to each unit.*

*Make information readily available to sites and locations already fully accessible. Create an advisory board made up of nondisabled and disabled to rate areas according to their level of accessibility. Consult this board to make minimal, but distinct, improvements.*

*Mass publication about programs or organizations who offer trips into wilderness [for persons with disabilities].*

**Suggestion 2: Maintain existing regulations--seek access without compromising the Wilderness Act.**

Users	18.75%
Managers	3.6%
Outfitters	20%

Comments from users with disabilities:

*My disability does not prevent me from enjoying wilderness areas, it just adds a logistical element as to how to get into these areas. Accessibility up to areas must be made standard, but in the [wilderness] areas they should be left in their natural state.*

*People with disabilities need to adapt to the conditions they are in. [They] can't expect all areas to be accessible.*

*How far can access be taken without hurting the concept of wilderness and the environment? I don't want to lose the wilderness; rather than having the wilderness adapt, I'd rather see the persons with disabilities adapt.*

*Areas would lose some of their attractiveness if we were to make them completely accessible. Just good to know there are still wild areas--keep them as undeveloped as possible.*

*Corporate America, in its quest for lucrative markets, continues to use disability as a political football. In their headlong drive for money they would gladly sacrifice the few remaining enclaves of national heritage. Don't use disability as a means to open wilderness.*

Comments from NWPS managers:

*Do not compromise Wilderness Act by allowing ATVs, etc. ...we need to come up with policy for use of wilderness by people with disabilities.*

*To provide handicapped access would involve constructing roads or paved trails, which are contrary to wilderness values. If made accessible, it doesn't remain wilderness.*

*Do not attempt to alter trails or allow mechanized use. Do not lose sight of wilderness preservation.*

Comments from outfitters:

*Don't create accessibility; it goes against the concept of wilderness.*

*If wilderness is made totally accessible, will it remain wilderness? People with disabilities must accept their circumstance and some areas may not be accessible.*

**Suggestion 3: Increase accessibility to areas outside wilderness (trailheads, parking, restrooms, TDDs in ranger stations)**

Users	20%	
Managers		11.2%
Outfitters	13%	

Comments from users with disabilities:

*Entry points need to be made accessible...ramps to existing buildings, widened restrooms.*

*Accessible toilet facilities at entry points.*

*TDD phone at ranger stations.*

*Ranger stations need to have truly accessible toileting facilities and ramping.*

*Braille or raised line maps would help the blind.*

Comments from NWPS managers:

*Complete totally accessible trails just outside wilderness designations.*

*Don't feel improvements in travel routes are appropriate. Need to provide ramps and other structures at trail heads for accessibility.*

*Handicapped accessible toilets at the trailheads need to be implemented.*

*Develop the surrounding areas to be totally accessible.*

Comments from outfitters:

*Have accessible entrance and specific information on levels of accessibility [and] for visually and hearing impaired.*

*Construct some mounting ramps for horse mounting. Construct some special ramping at put-in points at river's edge.*

**Suggestion 4: Increase access inside wilderness (boardwalks, widen trails, special permits)**

Users	10%	
Managers		9.9%
Outfitters	20%	

Comments from users with disabilities:

*Improve campsites and portage trails.*

*Signage should be in braille and placed at lowered heights.*

*Make campsite areas more accessible, ramping from river, provide riverside bathrooms totally accessible.*

*Widen paths.*

Comments from NWPS managers:

*Construct a trail suitable for wheelchair access.*

*Managers need to be provided with uniform, regionwide policies for granting valid exemptions to the guidelines of the Wilderness Act*

*Create specific trails with easy grade and hardened surface, close to trailhead.*

*Widen and reroute the grade of trails. People with disabilities have a right to visit their forests.*

*Redesign trails for persons with disabilities.*

*Special rafting permits for commercial outfitters. Lower fee to offset cost.*

*Reconsider strict stance of non-use of mechanical equipment. Special permits should be considered.*

Comments from outfitters:

*Specialized permits for nonprofit groups--they can't afford fees.*

*Special permitting process done on a local level--unit specific. Improve all existing camping facilities, improve toileting facilities, widen trails.*

**Suggestion 5: Issue special permits allowing motors and mechanized use for access (ATVs, motorboats, etc.)**

Users	10%*
Managers	1.3%
Outfitters	7%

\* Only two users specifically recommended the use of motors; however several commented on their desire to use motors in response to the question on whether the restrictions on mechanized use diminishes their ability to enjoy wilderness. If these are factored in as recommendations, the total number of persons with disabilities who recommend the use of motorized vehicles is eight, or 10 percent.

Comments from users with disabilities:

*Allow restricted use of ATVS.*

*Allow individualized motorized access to certain areas.*

*Disabilities or age should not stop people from going to wilderness. Managers of the units should rent motorized equipment...government shouldn't limit people from using motors.*

*ATV is a way to see wilderness I could never reach on foot.*

*How [can I] get out in case an emergency arises? Need mechanized usage.*

Comments from NWPS managers:

*Develop special area within wilderness to allow motorized use. Specialized permit.*

*Issue special use permits for motorized use if disabled individual needs this.*

*Allow use of motors on a limited basis.*

*Maintain existing regulations that allow for limited motorized use.*

Comments from outfitters:

*[Provide] access with motorized vehicles.*



**Suggestion 6: Encourage/promote use of outfitters and guides**

Users	10%	
Managers		13.4%
Outfitters	0	

Comments from users with disabilities:

*Highly promote existing organizations that enable persons with disabilities to go to wilderness areas.*

*Implement trail partners, which advocates people power for access.*

Comments from NWPS managers:

*Develop partnerships with area guides and specialty outfitters.*

*Commercial use operators could be encouraged to specifically tailor trips for persons with disabilities.*

*Increase usage and dependence on groups that deal with specialized population and the creative solutions they use.*

*Market the various outfitters who service persons with disabilities.*

*Cosponsored disability awareness training for commercial guides.*

Comments from outfitters:

None

**Suggestion 7: Increase funding for better access, including facilities, promotion, and scholarships.**

Users	6.25%
Managers	2.63%
Outfitters	0

Comments from users with disabilities:

*Continue to fund organizations that bring persons with disabilities to wilderness.*

*Develop more organized programs that take persons with disabilities [that are] federally funded.*

Comments from NWPS managers:

*We need an increase in funding and staffing to approach this issue in a positive manner.*

*The use of this area by persons with disabilities will require an imaginative approach that will require copious funding.*

*Specific funding aimed at developing accessible trails.*

*Lobby to provide funding for retrofit of existing facilities.*

Comments from outfitters:

None

**Suggestion 8: Rely on people power/human companions to gain access to wilderness.**

Users	6.25%	
Managers		.33%
Outfitters	0	

Comments from users with disabilities:

*Rely more on people power...reciprocate.*

*Go with someone who completely understands your disability.*

*Rely on friends who are willing to assist your needs while in the wilderness.*

Comments from NWPS managers:

*A chair-bound person willing to travel with an able bodied friend will probably have an extraordinary experience.*

Comments from outfitters:

None

## Conclusions

### Federal management policies and practices

The four federal agencies responsible for wilderness management have different policies and management practices regarding use of the NWPS in general and regarding persons with disabilities in particular. These differences are partly attributable to the fact that the NWPS is not an independent federal lands system. Each agency has a different mission and these missions are reflected in their overall policies toward the NWPS.

Three of the agencies--the National Park Service, the Forest Service, and the Bureau of Land Management--allow the use of wheelchairs within the NWPS. The Fish and Wildlife Service currently does not have a policy on this issue; however, it is their intention to adopt policies similar to those of the other land managing agencies in the Department of Interior. The BLM is in the process of further defining its policies; however, as a Department of Interior land management agency it, too, is likely to adopt the policies developed by other USDI agencies, specifically those of the National Park Service.

Forest Service policy differs from National Park Service policy in that it does not allow the use of electric (motorized) wheelchairs in the NWPS. This policy appears to be in conflict with the definition of a wheelchair in Section 507(c)(2) of the ADA:

...the term wheelchair means a device designed solely for use by a mobility-impaired person for locomotion, that is suitable for use in an indoor pedestrian area.

This definition is assumed to include all wheelchairs, whether motorized or not, provided that they are suitable for use in an indoor pedestrian area.

Most of the NWPS managers (74 percent) do not make special provisions for use by persons with disabilities. This appears to be consistent with Section 507(c)(1) of the ADA:

...consistent with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify any conditions of lands within a wilderness area to facilitate such use.

However, beyond the question of wheelchair use, specific guidelines on what is consistent with the Wilderness Act regarding use of the NWPS by persons with disabilities appear to be lacking. Guidelines are needed on issues such as trail width, toilets at hardened sites, and other practices currently employed within the NWPS to preserve the resource. In general, it appears that the federal agencies do not factor in use of the NWPS by persons with disabilities as much as they could.

Finally, there is some confusion among NWPS field managers about what the actual policies are regarding use by persons with disabilities. There are also considerable differences in opinion about how best to serve persons with disabilities in the NWPS.

It appears that the field managers of the NWPS need better training and direction when it comes to use of these areas by persons with disabilities.

## **Use levels of the NWPS by persons with disabilities**

People with disabilities do use the NWPS. Unfortunately realistic estimates of this use cannot be made based on the data collected for this study. Unit managers who responded estimated that 16,767 persons with disabilities visit the NWPS annually; however, these estimates cannot be verified, nor can accurate estimates be made for NWPS units that did not respond to the survey. For NWPS areas with the highest *estimated* use, see page 28.

## **Ability of persons with disabilities to enjoy the NWPS**

A significant majority of persons with disabilities surveyed enjoy using the NWPS. People with disabilities appear to visit the NWPS in the same ways and for the same reasons as people without disabilities (Roggenbuck and Lucas, 1987).

The majority (76 percent) of the respondents with disabilities do not believe that the restrictions on mechanized use stated by the Wilderness Act diminish their ability to enjoy the wilderness.

## **Recommendations**

1. All federal agencies that manage the NWPS should adopt policies consistent with those stated in Section 507(c) of the Americans With Disabilities Act as soon as possible.
2. Federal agencies should bring existing facilities outside of the NWPS up to code for use by persons with disabilities as soon as possible. This upgrade includes trailheads, parking facilities, restrooms, and TDDs in ranger stations.
3. NWPS managing agencies should develop guidelines regarding accommodations, special permits, and modifications for use by persons with disabilities that are consistent with the Wilderness Act. Agencies should be encouraged to facilitate NWPS use, consistent with the Wilderness Act, by persons with disabilities. Agencies are encouraged to work with persons with disabilities, outfitters, and other programs that use the NWPS to develop these guidelines.
4. NWPS unit managers should receive training to increase general awareness of disability issues and specific awareness of policies and practices regarding use of the NWPS by persons with disabilities.
5. Each agency should develop better information about what is available to persons with disabilities who want to use the NWPS. This information should be made readily available to the public.
6. Data collected for this study could be used in other studies; this information should be made available to any agency or person who requests it.

