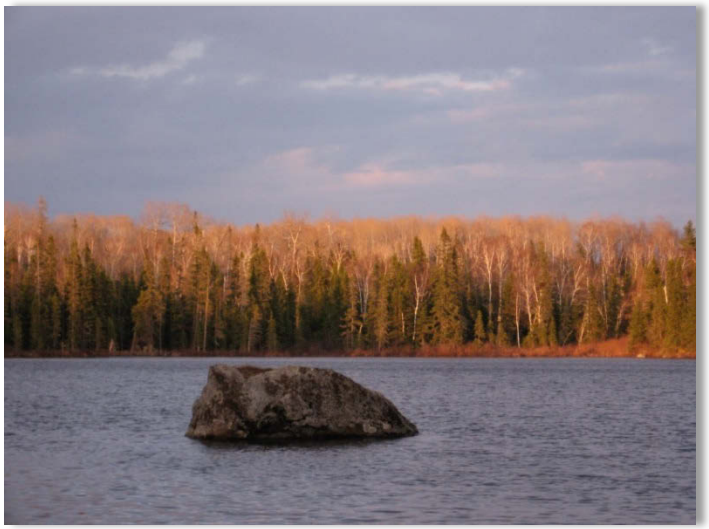
United States Department of Agriculture

Recreational Commercial Services Needs Assessment

Superior National Forest

November 2019



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Executive Summary

This Needs Assessment provides a framework for natural resource managers to determine where public and agency need exists for recreational commercial services on the Superior National Forest.

The evaluative criteria ranking showed there were a few activities in the general forest area (outside of wilderness) were there was a higher need for commercial services. Additionally, dispersing certain types of uses (for example, those that result in higher encounters and/or cause resource-based impacts) from wilderness to locations outside of the wilderness may be beneficial for both physical and social natural resources. The majority of activities showed a moderate or lower need for commercial services to supply opportunities for visitor participation. This indicates that in some areas there is low demand, access is easy, and visitors are capable of pursuing activities on their own.

In the general forest area, the activities that showed a higher need for recreational commercial services included dog sledding, winter camping; ice fishing, and rock climbing. There are a number of activities for which there is a moderate need.

In Wilderness, there were three activities that showed a higher need: backpacking, winter camping, and dog sledding. There were several activities that showed a moderate need. What the higher need activities have in common includes increased time with participants for discussion, interpretation, and development of wilderness-based primitive skills and ethics—all of which can be beneficial to developing knowledge and appreciation of wilderness.

Currently, about 20 recreation events are held each year. The number of requests is growing, and therefore impacting the Forest's capacity to administer these and outfitter-guide permits. Determining appropriate levels of use for this type of activity is difficult, since each requested event is very different in form and function. In most cases, each activity must be evaluated in terms of impacts to natural resources. A suggested framework for prioritizing the need for different types of recreation events is included in this analysis.

Introduction

Providing recreational opportunities and facilities is central to the mission of the US Forest Service (USFS). For a variety of reasons, Forest visitors may desire or need facilitation to fully experience the array of recreation opportunities that forests offer. Reasons for these may include visitors' lack of specialized equipment or technical knowledge, among others. A recreational commercial service, also known as an outfitter and guide service, can help further the agency's mission by providing escorted recreational experiences, specialized equipment, or both to Forest visitors. Thus, while recreational commercial services constitute a relatively small segment of overall visitor days to National Forests, these services can achieve an important purpose for the visitor, the agency, the resources, and the economy.

To be authorized to provide their services, federal regulations require that commercial outfitters and guides on National Forest lands obtain a Special Use Permit (SUP) (36 CFR 251.50). In so doing, all outfitter-guide applications are subject to proper National Environmental Policy Act (NEPA) analysis (see 36 CFR 220, and others as applicable). However, Forests may also conduct a needs assessment (an assessment of public and agency need for authorized outfitting or guiding activities) and an analysis of resource capacity (amount of overall use an area can sustain without detrimental social or physical resource impacts). These documents in turn are intended to inform the proper allocation of use (an amount of use allocated to a permit holder that is measured in service days or quotas and that is enumerated in a programmatic or project decision that is consistent with the applicable land management plan) (FSH 2709.15, 53.1 e-f).

The following definitions are used to refer to the types of recreational commercial services mentioned in this needs assessment (36 CFR 251.51):

Guiding - providing services or assistance (such as supervision, protection, education, training,

or other gain to individuals or groups on National Forest System lands.

Outfitting- renting on or delivering to National Forest System lands for pecuniary remuneration or other gain any saddle or pack animal, vehicle, boat, camping gear, or similar supplies or equipment.

Recreation Event - organized events of a temporary nature, such as animal, vehicle, or boat races; dog trials; fishing contests; rodeos; adventure games; and fairs. For this document, recreation events considered are commercial.

The need for services in a particular area considers more than requests by proponents for conducting guided activities on the National Forest. Public and agency need takes into consideration the range of recreation opportunities for the area based on recreation supply and demand, current outfitting and guiding activities, agency objectives that a recreational commercial service can assist in achieving, congressionally designated area management objectives, and current non-commercial opportunities. A Needs Assessment is not an analysis conducted under National Environmental Policy Act (NEPA); rather, it provides support for agency proposals under the NEPA.

What This Assessment Does

This needs assessment is not intended to reduce or expand existing use; those determinations are made in a capacity analysis and/or in NEPA analysis. A wilderness extent necessary determination is included as part of this assessment; however, specific capacity decisions, potential adjustments of location, seasons of use or permitted days would be determined in a subsequent NEPA decision. The needs assessment provides a framework for managers to

prioritize expansion and authorization of recreational commercial services where there is competitive interest and high demand. This prioritization ensures that both public and agency need are being met while continuing to provide a quality experience for guided and unguided visitors.

Forest Service Mission

The Forest Service mission is: *To sustain the health, productivity and diversity of the Nation's forests and grasslands to meet the needs of present and future generations.* Providers are expected to conduct their activities so that they meet the overall Forest Service mission. As set forth in law, this mission is to achieve quality land management under the sustainable multiple-use management concept and to meet the diverse needs of people. Objectives for outfitter-guides (FSH 2709.41, 53.1b) include:

- Providing services that address concerns of public health and safety, and that fosters successful small businesses consistent with the applicable land management plan.
- Facilitating greater participation of youth and educational groups in their program.
- Being skilled and experienced individuals, conducting their activities in a manner that protects environmental resources and ensures that National Forest visitors receive high-quality services.

Objectives for designated wilderness (FSM 2323.12 and 13g) include:

- 2323.12 Policy - 4. Consistent with management as wilderness, permit outfitter/guide operations where they are necessary to help segments of the public use and enjoy wilderness areas for recreational or other wilderness purposes.
- 2323.13g - Outfitter and Guide Operations - Address the need for and role of outfitters in the Forest plan. The plan must address the type, number, and amount of recreation use that is to be allocated to outfitters. Ensure that outfitters provide their service to the public in a manner that is compatible with use by other wilderness visitors and that maintains the wilderness resource.

Framework for Sustainable Recreation

The Agency's Framework for Sustainable Recreation identifies a vision, core principles, and focus areas for contributing to the sustainability of National Forests and adjacent communities. The recreation vision – *Renewing body and spirit, Inspiring passion for the land* – recognizes the spiritual, mental, and physical connections people make with the land. At its core, the Framework recognizes that many people connect to and know their National Forests through recreation. To be relevant to future generations, the Forest Service must encourage people to experience the outdoors first hand, and outfitter-guides are one of the primary partners to do so.

The recreational commercial services program contributes most significantly to the following focus areas:

- Forge Strategic Partnerships – Outfitter-guides are key partners in the delivery of recreation opportunities to a wide variety of Forest visitors. Often, a guided trip is the first introduction someone has to a National Forest. Outfitter-guides provide "recreational experiences, service activities, and environmental education for youth and adults that promote fitness, appreciation of nature and history, and citizen stewardship."
- Promote Citizen Stewardship – People who understand and appreciate the natural and cultural environment are more likely to support long-term efforts to care for it. Through environmental education and learning opportunities, outfitter-guides provide first-hand experiences and help cultivate citizen stewards.

- Develop a Sustainable Financial Foundation – Outfitter-guides contribute to a sustainable financial foundation by delivering services and programs the Forest Service cannot. As commercial entities operating on the National Forests, a portion of their revenue is returned to the Forest Service to be reinvested in program administration and land management activities.

Wilderness Stewardship Performance

The Agency's national Wilderness Stewardship Performance (WSP) Program is based on managing wilderness as a whole, with emphasis on the interdisciplinary responsibilities of wilderness. There are several different management elements associated with WSP. The outfitters and guides element requires that operating plans include and that outfitters and guides are modeling wilderness practices and teaching wilderness awareness.

Role of Recreational Commercial Services

Outfitter-guides can play a critical role in helping the Forest achieve the desired conditions for recreation opportunities in the following areas:

Education and Interpretation for Visitors

Many people want to know more about the natural and cultural features of the area they are visiting. While education and interpretation can be accomplished through signs, brochures, and other static media, outfitter-guides have a long reputation of turning information into a story and enhancing the experience of their clients.

Education and interpretation are often central to achieving the desired conditions in wilderness areas. Forest Service wilderness management direction (FSM 2323.83) states, "Verbal interpretative services by qualified wilderness rangers, volunteers, or permitted guides are acceptable." Therefore, along with wilderness rangers, developed recreation/other forest technicians and volunteers, outfitter-guides can deliver the appropriate message both inside and outside wilderness. The Forest should work with potential permittees to develop appropriate education and interpretation messages.

Protection of Sensitive Resources

Outfitter-guides are required to protect natural resources during their operations, so there is a greater opportunity for resource protection from guided versus unguided visitors. Outfitter-guide clients will have the opportunity to see and learn about unique cultural sites, the interconnected relationships of flora and fauna, and the effects, positive and negative, of human activity on natural resources. With their captive and interested audience, outfitter-guides can discuss and demonstrate Leave No Trace, Tread Lightly, other resource protection techniques, as well as help instill a resource ethic in their clients. There is strong accountability to ensure critical resources are protected and not affected by the guides' or their clients' activities.

Building Positive National Forest Constituencies

Outfitter-guides can assist the Forest in developing public appreciation of the land, its biological diversity, and the need for protection and management. Through education and interpretation, outfitter-guides can highlight management challenges and advocate support for resource protection efforts. Guided clients may share these messages with their friends and family and become public land constituents themselves.

Fostering Access to Opportunities

The National Forest environment can be intimidating to people who are not familiar with the outdoors. Outfitter-guides typically provide the knowledge, skills and/or equipment their clients do not possess. Outfitter-guides have an opportunity to introduce people to something highly

different from their daily lives. They also have specialized knowledge that helps people feel more comfortable in a new setting, while learning skills to possibly recreate on their own.

Forest Service Partners

Outfitter-guides can provide valuable feedback to the Forest about impacts to natural (both physical and social) and cultural resources, and how much and what kind of use is occurring, including unpermitted activity, which prevents opportunities for current permitted outfitter guides.

Analysis Area

The analysis area (Figure 1) includes all National Forest System (NFS) lands and waters managed by the Superior National Forest (Forest). The analysis area does not include State, Tribal, other federal, county or private lands within or adjacent to the Forest.

The Forest consists of three million acres, including 150 miles along the US-Canada border. The boreal forest ecosystem and the 625 square miles of forest that is surface water make this area unique. The Forest is a key recovery zone for gray wolves and Canada lynx. Other wildlife species such as moose, beaver, bald eagles, black bear, and deer depend on the relatively undisturbed ecosystem of the Forest. Healthy fisheries and clean air (the Wilderness is a class 1 air shed) are also important contributions of the Forest. The Forest includes several Inventoried Roadless Areas, Candidate Wild and Scenic Rivers, Scenic Landscape, and Unique Biological Areas.

A wide variety of recreational activities occur on the Forest, including fishing, hunting, camping, canoeing, and winter sports like snowmobiling, dog sledding, and cross country skiing. Outfitter-guides provide many of these opportunities, although the majority of participation is from private (unguided/unoutfitted) use. Within the Forest, there are approximately 2,647 miles of trails, 23 developed "fee" campgrounds, 18 rustic campgrounds, and more than 2000 backcountry campsites. There are also three national scenic byways.

