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Draft Recreation & Tourism Resource Assessment

Tongass National Forest Plan Revision



Forest
Service

Alaska
Region

Tongass
National Forest

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Cover Photo: Starrigavan Cabin on the Tongass National Forest.

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Forest Service, Alaska Region

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Introduction

This assessment identifies and evaluates available information about existing conditions, trends and sustainability of recreation settings, opportunities, uses, preferences, access, and scenic character. Conditions and trends are assessed within the plan area as well as in relation to the broader landscape. It provides a summary about the richness of the recreational experiences the Tongass supports — from the experiences that knit together communities and sustain the local way of life to once-in-a-lifetime trips by international travelers — and from heavily-developed sites visited by thousands every year to some of the most remote and wild places in the entire national forest system

Recreation contributes to social and economic sustainability and provides opportunities to connect people with nature. The forest setting has a profound influence on the types of recreation and tourism that take place. The Tongass National Forest encompasses about 17 million acres of forests, mountains, glaciers, rivers, lakes, and over 11,000 miles of coastline. Roads in the region accessible by passenger vehicles are relatively sparse, and the forest is not connected to mainland Alaska or the continental United States by road. Indeed, much of the forest is only reasonably accessible by boat or aircraft, increasing the expense and difficulty of getting to or recreating in many areas of the Tongass landscape. It is in this setting that the myriad forms of recreation on the Tongass take shape.

For the purposes of this report, “recreation” refers broadly to the activities and experiences people seek out on the Tongass National Forest for pleasure, enjoyment, fulfillment, and connection to nature, while “tourism” refers specifically to recreational experiences facilitated by commercial enterprises such as guides, transportation service providers, and the Southeast Alaska tourism industry writ large.

Resource Importance

Recreation is central to the role the Tongass National Forest plays at the regional, national, and global scales. Outdoor recreation is a primary way that people connect with the natural world, and providing recreational settings and opportunities is a vital part of the Forest Service mission to meet the needs of present and future generations (USDA 2010). The Tongass National Forest, the largest unit in the national forest system and by far the largest land manager in Southeast Alaska, plays an especially central role in the communities intimately tied to the forest.

The Tongass National Forest is a globally recognized recreation resource, receiving over two million recreational visits from around the world annually and used for recreation by the approximately 72,000 Southeast Alaska residents who live in close association with the forest (USDA 2019, NVUM data). The benefits that recreation provides to both visitors and residents is an important aspect of the ecosystem services provided by the Tongass National Forest (USDA 2017, Integrating Ecosystem Services). Forest-based recreation is a key component of lifeways in the region, connecting people to each other and their communities, connecting people with themselves, connecting people with local history and cultures, and sustaining livelihoods and traditions (ADNR 2023; Wilmer et al., 2024).

In addition to the importance of recreation to visitors to the Tongass and to those who live in and around the forest, recreation and tourism are primary economic contributors to the region and to the entire state of Alaska (Southeast Conference 2023; ADNR 2023; Alaska Outdoor Alliance 2019; US Department of Commerce 2023). Outdoor recreation demand, already robust on the Tongass, is projected to increase in Alaska and nationally (ADNR 2023; Alaska Outdoor Alliance 2019).

The marine-mountain interface and the size and remoteness of the Tongass is illustrated in Figure 1. Recreation and tourism on the forest are influenced by the increasing economic importance of outdoor

recreation to the regional and statewide economies. The economic activity generated by recreation and tourism is not spread evenly throughout the year, however. The tourism industry has pronounced seasonality, with busy summers, expanding shoulder seasons, and quieter winters.

Even during the busy and generally mild summers the climate of Southeast Alaska poses challenges with a wet climate and large amounts of rainfall. This compounds the difficulties of recreational facility maintenance in a forest as large, remote, and difficult to access as the Tongass.



Figure 1. The Endicott Arm exemplifies the rugged terrain, limited road access, and marine-mountain interface that is central to the Tongass National Forest. USDA Forest Service photo.

In addition, the interface of the marine and terrestrial environments is of critical importance as the thousands of islands that make up the Tongass National Forest are woven into the surrounding marine environment. Marine transportation is a primary means of accessing the forest and a great deal of recreational and tourism activity in the region takes place in the marine environment. Despite the importance of the marine environment to the forest in general and to recreation and tourism in the region specifically, the USDA Forest Service (Forest Service) generally does not have jurisdiction or control over activities taking place in marine waters, including recreational and tourism activities such as scenic cruises that do not touch land managed by the Forest Service.

Resource History and Current Management Direction

Resource History of Recreation and Tourism

Outdoor recreation has been a part of life since people first came to live in the area now called the Tongass National Forest. To this day, people in Southeast Alaska continue to engage in hunting, fishing, taking in the scenery, walking, and boating for pleasure.

The tourism industry in Southeast Alaska began in the late 1800s with the advent of steamships and continued to grow and change as railroads, air travel, and roads increased access to the region. Transportation changes and advances in recreational equipment have also affected how residents access and recreate on the forest, such as the more recent developments of mountain bikes and packrafts. The

cruise industry became the most popular way to visit Alaska in the 1970s and has increased in the years since, from 473,000 cruise passengers visiting southeast Alaska in 1985 to more than 700,000 in 2001 and an estimated 1.7 million in 2023 (Cervený, 2005; Southeast Conference 2023).

Recreation management was not necessarily a focus in forest planning prior to the shift in recent decades with the decline of the regional timber economy, and the rise of tourism as a major economic force in the region. The Tongass Land Management Plan was substantively amended most recently in 2016. The 2016 updates focused primarily on timber management, and largely retained recreation management guidance from the 1997 Tongass Land Management Plan. The result is recreation management direction that is nearly 30 years old and that does not anticipate or wholly address changes in the volume of recreation and tourism taking place on the forest or the current recreational needs and desires of communities interdependent with the forest.

Current Management Direction

Legal and Regulatory Compliance

Current recreation management direction in the 2016 Tongass Land Management plan, as adapted from the 1997 Forest Plan, includes the following elements of general guidance (USDA 2019, Tongass Land Management Plan):

- Provide a range of recreational opportunities within the recreation opportunity spectrum framework
- Emphasize recreation opportunities that are important to local communities as well as to visitors such as those provided through the tourism industry
- Work with partners, other agencies, Tribal governments, and local communities on recreation planning and project implementation as appropriate to achieve the Forest Service mission and fulfill the Tongass National Forest role in Southeast Alaska
- Maintain recreational infrastructure to provide for the health and safety of all users and remove facilities that are no longer needed, are detrimental to the environment, or are not affordable to maintain
- Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska

The interpretation of this general guidance is succinctly expressed in the recreation niche statement, describing the special role recreation plays in the forest (USDA 2021, Recreation Program of Work):

- “The Tongass National Forest has a global and local responsibility to maintain the character and quality of the unique temperate rain forest ecosystem and communities throughout. Historically the Tongass has helped define the cultural, spiritual and economic lives of residents. Whether the public only knows the Tongass exists or visits it via cruise ship interpretive programs, day-use sightseeing and hikes, or overnights in saltwater cabins, it is a symbol of vastness and freedom with settings unsurpassed for scenery and remote experiences. The Forest delivers well thought out concentrated day-use recreation, remote backcountry opportunities and a strong interpretation and education program to support this incredible place!”

Scope and Scale of Assessment

This assessment of recreation on the Tongass National Forest addresses the entire forest at a broad scale. The primary focus is on recreational activity taking place on lands administered by the Forest Service. The marine environment, however, is not in the jurisdiction of the Forest Service but is critically important for recreation on the Tongass — much of the recreation and tourism activity on the forest involves a marine component. Therefore, some topics will only be discussed as they directly relate to Forest Service-administered lands, and some topics (particularly concerning tourism and the economic and environmental impacts of recreation and tourism) will be discussed at a regional level that incorporates the marine environment to some extent.

“Recreation” as a term cannot fully capture the diverse ways people connect to the natural world, or all the reasons people go to the forest for enjoyment. The term may in some ways flatten the complex relationships that those recreating may have with the land. A full exploration of these relationships is beyond the scope of this summary. For forest plan revision purposes, including this assessment, the Forest Service will use the term “recreation” and assess it through the lens of the recreational settings and infrastructure that are managed by the Forest Service and how those settings and infrastructure are used at present and for the near-to-medium term (next 5–20 years) future.

Because recreation is a complex topic it interfaces and overlaps with other issues assessed for forest plan revision, including infrastructure, scenery, subsistence, socioeconomic, and climate change, among others. This recreation report will briefly touch on how each of these topics interact with recreation on the Tongass National Forest. In depth discussions of these topics can be found in other assessment reports.

Status and Trends

This assessment of recreation and tourism on the Tongass National Forest will focus on the current status and foreseeable trends of the following:

1. What the Forest Service Provides: Recreation Opportunities and Access
 - a. The supply of recreation opportunities on the Tongass National Forest
 - i. Recreation opportunity spectrum classes
 - ii. Scenery
 - iii. Developed recreation
 - iv. Dispersed recreation
 - b. Recreation access
 - i. Marine, trail, road, and air access
2. Current Recreation Use of the Forest
 - a. Overall visit characteristics
 - b. Resident recreational use and trends
 - c. Tourism use and trends
 - d. Outfitter and guide use and trends
3. Recreation and Tourism Ecological, Social, Cultural, and Economic Sustainability
 - a. Recreation and tourism ecological, social, cultural, and economic sustainability considerations
4. Primary Trends and Drivers Affecting Recreation and Tourism
 - a. Climate change
 - b. National, statewide, and regional trends in outdoor recreation and tourism

What the Forest Service Provides: Recreation Opportunities and Access

Supply of Recreation Opportunities – The Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) is the Forest Service's system for providing a variety of recreation settings and environments across a national forest. The underlying premise of ROS is that people seek specific settings that are optimal for their chosen activity and the overall recreation experience they desire (USDA 2024; ROS Guide). The Forest Service is required to use ROS to plan for and integrate recreation with other uses across a forest.

Nationally defined ROS classes range from undeveloped, primitive settings to highly developed, urban environments. An activity such as camping would look and feel different and would ultimately result in a very different experience depending on which setting it takes place in. The goal of ROS is to provide for this experiential diversity while respecting the essential nature of each national forest and the landscape's inherent ability to provide different recreational settings.