## **Acknowledgments**

Sandy Parrino, Margaret Hager, Ethel Briggs, and Mark Quigley--the National Council on Disability

David Park, Kay Ellis, Wes Henry--National Park Service

Joe Meade, Liz Close, Chuck Frayer, Ann Fege, and Alan Watson-- U.S. Forest Service

Keith Corrigall--Bureau of Land Management

Dave Heffernan--U.S. Fish and Wildlife Service

Margo Imdieke, Minnesota State Council on Disability

John Nousaine, Northeast Minnesota Center for Independent Living

Jay Rochlin, Tigurd, OR

Darrell Knuffke and the Wilderness Society, for free materials and information, including more than 300 maps of the National Wilderness Preservation System

Whole Access Tours of Redwood City, CA, for enlarged print copies of the Wilderness Society report on access

John Galland, Minneapolis, MN

Deb Jo Sathrum and Molly Schlaefer, Minneapolis, MN

John Kopchik, Disabled Outdoors, Chicago, IL

Mark Havens, Accessible Adventures, Portland, OR

Nancy Ertter, Alternate Mobility Adventure Seekers, Boise, ID

Tom McPike, Bay Area Outreach/Rec, Berkeley, CA

Gary Robb, Bradford Woods, Martinsville, IN

Scott Engram, Breckenridge Outdoor Educational Center,  
Breckenridge, CO

Patrick Reinhart, Challenge Alaska, Anchorage, AK

Jim Wise, Cooperative Wilderness Handicapped Outdoor Group (CW Hog), Pocatello, ID

Bill Dvorak, Dvorak's Kayak Expeditions, Nathrop, CO

Diane Poslosky, Environmental Traveling Companions,  
San Francisco, CA

David Cappetta, Voyageur Outward Bound, Minnetonka, MN

Tom Smith, Racoon Institute, Cazenovia, WI

Claire Coonan, Special Populations Learning Outdoor Recreation and Education (S'plore), Salt Lake City, UT

David Espeseth, SOAR, Portland, OR

Charlie Ross, Sobek Expeditions, Angels Camp, CA

Dale Abell, The Ability Center, Sylvania, OH

### References

Driver, B.L.; Nash, R.; and Haas, G. "Wilderness Benefits: A State of Knowledge Review." In Lucas, R.C., *Proceedings, National Wilderness Research Conference: Issues, State of Knowledge, Future Directions*. Ogden, UT: Intermountain Research Station, 1987, pp. 294-319.

Lucas, R.C., and Krumpel, E.E. "Wilderness Management: A Literature Review." In *The President's Commission on Americans Outdoors*. Washington, DC: U.S. Government Printing Office, 1986.

Merigliano, L. "Indicators to Monitor the Wilderness Recreation Experience." In Lime, D.W., *Managing America's Enduring Wilderness Resource*. St. Paul, MN: Minnesota Extension Service, University of Minnesota, 1990, pp. 156-162.

Roggenbuck, J.W., and Lucas, R.C. "Wilderness Use and User Characteristics: A State-of-Knowledge Review." In Lucas, R.C., *Proceedings, National Wilderness Research Conference: Issues, State of Knowledge, Future Directions*. Ogden, UT: Intermountain Research Station, 1987, pp. 204-245.

## **Appendices**



**Appendix 1A. Outfitters and Organizations Survey, Cover Letter,  
and Attachments**

Note: This cover letter was sent on Wilderness Inquiry letterhead.

May 8, 1991

«FIRST NAME» «LAST NAME»  
«ORGANIZATION»  
«ADDRESS»  
«CITY», «ST» «ZIP»

Dear «SALUTATION»:

Wilderness Inquiry is working with the National Council on Disability on a nationwide study examining wilderness and persons with disabilities.

The study, mandated by the Americans With Disabilities Act of 1990, will look at the effect that wilderness designations and wilderness land management practices have on the ability of individuals with disabilities to use and enjoy the National Wilderness Preservation System established by the Wilderness Act of 1964.

If this study is to be effective, we need your help. Due to your knowledge of wilderness opportunities for persons with disabilities, we ask that you help us by reviewing the following questionnaire and map.

Laura Fredrickson from our office will be calling within a week or so to verbally collect your response to the enclosed questionnaire. If you are unable to take the call, please complete and return the questionnaire by June 1st.

If you have questions concerning the study, please call. Thank you for you cooperation, it is valued and appreciated.

Sincerely,

Greg Lais  
Executive Director

Enc:

cc: Mark Quigley, National Council on Disability

## Organizations Questionnaire

Section 507, Americans With Disabilities Act of 1990  
May 8, 1991

Name of organization\_\_\_\_\_

Nature of organization\_\_\_\_\_

Address\_\_\_\_\_

Phone\_\_\_\_\_

Contact person\_\_\_\_\_Title\_\_\_\_\_

1) How many people do you serve annually?\_\_\_\_\_

2) What is your annual budget?\_\_\_\_\_

3) How long has your organization been in business?\_\_\_\_\_

For the purpose of this study, persons with disabilities includes people with physical, cognitive, and sensory disabilities.

4) What percentage of your trips are integrated with people with disabilities?

0-25%\_\_\_\_\_

50-75%\_\_\_\_\_

25-50%\_\_\_\_\_

75-100%\_\_\_\_\_

5) How many people with disabilities do you serve annually?\_\_\_\_\_

6) Who do you serve? (check all that apply)

People who use wheelchairs \_\_\_\_\_

People with cognitive impairments \_\_\_\_\_

People with sensory impairments \_\_\_\_\_

People who use canes and/or crutches\_\_\_\_\_

Other (please explain)\_\_\_\_\_

The Wilderness Act of 1964 created the National Wilderness Preservation System (NWPS). Congress designated that certain areas be protected in their natural condition as an enduring resource of wilderness.

Many remote, wild places have similar qualities and characteristics as the designated units of the NWPS, however, these are *not* part of the NWPS. Examples of wild areas that are not part of the National Wilderness Preservation System include Yellowstone National Park, Rocky Mountain National Park, many state parks, etc.

For the purpose of this study, we are only concerned with designated units within the National Wilderness Preservation System.

Please see enclosed map for specific listings and locations of NWPS units.

7) Do you conduct activities that involve persons with disabilities in the National Wilderness Preservation System?

Yes\_\_\_\_\_ No\_\_\_\_\_

If no, please skip to question number 20

If yes, state which units\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8) Please describe the people with disabilities that your organization has served on activities within the NWPS (check all that apply):

People who use wheelchairs \_\_\_\_\_

People with cognitive impairments \_\_\_\_\_

People with sensory impairments \_\_\_\_\_

People who use canes and/or crutches \_\_\_\_\_

Other (please explain)\_\_\_\_\_

\_\_\_\_\_

9) If your organization has conducted trips within the NWPS, how many has it conducted in the last 10 years?\_\_\_\_\_

10) If you have conducted trips within the NWPS, has the frequency of your NWPS trips involving persons with disabilities (please check one)

Increased\_\_\_\_\_

Decreased\_\_\_\_\_

Remained stable\_\_\_\_\_

We no longer conduct activities within the NWPS\_\_\_\_\_

11) If you have conducted trips within the NWPS, what modes of transport were used within the NWPS by persons with disabilities? (check all that apply)

Kayak\_\_\_\_\_ Dogsled\_\_\_\_\_ Other\_\_\_\_\_

Raft\_\_\_\_\_ Horse\_\_\_\_\_

Canoe\_\_\_\_\_ Hike\_\_\_\_\_

12) Have you served persons with disabilities in the past but have discontinued to do so? Yes\_\_\_\_\_No\_\_\_\_\_

If yes, why?

Lack of qualified staff\_\_\_\_\_

Legal/liability problems\_\_\_\_\_

Other (please explain)\_\_\_\_\_

- 13) Have you had any problems conducting NWPS trips that are the direct result of

NWPS restrictions (please explain)

Having persons with disabilities in your group (please explain)

Have had no problems\_\_\_\_\_

- 14) In your opinion, do any of the following prohibit persons with disabilities from enjoying the NWPS? (check all that apply):

Permits\_\_\_\_\_

Quota systems\_\_\_\_\_

Use of designated campsites\_\_\_\_\_

Use of latrines\_\_\_\_\_

Lack of information on accessible routes\_\_\_\_\_

Restrictions on motorized use\_\_\_\_\_

Lack of cooperation by agency (USFS, NPS)\_\_\_\_\_

Lack of improved trails\_\_\_\_\_

Lack of improved facilities (ramp, etc.)\_\_\_\_\_

Lack of communication devices for deaf (TDD)\_\_\_\_\_

Lack of tactile information, braille, signage, for visually impaired\_\_\_\_\_

All of the above\_\_\_\_\_

None of the above\_\_\_\_\_

- 15) Do you believe motorized use in the NWPS is *necessary* to provide access to persons with disabilities?

Yes\_\_\_\_\_No\_\_\_\_\_Please explain

- 16) Do you believe it is *necessary* to improve facilities (i.e., paved trails, shelters, handrails, and ramps, etc.) to provide access to the NWPS by persons with disabilities?

Yes\_\_\_\_\_No\_\_\_\_\_Please explain

- 17) Do you have an evaluation form or a means for receiving evaluation from your users? Yes\_\_\_\_\_No\_\_\_\_\_

If yes, please describe the evaluation, and briefly describe a "typical" response\_\_\_\_\_

\_\_\_\_\_

If no evaluation used, why not?\_\_\_\_\_

\_\_\_\_\_

18) From your experience, do you think persons with disabilities are able to enjoy the NWPS? Yes\_\_\_\_\_No\_\_\_\_\_

If yes, why?

If not, why not?

19) Do you have specific recommendations and suggestions for providing access in the NWPS for persons with disabilities? Please explain. Attach separate sheet if necessary.

20) If your organization does not conduct activities within the National Wilderness Preservation System please explain why not:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

21) If your organization does conduct outdoor activities, but not within the National Wilderness reservation System, where do you conduct them?\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Can you provide us with names of people with disabilities who have used the National Wilderness Preservation System who might be interested in participating in this study?

Name\_\_\_\_\_
Address\_\_\_\_\_
City, State\_\_\_\_\_
Zip Code\_\_\_\_\_

Name\_\_\_\_\_
Address\_\_\_\_\_
City, State\_\_\_\_\_
Zip Code\_\_\_\_\_

Phone (\_\_\_\_)\_\_\_\_\_-\_\_\_\_\_

Phone (\_\_\_\_)\_\_\_\_\_-\_\_\_\_\_

Name\_\_\_\_\_
Address\_\_\_\_\_
City, State\_\_\_\_\_
Zip Code\_\_\_\_\_

Name\_\_\_\_\_
Address\_\_\_\_\_
City, State\_\_\_\_\_
Zip Code\_\_\_\_\_

Phone (\_\_\_\_)\_\_\_\_\_-\_\_\_\_\_

Phone (\_\_\_\_)\_\_\_\_\_-\_\_\_\_\_

Name\_\_\_\_\_

Name\_\_\_\_\_

Address\_\_\_\_\_

Address\_\_\_\_\_

City, State\_\_\_\_\_

City, State\_\_\_\_\_

Zip Code\_\_\_\_\_

Zip Code\_\_\_\_\_

Phone (\_\_\_\_)\_\_\_\_\_-\_\_\_\_\_

Phone (\_\_\_\_)\_\_\_\_\_-\_\_\_\_\_

If necessary, attach more names on separate sheet.

Please return this form to:

Laura Fredrickson  
Wilderness Inquiry  
1313 Fifth St. SE, Box 84  
Minneapolis, MN 55414

**Appendix 1B. Persons with Disabilities Survey, Cover Letter, and Attachments**

Note: This cover letter was sent on National Council on Disability letterhead.

August 30, 1991

«FIRST NAME» «LAST NAME»  
«ADDRESS»  
«CITY», «ST» «ZIP»

Dear «SALUTATION»:

We want to find out about your experiences in wilderness areas. Your name was given to us by «SOURCE» as a person with a disability who has visited Federally designated Wilderness areas.

You may know that Congress passed the Americans With Disabilities Act in July 1990. In that Act, the National Council on Disability was asked to conduct a nationwide study examining the effect that Wilderness designations and management practices have on the ability of persons with disabilities to use and enjoy the National Wilderness Preservation System (NWPS).

Wilderness Inquiry is a nonprofit organization that is working with the National Council on Disability to gather information from people like you. If this study is to be effective, we need your help.

We realize there are many questions here for you to think about, but to help us make recommendations to Congress we ask you to consider each one as carefully and thoroughly as you can. Please complete the following questionnaire and return it in the stamped envelope provided *by September 30, 1991*.

Your participation in this study is voluntary. Your name will not be connected with your answers unless we receive specific permission from you to talk with you further about an issue. If you have questions concerning the study, please call Greg Lais at (612) 379-3858. Thank you for your cooperation. Your input is valued and important.

Sincerely,

Ethel Briggs  
Executive Director  
National Council on  
Disability

Greg Lais  
Executive Director  
Wilderness Inquiry

The Wilderness Act of 1964 created the National Wilderness Preservation System (NWPS). Congress designated that certain areas be protected and preserved in their natural condition as an enduring resource of wilderness.