The Forest Plan provides direction for identified Management Areas, each with their own standards and guidelines (Figure 2) for physical and social resources. These management areas both inside and outside designated wilderness provide varying levels of recreational access opportunities. From developed recreation sites (campgrounds, picnic sites, boat landings, observation sites, trailheads, swimming areas) to dispersed recreation facilities, campsites and trails (day use, backpacking, portaging, paddling, boating, bicycling, horseback riding, hunter walking, snowmobile, ATV/OHV, interpretive) to dispersed recreation not associated with facilities (orienteering, hunting, fishing, berry picking, bird watching, wildlife viewing, trapping) to wilderness management areas of semi-primitive motorized and non-motorized, primitive and pristine with specific rules and regulations. See Appendix A for additional applicable direction related to encounters and outfitting and guiding.

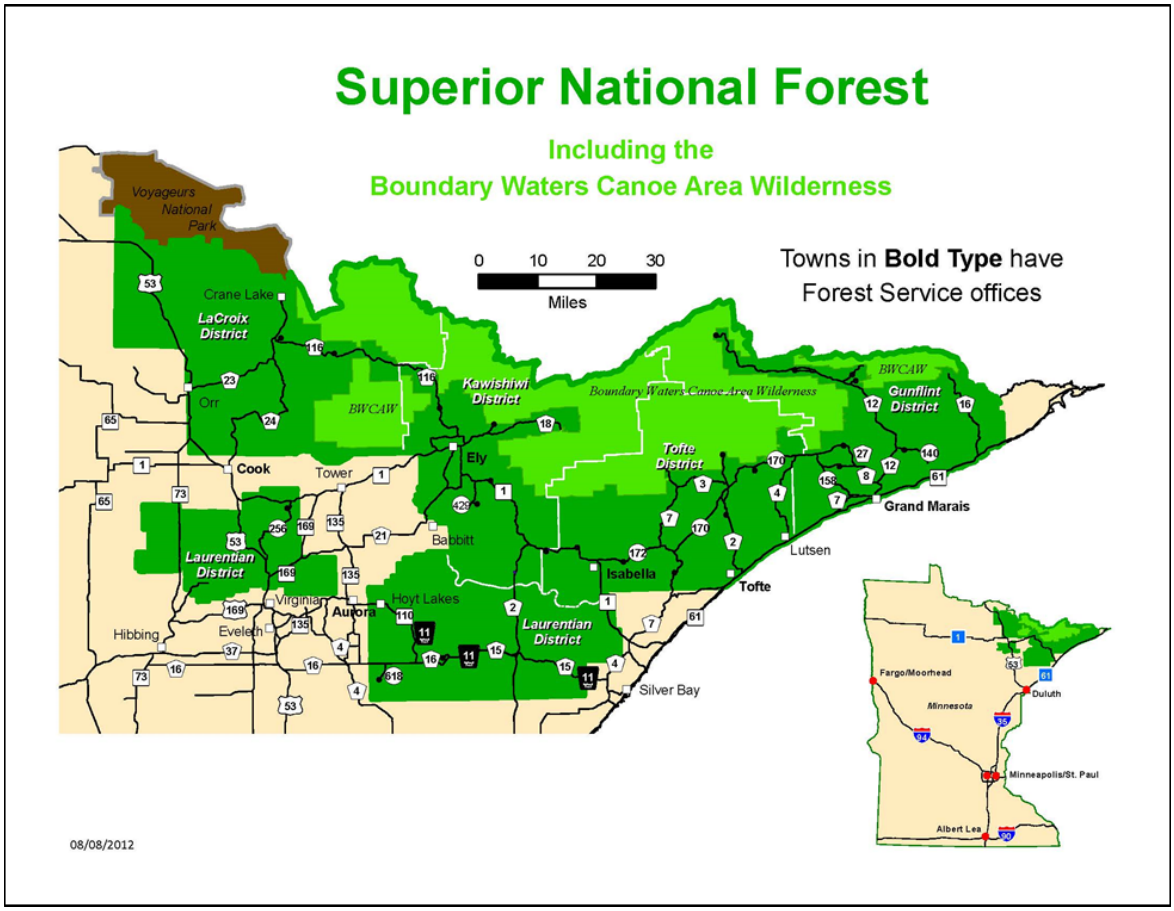

Figure 1. General Forest Map

Congressionally Designated Wilderness

There is one Wilderness Area considered in this analysis. The Boundary Waters Canoe Area Wilderness (BWCAW) is over one million acres in size, extending nearly 150 miles along the International Boundary adjacent to Canada's Quetico and La Verandrye Provincial Parks. Voyageurs National Park lies directly to the west with Grand Portage National Monument to the east. The BWCAW contains over 1,200 miles of canoe routes, 12 hiking trails and over 2,000 designated campsites. The BWCAW is one of the highest visited federally designated wilderness areas in the country. A quota permit and distribution system is in effect for overnight trips from May 1 and September 30, and a mandatory self-issued permit is required between October 1 and April 30. Nine (9) people and four (4) watercraft are the maximum allowed together in the wilderness. Different encounter rates are prescribed for each of four management areas in order to preserve wilderness character as prescribed by the Wilderness Act.

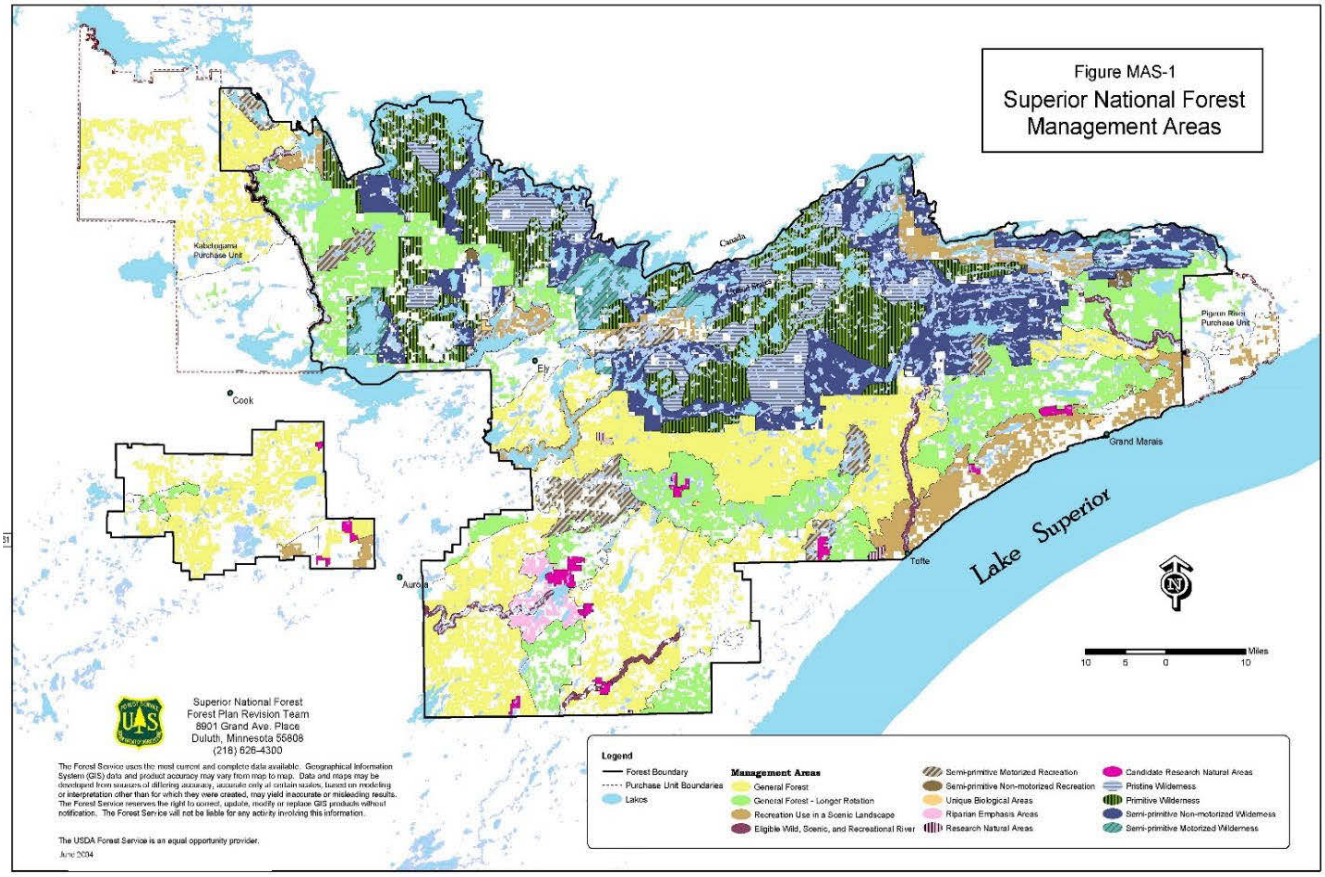

Figure 2. Forest Management Areas

The BWCAW is also the only wilderness area that has an air-space reservation of 4,000 feet, which was established by an Executive Order in 1949. In addition, the BWCAW is also one of the few wildernesses that permits motor-powered watercraft on designated lakes. These lakes are:

- Clearwater, North Fowl, South Fowl, Seagull (no motors west of Three Mile Island), Sections of Island River within the BWCAW (up to 10hp limit).
- Basswood (except that portion north of Jackfish Bay and Washington Island), Saganaga (except that portion west of American Point), Fall, Newton, Moose, Newfound, Sucker, Snowbank, East Bearskin, South Farm, Trout (up to 25 hp limit).
- Little Vermilion, Loon, Lac La Croix (not beyond the south end of Snow Bay in the U.S.A.), Loon River (no hp limit).

In Section 18 (a) of the BWCAW Act of 1978, the Secretary is authorized and directed to expedite and intensify the program of dispersed outdoor recreation development on the Forest area outside the Wilderness. It highlights the consideration to provide recreation experiences similar to those previously available in the *Boundary Waters Canoe Area* (before changes related to both 1964 and 1978 Acts) to help better disperse recreational use across the Forest to protect natural resources inside the wilderness, which includes recreational commercial services as well. The Forest is managed according to the Land and Resource Management Plan (LRMP) USFS 2004. The LRMP establishes Forest wide goals and objectives; standards and guidelines applying to future activities; management direction; and monitoring and evaluation requirements for the multiple uses of the Forest, including recreation.

Management direction for the BWCAW for outfitter and guides approved the following types of commercial uses: guided canoe trips, fishing and hunting guides, guided photography, dog

sledding, cross-country skiing, and snow shoeing (Forest Plan, 3-53). Direction is also included for tent camps and towboats authorized under a special use permit.

Historically and currently, many entry points are full during most of July and August as well as other key weekends. More detailed information for visitation can be found in the 2016 Boundary Waters Canoe Area Wilderness Permit and Visitor Use Trends report (see reference section).

Needs Assessment Considerations

Forest Niche

The Forest developed a recreation niche statement and setting map through the Recreation Facility Analysis process (2008). The niche statement describes the unique characteristics, opportunities, settings, and activities of the Forest's recreation program. Recreational commercial services should be aligned with niche opportunities and settings. The statement focuses on "superior": superior remoteness, superior boreal forest ecosystems, and superior lakes.

Forest Recreation Use

In response to the need for accurate recreation use data, the Forest Service developed a permanent sampling system known as the National Visitor Use Monitoring (NVUM) project which has been implemented nationwide. All National Forests and Grasslands completed two rounds of data collection as of 2009 and some, including the Superior, have completed the third round. The NVUM provides statistical recreation use information at the forest, regional, and national level. Table 1 shows general Forest visitation by destination as derived from visitor surveys and proxy data in 2016 from 762 individuals. While this is general Forest information, it gives a snapshot of what types of Forest land the majority of visitors are using.

Table 1. Visit Type

Visit Type	Visits (1,000s)	90% Confidence Level (%)
Total Estimated Site Visits	1,491	±16.0
Day Use Developed Site Visits	206	±36.8
Overnight Use Developed Site Visits	99	±29.2
General Forest Area Visits	990	±22.5
Designated Wilderness Visits†	195	±14.0
Total Estimated National Forest Visits	893	±19.9
Special Events and Organized Camp Use‡	0	±0.0

**A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.*

† Designated Wilderness visits are included in the Site Visits estimate.

‡ Special events and organizational camp use are not included in the Site Visit estimate, only in the National Forest Visits estimate. Forests reported the total number of participants and observers so this number is not estimated; it is treated as 100% accurate.