The nationally defined ROS classes are:

- **Primitive** settings encompass large, wild, and predominantly unmodified landscapes. Their size and configuration create remoteness from the sights and sounds of human activities, management, and development. Signs and other structures are minimal and constructed of rustic, native materials. Encounters with other users is very low, offering visitors the opportunity for solitude, self-reliance, closeness with nature, challenge, risk, and discovery. Many primitive settings coincide with designated wilderness areas. Additional primitive settings may also occur outside of wilderness areas.
- **Semi-Primitive Non-Motorized** settings are characterized by predominantly natural or natural-appearing landscapes. The size of these areas facilitate distance from more heavily used and developed areas, creating a sense of remoteness. Interaction with other users is low. These settings provide opportunities for self-reliance and utilizing wildland skills. Although some roads may be evident, they do not dominate the landscape.
- **Semi-Primitive Motorized** classes are characterized as predominantly natural or natural appearing backcountry settings. Motorized travel by off-highway vehicles or high-clearance vehicles occurs locally or nearby. Motorized routes or trails offer a high degree of self-reliance, challenge, and risk in exploring these large backcountry settings. Mountain bikes, other mechanized equipment, and non-motorized uses are also present locally or nearby. Limited rustic facilities are present for the purposes of visitor safety, sanitation, and resource protection.
- **Roaded Natural** settings are characterized by predominantly natural-appearing settings, with moderate sights and sounds of human activities and development. The overall perception is one of naturalness. Evidence of human activity varies from area to area and may include improved highways and high-maintenance-level roads; developed campgrounds and other recreation sites; small resorts and summer homes; and evidence of other multiple uses and management activities, such as timber harvesting, mining, and watershed restoration activities. Roads, motorized equipment, and vehicles are common locally or nearby in this setting. Non-motorized uses are also present. The density of use is moderate except at developed sites, where concentrations of use are higher. Regulations pertaining to user behaviors are common but generally less restrictive than those in the Rural and Urban ROS classes.
- **Rural** settings are characterized as modified natural environments. While these landscapes often contain patterns created by management activities, there is a dominant sense of open greenspace. Facilities are common and may include: resorts and summer home complexes; administrative

sites and work centers; and highly developed campgrounds, interpretive sites, trailheads, picnic areas, and other recreation facilities. The sights and sounds of human activity and management are readily evident, and the level of interaction with other users ranges from moderate to high.

- **Urban** settings are characterized as highly modified landscapes, dominated by structures and other infrastructure. Clustered facilities contain amenities for user convenience and comfort. There is a preponderance of onsite regulations that direct and limit the behavior of visitors. Very high and concentrated use levels are common. These settings are typically small in overall size and not common on National Forest System lands. Large ski areas, visitor centers, and resorts are sometimes classified as urban ROS settings.

The ROS class distribution across the Tongass National Forest is summarized in Table 1 below. The large size and remoteness of much of the Tongass means that the majority of the forest falls into the Primitive or Semi-Primitive Non-Motorized ROS classes (88 percent of total forest acreage), with a smaller percentage of the forest in the Semi-Primitive Motorized or Roaded Natural ROS classes (12 percent).

Table 1. Acreages allocated to each ROS class as desired under the 2016 Forest Plan and from a 2024 ROS inventory, rounded to the nearest 1,000 acres

Recreation Opportunity Spectrum Class	2016 Desired Approximate Acres	2016 Desired Percent of Total Area	Inventoried 2024 ROS Class Approximate Acres	Inventoried 2024 ROS Class Percent of Total Area
Primitive	10,346,000	62	8,487,000	51
Semi-Primitive Non-Motorized	3,046,000	18	6,170,000	37
Semi-Primitive Motorized	1,450,000	9	1,700,000	10
Roaded Natural	157,000	1	368,000	2
Roaded Modified ¹	1,675,000	10	--	--
Rural	6,000	<1	6,000	<1
Urban	500	<1	200	<1

Table 1 compares the desired acres in each class in the 2016 Forest Plan and the actual number of acres in each class as inventoried in 2024. Differences between the 2016 desired conditions and the 2024 current conditions are due to several factors. First, actual conditions on the ground in 2024 may differ from the desired conditions originally developed in 1997. For example, some forest roads have been closed in the intervening decades, and levels of motorized use, including by boats and aircraft, may have increased in some areas and decreased in others.

Second, the 2024 ROS inventory did not include the Roaded Modified class. As described in footnote 1, Roaded Modified is a subclass that is only used on some forests and is not included in the national ROS inventory mapping protocols (USDA, 2019). During development of the revised forest plan, the Forest Service will decide if Roaded Modified is still a ROS class that is relevant to desired future conditions on the Tongass. Most acreage that was included as Roaded Modified in the 2016 plan was classified as Semi-Primitive Motorized, Roaded Natural, or Semi-Primitive Non-Motorized in the 2024 ROS inventory.

¹ Roaded Modified is a subclass of the nationally-defined Roaded Natural ROS class that is only used on some national forests. On the Tongass, the Roaded Modified ROS subclass indicates areas that, compared to the Roaded Natural ROS class, have a greater concentration of human activity, more management control of user activity (parking areas, barriers, signs), and a greater degree of development. The Roaded Modified subclass differs from the Rural ROS class in that it is less suitable for passenger vehicle travel and has less complex or obvious development and a lower overall concentration of use than the Rural class does. Roaded Modified is not included in the national ROS inventory protocols, and therefore was not included in the 2024 ROS inventory for the Tongass.

Finally, national ROS mapping protocols have been updated substantially in recent years. The most important changes include: the addition of terrain to the mapping model; improved data sources, especially for marine boat traffic and air traffic; and overall improved accuracy of GIS mapping technology and data inputs. Primary data sources informing the 2024 ROS inventory include open roads and motorized trails, rivers and lakes that receive motorized use, marine vessel use, heliports, backcountry landing sites, common air tour routes, and motorized travel management areas within and up to 3 miles outside the forest boundary (USDA, 2019).

The 2024 ROS class inventory is a *snapshot of current* recreation settings and environments across the Tongass. The revised forest plan will include *future desired conditions* for ROS classes on the forest. These future desired conditions may reflect current inventoried ROS classes in some areas, and may call for a shift into a different ROS class in other areas.

Scenery

Under the Scenery Management System, the Forest Service strives to maintain the landscape character and scenic integrity of forests to ensure the enjoyment of high-quality scenery for this and future generations (USDA 1995). Additional discussion of the Scenery Management System and its implementation on the Tongass National Forest is in the Scenic Resources assessment report. The discussion below will focus on the intersection between scenery and the recreational opportunities available on the forest.

The Tongass and other forests in the National Forest System are managed to be not only functional but beautiful as well. This is intended in part to instill a sense of place in recreators and an appreciation of the unique character of the landscapes in which they recreate. The sweeping views of mountains, glaciers, rivers, coastline, and forested landscapes are critically important to the recreational experiences available on the Tongass and these views of Forest Service-managed land are recognized as a key characteristic of the entire Southeast Alaska region (Southeast Conference, 2023). Over half of visitors to Alaska (51%) cite scenic beauty as a reason for visiting the state, and over half of the state's visitors (56%) travel to Southeast Alaska in search of scenery available nowhere else (ATIA, 2023). During public engagement, Southeast Alaska residents have also cited the scenery provided by the Tongass as important to their recreational pursuits and sense of place (USDA 2024, Summaries of public feedback).

Each of the Recreation Opportunity Spectrum classes described above considers scenic quality and scenic integrity or the degree to which the area appears modified by development. The majority of the Tongass that is in the Primitive and Semi-Primitive Non-Motorized classes (75% of total forest acreage) provides views of unmodified, natural, or wild landscapes with high scenic integrity. On the over 5.7 million acres of wilderness on the Tongass, the Forest Service is required by the 1964 Wilderness Act to provide outstanding opportunities for solitude or primitive and unconfined recreation in undeveloped settings without permanent improvements or human habitation.

Not only does the scenery offered by the forest affect recreation on the Tongass, but recreation can affect the scenery as well. Recreation patterns across the forest are important for determining how scenery is managed, as recreation areas and trails are often deemed Visual Priority Routes, locations from which people are known to view the forest. These areas are often managed to provide higher degrees of scenic integrity, shown in Figure 2. Conversely, recreation activity and infrastructure may degrade the quality of scenery in some areas. See the Scenic Resources assessment report for more information.



Figure 2. The Tongass offers exceptional scenery and millions of acres of undeveloped recreation opportunities. Hiking near Triangle Peak. USDA Forest Service photo by Adam DiPietro.

Developed Recreation Opportunities

Developed recreation opportunities take place in areas with some level of development, infrastructure, or amenities that facilitate public enjoyment of the forest and resource protection. Developed recreation sites can include campgrounds, cabins, picnic sites, day use areas, trailheads, visitor centers, and other areas where developed facilities are important to the recreational experience. These facilities are often the first encounter recreators have with national forests and can serve as a portal for further exploration and connection with the outdoors.

Developed recreation opportunities on the forest are provided by cabins, boating sites, trailheads, campgrounds, wildlife viewing sites, visitor centers, and other facilities across the forest. The types and number of developed recreation facilities offered by the Tongass are summarized in Table 2 below (USDA 2024, NRM data).

Table 2. Developed recreation facilities on the Tongass National Forest (USDA Forest Service, 2024 NRM data)

Developed Recreation Facility Type	Number
Cabin	145
Three-sided Shelter	44
Picnic Site	38
Boating Site	35
Trailhead	28
Campground	23
Wildlife Viewing Site	12
Camping Area	7
Interpretive Site	6
Day Use Area	5

Developed Recreation Facility Type	Number
Interpretive Visitor Center	4
Information Site / Fee Station	2
Swimming Site	1

There are by far a greater number of public use cabins (145) across the forest than there is any other type of developed recreation facility, indicating the importance of cabin use (Figure 3) to recreation on the Tongass. Indeed, feedback received during 2018-2024 forest planning processes consistently emphasized public appreciation for the cabins provided by the Tongass. Cabin usage across the forest is uneven, with some cabins occupied over 75% of the time (Dan Moller, John Muir, and Windfall Lake cabins near Juneau) and some remote cabins receiving one or two visits per year (USDA 2024, NRM data).



Figure 3. Swan Lake cabin on the Petersburg Ranger District, Tongass National Forest. USDA Forest Service photo by Tiffany Christensen.

The over 300 developed recreation sites are spread across the Tongass National Forest, many in locations only accessible by boat or air. The large geographic scale of the forest and the limited access to many developed recreation sites poses challenges for facility maintenance, including increased expense due to the need for air or boat transportation services and the training required to use these services. The challenge of developed recreation facility maintenance on the Tongass is compounded by the region's overall wet climate and soils, which rapidly deteriorate outdoor facilities, particularly those constructed with wood or organic materials (Alaska Trails 2022). Any increase in recreational use, as is expected in Alaska (ADNR 2022), also increases wear and tear on developed recreation facilities and increases maintenance needs.

Given these challenges, the Forest Service has typically had difficulty staffing adequately to maintain all developed recreation facilities to a high level. Maintenance partnerships and contracts have been used with some success to fill this need, but cost-effective contract services for maintenance, especially for remote developed recreation sites, can be difficult to acquire (USDA 2020).

Mendenhall Glacier Recreation Area

The Mendenhall Glacier Recreation Area (MGRA) is the most highly developed recreation site on the Tongass. The MGRA encompasses roughly 5,800 acres approximately 12 miles north of downtown Juneau and includes a visitor center, trails, and a campground. The MGRA is also the most frequently visited site on the Tongass, receiving approximately 700,000 visitors a year. Approximately 85 percent of these visitors arrive with commercial service providers, including cruise ships and independent tour companies (USDA 2023, Mendenhall Facility Improvements EIS).

Visitation levels to the MGRA have increased in recent years and are expected to continue increasing as the cruise ship tourism season expands earlier into the spring and later into the fall and as cruise ships carry more passengers. Increasing visitation has strained the capacity of the MGRA, at a time when the landscape itself is rapidly changing due to the receding Mendenhall Glacier. These circumstances led the Forest Service to conduct a planning effort culminating in a 2019 master plan for the area (USDA 2019, Mendenhall Glacier Master Plan) and a 2023 Record of Decision authorizing implementation of some aspects of the 2019 plan (USDA 2023, Mendenhall Glacier Visitor Facility Improvement Projects Record of Decision).