Many remote, wild places have similar qualities and characteristics as the designated units of the NWPS, however, these are *not* part of the NWPS. Examples of areas that possess such "wilderness-like" qualities would be Yellowstone National Park, Rocky Mountain National Park, and many state parks. However, these are *not* units of the NWPS.

*For the purpose of this study, we are concerned only with designated units within the National Wilderness Preservation System. Please see the enclosed map for specific listings and locations of NWPS units.*

For the purpose of this study, persons with disabilities include those with physical, cognitive and sensory disabilities and the use of possible assistive devices.

1) Please name up to 5 wilderness areas of the NWPS you have visited since having a disability. (Please refer to enclosed map for specific names and locations of NWPS units.)

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) \_\_\_\_\_
- e) \_\_\_\_\_

2) Please circle the number that best rates your level of overall enjoyment of the NWPS areas you listed in question 1. The letter in front of each response corresponds to the wilderness you listed in question 1.

	Did not enjoy	Enjoyed very little	Enjoyed somewhat amount	Enjoyed very much	Enjoyed a tremendous
a)	1	2	3	4	5
b)	1	2	3	4	5
c)	1	2	3	4	5
d)	1	2	3	4	5
e)	1	2	3	4	5

3) How many trips have you taken to wilderness areas in the



NWPS since having a disability?

1 trip\_\_\_\_\_ 2-4 trips\_\_\_\_\_ 5 or more trips\_\_\_\_\_

4) What is the longest time you've spent in a wilderness area in the NWP at one time since having a disability?

1 day\_\_\_\_\_ 2-3 days\_\_\_\_\_ 4 days or more\_\_\_\_\_

5) What means of transportation have you used while traveling within the NWPS since having a disability? (check all that apply)

Kayak\_\_\_\_\_ Canoe\_\_\_\_\_ Dogsled\_\_\_\_\_  
Raft\_\_\_\_\_ Horse\_\_\_\_\_ Hike\_\_\_\_\_  
Other (please explain)\_\_\_\_\_

6) Did you use any of the following assistive devices on any of your trips to the NWPS Check all that apply)

Manual wheelchair\_\_\_\_\_ Walker\_\_\_\_\_  
Electric wheelchair\_\_\_\_\_ Crutches/cane\_\_\_\_\_  
Amigo\_\_\_\_\_ Guide dog\_\_\_\_\_  
Other (please explain)\_\_\_\_\_

7) Do you typically visit the NWPS

Alone\_\_\_\_\_  
With friends/family\_\_\_\_\_  
With an organized group or outfitter\_\_\_\_\_

8) Why did you choose to visit the NWPS? (check all that apply)

To experience solitude\_\_\_\_\_  
To experience scenery/natural beauty\_\_\_\_\_  
To share the experience with family or friends\_\_\_\_\_  
To experience a personal challenge\_\_\_\_\_  
To experience nature on its own terms\_\_\_\_\_  
To enjoy fishing or hunting\_\_\_\_\_  
Other (please explain)\_\_\_\_\_  
\_\_\_\_\_

9) Did you check or attempt to check the accessibility of the NWPS before your trip?

Yes\_\_\_\_\_ No\_\_\_\_\_

10) If yes, did you find information from (check all that apply)

Organization/outfitter leading trip\_\_\_\_\_

NWPS manager (Forest Service, Park Service, etc.)\_\_\_\_\_

Friends who had visited the area before\_\_\_\_\_

Other (please explain)\_\_\_\_\_

\_\_\_\_\_

11) If you did not check the accessibility before your NWPS trip, why not?

I did not think it was necessary\_\_\_\_\_

I did not know where to look for information\_\_\_\_\_

I could not find any information on accessibility\_\_\_\_\_

12) Did you visit the NWPS prior to having a disability?

I *did* visit the NWPS prior to my disability\_\_\_\_\_

I *did not* visit the NWPS prior to my disability\_\_\_\_\_

I was born with my disability\_\_\_\_\_

13) Before visiting the NWPS, did you have concerns about going into a wilderness area that specifically relate to your disability?

Yes\_\_\_\_\_No\_\_\_\_\_If yes, please explain:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

14) What were the highlights of your visit(s) to the NWPS? (check all that apply)

Personal achievement/feelings of accomplishment\_\_\_\_\_

Solitude/peace\_\_\_\_\_

People or relationships\_\_\_\_\_

Scenery or location\_\_\_\_\_

Personal growth\_\_\_\_\_

No high points\_\_\_\_\_

Other (please explain)\_\_\_\_\_

15) What were the low points of your visit(s) to the NWPS? (check all that apply)

Lack of information about area I wished to visit\_\_\_\_\_

Physical discomfort\_\_\_\_\_

Trails/terrain too rugged\_\_\_\_\_

Undeveloped/primitive campsites\_\_\_\_\_

Uncooperative group members\_\_\_\_\_

Poor access at entry point (parking, etc.)\_\_\_\_\_

No low points\_\_\_\_\_
Other (please explain)\_\_\_\_\_

16) In your opinion, did your disability enhance or inhibit the opportunity for you to enjoy the NWPS?

Enhanced the opportunity for me\_\_\_\_\_
Inhibited the opportunity for me\_\_\_\_\_
Had no effect on the opportunity for me\_\_\_\_\_

Please explain:\_\_\_\_\_

17) Do you believe the restrictions on mechanized use within the NWPS diminishes your ability to enjoy it?

Yes\_\_\_\_\_ No\_\_\_\_\_ Please explain:\_\_\_\_\_

18) Do you have suggestions for improving the ability of persons with disabilities to enjoy the NWPS?

Yes\_\_\_\_\_ No\_\_\_\_\_ Please explain:\_\_\_\_\_

Many people visit areas that are not within the National Wilderness Preservation System (NWPS). These areas are rugged, wild, and remote, but they are not designated units of the NWPS. Often they are public or private areas that have not been developed. For questions 19 and 20, we want you to think about lands you have visited that are not within the NWPS, such as state parks, Yellowstone National Park, Allagash Wilderness Waterway, etc.

19) Do you visit wildlands outside of the NWPS?

Yes\_\_\_\_\_ No\_\_\_\_\_ If yes, please describe them by name and the state where they are located:

\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

20) Do the experiences you have in wild areas *outside the NWPS* differ from your experiences inside the NWPS?

Yes\_\_\_\_\_No\_\_\_\_\_Please explain:

\_\_\_\_\_  
\_\_\_\_\_

Questions 21 - 24 are optional. This is demographic data that will be helpful to us, but we do not require you to answer it.

21) We want to know more about you. Please tell us your:

Age\_\_\_\_\_Sex\_\_\_\_\_

City and state of residence\_\_\_\_\_

22) Do you have a disability?

Yes\_\_\_\_\_No\_\_\_\_\_

If yes, please describe it by name:\_\_\_\_\_

23) Do you (check all that apply)

Use a wheelchair\_\_\_\_\_

Walk with cane/crutches\_\_\_\_\_

Use a guide dog\_\_\_\_\_

Use other assistive  
devices \_\_\_\_\_

If other, please explain:\_\_\_\_\_

24) If you have other comments please share them here, or attach a separate sheet of paper:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

---

---

---

25) Would you be willing to have us contact you by telephone for more detailed information on your opinions?

Yes\_\_\_\_No\_\_\_\_ If yes, please give us your name, address, and phone number:

Name\_\_\_\_\_

Address\_\_\_\_\_

City\_\_\_\_\_State\_\_\_\_\_Zip\_\_\_\_\_

Telephone (        )\_\_\_\_\_

Thank you for participating in this study!

Please return this response in the enclosed envelope, or to:

Wilderness Inquiry 1313 Fifth St. SE, Box 84  
Minneapolis, MN 55414  
(612) 379-3858 Voice or TDD

## Appendix 1C. NWPS Managers Survey and Cover Letter

Note: The cover letters for this survey varied slightly from what is presented here. The Forest Service and the National Park Service re-worded this letter and put it on their agency letterhead. Wilderness Inquiry distributed surveys directly to the Fish and Wildlife Service and the Bureau of Land Management. Surveys distributed by Wilderness Inquiry included a cover letter on Wilderness Inquiry letterhead.

«FIRST NAME» «LAST NAME»  
«ORGANIZATION»  
«ADDRESS»  
«CITY», «ST» «ZIP»

Dear «SALUTATION»:

We want to find out what level of use, if any, the wilderness area you manage receives from persons with disabilities.

You may know that Congress passed the Americans With Disabilities Act in 1990. In that Act, the National Council on Disability was mandated to conduct a nationwide study examining the effect that wilderness designations and wilderness land management practices have on the ability of persons with disabilities to use and enjoy the National Wilderness Preservation System.

The National Council on Disability has contracted with Wilderness Inquiry to conduct this study. Wilderness Inquiry is a nonprofit, Minneapolis-based organization that conducts wilderness adventures with persons who have disabilities.

Enclosed is a questionnaire designed for wilderness managers. This survey has been developed in cooperation with the four Federal wilderness management agencies (USFS, USF&W, NPS, BLM).

We understand that you may not have hard data on many of the questions asked in this questionnaire. If you do not have hard data, please respond according to your best judgement.

We ask that you take a moment to complete the questionnaire and return it to XXXX by *October 15th, 1991*.

If you have questions concerning the study, please contact Greg Lais at Wilderness Inquiry (612-379-3858). Thank you for your cooperation.

Sincerely,            Official from Federal Agency

**WPS Unit Managers Questionnaire  
Wilderness Access**

The National Wilderness Preservation System was established by Congress in passing the Wilderness Act of 1964. The Americans With Disabilities Act of 1990 (Section 507) requires a study to determine the ability of persons with disabilities to enjoy and utilize the National Wilderness Preservation System. You have been identified as a person in charge of managing a unit of the National Wilderness Preservation System (NWPS). Your assistance in completing this questionnaire is greatly appreciated.

1) How would you describe the *primary* terrain type in your wilderness unit used by visitors interested in recreation? (check only one)

Mountainous_____	Lake and/or river_____
Swamp, marsh wetland_____	Desert_____
Forest/heavily vegetated_____	Coastal_____

We realize that most units of the NWPS prohibit the use of motorized vehicles. However, in some units the use of motors has been grandfathered in. For this reason we are including responses regarding motorized use in questions 2, 7, and 11.

2) People who visit your wilderness unit use which of the the following means of travel: (check all that apply)

Raft_____	Kayak_____	Motorboat_____
Canoe_____	Hike_____	Bicycle_____
Horse_____	Dogsled_____	Airplane_____
Ski_____	Snowmobile_____	
	All-terrain vehicle_____	

Other (please describe)\_\_\_\_\_

Persons with disabilities include those who use wheelchairs, crutches, canes, and those who have visual and or hearing impairments, mental retardation, epilepsy, etc.

3) Have you ever received inquiries from persons with disabilities about the use of your wilderness unit?

Yes\_\_\_\_\_ No\_\_\_\_\_ Don't know\_\_\_\_\_

4) If yes, approximately how many inquiries do you receive annually?\_\_\_\_\_

Is this figure an estimate\_\_\_\_\_ based on exact documentation\_\_\_\_\_

5) How many people with disabilities do you believe use your unit of the NWPS each year?\_\_\_\_\_

Is this figure an estimate\_\_\_\_\_ based on exact documentation\_\_\_\_\_

6) Does your wilderness unit have any information available that specifically addresses wilderness use by persons with disabilities?