§ A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

 # This value defines the upper and lower bounds of the visitation estimate at the 90% confidence level, for example if the visitation estimate is 100 +/-5%, one would say "at the 90% confidence level visitation is between 95 and 105 visits."

According to the NVUM data, just under 40 percent of the visits to the Forest are made by females. There are very few racial or ethnic minorities in the visiting population. Children under the age of 16 account for nearly 15 percent of the visits, while people in their sixties account for 21 percent.

A little over a quarter of the visits to this area come from people who live within 25 miles. Over half come from people living over 200 miles away.

The most frequently reported primary activities are hiking/walking (20%), relaxing/hanging out (16%), fishing (12%) and viewing natural features (12%). For water-based activities, 25 percent participation was noted for non-motorized and 9 percent for motorized.

In general, visitors that participated in the NVUM survey are not feeling crowded. When asked to rank several areas in terms of perceived crowding, with a score of ten representing overcrowded and a one (1) meaning "hardly anyone there," average ratings were four (4), with, notably, the most crowded feeling in designated wilderness at 5.7.

In designated wilderness, females (38%) were far less likely to visit than males (62%). The largest age group was 50-59 (25%) with the next closest the 40-49 age group (21%). The lowest representation in wilderness visitors was the 16-19 age group at 2 percent. Race/ethnicity results show wilderness visitors surveyed in 2016 were 100 percent white.

The implications of these results to this outfitter-guide analysis include underrepresentation of different ethnicities, children and women in wilderness settings; relatively high local visitation, and the importance of providing opportunities for hiking.

Wilderness Specific Information

In addition to the more general NVUM findings, much is known about visitor demographics and characteristics within the wilderness area. In 1969 (n = 152), 1991(n = 295) in 2007 (n = 811), and in 2011 (n = 11,811) a sample of BWCAW visitors were contacted to update knowledge about use and user characteristics. Information obtained from these studies that are relevant to this needs assessment include:

- About two-thirds of overnight visitors in 2007 described themselves as being 40 years of age or older. While in 1969 and 1991, the average age was 26 and 36, respectively. The 2016 Forest actual use data shows 12 percent of the 155,611 users as 17 and younger.
- Nearly three-quarters of surveyed overnight visitors in 2007 were male (this has remained fairly stable over the last four decades)
- Overnight visitors reported an average of roughly 12 previous visits to the BWCAW. This level of prior visitation has increased over 1991 and 1969 findings.
- Party size averaged 4.4 people and the length of trip lasted on average 4.4 days. This represents a slightly smaller group size and longer trip length than found in the previous studies, however, actual use data from the Forest shows this too has remained fairly stable.
- The number of groups seen changed significantly over previous studies. That number more than doubled by 2007 to 8.6 groups per day, which is at the upper end of Forest encounter standards for seeing other groups while traveling and over standard for seeing other groups while camping.
- People are feeling more crowded; 60 percent reported feeling crowded in 2007, while less so at 56 percent in 1991, and just over 30 percent in 1969. Over half felt that there was crowding in at least a few places in 2007, and 81 percent of those who said this were a little or moderately bothered by the amount of people. Seventeen percent changed the route of their trip in 2007 due to crowding.

- Less than 40 percent of overnight visitors in 2007 used the services or purchased supplies from an outfitter. Only 6 percent of overnight groups describe themselves as fully outfitted. In 2011, visitors were also asked if they used the services of an outfitter. 1.6 percent specifically said they used a commercial guide and 46.6 percent said they used outfitter services.
- From 1991 to 2007, visitors reported seeing significantly more groups that camped within sight or sound of their own campsites and more groups traveling past their camps within sight or sound of their campsites. In the 2011 survey, 261 visitors sent in comments with their survey itineraries (unrelated to a specific survey question) concerning crowding. And during a 2008/2009 study on time constraints to wilderness visits, interviewees shared stories of reduced opportunities for solitude and reported crowding in the wilderness area periphery.
- Seeing large numbers of people was the only potential issue that increased (from 13.3 percent in 1991 to 21.1 percent in 2007) in numbers of people indicating it was a problem for them during their trip. Evaluations of portage maintenance, litter, publicizing rules and regulations, advertising the permit requirement, obtaining permits, finding firewood, improper disposal of fish entrails, finding fire grates full of trash, and finding an unoccupied campsite were all substantially less problems (depending on the location) in 2007 than 1991.

Of problems reported, the largest mentioned in 2007 were too many people in the area (32.6%), getting information to help visitors avoid congested areas (27.4%), litter (27.3%) and finding an unoccupied campsite (25.6%). In the 2011 comments (aside from crowding as mentioned above), 1,741 specifically mentioned campsites, 981 on portages, 474 on visitor use permits, 196 on trash, 102 on fire grates, and 59 on rules and regulations. Although these were individual comments unrelated to specific survey questions and the displeasure was on a large scale, these were important topics for them to mention nonetheless.

Wilderness day use visitor data (2007):

- The average age of respondents was 49, with 65 percent of these being male.
- Average group size was 3.6 (3.2 in 2016 actual use data), with none reporting that they were part of an organized group.
- Day use visitor respondents in 2007 reported seeing, on average, 7.5 non-motorized groups (upper end of Forest encounter standards) and 3.3 motorized groups during the course of their day trip. However, despite these encounter levels, 68 percent of day use visitor respondents in the sample reported that the BWCAW was not overcrowded.
- The largest resource issues for respondents were litter (20.2%), the difficulty of obtaining a day use permit (20.1%), and the amount of information on where other users would be (17.3%).

The 2016 Forest Trends in Visitor Use report showed the majority of wilderness use occurred during the May and September mandatory quota season, and the average group size for overnight users under the quota system was about four (4) people. Self-issue permits are required for non-motorized day use visitors during the quota season and non-quota season, all overnight use (motorized and non-motorized) during the non-quota season, and any motorized day use on Little Vermilion, Loon, Lac La Croix (not beyond the south end of Snow Bay) and Loon River (per the legislation). Those group sizes were less, about three people. Of all the self-issued permits, the most popular access was by kayak or canoe.

From 2009 to 2016, the number of quota visitors ranged from a high of 114,031 (2009) to 97,708 in 2014. Most of the quota permits were for overnight paddle followed by day use motor, then overnight motor. Overnight hiking accounted for the lowest number of permits.

Of all visitors, the majority were overnight quota permit visitors followed by self-issue permit visitors during the quota season, followed by day use motor quota visitors during the quota season. Self-issue visitors during the non-quota season account for the smallest group of visitors.

The highest method of travel by self-issue visitors during the quota season was canoeing or kayaking. Hiking was the next highest in the quota season, followed by motor boat travel. In the non-quota season, hiking surpassed canoeing/kayaking, and winter sports are obviously more popular than in quota season (snowshoe, ski, snowmobile, and dog sled).

Visitor Preference Regarding Motorized Boats

Since motorized transport is unique in this area, visitors have occasionally been asked their opinion on the level of motorized use. While these are two different mechanisms of gathering information, and somewhat dated, the following information is helpful for this needs assessment.

The 1993 BWCAW Environmental Impact Statement (EIS) asked: "Should towboats be allowed. If so, how many?"

Of 4,000 comments on the EIS in general, 268 answered the question specifically about towboats and of those the following responses were received:

- 25 positive, but with zero regulation
- 46 positive of status quo
- 24 positive, but with further reductions
- 173 in favor of elimination

The 2007 visitor survey received 6,067 comments in general about numerous topics. Of these, 178 specifically mentioned the use of motor boats (including, but not limited to towboats) and of those there were:

- 41 positive comments related to the use of motor boats
- 137 negative comments related to the use of motor boats

Out of those 178 comments, 40 specifically mentioned towboat services and of those:

- 16 were negative about towboats in general
- 24 simply stated that they purchased a tow. Of those 24 visitors, two assigned the positive values of "helpful" and "well worth the money".

Wilderness Character Mapping

Beginning in 2013, the Superior National Forest partnered with the Aldo Leopold Wilderness Research Institute to develop a map of threats to wilderness character in the BWCAW. The results showed that the majority of the wilderness has high quality wilderness character that has not been substantially impacted by threats. The lowest quality categories are highly correlated with lakes that allow motorized use, especially those that are wilderness entry points. The highest quality categories are primarily found away from entry points and travel routes, especially in areas with fewer and smaller lakes and within pristine management areas.

The study via in-depth interviews on constraints to wilderness visits from 2008-2009 revealed that time constraints, including limited vacation time from work and family commitments, were an issue for the majority of the study participants. Permit availability and occupied campsites were also factors. Impacts of the constraints on behavior and experience included shortened experiences, substituted experiences, reduced opportunities for solitude, and adjusted trip planning.

The implications of the reports and studies listed above include:

- The need to look closely at the areas where wilderness character is being degraded when considering capacity, current use, allocations and new authorizations;
- The underrepresentation of some ethnic groups, ages and gender;
- Changes in visitor use patterns due to constraining factors—more base camping, attempts to get beyond crowded areas, shorter trips; and,
- Concerns involving the use of motorized boats, even though this use is allowed.

Existing Recreational Commercial Services

Actual use is the amount of client days (commonly called service days) an existing recreational commercial service is authorized to use under a SUP in a given year. The Forest has chosen to allow outfitter-guides to determine the amount of visitors they can serve rather than limiting this use through an allocation. While actual use numbers are not the sole basis for determining need, they can show public demand for a recreational commercial service.

An indication of need can be determined from a review of the number of people these services accommodate each year. A review can give a clear picture of what types of activities are more popular and how the use varies per year. On the Forest, canoeing and organization camps make up a large bulk of permitted use. Summer wilderness guided canoe trips facilitated access for 42,883 people in 2016, indicating a high demand for this type of activity. For winter dog sledding in non-wilderness areas of the Forest, 13,278 client days were recorded, Other permitted activities in 2016 included fishing, summer tent camps, snowshoeing, hunting, photography, livery service, and horseback riding.

While it is often difficult to determine the ratio of recreational commercial/non-commercial visitors to a Forest, 2007 and 2011 survey data reveal the following:

2007: N=564

- • Guided - 0.2 percent said yes.
- • Outfitted – 5 percent said yes. 35 percent said partially. 60 percent said no.
- • Both terms were defined; however, in this case outfitted also meant those visitors who rented equipment off-forest and brought it there themselves as well as those visitors who hired a service to set up their equipment on site.

2011: N=11,462

- • Guided - 1.6 percent said yes.
- • Outfitted - 46.6 percent said yes (includes both partially and fully), while 53.4 percent said no.
- • Both terms were defined; the same caveat as above.

The guided/outfitted percentage does not include towboat services, which are explained in more detail below.

Towboats

Towboat services and tows are defined in the R9 Superior Supplement 2709.14_50-2018-1:

Livery Service. An outfitter/guide who provides a service of dropping off or picking up supplies, equipment, or clients on National Forest System lands.

Towboat Service. An outfitter/guide who provides a tow service using a motor-propelled watercraft designed to transport, on the boat itself or by towing behind, additional canoes, boats, camping supplies and associated equipment and persons.

Tow. The act of using a motor-propelled watercraft by an outfitter/guide to complete a round-trip commercial towboat service.

Towboats are included in this Needs Assessment since they are a recreational commercial service, although they operate differently than a typical outfitting and guiding business. Towboats are permitted both inside and outside of the wilderness. The BWCAW Act prohibited all motorboat use within the Wilderness except on a few specific lakes. On those lakes, Congress limited the size of allowable motors and imposed a statutory cap on such motorboat use at no greater than "the average actual annual motorboat use of the calendar years 1976, 1977, and 1978 [the "base period use"] for each lake. Congress further directed the Secretary to develop and implement entry-point quotas to restrict motorboat use in accordance with the statutory cap "based on such criteria as the size and configuration of each lake, and the amount of use on that lake."

On other lakes where motorboat use was already occurring prior to the BWCAW Act, the Act served to "provide for the orderly and equitable transition from motorized recreational uses to nonmotorized recreational uses on those lakes, streams, and portages in the wilderness where such mechanized uses are to be phased out under the provisions."

Towboats are isolated in this discussion because they differ from other recreational commercial services in that a towboat operation takes people and equipment from a starting point to a drop-off point like a taxi service. Beginning in 1995, all towboat operations had to be authorized by a SUP, but their use of motors was still exempt from the motor cap. Towboat use was to be limited to the 1992 levels for numbers of boats, trips, current operators, and specific lakes. Growth was not to be permitted beyond these limits. If an operator terminated his/her SUP, an assessment was to be completed to determine if a permit should be issued to another individual or business.