Current management direction for the MGRA resulting from these planning efforts includes:

- Facility improvements to parking lots, existing trails and the historic Visitor Center
- Construction of a new welcome center and visitor plazas; trails and trailheads; and public use cabins
- Habitat restoration
- Updates to management unit boundaries and Recreation Opportunity Spectrum class designations
- Updates to visitor capacity estimates and commercial use allocation to allow for increased visitation

Dispersed Recreation

Dispersed recreation includes all of the recreational activity that takes place on the Tongass away from developed recreation sites or facilities. This type of recreation generally does not have associated Forest Service fees and has little or no Forest Service-managed infrastructure.

The vast area and remote nature of much of the Tongass provides an expansive setting for dispersed recreation. In past years, nearly 2,000 areas on the Tongass have been identified as being popular for dispersed recreation. This testifies to the importance of recreation beyond the developed areas of the forest. These dispersed recreation sites include undeveloped campsites, locations popular for freshwater fishing, and good anchorages along the forest coastline.

Dispersed recreation on the Tongass also takes place beyond these identified sites, in the millions of acres of undeveloped landscape on the forest. Most of these areas and identified dispersed recreation sites are not monitored regularly by the Forest Service, however, the condition of approximately 550 sites located in designated wilderness areas are monitored on a five-year cycle. Reports from 2020 and 2021 indicate monitored sites in wilderness have relatively low impact on the surrounding environment, meet ROS class guidelines, and offer opportunities for solitude. Influences from outside of the wilderness area and outside of the jurisdiction of the Forest Service, primarily boat and airplane traffic, frequently impact the recreational experience at these sites by introducing mechanical noise (USDA 2021, Biennial Monitoring Report).

Public feedback received during 2018-2024 engagement efforts related to recreation on the Tongass highlights the importance of dispersed recreation in undeveloped areas of the Tongass to many of the people recreating on the forest. One of the themes from such feedback was a desire to focus development in high-use areas of the forest in order to preserve solitude, wilderness, and remote, unmanaged experiences. These types of recreational experiences are central to the connection that many forest users have to the Tongass, and to the lifestyles of many Southeast Alaska residents (USDA 2024, Summary of public feedback). Additional information about how the forest is used for different types of dispersed recreation are in following sections of this report.

Recreation Access

The Tongass National Forest’s immense size, relatively remote location and limited road system that generally does not connect to areas outside the Southeast Alaska Region make recreational access to the Tongass unique in the national forest system. Indeed, many communities and recreational opportunities on the forest are only reasonably accessible by boat or air. This means that airplane, helicopter, and especially boat recreational access to the forest play an important role in addition to roads and trails.

Marine Access

Because many recreators on the Tongass arrive via the 11,000 miles of coastline, the Forest Service provides facilities enabling this marine access. The types and numbers of these marine access facilities are summarized in Table 3 (USDA 2024 NRM data).

Table 3. Marine access facilities used for recreation on the Tongass National Forest (USDA Forest Service, 2024 NRM data)

Facility Type	Number
Log transfer facility ²	51
Bouy or anchorage	43
Dock	24

Recreation users accessing the forest via the marine environment tend to be highly mobile. Opportunities to encounter other parties are much greater for these highly mobile users than they would be if each party stayed in one location for the duration of its outing. Conversely, this mobility also allows people to avoid each other. Groups tend to disperse themselves geographically, with many groups moving around to seek areas without other people. If a bay or anchorage appears crowded, a group may avoid entering that bay.

In recent years, saltwater boat launches in Southeast Alaska have been reported as extremely overcrowded, and additional boat launches have been identified by the region’s residents as a needed recreation facility improvement (ADNR 2023, p. 3-32).

Although not managed by the Forest Service, the Alaska Marine Highway System and the ferries it operates provide crucial transportation across Southeast Alaska and to the communities that serve as portals for recreational access to the Tongass. Some communities have expressed concerns about decreases in the availability of ferries in the region and the access they provide to other communities and opportunities for recreation on the Tongass (Huber-Stearns et al. 2020).

² Log transfer facilities were originally constructed to move cut timber from land to the saltwater or boats for transportation. Although they were not intended for recreational forest access, many log transfer facilities not in current operation for timber are used by boats as a point of entry onto the Tongass for recreation and other purposes.

Trail Access – Summer

The Tongass National Forest provides over 900 miles of trail accessible during summer months. These trails include decommissioned roads adapted for ATV or OHV use, rustic hiking trails, fully developed trails accessible to people of varying abilities, and trails developed for non-motorized watercraft (USDA 2024, NRM data). Table 4 summarizes the types of trails available during summer months on the Tongass and Table 5 defines the listed trail development levels.

Table 4. Length of trails by designed use and development level on the Tongass National Forest (USDA 2024, NRM data)

Trail Type and Development Level	Length (miles)
All-Terrain Vehicle	
Moderately Developed	24
Developed	430
Highly Developed	15
Total ATV Trail Miles	470
Hiking	
Minimally Developed	54
Moderately Developed	113
Developed	226
Highly Developed	23
Fully Developed	3
Total Hiking Trail Miles	418
Non-motorized Watercraft	
Moderately Developed	31
Developed	11
Total Non-motorized Watercraft Trail Miles	43
Bicycle	
Developed	1
Highly Developed	<1
Total Bicycle Trail Miles	1

Table 5. Forest Service trail development level definitions

Trail Development Level	Trail Development Level Definition
Minimally Developed	Tread is intermittent and often indistinct, may require route finding, single lane with no allowances constructed for passing, obstacles are often substantial and provide increased challenge, steep grades, structures minimal to non-existent, typically no bridges, signage infrequent
Moderately Developed	Tread continuous and discernable but narrow and rough, single lane with minor allowances constructed for passing, obstacles may be common and provide challenge, limited structures, bridges as needed, limited route signage
Developed	Tread continuous and obvious, single lane with allowances constructed for passing, obstacles may be common but not substantial, structures may be common and substantial, signage common
Highly Developed	Tread wide and relatively smooth with few irregularities, single lane with allowances constructed for passing, double lane where needed, obstacles infrequent and insubstantial, structures frequent and substantial, bridges as needed, trailside amenities may be present, signage and information common
Fully Developed	Tread wide and generally uniform, single lane with frequent turnouts, double lane where needed, obstacles not present, structures frequent or continuous, trailside amenities may be present, signage and information common

The most popular trails tend to be those that access alpine areas (Figure 4), a specific destination such as a glacier, lake, waterfall, or scenic overlook, and those used to access other infrastructure such as cabins. Many remote trails receive very little use and tend to be relatively unmaintained. However, some remote trails, such as those used by outfitter-guides (such as Cascade Creek or the WWII Canon trail) get heavy use despite their remote location.



Figure 4. The John Muir trail outside of Juneau demonstrating a need for constructed trail features through the wet terrain of the Tongass National Forest. USDA Forest Service photo by Marie Messing.

The Forest Service does not consistently monitor crowding on trails but does collect encounter rates reported by outfitters or guides using forest trails. These reported encounter rates are generally low; however, some trails tend to get heavier use and therefore provide a greater likelihood of encountering other users. Trails with high reported encounter rates include the Lake Eva trail, the Cascade Creek trail in Thomas Bay, the George Island WWII Canon trail, and the trails in the vicinity of the Mendenhall Glacier Visitor Center (USDA Forest Service, 2024 NRM special uses data).

Because the Forest Service is the primary land manager in Southeast Alaska and many communities are surrounded by the Tongass National Forest, trails close to population centers and popular for community use may be managed by any one of several jurisdictions (Forest Service, municipality, borough, or state) and may or may not connect with other Forest Service trails (Alaska Trails 2022, p. 13). No matter which entity manages trails close to communities, these trails often receive a high degree of use for activities such as exercise or dog walking by residents, as well as use by visitors or commercial guides.

The 2022 Tongass National Forest Sustainable Trails Strategy identifies increased trail connections between communities and the Tongass as a recurring need throughout the region. Meeting this need would require work across jurisdictions, highlighting the opportunity for collaborative trail planning and partnerships (Alaska Trails 2022, p. 18-22). Additional identified opportunities for improving the trail system on the Tongass National Forest include trails accessing the alpine, an increase in trail type or development level diversity, trails to and between cabins and other recreational infrastructure, more water trails, and trails that access particularly noteworthy natural or cultural features (Alaska Trails 2022, p. 16).

Taking advantage of these opportunities to improve the trail system on the Tongass would require overcoming several challenges. One of the primary challenges facing the Tongass trails program is the difficulty and expense of trail construction and maintenance given the wet soils and climate, the extent of the current trail system, and the difficult access to many areas of the forest (Alaska Trails 2022, p. 12; Figure 5). Trails in the wet climate of Southeast Alaska generally require a high degree of trail infrastructure, including imported aggregate substrate and drainage management features such as culverts, water bars, bridges, and boardwalks.



Figure 5. Wrangell Ranger District trail crew repairs a trail after winter blowdown and erosion. USDA Forest Service photo by Jennifer Kardiak.

As an illustration, trails in the Alaska Region of the Forest Service (Chugach and Tongass national forests) have approximately 13 times as many of these features than any other region in the Forest Service, despite having only a fraction (5-13%) of the length of trails of other regions (USDA 2024, NRM data). All this infrastructure involves both the initial expense of construction and ongoing maintenance; trails without regular maintenance quickly fall into disrepair in the challenging climate of the Tongass. Trails of different development levels incur different types of costs. More highly developed trails tend to need higher upfront investment to construct but less maintenance over their lifespan, while lesser-developed, rustic trails require more maintenance over time to keep them in usable condition despite a lower initial construction cost.

Trail Access - Winter

In addition to trails designed for summer uses, the Forest Service also maintains about 29 miles of trail specifically for winter use on the Tongass. These trails are summarized in Table 6 (USDA 2024, NRM data).

Table 6. Winter trail types on the Tongass National Forest (USDA Forest Service 2024, NRM data)

Trail Type	Length (miles)
Cross Country Ski	18
Snowmachine ³	11
Total Winter Trail Miles	29

In the national forests of Alaska, the Alaska National Interest Lands Conservation Act of 1980 (ANILCA) allows for snowmachine⁴ use during periods of adequate snow cover for traditional uses and travel to and from villages and homesites (ANILCA 1110(a)). The Forest Service has defined some activities that may commonly be considered recreation as a traditional use on the Tongass National Forest. That being said, creation or designation of trails or areas specifically for snowmachine use requires the Forest Service to conduct a travel management process complying with the 2012 Travel Management Rule (36 CFR 212).

Given the relatively small number of miles of winter trails across the Tongass, much winter recreational use takes place beyond trails specifically maintained for winter use. This may include both motorized and non-motorized use of snow-covered summer trails and roads and use of areas without any trails at all. Across much of the forest there is a marked decrease in tourism activity in the winter and most recreational use is by residents. Popular activities include snowmachining, skiing, snowshoeing, ice skating, northern lights viewing, glacial cave exploration, ice fishing, and accessing recreational traplines (USDA 2024, Summary of public feedback).

The overall lesser degree of recreational use levels in the winter and lesser degree of maintained infrastructure supporting that use poses different challenges than those created by the summer trail system. Near some populous communities including Juneau, conflicts can emerge between motorized and non-motorized winter users accessing the same areas of the forest. Similarly, crowding at winter trailheads is not uncommon during periods of optimal conditions as recreators flock to the relatively few trails that are specifically maintained for winter use.