Yes\_\_\_\_\_ No\_\_\_\_\_

*IF YES, PLEASE RETURN A COPY WITH THIS QUESTIONNAIRE.*

7) How do people with disabilities travel while in your wilderness unit? (check all that apply)

Raft\_\_\_\_\_ Kayak\_\_\_\_\_ Motorboat\_\_\_\_\_
Canoe\_\_\_\_\_ Hike\_\_\_\_\_ Bicycle\_\_\_\_\_
Horse\_\_\_\_\_ Dogsled\_\_\_\_\_ Airplane\_\_\_\_\_
Ski\_\_\_\_\_ Snowmobile\_\_\_\_\_
All-terrain vehicle\_\_\_\_\_

Other (please describe)\_\_\_\_\_

8) Do you believe most people *with* disabilities visit your wilderness unit (check only one)

Alone\_\_\_\_\_
With family/friends\_\_\_\_\_
In organized groups\_\_\_\_\_
Don't know\_\_\_\_\_

Is this response an estimate\_\_\_\_\_ based on exact documentation\_\_\_\_\_

9) How do most people *without* disabilities visit your wilderness unit? (check only one)

Alone\_\_\_\_\_
With family/friends\_\_\_\_\_
In organized groups\_\_\_\_\_
Don't know\_\_\_\_\_

Is this response an estimate\_\_\_\_\_ based on exact documentation\_\_\_\_\_



10) Does your unit allow for the use of wheelchairs by persons with disabilities?

Yes\_\_\_\_\_ No\_\_\_\_\_ Don't know\_\_\_\_\_

Comments\_\_\_\_\_

11) Does your unit make special provisions for use by persons with disabilities?

Yes\_\_\_\_\_ No\_\_\_\_\_ Don't know\_\_\_\_\_

If yes, what are they? (check all that apply)

Special permits\_\_\_\_\_

Use of motors\_\_\_\_\_

Special areas\_\_\_\_\_

Accessibility information\_\_\_\_\_

Other (please explain)\_\_\_\_\_

12) In your opinion, do the management policies of your agency for NWPS units inhibit the enjoyment of persons with disabilities?

Yes\_\_\_\_\_ No\_\_\_\_\_

If yes, why?\_\_\_\_\_

If no, why not?\_\_\_\_\_

13) Do you provide any of the following to the general population prior to their visiting wilderness areas? (check all that apply)

Advice\_\_\_\_\_

Informational wilderness travel materials\_\_\_\_\_

Special training\_\_\_\_\_

Other\_\_\_\_\_

14) What is the official name of the unit(s) of the NWPS that you manage? (please list them all if more than one)

---

---

15) For which federal agency do you work?\_\_\_\_\_

16) What is your official job title?\_\_\_\_\_

17) How many years have you personally been involved in the management of this wilderness area?\_\_\_\_\_

18) Please elaborate on what, if anything, you think could be done to facilitate enjoyment of your NWPS unit by persons with disabilities:

---

---

---

---

---

---

---

---

Please return your response in the enclosed envelope, or to

Wilderness Inquiry 1313 Fifth St. SE, Box 84  
Minneapolis, MN 55414  
(612) 379-3858 Voice or TDD

THANK YOU FOR PARTICIPATING IN THIS SURVEY. THE RESULTS WILL BE MADE AVAILABLE TO THE WILDERNESS COORDINATOR FOR YOUR AGENCY, OR YOU CAN CALL WILDRNESS INQUIRY FOR A FINAL COPY.

**Appendix 2A. Tabulations of the Responses from Organizations  
and Outfitters**

1) How many people total do you serve annually? \_\_\_\_\_

1	=	0-100	
2	=	101-500	7
3	=	501-1000	2
4	=	1001-2000	1
5	=	2001+	5

DATA TITLE: People Served Annually

2) What is your annual budget?\_\_\_\_\_

1	=	\$0-100,000	2
2	=	\$100,001-120,000	2
3	=	\$120,001-175,000	3
4	=	\$175,001-200,000	1
5	=	\$200,001+	7

DATA TITLE: Annual Budget

3) How long has your organization been in business?\_\_\_\_\_

1	=	0-3 yrs	1
2	=	4-10 yrs	6
3	=	11-15 yrs	3
4	=	16+ yrs	5

DATA TITLE: Years In Business

4) What percentage of your trips are integrated with people with disabilities?

1	=	0-25%	3
2	=	25-50%	2
3	=	50-75%	1
4	=	75-100%	9

DATA TITLE: % of Integrated Trips

5) How many people with disabilities do you serve annually?\_\_\_\_\_

1	=	0-50	3
2	=	51-100	0
3	=	101-200	2
4	=	201+	10

DATA TITLE: Dis Served Annually

6) Whom do you serve? (check all that apply)

1 = People who use wheelchairs	14
2 = People with cognitive impairments	15
3 = People with sensory impairments	15
4 = People who use canes and/or crutches	15
5 = Terminally ill	2
6 = Other	1

DATA TITLE: Persons Served

7) Do you conduct activities that involve persons with disabilities in the National Wilderness Preservation System?

1 = yes	11
2 = no	4

DATA TITLE: Trips In NWPS

If yes, state which units:

- Black Canyon of the Gunnison
- Boundary Waters Canoe Area
- Chama River Canyon
- Chugach
- Collegiate Peaks
- Craters of the Moon
- Eagles Nest
- Denali
- Desolation Canyon
- Frank Church/River of No Return
- Glacier Bay
- Hells Canyon
- Jedediah Smith
- Kenai
- Lost Creek
- Mesa Verde
- Mt. Rainier
- Sawtooth
- Teton
- Three Sisters
- Trinity Alps
- Yosemite

8) Please describe the people with disabilities that your organization has served on activities within the NWPS. (check all that apply)

1 = People who use wheelchairs	9
2 = People with cognitive impairments	10
3 = People with sensory impairments	10
4 = People who use canes and/or crutches	10
5 = Terminally ill	1
6 = Other	1

DATA TITLE: In NWPS, People Served

9) If your organization has conducted trips within the NWPS, how many has it conducted in the last 10 years?\_\_\_\_\_

1 = 1-20	0
2 = 21-100	5
3 = 101-200	10
4 = 201+	0

DATA TITLE: Trips Over 10 Yrs

10) If you have conducted trips within the NWPS, has the frequency of your NWPS trips involving persons with disabilities (please check one):

1 = Increased	3
2 = Decreased	2
3 = Stable	6
4 = We no longer conduct activities within the NWPS	0

DATA TITLE: Trips w/DIS

11) If you have conducted trips within the NWPS, what modes of transport were used within the NWPS by persons with disabilities? (check all that apply)

1 = kayak	5	5 = horse	2
2 = raft	8	6 = hike	8
3 = canoe	4	7 = ATV	0
4 = dogsled	3	8 = airplane	0

DATA TITLE: Modes of Transport

12) Have you served persons with disabilities in the past but have discontinued to do so?

1 = yes	0
2 = no	11

DATA TITLE: Discontinued Service

13) Have you had any problems in conducting NWPS trips that are the direct result of:

1 = Have had no problems	9
2 = NWPS restrictions	0
3 = Having persons with disabilities in your group	2

DATA TITLE: Problems in NWPS

Comments:

*Planning trips is more complicated because you need a lot more logistical information than what is available as far as the lay of the land and the information is just not available. You are more limited in where you can go.*

*Some trips require extended hikes to put-in points; would like transport to spots.*

DATA TITLE: Comments 2

14) In your opinion, do any of the following prohibit persons with disabilities from enjoying the NWPS? (check all that apply)

1 = permits	3
2 = quota systems	1
3 = use of designated campsites	1
4 = use of latrines	2
5 = lack of information on accessible routes	7
6 = restrictions on motorized use	3
7 = lack of cooperation by agency	1
8 = lack of improved trails	6
9 = lack of improved facilities	7
10 = lack of communication devices for deaf (TDD)	1
11 = lack of tactile information for visually impaired	5
12 = all of the above	1
13 = none of the above	0

DATA TITLE; Prohibit Persons w/Dis

15) Do you believe motorized use in the NWPS is necessary to provide access to persons with disabilities?

1 = yes            5  
2 = no             6

DATA TITLE: Motors Necessary

(please explain)\_\_\_\_\_

Comments:

*Yes, to get to site locations.*

*For adequate accessibility, but only in outlying areas just outside wilderness.*

*Motorized use would help in getting persons with disabilities to put-in points on rivers.*

*It would be advantageous to use a four-wheeler because of the rugged terrain. Can't get a permit to do so.*

*Rely on horses, water craft, and dogsleds to get people into backcountry.*

DATA TITLE: Comments 3

16) Do you believe it is necessary to improve facilities (i.e., paved trails, shelters, handrails, ramps, etc.) to provide access to the NWPS by persons with disabilities?

1 = yes            6  
2 = no             5

DATA TITLE: Improve Facilities

(please explain)\_\_\_\_\_

*Existing facilities need to be brought up to standard.*

*Toilet facilities should be developed in the outback; put-in and take-out areas at the river's edge should be ramped. Parking at entrance.*

*If any improvements in NWPS for any other reason, then make it totally accessible.*

*Let's improve access on nonwilderness lands instead.*

*Wilderness should be available to all people. Ways to make things accessible without disturbing the quality of the land. . .raised walkways over rugged terrain.*

*Improve trails by widening but not by paving. Build public cabins accessible for all persons--more amenities.*

Areas up to wilderness.

DATA TITLE: Comments 4

17) Do you have an evaluation form or a means for receiving evaluation from your users?

1 = yes	11
2 = no	0

DATA TITLE: Eval Form

18) From your experience, do you think persons with disabilities are able to enjoy the NWPS?

1 = yes	10
2 = no	2

DATA TITLE: Able to Enjoy

(please explain)\_\_\_\_\_

*Most folks are just like able-bodied and desire wilderness--awareness of possibilities and false limitations.*

*I have seen people with disabilities take on a lot of determination and patience and the rewards I can see in their eyes and in their attitudes to try something challenging.*

*Provides the opportunity for persons with disabilities to have an able-bodied challenge and opportunity.*

*It's important that the NWPS is preserved in its rustic sense so all persons have the chance to experience the primitive, wild setting.*

*They can't enjoy them because there isn't an easy enough route to get to the areas.*

*These people want to challenge themselves and have some adventure--the wilderness provides the background*



*Persons with disabilities need to be made aware of what is available to them.*

*For the same reason anyone else enjoys the wilderness.*

*Philosophically, yes, but due to the accessibility issue, no! I believe persons of all ability levels should have the opportunity to go into extremely remote areas--use organizations like ours as the intermediary.*

*I think persons with disabilities enjoy it for the same reasons non-disabled enjoy it. Not enough information is available to persons with disabilities as far as places easily accessible.*

DATA TITLE: Comments 5

19) Do you have specific recommendations and suggestions for providing access in the NWPS for persons with disabilities? Please explain. Attach separate sheet if necessary.

Comment codes:	# of responses	% of total (15)
0 = Not relevant to question asked.	0	0
1 = Encourage/promote use of outfitters and guides.	0	0
2 = Increase accessibility to areas outside wilderness (trailheads, parking, restrooms, TDDs).	2	13
3 = Increase access inside wilderness (boardwalks, widen trails, special permits).	3	20
4 = Allow use of wheelchairs.	0	0
5 = Maintain existing regulations--seek access without compromising Wilderness Act.	3	20
6 = Motors and mechanized use needed for access (ATVs, motorboats).	1	7
7 = Training and education for wilderness staff on disability awareness.	0	0
8 = Develop materials that provide information on access, provide clearinghouse for information.	5	33

9 = Repeal provisions of Wilderness Act that restrict motors, development, and mechanized use.	0	0
10= Increase funding for better access, including facilities, promotion, and scholarships.	0	0
11= Rely on people power/human companions to gain access to wilderness.	0	0

DATA TITLE: Recommendations

**Appendix 2B. Tabulations of the Responses from Persons with Disabilities**

1) Please name up to 5 wilderness areas of the NWPS you have visited since having a disability. (Please refer to enclosed map for specific names and locations of NWPS units.)