In the 1981 Plan to Implement the BWCAW Act, the Forest Service calculated the average actual annual motorboat use during 1976, 1977, and 1978—the "base period use"—as a total of 14,925 motorboat entry-point permits, allocated across twelve different entry-points. The Implementation Plan stated that those "quotas are the maximum amount of motorboat use allowable under the Act. They will be adjusted when certain lakes are closed to motorboat use, as directed by the Act."

After 1981, day and overnight motor quotas steadily dropped due to statutory motor use phase-outs, updated Forest Plans, and resource protection to the current quota of 9,344 (Table 2).

Table 2. Towboat data for 2012-2018 towboat location data

Drop-off / Pick-up Locations	Years / Total Tows						
Years (right column)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Moose Lake Entry Point Totals	2,020	2,022	2,178	3,224	3,263	3,321	3,367
Back Bay East Basswood Lake	32	34	27	39	34	42	37
Beaver Island East Basswood Lake	1	0	4	4	55	0	6
Birch Lake Portage Sucker Lake	778	842	969	918	976	1,023	1,086
Found Lake Portage Newfound Lake	0	1	3	2	0	4	4
Lincoln Island East Basswood Lake	134	141	114	142	123	286	308
Prairie Portage International	153	142	148	1,128	1,115	1,173	1,119
Splash Lake Portage Newfound Lake	766	718	763	817	824	751	781
Washington Island East Basswood Lake	137	127	134	143	121	20	20
Wind Lake Portage Moose Lake	19	17	16	31	15	22	6
Fall Lake Entry Point Totals	40	28	50	44	58	57	56
4 Mile Portage Fall Lake	4	2	9	18	8	8	15
Newton Lake Portage Fall Lake	8	7	1	4	17	8	6
No Motor Zone Line West Basswood Lake	28	19	40	22	33	41	35
Snowbank Lake Entry Point Totals	3	3	10	3	5	13	19
Boot Lake Portage Snowbank Lake	0	0	0	0	0	11	19
Parent Lake Portage Snowbank Lake	0	0	0	0	0	2	0
Disappointment Lake Portage Snowbank Lake	3	3	10	3	5	0	0
Farm Lake Entry Point Totals	0	0	0	33	24	20	18
Farm Lake	0	0	0	33	24	20	18
Trout Lake Entry Point Totals	0	0	2	0	5	0	0
Trout Lake	0	0	2	0	5	0	0
Outside BWCAW Totals	20	16	29	25	45	27	38
Crab Lake Portage Burnside Lake	20	16	29	25	45	27	38
Clearwater Lake Entry Point Totals	18	19	20	38	41	23	41
Campsite Clearwater Lake	4	4	0	4	6	0	9
Caribou Lake Portage Clearwater Lake	5	0	4	4	6	1	3
West Pike Lake Portage Clearwater Lake	6	7	8	17	18	12	15
Mountain Lake Portage Clearwater Lake	3	8	8	13	11	10	14
Seagull Lake Entry Point Totals	7	5	18	18	19	69	67
3 Mile Island Sea Gull Lake	7	5	18	17	17	68	66
Paulson Lake Portage Seagull Lake	0	0	0	1	2	1	1
Saganaga Lake Entry Point Totals	440	722	708	766	826	993	993
American Point Saganaga Lake	220	457	436	277	300	313	411
Campsite Saganaga Lake	0	2	0	14	6	1	7
International Saganaga Lake	158	180	155	388	399	493	438
Red Rock Lake Portage Saganaga Lake	42	55	79	47	72	129	94
Sag Falls Saganaga Lake	20	28	38	40	49	57	43

*Only 2015-2018 had International data required on reports (explains jump in International - Saganaga Lake & Prairie Portage – International
#Public comment suggested that data prior to 2012 be provided. Within the short timeframe of document completion this could not be completed.

Outfitter and Guide Requests

Over the past several years, the Forest has received requests for guided activities. The requests have increased over the years. The following tables illustrate the applications accepted over the last several years as well as existing permits.

Table 3. Permit applications for total outfitter guide applications accepted

Year	West Zone	East Zone	Total
2012	10	3	13
2013	9	8	17
2014	9	6	15
2015	2	6	8
2016	2	5	7
2017	6	6	12
2018^	0	0	0

*Totals include Temporary Outfitter Guide Permits and Priority Use Outfitter Guide Permits

^ None accepted due to guidance that a needs assessment was to be completed prior to accepting new proposals.

Table 4. Priority use permits for total current priority use outfitter guide permits

Year	West Zone	East Zone	Total
2012	77	45	122
2013	81	51	132
2014	81	47	128
2015	82	48	130
2016	78	47	125
2017	75	49	124
2018	73	46	119

*Totals are estimates of the highest number of permits operating at some point within each given year.

Public Involvement

In order to better determine public need for this assessment, two open houses were held in the fall of 2019 where participants were able to visit with agency staff and provide input relating to trends in visitor use, demand, and current conditions on the Forest. A draft needs assessment was made available online and at these meetings. A worksheet was posted on the Forest website with questions regarding personal experiences and desired activities within the Forest. In addition, people were encouraged to submit general comments.

Common themes included the following:

- The need for dog sledding and winter camping recreational commercial services.
- The need for services that would assist with accessibility for disabled, youth and elderly people.
- The need for towboats to distribute use and assist disabled or elderly visitors. There were also comments from respondents who disagreed with the use of towboats within wilderness.

Trends that were common among many respondents included the following:

- More people are participating in shorter trips and using base camps than in the past; it is often difficult to find campsites closer to the entry points and within 1-2 days of entry points due to this.
- Some natural resource impacts have been noted at campsites near entry points; less so at sites farther inside the wilderness.
- Though most respondents focused on the wilderness area, several people thought that there were additional opportunities outside of the wilderness, particularly for biking. Many respondents said that their business needed the wilderness opportunities to operate.
- Many respondents advocated for changes in quotas for various entry points, saying that this would help distribute use.
- Respondents were equally split on resource and social concerns, with some stating that they did not have any concerns, while others mentioned negative effects in high use areas of the wilderness.
- The Moose Chain in particular was often mentioned for its high level of motorized and non-motorized use. Crowding was reported in this area and at other entry points.

Process for Determining Need

The general public, cooperators, and outfitters and guides were asked which activities they wished to participate in but could not currently; what activities potential clients were requesting; what type of recreational commercial services were appropriate; where and what type of activities could be increased or reduced, and what type of recreational commercial service they would book for their personal trips. The findings were included as *public need.*

Agency need was determined through a set of criteria established by Forest wilderness and recreation staff (see Appendix D). Both public and agency need were included in the evaluation to obtain a final need ranking. Activities that were not mentioned by the public but showed a higher or moderate agency need may be expanded in the future should a demonstrated public need arise.

Permitting Low to High Need Activities

Agency and public needs are dynamic. If an activity ranked lower in terms of need in this evaluation, this does not mean it can never be permitted. This also applies to the higher need activities: if reasons exist, including potential conflicts, high levels of local use or controversy, resource damage (physical and social) from current use, or managerial capacity to administer permits to standard, managers should consider carefully the implications of adding or expanding recreational commercial services. This analysis is meant to serve as guidance only, and there may be situations that warrant deviation from it. Documentation of decisions made is recommended, and revisiting of this analysis should occur on a regular basis to reflect changing needs.

Public and Agency Need for Recreational Commercial Services

While the activities evaluated represent a comprehensive list of activities that could reasonably occur on the Forest, it would be impossible to identify every activity or future ones to be offered by a recreational commercial service. If the Forest wants to consider any additional activities for recreational commercial services, the activity will need to be evaluated through the same process.

Need for Recreational Commercial Services

Activities were categorized into three possible lists. Two important caveats exist: (1) If an activity is identified as meeting public need for new or additional use, it does not mean that it can be accommodated everywhere, and (2) The lists of activities occurring or expected to be requested on the Forest is not all inclusive.

The proposed activity must also pass through the national screening criteria for recreational commercial services and be compliant with Forest Plan direction.

General Forest Area

List 1. Activities for which there is a higher need for recreational commercial services.

- Dog sledding
- Winter camping
- Ice fishing
- Rock climbing

List 2. Activities for which there is a moderate need for recreational commercial services.

- Backcountry skiing/boarding
- Backpacking
- Big game hunting
- Biking (mountain)
- Biking (road)
- Camping (canoe-based)
- Camping (motor boat)
- Canoeing/kayaking
- Education
- Hiking
- Horseback riding (day and overnight)
- Jeep/OHV/motorcycle
- Photography (includes night sky tours)
- Rock climbing
- Towboats
- Yurts

List 3. Activities for which there is a lower need for recreational commercial services.

- Cross country skiing/snowshoeing
- Snowmobiling
- Fishing
- Short stop tours
- Snow biking

Wilderness

List 1. Activities for which there is a higher need for recreational commercial services.

- Backpacking
- Dog sledding
- Winter camping

List 2. Activities for which there is a moderate need for recreational commercial services.

- Camping (canoe-based)
- Camping (motorboat based)
- Canoeing/kayaking (day use)
- Cross-country skiing/snowshoeing
- Education
- Fishing (day and overnight)
- Hunting
- Ice fishing
- Photography, including night sky tours
- Towboats

List 3. Activities for which there is a lower need for recreational commercial services.

- Day hiking
- Rock climbing
- Short stops (buses dropping tourists off to trail heads/entry points directly on the boundary)
- Tent camps (Glamping, set up facilities)

Recreation Events

Table 4. Recreation events permitted by total recreation event permits

Year	West Zone	East Zone	Total
2012	4	8	12
2013	4	7	11
2014	4	8	12
2015	5	11	16
2016	9	14	23
2017	8	12	20
2018	9	12	21

Due to the wide range of existing activities, recreation events as a whole were not evaluated as a category in the needs assessment. Any resource or social concerns with these events are often related more to capacity than to need. The recommended method of evaluating types of events is displayed in the table below and focuses on fee-based events, as non-commercial events are typically permitted. Recreation events are typically suggested for areas outside wilderness if it is not a wilderness dependent activity. The following wilderness restriction also applies:

2323.13h - Competitive Events

Do not permit competitive events, including competition involving physical or mental endurance of a person or animal, foot races, canoe or boat races, competitive trail rides, survival exercises (including military), or other activities of this nature in wilderness.

Table 5. Recreation Event Suggested Criteria

Category	Value	Criteria
Recreation Niche	L (1 point)	There is no specific niche market for this activity nor does the niche emphasize the settings, and/or special places where the activity may occur.
	M (2 points)	There is no specific niche market for this activity however the niche emphasizes the settings, and/or special places where the activity may occur.
	H (3 points)	There is a specific niche market for this activity. Settings and/or special places where the activity may occur have also been emphasized.
Local Interest	L (1 point)	The activity is not offered currently, nor is there any interest from proponents or the general public in making the activity an offering.
	M (2 points)	The activity occurs currently and/or there is some interest from proponents or the general public in increasing capacity for these types of events. Actual use versus use authorized is on average 50-75%.
	H (3 points)	The activity occurs currently and there is strong interest from proponents and the general public to increase opportunities for these types of events. Actual use versus use authorized on average is 75% or higher.
Social / Facility / Resource Capacity	L (1 point)	This activity would impact and/or diminish the capacity of the resource. Additional such events would increase both the number of encounters with groups and individuals beyond their desired level, increasing impressions of crowding. Use of facilities (trails, trailheads, associated day-use areas, parking lots, etc.) would be greatly increased, making them harder to maintain. Crowding in the facilities would increase damage to the vegetative and visual resources adjacent to the facilities and reduce visitor satisfaction.
	M (2 points)	This activity would moderately impact the capacity of the resource. There is moderate opportunity to increase the number of events beyond the current level without increasing impressions of crowding. There is moderate additional capacity for visitors to use facilities (trails, trailheads, associated day-use areas, parking lots, etc.) without making them harder to maintain. The facilities can accommodate a moderate amount of added use without visitors negatively impacting the adjacent vegetative and visual resources.

Category	Value	Criteria
	H (3 points)	This activity would not impact the capacity of the resource. The number of events of this type can be increased well beyond the current level without increasing impressions of crowding. The facilities (trails, trailheads, associated day-use areas, parking lots, etc.) can accommodated greater use without making them harder to maintain. Additional use of facilities by visitors will not negatively impact the adjacent vegetative and visual resources.
Economic Viability	L (1 point)	This activity would minimally benefit the local economy (mostly local participation).
	M (2 points)	This activity would somewhat support economic sustainability in local communities (e.g., utilize or foster small business, moderate participation from out of town visitors who would stay the night)
	H (3 points)	This activity would actively promote economic sustainability in local communities (e.g., utilize or foster small business, create jobs, draw visitors specifically to participate in the activity or encouraging high numbers of visitors (100 +) to spend the night in nearby communities).