Roads as Recreational Access

The history of logging on the Tongass National Forest leaves a legacy of over 1,500 miles of roads potentially available for public use. These roads are valued by residents and visitors as recreation resources in and of themselves and for the access the roads provide to other desired recreation experiences (Huber-Stearns et al. 2020, p. 40). Most of these roads (over 1,000 miles of the total) are suitable only for high-clearance or off-highway vehicles. Table 7 lists the number of miles of road available on the Tongass at different maintenance levels.

Table 7. Length of roads available for recreation on the Tongass at different maintenance levels (USDA 2024, NRM data), not including additional non-forest-service roads that provide access to the forest.

Road Maintenance Level	Length (miles)
High clearance vehicles only	1156
Suitable for passenger cars	492
Moderate degree of user comfort	28
High degree of user comfort	2
Total	1678

³ “Snowmachine” is another word for snowmobile that is in common use across Alaska. Snowmachine is also the term used in the Alaska National Interest Lands Conservation Act and is used here as well.

Roads on the Tongass that are more highly developed and provide a greater degree of user comfort tend to receive more recreational use, with a lower overall proportion of recreational use on roads only open to high clearance vehicles or OHVs. The most popular roads tend to be those that provide good access to resources such as hunting or fishing areas, those that access unique trails, or those that provide scenic views. Opportunities for driving loops are currently limited on the Tongass but tend to be popular. Both residents and commercial guides use roads for recreation. Local residential use of roads ranges from taking advantage of the opportunity to get out of town, driving for pleasure, accessing subsistence resources, recreational OHV use, or simply using the roads as transportation to other recreational opportunities. Additional information on Tongass National Forest roads is in the *Infrastructure* assessment report.

Air Access

The Tongass National Forest maintains five airstrips, all within the northern section of the forest on the Yakutat Ranger District. Under the Alaska National Interest Lands Conservation Act (ANILCA), privately-operated fixed wing aircraft may also land elsewhere on the forest such as on gravel bars and other durable surfaces, though these are limited in availability. Privately-operated ski plane landings on snow surfaces would also be allowed under ANILCA for traditional activities and for travel to and from villages and homesites. Floatplanes are commonly used to access lakes in backcountry areas of the forest. Many of the public use cabins on the Tongass are located on lakes that are only realistically accessible with a floatplane. Lakes must be of sufficient size to accommodate floatplane access.

Helicopters are another form of air access to the forest that has grown in popularity in recent years. Commercial helicopter landings on the Tongass require a permit from the Forest Service. In the years 2019 and 2023 (the most recent years without noticeable Covid-related effects on visitation levels), approximately 100 visitors participated annually in heli-ski tours accessing the Tongass, and an average of almost 14,000 visitors participated in helicopter landing tours on the forest each year (USDA 2024, NRM special uses data).

Forest staff report that recent years have seen a decrease in the overall availability and an increase in the cost of air transportation or air taxi services in the region. This affects remote recreation access for those without private aircraft.

Current Recreation Use of the Forest

Overall Recreation Visit Characteristics

The Forest Service uses the National Visitor Use Monitoring Program to collect data on the volume and nature of visitation for each National Forest. The most recent data for the Tongass National Forest was collected in 2016–2019 (USDA 2019, NVUM data).

The Tongass receives an estimated 2.3 million annual recreation visits every year. Most of those visits take place at developed day use sites or in undeveloped areas of the forest. This recreational use is not spread evenly across the forest — the Juneau Ranger District combined with the Admiralty National Monument receives the most (over 1 million visits annually), while the Sitka and Hoonah Ranger Districts together receive the least (264,000 visits total between the two districts annually, as of 2019).

The fact that the Tongass is an important recreation resource for both area residents and visitors from outside of Southeast Alaska is reflected in the demographics of forest recreational users. Recreational visits to the forest are split almost evenly between local residents (people coming from within 25 miles of the forest) and people coming from far away (visitors from over 500 miles away from the forest).

Similarly, people who use the forest for recreation are split almost evenly between those who visit the forest only 1–5 times per year (many of whom are likely coming from a great distance), and those who recreate on the forest 51–300 times per year (many of whom likely live close to the forest) (USDA 2019, NVUM data).

Overall, the people recreating on the Tongass are satisfied with their experiences. Forest users report being the most satisfied with employee helpfulness, scenery, and the value they get for fees paid (average score on these metrics 4.9 out of 5, with 5 being very satisfied). Recreators report being the least satisfied with recreation information availability (score of 4.3 out of 5) and the adequacy of signage (score of 4.4 out of 5) (USDA 2019, NVUM data). This indicates an opportunity for the Forest Service to improve education, information sharing, and communication regarding recreational opportunities across the forest.

Table 8 displays the recreational activities that people most reported engaging in while visiting the forest. The column listing the percentage of visits with the activity as the primary reason for the visit indicates how central each activity is for motivating a visit to the Tongass. The column listing the percentage of visits where each activity took place indicates how commonly people engage in that activity, whether or not that activity was the primary reason motivating their use of the forest.

Table 8. Recreational activities on the Tongass National Forest by percent of visits with each activity as a primary reason for the visit and by the percent of visits participating in each activity (USDA 2019 NVUM data)

Activity	% with Activity as Primary Reason for Visit	% of Visits Participating in Activity
Hiking/walking	34	67
Viewing natural features	32	56
Nature center activities	7	36
Fishing	5	7
Viewing wildlife	4	39
Hunting	2	3
Nature study	2	6
Relaxing	2	20
Gathering forest products	2	5
Driving for pleasure	1	5
Picnicking	1	2
Other activities (e.g., camping, cross country skiing, bicycling, backpacking)	8	16

The most popular recreational activities on the Tongass overall are hiking or walking, viewing natural features, viewing wildlife, and nature center activities. Hiking or walking and viewing natural features are also the most common primary reasons for coming to the Tongass, suggesting that these activities are both popular (frequently engaged in) and important to recreators (primary reasons for visiting). Activities such as relaxing are engaged in by many forest users (20% of all visits) but are not a primary reason for coming to the Tongass (only 2% of visits have relaxing as a primary motivation). Nature center activities are similarly popular (included in 36% of all visits), but not an important reason for a forest visit (primary reason for 7% of visits). Fishing and hunting, on the other hand, are not participated in by a large number of forest users (7% and 3%, respectively), but for those engaging in these activities, fishing and hunting also tend to be the primary reason for their visit to the forest (fishing is the primary reason for 5% of forest visits, hunting the primary reason for 2% of visits).

The number of forest users engaging in fishing (Figure 6) and hunting may be dwarfed by the numbers of visitors experiencing areas such as the Mendenhall Glacier Recreation Area, but these raw numbers can't fully illustrate the importance of fishing and hunting on the Tongass, both for regional residents and for visitors from afar. Commercially guided fishing and hunting trips serve thousands of visitors every year and contribute millions of dollars to the regional economy – in 2011, wildlife hunting and viewing generated 2,463 jobs in Southeast Alaska and \$138 million in labor income, and residents and visitors spent a combined \$92 million on hunting alone (ADFG 2014, p. 20-24; Alaska Professional Hunters Association 2014, p. 11; Trout Unlimited 2010, p. 12). Southeast Alaska supports 16% of all guided hunting trips in Alaska (Alaska Professional Hunters Association 2014, p. 11). As visitation to the Tongass has grown over the last decade, these economic impacts have likely grown as well.



Figure 6. Flyfishing on the Craig and Thorne Bay Ranger District of the Tongass National Forest. USDA Forest Service photo by Alexandra von Bergman.

Hunting and fishing are also of crucial importance for residents of Southeast Alaska. Much of this resident hunting and fishing is more accurately characterized as subsistence, for rural residents, or a traditional way of life, rather than recreation. For more information about subsistence hunting and fishing by Southeast Alaska residents, please see the Subsistence and Other Harvest Assessment section. Some of the most important species sought for both resident and visitor recreational hunting and fishing include salmon, trout, dolly varden, Sitka deer, moose, mountain goat, black and brown bears, waterfowl, and upland gamebirds.

In addition to the recreational activities tracked by the National Visitor Use Monitoring program, there are several activities that are growing in popularity and that may emerge as more important recreational activities on the Tongass in the near future. These growing recreation trends include helicopter-supported skiing, e-bikes, recreational drone use, packrafting, backcountry skiing or mountaineering, and a desire for more water trails connecting areas across the forest (USDA 2024, Summary of public feedback). In addition to improvements in recreation equipment, recent years have brought an explosion of information available on the internet regarding recreational opportunities, routes, and trip reports from forest users. This information availability facilitates independent recreation and can essentially make remote areas of the forest less out of reach for some forest users. Overall, changes in recreation equipment such as the

development of packrafts and more powerful jet boats and snowmachines, as well as increased information sharing about recreation on the Tongass facilitate greater access to the forest and have the potential to change the location, timing, and type of recreational use that different areas of the forest receive.

Southeast Alaska Resident Forest Recreation

Residents of the communities surrounded by the Tongass National Forest have recreational use of the forest woven into their way of life. People who live near the forest make approximately half of all the recreational visits to the forest (nearly 1 million recreational visits) despite being relatively few in number (approximately 72,000 regional residents). Approximately 99% of Southeast Alaska residents report participating in outdoor recreation (ADNR 2023, Appendix 3). This frequent use by Southeast Alaska residents speaks to the centrality of forest recreation to the lifestyles of many people living in the region.

Southeast Alaska residents engage in all manner of recreational activities on the forest. Popular activities include, but are not limited to, using public use cabins, hiking on trails, camping, visiting hot springs, kayaking, sportfishing, dog walking, biking, skiing, gathering, and bird watching (USDA 2024, Summary of public feedback). It is also important to note that many regional residents appreciate recreation on the Tongass for the opportunities such recreation provides for reflection, artistic pursuits, and connection to place, spirituality, self, and others. The freedom to explore the forest without permits or direct management oversight is valued by many Southeast Alaska residents (USDA 2024, Summary of public feedback).

As described above, Southeast Alaska residents make frequent use of the forest for fishing, hunting, and gathering forest products. Much of this use is more accurately described as subsistence activities for rural residents or traditional ways of life, rather than as strictly recreational activity without a connection to sustaining life in the region or providing for self, family or community. For more information about subsistence use of the Tongass, please see the Subsistence and Other Harvest assessment report. One way that recreation intersects with subsistence on the Tongass is how recreation infrastructure, especially public use cabins, supports subsistence use. Many subsistence users rely on public use cabins, roads, trails, docks, and other recreation access Forest Service-provided infrastructure to get out onto the forest for fishing, hunting, or gathering. In that way, the recreation and access infrastructure that the Tongass provides, and the extent to which the forest is able to maintain that infrastructure, affects not only recreation and tourism use of the forest, but subsistence use as well.

The Tongass National Forest conducted public outreach on recreation-related topics during 2018–2024. Many Southeast Alaska residents provided feedback on the types of recreation experiences they seek on the forest, ways that the Forest Service can support the recreation economy, and changes or improvements needed to forest recreation infrastructure, among other topics. Some of the important themes to emerge from these conversations include: a desire for diverse recreational opportunities across the forest; the importance of recreational infrastructure and the need for maintenance of existing infrastructure; the need to minimize recreational impacts on subsistence opportunities; a desire for increased education on responsible recreation; a desire for increased flexibility in permitted uses on the forest; the need to preserve the natural environment and wilderness character of the forest; and the need for balance between use, preservation, local recreational use of the forest, and forest-based tourism (USDA 2024, Summary of public feedback).