NWPS unit name	# of respondents
Boundary Waters	44
Teton	13
Denali	10
Everglades	10
Badlands	9
Frank Church/ River of No Return	6
Kenai	5
Lake Chelan-Sawtooth	5
Craters of the Moon	4
Hawaii Volcanoes	4
Hells Canyon	4
Yosemite	4
Bob Marshall	3
Isle Royale	3
Joshua Tree	3
Mt. Rainier	3
Arctic Wildlife Refuge	2
Bandelier	2
Cedar Keys	2
Crab Orchard	2
Florida Keys	2
Haleakala	2
J.N."Ding" Darling	2
Joyce Kilmer-Slickrock	2
Olympic	2
Petrified Forest	2
Presidential Range	2
Selway-Bitterroot	2
Twin Peaks	2
Wrangell-St. Elias	2
Alexander Springs	1
Alpine Lakes	1
Ansel Adams	1
Black Canyon/Gunnison	1
Bosque del Apache	1
Cache La Poudre	1
Castle Crag	1
Chama River Canyon	1
Charles C. Deam	1
Citico Creek	1
Columbia	1
Gates of the Arctic	1

Gates of the Mountains	1
Glacier Bay	1
Glacier Peak	1
Golden Trout	1
Great Swamp	1
Gros Ventre	1
Guadalupe Mountains	1
Jarbridge	1
John Muir	1
Lacassine	1
Lake Clark	1
Lizard Head	1
Mesa Verde	1
Moosehorn	1
Mt. Evans	1
Never Summer	1
Noatak	1
Okefenokee	1
Pecos	1
Pinnacles	1
Rainbow Lake	1
Rattlesnake	1
Russel Fjord	1
Saguaro	1
San Juan Islands	1
San Pedro Parks	1
Seney	1
South San Juan	1
St. Marks	1
Theodore Roosevelt	1
Three Sisters	1
Upper Buffalo	1
Upper Kiamichi River	1
Washakie	1
Weminuche	1

DATA TITLE: Wilderness Unit

2) Please circle the number that best rates your level of overall enjoyment of the NWPS areas you listed in question 1. The letter in front of each response corresponds to the wilderness you listed in question 1.

1 = Did not enjoy	<b>0</b>
2 = Enjoyed very little	<b>3</b>
3 = Enjoyed somewhat	<b>19</b>
4 = Enjoyed very much	<b>72</b>
5 = Enjoyed a tremendous amount	<b>113</b>

DATA TITLE: Enj. Rating

3) How many trips have you taken to wilderness areas in the NWPS since having a disability?

1 = 1 trip	<b>11</b>
2 = 2-4 trips	<b>31</b>
3 = 5+ trips	<b>38</b>

DATA TITLE: # of Trips

4) What is the longest time you've spent in a Wilderness area in the NWPS at one time since having a disability?

1 = 1 day	<b>6</b>
2 = 2-3 days	<b>6</b>
3 = 4+ days	<b>68</b>

DATA TITLE: Trip Length

5) What means of transportation have you used while traveling within the NWPS since having a disability? (check all that apply)

1 = kayak	<b>23</b>	5 = dogsled	<b>1</b>	<b>5</b>
2 = raft	<b>23</b>	6 = hike	<b>31</b>	
3 = canoe	<b>57</b>	7 = motorized	<b>4</b>	
4 = horse	<b>17</b>	8 = other	<b>4</b>	

DATA TITLE: Mode of Transport

6) Did you use any of the following assistive devices on any of your trips to the NWPS? (check all that apply)

1 = manual wheelchair	<b>40</b>	6 = guide dog	<b>0</b>
2 = electric wheelchair	<b>4</b>	7 = prostheses	<b>4</b>
3 = amigo	<b>1</b>	8 = none used	<b>13</b>
4 = walker	<b>0</b>	9 = white cane	<b>3</b>
5 = crutches/cane	<b>26</b>		

DATA TITLE: Asst. Dev. on Trail

7) Do you typically visit the NWPS

1 = Alone	<b>7</b>
2 = With friends/family	<b>41</b>
3 = With an organized group or outfitter	<b>58</b>

DATA TITLE: Group or Alone

8) Why did you choose to visit the NWPS? (check all that apply)

1 = To experience solitude	42
2 = To experience scenery/natural beauty	74
3 = To share the experience with family/friends	56
4 = To experience a personal challenge	62
5 = To experience nature on its own terms	65
6 = To enjoy fishing or hunting	16
7 = Other (please explain)_____	0

DATA TITLE: Why Visit

9) Did you check or attempt to check the accessibility of the NWPS before your trip?

1 = yes	37
2 = no	42

DATA TITLE: Check Access Before

10) If yes, did you find information from (check all that apply)

1 = Organization/outfitter leading trip	27
2 = NWPS manager (Forest Service, Park Service, etc.)	10
3 = Friends who had visited the area before	17
4 = Other (please explain)_____	1

DATA TITLE: Source of Access Info

11) If you did not check the accessibility before your NWPS trip, why not?

1 = I did not think it was necessary	39
2 = I did not know where to look for information	4
3 = I could not find any information on accessibility	4

DATA TITLE: If Not, Why Not?

12) Did you visit the NWPS prior to having a disability?

1 = I <i>did</i> visit the NWPS prior to my disability	20
2 = I <i>did not</i> visit the NWPS prior to my disability	32
3 = I was born with my disability	28

DATA TITLE: Visit Prior

13) Before visiting the NWPS, did you have concerns about going into a wilderness area that specifically relate to your disability?

1 = yes	34
2 = no	46

DATA TITLE: Have Concerns

(please explain) \_\_\_\_\_

The concerns people mentioned are categorized below:

1 = Concerned about personal endurance/capability	5
2 = Toileting	5
3 = Trail and facility access	8
4 = Want to be independent	1
5 = Availability/quality of adapted equipment	
2	
6 = Unable to use my white cane	1
7 = Emergency evacuation	1

DATA TITLE: Concern Comments

14) What were the highlights of your visit(s) to the NWPS? (check all that apply)

1 = Personal achievement/feelings of accomplishment	66
2 = Solitude/peace	49
3 = People or relationships	61
4 = Scenery or location	75
5 = Personal growth	51
6 = No high points	1
7 = Other (please explain)	1

DATA TITLE: Highlights

15) What were the low points of your visit(s) to the NWPS?  
(check all that apply)

1 = Lack of information about area I wished to visit	4
2 = Physical discomfort	10
3 = Trails/terrain too rugged	19
4 = Undeveloped/primitive campsites	10
5 = Uncooperative group members	10
6 = Poor access at entry point (parking, etc.)	10
7 = No low points	46
8 = Other	0

DATA TITLE: Lowlights

16) In your opinion, did your disability enhance or inhibit  
the opportunity for you to enjoy the NWPS?

1 = Enhanced the opportunity for me	19
2 = Inhibited the opportunity for me	29
3 = Had no effect on the opportunity for me	32

DATA TITLE: Enhance or Inhibit

17) Do you believe the restrictions on mechanized use within  
the NWPS diminishes your ability to enjoy it?

1 = yes	17
2 = no	61

DATA TITLE: Opinion of Mech.

Please explain\_\_\_\_\_

A total of 29 people offered explanations. These explanations  
have been divided according to the yes and no responses stated  
above.

Responses from people who indicated that the restrictions on  
mechanized use diminish their ability to enjoy it:

*Can't use ATV in all areas. I need to use this due to  
paralysis.*

*How do I get out in case of an emergency arises--need  
mechanized usage.*

*Don't want to see paved trails just so cars can drive  
through.*



*Trails difficult for manual chairs, could be helpful to use ATV.*

*Would like to be able to use a three-wheeler--would allow me to get into areas I wouldn't otherwise be able to.*

*I would like to be able to use an ATV for increased access.*

*Canoeing is much easier for disabled when there is no wake from outboard motors.*

*Disability or age should not stop people from going to wilderness. Managers of the units should rent motorized equipment...government shouldn't limit people from using motors.*

*If I were allowed to ride an off-road vehicle it would allow me to see a lot of area I otherwise wouldn't be able to.*

*I want to be able to travel by boat and have a close toilet facility.*

*Limited access of all-terrain vehicles.*

*It limits my independence in the wilderness but I don't want them to change the restrictions.*

*ATV is a way to see wilderness I could never reach on foot.*

Responses from people who indicated that the restrictions on mechanized use do not diminish their ability to enjoy it:

*It only enhances it.*

*Many alternatives such as dogs, horses and people power. The sense of personal achievement is greatly enhanced by overcoming the emotional, physical and psychological barriers and achieving a significant undertaking in the wilderness without relying on mechanized use.*

*Gas-powered is too noisy and smelly, electric distorts natural experience.*

*There are enough areas on the planet that allow machines... by adaptation persons with disabilities can access the total wilderness areas.*

*Mechanized vehicles wouldn't solve anything.*

*Mechanized use would undermine the concept of wilderness... keep them out.*

*Enjoy the wilderness in its natural state...just requires some assistance from other people to help me adapt.*

*Mechanized use would take away from the natural beauty of the wilderness.*

*Mechanized use is incompatible with the wilderness experience...there are many places to go that are like wilderness that allow motors.*

*Loopholes shouldn't be created for persons with disabilities; then other groups will seek to alter wilderness to accommodate them also.*

*Individuals with disabilities should rely on family and friends to help them out in wilderness. Do not allow motors or mechanized devices.*

*Visit the wilderness on its own terms; otherwise visit the many other areas that are scenic where access is not restricted.*

*I believe mechanized wheelchairs should be allowed.*

*Limiting mechanized use increases my ability to enjoy the wilderness.*

*Allowing mechanized use in the wilderness would make it noisy and polluting--precisely what persons with or without disabilities are trying to escape.*

*Wilderness is wilderness...it won't be the same if mechanized use is allowed. People with disabilities can access the wilderness if they only put their minds to it.*

DATA TITLE: Comments on Mech.

18) Do you have suggestions for improving the ability of persons with disabilities to enjoy the NWPS?

Responses to this question were categorized as follows:

Comment codes:	# of responses	% of total (80)
0 = Not relevant to question asked.	5	6.25
1 = Encourage/promote use of outfitters and guides.	6	7.5

2 = Increase accessibility to areas outside wilderness (trailheads, parking, restrooms, TDDs).	9	11.25
3 = Increase access inside wilderness (boardwalks, widen trails, special permits).	8	10
4 = Allow use of wheelchairs.	0	0
5 = Maintain existing regulations--seek access without compromising Wilderness Act.	4	5
6 = Motors and mechanized use needed for access (ATVs, motorboats).	2	2.5
7 = Training and education for wilderness staff on disability awareness.	0	0
8 = Develop materials that provide information on access, provide clearinghouse for information.	10	12.5
9 = Repeal provisions of Wilderness Act that restrict motors, development, and mechanized use.	0	0
10= Increase funding for better access, including facilities, promotion, and scholarships.	3	3.75
11= Rely on people power/human companions to gain access to wilderness.	4	5

DATA TITLE: Suggestions to Improve Access

19) Do you visit wildlands *outside of the NWPS*?

1 = yes           **54**  
2 = no             **15**

DATA TITLE: Visit Non NWPS

Areas visited outside of the NWPS include:

Yellowstone  
Devils Tower, WY  
Yellowstone  
Glacier National Park  
Grand Canyon

Dinosaur Monument  
Rocky Mountain National Park  
Green River, CO  
Big Bend National Park  
St. Croix River  
Minnesota River  
Snow Mass, CO  
Smokey Mountains  
Acadia National Park  
Quebec, Ontario  
Prince William Sound  
Big Lake  
Porcupine Mountains  
Deschutes River OR  
Chequamegon Trail  
Penobscot River  
Northwest Territories  
Allagash River  
Olympic Penninsula  
Canadian Rockies  
NW Ontario  
North Fork of Potomac  
Youghiohiogheny, PA  
New River, WV  
New River Gorge, WV  
Lake Powell  
Jackson Hole, WY  
Iditarod Trail,  
Stampede Trail  
Yampa River, CO  
Eldorado Canyon, CO  
Snake River, ID  
Adirondacks  
Fern Canyon, CA  
Grass Valley, CA  
Arches National Monument  
Chugach  
Camp Courage  
Blue Mound, MN  
Black River, MS  
Shawnee Natl. Forest, IL  
Flat Head River, MT  
Belize  
Great Slave Lake  
Apostle Islands  
Outer Banks, NC  
Canyonlands National Park  
S. Manitou Islands  
Ammicon, WI  
Afton State Park  
Dog Island, FL

DATA TITLE: Area Names

20) Do the experiences you have in wild areas *outside the NWPS* differ from your experiences inside the NWPS?