In general, a rating of 9 or above would entail a higher need rating.

Conclusions

It is often difficult to determine recreation trends and demand due to a fluctuating economy, emerging technology, and changing populations. In wilderness, very few activities were dependent on a wilderness setting and could be accommodated in other Forest areas. However, a common marketing point and a desire on the part of visitors is to be in the "Boundary Waters". If managers wish to shift some use outside of wilderness, they should consider an "Unbounded" concept that recreational commercial services could promote—areas not under the quota where less encounters with others may occur. Here again, a balance must be struck between the cultivation of future wilderness supporters and the extent necessary for realizing the public purposes of wilderness as identified in the Wilderness Act.

While a need may be identified for several activities, there may not be sufficient capacity to accommodate all of them. Capacity is the amount and type of visitor use that can be accommodated consistent with the desired conditions. This can be described as social, facility, and environmental capacity. There may be areas where social, facility or environmental limiting factors mean that additional use cannot be supported. There may be reasons, for example, to provide more opportunities outside of wilderness for primitive types of recreation in order to meet the standards and guidelines for the wilderness (e.g., encounter, challenge, and risk standards, campsite desired conditions). In addition, the managerial capacity to manage permits to standard must be studied. The next step in determining the appropriate level of recreational commercial services is to balance the capacity with the identified need.

Relationship to Niche and Supply

The Forest Niche speaks to the following: **superior opportunities**. Important elements of the niche include access to a variety of experiences. Some of the activities showing a higher or a high moderate need are those which most closely align with the niche (rock climbing, backpacking, and winter camping in a dynamic and unique ecosystem).

There are many other federal, state and private providers of recreation opportunities regionally. When assessing capacity to meet demonstrated need, managers should determine whether adequate supply exists elsewhere. This could allow for better prioritization of commercial services. Since a high percentage of the activities analyzed in this document show a moderate need, a plan of action could be to focus on those with a higher need and/or those which can only be accommodated in these particular districts; the activities showing a lower need that are being offered by other providers could be left for those providers to supply.

Relationship to Trends

Review of National Visitor Use Monitoring (NVUM) Forest data shows that hiking/walking, relaxing/hanging out, fishing, and viewing natural features are more important to surveyed visitors. However, the surveys available are lacking in that they do not reveal if visitors prefer a guide for these types of activities or if they are confident in participating on their own. Likewise, they do not specify if visitors' experiences are enhanced or diminished by the presence of guided groups. Until this information is available, trends should be considered for the purposes of general management only. However, when authorizing additional services for the most popular activities mentioned in the NVUM, managers should consider existing use and capacity of the areas to absorb additional pressure.

In the most recent NVUM, visitors said crowding was 5.7 out of 10 in wilderness. Managers should consider this finding and information from the other detailed wilderness-specific research when permitting additional recreational commercial services there. Timing, location, and frequency of potential encounters should be evaluated.

Public input showed that visitor use patterns in the Forest, particularly the BWCAW, are changing. People spend less time than in the past and are more apt to go shorter distances and

base camp. The implications when assessing the need for additional recreational commercial services are that activities that provide opportunities outside of wilderness or bring people to less crowded locations are more needed, while also considering that areas that offer opportunities for solitude should be maintained in that state.

Another important trend indicated by public comment was the need for accessible opportunities. The implication when assessing the need for additional commercial services is that preference could be given to those businesses that are able to accommodate this type of request, as long as it was based on need, not convenience.

The public comments indicated a difference in opinion over towboats in the BWCAW. While many respondents indicated that these are important services, others disagreed. A capacity analysis or an environmental analysis could assist in balancing opposing viewpoints with wilderness considerations.

Wilderness Extent Necessary Determination

An additional step was performed to determine the *extent necessary* for commercial services in the BWCAW. An extent necessary worksheet was prepared for each activity or potential activity that could occur in the wilderness, regardless of its need ranking, recognizing that need may change (See Appendix E for an example). Though an agency or public need may have been identified through the needs assessment, the *extent* must still be determined.

Commercial enterprises are generally prohibited in wilderness by Section 4(c) of the Wilderness Act of 1964. (Exceptions include valid existing rights such as pre-existing mineral leases.) A commercial service, however, is a type of commercial activity that is permitted under Section 4(d)(6) of the Wilderness Act if the managing agency determines it to be necessary and appropriate for realizing the recreational or other wilderness purposes of the area. See 16 U.S.C. 1133(d) (5). The Wilderness Act does not define "commercial enterprise" or “commercial service." However, these terms have been interpreted by land management agencies to mean, among other things, outfitting and guiding. This is consistent with U.S. Forest Service regulations on outfitting and guiding, which define "commercial use or activity" as "any use or activity on National Forest System lands (a) where an entry or participation fee is charged, or (b) where the primary purpose is the sale of a good or service, and in either case, regardless of whether the use or activity is intended to produce a profit." (36 CFR 251.51).

These elements stated in the wilderness character mapping effort were considered during the analysis:

- Encounter monitoring in the wilderness began in 2008 and is ongoing; while survey data are still incomplete, the preliminary results appear to indicate that some travel zones do not meet SNF plan standards for their management area.
- Out of 67 total entry points in the BWCAW, 29 of them are known to have frequent congestion problems. In the BWCAW, there are 18 tow routes, 2 motorized portages (both on Loon River), 2 portages that allow motorized and mechanized use (Prairie Portage and the Vermillion-Trout Lake portage) and 4 areas that permit the use of portage wheels (portages along the international boundary, Four-Mile Portage, and the Fall-Newton-Pipestone and Back Bay portages into Basswood Lake).
- The majority of the wilderness has high quality wilderness character that has not been substantially impacted by threats. Overlaying the map of threats to wilderness character with a map of BWCAW waterbodies reveals that patterns and variations in the magnitude of threats are strongly linked to lakes for both high quality and degraded areas. The lowest quality categories are highly correlated with lakes that allow motorized use, especially those that are wilderness entry points. The lowest four categories (0–40) are

primarily clustered around the end of the Gunflint Trail (Saganaga and Seagull lakes) and the Fernberg Road (Snowbank, Parent, Moose, Newfound, Found, Basswood—especially Pipestone Bay, Newton, Fall, and South Farm lakes). Additional areas within these categories include lakes in the Trout Lake and Vento units (Trout, Clearwater, Duncan, and East Bearskin lakes), Paulson Lake (south of Seagull Lake), and a small portion of Knife Lake (near Thunder Point).

- Of the 17 lakes within the lowest 4 categories, 12 allow motorized use (encompassing more than half of all motorized lakes in the wilderness), 8 are motorized entry point lakes, and an additional 6 are easily accessible via a short portage from an entry point.
- Visitor survey information over several decades has revealed larger group sizes, more encounters, and more motorized use is occurring.
- Commercial outfitters and guides often have standardized routes that they both recommend to their clients and use in their commercial operations, and they can therefore influence visitor use patterns and opportunities for solitude. The impact of frequently used routes was determined based on the type of commercial use and the magnitude of its associated effects; for example, motorized services during the primary use season were depicted as having a greater effect on solitude than non-motorized winter use. Guided or outfitted excursions in the wilderness include canoeing, kayaking, motorized boating, dogsledding, skiing, snowshoeing, hunting, and fishing. Outfitters and guides also provide towing services on Loon River, La Croix, Trout, South Farm, Fall, Newton, Basswood, Moose, Newfound, Sucker, Snowbank, Seagull, Saganaga, and Clearwater lakes.

Public input revealed that most believed some crowding and impacts to vegetation at portages and campsites were present, mainly at entry points. Some commenters mentioned high numbers of both canoe parties and towboats in specific locations, and the fact that visitors sometimes ask to be towed in order to escape the motor routes. The problem of finding campsites near entry points was also mentioned.

This extent necessary determination does not specify individual service day numbers for specific activities for two reasons: Normally a determination is prepared in conjunction with a capacity analysis, and key information is needed in order to assess and define these numbers. A capacity analysis identifies additional resource recommendations gathered from resource specialists, wilderness character monitoring and public input. In addition, since recreational commercial services are not issued a set number of service days (use is obtained through the wilderness quota permit system), adjustments will have to be made for each individual business based on their service locations and activity.

Summary

The extent necessary determination showed the following:

Activities that could be authorized at a higher level than present should a need arise/have been identified in the needs assessment: **Winter camping, Snowshoeing/XC skiing, Education, Backpacking, Dog Sledding**

Activities that could remain at existing levels: **Canoe-based camping, Overnight Motorized Fishing, Day Canoe, Day Fishing, Hunting, Rock Climbing, Day Hiking**

Activities that should be further considered and analyzed in a capacity analysis and environmental (NEPA) analysis: **Towboats, Short Stop Tours, Tent "glamping" camps (summer, motorized routes)**[1]

While this is a general extent necessary determination, there may be locations and seasons where some of these activities should not be authorized, depending on existing and expected impacts to wilderness character. The majority of the BWCAW is not experiencing degradation; however, there are some areas, particularly along motorized routes, where the solitude and undeveloped qualities of wilderness character are being negatively affected.

Allocation Recommendations

In wilderness, since a quota exists for the main use season, the goal is to manage visitor use impacts through monitoring of indicators and thresholds (or "standards"). Established standards exist in the BWCAW Plan, and ongoing wilderness character monitoring shows trends in improvement or degradation of wilderness character. Specific allocations in recreational commercial services would be to the level that would not contribute to degradation, or would work to improving the existing condition.

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[1] Defined in the Forest Plan: A tent camp is a temporary camp that is delivered and set up by a special use permittee when the client enters the Wilderness, then taken down and removed from the Wilderness at the conclusion of the client's trip. (3-54)

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Appendix A. Agency Management Direction

The Code of Federal Regulations (36 CFR 261.10(c)) prohibits "selling or offering for sale any merchandise or conducting any kind of work activity or service unless authorized by Federal law, regulation, or special-use authorization" on federal lands. On National Forest System lands, a special-use permit is required when any individual or organization is conducting outfitting and guiding activities or services for gain.

Forest Service Manual 2703.1 states that the following items need to be considered when evaluating requests for use of National Forest System lands:

> Apply the first- and second-level screening criteria per 36 CFR 251.54 and FSH 2709.11, sections 11 and 12, to proposals for the use of National Forest System lands.

Forest Service policy contained within FSH 2709.14.51.3(c) includes the following:

> Authorize only those outfitting and guiding activities that are consistent with the applicable land management plan and that meet the screening criteria in 36 CFR 251.54(e) and FSH 2709.11, chapter 10.
>
> Do not authorize any development or permanent improvements in non-wilderness in the National Forest System for outfitting and guiding services, except when there is a demonstrated public need and the structures, improvements, or installations have negligible value and minimal impact on national forest resources, as with hitching posts, corrals, tent frames, permitted access routes, and shelters.
>
> Do not authorize any development, improvements, or installations in wilderness areas for the purpose of convenience to the holder or the holder's clients. Do not authorize any caches in wilderness areas. Do not authorize permanent structures, improvements, or installations in wilderness areas unless they are necessary to meet minimum requirements for administration of the area for the purposes of the Wilderness Act (16 U.S.C. 1133c).
>
> Work with other Federal agencies, State and local authorities, outfitters and guides, outfitting and guiding organizations, and other interested parties to ensure that outfitting and guiding activities are consistent with applicable laws and regulations and to identify unauthorized outfitting and guiding activities. Follow procedures in FSM 5300 in investigating and preventing the occurrence of unauthorized outfitting and guiding activities.
>
> Do not issue a separate permit for outfitting or guiding activities (such as cross-country skiing or horseback riding) to a holder of a permit or term permit for a commercial public service site (such as a pack station or resort) when the outfitting or guiding activities are part of commercial public service site operations and the commercial public service site would not exist without the outfitting and guiding activities. Include the outfitting and guiding activities in a supplement to the term special use permit.
>
> Do not authorize use when an applicant owns no tangible assets, lacks the prerequisites to conduct outfitting and guiding (such as a state license, liability insurance, and equipment), and would serve only as an intermediary for others providing those services on National Forest System lands.