During the creation of the 2023 Statewide Comprehensive Recreation Plan, over 25% of surveyed Southeast Alaska residents cited a lack of supporting infrastructure as a barrier to outdoor recreation. The most desired infrastructure improvements included more trails accessible to individuals with disabilities;

more easy, well signed trails that access natural areas; more public use cabins and more of those cabins connected by trails; and more backcountry hiking, skiing, or biking trails (ADNR 2023, Appendix 3).

Tourism Current Status and Trends

Southeast Alaska, including the Tongass National Forest, is a critical component of the entire statewide tourism landscape. The Southeast Alaska region, approximately 80% of which is managed by the Forest Service, receives the highest percentage of the total 2.7 million annual out-of-state visitors across all regions in Alaska, and four of the top five most visited destinations are Southeast Alaska cruise ship stops including the towns of Juneau and Ketchikan (ADNR 2023; ATIA 2023, Tourism Impact Model). Two thirds of all the visitors to the state of Alaska (67%) go to the Inside Passage, the marine route that winds through the Tongass National Forest (ATIA 2023, Tourism Impact Model). Southeast Alaska is, in short, a heavily-touristed region in which the Tongass is the largest land manager.

Types of Tourism in and Around the Tongass

The tourism activities that take place in and around the Tongass National Forest can be grouped into a few broad categories: large and small cruise ships, outfitter guides, cultural tourism, and transportation services and scenic flights.

These broad categories of tourism activities in and around the Tongass are discussed briefly below. It is important to note that the Forest Service only exercises jurisdiction over activities that take place on the Tongass National Forest. In other words, the Forest Service is generally only able to directly manage via special use permits those tourism activities that take place on the forest itself. Tourism activity that takes place on state, municipal, or private property or in the marine environment and that does not take place on the Tongass National Forest, such as the large cruise ship visitation or guided saltwater fishing trips, are not managed by the Forest Service.

Large (generally greater than 1000 passengers) and small (generally fewer than 1000 passengers) cruise vessels (Figure 7) bring most of the visitors to Southeast Alaska each year. While many cruise passengers never step foot on the Tongass National Forest, viewing the scenic beauty of the forest from the cruise ship and watching forest wildlife is a key part of the Alaska cruise experience. When cruise passengers do access the forest, they frequently engage the services of outfitters or guides to participate in activities such as visiting the Mendenhall Glacier Recreation Area or other forest visitor centers, walking tours, guided hikes, and dogsled tours on glaciers within the national forest.



Figure 7. The Southeast Alaska Discover Center, operated by the Forest Service in Ketchikan. A cruise ship can be seen in the background. Many Tongass National Forest visitors arrive via cruise ship and go to forest visitor centers. USDA Forest Service photo by Tom Iraci.

Outfitters and guides provide equipment and knowledgeable expertise to visitors during guided recreational experiences on the Tongass. Approximately 180 outfitter or guide operators serve over 575,000 clients annually, participating in activities including hiking, wildlife viewing, hunting, and fishing. When operating on the Tongass National Forest, outfitters and guides are managed by the Forest Service via special use permits, and any outfitter or guide activity on the forest must follow Forest Service rules and regulations. Because this aspect of tourism on the Tongass is directly regulated by the Forest Service, outfitter and guide use of the forest is discussed at greater length below.

Transportation service providers such as bus companies, water taxi services, or flight operators may work in concert with outfitters and guides to transport guests around Southeast Alaska and onto the Tongass National Forest. These transportation service providers may also operate independent of other tourism providers, operating their own flightseeing trips, scenic boat tours, or bus tours. When operating on land managed by the Forest Service, transportation service providers are managed via special use permits much as outfitters or guides are, and all provider activities must comply with Forest Service rules and regulations. When operating outside of Forest Service jurisdiction, such as flightseeing trips that do not land on the Tongass or boat trips that stay in the marine environment, these service providers and their activities are generally not managed by the Forest Service.

Some communities in Southeast Alaska engage and educate visitors and tourists with cultural tourism experiences. The Alaska Native Heritage Center defines cultural tourism as “educating visitors about traditional Alaska Native knowledge and ways of life while providing for the perpetuation of culture by offering opportunities to experience and learn about Alaska Native peoples, cultures, and history” (ANHC, 2022). Cultural tourism activities include cultural demonstrations, Alaska Native arts exhibitions, museums, and other attractions focused on the rich cultures, traditions, and history of the Tongass region. In 2016, approximately 12% of all visitors to Southeast Alaska participated in Alaska Native cultural tours or activities (ADOC, 2017). In the years since then, many communities and

organizations have sought to increase opportunities for cultural tourism in Southeast Alaska, including the Alaska Travel Industry Association, the Alaska Native Heritage Center, Southeast Conference, the Sealaska Heritage Institute, and the communities of Saxman, Sitka, and Kasaan (ATIA 2023, Fiscal Year 2023-24 Marketing Plan; ANHC 2022; Southeast Conference 2023; City of Saxman, 2021; City and Borough of Sitka, 2018).

Tourism Trends

All types of tourism are highly seasonal, with busy summers and much lower visitation in winter. This is changing, however, as tourism operators across Alaska shift to marketing the traditional “off” seasons of spring, fall, and winter (ATIA 2023, Travel Alaska Marketing Plan). In Southeast Alaska, the cruise ship industry has expanded into April and October, during what is commonly called the “shoulder season” (ATIA 2023, Tourism Impact Model).

The tourism industry in Southeast Alaska has overall experienced growth in recent years and is expected to continue growing in the foreseeable future (Southeast Conference 2024a). The cruise industry, which brings most visitors to the region, was almost completely absent during the Covid-19 pandemic in 2020 and 2021. Since then, cruise ship passenger numbers have recovered and even surpassed pre-pandemic levels — there were approximately 1.3 million cruise passengers in 2019, and an estimated 1.7 million in 2023. The cruise industry, and tourism across Southeast Alaska, is predicted to continue growing in coming years (ATIA, 2020; JEDC, 2023; Southeast Conference 2023, Economic Plan). Indeed, the Southeast Conference Comprehensive Economic Development Strategy for 2021–2025 includes goals related to growing the regional tourism economy such as increasing visitor opportunities, growing cultural and arts tourism, increasing trail access, and increasing yacht and small cruise ship visitation (Southeast Conference 2023, Economic Plan). Intentions for growing the tourism industry in Southeast Alaska are not uniform, however, and communities across the region vary in the degree to which they wish to see increased tourism in their area (Huber-Stearns et al., 2020). Nevertheless, overall tourism activity in Southeast Alaska, both on the Tongass National Forest and in areas not managed by the Forest Service, is expected to continue increasing in the near future.

Outfitter and Guide Use Current Status and Trends

Outfitter and Guide Use Current Status

Outfitter and guide use of the Tongass National Forest is the component of the tourism industry that specifically takes place on land managed by the Forest Service and for which the Forest Service issues permits and has the ability to enforce rules and regulations. The Forest Service also regularly monitors this use, and reported outfitter and guide data informs this section of the assessment (USDA Forest Service, 2024 NRM special uses data). Averages and comparisons between years generally exclude the pandemic-influenced years of 2020 and 2021 when overall tourism and visitation to the Tongass was unusually low.

In the 10 years to 2023, there were an average of about 180 outfitters or guides operating on the Tongass each year, offering one or more of 27 different recreational activities. These operators have served an average of over 575,000 clients each year. Since 2014, the greatest number of permitted operators have offered touring, fishing, wildlife or scenery viewing, hunting, hiking, and interpretation. The greatest number of clients have participated in going to Forest Service visitor centers, walking nature tours, dogsled tours, and non-motorized freshwater boating. Information about outfitter and guide activity on the Tongass is summarized in Table 9.

Table 9. Average annual number of forest visitors participating in guided activities on the Tongass, 2014–2023 and average annual number of operators offering each activity. The pandemic years of 2020 and 2021 are excluded from averages due to unusually low visitation numbers. Some activities permitted separately by the Forest Service are grouped together in this table for ease of understanding. (USDA 2024, NRM special uses data).

Outfitter or Guide Activity	Average Annual Number of Visitors Participating in Guided Activity, 2014-2023
Forest Visitor Center Tour	454,112
Walking Nature Tours	52,278
Non-motorized freshwater boating	26,441
Dogsled Tours	25,305
Helicopter Landing Tours	13,885
Flightseeing Landing Tours	10,244
Freshwater Fishing	5,963
Vehicle Nature Tours	5,793
Bicycle Nature Tours	5,439
Camping	1,927
Hunting	462
Skiing Nature Tours	118
Heliskiing Tours	104

Outfitter and guide use of the Tongass (Figure 8) are not spread evenly across the forest. Areas with particularly concentrated outfitter and guide use, based on the average number of clients visiting during 2014–2023 include the Mendenhall Glacier Recreation Area, the Juneau Icefield, Betton Island, the Skagway Icefield, and the road system near the community of Hoonah. For an interactive map of where permitted outfitter and guide activity takes place on the Tongass, please see the [Tongass National Forest Plan Revision Data Viewer](#) on the plan revision website.



Figure 8. Tongass river rangers speak with a sportfishing guide while client's fish for coho salmon on the Situk River. USDA Forest Service photo by Paul A. Robbins.

Outfitter and Guide Use Trends

In 2024, the Juneau Economic Development Council (JEDC), in partnership with the Forest Service, surveyed outfitters and guides operating on the Tongass National Forest to assess the state of their operations and determine important trends affecting this sector (JEDC 2024). Specific groups surveyed included freshwater fishing guides, small cruise operators, and hunting guides. Two prominent themes emerged: issues with the Forest Service permitting process and tensions between operators with different needs or expectations for the recreational opportunities available on the forest.

Overall, outfitters and guides expressed a desire for greater flexibility with Forest Service permitting and a less cumbersome process in general. Greater flexibility in choosing locations to guide was a nearly universal request, with a desire for less stringent group size limitations expressed by some small cruise operators. Additional public feedback during forest plan revision indicated a need for greater clarity and communication about the Forest Service outfitter and guide permitting process in general, including for those not yet permitted to operate on the Tongass. A difficult permitting process and lack of process clarity and effective communication from the Forest Service has hindered some potential operators from participating in outfitting or guiding on the Tongass. There is a perception from some that a burdensome and unclear Forest Service permitting process is holding back what would otherwise be a vibrant economy of small, locally owned outfitter and guide services operating on the Tongass.

The possibility for overlapping or conflicting guided uses on the Tongass has been recognized for many years. In 2018 a collaborative process was initiated to reduce crowding and conflict between big game hunting guides and small cruise vessels during spring and fall hunting seasons. Outcomes and agreements from this process are recorded in a best management practices agreement. These best management practices are intended to reduce the potential for conflict between different operators, such as between small cruise operators hoping to view wildlife and hunting guides hoping to stalk and harvest wildlife. These voluntary best management practices are largely viewed as successful in managing potential conflicts, however, their voluntary nature and the fact that they only address the northern half of the forest creates opportunities for possibly expanding the program.

Different outfitters and guides also have different needs and desires when it comes to recreational infrastructure on the Tongass. Some permittees appreciate the remote and undeveloped nature of much of the Tongass and would prefer minimal additional development, while others would like to see a greater degree of development to facilitate more access to the forest in the form of increased trails and restrooms in particular. In general, many outfitters and guides would like to see most of the Tongass retain its wild and undeveloped character with recreational development as needed in select areas to help disperse users and maintain opportunities for solitude on the forest.