1 = yes           **17**  
2 = no            **35**

DATA TITLE: Experiences Differ

Please explain\_\_\_\_\_

A total of 14 people responded as stated below:

*Wilderness is more rugged.*

*State parks more accessible.*

*Parks not in the NWPS are less rugged; trails are well traveled.*

*Out of NWPS, less challenging.*

*NWPS offers more solitude, less populated.*

*Non-NWPS have more of a commercial bent to them.*

*Non-NWPS have advanced structures.*

*Non-NWPS have paved trails.*

*Non-NWPS more wheelchair accessible.*

*More people visible and impact of people visible.*

*Many areas are making major improvements in facilities; policy adaptation for persons who are disabled.*

*Impact of man on pristine country is highly visible.*

*Experiences in the NWPS are more rugged.*

*Areas out of NWPS allow motorized use and large crowds.*

DATA TITLE: Comments on Why Differ

21) We want to know more about you. Please tell us your

Age\_\_\_\_\_

Age range           18 to 72 years

Number of respondents by age by category

Age 18 - 29           19

Age 30 - 39           19

Age 40 - 49	22
Age 50 - 59	5
Age 60 - 69	2
Age 70 - 79	2

DATA TITLE: Age

Sex_____	
1 = Male	<b>44</b>
2 = Female	<b>34</b>
No response	<b>2</b>

DATA TITLE: Sex

State of residence\_\_\_\_\_

Alaska	6
California	2
Colorado	5
Florida	4
Georgia	1
Idaho	5
Illinois	4
Indiana	7
Maine	1
Michigan	2
Minnesota	22
Montana	1
New Jersey	2
New Mexico	1
New York	2
North Dakota	1
Ohio	2
Rhode Island	1
Tennessee	1
Texas	2
Vermont	1
Washington	1
Wisconsin	5
Unknown	1

DATA TITLE: State

22) Do you have a disability?

1 = Cognitively impaired	<b>8</b>
2 = Sensory impaired	<b>7</b>
3 = Mobility impaired--non-wheelchair user	<b>25</b>
4 = Mobility impaired--wheelchair user	<b>40</b>

DATA TITLE: Disability

23) Do you (check all that apply)

1 = use a wheelchair	41
2 = use a guide dog	0
3 = walk with cane/crutches	15
4 = walk with a white cane	6
5 = prostheses	4
6 = none used	10
7 = brace	2
8 = other, please explain	1

DATA TITLE: Asst. Dev. General Life

24) If you have other comments please share them here, or attach a separate sheet of paper:

Comment codes:	# of responses	% of total (80)
0 = Not relevant to question asked.	6	7.5
1 = Encourage/promote use of outfitters and guides.	3	3.75
2 = Increase accessibility to areas outside wilderness (trailheads, parking, restrooms, TDDs).	7	8.75
3 = Increase access inside wilderness (boardwalks, widen trails, special permits).	1	1.25
4 = Allow use of wheelchairs.	0	0
5 = Maintain existing regulations--seek access without compromising Wilderness Act.	12	15
6 = Motors and mechanized use needed for access (ATVs, motorboats).	0	0
7 = Training and education for wilderness staff on disability awareness.	0	0
8 = Develop materials that provide information on access, provide clearinghouse for information.	3	3.75
9 = Repeal provisions of Wilderness Act that restrict motors, development, and mechanized use.	0	0

10= Increase funding for better access, including facilities, promotion, and scholarships.	3	3.75
11= Rely on people power/human companions to gain access to wilderness.	1	1.25

DATA TITLE: Final Comments

*Combined results from suggestions to improve access and final comments. Redundancy has been removed (e.g., if person made same type of comment in response to each question they were not counted twice). These figures have been used in suggestions in section 4 of the report.*

COMBINED Comment codes:	# of responses	% of total (80)
0 = Not relevant to question asked.	11	13.75
1 = Encourage/promote use of outfitters and guides.	8	10
2 = Increase accessibility to areas outside wilderness (trailheads, parking, restrooms, TDDs).	16	20
3 = Increase access inside wilderness (boardwalks, widen trails, special permits).	8	10
4 = Allow use of wheelchairs.	0	0
5 = Maintain existing regulations--seek access without compromising Wilderness Act.	15	18.75
6 = Motors and mechanized use needed for access (ATVs, motorboats).	2	2.5
7 = Training and education for wilderness staff on disability awareness.	0	0
8 = Develop materials that provide information on access, provide clearinghouse for information.	12	15
9 = Repeal provisions of Wilderness Act that restrict motors, development, and mechanized use.	0	0



10= Increase funding for better access, including facilities, promotion, and scholarships.	5	6.25
11= Rely on people power/human companions to gain access to wilderness.	5	6.25

**Appendix 2C. Tabulations of Responses from NWPS Managers**

1) How would you describe the *primary* terrain type in your wilderness unit used by visitors interested in recreation (check only one)

1 = mountainous	<b>193</b>
2 = swamp, marsh wetland	<b>25</b>
3 = forest/heavily vegetated	<b>52</b>
4 = lake and/or river	<b>22</b>
5 = desert	<b>25</b>
6 = coastal	<b>21</b>

DATA TITLE: Terrain Type

2) People who visit your wilderness unit use which of the following means of travel? (check all that apply)

1 = raft	<b>86</b>	8 = snowmobile	<b>18</b>
2 = canoe	<b>76</b>	9 = all-terrain vehicle	<b>21</b>
3 = horse	<b>215</b>	10 = motorboat	<b>41</b>
4 = ski	<b>92</b>	11 = bicycle	<b>23</b>
5 = kayak	<b>61</b>	12 = airplane	<b>20</b>
6 = hike	<b>272</b>	13 = other	<b>4</b>
7 = dogsled	<b>16</b>		

DATA TITLE: Modes of Transport

3) Have you ever received inquiries from persons with disabilities about the use of your wilderness unit?

1 = yes	<b>97</b>
2 = no	<b>164</b>
3 = don't know	<b>40</b>

DATA TITLE: Inquiries by Disabled

4) If yes, approximately how many inquiries do you receive annually?\_\_\_\_\_ (actual number they provide)

DATA TITLE: Yes, How Many

Is this figure an	1 = estimate	<b>93</b>
	2 = based on exact documentation	<b>13</b>

DATA TITLE: Based on 1

5) How many people with disabilities do you believe use your unit of the NWPS each year?\_\_\_\_\_ (actual number)

DATA TITLE: Persons with disabilities use unit

Is this figure an	1 = estimate	<b>256</b>
	2 = based on exact documentation	<b>6</b>

DATA TITLE: Based on 2

6) Does your wilderness unit have any information available that specifically addresses wilderness use by persons with disabilities?

1 = yes	<b>7</b>
2 = no	<b>292</b>

DATA TITLE: Info on access

7) How do people with disabilities travel while in your wilderness unit? (check all that apply)

1 = raft	<b>46</b>	8 = snowmobile	<b>5</b>
2 = canoe	<b>32</b>	9 = all-terrain vehicle	<b>13</b>
3 = horse	<b>146</b>	10 = motorboat	<b>21</b>
4 = ski	<b>22</b>	11 = bicycle	<b>11</b>
5 = kayak	<b>26</b>	12 = airplane	<b>10</b>
6 = hike	<b>182</b>	13 = other	<b>0</b>
7 = dogsled	<b>5</b>		

DATA TITLE: Disabled Mode Transport

8) Do you believe most people *with* disabilities visit your wilderness unit (check only one)

1 = Alone	<b>1</b>
2 = With family/friends	<b>161</b>
3 = In organized groups	<b>27</b>
4 = Don't know	<b>85</b>

DATA TITLE: With Whom Visit

Is this response an	1 = estimate	<b>209</b>
	2 = based on exact documentation	<b>11</b>

DATA TITLE: Based on 3

9) How do most people *without* disabilities visit your wilderness unit? (check only one)

1 = Alone	19
2 = With family/friends	270
3 = In organized groups	9
4 = Don't know	5

DATA TITLE: With Whom Visit 2

Is this response an	1 = estimate	227
	2 = based on exact documentation	75

DATA TITLE: Based on 4

10) Does your unit allow for the use of wheelchairs by persons with disabilities?

1 = yes	183
2 = no	100
3 = don't know	17

DATA TITLE; Allow Wheelchairs

Comments\_\_\_\_\_

Comment codes:	# of responses
0 = Not relevant to question asked	3
1 = Reference to difficulty of terrain	21
2 = Indicates confusion on wording of question	2
3 = Reference to accessibility outside of NWPS	2
4 = Reference to ease of terrain	1
5 = No developments or adaptations for wheelchair	3
6 = Treat wheelchair as pedestrian	1
7 = Indicates a lack of understanding of policy	1
8 = First time ever asked about wheelchairs	3
9 = Nonmotorized only	1

DATA TITLE: Comments Wheelchair

11) Does your unit make special provisions for use by persons with disabilities?

1 = yes	59
2 = no	224
3 = don't know	8

DATA TITLE: Special Provisions

If yes, what are they? (check all that apply)

1 = special permits	15
2 = use of motors	11
3 = special areas	11
4 = accessibility information	14
5 = other	1

DATA TITLE: If Yes, What

(please explain)\_\_\_\_\_

DATA TITLE: Comments Provisions

12) In your opinion, do the management policies of your agency for NWPS units inhibit the enjoyment of persons with disabilities?

1 = yes	67
2 = no	233
No response	3

DATA TITLE: Policies Inhibit

If yes, why?\_\_\_\_\_If no, why not?\_\_\_\_\_

Comment codes:	# of responses
0 = Not relevant to question asked.	
10	
1 = Reference to difficulty of terrain	22
2 = Agency policy does not inhibit, but provisions of Wilderness Act do inhibit.	12
3 = Need to work/network more with disabled persons.	7
4 = Policies do not inhibit any more than they do for nondisabled.	14
5 = Wheelchairs are prohibited in wilderness.	
4	
6 = We should emphasize experiences and facilities outside of wilderness.	8
7 = Need more funding for access.	10
8 = Wilderness preservation takes	

precedence over access. **5**

9 = Revise current policies to increase accessibility. **7**

DATA TITLE: Comments on Policies

13) Do you provide any of the following to the general population prior to their visiting wilderness areas? (check all that apply)

1 = advice	<b>248</b>
2 = informational wilderness travel materials	<b>219</b>
3 = special training	<b>15</b>
4 = other	<b>6</b>

DATA TITLE: Info to General

14) What is the official name of the unit(s) of the NWPS that you manage? (please list them all if more than one)

DATA TITLE: Unit Name

15) For which federal agency do you work?\_\_\_\_\_

1 = BLM	<b>13</b>
2 = NPS	<b>39</b>
3 = USFS	<b>210</b>
4 = FWS	<b>42</b>

DATA TITLE: What Agency

16) What is your official job title?\_\_\_\_\_

17) How many years have you personally been involved in the management of this wilderness area?\_\_\_\_\_

18) Please elaborate on what, if anything, you think could be done to facilitate enjoyment of your NWPS unit by persons with disabilities:

Comment codes:	# of responses	% of total (304)
0 = Not relevant to question asked.	20	6.6
1 = Encourage/promote use of outfitters and guides.	41	13.4
2 = Increase accessibility to areas outside		

wilderness (trailheads, parking, restrooms, TDDs).	34	11.2
3 = Increase access inside wilderness (boardwalks, widen trails, special permits).	30	9.9
4 = Allow use of wheelchairs.	5	1.6
5 = Maintain existing regulations--seek access without compromising Wilderness Act.	11	3.6
6 = Motors and mechanized use needed for access (ATVs, motorboats).	4	1.3
7 = Training and education for wilderness staff on disability awareness.	5	1.64
8 = Develop materials that provide information on access, provide clearinghouse for information.	47	15.5
9 = Repeal provisions of Wilderness Act that restrict motors, development, and mechanized use.	3	1
10= Increase funding for better access, including facilities, promotion, and scholarships.	8	2.63
11= Rely on people power/human companions to gain access to wilderness.	1	.33

DATA TITLE: Overall Comments

19) Is this NWPS unit jointly managed with other agencies?

1 = yes            **112**  
2 = no             **192**

DATA TITLE: Jointly Managed

20) What state is your unit in?