Applicable Recreation Objectives

Recreation objectives, stated in FSM 2302, that apply to outfitting and guiding in general are:

> Serve visitors and local communities. Provide a broad range of nature and heritage-based outdoor recreation and tourism opportunities for the responsible use and enjoyment of local communities and their visitors.
>
> In collaboration with communities and other providers of outdoor recreation, use visitor and local community characteristics and preferences for recreation and tourism activities, settings, experiences, and benefits to guide recreation planning, management, marketing, and monitoring.
>
> Identify and enhance recreational, scenic, and culturally distinctive landscapes that comprise special places to provide outstanding quality and diverse recreation opportunities.
>
> Identify, analyze, and monitor the changing demographic composition of the country and regional market areas to adapt recreation settings, facilities, and programs for greater use, enjoyment and understanding of the National Forest System.
>
> Strive to provide sustainable recreation opportunities and programs that equitably serve the needs of local communities and visitors.
>
> Strive to protect and enhance natural, scenic, cultural, wilderness, and wild and scenic rivers resources.
>
> Create an integrated and sustainable program that fosters conservation of natural and cultural resources.
>
> Reduce the impacts and conflicts resulting from recreational use through education, management, monitoring, and enforcement.
>
> Preserve an enduring resource of wilderness and wild and scenic rivers for the benefit and enjoyment of present and future generations.
>
> Address public safety through utilization of appropriate risk management approaches across the spectrum of recreation settings.

Forest Service Special Use policy for outfitting and guiding provided in FSH 2709.14, Chapter 50, Section 53.1c states:

> Authorize only those outfitting and guiding activities that are consistent with the applicable land management plan and that meet the screening criteria in 36 CFR 251.54(e) and FSH 2709.11, chapter 10.
>
> Work with other Federal agencies, State and local authorities, outfitters, and outfitter and guide organizations to ensure that outfitting and guiding activities are consistent with applicable laws and regulations and to identify unauthorized outfitting and guiding activities.
>
> Follow procedures in FSM 5300 in investigating and taking action to prevent the occurrence of unauthorized outfitting and guiding activities.

Wilderness

Objectives for wilderness management provided in FSM 2323.11 are to:

> Provide, consistent with management of the area as wilderness, opportunities for public use, enjoyment, and understanding of the wilderness, through experiences that depend upon a wilderness setting.
>
> Provide outstanding opportunities for solitude or a primitive and unconfined type of recreation.

Forest Service policy addressing recreation management in Wilderness found in FSM 2323.12 states:

> Maximize visitor freedom within the wilderness. Minimize direct controls and restrictions. Apply controls only when they are essential for protection of the wilderness resource and after indirect measures have failed.
>
> Use information, interpretation, and education as the primary tools for management of wilderness visitors.
>
> Manage for recreation activities that are dependent on the wilderness environment so that a minimum of adaptations within wilderness are necessary to accommodate recreation.
>
> Consistent with management as wilderness, permit outfitter/guide operations where they are necessary to help segments of the public use and enjoy wilderness areas for recreational or other wilderness purposes.

Forest Service policy addressing outfitter and guide operations in Wilderness found in FSM 2323.13g states that managers should:

> Address the need for and role of outfitters in the forest plan. The plan must address the type, number, and amount of recreation use that is to be allocated to outfitters. Ensure that outfitters provide their service to the public in a manner that is compatible with use by other wilderness visitors and that maintains the wilderness resource.
>
> Approve only temporary structures and facilities for outfitter and guide operations necessary to properly meet their public service in a manner compatible with the wilderness environment. These structures shall be located away from main trails, streams, lakes, key interest features, and non-outfitted public use areas. Specify in forest plans, subsequent implementation schedules, or special use permits what improvements are permitted and their locations.
>
> Ensure that outfitters remove all equipment and material, other than structures authorized to remain such as dismantled structure frames and poles made of native material, from the wilderness at the end of each season. Do not permit caches, and phase out existing ones on a planned basis. Do not allow permanent improvements such as cabins, toilet buildings, or tent frames with floors and sides. Further direction for managing outfitter and guides operations is found in section 2324.3, FSM 2343, FSM 2700 and FSH 2309.19, the Wilderness Management Handbook.

Appendix B. Forest Management Direction

OUTFITTER AND GUIDE OPERATIONS, AND SPECIAL USES

By October 1, 1995, all outfitter and guide operations that meet the requirements in FS Manual 2700 will be required to have a special use permit. These include day and overnight operations.

The following types of commercial uses are approved in the BWCAW: guided canoe trips, fishing and hunting guides, tent camps (see below), towboats, guided photography, dog sledding, X-country skiing, and snowshoeing. Applications will be reviewed on a case-by-case basis. New uses are subject to an assessment.

Management Area 5.1

Special uses are generally unacceptable.

Tent Camps

Temporary tent camps may be permitted under special use permit in all management areas except 5.1.

A tent camp is a temporary camp that is delivered and set up by a special use permittee when the client enters the Wilderness, then taken down and removed from the Wilderness at the conclusion of the client's trip. Dropping off supplies or provisions throughout the trip is not permitted.

Permanent campsites or caches are not permitted. All equipment associated with the tent camp must be brought in and taken out with the client.

3-13 Standards and Guidelines, Superior National Forest BWCAW Management Plan and Implementation Schedule

Tent camp operators must use equipment that is appropriate to wilderness and practice leave no trace camping techniques.

Towboats Management Area 5.3

A towboat operation is a commercial enterprise that takes people and equipment from a starting point to a drop-off point.

Beginning in 1995, all towboat operations must be authorized by a special use permit.

Towboat use will be limited to the 1992 levels for numbers of boats, trips, current operators, and specific lakes. Growth will not be permitted beyond these limits. If an operator terminates his/her special use permit, an assessment will be completed to determine if a permit should be issued to another individual or business.

Management Area Direction for Encounters

General Forest

D-GF-10 Many people may use this area, mostly along waterways, roads, and trails. In these more highly used areas, it is common to encounter others engaged in a wide variety of activities. In the remainder of the management area contacts between users will generally be less frequent.

G-GF-3 Most special uses can be accommodated.

General Forest—Longer Rotation

D-LR-10 Many people may use this area, mostly along waterways, roads, and trails. In these more highly used areas it is common to encounter others engaged in a wide variety of activities. In the remainder of the MA, contacts between users will generally be less frequent.

G-LR-3 Most special uses can be accommodated.

Recreation Use in a Scenic Landscape

D-RU-8 Many people use this area along lakes and roads and at developed recreation sites. It is common to encounter others. Some people may use the more remote parts of these areas where less development opportunities are provided and consequently fewer people are encountered.

G-RU-3 A wide variety of special uses is generally permitted.

Eligible Wild, Scenic and Recreational Rivers

S-WSR-18Wild, Scenic and Recreation River Segments: Existing special uses may be continued. New applications will be evaluated on their suitability relative to the river's values.

Semi-Primitive Non-Motorized

D-SPNM-9 Most recreation use occurs on lakes, trails, and portages. It is uncommon to encounter others in the area.

G-SPNM-3 Special uses are generally not permitted, except those uses that do not detract from the semi-primitive environment or uses needed to access or supply utilities to private land, recreational facilities, or administrative sites.

Semi-Primitive Motorized

D-SPM-6 Contacts between recreationists is minimal. Recreation sites are spaced so as to minimize contacts between users.

G-SPM-3 Special uses are generally not permitted, except those uses that do not detract from the semi-primitive environment or uses needed to access or supply utilities to private land, recreational facilities, or administrative sites.

Unique Biological Areas

G-UB-11 Authorizations that protect or enhance the UB management areas are generally allowed.

Riparian Emphasis Areas

Special Uses G-RE-2 Special uses that do not complement or are not compatible with the kind and development level of associated Forest Service facilities within the area are generally not permitted. S-RE-1 New special uses that would degrade the long term ecological function of riparian areas are not permitted.

Research Natural Areas

D-RNA-5 The setting is usually natural but can vary from site to site. Recreational use is not a featured activity in these areas, but low impact educational and interpretation activities can be provided for. These areas may be closed to public use when needed to protect botanical or other attributes from disturbances.

S-RNA-10 New special use permits are not permitted. Exceptions may be made for permits to meet research needs.

BWCAW Management Area Direction:

Goals & Objectives: Commercial operations may provide services that are in keeping with wilderness values. To ensure this, all commercial operations will be authorized by special use permit.

Management Area 5.1 Pristine

DESIRED SOCIAL CONDITION: This area provides an outstanding opportunity for isolation and solitude, relatively free from the evidence of contemporary human activity. Frequency of encounters with other visitors is rare.
Opportunities exist for a very high degree of risk, challenge and self-reliance.

Management Area 5.2 A Primitive

DESIRED SOCIAL CONDITION: This area provides an excellent opportunity for isolation and solitude, relatively free from the sights and sounds of humans. The frequency of encountering others is low. Opportunities exist for a high degree of challenge and self-reliance through the application of primitive outdoor skills.

Management Area 5.2BSemi-Primitive Non-Motorized

DESIRED SOCIAL CONDITION: Opportunities for experiencing isolation and solitude are moderate to low.
The frequency of encountering others in the area is moderate

Management Area 5.3B Semi-Primitive Motorized

DESIRED SOCIAL CONDITION: Opportunities for experiencing solitude and isolation are low. Motorized watercraft are permitted and will be noticeable along major travel routes and portages, and near major entry points. The frequency of encountering others is moderate to high while traveling, and moderate on campsites.

Desired Future Conditions

Table 6. Management areas and measurements

Management Area	Pristine	Primitive	SPNM	SPM
Frequency of Encounters	Rare (0-4 per day)	Low (3-6 per day)	Moderate (5-10 per day)	Moderate to high (6-12 per day)
Frequency of Contact with Other Parties while traveling	Rare (0-2 per day)	Low (3-5 per day)	Moderate (5-8 per day)	Relatively high 6-10 per day
Frequency of contact with other parties while camping	Rare to non-existent (0-1 per day)	Low (1-2 per day)	Moderate (2-3 per day)	Moderately frequent (2-4 per day)

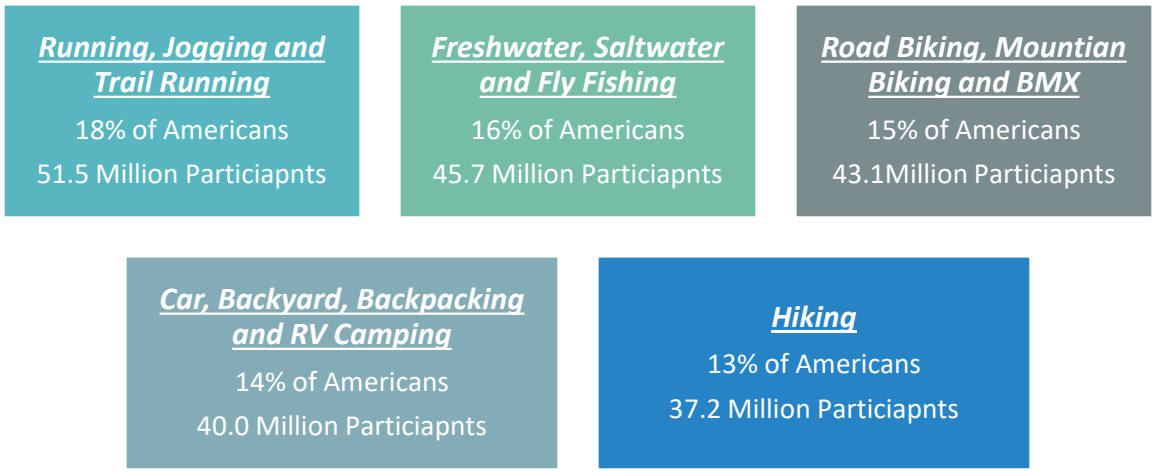
Appendix C. Supply and Demand Analysis

Several factors, relating to societal, lifestyle, and demographic trends can affect recreation participation. Race, ethnicity, and gender also affect recreation participation. The aging of the baby boomer generation, income changes, time constraints, changes in family structure, and immigration are examples of trends that can all affect recreation. Some specific examples of how trends affect recreation are that people are tending to take more frequent, shorter trips, rather than the traditional two-week vacation; many people are looking for opportunities that are close to home and more families and singles are recreating.