Recreation and Tourism Ecological, Social, Cultural, and Economic Sustainability

The Forest Service defines sustainable recreation as the set of recreation settings and opportunities on the National Forest System that is ecologically, economically, and socially sustainable for present and future generations (36 CFR 219.19). The deep integration of the Tongass National Forest into the lifeways and traditions of nearby communities necessitates a consideration of cultural sustainability as well — the extent to which recreation and tourism on the Tongass supports or affects the ability of the forest to sustain the cultural traditions which depend on it.

This section of the assessment will briefly examine the relationship between recreation and tourism on the Tongass and the ecological, social, cultural, and economic sustainability of the forest.

Ecological Sustainability Considerations

Recreation and tourism on lands managed by the Forest Service are not generally considered primary drivers of ecological change on the Tongass National Forest (see the Terrestrial and Aquatic Ecosystem assessment reports). There are existing environmental impacts from these uses, however, and as recreation and tourism levels and patterns change, these impacts are also likely to change and perhaps increase. The nature and extent of environmental impacts from recreation and tourism speak to the ecological sustainability of these activities on the Tongass.

The field of recreation ecology is vast, and this assessment will not attempt a synthesis of all possible impacts to the environment from recreation on the Tongass. Rather, the focus is on the types of environmental impacts from recreation that are most relevant to the specific circumstances of the Tongass National Forest. The primary types of environmental impacts from recreation and tourism on the Tongass can be broadly described in two general categories: localized impacts to the physical environment when recreational infrastructure can't accommodate use levels and impacts to wildlife. Although the marine environment is generally not managed by the Forest Service, environmental impacts from marine-based recreation and tourism are briefly mentioned as well.

Localized Impacts Near Recreational Infrastructure

Providing recreational infrastructure such as trails (Figure 9), campsites, and educational signage can be an effective way to minimize environmental impacts from outdoor recreation (Marion 2016). However, when recreation infrastructure is either insufficient for the levels or types of use it receives or if it is not maintained in working order, impacts can quickly develop. On the Tongass, inadequately maintained trails or a lack of trails in areas that receive heavy use are a common source of localized environmental impacts (Alaska Trails, 2022).



Figure 9. Water cascades down the One Duck Trail, demonstrating a need for trail maintenance to avoid possible impacts to nearby waterways or the temptation to develop user-created trails around the muddy pools. USDA Forest Service photo.

These impacts include vegetation trampling and user-created trails when people avoid muddy sections of trail or create their own trails to attractive areas, establishing a braided network of informal trails cut through vegetation. Muddy or unusable sections of existing trail often form when boardwalks or drainage features like culverts or water bars fail, leading to pooling, flooding, and the erosion of the tread surface. These issues with drainage can also impact nearby waterways if increased sediment erodes off the poorly drained trail.

These effects can be especially impactful when user-created trails are established with OHV use. Observations from ranger district staff across the forest indicate that OHV use in general is increasing on the Tongass. When OHVs are operated on trails capable of supporting that use or on durable surfaces, impacts are minimal. But OHV use off trails and durable surfaces, such as across wet areas or muskeg, can swiftly impact vegetation, hydrological conditions, and wildlife movement. Although this is not a widespread issue on the Tongass at present, increases in OHV use in the future may also increase the degree of environmental impacts from user-created OHV trails through sensitive areas.

Developed areas of concentrated recreational use, such as public use cabins and campgrounds, can also create localized impacts to the environment. One of the most frequently observed impacts near these sites on the Tongass is the cutting of standing trees for firewood. Local tribes also have concerns about vandalism and theft when recreation sites are near cultural heritage sites. These localized impacts from recreational use may be exacerbated as tourism and recreation increase on the Tongass, particularly if forest infrastructure development and maintenance, visitor education, and enforcement efforts can't meet emerging demands.

Impacts to Wildlife

Many of the wildlife impacts from recreation and tourism on the Tongass can be described as changes to wildlife behavior and access to habitat (Miller et al., 2020). Popular wildlife observation sites (Figure 10) on the Tongass such as Pack Creek and Anan illustrate these effects on brown and black bears. Some of the bears using these areas become habituated to human presence. Conversely, some bears may avoid areas with such heavy recreational use, or they may shift their use of the habitat to times that are less popular with visiting humans, such as at night.



Figure 10. A photographer and a black bear at the Anan wildlife viewing platform. USDA Forest Service photo by Mark Meyer.

The bears that avoid use of these high-quality habitat areas may ultimately be less successful because they are relegated to using lower-quality food sources (Systma, Gardner, Lewis, & Prugh, 2022; Griffin, 2021). Some of the most popular areas for bear viewing such as Pack Creek and Anan require permits for visitation or have Forest Service staff on site to educate visitors and minimize the potential for human-wildlife conflicts. Other areas popular for wildlife viewing do not require permits or do not have actively managed wildlife viewing stations.

Alpine wildlife is particularly sensitive to disturbance from aviation use, and much of the aviation use on the Tongass is related to glacier flightseeing and glacier landing tours. Mountain goats are of particular concern and may avoid using areas frequently disturbed by aviation noise. The high alpine areas popular for flightseeing during the busy summer tourism season are also the same alpine habitat areas needed by mountain goats during the same time of year. Impacts to mountain goats from avoiding this needed habitat include effects at the individual and population levels such as a reduction in foraging, increases in movement, stress, and energetic expenditure, and overall decreased reproductive success (NWSGC 2020; Goldstein et al., 2005). Bears may also be impacted by aircraft noise in alpine areas during the spring denning season (Crupi et al., 2020).

The 2016 Tongass Land and Resource Management Plan has standards and guidelines directing flight activity, including landings, to avoid disturbing mountain goats and other alpine wildlife, including a 1500 foot horizontal and vertical buffer around individual goats and kidding and summer habitat as well as guidance for flight paths to avoid known mountain goat kidding areas from May 15 to June 15 “where feasible” (USDA 2016, p. 4-91).

Fishing and hunting on the Tongass also impact wildlife, most obviously through the removal of harvested individual animals. Although this use takes place on the federally managed Tongass National Forest, fish and wildlife harvest levels are managed by the Alaska Department of Fish and Game to provide a sustainable resource for Alaskans. Forest Service staff have identified the behavior of recreators participating in fishing and hunting as a greater overall impact to wildlife populations than the level of recreational harvest. Many of these behavioral impacts involve popular freshwater fishing areas that may be used by many people at the same time of year. The most important impact from this use is competition between recreators and wildlife who are also trying to fish. Both humans and wildlife such as bears are drawn to the same locations to fish during strong runs, leading to potential wildlife habituation, human-wildlife conflict, and wildlife displacement from or avoidance of important food sources (Systema et al., 2022). User-created trails or litter in these popular areas may also impact wildlife.

Impacts from Marine-Based Recreation

The Tongass National Forest generally does not manage the marine environment and does not have jurisdiction over activities taking place on marine waters. However, because much of the Tongass is only reasonably accessible by boat and because so much of the regional tourism economy relies on cruise ships, this section will briefly mention some of the main environmental impacts from marine-based recreation and tourism taking place near the Tongass National Forest.

Some of the more obvious environmental effects from marine-based recreation include impacts to air and water quality from ship exhaust and effluent. These effects are most pronounced from larger vessels such as large cruise ships. Disposal of bilge and wastewaters at sea can release micropollutants, pathogens, oil and other hydrocarbons, and may reduce the availability of dissolved oxygen (Lloret et al., 2021). Similarly, exhaust from ship engines releases sulfur oxides and nitrogen oxides, impacting air quality and visibility. These impacts to air quality tend to be greater close to shore and in the narrower straits, inlets, and fjords common in Southeast Alaska than they would be out on the open ocean (Lloret et al., 2021; Molders, Gende, & Pirhalla, 2013). Some Tribes are extremely concerned with the pollution and

environmental impacts associated with large scale cruise tourism and have started water quality and air quality monitoring programs as a result. See the Air Quality assessment section for additional information on air quality impacts.

Ship traffic can also impact marine wildlife. These effects include behavior changes such as changing the timing or location of feeding, avoidance of high-traffic areas, direct strikes or mortality from wildlife collision with ships, and acoustic disturbance to wildlife from boat engine noise. Marine mammals such as humpback whales are particularly vulnerable to these impacts, and marine mammal watching also motivates a portion of the marine-based recreation in Southeast Alaska (Harris, Gende, Logsdon, & Klinger, 2012; Erbe et al., 2019).

It is important to note that all forms of marine travel pose these environmental impacts, not solely marine-based recreation or cruise ships. However, in contrast to other activities like shipping or commercial fishing, boating related to recreation and tourism tends to involve more time in remote areas, in particularly narrow fjords, and in areas close to shore for wildlife viewing. As such, the environmental impacts from marine-based recreation may have a greater opportunity to affect the natural resources of the Tongass National Forest than other forms of marine activity. See the Federally Recognized Species Assessment for additional information on impacts to marine wildlife.

Social Sustainability Considerations

The Tongass National Forest is tightly interconnected with Southeast Alaska communities and the lives of regional residents. Social sustainability refers to the capability of society to support the network of relationships, traditions, culture, and activities that connect people to the land and to one another and support vibrant communities (36 CFR 219.19). Because the Tongass is so culturally important, specific cultural sustainability considerations are discussed separately. The social sustainability considerations section will focus on how the Tongass provides opportunities to connect people to nature, emerging tensions between local resident use and tourism use of the forest, how recreation on the Tongass interfaces with existing community plans, and recreation-related work conducted on the Tongass with forest partners.

Opportunities to Connect People to Nature

Recreation on the Tongass in all its various forms provides endless opportunities for people to connect with the natural world. From strolls in the “backyard” to group OHV rides to multi-week backcountry expeditions (Figure 11), each recreational opportunity on the Tongass offers connection and encounters with nature. Recent planning efforts and public feedback received during these 2018–2024 efforts (Sustainable Cabin Strategy, Southeast Alaska Sustainability Strategy, Sustainable Trails Strategy, 2024 Forest plan revision Public Feedback) have highlighted ways that the Forest Service could enhance how recreation on the Tongass fosters connections between people and their environment.

Education and interpretation have been recognized in public feedback as important tools for supporting connections between people and nature. The Tongass National Forest offers two visitor centers in Juneau and Ketchikan visited by hundreds of thousands of people every year. The educational activities and exhibits at these visitor centers provide important context for landscapes and cultures that might otherwise be unfamiliar to visitors. Some members of the public have indicated a need for increased incorporation of education and interpretation into tourism activities to deepen the understanding and connection between visitors using commercial services and the Tongass landscape (USDA 2024, Summary of public feedback).

One of the primary desires expressed in public feedback is greater physical connectivity between communities and the forest via trails (Alaska Trails 2022, ADNR 2023; USDA 2024 Summary of public

feedback). Similarly, there is a desire for other recreational opportunities, particularly public use cabins, to be more accessible from communities, either via roads or trails (USDA 2024 Summary of public feedback). For the residents of Southeast Alaska, many of whom live in communities literally surrounded by the Tongass National Forest, connection to the forest is a way of life, a need that can be further supported by conscious efforts by the Forest Service to connect communities to recreational opportunities on the forest. As air and boat travel become more expensive and less available, these community-accessible recreation opportunities become even more important for residents without these means of transportation (USDA 2024 Summary of public feedback). Conversely, many members of the public have also expressed a continued need for remote and challenging recreation opportunities on the forest to foster connections to the natural world in a relatively unmodified landscape (USDA 2024 Summary of public feedback).