DATA TITLE: State

**Appendix 3. Outfitters, Organizations, and Wilderness Advocates  
Contacted for Participation in the Study**

Mark Havens  
Accessible Adventures  
250 NE Tomahawk Island Drive  
Portland, OR 97217  
503/789-1019

Bob Jordan \*  
Activities Unlimited, Inc.  
P.O. Box 324  
Helena, MT 59624  
406/442-7809

Nancy Ertter  
Alternate Mobility Adventure Seekers  
BSU P.E. Dept  
1910 University Dr.  
Boise, ID 83725  
208/385-3030

Tom McPike  
Bay Area Outreach/Rec  
605 Eshleman Hall/U of CA Berkeley  
Berkeley, CA 94720  
415/849-4662

Gary Robb  
Bradford Woods  
5040 State Road 67 North  
Martinsville, IN 46151  
812/885-0227

Scott Engram  
Breckenridge Outdoor Ed. Ctr.  
P.O. Box 697  
Breckenridge, CO 80424  
303/453-6422

Patrick Reinhart  
Challenge Alaska  
P.O. Box 110065  
Anchorage, AK 99511  
907/563-2658

Jim Wise  
Cooperative Wilderness  
Handicapped Outdoor Group (CW HOG)  
Box 8118  
Pocatello, ID 83209  
208/236-3912



Bill Dvorak  
Dvorak's Kayak Expeditions  
17921 Hwy 285  
Nathrop, CO 81236  
(719) 539-6851

Diane Poslosky  
Environmental Traveling Companions  
Fort Mason Center, Bldg. C  
San Francisco, CA 94123  
415/474-7662

Everglades Program \*  
North Carolina Outward Bound School  
121 No. Sterling  
Morganton, NC 28655

Al Coar \*  
Outward Bound  
690 Market St. #500  
San Francisco, CA 94101  
415/398-9626

David Cappetta  
Voyageur Outward Bound  
10900 Cedar Lake Road  
Minnetonka, MN 55343  
612/542-6255

Shorty Powers \*  
P.O.I.N.T (Paraplegics On Independent Nature Trips)  
3200 Mustang Dr.  
Grapevine, TX 76051

Tom Smith  
Raccoon Institute  
PO Box 35A  
Cazenovia, WI 53924  
(608) 983-2327

Claire Coonan  
Special Populations Learning Outdoor  
Recreation & Education (S'plore)  
699 E. South Temple, #120  
Salt Lake City, UT 84102  
801/363-7130

David Espeseth  
SOAR  
P.O. Box 14583  
Portland, OR 97214-4583  
503/238-1613

Charlie Ross  
Sobek Expeditions  
P.O. Box 1089  
Angels Camp, CA 95222  
209/736-4524

Dale Abell  
The Ability Center  
5605 Monroe St.  
Sylvania, OH 43560  
419/885-5733

Phyllis Cangemi \*  
Total Access Camping  
23777 Mulhooland Hwy, #118  
Calabasas, CA 91302

Darrell Knuffke  
The Wilderness Society  
777 Grant St., Suite 606  
Denver, CO 80203  
303/839-1175

Michael Kellett  
Wilderness Society  
20 Park Plaza, Suite 536  
Boston, MA 02116  
617/350-8866

\* Did not respond

## Appendix 4. National Council Member and Staff Biographies

### National Council Members

#### Sandra Swift Parrino

As National Council chairperson, Sandra Swift Parrino has played an active role on key issues affecting the lives of people with disabilities. Nominated by President Reagan in 1982, appointed chair by the President in 1983 and reappointed by President Bush, Sandra Parrino has supported the rights of people with disabilities before Congress, in the media, and before groups nationwide. Under her leadership, the National Council is a driving force with respect to creating public policies that affect the nation's people with disabilities.

During her tenure as chair, the National Council has worked toward creating and enacting legislation for people with disabilities; issued a policy statement, National Policy for Persons with Disabilities; convened hearings nationwide to solicit comments and recommendations from people with disabilities about discrimination; issued a major report, Toward Independence, which outlined key components of a comprehensive civil rights law protecting people with disabilities; initiated the first national survey of attitudes and experiences of Americans with disabilities in conjunction with Louis Harris and Associates, Inc.; issued On the Threshold of Independence, a report outlining specifics of the Americans With Disabilities Act; created and developed the Americans with Disabilities Act; participated with President Bush at the signing of the Americans with Disabilities Act; conducted the first National Conference on the Prevention of Primary and Secondary Disabilities; and issued reports with regard to minorities with disabilities, personal assistance services, health insurance, the financing of assistive technology, and the education of students with disabilities.

Before becoming National Council chair, Sandra Parrino founded and directed the Office for the Disabled, in the Towns of Ossining and Briarcliff Manor, N.Y., where she created a regional program for public and private organizations that focused on programs for people with disabilities and compliance with 504. She has more than 25 years' experience on boards, councils, commissions, committees and task forces at the federal, regional, state and local levels, and as an expert witness, community leader, organizer and activist.

Sandra Parrino has represented the U.S. government on disability issues in many countries. She has been invited by the Department of State to represent the United States at the Meetings of Experts in Finland, and China and represented the United States at the United Nations Center for Social Development in Vienna several times. In 1990, 1991, 1992 she was invited by the Department of State to be a delegate at the Third Committee on Social Development of the United Nations. In 1991, she was invited by the People's Republic of China to assist them in their efforts to help people with disabilities. At the request of the government of Czechoslovakia, she and the

National Council were invited to conduct the Eastern European Conference on Disabilities for participants from Czechoslovakia, Poland and Hungary.

Sandra Parrino graduated from Briarcliff College with a B.A. in history, and completed courses at Bennett College, GuildHall School of Drama in London, and the Yale School of Languages. In 1992, Mrs. Parrino received an Honorary Doctorate of Humane Letters from St. John's University in New York. Her husband, Richard is a rheumatologist. They have three children, two of whom have disabilities. Sandra Parrino was born in New Haven, Conn. and now resides in Briarcliff Manor, New York.

#### **Kent Waldrep, Jr.**

Kent Waldrep has been involved with disability issues on a local, state, and national level since suffering a spinal cord injury in 1974 while playing football for Texas Christian University. Since 1981, Waldrep has served on the National Council by presidential appointment. He is National Council vice chair and chairman of the Research and Prevention Committee. He has been instrumental in formulating the National Council initiative on preventing primary and secondary disabilities.

Waldrep, one of 15 original ADA drafters, gave the legislation its name. He has lectured nationwide on subjects ranging from national disability policy to medical research targeted at curing paralysis. He founded the American Paralysis Association and the Kent Waldrep National Paralysis Foundation. He has appeared on *Good Morning America*, the *Today Show*, the *NBC Nightly News*, and *CNN*, and has been featured in *People* and *Look* magazines, *USA Today*, and others.

He was selected by the U.S. Jaycees as one of 1985's 10 Outstanding Young Men in America and received a special award from the Texas Sports Hall of Fame and a Sports/Fitness Award from the President's Council on Physical Fitness. Kent Waldrep Days are celebrated in four Texas cities and Birmingham, Alabama. He serves on many boards, including the Texas Rehabilitation Commission. He is past chairman of the Texas Governor's Committee for Disabled Persons and now chairs the Dallas Rehabilitation Institute. He also is chairman of Turbo-Resins, Inc., a family-owned and -operated aviation-repair business. He lives in Plano, Texas, with his wife Lynn and two sons, Trey and Charles Cavanaugh.

#### **Linda Wickett Allison**

Linda Allison of Dallas, Texas, is a long-time advocate of people with disabilities. She is a board member of the National Paralysis Foundation and a trustee for the International Spinal Research Trust. Allison, who grew up in Fort Worth, has three children. Her daughter Marcy was paralyzed from the waist down in a 1979 automobile accident. Marcy graduated from the University of Texas School of Law in 1986 and practices law in Austin. Allison's late husband, James N. Allison, Jr., owned the *Midland Reporter Telegram* and other newspapers in Texas and Colorado and was former deputy chair of the Republican National Committee.

**Ellis B. Bodron**

Ellis Bodron of Vicksburg, Mississippi, has been a practicing attorney since 1947. He served 36 years as a member of the Mississippi Legislature--one term in the House of Representatives and eight terms in the Mississippi Senate. Bodron also chaired the Senate Finance Committee from 1961 until 1983.

Bodron, who is blind, is associated with several civic organizations, including the Vicksburg Lions Club, Vicksburg Chamber of Commerce, and the University of Mississippi Alumni Association. In addition, Bodron is a member of the Advisory Board of Directors, Deposit Guaranty National Bank.

Bodron has also been a member of the Agriculture and Industrial Board, which preceded the Board of Economic Development, and the Committee of Budget and Accounting and Board of Trustees of the Mississippi Public Employees Retirement System.

Ellis Bodron graduated with a Bachelor of Arts and a Bachelor of Laws Degree from the University of Mississippi. He is married with two children.

**Larry Brown, Jr.**

Since 1981, Larry Brown of Potomac, Maryland, has been the Xerox business and community relations manager for the Mid-Atlantic Region, Coastal Operations, Custom Systems Division. In 1991 he became Government and Community Relations Manager with Integrated Systems Operations.

Brown was a running back for the Washington Redskins for eight years. During that time he received many awards, including Most Valuable Player in the National Football League for 1972, and was recently inducted into the Washington, D.C., Touchdown Hall of Fame.

After retiring from football in 1977, he worked at E.F. Hutton as a personal financial management adviser. He has been special assistant to the director, Office of Minority Business Enterprise, Department of Commerce. He is involved with youth, people with disabilities, and senior citizens. Brown has spoken at schools, colleges, and universities on topics such as motivation, discipline, and camaraderie. He works with many organizations, including the Friends of the National Institute on Deafness and Other Communication Disorders, the Deafness Research Foundation, and the Vincent Lombardi Foundation.

**Mary Ann Mobley Collins**

A former Miss America who lives in Beverly Hills, California, Mary Ann Collins has a career in film, television, and on Broadway. She has co-hosted the National March of Dimes telethons with her husband, Emmy-award winning actor Gary Collins, and serves as National Chair of the Mother's March Against Birth Defects. She is a member of SHARE, a Los Angeles-based women's organization that has raised more than \$6 million for the Exceptional Children's Foundation for the Mentally Retarded. She serves on the National Board of the Crohns and Colitis Foundation.

Collins helped raise funds for the Willwood Foundation in her native Mississippi, which provides homes for young adults with mental

and physical learning disabilities. She has received many awards and honors, including the 1990 International Humanitarian Award from the Institute for Human Understanding, Woman of Distinction 1990 from the National Foundation for Ileitis and Colitis, and the HELP Humanitarian Award of 1985 from HELP for Handicapped Children. She has filmed documentaries in Cambodia, Ethiopia, Mozambique, Somalia, Kenya, Sudan, and Bolivia on the plight of starving children and people with disabilities.

**Anthony H. Flack**

Anthony Flack of Norwalk, Connecticut, is president of Anthony H. Flack & Associates. He has been a member of the board of Families and Children's Aid of Greater Norwalk and has worked with the Child Guidance Center of Greater Bridgeport, the Youth Shelter in Greenwich, Hall Neighborhood House in Bridgeport, and the Urban League of Greater Bridgeport. Flack is a member of the Allocations and Admissions Committee, United Way of Norwalk, and received the Bell Award for outstanding service in the field of mental health at the Bridgeport Chapter, Connecticut Association of Mental Health.

**John A. Gannon**

John Gannon of Cleveland, Ohio, and Washington, D.C., founded John A. Gannon and Associates. His firm has offices in Columbus and Cleveland, Ohio; Denver, Colorado; and Washington, D.C. A fire fighter for more than 30 years, Gannon was an active leader of the International Association of Fire Fighters (IAFF) Local 93. Starting as a member of the local IAFF committee, he eventually became president, a position he held for 10 years before being elected to national office.

In September 1988, Gannon was elected IAFF President Emeritus. He had served as president of the 170,000-member organization since 1980. Under his leadership, the IAFF expanded its role in occupational safety and health.