National Trends

Nationally, the 2016 Outdoor Recreation Participation Report found that approximately 48.4% of Americans ages six and older participated in outdoor recreation in 2015. That is the same as was in 2014, however a slight decrease from 2013 which was at 49.2%. The number one reason that motivates Americans to get outside is that it's a good way to get exercise, the second biggest motivator is spending time with friends and family. Lack of interest is the number one reason why Americans don't participate in outdoor activities and 20 percent said they did not have the skills or abilities needed to participate in these activities. Running, jogging and trail running rank as the most popular activity by participation rate and frequency, also across all diversity groups.

Figure 1. Most popular activity by participation



A second national source for trends is the National Survey on Recreation and the Environment (NSRE). NSRE represents the continuation of the ongoing National Recreation Survey series that began in 1960. Surveys focus on outdoor recreation participation and personal demographics for people 16 years and older in the United States. For the U.S. population as a whole in the 2010-11 period, participation in walking for pleasure (almost 85 percent of them/us) and family gatherings outdoors (just over 74 percent) were the most widely popular activities. Participation rates for these activities had changed very little in recent years. Participation in swimming, diving and related activities and in sightseeing were both over 60 percent in the earlier 2005-2009 period, and along with viewing or photographing birds (41 percent in 2010- 11), these were the three activities which had grown the fastest. Participation in sightseeing increased 8.1

percent, followed by viewing birds (up 5.7 percent) and participating in swimming activities (up 4.8 percent).

Other activities with increasing participation rates were viewing or photographing other wildlife besides birds, boating, fishing, and snow/ice activities. Participation rates for four activities appear to have decreased between 2005-09 and 2010-11. They include picnicking, bicycling, developed camping and primitive camping. The participation rate for picnicking showed the percentage-point decrease during this period, falling by more than 4.0 percent.

As far as demographics, Cordell (2010) found that participation rates for outdoor activities are significantly higher among males, non-Hispanic Whites, young to middle-aged people, people with college education, middle to higher income people, and rural residents. Green et al (2010) compiled constraints to participating in outdoor recreation, and found that "fear of the forest" was cited by Hispanics, Asian/Pacific Islanders and lower-income households, among other reasons. Immigrants as well as people from lower income households cited "feel unwelcome or uncomfortable."

Projected Recreation Use—Long Term Trends

Key Findings through the Year 2060

Supply factors such as proximity and availability of recreation resources are important in determining whether and to what degree individuals recreate. Previous research has shown that the amount of outdoor recreation settings or opportunities available to an individual will affect the individual's choice and intensity of participation in given activities. For example, whether an individual skis and how often can in part be explained by the proximity of skiing opportunities.

Likewise, most dispersed outdoor recreation activities, such as viewing wildlife, require access to wildlife habitat on private and public forests, ranges, and wetlands. Bowker et al (2010) estimates that the fastest growing activities over the next 50 years are developed skiing (20 to 50 percent), undeveloped skiing (9 to 31 percent), challenge activities (6 to 18 percent increase), equestrian activities (3 to 19 percent), and motorized water activities (-3 to 15 percent).

Alternatively, a number of activities will experience a decline in adult participation rates. These include visiting primitive areas (0 to -5 percent), motorized off-road activities (0 to -18 percent), motorized snow activities (2 to -11 percent), hunting (-22 to -31 percent), fishing (-3 to -10 percent), and floating activities (3 to -11 percent).

Summary: Common Themes for National and Regional Long-Term Trends

- Forested settings continue to be a draw for people viewing scenery;
- The economy impacts how people participate;
- Triathlons and adventure racing have experienced significant growth;
- Participation by kids in the outdoors is declining;
- Outdoor participation supports land conservation and volunteerism;
- Hunting and fishing are declining but wildlife watching has increased;
- Decline in snow-dependent recreational activities;
- The national obesity epidemic is raising awareness of the value of public lands;
- The health care industry is becoming a stronger partner with land managers.

Regional Trends

The Minnesota Statewide Comprehensive Plan for 2014-2018 revealed the following trends:

- The Minnesota population continues to grow older with the median age increasing to 37.4
- There has been documented decreasing involvement of young adults and their children in recreational activities, while the older adults have maintained more stable involvement
- However, the BWCAW visitor use data has shown a steady increase in the number of youth listed on wilderness permits the last 3 years with 2016 showing 12% of the visitation
- In Minnesota 62.8% of adults are either overweight or obese and less than half meet recommended levels of physical activity
- Hunting and fishing licensing rates indicate a greater participation of involvement from older adults than seen previously and shows a need for providers to address opportunities for this age group, which is expected to grow over the next several years.
- Population growth has slowed; most growth is taking place in a few urban areas

Appendix D. Evaluation Criteria Rankings

Evaluation Criteria

Non-wilderness categories

The analysis team, composed of recreation, special use and wilderness specialists from the Forest, developed evaluation categories and associated criteria to assess agency need for recreational commercial services. Public need was determined from the comments received at two workshops and from a worksheet available online and at the workshops.

Criteria 1: Specialized knowledge, skills and abilities

This criterion recognizes the role recreational commercial services serve in fostering access to opportunities and providing services for people who lack specific skills, knowledge, equipment or abilities related to a specific outdoor activity or pursuit.

The National Forest environment can be intimidating to people who are not familiar with the outdoors. Outfitter-guides typically provide the knowledge, skills and/or equipment their clients do not possess. Outfitter-guides have an opportunity to introduce people to National Forest recreation opportunities they may otherwise not be able to experience. They also have specialized knowledge and skill that helps people feel more comfortable and safe.

Criteria 2: Agency Need

This criterion addresses both local and national agency visitor management goals, issues, concerns and opportunities. Some of these may be articulated in a Forest plan. Examples include the need for modeling ethical behavior and imparting skills, providing stewardship messages, mitigating resource impacts, and conserving the area for future visitors and businesses.

Criteria 3: Public Need

This criterion took into consideration the need identified by the public, both outfitter-guides and the general public during the comment period for this assessment. The following tables display the non-wilderness evaluation criteria.

Table 7. Specialized knowledge and skills

Specialized Knowledge and Skills

Ranking	Description
L	The activity does not require the participant to learn new or unique skills or little time is required to master needed skills.
M	The activity requires the participant learn new or unique skills but the skills can be fairly easily taught.
H	The activity requires the participant to master unique, technical skills and considerable time and/or talent is needed to master the skills. Use of a guide is almost a prerequisite for a novice to participate in the activity.

Agency Need

Table 8. Agency need

Ranking	Description
L	This activity, if provided by a recreational commercial service, could meet an identified agency need if stipulations were placed in the permit (e.g. trail maintenance, reporting of illegal uses, educating others) and/or no agency needs have been identified that this activity could assist in meeting.

Ranking	Description
M	This activity, if provided by a recreational commercial service, could meet identified agency needs through both permit stipulations and the nature of the activity (e.g. trail maintenance, reporting of illegal uses, educating others, presence in known problem areas, modeling of skills/LNT while performing an activity that has caused impacts by unguided users).
H	This activity, if provided by a recreational commercial service, would clearly meet several agency needs through permit stipulations and the nature of the activity, and is likely to cause long-lasting, positive change in correcting and meeting identified and documented agency issues/needs.

Public Need

Table 9. Public Need

Ranking	Description
L	Not mentioned as a public need from public meetings or outreach
M	Mentioned by at least one person in the public meetings or from outreach
H	Frequently mentioned as a public need in the meetings or from outreach

Wilderness Criteria

The need for commercial services in wilderness must be considered carefully. The Wilderness Act of 1964, Section 4 (c) Prohibition of Certain Uses states: "*…there shall be no commercial enterprise…"* However, section 4(d) (6) states: *"Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas."*

The Wilderness Act directly states that commercial services may be allowed in wilderness and provides the general criteria for determining appropriate types and amounts of operations to be considered for recreation and other purposes of wilderness. The overriding constraint on commercial services (and all types of visitor use) in wilderness, is the mandate to preserve wilderness character. Human influences that degrade wilderness character are to be minimized so that natural conditions are protected, and the benefits of the wilderness resource (social, biological, and physical) are available to future generations. Decisions about commercial services in wilderness must consider potential benefits and effects to wilderness character as defined by the five statutory qualities of wilderness character: undeveloped, natural, untrammeled, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and other features of value.

Visitor use of wilderness (including commercial services) is compatible with all the other mandates of the Wilderness Act unless those uses degrade natural conditions or impair the wilderness character of the area. The evaluation criteria for commercial services in wilderness are therefore based on the mandates provided in the Wilderness Act, especially in regard to the preservation and protection of wilderness character and the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

Wilderness criteria were developed to analyze the need for recreational commercial services in wilderness, and public comment was incorporated into this step.

Criteria 1: Specialized Skills, Knowledge, Ability

This criterion recognizes the role recreational commercial services serve in fostering access to opportunities and providing services for people who lack specific primitive skills, knowledge, equipment or abilities related to a specific outdoor activity or pursuit.

The Forest environment can be intimidating to people who are not familiar with the outdoors. Outfitter-guides typically provide the knowledge, primitive skills and/or equipment their clients do not possess. Outfitter-guides have an opportunity to introduce people to National Forest wilderness recreation opportunities they may otherwise not be able to experience.

Criteria 2: Contribution to Wilderness Understanding and Appreciation

This criterion is meant to focus on the uniqueness of wilderness and how these areas differ from backcountry experiences that are not wilderness dependent. Meaning, the same outdoor experience can be found in semi-primitive areas outside the BWCAW where visitors can hone outdoor skills before recreating in a more primitive location such as wilderness. This method also helps prevent costly search and rescues.

There may also be specific reasons why this Wilderness Area was designated; if an activity is aligned with those reasons (for example, the BWCAW was designated to protect the unique biotic resources and water quality of the area and serve as a haven of solitude and freedom from the pressures of our fast-paced, industrialized society), a recreational commercial service that seeks to educate visitors on these unique features would contribute to understanding and appreciation of that specific wilderness. Contributions also refer to introducing youth and under-represented populations to wilderness to broaden the audience that finds wilderness relevant.

Criteria 3: Agency Need

This criterion addresses both local and national agency wilderness management goals, issues, concerns and opportunities. Some of these may be articulated in a Forest or Wilderness Plan. Examples could include a need to increase opportunities for under-represented populations to experience wilderness. Other examples include addressing and preventing specific resource issues that commercial services could assist with by presence or stewardship activity, providing support for research, monitoring, or other projects; providing education or interpretation; or otherwise supporting the Agency's mission or priorities. This criterion requires managers to take a close look at sustainable recreation in their area, determining what the most critical issues are, and documenting how outfitter-guide services could protect, enhance, and support the wilderness. Consider contribution to agency mission, alignment with Forest Plan goals and standards, and mitigation of impacts that threaten wilderness character.

Criteria 4: Wilderness Setting

This evaluation criterion is based on the degree to which this activity could be pursued in other locations outside of wilderness. This will be specific to the individual wilderness area being considered. As previously mentioned, the BWCAW Act of 1978, authorizes the Forest to intensify the program of dispersed outdoor recreation development on the Forest outside of the Wilderness to help better disperse recreational use across the Forest in an effort to protect natural resources inside the wilderness, which includes recreational commercial services.

Criteria 5: Public Need

This criterion took into consideration the need identified by the public, both outfitter-guides and the general public during the comment period for this assessment.

Table 10. Wilderness Criteria

Specialized Skills, Knowledge, Ability

Ranking	Description
L	The activity does not require the participant to learn new or unique skills or little time is required to master needed skills.
M	The activity requires the participant learn new or unique skills and the skills can be fairly easily taught.
H	The activity requires the participant to master unique, technical skills and considerable time and/or talent is needed to master the skills. Use of a guide is almost a prerequisite for a novice to participate in the activity.

Contribution to Wilderness Understanding and Appreciation

Table 11. Contribution to wilderness understanding and appreciation

Ranking	Description
L	This activity has fewer opportunities for participants to learn about and appreciate wilderness due to the nature of the activity (skill development, single file activities, less time for group discussions)
M	This activity has occasional opportunities for participants to learn about and appreciate wilderness (e.g. some hands-on learning, occasional group discussion time, or overnight experiences which lend to time spent in wilderness/talking about wilderness). The nature of the activity may lend itself to learning about the regional or local attributes important to these specific wilderness areas.
H	This activity specifically focuses on wilderness appreciation and understanding and/or specifically focuses on regional or local attributes important to these wilderness areas. The majority of the activity lends itself to numerous opportunities (e.g. almost entirely hands-on learning, group discussion, or overnight experiences).