Figure 11. Hikers on the Mt. McGinnis and West Glacier Trail near Juneau. USDA Forest Service photo by Robin Mulvey.

Tourism operators, outfitters, and guides have somewhat overlapping and somewhat distinct needs for connection from those expressed by Southeast Alaska residents. These operators typically bring groups of people from outside of the region to the Tongass to encounter a remote and wild landscape that the visitors might never otherwise get to experience. Facilitating connections to nature for thousands of visitors participating in guided activities requires the Forest Service to balance accommodating large numbers of people with appropriate infrastructure while not degrading the sense of remoteness and solitude that many of those visitors seek (JEDC 2024).

Emerging Tensions Between Local Resident and Tourism Use

In some areas, the overlapping and at times diverging recreational needs of Southeast Alaska residents and regional tourism operators have led to emerging tensions. The desire to balance the recreational needs of residents with those of the tourism industry was one of the most prominent themes expressed in public feedback during forest planning efforts since 2018. In general, there is an acknowledgement of the important role tourism plays in the regional economy with a concurrent desire to avoid loving the Tongass to death or overexposing the forest to tourism such that the character of the forest and the region is changed. These emerging tensions are often expressed in terms of locally popular areas receiving an increase in commercial visitation, competition between user groups for cabins, anchorages, or other forest

infrastructure, and competition for hunting and fishing resources (USDA 2024 Summary of public feedback; Cervený 2005; Ketchikan Gateway Borough 2022). Concerns have also been expressed about the effects of tourism on the regional cost of living, environmental impacts, and social changes in Southeast Alaska communities (Huber-Stearns 2020). More information about the socioeconomic situation in Southeast Alaska communities in general can be found in the Socioeconomic Conditions assessment report.

Many community plans developed by the towns and villages of Southeast Alaska aim to navigate these emerging tensions. Some communities focus primarily on providing recreational opportunities for local residents, while others actively seek an increase in tourism-related recreation and the economic benefits it can bring. Most community plans strive for a balance between meeting the recreational needs of local residents and accommodating a degree of tourism considered sustainable in that community. Some Tribes and many Alaska Native Corporations have invested heavily in businesses that depend on cruise tourism, and are concerned with the Tongass as a scenic draw. Many of these businesses also depend on public lands for excursions or activities that take place outside of the corporation's land base. Juneau and Ketchikan, two of the most heavily visited municipalities in the region, have developed tourism best practices programs that are considered a gold standard for managing high levels of visitation while also maintaining a high quality of life, including access to outdoor recreation, for residents (Ketchikan Visitors Bureau, 2020; Travel Juneau, 2024). However, even with these management practices in place, tensions remain in these communities and work to address these tensions continues between municipalities and tourism operators.

The Forest Service does not have any direct management role or authority over the ways that towns and villages manage tourism activity via approaches like ship quotas or the development of cruise ship dock infrastructure. However, the Forest Service does permit and manage recreational activity on the Tongass National Forest, including many of the commercially guided activities that visitors arriving with tourism providers participate in. Forest Service management of recreation on the Tongass can help support the goals expressed in community plans and meet the needs of tourism operators. Ideas for accomplishing this and addressing the emerging tensions between local and tourism-related recreational use on the Tongass have been offered by regional residents and tourism operators. Some of the ideas generated during recent forest planning efforts have included designating areas of the forest important for local use and limiting commercial use in these areas, designating areas where different levels of commercial use of the forest would be appropriate, providing more flexibility in commercial recreation permits to spread that use out, and focusing recreational infrastructure development on the Tongass in areas where high levels of use would be appropriate.

Recreation-related Partnerships

An important portion of the recreation management work conducted on the Tongass is accomplished with partnerships between the Forest Service and outside organizations such as nonprofits, municipal governments, and tribal organizations at the local, regional, and statewide levels. These partnerships are vital to the provision of recreation opportunities on the Tongass National Forest — it would not be possible for the Forest Service to conduct all recreation management activities on its own. The types of recreation-related work done with these partnerships include, among others, trail construction and maintenance with organizations like TrailMix, the City of Ketchikan, and Sitka Trail Works; maintenance of developed recreation sites with the cities of Kake and Kupreanof; recreation project visioning, planning, and execution with Spruce Root; wilderness monitoring with the Sitka Conservation Society; and winter trail grooming with the Juneau Nordic Ski Club.

In the recent past, the amount of money the Forest Service has dedicated to these recreation-related partnerships has been second only to the amount of money dedicated to road maintenance partnerships

(Huber-Stearns, 2020). The need has been identified, however, for increased Forest Service involvement with partner organizations to meet the growing recreational demands placed on the forest. The 2022 Tongass National Forest Sustainable Trails Strategy calls out a need for increased Forest Service investment in partner organizations on a monetary and relational level. This is particularly important in the many rural areas and smaller communities of Southeast Alaska where populations aren't as large and the capacity for partnership work may not be as developed as it is in larger communities (Alaska Trails 2022, p. 5-13).

The development of recreation projects that involve multiple jurisdictions, such as trails that cross from the Tongass into communities, require collaborative planning and execution between the Forest Service and partner organizations. Ideas identified in the Sustainable Trails Strategy for fostering these partnerships include creating a culture of responsiveness in the Forest Service when approached by partners, sending Forest Service staff to participate in partner planning processes, sharing training resources among partners, regular Forest Service consultation with partners, and including partners in internal Forest Service planning processes (Alaska Trails 2022, p. 14). An additional idea for partnership generated during the Sustainable Cabin Strategy planning process was for the establishment of an adopt-a-cabin program to aid in the maintenance of forest public use cabins (USDA Forest Service, 2020).

There is also ample opportunity for increased collaboration with tribal organizations for recreation management, cultural education on the forest, and the provision of culturally informed recreation opportunities on the Tongass. These are discussed below in Cultural Sustainability Considerations.

Cultural Sustainability Considerations

Cultural sustainability is discussed here as a specific and important form of social sustainability. The Tongass National Forest is directly tied to the vibrant, living cultures of Southeast Alaska and this section will examine how recreation on the forest affects the ability of the Tongass to continue sustaining these cultures.

One way that recreation on the Tongass affects cultural sustainability is when recreational use or sites overlap with areas important for traditional uses. This can occur if developed recreation sites are constructed in areas with historic or cultural resources. In these instances, recreational use of the area may directly impact cultural or historic resources by damaging culturally important objects or structures, degrading the surrounding environment, or by changing the character of an area.

The overlap between traditional use and recreational use is perhaps more common when recreational uses, such as sportfishing, takes place in areas of traditional use, whether or not the area is specifically developed for recreation. Concern about competition for resources between recreational and local users was a primary theme expressed by members of the public during 2018–2024 engagement. Tribes have expressed concerns around increasing conflicting use between tourism/guided hunts and local ability to fill subsistence needs. Fishing was frequently identified as a top priority where recreation and traditional use overlap, as well as hunting and general competition for access to the forest such as use of roads, trails, and public use cabins (USDA 2024, Summary of public feedback). Some members of the public have expressed a desire to separate recreational use from traditional use areas to protect resources and this important traditional use of the forest. For more information about subsistence use of the Tongass, see the Subsistence and Other Harvest assessment report.

Many tribes have identified recreation infrastructure priorities around their communities. Multiple rural, predominantly Alaska Native communities have requested more recreation infrastructure investment in their communities (public use cabins, trails). There is a current disparity around how much recreation infrastructure exists in smaller, rural, Native communities have vs larger communities, and how accessible

it is. Many Southeast Alaska residents have indicated that forest docks, trails, roads, and public use cabins are critically important for their continued use of the forest for their traditional way of life and other culturally important activities (USDA 2024, Summary of public feedback). This infrastructure is therefore not only a recreation-related issue but is also tied to the continued ability of the Tongass to support the Tribes of Southeast Alaska. Tribes have also expressed a desire for indigenous languages to be included on the naming and signage for recreation infrastructure.

Tribal organizations in Southeast Alaska frequently engage with the Forest Service on recreation-related initiatives on the Tongass. A recent example of this is the Memorandum of Understanding between the Forest Service and the Central Council of Tlingit and Haida Indian Tribes of Alaska concerning co-stewardship of the Mendenhall Glacier Recreation Area. Under this agreement, the Forest Service and the Central Council will collaborate to hire more Alaska Native interpreters to improve interpretation programs to better reflect Alaska Native culture and to increase collaboration on resource monitoring in the recreation area. The Alaska Youth Stewards program is another example of cooperation between the Forest Service and Southeast Alaska tribal organizations and members. The Alaska Youth Stewards program recruits young adults, including tribal members, from across Southeast Alaska for experiential learning and job training on projects across the Tongass. The Petersburg Indian Association also collaborates with the ranger district on local recreation improvements. Many of these projects support outdoor recreation on the forest and in Southeast Alaska communities. The need for increased co-stewardship is recognized across the Forest Service, and there is the opportunity for the Tongass National Forest to build on these existing successful examples (USDA, 2023, Strengthening Tribal Consultations and Nation-to-Nation Relationships). The local tribes have also expressed a need for tribal preferences for permits, a need to assess the number of Native owned operations on the Tongass and the need for tribal priority in management, for example on Admiralty Island Bear viewing areas.

Economic Sustainability Considerations

Economic Impact

Recreation and tourism on the Tongass National Forest are important drivers of the regional and statewide economies. Statewide, outdoor recreation is a growing sector of the economy, even as the state GDP overall has decreased in recent years — from 2012 to 2017 statewide GDP in Alaska decreased by 9% while the outdoor recreation GDP increased by 19% during the same time (ADNR, 2023). In Southeast Alaska specifically, the visitor industry supports over 8,263 jobs and produces \$347 million in labor income (Southeast Conference 2024b). Although this does not solely reflect economic activity related to outdoor recreation, it indicates the impact of the tourism industry writ large on the regional economy. However, many jobs in leisure and hospitality tend to pay lower wages than in other industries, and jobs in this sector are filled by workers from outside of Southeast Alaska and have a greater likelihood of being part-time, seasonal, or temporary (JEDC 2023, p. 11).

Economic activity related directly to recreation on the Tongass (as opposed to tourism, leisure, and hospitality in the region writ large) supported 670 jobs, created \$26,236,000 in labor income, and generated \$42,171,000 in total GDP contributions in 2019 (USDA 2019, FY19 Economic Contributions).

The portions of the recreation and tourism sector in Southeast Alaska which depend on visitors from outside of the region are sensitive to changes in the broader economy and to other changes in the travel and tourism industry such as the Covid-19 pandemic. Economic downturns tend to lead people to scale back on expenses such as Alaskan vacations, and national recessions can lead to a decrease in overall tourism activity on the Tongass. Similarly, the Covid-19 pandemic led to the near-disappearance of the tourism industry in Southeast Alaska for over a year, though visitor numbers and related economic activity have largely rebounded. Some businesses, however, either went out of business during the

pandemic, or have yet to recover from the reduction in overall tourism activity during the height of the pandemic.

Fiscal Sustainability of Forest Service Recreation Operations

Recreational infrastructure on the Tongass National Forest is difficult and expensive to maintain, due to challenging access often requiring boat or air travel and the wet climate that rapidly deteriorates roads, trails, buildings, and other infrastructure (USDA 2022, R10 Listening Sessions). The construction of new cabins and trails on the forest requires additional maintenance. Increases in use of infrastructure also requires more maintenance. The expense of recreational infrastructure maintenance can be mitigated somewhat by sustainable infrastructure design and careful site selection. For example, the use of aggregate rather than lumber on trails can increase the lifespan of a trail and reduce overall maintenance costs. However, approaches such as this can often require a greater upfront investment in more expensive materials and construction techniques. Budgets may not always allow for high initial project costs, even if expenses would be reduced overall during the lifetime of the project from lower maintenance needs.