Concerned about the hazards of his profession, he guided and directed a series of programs to promote greater safety and health protection. One program sponsored research on safer garments and equipment for fire fighters. Gannon also fostered development of the IAFF Burn Foundation, which raises funds for research on the care of burn victims. In 1985, the Metropolitan General Hospital, in Cleveland dedicated a John Gannon Burn and Trauma Center in recognition of his support for the hospital.

Gannon was elected vice president of the AFL-CIO, with which the IAFF is affiliated. Within the AFL-CIO he is vice president of the Public Employee Department. On the Executive Council, he is a member of several committees. He serves on the board of the National Joint Council of Fire Service Organizations and in 1982 served as its chairman. He is a member of the board of the Muscular Dystrophy Association. Gannon attended Miami University in Ohio and Glasgow University in Scotland, and studied at Baldwin-Wallace College and Cleveland State University.

### **John Leopold**

John Leopold of Pasadena, Maryland, has 18 years' experience in elected state office. He was elected to the Hawaii State House of Representatives in 1968 and re-elected in 1972. In 1974, Leopold was elected to the Hawaii State Senate. In 1982, he became the first Republican in Maryland history elected from District 31 in Anne Arundel County to the Maryland House of Delegates, where he served until 1991.

An advocate of people with disabilities, Leopold is a member of the Learning Disabilities Association of Anne Arundel County, the Anne Arundel County Committee on Employment of People with Disabilities, and the University of Maryland Hospital Infant Study Center Planning Advisory Board. He has served in other appointed and elected positions, including the Hawaii State Board of Education in 1968, the National Advisory Council for the Education of Disadvantaged Children in 1977, and the Maryland State Accountability Task Force for Public Education in 1974.

Leopold has written and produced cable television commercials in Maryland, written a weekly interview column for a local publication, and hosted and produced a weekly radio public affairs program. He graduated from Hamilton College in Clinton, New York, with a B.A. in English.

### **Robert S. Muller**

Robert Muller of Grandville, Michigan, began his career with Steelcase, Inc., in 1966 and is now an administrator. He is an adjunct associate professor in the Department of Psychology at Aquinas College and in the Department of Education at Calvin College in Grand Rapids. He serves on the board of trustees for Hope Network and Foundation in Grand Rapids, which serves 1,700 adults with disabilities. In April 1981, he received an honorary degree in educational psychology from the Free University in Amsterdam, the Netherlands.

Muller holds a B.S. in business administration from Aquinas College and in 1978 was voted Outstanding Alumnus of the Year. He has lectured at colleges and universities nationally and internationally. He is a board member for several national, state, and local organizations.

In May 1987, Muller and his wife hosted a first-time event at the White House with the Vice President. The Celebration of Disabled Americans at Work was cosponsored by several major corporations. He now serves as president of the National Roundtable on Corporate Development for Americans with Disabilities. In 1985, Muller received the Liberty Bell Award from the Grand Rapids Bar Association. In 1988, he was national co-chair of the Disabled Americans for President Bush campaign.

### **George H. Oberle, PED**

George Oberle of Stillwater, Oklahoma, has more than 35 years' experience in the field of health, physical education, and recreation. He began his career as a high school teacher and coach and has been a professor and director of the School of Health,

Physical Education and Leisure at Oklahoma State University since 1974. Oberle is a consultant to many organizations in the area of administration and adaptive physical education. In 1988, he worked with the Kennedy Foundation to organize and direct a new program of unified sports for the Special Olympics.

Oberle chaired the College and University Administrators' Council (1980-82); he was president of the Association for Research, Administration, Professional Councils and Societies (1984-87); and served as a board member of the American Association of Health, Physical Education, Recreation and Dance (1985-89). Awards include the 1985 Centennial Award from the American Association of Health, Physical Education, Recreation and Dance; and Meritorious Service Awards from Indiana and Oklahoma.

He was selected for *Men of Achievement* in 1975 and recognized in *Who's Who of the Southwest* in 1977. Oberle received his doctorate from Indiana University in administration and adapted physical education, and has written many books and articles. He lectures extensively about wellness promotion, adapted physical activity, sports, and recreation for people with disabilities.

#### **Mary Matthews Raether**

Mary Raether of McLean, Virginia, is associated with St. John's Child Development Center, a nonprofit organization providing instruction, employment training, and independent and group home living skills for people with severe mental disabilities, especially those with autism. Raether has been an officer and trustee of St. John's since 1985 and has chaired the public relations committee and participated on the executive, nominating, investment, and development committees.

Raether has been active in civic, educational, and religious organizations in the Washington metropolitan area. While community vice president of the Junior League of Washington, she developed emergency grant procedures and fund-raising information services for small and emerging nonprofit organizations. Raether has 10 years' experience as legislative assistant to Reps. George Bush and Barber Conable. She specialized in tax, social security, Medicare/Medicaid, and trade issues. She considers her efforts in clarifying the tax status of lobbying by nonprofit organizations an outstanding career accomplishment. She received a B.A. from the University of Texas at Austin in 1962. She is married and has two children.

#### **Anne Crellin Seggerman**

Anne Crellin Seggerman, of Fairfield, Connecticut, is the founder of Fourth World Foundation, Inc., a company engaged in the development of interfaith media.

A member of the Bridgeport Urban Gardens and Youth at Risk/Breakthrough Foundation, Seggerman founded and serves as the chairman of the board of the Fairfield County Chapter of Huxley Institute for Biosocial Research. She previously was a member of the President's Committee on Mental Retardation.

Seggerman is listed in *Who's Who of American Women* and has received numerous honors including an Honorary Doctor of Humane



Letters Award from Sacred Heart University, the Association of Knights and Ladies of the Holy Sepulchre, and the American Association of the Order of Malta. She was previously appointed to serve on the Housing of Handicapped Families of the Department of Housing and Urban Development.

Seggerman is experienced in providing care, treatment, and rehabilitation to chronic and acute schizophrenia, and has extensive experience with alcoholics and children with learning disabilities. She is married, with six adult children.

### **Michael B. Unhjem**

Michael Unhjem of Fargo, North Dakota, is president of Blue Cross/Blue Shield of North Dakota. The youngest member in state history elected to the North Dakota House of Representatives, Unhjem is a member of the National Conference of Commissioners on Uniform State Laws. In 1988, he served as president of the National Mental Health Association.

He has been involved in local and national organizations, including the Advisory Mental Health Council of the U.S. Department of Health and Human Services; the Governor's Commission on Mental Health Services; the National Alliance for Research on Schizophrenia and Depression; and the National Mental Health Leadership Forum. Awards include the 1989 Special Presidential Commendation from the American Psychiatric Association, the 1988 Distinguished Leadership Award from the North Dakota Psychological Association, and the National Excellence in Leadership Award from North Dakota.

He was recognized by *Who's Who in American Politics* and *Who's Who in North Dakota*. Unhjem graduated *magna cum laude* with a B.A. in history and political science from Jamestown College in North Dakota in 1975. In 1978, he earned a J.D. with distinction from the University of North Dakota School of Law in Grand Forks. He is married and has two children.

### **Helen Wilshire Walsh**

Helen Walsh of Greenwich, Connecticut, is a board member of the Rehabilitation Institute of Chicago, the largest U.S. rehabilitation center. She has been involved in disability advocacy for many years and has been associated with the Institute of Rehabilitation Medicine at the New York Medical Center, where she served as associate trustee. She has served as vice president, president, and chairman of the board of Rehabilitation International USA.

Walsh has been a member of the President's Committee on the Employment of People with Disabilities, and was appointed by the President to serve as a member of the National Advisory Council of Vocational Rehabilitation. In 1976, Walsh received the Henry J. Kessler Award for outstanding service in the rehabilitation field. She has received the Rehabilitation International Award for Women and the Anwar Sadat Award for outstanding work in the field of rehabilitation.

## **National Council Staff**

### **Ethel D. Briggs**

Ethel Briggs is executive director of the National Council on Disability. In seven years at the National Council, Briggs served as the acting executive director, deputy executive director, and director of Adult Services. Briggs is former chief of the Office of Staff Development and Training for the Washington, D.C., Rehabilitation Services Administration. Prior experience includes employment as a rehabilitation counselor supervisor, vocational rehabilitation counselor and part-time college instructor at George Washington University. Briggs, a long-time advocate for people with disabilities, graduated from North Carolina Central University and holds a master's degree in counseling from the University of North Carolina at Chapel Hill. She was recognized by *Dollar & Sense Magazine* as one of the Top 100 African American Business and Professional Women of 1989. Briggs also was recognized in *Outstanding Women in America* in 1976 and by *Who's Who in American Colleges and Universities* in 1971.

### **Harold W. Snider, PhD**

Harold Snider, selected as deputy executive director in June 1990, was previously the first director of outreach for people with disabilities at the Republican National Committee. He served as executive director of the American Impact Foundation and was president of Access for Handicapped, Inc. Snider holds a B.S. in international studies from Georgetown University, a master's degree in history from the University of London, and a doctorate in history from Oxford University in England. He is the author of two books on disability, *The United States Welcomes Handicapped Visitors* and *Museums and Handicapped Students: Guidelines for Education*.

### **Billie Jean Hill**

Billie Jean Hill joined the staff of the National Council on Disability as program specialist in March 1992. Previously, Hill was director of communications and editor for the Blinded Veterans Association and, earlier, she served as founding director of a statewide broadcast service for persons with reading disabilities with Mississippi Educational Television in her home state. She was appointed to work on a governor's commission in Mississippi to report on the needs of children and youth in rural Mississippi who are disabled. Hill studied journalism and education at Mississippi University for Women and at the University of London in England. She serves as chairperson of the Board of Publications for the American Council of the Blind.

### **Janice Mack**

Janice Mack, who serves as the administrative officer for the National Council, was formerly employed with the National Oceanic and Atmospheric Administration. Mack graduated from Calvin Coolidge High School.

**Mark S. Quigley**

Mark Quigley joined the staff as a public affairs specialist in May 1990. He previously served as a consultant to the U.S. National Commission on Drug-free Schools. He is a former program coordinator at the U.S. Interagency Council on the Homeless, and former director of communications at the White House Conference on Small Business. Quigley graduated *magna cum laude* in 1979 from Northern Virginia Community College in Annandale with an A.A. in general studies. He received a B.A. in government and politics in 1983, and an MPA in public administration in 1990 from George Mason University in Fairfax, Virginia.

**Katherine D. Seelman, PhD**

Katherine Seelman joined the National Council staff in 1989 as a research specialist. She is former director of Public Education, Research and Technological Services at the Massachusetts Commission for the Deaf and Hard of Hearing. She was a research scholar at Gallaudet University in Washington, D.C., and a consultant to the American Association of Retired Persons.

Seelman received a doctorate in public policy and a master's degree in political science from New York University, and a B.A. in political science from Hunter College in New York. She is the author of many published articles, including "Communication Accessibility: A Technology Agenda for Deaf and Hard-of-Hearing People," *International Journal of Technology and Aging*; "Communication Accessibility for Deaf and Hard-of-Hearing People; An Expanded Concept of Access," *Journal of Disability Policy Studies*; and "A Comparison of Federal Laws Toward Disabled and Racial Ethnic Groups in the USA," *Disability, Handicap and Society*.

**Brenda Bratton**

Brenda Bratton, executive secretary for the National Council, was formerly employed as a secretary at the National Transportation Safety Board. Bratton graduated from Farmville Central High School and the Washington School for Secretaries.

**Stacey S. Brown**

Stacey Brown is staff assistant to the chairperson and has been employed by the National Council since 1986. Prior experience includes employment as a receptionist and clerk with the Board for International Broadcasting and with the Compliance and Enforcement Unit of the Architectural and Transportation Barriers Compliance Board, where he was a student assistant. Brown is a graduate of Howard University in Washington, D.C., where he earned a B.A. in political science in 1987.

**Consultant**

**Gregory J. Lais**

Greg Lais is the executive director of Wilderness Inquiry, Inc., a Minneapolis-based nonprofit organization specializing in adventure travel and wilderness issues involving people with disabilities.