Agency Need

Table 12. Agency need

Ranking	Description
L	This activity, if provided by a recreational commercial service, could meet an identified agency need if stipulations were placed in the permit (e.g. trail maintenance, reporting of illegal uses, educating others) and/or no agency needs have been identified that this activity could assist in meeting.
M	This activity, if provided by a recreational commercial service, could meet identified agency needs through both permit stipulations and the nature of the activity (e.g. trail maintenance, reporting of illegal uses, educating others, presence in known problem areas, modeling of skills/LNT while performing an activity that has caused impacts by unguided users).
H	This activity, if provided by a recreational commercial service, would clearly meet several agency needs through permit stipulations and the nature of the activity, and is likely to cause long-lasting, positive change in correcting and meeting identified and documented agency issues/needs.

Wilderness Setting

Table 13. Wilderness setting

Ranking	Description
L	This activity can be pursued in other locations outside of wilderness; the wilderness setting is not necessarily an important factor
M	It may not be specifically important, but opportunities outside of wilderness are limited and the presence of wilderness significantly contributes to the experience of visitors.
H	There are no other locations outside of wilderness that can accommodate this type of use, either due to geography or experience, or this activity is entirely dependent on a wilderness setting(for example, trips focused entirely on wilderness education).

Public Need

Table 14. Public need

Ranking	Description
L	Not mentioned as a public need from public meetings or outreach
M	Mentioned by at least one person in the public meetings or from outreach
H	Frequently mentioned as a public need in the meetings or from outreach

General Forest Area (GFA)

Table 15: General Forest Evaluation

Activity	KSAs	Agency need	Public Need	Overall Need	Notes
Backcountry skiing/snowboarding	M	M	L	M	Not an established use
Backpacking	M	M	M	M	Searches have taken place; weather can be an issue
Rafting	NA	NA	NA	NA	Added to show it was evaluated
Avalanche Awareness/Mountaineering	NA	NA	NA	NA	Added to show it was evaluated
Big game hunting	M	M	L	M	Guides use areas outside of the forest; often there are large camps; however, this is largely unguided use. High demand for bear hunting guides but can't authorize due to DNR regulations
Biking, mountain	M	L	H	M	Mostly gravel; some single-track
Biking, snow	M	L	L	L	Emerging use
Canoeing/kayaking (flatwater)	M	L	M	M	Day use
Cross country skiing/snowshoeing	M	L	L	L	
Shuttle services/short stops	L	L	L	L	"Short stops" will be under permit in the future. Short stops include the busloads of tourists dropped off at trailheads. Much of this activity occurs along the shore.

Activity	KSAs	Agency need	Public Need	Overall Need	Notes
Education, nature based or historical	L	M	M	M	
Fishing	L	M	L	L	Public comments related to wilderness fishing
Hiking	L	M	M	M	
Jeep/OHV/motorcycle	M	M	M	M	Roads mainly
Horseback riding (day/overnight)	M	M	M	M	
Ice Fishing	M	M	H	H	Comments suggested that this is a recurring request
Glamping/yurts	L	M	M	M	Some camps are available in the area. Damage depends if they are using a glamping trailer in an already impacted dispersed site or a yurt in a newly cleared site.
Photography, includes night sky	L	M	M	M	Public need mentioned
Rock Climbing/bouldering/ice climbing	H	M	M	H	Can help with bolting issues; anchoring on trees, destroying vegetation and lichen
Snowmobiling	M	L	L	L	Resource impact may be M depending on location; social impact may differs from unguided use (different behavior)
towboats	L	L	H	M	There may be opportunities outside of wilderness that are not being utilized
Road biking	L	L	H	M	Public need mentioned
Winter camping	M	M	H	H	Winter travel skills
Dog sledding	H	M	H	H	Includes driving the sled
motor based camping	M	M	L	M	
Canoe based camping	M	M	M	M	Evening discussions; quieter pursuit; available other places

Wilderness Evaluation

Table 16. Wilderness Evaluation

Activity	Skills, Knowledge, Equipment	Contribution/ understanding	Agency need	Public need	Setting	Overall Need	Notes
Canoe based camping	M	H	L	M	M	M	One of main reasons established; lots of private use occurs
Backpacking (foot)	M	H	H	M	M	**H**	Experience is different; trails are generally one way; not a lot of pickup options; unguided backpacking is a small % of use in wilderness but outfitters could open up trails. Navigation is pretty tough due to burned area/no tread/overgrowth; trails provide opportunities for ecosystem knowledge such as regeneration; unique multi-day opportunities and only boreal forest: Some similar opportunities outside (not dependent) but not a lot of trails are available.
Motor boat based camping	M	H	M	M	L	M	Outfitter-guides can discuss the motorized use to a captive audience; can reach a different user base
Hunting	H	M	L	L	M	M	Bringing game out/field dress in wilderness; not many opportunities outside of wilderness exist
Ice Fishing	M	M	M	H	L	M	Opportunities outside of wilderness; can educate on winter skills and travel. Public comments indicated frequent requests.
Canoeing/kayaking (flatwater) (day use)	M	M	M	M	L	M	Less downtime to educate as opposed to overnight
Cross country skiing/snowshoeing	H	M	M	L	L	M	Wilderness adds complexity for skills; lake travel in winter; winter wilderness setting experience is completely

Activity	Skills, Knowledge, Equipment	Contribution/ understanding	Agency need	Public need	Setting	Overall Need	Notes
							different/educate on ecosystem
Education	M	H	H	M	M	M	
Fishing	M	M	M	M	M	M	Issues with fish remains (this covers day and night)
Hiking, day	L	M	L	L	L	L	Shorter distances; less use than other activities
Rock climbing	H	L	L	M	L	L	
Towboats	M	L	L	H	L	M	Public need indicates desire on the part of the public; tows are creating congestion in some areas and dispersing use in others; many comments in opposition also
Photography including night sky	L	M	L	M	M	M	Size and scope draws people there
Sledding, dog	H	M	M	H	M	H	Trail reports etc. received from guides are helpful. Requests stated from public.
Winter camping	H	H	M	H	M	H	Winter wilderness travel: LNT skill development/practices needed
Glamping set-up tent camping (summer)	L	M	L	M	L	L	In motorized routes; "glamping"
Short stops (buses dropping tourists off at trail heads/entry points on boundary)	L	H	L	M	L	L	This gears towards the bus loads dropped off at Eagle Mountain trailhead/entry point.
Rafting	NA	NA	NA	NA	NA	NA	Added to show it was evaluated
Avalanche awareness/mountaineering	NA	NA	NA	NA	NA	NA	Added to show it was evaluated

Appendix E. Wilderness Extent Necessary Worksheet

Extent Determination for Boundary Waters Canoe Area Wilderness

Date:

Outcome: Determine if the frequency and intensity of this activity would create or is creating a programmatic change to wilderness character. Estimate the level of commercial services that is necessary in wilderness.

Management Area:

Size in Acres:

Activity considered:

Conclusion:

Public Purposes and Wilderness Character

Section 4 (b) of the Wilderness Act states "Except as otherwise provided in this act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use." Examples of contributing to public purposes could include learning about wilderness, understanding the role of wilderness ecosystems, supporting scientific research that furthers understanding of outside forces on wilderness; or providing opportunities for visitors to experience wilderness.

The Wilderness Act does not define wilderness character, but according to Landres et al. (2015)[2], wilderness character may be described as the "combination of biophysical, experiential, and symbolic ideals that distinguish wilderness from all other lands." There are four (sometimes five) qualities of wilderness that may be used to approximate wilderness character for the purposes of monitoring changes over time. These qualities are defined in the "Definitions" at the end of this document. The qualities are equally important and reinforce one another. Documentation of how an activity would affect wilderness character can assist in determining the extent to authorize recreational commercial services.

The need for recreational commercial services in wilderness must be considered carefully. The Wilderness Act of 1964, Section 4 (c) Prohibition of Certain Uses states:

> "There shall be no commercial enterprises". However, section 4(d)(6) states:
>
> "Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas."
>
> Any commercial service can be considered a degradation; for the purposes of this exercise "degradation" focuses on the indicators and standards in the mapping document.

[2] USDA 2015. General Technical Report RMRS-GTR-340. Keeping It Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character across the National Wilderness Preservation System.

Boundary Waters Canoe Area Wilderness Act of 1978
Public Law 95-495
92 Stat. 1649

SECTION 1. The Congress finds that it is necessary and desirable to provide for the protection, enhancement, and preservation of the natural values of the lakes, waterways, and associated forested areas known (before the date of enactment of this Act) as the Boundary Waters Canoe Area, and for the orderly management of public use and enjoyment of that area as wilderness, and of certain continuous lands and waters, while at the same time protecting the special qualities of the area as a natural forest-lakeland wilderness ecosystem of major esthetic, cultural, scientific, recreational and educational value to the Nation.

CURRENT USE (for new uses, skip to Additional Use below)

Question 1) Does the wilderness character map show degradation in this area or are current standards being exceeded in the season of use?

☐ Yes ☐ No. ☐ Partially

If applicable, explain degradation and to which quality.

Question 2) Does this commercial activity contribute to the degradation?

☐ Yes, recreational commercial services are the main contributor.

☐ Partially, it's a combination of both uses that are contributing, or this activity is not contributing

☐ No, noncommercial uses are the main contributor**.**

Explain.

IF YES, STOP HERE and apply Scenario 1.

Scenario 1. Reduction/Relocation of Existing Services. Reduce/relocate/further analyze the percent of commercial services to a level that is not expected to contribute to degradation, or reduce public use and guided use in proportion or add additional stipulations to permits that would mitigate.

Consider the following:

- Identify the standards that are not being met from the BWCAW plan, or the measureable impacts to wilderness character that are occurring from the current level of use. Is the severity high, moderate or low? A higher severity may indicate the need to reduce 50%, for example; a low severity may indicate a lesser reduction, 5-10%.
- Identify the current ratio of recreational commercial/non-commercial use for this activity. Consider reducing by a % that would still facilitate access yet assist in reversing the degradation. Consider spatial and temporal changes to permits that would resolve the issue.
- If non- commercial use is contributing, it is recommended to reduce this use also by a percent equal to its contribution.

If No or Partial, go to question 3.

Question 3) Is the **current** recreational commercial service, meeting the public purposes for wilderness (recreational, educational, conservation, scientific, scenic, historic)?

☐ Yes, existing levels meet the public purposes ☐ No, the need is not being met and there is a need to provide additional services

☐No, because this activity is not necessary to meet a public purpose or manage for wilderness character

Explain.

If No. Identify the public or agency need that is not being met and go to question 4.

If No, because the activity is not necessary, go to scenario 1.

If Yes, stop here and apply Scenario 2. Existing Use Levels.

Scenario 2. Existing Levels.

Continue recreational commercial services at their current level. Do not authorize additional types of this activity. If conditions change, increases could be allowed.

Question 4). Has the use increased over the last five years?

☐ **Yes** ☐ **No**

Explain. Click here to enter text.

If No, stop here. Apply Scenario 2, Existing Levels.

Scenario 2. Existing Levels.

Continue recreational commercial services at their current level. Do not authorize additional types of this activity. If conditions change, increases could be allowed.

Work with existing permittees to meet public and agency need within the scope of their permits.

If Yes, go to Question 5.

Additional or NEW Use

Question 5) Would additional or new use, considering the likely frequency and intensity of such trips, create a measureable negative change to wilderness character?

☐ **Yes** ☐ **No** ☒Potentially could be authorized with additional stipulations or quota

Explain. Click here to enter text.

If No, go to Question 6.

If Yes, do not consider additional use unless it can be accommodated spatially or temporally without degrading wilderness character.

Question 6) Would an increase in recreational commercial services **enhance or protect** wilderness character or meet public and agency need, including meeting the public purposes of wilderness?

☐ **Yes** ☐ **No**

Explain.

If No, stop here. Do not authorize additional use or new uses.

If Yes, go to Scenario 3.

Scenario 3. Potential increase in recreational commercial services.

Identify the level of increase that would meet public and agency need/public purposes, and protect and enhance wilderness character.

- # of trips that would correct an existing concern (e.g. having an outfitter here weekly could mitigate an issue or could report issues; keep trails open, etc.)
- # of trips/clients served that would meet a public or agency need: e.g. increase supporters, serve under- represented groups,
- # of trips/clients that would disperse use where it is desired to alleviate concerns, or type of use that would benefit the resource
- For new uses, consider a small increase to begin; for example 100-200 service days, and monitor effects.