Fluctuating and necessarily limited budgets also require constant re-prioritization of recreation projects and can make it difficult to commit to the required long-term maintenance of existing and new infrastructure. The maintenance needs of existing infrastructure can make any new infrastructure difficult to financially justify and affordably maintain. Conversely, influxes of funding for new recreation infrastructure can allow for initial construction of new facilities without the guarantee of future funding for the maintenance of those facilities. It can also be difficult to adequately staff recreation operations on the Tongass to perform necessary maintenance and recreation program management.

In addition to the challenges with expensive maintenance and fluctuating budgets described above, the Tongass also experienced the near disappearance of much of the Southeast Alaska tourism industry in 2020 and 2021. This included a severe reduction in permitted commercial activities on the forest and an associated decrease in the fees the Forest Service would typically recover from this use. This had rippling effects on the budget available for recreation infrastructure maintenance and program management. Although visitation numbers have since rebounded from pandemic lows, the hole blown in the recreation management budget by several years of essentially no permitted use fee collection will have effects for years to come.

Primary Trends and Drivers Affecting Recreation and Tourism

Climate Change

As climate change continues to affect the natural environment of the Tongass National Forest it will undoubtedly also affect the recreation and tourism dependent on that environment. According to the Tongass National Forest Climate Change Vulnerability Assessment, the overall climate change impacts relevant for recreation and tourism include increased temperatures, precipitation increases with more of that precipitation falling as rain rather than snow, drought in some areas, and changes to the timing and intensity of runoff. This summary of the anticipated impacts to recreation and tourism from climate change are drawn from the Tongass National Forest Climate Change Vulnerability Assessment. For a more in-depth discussion of how climate change is expected to affect the Tongass, please see Drivers, Stressors and Climate Change assessment report.

Impacts to Infrastructure

Increases in precipitation in most areas of the Tongass will likely increase the recreation infrastructure maintenance needs already created by a predominantly wet environment. Increases in precipitation also lead to increased risk of floods, landslides, and debris flows. These events, whether small or catastrophic,

can severely damage recreational infrastructure, increasing the need for maintenance, replacement, reconstruction, or facility redesign or hardening to prevent damage from future such events. All of this will likely increase the costs of providing recreational infrastructure on the Tongass.

Recreational Activity Availability

Decreased winter snowfall will impact the timing and location of the availability of snow-dependent winter recreation such as skiing (Figure 12) and snowmachining. As less snow overall is available for a smaller portion of the year, these uses may become concentrated in areas where conditions allow, potentially increasing user conflicts that already exist in some areas popular for winter recreation. It is also possible that in the future any recreational infrastructure that supports winter recreation such as trailheads may not align with areas where snow conditions still allow for winter recreational activities.



Figure 12. Skiing on the Tongass National Forest. The timing and availability of snow-dependent recreation on the forest may be affected by climate change. USDA Forest Service photo by Adam DiPietro.

The glaciers of the Tongass National Forest are retreating in the face of climate change, in many cases reducing the viewability of the forest's glaciers and eventually possibly affecting the safety of popular glacier activities such as landings and dogsled tours. The Mendenhall Glacier in Juneau is a prime example of how glacial retreat may impact recreation and tourism on the Tongass. Although the Mendenhall Glacier Recreation Area was created in part to provide opportunities for viewing the glacier, it is now estimated that the glacier will be out of sight of the main visitor campus within 20 to 40 years (USDA 2023, Mendenhall EIS, p. 1-8).

Climate change effects on fish and wildlife habitats, populations, and behaviors will impact the availability of hunting, fishing, and wildlife viewing opportunities on the Tongass. Rising temperatures, changing precipitation and hydrological conditions and subsequent changes in vegetation will affect wildlife habitat, potentially changing where different species of wildlife occur on the Tongass. This in turn may affect where opportunities for wildlife-dependent recreation can occur. It is also possible that changes to wildlife habitat may affect the ability of the forest to support different species of wildlife, leading to increases in some wildlife populations and decreases in others.

Effects from climate change on watersheds are expected to be pronounced, and include loss of meltwater in some locations, extreme flows, increases in water temperatures, and an increase in the possibility for

both floods and droughts in different areas of the forest. These changes will likely impact fish population productivity and stability, affecting opportunities for recreational fishing on the Tongass.

Changes to Visitation Seasonality

Historically, summer has been the busiest season for tourism in Southeast Alaska and for recreational visits to the Tongass National Forest. As climate change warms temperatures across the region, visitation and tourism has been growing into what had formerly been the less-busy spring and fall “shoulder” seasons. In 2015, the tourism season was generally considered to last from May 1 to September 30, while in 2023 cruise ships were visiting Juneau from April 17 to October 25 (USDA 2023, Mendenhall EIS, p. 1–8). This growth in the primary tourism season, already underway, could be accelerated with continued climate change, leading to increased overall tourism and recreational use of the Tongass, greater demand for recreational infrastructure, increased competition for recreational opportunities, and greater need for forest recreation program management and facility maintenance.

National, Statewide, and Regional Trends in Outdoor Recreation and Tourism

Outdoor recreation participation has grown across the United States in recent years. The Covid-19 pandemic of 2020 and 2021 saw massive increases in use of public lands by local residents across the country, and this increase in outdoor recreation is projected to continue into the future (ADNR 2023). While use of public lands nationwide has increased, federal funding for outdoor recreation has largely stagnated (Outdoor Recreation Roundtable 2024).

Alaska was no exception to this trend of increasing recreation, as outdoor recreation participation grew across the state during the pandemic, despite the near-total disappearance of cruise ship visitation (ADNR 2023). Alaskans overall participate in outdoor recreation at rates that far exceed the national average, with 81% of Alaskans reporting participation in outdoor recreation compared to 48%. The opportunities for outdoor recreation that Alaska provides are cited by 58% of state residents as a primary reason for living in Alaska (University of Alaska 2019). Outdoor recreation is central to the lives of many Alaskans, and demand for outdoor recreational opportunities can reasonably be expected to continue growing.

In Southeast Alaska, the Covid-19 pandemic caused cruise ship tourism to effectively disappear for nearly two years during 2020 and 2021. Since then, however, passenger numbers have rebounded to exceed pre-pandemic levels — there were approximately 1.3 million cruise ship passengers visiting the region in 2019, and 1.7 million in 2023. Predictions indicate continued growth in cruise ship visitation to Southeast Alaska (ATIA 2020; JEDC 2023; Southeast Conference 2023). This growth is not limited to large cruise operators. There have also been increases in small cruise vessel (1,000 passengers and under) tourism in Southeast Alaska, and increased reports of unpermitted or illegal cruise and guiding operations (JEDC 2024). The Southeast Conference Comprehensive Economic Development Strategy envisions further increases in regional tourism, with goals to increase visitor opportunities, grow cultural and arts tourism, increase trail access, and increase yacht and small cruise ship visitation (Southeast Conference 2023). Tourism operators in Southeast Alaska also plan to expand in future years (Southeast Conference 2024a).

As overall tourism visitation numbers to Southeast Alaska increase, there have also been changes to the types of recreational experiences sought by these visitors. Across Alaska, including in Southeast Alaska, there is a shift to a desire for more active, independent recreational experiences, including the possibility for multi-day hikes and other adventures that connect visitors to natural Alaska (ADNR 2023; Alaska Trails 2022). Small cruise operators and other visitor service providers in Southeast Alaska have also expressed a desire for additional “off the beaten path” experiences to offer guests in search of an authentic connection to all that Alaska has to offer (JEDC 2024). As the Tongass National Forest manages approximately 80% of the land in Southeast Alaska, these desires for active and independent outdoor

recreational experiences imply increased need for the types of recreational opportunities afforded by the forest that may not be available off Forest Service-managed land.

These changes and increases in overall tourism in Southeast Alaska are taking place while the 72,000 regional residents are also expressing continued need for outdoor recreation on the Tongass. Some of the primary desires expressed by residents during recent forest planning efforts include increased public use cabins, more trails and cabins located near communities, increased availability of water and bike trails, continued opportunities to experience wild landscapes, recreational infrastructure that can support subsistence use, and the desire for levels of commercial recreational use that support community economic development without changing community character (USDA Forest Service 2024 Summary of public feedback). These expressed needs in some ways complement and, in some ways, overlap or compete with the needs expressed by tourism operators in Southeast Alaska.

Navigating these shifting trends in recreation and tourism and negotiating a balance between the two is a primary driver of the need for revision of the Tongass National Forest Land Management Plan.

Information Gaps

- Current recreational use levels and patterns are not consistently monitored for non-permitted (non-commercial) recreation uses on the Tongass, leading to difficulties in quantifying this information with any precision.

Key Takeaways

- Outdoor recreation is critically important both for the Southeast Alaska economy and for the traditional way of life for people of the Tongass.
- Recreation on the Tongass is strongly influenced by the marine-mountain interface, challenging access to many areas, the remoteness and size of the forest, and the extent to which tourism is a major economic force in the region.
- Due to the remoteness and relatively undeveloped nature of much of the Tongass, recreational opportunities available on the forest skew toward the primitive side of the Recreation Opportunity Spectrum.
- Developed recreational opportunities and recreation infrastructure are scattered across the forest and include 189 recreational cabins or shelters, campgrounds, and wildlife viewing sites. Access to the forest is provided by over 900 miles of trail, over 1600 miles of road, and a variety of docks, buoys, and other marine access facilities. Maintenance of this infrastructure is complicated by challenging access to some areas, a wet climate, and fluctuating budgets.
- The Tongass receives approximately 2.3 million recreational visits each year. Popular activities include hiking, viewing natural features, visitor center activities, fishing, viewing wildlife, and hunting.
- Tourism and commercial recreation on the Tongass are a key component of the statewide and regional economies and are predicted to grow in future years. Forest Service outfitter and guide permitting processes have been identified by some members of the public as a barrier to further development of a local recreation and tourism-based economy.
- Outdoor recreation can contribute to the ecological, social, and economic sustainability of the Tongass; however, recreation can also adversely impact the natural environment and may not contribute to social or cultural sustainability in all contexts.

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- Climate change and the projected continued growth of the tourism industry in Southeast Alaska will affect recreational opportunities on the Tongass in the future.
 - Prominent themes from public feedback received during recent forest planning efforts include:
 - a. A desire for diverse recreation opportunities across the forest
 - b. The importance of recreation infrastructure and the need for maintenance of existing infrastructure
 - c. The need to minimize impacts from recreation on subsistence opportunities
 - d. A desire for increased education on responsible recreation
 - e. A desire for increased flexibility, clarity, and communication regarding permitted uses and permitting processes for outfitter and guide activity on the forest
 - f. The need to preserve the natural environment and wilderness character of the forest
 - g. The need for balance between use, preservation, local recreational use of the forest, and forest-based tourism

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Glossary

Recreation Opportunity Spectrum (ROS)

A system for planning and managing recreation resources that categorizes recreation opportunities into six classes. Each class is defined in terms of the degree to which it satisfies certain recreation experience needs based on the extent to which the natural environment has been modified, the type of facilities provided, the degree of outdoor skills needed to enjoy the area and the relative density of recreation use.